



View from Merriman Street looking south within Millers Point Conservation Area (Source:AECOM 2018)

4.0 Project Description

As Barangaroo’s keystone project, Central Barangaroo will complete the sweep of city and foreshore experiences along the western waterfront of Sydney’s CBD. The foreshore precinct will draw together and integrate foreshore public spaces with city living, workplaces, community and cultural uses, and a shopping and dining precinct, all connected to Sydney’s new metro network. As a key part of Sydney Metro’s city shaping network, Barangaroo Station will improve access for visitors, providing an arrival point within Sydney’s CBD, on the Harbour foreshore.

Comprising the remaining development blocks 5, 6 and 7 of the approved Barangaroo Concept Plan (Approved Concept Plan), Central Barangaroo’s built form will provide a visual transition between the natural setting and scale of Barangaroo Reserve and Nawi Cove in the north, to the high rise central business district scale of Barangaroo South.

The recently completed Wulugul Walk now extends along the entire Barangaroo waterfront connecting the Woolloomooloo to Glebe foreshore walk. Central Barangaroo’s Harbour Park will create a major western harbour public open space that integrates with Wulugul Walk.

Subsequent subsections in this section will cover the masterplanning vision for this area and previous modifications of the Central Baranagaroo development.

4.1 Master Planning for Central Barangaroo

The *Barangaroo Act 2009* was established on 30 March 2009 to specify the former BDA’s functions, use and management of Barangaroo.

INSW was established in July 2011 to assist the NSW Government in identifying and prioritising the delivery of critical public infrastructure for NSW. As of 1 July 2019, INSW became the State Government agency responsible for the development of Barangaroo and management of its public spaces.

Work on the master planning vision and framework for Central Barangaroo originally commenced in 2013 with the appointment of a world renowned team of international and local professionals, Skidmore, Owings & Merrill LLP + Andersen Hunter Horne (SOM + AHH).

Building upon the then approved Barangaroo Concept Plan (MOD 6), SOM + AHH prepared a draft Central Barangaroo Master Plan Framework that explored opportunities to enhance the built form and public domain outcomes, as well as ensure connectivity and access across the whole Barangaroo precinct.

To inform the master planning framework, several early rounds of public consultation were undertaken in 2013. The consultation comprised a public workshop, followed by a four week, interactive, on-line conversation, in addition to direct engagement with key stakeholders.

SOM’s Central Barangaroo Master Plan Framework established a design and development framework that enabled an increase in density of mixed-use development to ensure the precinct could create its own distinct identity, with a diversity of character and experiences, whilst being of an appropriate scale to its context.

SOM’s draft Master Plan Framework for Central Barangaroo informed the MOD 9 - RtS DGR’s request in 2014.

Sydney Metro – Barangaroo Station

In June 2015, as part of the Sydney Metro City & Southwest project, the NSW Government confirmed a strategic alignment option to build a new metro station at Barangaroo. In November 2015, the location of Barangaroo Station was confirmed as beneath the northern end of Hickson Road in Millers Point, with pedestrian access via Central Barangaroo and Nawi Cove. The station is currently being constructed beneath Hickson Road and is due to be operational in 2024 when the City & Southwest line opens.

SOM’s master planning work for Central Barangaroo recommenced in 2019 with a review of changed circumstances affecting Central Barangaroo and the broader Barangaroo precinct. This review largely re-affirmed the objectives and core principles developed for Central Barangaroo, as well as the proposed built form and public domain outcomes.

SOM’s refined Master Plan Framework for Central Barangaroo responded to the enhanced opportunities created by the metro infrastructure. The new station provides design integration and benefits into both the future Barangaroo precinct and the local historic areas of Millers Point and Walsh Bay. This updated design provided basis of the MOD 9 - exhibited development envelope.

4.2 Modification Background Information

Modification 11 is the latest approved modification and includes all approved modifications up to Modification 8 (Approved Concept Plan), as well as Modification 10. Relevant information from the Instrument of Approval for Modification 8 is provided below as well as an overview of the two most recent approved modifications.

Instrument of Approval

Relevant to this report, a condition of the Modification 8 approval for future applications includes the following:

C1 Future Building/s on Block 5

Any future development application/s within Block 5 is to satisfy the following:

- a) demonstrate that views will be retained:
 - i. from Millers Point and Observatory Hill to the western part of Sydney Harbour; ...

This condition forms part of the rationale for the selection of various Observer Locations.

Modification 10 (MOD 10)

Environmental assessment requirements were initially issued in June 2006 (MP06_0162) and the original Concept Plan for the redevelopment of Barangaroo approved in February 2007 by the Minister for Planning.

The Concept Plan as approved contemplates a mixed use development of commercial, residential, tourist, retail and community uses within an urban structure of development blocks, street networks, and the delivery of approximately 11 hectares of new public open space/public domain. The Approved Concept Plan (MOD 10) has been modified ten (10) times from the original concept.

The Approved Concept Plan (MOD 10) comprises the following:

- A mixed use development involving a maximum of 658,666 m² gross floor area (GFA), comprised of:
 - a maximum of 231,831 m² of residential GFA of which a maximum of 162,031 m² will be in Barangaroo South;
 - a maximum of 76,000 m² of GFA for tourist uses of which a maximum of 59,000 m² will be in Barangaroo South;
 - a maximum of 44,766 m² of GFA for retail uses of which a maximum of 30,000 m² will be in Barangaroo South;
 - a maximum of 5,000 m² of GFA for active uses in the Public Recreation zone of which 3,500 will be in Barangaroo South; and
 - a minimum of 14,400 m² GFA for community uses.

- Approximately 11 hectares of new public open space/public domain, with a range of formal and informal open spaces serving separate recreational functions and including an approximate 2.2km public foreshore promenade;
- Built form design principles, maximum building heights and GFA for each development block within the mixed use zone;
- Public domain landscape concept, including parks, streets and pedestrian connections;
- Alteration of the existing seawalls and creation of a partial new shoreline to the harbour;
- Construction, operation and maintenance of a concrete batching plant to supply concrete for construction of future development under this Concept Plan at Barangaroo South; and
- No approval is granted or implied for the future use of a heliport and/or a helipad.

The Approved Concept Plan (MOD 10) provides for three mixed use development blocks (Blocks 5, 6 and 7) within Central Barangaroo in addition to land identified for new public open space / public domain.

The proposed Section 75W Modification to the Approved Concept Plan (MOD 8, subsequently further modified to MOD 10) for Barangaroo (MOD 9 - RtS) incorporates significant further master planning work and public consultation to realise what will be the final stage of Barangaroo to be delivered.

Modification 11 (MOD 11)

Modification 11 is the latest approved modification and includes changes including all modifications up to modification 8, as well as modification 10. Mod 11 to Barangaroo Concept Plan (MP06_0162) i the Approved Concept Plan was lodged with the NSW Department of Planning, Industry and Environment on 17 July 2020 and approved on 22 October 2020.

The Approved Concept Plan relates to localised vehicular access and staging of works for Barton Street and Hickson Park, and makes no changes to GFA or maximum building heights. Therefore assessment in this report will be carried out against the MOD 10 development envelope.

The Approved Concept Plan seeks to:

- expressly permit construction vehicles and non-construction vehicles to use Barton Street; and
- stage the delivery of Hickson Park to align with the current status of the development of the surrounding buildings in Barangaroo South and Central Barangaroo, and to avoid the potential for abortive and reinstatement works.

The Approved Concept Plan seeks to amend the following conditions approved as part of MOD 8 of the Barangaroo Concept Plan:

- Conditions B3(5), B12, C3C and C8 that relate to Barton Street; and
- Conditions B3(1)(a) and B12 and Appendix 1 that relate to delivery of Hickson Park.

Approved Concept Plan for Central Barangaroo

The Approved Concept Plan is the culmination of the previously outlined approved modifications.

The Approved Concept Plan does not contain a set of approved development envelopes for Blocks 5, 6 and 7, that would have ordinarily be provided for a concept development under Part 4 of the EP&A Act. This is generally consistent with the nature of Part 3A concept plan approvals, which enable essential flexibility due to the scale and complexity of Part 3A projects.

The approved concept development envelopes are governed by the following approved Concept Plan elements:

Conditions A1 and A2(1)

Condition A2(1)(c) approves the *Barangaroo Part 3A Modification Report – Headland Park and Northern Cove* prepared by MG Planning Pty Ltd on behalf of Sydney Harbour Foreshore Authority dated January 2009 (MOD 3), which included:

- Development block layout as illustrated in Figure 12 ‘Revised Development Blocks’, and
- Street network as provided in Figure 18 ‘Revised Street Hierarchy’.

The consolidation of the two key parameters produces a building envelope that depicts an accurate and appropriate representation of the approved Concept Plan, which includes the following:

- A 20m wide east-west pedestrian link between Block 5 and 6, and
- A 10m wide east-west pedestrian link between Block 6 and 7.

The realignment of Hickson Park via MOD 8 altered the southern configuration of Block 5 and has been accordingly reflected in the concept building envelopes.

Condition B4 Future Built Form

Condition B4(2) sets out the maximum GFA and height for Blocks 5, 6 and 7. These controls are also reflected in the PEHC SEPP ‘Gross Floor Area’ and ‘Height of Buildings’ mapping.

A composite of the Approved Concept Plan development envelopes is provided in Figure 19 and Figure 20. This has informed the baseline against which MOD 9 -RtS is assessed.

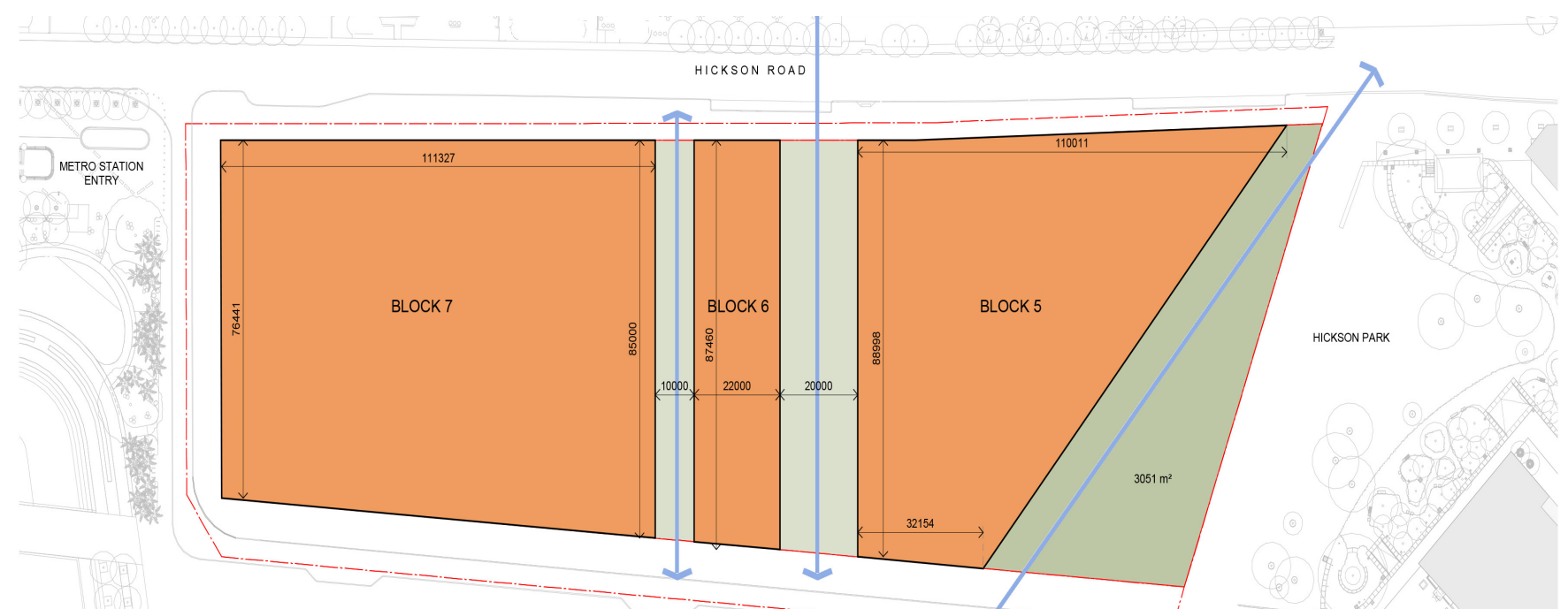


Figure 19 Approved Concept Plan (Source: SJB 2023)

Modification 9

This modification application seeks consent for modifications to the Approved Concept Plan (Barangaroo Concept Plan MP06_0162, as modified by MOD 11) in relation to Central Barangaroo, Barangaroo Reserve (Cutaway only) and Barangaroo South (Barton Street and Hickson Park only).

MOD 9 results in modification to the Approved Concept Plan for Blocks 5, 6 and 7, updates to the Instrument of Approval and Statement of Commitments, and amendments to *State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021* (PEHC SEPP) as it applies to Barangaroo.

Following exhibition of the project (MOD 9 - exhibited) from 12 July 2022 to 8 August 2022, MOD 9 - exhibited has been refined by the project team to MOD 9 Response to Submission concept plan (MOD 9 - RtS). Extensive engagement has occurred with the Department of Planning and Environment (DPE) and Government Architect NSW (GANSW) to review key elements of the project including scale of built form compatibility, open space and public amenity.

Overall, it introduces a more simplified development envelope at a reduced scale to the surrounding heritage context, including additional public domain offering and the deletion of the previously proposed 20 storey tower in response to submissions.

A summary of the changes is provided in [Table 4](#).

Table 4 Comparison of Changes Between the MOD 9 - exhibited design and the MOD 9 - RtS design

COMPONENT	APPROVED	EXHIBITED (MOD 9 - exhibited)	AMENDED* (MOD 9 - RtS)	CHANGE**
Overall Development Area				
Project area	22ha	22ha	22ha	None
Maximum Envelope Height				
Block 5	34	RL 44.5	RL 42.45	Reduced by RL 2.05
Block 6	29	RL 38.7	RL 35	Reduced by RL 3.7
Block 7	35	RL 73.7	RL 35	Reduced by RL 38.7
Gross floor area				
Residential	191,031m ²	190,031m ² (1,000m ² reduction)	237,031m ² (46,000m ² increase)	Increased by 47,000m ²
Tourist	76,000m ²	76,000m ²	76,000m ²	None
Retail	34,000m ²	71,800m ² (37,800m ² increase)	44,766m ² (10,766m ² increase)	Reduced by 27,034m ²
Active	5,000m ²	5,000m ²	5,000m ²	None
Community	10,000m ² 2,000m ² within development Blocks 6 and 7	Up to 19,000m ² max 2,800m ² within development Blocks 5, 6 and 7 (800m ² increase)	Up to 19,000m ² max 2,800m ² within development Blocks 5, 6 and 7 (800m ² increase)	None
GFA distribution	Block 5 - 29,688m ² Block 6 - 3,000m ² Block 7 - 15,000m ²	Flexible distribution and allocation permitted for all buildings in Blocks 6, 7 and 8 (below and above ground)	Flexible distribution and allocation permitted for all buildings in Blocks 6, 7 and 8 (below and above ground)	Control retained
Wintergardens	Not applied to Blocks 5, 6 and 7	Wintergardens to be excluded for the maximum residential and commercial GFA for Blocks 5, 6 and 7	Wintergardens to be excluded for the maximum residential and commercial GFA for Blocks 5, 6 and 7.	Control retained
Building overhangs	None	A building overhang up to 3m wide located above ground level, and/or façade articulation elements up to 650mm wide above ground level	None	Control deleted

* Amendments compared against the current Concept Approval (Approved column)

** Changes compared between the exhibited project (Exhibited column) and the amended project (Amended column)

4.3 MOD 9 - RtS Development Description

The modifications to the Approved Concept Plan require amendments to Schedules of the Instrument of Approval, including the development description and relevant conditions of consent. The Instrument of Approval was last modified as part of MOD 11 on 22 October 2020.

As a result of the amendments previously outlined, the Condition ‘A1 Development Description’ of the approved Concept Plan for Barangaroo (MP06_0162) will be modified by MOD 9 - RtS, as follows:

(1) A mixed-use development involving a maximum of ~~602,354~~ 667,686m² gross floor area (GFA), comprising:

- (a) a maximum of ~~191,031~~ 237,031 m² of residential GFA of which a maximum of 162,031 m² will be in Barangaroo South;
- (b) a maximum of 76,000 m² of GFA for tourist uses of which a maximum of 59,000 m² will be in Barangaroo South;
- (c) a maximum of ~~34,000~~ 44,766 m² of GFA for retail use of which a maximum of 30,000 m² will be in Barangaroo South;
- (d) a maximum of 5,000 m² of GFA for active uses in the Public Recreation zone of which 3,500 will be in Barangaroo South; and
- (e) a minimum of ~~12,000~~ 14,800 m² GFA for community use.

The MOD 9 - exhibited application proposed a GFA increase of 144,355 m² for Blocks 5, 6 and 7 (above and below ground). The amended MOD 9 -RtS application reduces this by 40,355 m², resulting in a revised GFA increase of 104,000 m² (above and below ground).

Modified Concept Plan

The key elements that make up the MOD 9 -RtS design are summarised in Table 5.

Table 5 Comparison of Changes Between the MOD 9 - exhibited design and the MOD 9 - RtS design

ELEMENT	DESCRIPTION
Land Use	
Uses	Mixed-use development including retail, tourist, community, commercial and shop top housing
GFA	
Above Ground	Maximum 92,908 m ²
Below Ground	Maximum 11,092 m ²
Total	Maximum 104,000 m ² (with a maximum 75,000 m ² for residential)
Heights	
Block 5	RL 22, RL 35 and RL 42.45
Block 6	RL 35
Block 7	RL 35

Summary of Concept Plan Refinements Post Exhibition

A summary of the amendments since exhibition is provided below:

GFA Amendments

- Reduced total GFA permissible within Blocks 5, 6 and 7 from 144,355 m² to 104,000 m²,
- Reduced below ground GFA from 28,166 m² to 11,092 m², and
- Increased maximum residential component cap from 28,000 m² to 75,000 m², and
- No change to the Cutaway GFA uses of up to 24,000 m².

Development envelope Amendments

- Removal of the tower element at Block 7 at RL 73.7
- Reduced building height with the tallest element located on Block 5 at RL 2.45
- Amendments to the overall dimension and footprint of Blocks 5, 6 and 7 including new pedestrian connections open to the sky
- Deletion of building cantilever elements into public domain
- Refinements to the interface of Block 5 and Hickson Park
- Simplified building height and massing across the entire site with only three heights proposed to minimise visual impacts from Observatory Hill and Millers Point.

Open Space and Public Domain Amendments

- Increased provision of publicly accessible open space when compared to the approved Concept Plan,
- New north-south pedestrian link with a minimum width of 8m and open to the sky to facilitate visual links from Hickson Park to Nawi Cove,
- Expanded east-west pedestrian connections, known as Plaza North and Plaza South up to 20m wide and open to the sky,
- New east-west arcade between Blocks 5 and 6 with a minimum width of 6m, and
- Additional allowance for deep soil zones across the site.

Traffic and Access Amendments

- Retain Barangaroo Avenue as a one-way shared street, and
- Deletion of Barton Street as a proposed permanent street.

Statutory and Development Control Amendments

- Amendments to the SEPP mapping and provisions to align with amended building envelope GFA, building heights and land uses,
- Removal of proposed SEPP amendment to allow GFA to extend 25m into the RE1 Public Recreation zone below ground level,
- Removal of proposed SEPP amendment to allow building façades to extend by an additional 3m above ground and the 650mm façade articulation zone,
- Amended Design Excellence Strategy to be largely consistent with PEHC SEPP, and
- Amended Urban Design Guidelines to reflect amended building envelope outcomes.

Axonomic diagrams show the designs for the Approved Concept Plan , MOD 9 - exhibited and MOD9 - RtS designs in Figure 20, Figure 21 and Figure 22.

A plan and elevation of the Approved Concept Plan for Central Barangaroo is shown in comparison to the proposed MOD 9 - RtS in Figure 30, Figure 26, Figure 27, Figure 28, and Figure 29.

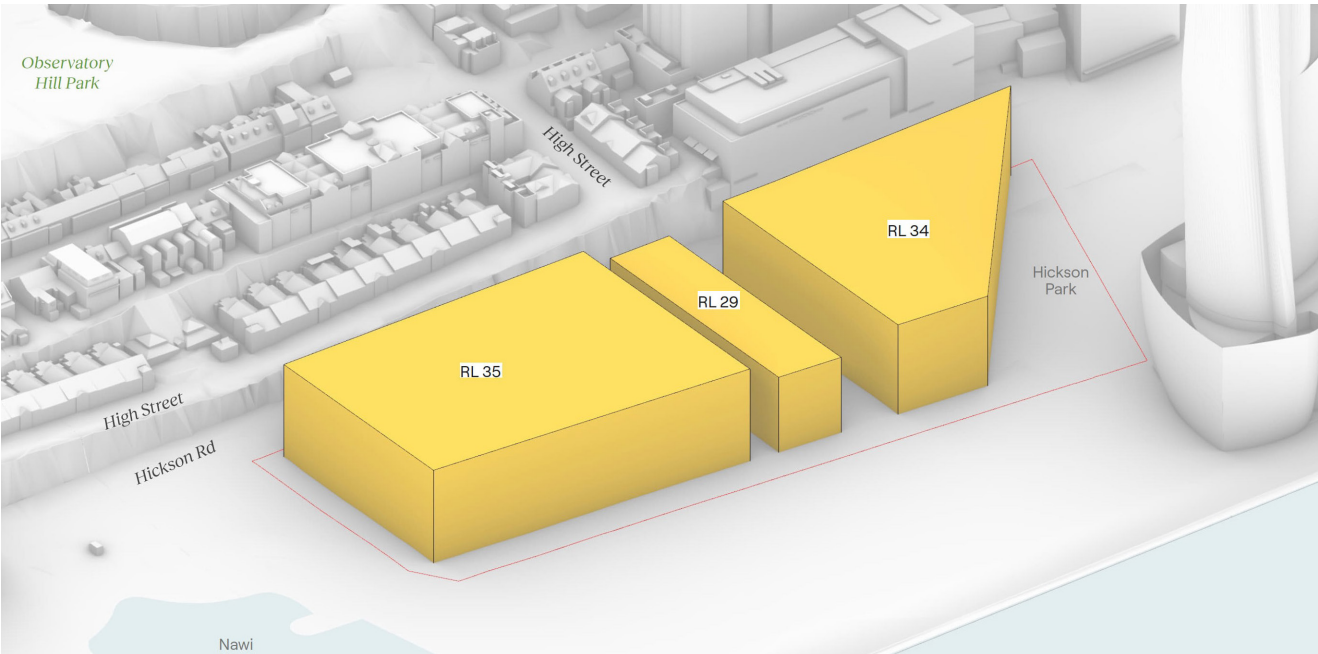


Figure 20 Axonometric of the Approved Concept Plan (Source: SJB diagrams September 2023)

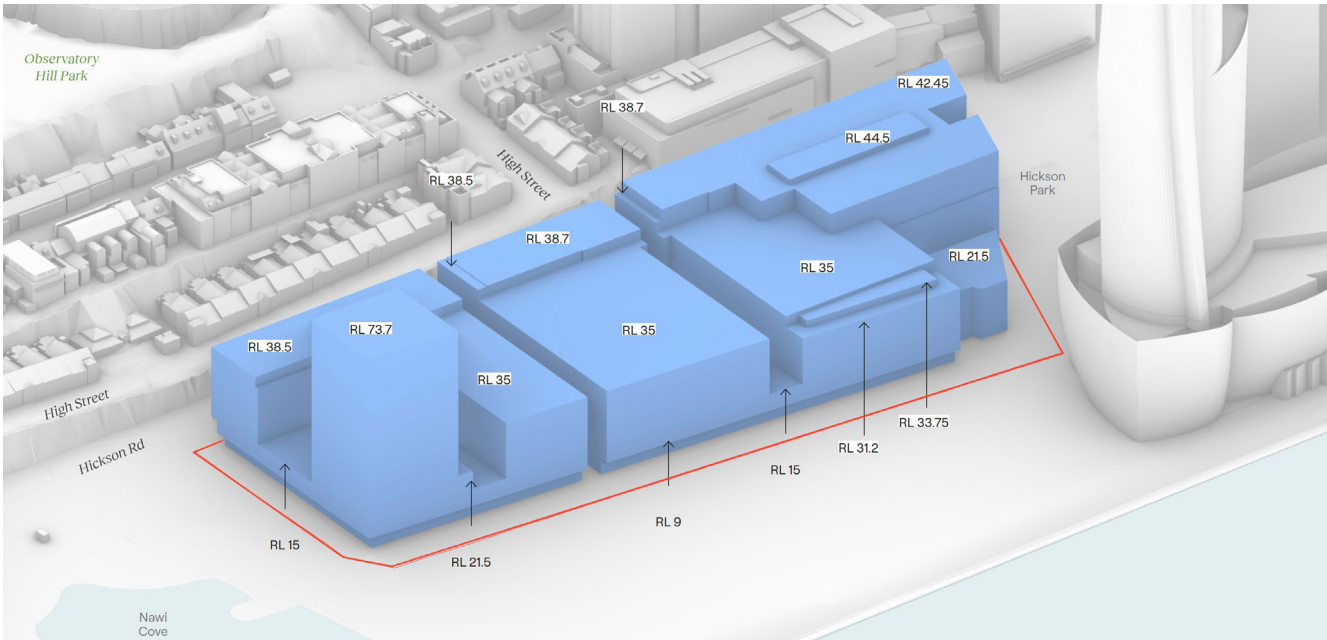


Figure 21 Axonometric of MOD 9 - exhibited (Source: SJB diagrams September 2023)

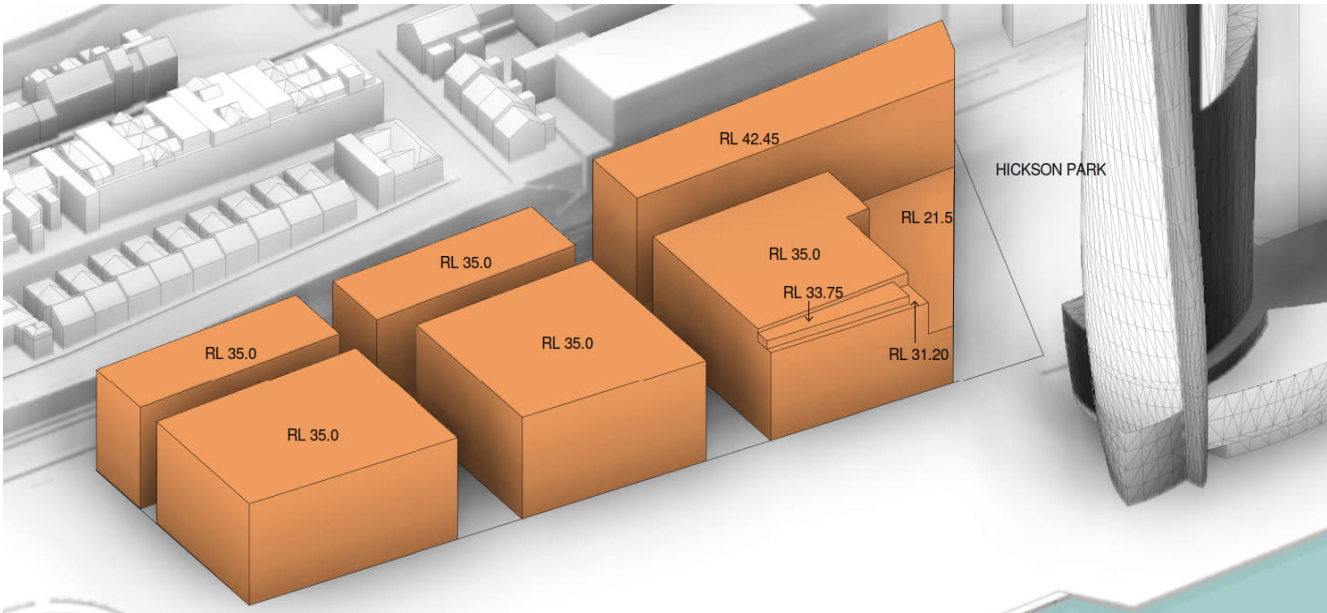


Figure 22 Axonometric of MOD 9 - RtS (Source: SJB diagrams October 2023)

4.3.1 Urban Design Principles for MOD 9 - RtS

In envisioning the last phase of Barangaroo's renewal, the urban design principles for Central Barangaroo respond to, and build upon, the planning, design and development guidance provided in SOM's Master Plan Framework. The urban design principles provided by SJB for MOD 9 - RtS for Central Barangaroo propose to:

- Deliver an innovative, creative, and dynamic waterfront destination that is permeable and connected within the precinct and connected with the city
- Ensure the delivery of design excellence in the planning and built form of the precinct, creating a diverse community of architectural expression within an overall coherent urban structure
- Deliver diversity of products and uses integrating commercial, residential, retail, community, civic, cultural, hospitality and entertainment activities which contribute to a vibrant and active identity
- Create and deliver a public domain that is distinct, unique, and innovative and allows for range of passive and active outdoor spaces and uses that together create a new iconic visitor attraction, consistent with the Infrastructure NSW's Activation Framework
- Deliver a balance of financial return and public benefit and amenity across the precinct
- Deliver a culturally distinctive, locally relevant, and internationally appealing canvas for appropriate facilities, experiences and public art
- Ensure high levels of public attraction, operational serviceability, amenity, and security across the precinct and during staging
- Extend the principles and networks of the climate-positive promise in line with the current world's best practice to deliver a whole of Barangaroo outcome and create projects that respond visibly to the sustainable needs of people and the planet

Place Principles

The SJB Place Principles are as follows:

Place Principles build on the extensive body of work already completed for Central Barangaroo. The scope and potential of the place is clearly understood and appreciated by the city and its community.

The desire to harness the site's potential requires bravery in the approach to design, development and place-making. We must extend our ambitions beyond the built outcome in order to achieve the 'alchemy' (i.e. world's best) of design and city-making. This requires subtle and nuanced approaches to the every-day understanding of the site and the city.

Outlined on the following pages are the place principles that sit at the heart of the master plan for Central Barangaroo.

Distinctly Sydney

- *Embodying the beauty of the city and its harbour setting, without the need or desire to over-power and dominate*
- *Creating a sense of 'the local', that's familiar and comfortable - avoiding a sense of exclusivity and elitism*
- *Forming a new neighbourhood that relates to the grain and texture of Millers Point, with the global reach of Barangaroo and the Harbour City.*

Connecting communities

- *Seamlessly integrated streets and spaces that open views and vistas to the harbour*
- *Bringing nodes and modes together into a cityscape that caters to everyone, but frames the experience around the pedestrian*
- *Opening-up the western edge of the city from The Rocks and Millers Point to the harbour and Headland Parks.*

Embedding Country

- *Design seeking place within Gadigal and Dharawal knowledge systems that considers ongoing engagement and cultural research*
- *Maximising landscaping opportunities to support high amenity on site by integrating micro climate and considering all ecologies at different scales*
- *Storytelling that honours the site's past and connects with the water story, sky story and the eons held name Gomora - place of light*

Engage with nature

- *Dynamic spaces and streets catering to the diurnal rhythm of the city, shifting seasons and phases of the harbour's life*
- *Deep soil at the edges, providing cool canopies that protect pedestrians and manage privacy*
- *Seamless integration to the Harbour Park, drawing nature into the heart of the precinct through intimate landscaping*
- *Bringing nature in and up buildings, utilising edges, balconies and roof planes*
- *Sun and air into the open streets, using the proportions of these spaces to manage weather, shade and comfort levels.*

Holding the edges

- *Provide strong edges to Harbour Park, Hickson Park, Hickson Road and Nawi Cove, which are public, active and dynamic. These are the 'front door' of the place*
- *The interface at ground will determine the relationship with the place. The public-ness of this experience will influence its role in the city*
- *Consider where people wish to move, dwell, sit and enjoy the spaces in and around the site. Slow and fast spaces, controlled through changes in street and space aperture, placement of seating, landscaping and way finding*
- *Provide clear thresholds between the edges and the internal experience - consciously designed by experienced in the subconscious.*

Beauty and delight

- *Beauty is in the 'eye of the beholder', and should be sought through individual moments, rather than a monumental gesture*
- *Each building can offer unlimited and varied outcomes, but should sit comfortably within the fabric of the city - there's no need to yell or shout from every façade*
- *The beauty of the site and its setting provide the ideal backdrop for framed and reflected views of the park, harbour and city setting*
- *Honest and tactile materials, embraced and crafted with care into a place that offers variation and texture, but reads in a coherent way for those that visit*
- *Being playful is always a good thing, but everyone needs to be in on the game. Be inclusive and engaging throughout.*

Future focused

- *The sustainability of the precinct should be the legacy of Barangaroo, and surpass the ambitions of the City*
- *Targets should be set within the context of global best practice, this is the expectation*
- *Locally, the focus will be on livability, community well-being, health and amenity - this is the same, whether you're a resident, tenant or visitor*
- *Record, Report and Refine over time - progress requires movement in a positive direction, and not a static response*
- *Barton Street as a key vehicular connection between Barangaroo Avenue and Hickson Road.*

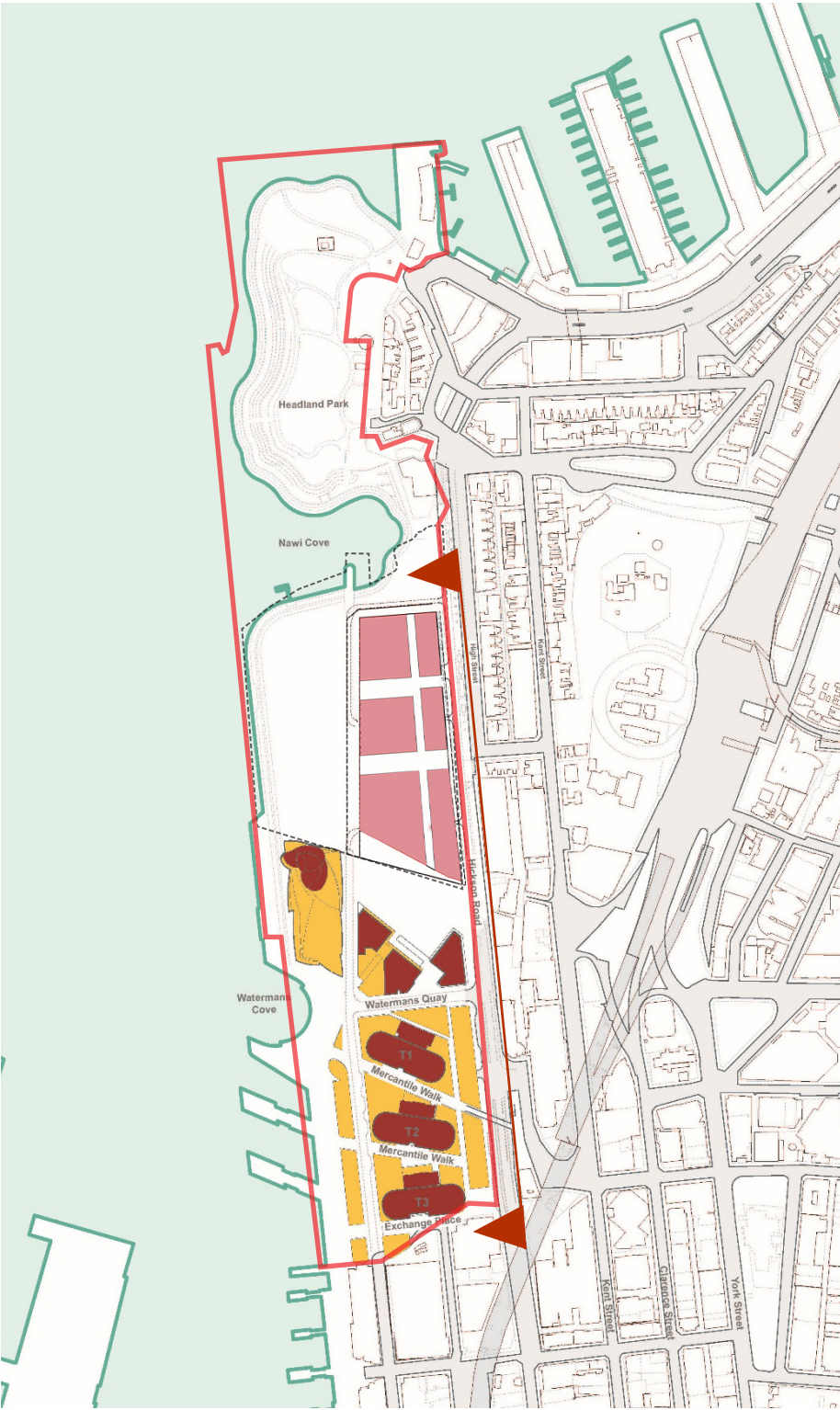


Figure 23 Plan showing MOD 9 - RtS within Central Barangaroo (Source: AECOM modified HASSELL diagram (November 2020))

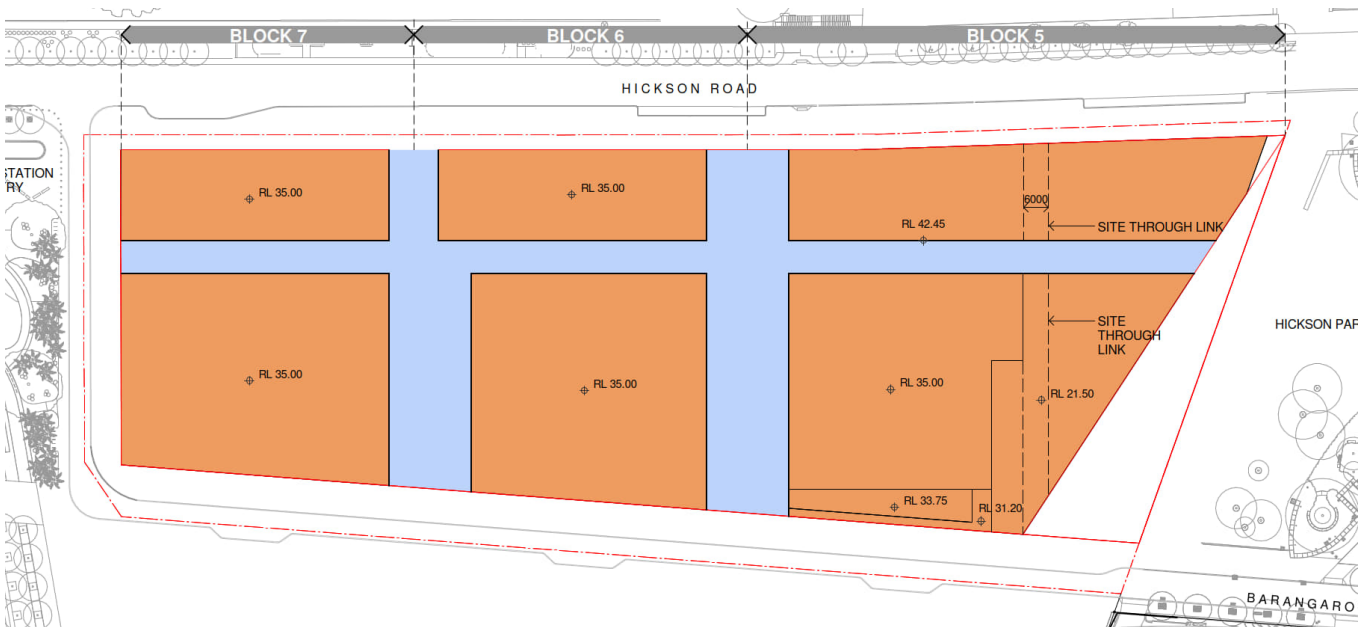


Figure 24 Plan diagram of MOD 9 -RtS with building heights (Source: SJB diagrams (October 2023))

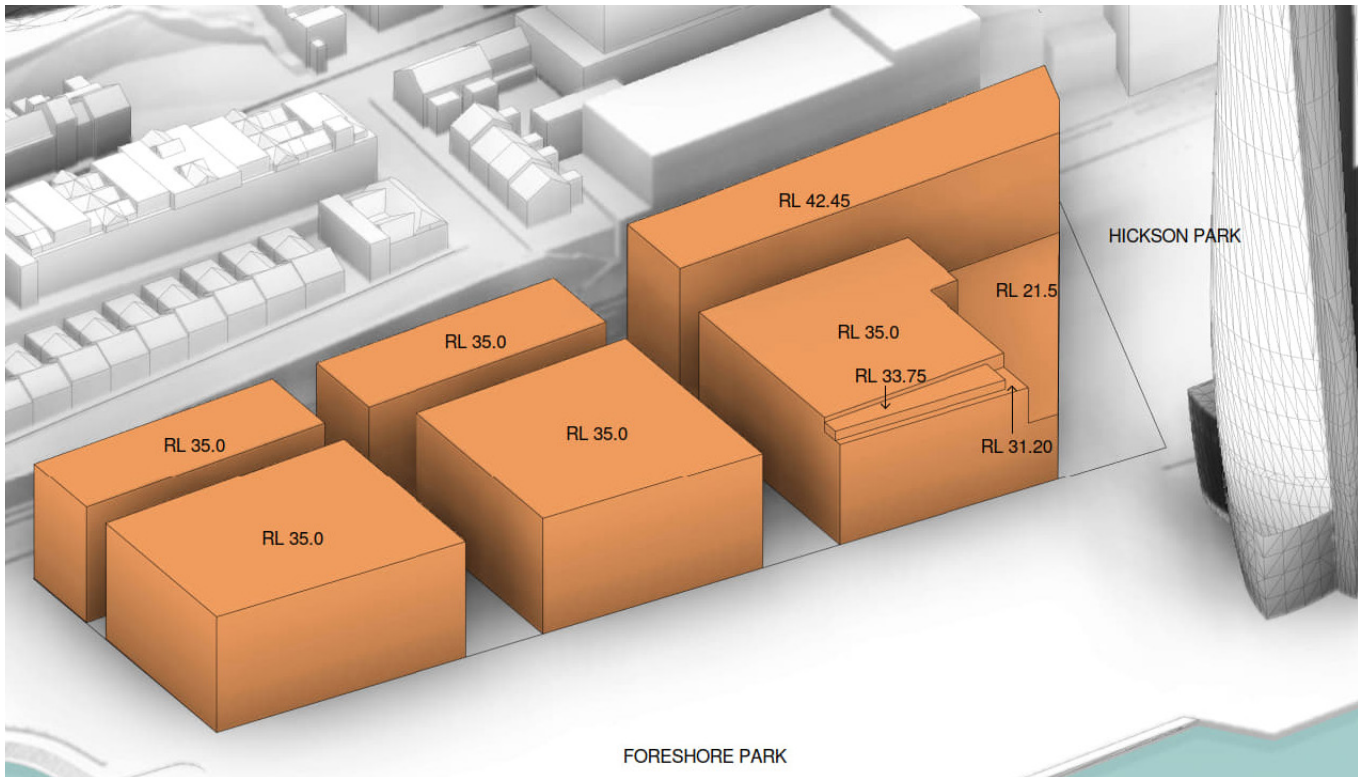


Figure 25 Axonometric diagram of MOD 9 with building heights (Source: SJB diagrams (October 2023))

LEGEND

 Approved Concept Plan development envelope

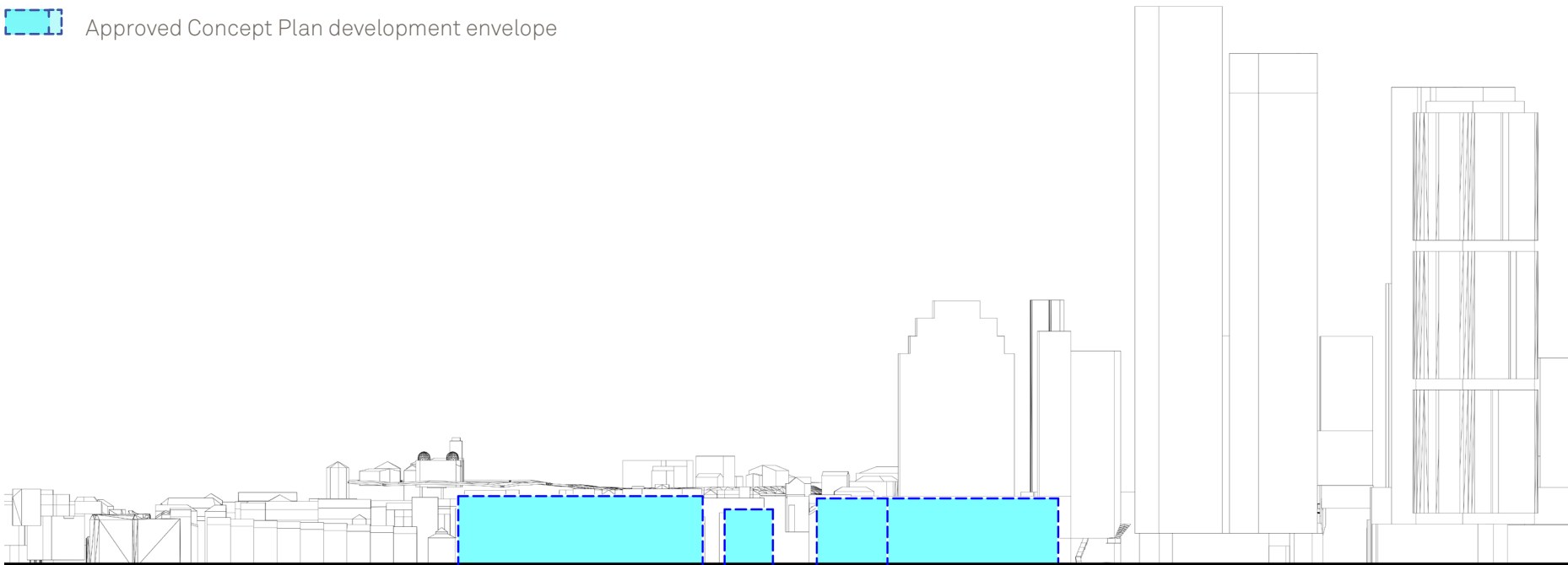


Figure 26 Elevation Looking East - Approved Concept Plan (Source: Modified from SJB diagrams (July 2023))

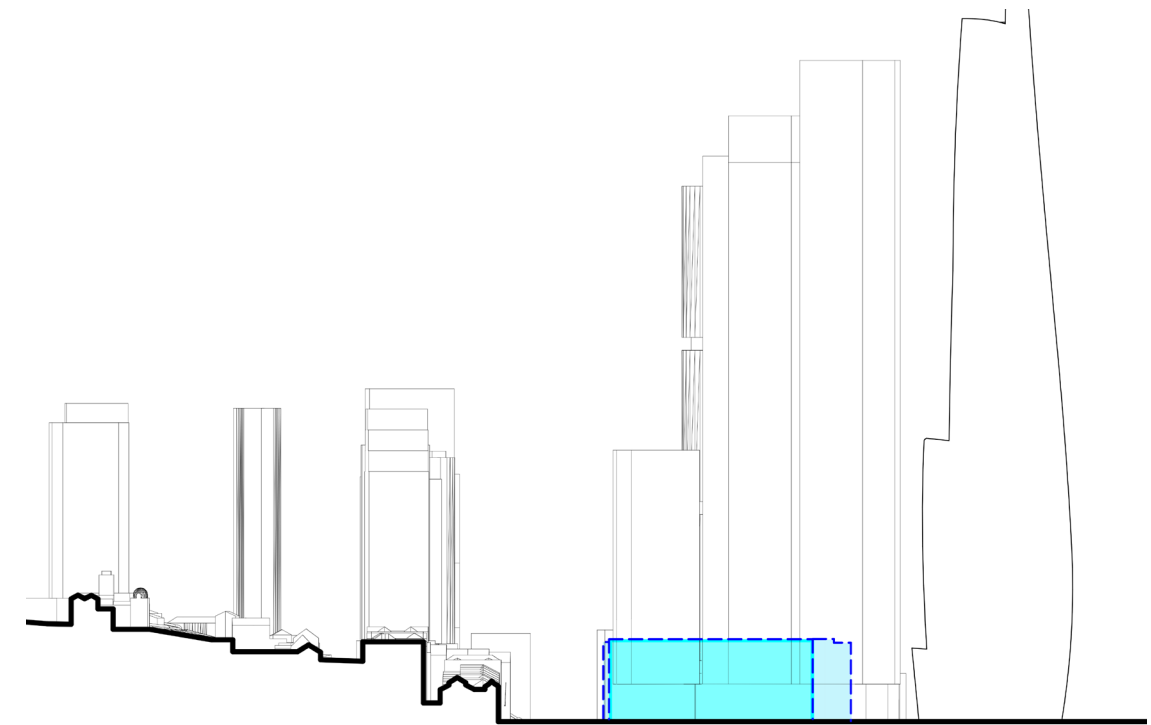


Figure 27 Sectional Elevation Looking South - Approved Concept Plan (Source: Modified from SJB diagrams (July 2023))

LEGEND
MOD 9 -RtS development envelope

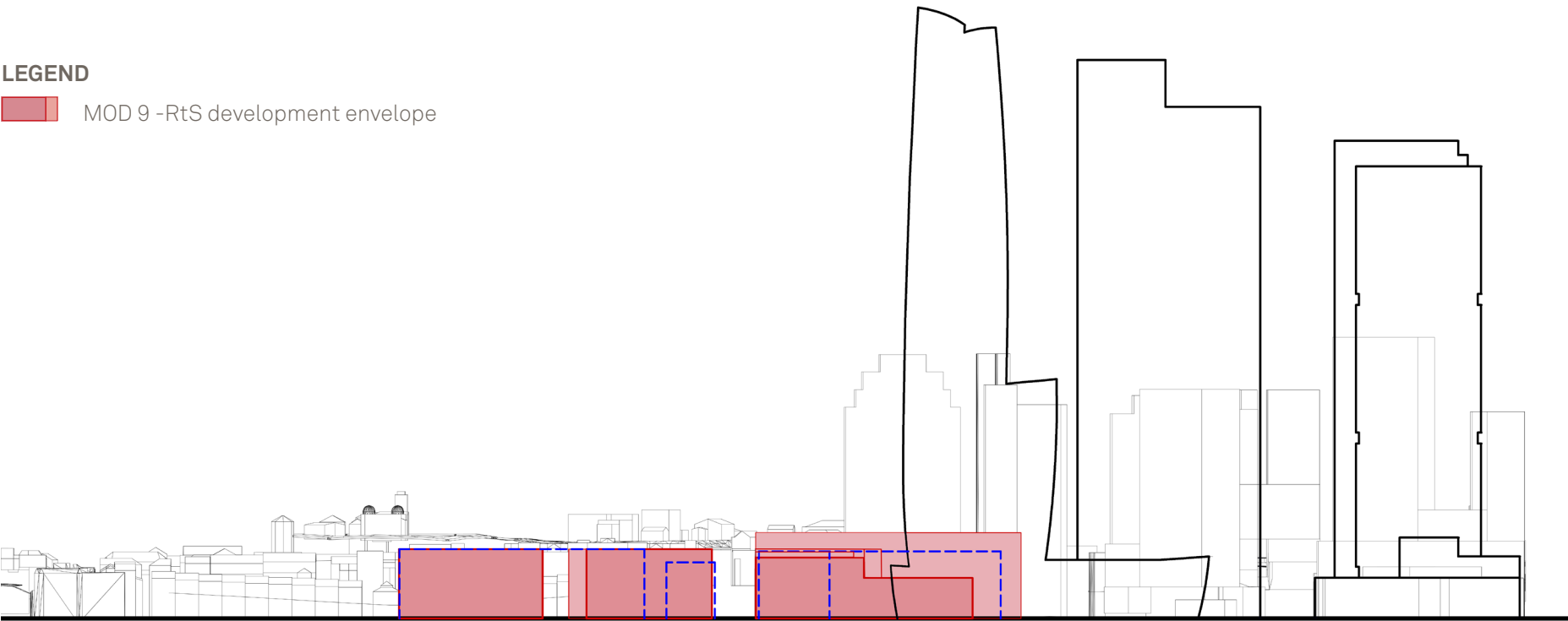


Figure 28 Elevation Looking East - MOD 9 - RtS, Approved Concept Plan shown as a blue dotted line (Source: Modified from SJB diagrams October 2023)

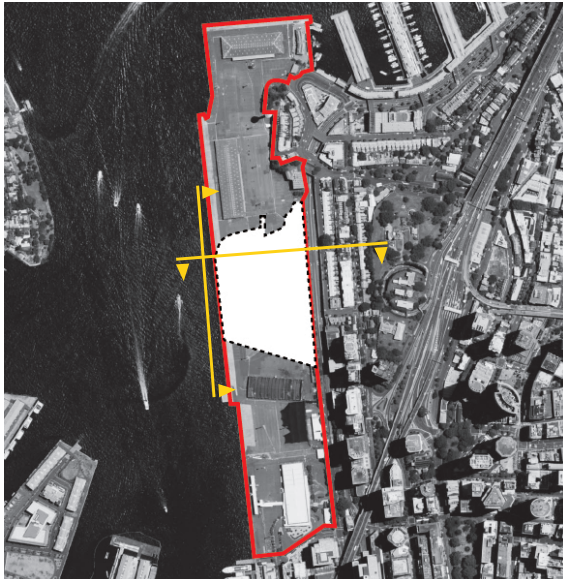


Figure 30 Location of elevation and sectional elevation

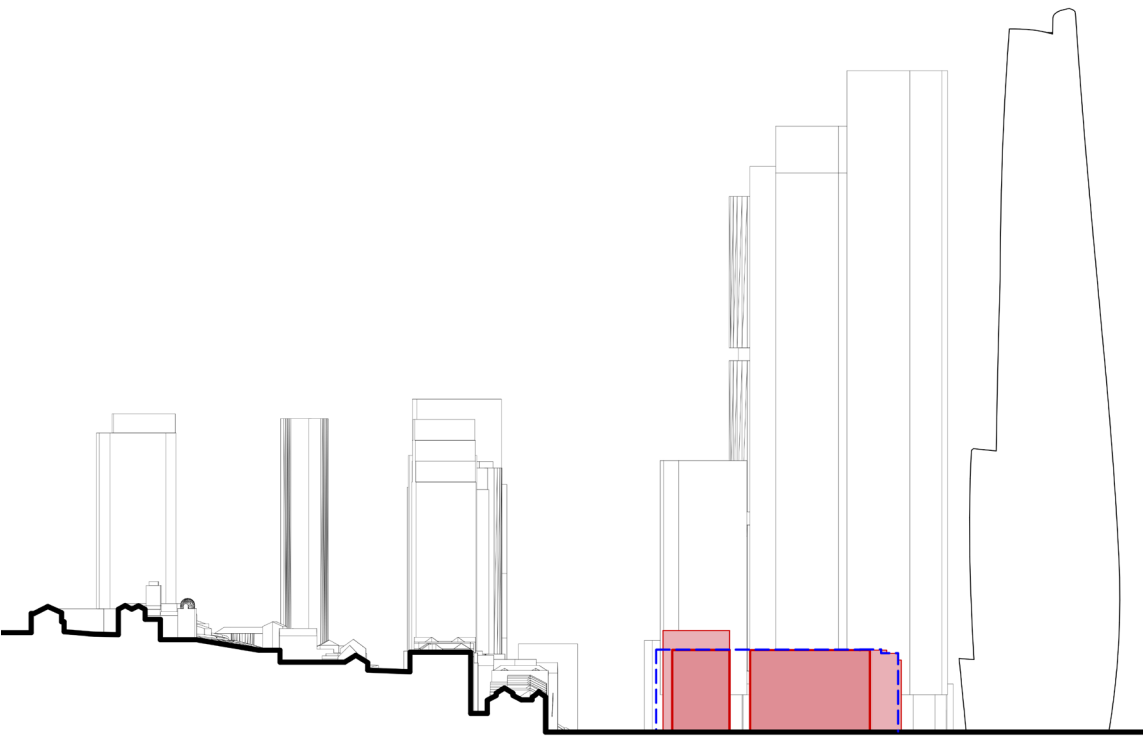


Figure 29 Sectional Elevation Looking South - MOD 9 - RtS (Source: Modified from SJB diagrams October 2023)



View from Nawi Cove Pier looking north towards Barangaroo Reserve

5.0 Methodology

5.1 Observer Locations

Figure 31 identifies the observer locations chosen for this report. A rationale for the choice of each observer location is provided in Section 5.1.1 and at the beginning of the assessment for each location.

The first 32 observer locations were selected to asses the impact on views in the first iteration of the assessment. Additional observer locations were added to assess MOD 9 - RtS in response to comments made in the submissions, as discussed in Appendix B.

Original Observer Locations:

- 01: Sydney Observatory Hill Park
- 02: Sydney Observatory
- 03: High Street (South)
- 04: Munn Reserve
- 05: Clyne Reserve
- 06: Barangaroo Reserve - Wulugul Walk
- 07: Barangaroo Reserve - Stargazer Lawn
- 08: Hickson Road
- 09: Gas Lane
- 10: Ballaarat Park
- 11: Pirrama Park
- 12: Balmain East -Illoura Reserve
- 13: Balls Head Reserve
- 14: Blues Point
- 15: Sydney Harbour Bridge
- 16: ‘Langham Hotel’ - Level 03
- 17: Highgate Residential Tower - Level 15
- 18: Highgate Residential Tower - Level 25
- 19: The Georgia Residential Tower - Level 15
- 20: The Georgia Residential Tower - Level 25
- 21: Stamford Marque Residential Tower - Level 15
- 22: Stamford Marque Residential Tower - Level 25
- 23: Stamford on Kent Residential Tower - Level 15
- 24: Stamford on Kent Residential Tower - Level 25

- 25: 189 Kent Street Apartments – Level 15
- 26: One Sydney Harbour Residential Tower – Level 9
- 27: Crown Sydney Hotel – Level 13
- 28: Crown Sydney Residential Apartments – Level 34
- 29: Shelley Street (from King Street Bridge)
- 30: Lime Street
- 31: Darling Harbour (Pymont Bridge)
- 32: Darling Harbour - Australian National Maritime Museum

Additional Observer Locations in response to submissions

- 33: Sydney Observatory Hill Park - South Path
- 34: Sydney Observatory - South West
- 35: National Trust Car Park
- 36: High Street – North
- 37: High Street – South
- 38: Hickson Road - Corner of Watermans Quay
- 39: James Watkinson Reserve
- 40: Giba Park
- 41: Corner of Grafton Street and Grafton Lane



Figure 31 Map of Observer Locations (source: AECOM modified Google Map)

5.1.1 Rationale for Choice of Observer Locations

5.1.1.1 Director General's Requirements

The Director General's Requirements included the need to assess the following locations: Hickson Road, Kent Street, Shelley Street, Lime Street, Gas Lane, High Street, East Balmain, Darling Harbour, Blues Point, Millers Point, Sydney Observatory, Sydney Observatory Hill Park, Clyne Reserve, Munn Reserve, Sydney Harbour Bridge, Pyrmont Bridge, Ballarat Park Darling Island and Jones Bay Wharf Pyrmont.

All of the above were adopted as observer locations except for Jones Bay Wharf Pyrmont which was replaced with the nearby Pirrama Park given the significantly larger number of recreational users of this space and similar vantage point location.

5.1.1.2 Barangaroo South Precinct

Approved developments within Barangaroo South Precinct (the Crown Casino Hotel and Resort and One Sydney Harbour) either already enjoy or would enjoy (once fully constructed) sweeping harbour views. Central Barangaroo lies adjacent to these developments and would comprise a good portion of the foreground of views to the north. Views (particularly to the Sydney Harbour Bridge) were assessed from these locations. The preservation of views from these developments to the Sydney Harbour Bridge and Sydney Opera House was agreed stemming from the court case *Crown Sydney Property v Barangaroo Delivery INSW*; Lendlease (Millers Point) v Barangaroo Delivery INSW [2018] NSWSC 1931.

5.1.1.3 Goat Island

Goat Island was not included because it is now part of Sydney Harbour National Park and is not readily accessible to the public other than by means of formal guided tours or special events. Additionally, given the location of the island north, north-west of Barangaroo, views to Central Barangaroo are partially obscured due to screening by Barangaroo Reserve. Further, between the views assessed from Illoura Reserve and Balls Head Reserve, the view from this location can be reasonably inferred.

5.1.1.4 More Distant Locations

The following more distant observer locations were considered but not included for the following reasons:

- Gladesville Bridge: MOD 9 - RtS would be seen as a relatively minor addition within the context of the Approved Concept Plan, and too distant for the scale of project.
- North Sydney CBD, the view is:
 - across the short face of the development,
 - obtained from office premises where the focus of building occupants would be trained on their work tasks rather than the landscape,
 - distant, and
 - seen against the backdrop of the Barangaroo South development.
- Sydney Opera House forecourt, the view is seen:
 - within the context of the Approved Concept Plan and the CBD backdrop,
 - as a small component of an extensive and complex panoramic harbour view, and
 - from Sydney Harbour Bridge is broadly representative.
- Cremorne Point: The view is:
 - seen within the context of the Approved Concept Plan and the CBD backdrop,
 - seen as a small component of an extensive and complex panoramic harbour view, and
 - too distant.
- Watsons Bay: The view is:
 - seen within context of the Approved Concept Plan and the CBD backdrop, and
 - too distant for the scale of the project.

5.1.1.5 Response to Submissions

In response to submissions, additional observer locations have been included for assessment these include:

- Additional views from the south Side of Observatory Hill
- Views from heritage items
- Additional views from the west at the extent of the view catchment

A full response to submissions can be found in [Appendix B](#).

5.1.1.6 New link bridge to Millers Point

A pedestrian bridge connecting MOD 9 - RtS to Millers Point has been conceptualised as part of a future application but is not part of this application and therefore has not been assessed. A high level discussion surrounding the visual context of this element has been provided in the Response to Submissions ([Appendix B](#)).

5.2 Views and Visualisations

5.2.1 Existing View

For the purposes of this assessment, the 'existing' view shows the view before any development of Central Barangaroo, as seen from each observer location. The existing view comprises the view available at the time of photographing each observer location (refer [Section 5.6.1](#)).

Where the observer location was located at a privately owned or inaccessible position (e.g. from an approved development not yet constructed), a theoretical existing view was digitally generated (refer [Section 5.6.2](#)).

5.2.2 Approved Concept Plan Visualisation

This is the view against which the MOD 9 - RtS development envelope is assessed and comprises the existing view as seen from each location with the addition of the Approved Concept Plan development envelope (shown in purple) for Central Barangaroo. Figures for the Approved Concept Plan illustrate vertical exaggerations accurately rather than showing a 'flattened' impression of buildings.

5.2.3 MOD 9 - exhibited Visualisation

This view has been included for reference and to illustrate the changes in response to submissions to this iteration of the design. This visualisation comprises the existing view overlaid with the MOD 9 - exhibited development envelope (shown in purple).

5.2.4 MOD 9 - RtS Visualisation

This is the proposed view to be assessed against the Approved Concept Plan and comprises the existing view as seen from each location overlaid with the MOD 9 - RtS development envelope (shown in purple) for Central Barangaroo.

5.3 Assessment Criteria

In response to the DGR’s the following criteria have been defined to assist in understanding the nature of the view and observer types for each observer location. These criteria provide a basis for understanding the nature of proposed change and determining the extent of any visual impact that may occur as a result of MOD 9 - RtS.

5.3.1 General Criteria

The following general assessment criteria stems from criteria for visual impact assessment taken from the Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Management and Assessment, UK, 2013):

- Distance to view
- Observer type (e.g. tourist, other recreational user, resident)
- Number of observers
- Duration of observation
- Visibility of Central Barangaroo within the view (i.e. the visual prominence of Central Barangaroo within the view)
- Visual absorption capacity (defined as: the landscapes ability to absorb physical changes without transformation of its visual character and quality).

5.3.2 View Sharing Criteria

This criteria stems from NSW Land and Environment Court cases where planning principles have been established with regard to view sharing. It also takes guidance from the *State Environmental Planning Policy (Biodiversity and Conservation) 2021*. The notion of view sharing is invoked when a private property or an area of the public domain enjoys an existing view (refer [Section 5.2](#)) and a proposed development would share that view by taking some of it away for its own enjoyment. The planning principles:

- consider the acceptability of the impact of the proposed development on the views enjoyed from private property in the vicinity of a proposed development (Tenacity Consulting v Warringah, 2004. NSWLEC 140), and
- consider the acceptability of the impact of private developments on views from the public domain in the vicinity of the proposed development (Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor, 2013. NSWLEC 1046).

5.3.2.1 Views from Private Property

For view sharing associated with views from private property, a four-step assessment process (Tenacity Consulting v Warringah, 2004. NSWLEC 140) is considered as part of the overall assessment criteria to decide whether the proposed view sharing is reasonable, as follows:

1. Assessment of the view to be affected. Water views are valued more highly than land views. Iconic views, e.g. the Sydney Harbour Bridge and Sydney Opera House are valued more highly than views without icons. Whole views are valued more highly than partial views, e.g. a water view in which the interface between land and water is visible, is more valuable than one in which it is obscured.
2. Consider from what part of the property the views are obtained: For example, the protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries. Sitting views are more difficult to protect than standing views.
3. Assess the extent of the impact: For example, the impact on views from living areas and kitchens would typically be more significant than from bedrooms or service areas.
4. Assess the reasonableness of the proposal: A development that complies with all planning controls would be considered more reasonable than one that breaches them.

Visual impact assessments on residential properties are considered for three situations, as follows:

- Residential towers on Kent Street: computer generated perspective views have been created from Level 15 (RL 59) and Level 25 (RL 90) for the Highgate, The Georgia, Stamford Marque, and Stamford on Kent apartment buildings. These RLs have been drawn from those used for the View and Visual Impact Assessment prepared for the Approved Concept Plan to provide consistency. View locations from each building are located towards the northern end of the building as it reflects the direction of view. An additional viewpoint was created to consider the view seen from the proposed 189 Kent Street Apartments, which have approval but have not been constructed yet. A comparison is then undertaken between the extent of view available between the Approved Concept Plan and MOD 9 - RtS.
- Residential terrace properties on High Street and Kent Street: for residential terrace properties on High Street and Kent Street, typical sections are used to illustrate and assess view impacts for these residential properties. It was found that views from terrace housing on High Street would be lost on construction of the Approved Concept Plan. This location was therefore not assessed in previous iterations of this report, however, in response to submissions outlining the importance of this location considering its heritage listings, new observer locations have been added to assess any potential impact.
- Langham Hotel: A view from the Langham Hotel on Kent Street is taken from a central location on the upper (3rd) floor to illustrate and assess view impacts on hotel patrons.

5.3.2.2 Views from the Public Domain

For view sharing associated with the public domain, a two-part process (Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor, 2013. NSWLEC 1046) is considered as part of the assessment. Relevant sections of the process are as follows:

1. Identification Stage

Identify the nature and scope of existing views (refer [Section 5.2](#)) from the public domain. Issues that may be considered include:

- existing view
- nature and extent of view
- compositional elements
- curtilages of important elements
- observer location: Identify locations within the public domain from which the view will be potentially interrupted /obstructed
- extent of obstruction: Identify the extent of the obstruction at each relevant location, including from a seated position,Intensity of use: Identify the intensity of public use at these locations
- documented importance: Identify whether or not there is any document that identifies the importance of the view to be assessed, e.g. by international, national, state or local heritage recognition.

2. Analysis of Impacts

Issues that may be considered include:

- Document weighting: Assess the weighting that should be applied to an objective/aim for the maintenance, protection and/or enhancement of public domain views. The weight given will depend on the status of the document containing it and the terms in which it is expressed, e.g. ‘preservation’ of views as opposed to ‘minimisation of impacts’.
- Quantitative evaluation: Undertake a quantitative evaluation of the extent of the present view, the compositional elements within it and the extent to which the view will be obstructed. Assess whether the remaining view would still be sufficient to understand and appreciate the nature of and attractiveness of significant elements of the current view.
- Qualitative evaluation: Undertake a qualitative evaluation of the remaining view. Set out the factors taken into account and weight attached to them. A high value is placed on physical features such as land/water interfaces, iconic views and views that are unobstructed. Other factors for consideration include:
 - Is any significance attached to the view likely to be altered?
 - If so, who or what organisation has attributed that significance and why have they done so?

- Is the present view regarded as desirable and would the change make it less so, and why?
- Should any change to whether the view is a static or dynamic one be regarded as negative or positive and why?
- If the present view attracts the public to specific locations, why and how will that attraction be impacted?
- Is any present obstruction of the view so extensive as to render the preservation of the existing view merely tokenistic?
- However, on the other hand, if the present obstruction of the view is extensive, does that which remains nonetheless warrant preservation?
- If the change to the view is its alteration by the insertion of new element(s), how does that alter the nature of the present view?
- A rating of High, Moderate, Low or Not Applicable is applied to each of the above criteria, in conjunction with a brief commentary where required.
- View sharing principles apply to a select range of the observer locations assessed, i.e. to those locations where a substantial view to, or through the proposed development may occur from the public domain, private residences (predominantly terraces houses), and from Langham Hotel. This broadly encompasses views from the Millers Point Conservation Area, and from harbour headland locations to the west. Those observer locations that do not have view sharing principles applied do not have important elements of the view interrupted.

5.4 Assessment of Visual Impacts

An assessment of visual effects deals with the effects of change on the views available to people and their visual amenity. It assesses how the surroundings of individuals or groups of people (observer/s) may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements.

Visual impact assessment relies on linking judgements about the sensitivity of the viewpoint (considering the visual observers they represent) and the magnitude of the effects to arrive at conclusions about the significance of impact. These judgements take into consideration both the findings of the above general and view sharing assessment criteria (refer Section 5.3), and the ‘sensitivity’ and ‘magnitude’ criteria addressed below.

5.4.1 Sensitivity and Magnitude

The visual impact assessment grading matrix (refer Table 6) combines the sensitivity of the viewpoint to the proposed change in the view to Central Barangaroo, and the magnitude of the change arising from the difference between the Approved Concept Plan and the MOD 9 - RtS design, to provide an impact rating ranging between High and Negligible.

Table 6 Visual impact assessment grading matrix

		MAGNITUDE			
		HIGH	MOD	LOW	NEG
SENSITIVITY	HIGH	H	HM	M	N
	MOD	HM	M	ML	N
	LOW	M	M	L	N
	NEG	N	N	N	N

5.4.1.1 Sensitivity

The sensitivity of an observer location considers the visual receptors who would see the view from that location and comprises the components outlined below.

Susceptibility of visual receptors to change

The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of the activity of people experiencing the view and the extent to which their attention or interest may therefore be focused on the view.

Visual receptors most susceptible to change generally comprise: residents who are likely to occupy these locations for long periods of time; people engaged in passive outdoor recreational activities such as walking, or sitting and enjoying the view; visitors to attractions where the surroundings are part of the experience; and communities where the landscape setting is an important contributor to the amenity of their environment.

Visual receptors with a moderate susceptibility to change generally comprise travellers on road, rail and other forms of transport. Where travel involves recognised scenic routes awareness of views may be particularly high.

Visual receptors with less sensitivity to change include people engaged in outdoor sport which does not involve or depend on appreciation of views of the landscape, and people at their place of work where attention is focused on their activity and the setting is less important to their experience.

Value attached to views

This assessment considers:

- the recognition of the value attached to particular views, either in relation to heritage assets or through planning designations, planning policy or other existing planning or urban design studies;
- indications of the value attached to views, either through inclusion in guidebooks or on tourist maps, provision of facilities for their enjoyment such as sign boards and interpretive material; and
- references to them in literature or art.

These components are combined to produce a sensitivity assessment that ranges from High to Negligible.

5.4.1.2 Magnitude

The magnitude of visual impacts comprises the components outlined below.

Size or scale of the change

This assessment takes account of the scale of change in the view with respect to: the loss or addition of features in the view; the degree of contrast or integration of any new features or changes and characteristics in terms of form, scale and mass, line, height, colour and texture; and the nature of the view of the proposal and whether views will be full, partial or glimpses.

Geographical extent of impacts

The geographical extent of a visual impact will vary with different viewpoints and is likely to reflect the horizontal angle of the view, the distance of the viewpoint, and the extent of the area over which changes would be visible.

Duration and reversibility of the impacts

Duration is judged on a scale of short term (zero to five years), medium term (five to ten years) and long term (more than ten years). Reversibility comprises a professional judgement about the prospects of the impact being reversed, e.g. a solar farm could be considered to have good potential to return to farmland, whereas for example, residential development would be considered long term.

For the purposes of this assessment, it has been assumed that the duration of MOD 9 - RtS is long term. This factor has therefore not specifically been addressed for each observer location.

These components are combined to produce a magnitude of visual impact assessment that ranges from High to Negligible.

5.4.1.3 Overall Significance of Visual Impacts

Once the sensitivity of the observer to visual change and the magnitude of changes in the content and character of views have been determined, a matrix is used to determine an overall rating of the level of significance of the impact, described as being Negligible, Low, Moderate to Low, Moderate, High to Moderate, or High, as set out in [Table 6](#).

5.5 Comparison of Existing, Approved Concept Plan, MOD 9 - exhibited and MOD 9 - RtS

A high level assessment is undertaken for each observer location that compares the existing view with views resulting from the Approved Concept Plan, MOD 9 - exhibited and MOD 9 - RtS. Assessment has been undertaken using a close approximation of the human eye.

A series of images were taken with a 28mm lens on a 35mm format sensor. These images are stitched together to create a panoramic image that matches the 460 angle of view specified in the DGRs, whilst removing parallax and rectilinear distortion. This provides the most accurate recreation of what a bi-focal human eye can see from any particular observer location. Observer locations have been selected to cover long range, medium range and short range positions.

5.6 Preparation of existing views

5.6.1 Publicly accessible observer locations

For observer locations accessible to the public, a panorama was prepared to illustrate the ‘existing’ before view.

5.6.1.1 On ground photography

A series of photographs were captured at each location over a two day period commencing on the 12th July 2023 using a Nikon D810 digital camera with a Nikon 28mm AF-S lens. The camera has a full frame sensor equal in size to that of 35mm film and therefore there is no crop factor to be considered. The lens was selected for its excellent image quality and low levels of distortion.

The camera was mounted on a level tripod using an RRS panoramic head. This allows the camera to be rotated around the nodal point of the lens, removing any parallax error from the photography. A series of Images were then captured from left to right in 30° increments, until a minimum of 150° had been recorded.

Camera positions were recorded using a Trimble DA2 w/ TDC-600 with Terraflex (GPS). This equipment allows an RTK precision of +/- 10mm H/15mm V. The coordinate system used was MGA56.

From some photographed locations the surrounding landform, trees or buildings made the GPS recording less accurate due to the inability to triangulate its position using satellites. Where it was not possible to use the GPS to accurately locate the camera position, the camera position was located using nearby items visible in aerial photography and the final position cross checked using the 3D city model as described in [Section 5.7.2](#).

5.6.1.2 Creation of panoramas

Photographs captured on site were post processed to remove any elements of lens distortion and stitched together using specialised panoramic software. Each photograph was tied to its adjacent image using relative tie points to create an accurate panorama. A minimum of 10 control points were used to ensure a high level of accuracy with average control point divergence measured at <1 pixel. Refer [Appendix A](#) for alignment images and surveyor qualifications.

Panoramic photographs are then generated with a horizontal Field of View of 124° and a vertical Field of View of 55° using a true rectilinear projection to accurately simulate a camera lens with a Field of View (FoV) equal to 124°.

5.6.2 Non-publicly accessible observer locations

Some observer locations were not accessible to create a before view using on ground photography. These locations were either on private land or were approved but not constructed. For these locations the existing view was created by Arterra Interactive Pty Ltd using a city model.

5.6.2.1 Sydney CBD 3D Digital Model

The Sydney CBD 3D digital model is based on a combination of accurate data sets including LiDAR capture, Photogrammetry capture and BIM models. The data sets have been combined into one model which represents the Arterra Interactive Sydney CBD model. The location of the model is based on MGA coordinates but relocated to a false origin due to the limitation of 3DSmax software.

5.6.2.2 Sun direction

Sunlight angles have been set up accurately using the 3DSMax daylight system.

The sunlight and daylight systems use light in a system that follows the geographically correct angle and movement of the sun over the earth at a given location. The system allows the choice of location, date, time, and compass orientation. This system is suitable for shadow studies of proposed and existing structures. In addition, latitude, longitude, north direction, and orbital scale can be animated.

5.6.2.3 Camera and view location

Cameras present a scene from a particular point of view. Camera objects simulate still-image, motion picture, or video cameras in the real world.

5.7 Preparation of Visualisations

Visualisations were prepared for publicly accessible observer locations by AECOM using panoramas created from site photography (refer [Section 5.6.1](#)), while digital visualisations were prepared by Arterra Interactive for non-publicly accessible observer locations (refer [Table 7](#)).

5.7.1 Non-publicly accessible observer locations

5.7.1.1 View angle, field of view and aspect ratio

The FoV, lens and aspect ratio have been set up under specific instruction from AECOM using the following settings in 3DSMax software:

- FoV to 124 degrees.
- Aspect ratio to 124 x 55.

5.7.2 Publicly accessible observer locations

5.7.2.1 Preparation of panoramic bases

A series of photographs were captured and stitched to create a panorama for each observer location as described in [Section 5.6.1](#).

5.7.2.2 On ground tie point capture

Following the photography, the Trimble DA2 w/ TDC-600 (GPS) was used to capture location information for a series of tie points that would be used to accurately align the camera and the virtual camera in the 3D Software.

Tie points are specific, identifiable surveyed objects visible in both the 3D model and within the panoramic photograph. As with the camera location, these are recorded to an accuracy of +/- 10mm H/15mm V.

Tie points were undertaken for Observer Locations 1, 2, 4, 5, 6, 7, 10, 11, 14, 15, 29, 30, 31, 32, 33, 34, 35, 36, 39, 40, 41 (Refer to [Table 7](#)).

5.7.2.3 Development of the 3d model

The 3D model of the proposed development was initially supplied to AECOM as a dwg file “201001_3D-RefinedDesign&Envelope.dwg” by Aqualand. Subsequent changes to the model were provided in the files “CB Envelope 231013.dwg” and “CB Envelope 231024.dwg” which were used to update the affected visualisations.

The 3D model of the consented Approved Concept Plan envelopes for Central Barangaroo were supplied to AECOM as a dwg file “230523 - Aqualand VIA Base Envelope.dwg” by Aqualand.

The 3D models of the consented Block Y - Crown Sydney Hotel Resort and the Block R4A, R4B and R5 - Renzo Piano One Sydney Harbour development were supplied to AECOM as 3ds max models file “BLDG – Crown.max, R4A.max, R4B.max and R5.max” by Arterra.

The 2D site plan was provided to AECOM as a dwg file “180629_Eagle_SitePlanBase.dwg” by HASSELL Studio who confirmed RLs for the development.

These models and plans were imported into 3DS Max and were aligned to a local datum offset from MGA56. The development envelopes were aligned to the site plan and the heights checked and confirmed. The 3D model was compared to both hard and soft copies of plans to ensure consistency.

5.7.2.4 Virtual camera placement

Virtual cameras are placed into the 3D scene, aligned to the local datum and matched to the GPS co-ordinates of the field camera position. These positions have an RTK precision of +/- 10mm H/15mm V.

The Field of View and aspect ratio of the virtual cameras was then adjusted to match the rectilinear image field of view of 124°.

The tie point data recorded on site is then imported into the software, aligned with the local datum and used to generate markers in the scene file corresponding to the real world location of the tie points.

The virtual camera’s location is locked and the camera is rotated until the virtual tie points align with the tie points shown within the panoramic image. Multiple tie points were used across the width of the view to ensure accuracy. The tie points are rendered and overlaid on the full size existing panoramic image. The alignment is refined until no disparity can be found.

For confirmation, an extra layer of data was loaded into the scene for cross checking. A 3D city model, provided by Aerometrex and generated using 10cm aerial photography acquired in May 2017, is loaded into the scene and aligned to local datum (Refer to [Table 7](#)). The 3d model, along with the tie points were rendered and overlaid on the panorama. These images are included in the appendices.

For the locations using a photomontage, not a visual simulation, (Observer Locations 3, 8, 9, 12, 13, 29, 38 and 39) only the 3D city model was used for alignment as tie points were not able to be taken to the same level of accuracy.

5.7.2.5 Rendering

In the 3D model scene file, the sun and environment was simulated to match the precise day and time that the original photographs were taken. This ensures that the lighting of the development matches as well as the shadows being cast correctly. The views are then rendered as exr files using Vray. Vray is selected for its accurate lighting capability and quality of rendering.

5.7.2.6 Final image composition

The rendered files were then taken into 2D image editing software and overlaid on the original panoramic images. A mask was applied to the rendered image allowing elements in the foreground to be visible in their exact position in front of the development.

AECOM carefully compared on site photography, plans, aerial photography and other sources of information such as Google street view when editing the photo to make sure that everything that is in front of the development can still be seen.

Once editing was complete, a flattened image was output from the editing software and a final correction was applied to remove stretching that is found at the edges of a rectilinear image. This correction was done applying a rectilinear perspective correction tool and compensated for images being printed on flat paper. Due to the back of our eyes being slightly round, not flat, this correction provides a more accurate simulation of a view.

All viewpoint representations from the public domain (including panoramas to reflect the existing view and visual simulations to illustrate the approved or proposed changes) include viewing frames on top of the images for a 35mm and 50mm lens to provide a reference of typical camera lenses. A 50mm lens is considered the benchmark for landscape technical photography regarded as the closest to the human eye, albeit there is also typically wider peripheral vision.

5.7.2.7 Conclusion

AECOM prepare visual simulations in line with accepted industry standards, incorporating a series of processes and steps to ensure consistency and accuracy in each output. These visual simulations accurately represent the proportions and location of the proposed development and views from the selected locations as prescribed by the design information available.

The images are created to represent the view from a specific location and time, capturing the primary human field of view. They are designed to be viewed at a certain size and resolution. Care should be taken to avoid zooming in to digital versions of the image, as viewing the information at a different scale or distance can over emphasize the visual impact of the development.

Table 7 Alignment method for each Observer Location

#	Observer Location Name	Alignment method		
		Photographed or digital visualisation *	Trimble DA2 w/ TDC-600 (GPS)	City Model
01	Sydney Observatory Hill Park	P	x	x
02	Sydney Observatory	P	x	x
03	High Street (South)	P		x
04	Munn Reserve	P	x	x
05	Clyne Reserve	P	x	x
06	Barangaroo Reserve - Wulugul Walk	P	x	x
07	Barangaroo Reserve - Stargazer Lawn	P	x	x
08	Hickson Road	P		x
09	Gas Lane	P		x
10	Ballaarat Park	P	x	x
11	Pirrama Park	P	x	x
12	Balmain East -Illoura Reserve	P	x	x
13	Balls Head Reserve	P	x	x
14	Blues Point	P	x	x
15	Sydney Harbour Bridge	P	x	x
16	‘Langham Hotel’ - Level 03	D		x
17	Highgate Residential Tower - Level 15	D		x
18	Highgate Residential Tower - Level 25	D		x
19	The Georgia Residential Tower - Level 15	D		x
20	The Georgia Residential Tower - Level 25	D		x
21	Stamford Marque Residential Tower - Level 15	D		x
22	Stamford Marque Residential Tower - Level 25	D		x
23	Stamford on Kent Residential Tower - Level 15	D		x

Table 7 continued

#	Observer Location Name	Alignment method		
		Photographed or digital visualisation *	Trimble DA2 w/ TDC-600 (GPS)	City Model
45	Stamford on Kent Residential Tower - Level 25	D		x
25	189 Kent Street Apartments – Level 15	D		x
26	One Sydney Harbour Residential Tower – Level 9	D		x
27	Crown Sydney Hotel – Level 13	D		x
28	Crown Sydney Residential Apartments – Level 34	D		x
29	Shelley Street (from King Street Bridge)	P	x	x
30	Lime Street	P	x	x
31	Darling Harbour (Pyrmont Bridge)	P	x	x
32	Darling Harbour - Australian National Maritime Museum	P	x	x
33	Sydney Observatory Hill Park - South Path	P	x	x
34	Sydney Observatory - South West	P	x	x
35	National Trust Car Park	P	x	x
36	High Street – North	P	x	x
37	High Street – South	P		x
38	Hickson Road - Corner of Watermans Quay	P		x
39	James Watkinson Reserve	P	x	x
40	Giba Park	P	x	x
41	Corner of Grafton Street and Grafton Lane	P	x	x

*Photographed visualisation (P) prepared by AECOM as per Section 5.6.1. Digital visualisation (D) prepared by Arterra Interactive as per Section 5.7.1.



View from Sydney Observatory Hill Park looking west towards Millers Point Conservation Area and out to the Harbour (Source: AECOM)

6.0 Visual Impact Assessment

6.1 Observer Location 1: Sydney Observatory Hill Park

6.1.1 Observer Location Position

Observer Location 1 is positioned at Observatory Hill, with the view taken from north of Sydney Observatory looking south-west through to north-west across Millers Point towards Pyrmont, White Bay and Balmain (refer Figure 32).

6.1.2 Observer Location Rationale

This observer location has been chosen for the following reasons:

- Director-General’s Requirements for a view from Sydney Observatory Hill Park
- The view was identified as part of an important panorama from this location in two local heritage studies (City Plan Heritage (2006) and Davies (2006))
- The location captures the northern and eastern faces of the Central Barangaroo development envelope
- This observer location, in conjunction with the following observer location (Observer Location 2: Sydney Observatory), captures the key elements of the view from Sydney Observatory Hill Park
- The view includes Block 5 and addresses the requirements of Condition C1 of the Instrument of Approval.
- A likely view of Aboriginal historic importance.

6.1.3 Existing View

Figure 33 shows the existing view photographed on the 13th of July, 2023.

The foreground of the view comprises the sweeping lawn and palisade fencing surrounding Observatory Hill. A mature fig tree, to the left, frames the view to the landscape beyond. There is a drop in level between the lawns of Observatory Hill and the surrounding landscape. The middle ground is occupied by the roofs and upper floors of predominantly Victorian period terrace housing seen in front of the large expanse of water stretching from Darling harbour west of Jones Bay, Johnstons Bay including part of the passage through to Blackwattle Bay, White Bay, Balmain East, Snails Bay, and beyond to the Parramatta River.

Glimpse views to high rise residential development on Kent Street, Sydney International Towers and One Sydney Harbour are partially visible to left of frame behind a large fig tree in the foreground. The Crown Hotel and Resort is a visually dominant element seen middle ground. Medium and high rise development, with little tree cover, is visible in Pyrmont, with the tallest western elements of the ANZAC Bridge visible in the background.

Beyond the Pyrmont peninsula, the view is characterised by a wide, open sweep of harbour with a well vegetated urban landscape extending across the Cumberland Plain to the horizon. A further key element of the view is the ‘big sky’ and uninterrupted view to much of the horizon.



Figure 32 Observer Location (source:AECOM modified Google Map)



Figure 33 Existing view (AECOM, July 2023)



Figure 34 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, July 2023)



Figure 35 Visualisation showing the development envelope of MOD 9 - exhibited (AECOM, July 2023)



Figure 36 Visualisation showing the development envelope of MOD 9 - RtS (AECOM, July 2023)

6.1.4 Approved Concept Plan

Figure 34 shows the view including the development envelope for the Approved Concept Plan (shown in purple) to the centre of frame. As can be seen, the Approved Concept Plan screens part of the harbour view south-west of White Bay. The remaining water view is visible and seen against the low backdrop of the inner Western Suburbs. High rise residential tower blocks at Pyrmont Point, the landmark towers of ANZAC Bridge, White Bay Power Station and Balmain Town Hall are seen in silhouette projecting above the horizon.

The development envelope of the Approved Concept Plan lies at or below the level of Sydney Observatory Hill Park, and at or above the line of terrace housing on Kent Street, with the top of Langham Hotel visible and housing at the southern end of High Street marginally projecting above it.

6.1.5 MOD 9 - exhibited

Figure 35 shows the view including the development envelope of the MOD 9 - exhibited.

The development envelope of MOD 9 - exhibited is viewed as a collection of blocks of varying heights. Block 5 is visible to the far left within Central Barangaroo, projecting moderately above the Langham Hotel and seen against the backdrop of the Crown Hotel and Resort podium.

The Block 6 envelope is viewed as a square block that projects moderately above the height of the terrace housing roof line in front. Most of Block 6 is viewed in front of the Crown Hotel and Resort. A small fraction of the Pyrmont high rise view would be obscured by Block 6, however, the view to the horizon has been preserved.

The development envelope of Block 7 is a rectangular block terminating in taller tower on podium towards the north-western corner of the building mass. The lower rectangle portion of the block sits approximately at the level of the Langham Hotel, however, within the viewing frame it sits moderately above the residential terrace homes in the direct foreground of the frame. The lower block obscures a portion of the view to the water of the harbour, and a portion of the Pyrmont ridgeline development, retaining the view to the tall residential towers on Pyrmont Point and the ANZAC Bridge towers. The main roof level is only marginally higher than that of the Approved Concept Plan.

Seen in the centre of the frame, the taller tower of Block 7 is an anomaly within the view, creating a disruption to the horizon line. It is seen in high contrast against the skyline, partially removing the view towards of Rozelle and White Bay Power Station. There is no change to the extent of harbour view lost compared to the Approved Concept Plan. The partial view of Pyrmont Point, ANZAC Bridge and Annandale seen behind Block 7 provides a sufficient level of detail to interpret ongoing continuity of the flat Sydney Basin landscape beyond MOD 9 - exhibited.

The tallest elements of MOD 9 - exhibited project to and above the level of Sydney Observatory Hill Park, blocking the view to and from Millers Point residential development and the Langham Hotel from the surrounding landscape to the west, also obstructing the view of southern portion of the Sydney Observatory.

6.1.6 MOD 9 - RtS

Figure 36 shows the view including the development envelope of MOD 9 - RtS. To the left of frame, Block 5 is visible extending north from the canopy of the fig tree in the foreground of the view. Block 5 is the tallest block within MOD 9 - RtS (RL 42.45m) and projects moderately above the Langham Hotel, seen against the backdrop of the podium of the Crown Hotel and Resort.

Block 6, while visible within the view, would be difficult to discern from this location. The roofline of Block 6 would be visible between the chimneys of terrace housing on Kent Street to the north of the Langham Hotel. It would be seen against the backdrop of the Crown Hotel and Resort.

Block 7 of MOD 9 - RtS would be the most visible block with the development, seen in the centre of frame within the view. Similar to the Approved Concept Plan, Block 7 would screen views to the Jones Bay and Pyrmont Bay Wharves and views to the water to the south of White Bay. Views to the high rise residential towers at Pyrmont, the ANZAC Bridge, White Bay Power Station and Balmain Town Hall are preserved.

6.1.7 Comparison of Existing, Approved Concept Plan, MOD 9 - exhibited and MOD 9 - RtS

The existing view is described in Section 6.1.3 and can broadly be characterised as a panoramic view framed by mature fig trees in the foreground. The view extends from the Crown Hotel and Resort westwards across the Millers Point Conservation Area to a sweeping harbour view set against the low, gently undulating and vegetated suburbs of the Cumberland Plain, extending to the horizon.

The view including the Approved Concept Plan is described in Section 6.1.4. The very tall, slender towers within Barangaroo South (One Sydney Harbour and the Crown Hotel and Resort) visually contrast with the relatively low, rectilinear form of the Approved Concept Plan development envelope, which projects marginally above the height of Langham Hotel and the tallest terrace houses. The Barangaroo South towers comprise highly contrasting visual elements to the long and low, finely articulated heritage roofscape of Kent Street. The existing wide, open landscape view is substantially conserved with this massing arrangement, albeit seen as a narrow band of land between the Approved Concept Plan development envelope and the horizon.

The view including the MOD 9 - exhibited is described in Section 6.1.5. Within this view, the development envelope comprises a modulated rectangle form, with minimal changes in height for the majority of the form, which results in a visually consistent height to the majority of its length. This, however, excludes the Block 7 tower. This tower reaches to RL 73.7m, which is approximately 38m above the podium level on which it sits. It is a visually prominent feature within the view, breaking the continuity of the horizon. While the tower does not obstruct the view of the water any more than the Approved Concept Plan, it does interrupt the view to the horizon, introducing an additional built element seen against the sky within the view.

The view including MOD 9 - RtS has removed the Block 7 tower form from within the design, as described in Section 6.1.6. The development envelope in MOD 9- RtS proposed the taller elements in the south, nestling against much higher buildings of Barangaroo South. The addition of the taller Block 5 form (RL 42.45m) would just be visible at the southern end of Central Barangaroo, extending from behind one of the characteristic fig trees within Observatory Hill and seen behind the roof of the Langham Hotel and in front of the podium of the Crown Hotel and Resort. Blocks 6 and 7 are visible above the roofline of Millers Point at a height similar to that seen within the Approved Concept Plan.

The form, mass and scale of MOD 9 - RtS is considered to be visually subservient to the development within Barangaroo South. The new elements do not remove any more of the harbour view than obscured with the Approved Concept Plan. The taller Block 5 is visually recessive within the view given its position at the southern end of Central Barangaroo, where it is partially screened from view, and seen with the considerable bulk of the Crown Hotel and Resort as a backdrop.

6.1.8 Visual Impact Assessment

The following is an assessment of visual changes between the Approved Concept Plan and MOD 9 - RtS at Central Barangaroo. Refer Table 8 for the General Assessment Criteria, Table 9 and Table 10 for View Sharing Assessment Criteria and Table 11 and Table 12 for Visual Impact Assessment and rating.

Overall, the visual impact is considered to be **Moderate**.

Table 8 General Assessment Criteria - Observer Location 1: Sydney Observatory Hill Park

Criteria	Rating				Comments
	H	M	L	N/A	
Distance to view				●	Between 180 m and 380 m, with MOD 9 - RtS seen in a high level of detail.
Observer type				●	View from open space - general park users, exercise groups, tourists and special events such as weddings.
Number of observers		●			Anticipated be moderate for much of the week and high to moderate on weekends.
Duration of observation		●	●		Typically moderate to low duration, with people strolling through the park over relatively short periods, and sitting for longer durations, e.g. eating their lunch during the week or picnicking on the weekend.
Visibility		●			Central Barangaroo is positioned within the central portion of the middle ground of the view, but only the top portion of the development envelope visible.
Visual absorption capacity		●			Central Barangaroo is positioned behind the fine grained, low roofline of Millers Point with a backdrop of Pyrmont and the western suburbs. The development is generally proportional to the surrounding built form and therefore the landscape has a moderate level of visual absorption capacity.

Table 9 View Sharing Assessment Criteria - Observer Location 1: Sydney Observatory Hill Park

No.	Stage	Rating				Response
		H	M	L	N/A	
1	Existing view with Approved Concept Plan					
1 (a)	Nature / extent of existing view				●	View to Darling harbour north and most of White Bay across the Millers Point Conservation Area, which incorporates Sydney Observatory Hill Park in the foreground. Limited portion of the Central Barangaroo development envelope visible within the visual context of Millers Point. Broad view to the horizon above the Central Barangaroo development envelope is retained.
1 (b)	Compositional elements				●	Key compositional elements comprise: <ul style="list-style-type: none">The open, linear ridge-top parkland with large over-arching fig trees which frame the view to the left of the frame in Sydney Observatory Hill Park in the foreground.The visually consistent roofscape of small architectural elements (Victorian terraces), with a portion of this view containing the partial forms of the Central Barangaroo development envelope.The tall tower framing elements of Barangaroo South.The sinuous harbour edge of White Bay (part of), Balmain East, and Sydney Harbour to the right of frame defines the Balmain Peninsula and associated well vegetated, low scale suburban landscape. The characteristic sinuous line of the harbour / land interface with well vegetated promontories and bays with an expansive water view to the north-west (right of frame).harbour edge of White Bay (part of) and taller elements seen against the horizon to centre of frame include the ANZAC Bridge central supporting towers and high rise residential development within Pyrmont. The White Bay Passenger Cruise Terminal comprises a point of interest when ships are berthed.The horizon line and ‘big’ sky.
1 (c)	Curtilages of important elements				●	The water view that defines the Balmain Peninsula. The roofscape of Millers Point seen against the harbour.
2	Nature / extent of any obstructions to view			●		harbour view has already been lost beyond the Central Barangaroo Approved Concept Plan development envelope.
3	Number of observers		●			Moderate, as detailed above.
4	Documented importance of view	●				Yes - Heritage reporting - City Plan Heritage (2006) and Davies (2006)

Table 10 Analysis of impacts - Observer Location 1: Sydney Observatory Hill Park

No.	Analysis of impacts	Rating				Response
		H	M	L	N/A	
5	Document weighting					
5(a)	City Plan Heritage (2006)	●				Heritage report specifically commissioned to assess the impact of the East Darling harbour (now Barangaroo) Concept Plan on heritage items, including an assessment of important views from and to Millers Point within the context of Barangaroo. Sydney Observatory Hill Park identified as an important viewing location.
5(b)	City of Sydney (2011)	●				Heritage report commissioned by City of Sydney (2011) for Millers Point and Walsh Bay areas, including identification of key views from Millers Point. Sydney Observatory Hill Park identified as an important viewing location.
6	Quantitative evaluation					
6(a)	Extent of obstruction / new elements			●		The new elements in the view comprise the modulated block forms for Block 5 to the south, with the increased height of MOD 9-RtS stacked against the bulk of taller buildings within Barangaroo South. The forms of Block 6 and 7 are comparable to the Approved Concept Plan, with no change in the elements obstructed or added within the view. Overall, the new elements do not remove any more of the harbour view than currently seen with the Approved Concept Plan.
6(b)	Is the view still sufficient to understand and appreciate the nature of and attractive or significant elements of the existing view?				●	Yes. The sinuous land / water interface with its bays and inlets and backdrop of low-rise inner western suburbs will be retained as per Approved Concept Plan.
		Yes	No	N/A		
7	Qualitative evaluation					
7.1(a)	Is significance attached to the view likely to be altered?		●			No.
7.1(b)	If so, which organisation / why?			●		N/A
7.2	Would the proposed change make the view less desirable / why?		●			No. The MOD 9 - RtS Block 5, while taller than that in the Approved Concept Plan, positions the additional height to the south of Central Barangaroo, near the considerably taller Barangaroo South developments of One Sydney Harbour and the Crown Hotel and Resort. Block 5 is partly screened from view by foreground elements within the view, and itself only screens part of the podium of the Crown Hotel and Resort rather than documented valuable assets within the view such as the harbour or any heritage item or area. The proposed change comprises a visually subservient built form elements to the tall development of Barangaroo South in terms of mass and scale.
7.3	Should change to whether the view is static or dynamic be regarded as positive or negative / why?			●		The view will remain a dynamic one in the sense that general water craft and cruise ships will still be seen moving through the harbour from this location.
7.4	If the present view attracts the public to the location, why / how will that attraction be impacted?			●		Issues as described above in Item 7.1(a) and Item 7.2.
7.5	Is the present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?		●			No.
7.6	If the present obstruction of the view is extensive, does that which remains still warrant preservation?	●				Yes.
7.7	If the view is altered by the insertion of new element(s), how does this alter the nature of the present view?			●		It adds a new, modulated composition of development envelope forms than that of the Approved Concept Plan. The form, mass and scale of these comprise visually subservient built form elements to the tall development of Barangaroo South . Block 5 a removes a very small portion of the view to the podium of the Crown Hotel and Resort within Barangaroo South. The new elements do not remove any more of the harbour view than currently seen with the Approved Concept Plan.

Table 11 Visual impact assessment - Observer Location 1: Sydney Observatory Hill Park

Analysis of impacts	Rating				Comments
	H	M	L	N	
Sensitivity	<div><div></div></div>				<p>The sensitivity of observers to the difference in view between the Approved Concept Plan and MOD 9 - RtS is considered to be High.</p> <p>Susceptibility of visual receptors to change:</p> <p>Sydney Observatory Hill Park comprises a setting where people currently take in an exceptional panoramic view, the value of which is widely acknowledged as it is identified within planning and heritage documents. The attention of the park users can be expected to be trained on this view as they enjoy the public space or activity within it.</p> <p>Value attached to views:</p> <p>With regard to the value of the view, the City Plan Heritage (2006) heritage study notes that ‘the quality of the view’ to the west will be conserved if ‘the harbour will remain visible and legible and the opposite foreshore (Peacock Point) will remain visible.’ The view as shown in Figure 36 can reasonably be said to achieve this outcome. The observer location is a parkland setting, with an iconic view to Sydney Harbour an important part of the recreational appeal of the location.</p>
Magnitude of change			<div><div></div></div>		<p>The magnitude of change between the view to the Approved Concept Plan and MOD 9 - RtS is considered to be Low.</p> <p>Size or scale:</p> <p>The scale of change in the view is minor, incorporating a change in the composition of the view from that of a long and low quadrilateral block form, to that of a more modulated form, with increased block heights rising to the south towards nearby taller towers within Barangaroo South. The increase in the proportion of the view occupied by MOD 9 - RtS in comparison to the Approved Concept Plan is minor.</p> <p>The degree of contrast between MOD 9 - RtS and the Approved Concept Plan is low. The general form, mass and scale of MOD 9 - RtS is considered to comprise visually subservient built forms to that of Barangaroo South.</p> <p>The period of time over which sensitive park users can be expected to take in the view is considered to be moderate, as above. The extent of the park from which MOD 9 - RtS would be seen is similar to the Approved Concept Plan.</p> <p>Geographical Extent:</p> <p>The elevated viewing location provides a small measure of looking down onto the roof plane of MOD 9 - RtS, but effectively the development is seen in elevation.</p> <p>Given the viewing distance of between 180 m and 380 m, MOD 9 - RtS would be seen in a high level of detail.</p> <p>As experienced with the Approved Concept Plan, MOD 9 - RtS would be seen within a thin plane of the central portion of the middle ground of the view.</p>

Table 12 Visual impact assessment results matrix - Observer Location 1: Sydney Observatory Hill Park

		MAGNITUDE			
		HIGH	MOD	LOW	NEG
SENSITIVITY	HIGH	H	HM	M	N
	MOD	HM	M	ML	N
	LOW	M	ML	L	N
	NEG	N	N	N	N

6.2 Observer Location 2: Sydney Observatory

6.2.1 Observer Location Position

Observer Location 2 is positioned at Observatory Hill, with the view taken from south-east of the Sydney Observatory looking south-west through to west across Millers Point towards Pyrmont, White Bay and Balmain (refer Figure 37).

6.2.2 Observer Location Rationale

This observer location has been chosen for the following key reasons:

- Director-General's requirement for a view from Sydney Observatory
- The view was identified as part of an important panorama from this location in two local heritage studies City Plan Heritage (2006) and Davies (2006). The location broadly captures the northern extent of Central Barangaroo
- This observer location in conjunction with the previous Observer Location 1 - Sydney Observatory Hill Park, captures the key elements of the view from the south-west through to the north-west as relevant to Central Barangaroo.
- The view includes Block 5 and addresses the requirements of Condition C1 of the Instrument of Approval.
- A likely view of Aboriginal historic importance.

6.2.3 Existing View

Figure 38 shows the existing view as of 12 July, 2023. This photo is taken from close to the Sydney Observatory's north telescope, and looks west across Millers Point, Sydney Harbour and Western Sydney to the horizon.

The view is framed by mature vegetation within Sydney Observatory Hill Park, with residential tower blocks on Kent Street and the International Towers Sydney to the south-west visible beneath the tree canopy. The tall, slender forms of the Crown Hotel and Resort and One Sydney Harbour are visually dominant within the middle ground of the view.

A longer view to the west to White Bay, Pyrmont and the ANZAC Bridge are seen in the gaps between foreground vegetation and Barangaroo South.

A small fig tree is located on the western boundary of the park to centre right of frame, screening the view to much of Balmain East. A long view north-west across Sydney is visible to the right of the fig tree, with the heritage listed Palisade Hotel just visible to the far right of frame in the middle ground.

The view comprises low rise Victorian era terrace development on Kent Street in the middle ground and Langham Hotel (white, contemporary building centre left of frame partly screened by vegetation). The wharves of Pyrmont Point are partially visible (centre of frame) with residential tower blocks and the northern tower of ANZAC Bridge beyond projecting above the skyline.

The harbour comprises a key element of the view with its characteristic sinuous land/ water interface, sweeping over a distance of some two kilometers from Darling harbour west of Jones Bay, to Johnstons Bay including part of the passage through to Blackwattle Bay, White Bay, Balmain East (partial view), Snails Bay and beyond to the Parramatta River (right of frame).

Beyond the harbour, high rise residential development on Kent Street and International Towers Sydney are partially visible to left of frame. Medium and high rise development, with little tree cover, is visible in Pyrmont. North of Pyrmont Peninsula, the view is characterised by a well vegetated urban landscape extending across the Cumberland Plain to the horizon, set beneath a 'big sky'.



Figure 37 Observer Location (Source: AECOM modified Google Map)

6.2.4 Approved Concept Plan

Figure 39 shows the view with the Approved Concept Plan. The view is similar to that for Observer Location 1.

The Block 6 envelope is viewed as a long and relatively low rectangle form that projects just above the height of Langham Hotel. This removes most of the intricate view to the harbour, retaining just a small edge of water view along the western end of White Bay, and the rooftops of Jones Bay Wharf and the residential development adjoining Ballaarat Park. However, the view across Pyrmont to the ANZAC Bridge, the former White Bay Power Station, and Balmain to the horizon is effectively retained in full, as is the small view between Crown Hotel and Resort and One Sydney Harbour to the Ibis Hotel in Darling harbour.

6.2.5 MOD 9 - exhibited

Figure 40 shows the view with MOD 9 - exhibited.

The development envelope is slightly taller in Block 5 (partially obscured by tree canopy) which minimally reduces the view to the development - including One Sydney Harbour, Crown Hotel and Resort and the Ibis Hotel in Darling harbour - behind it.

The Block 6 envelope is viewed as a short square form that projects marginally above the height of Langham Hotel. This removes a small view of high rise development in Pyrmont.

Block 7 comprises a modulated block stepping down from the eastern edge and then terminating with a taller raised block form on the northern-western corner. The closest roof level to this view is marginally higher than that of the Approved Concept Plan. The taller step along the eastern edge of the block removes only a small portion of the view to Pyrmont Point. The north-western tower is an anomaly in the view, creating further disruption to the horizon, along with the tree directly to the right. It projects well above and is seen in high contrast against the sky, partially removing the view towards Rozelle. The scale of this projecting element is visually proportional to that of the mid level wing of Crown Hotel and Resort. The form, scale and mass of Block 7 contrasts with the small, finely detailed terrace roofscape.

Most of the already small water view of White Bay is lost behind the projecting north-western form of Block 7. The partial view of Rozelle seen behind Block 7 provides a sufficient level of detail to interpret ongoing continuity of the flat Sydney Basin landscape beyond MOD 9 - exhibited.

6.2.6 MOD 9 - RtS

Figure 41 shows the view including the MOD 9 - exhibited development envelope. The development envelope appears as a collection of long, low rectangular forms, with the separations (both east-west and north-south between the blocks) visible due to the view across the roof plane of the buildings.

Similar to that experienced in the Approved Concept Plan, the development is visible within a narrow portion in the middleground of the view. Blocks 6 and 7 are seen projecting above the terrace housing on Kent Street in Millers Point, with a backdrop that includes the waters edge within White Bay, the roof of Jones Bay Wharf, Glebe Island and White Bay Power Station, the residential high rise buildings within Pyrmont and the ANZAC Bridge. Glimpse views to Block 5 are seen to the south (left of frame) but predominantly screened from view by the Langham Hotel and fig trees in the foreground of the view.

6.2.7 Comparison of Existing, Approved Concept Plan, MOD 9 - exhibited and MOD 9 - RtS

The existing view is described in Section 6.2.1, comprising a view across open parkland to low rise Victorian era terrace development on Kent Street in the middle ground (part of the Millers Point Conservation Area) seen against the backdrop of Darling harbour and White Bay, and the visually prominent Langham Hotel (white, contemporary building centre left of frame) seen against the backdrop of Pyrmont Point. Beyond the harbour and to right of frame, the view is characterised by a well vegetated urban landscape extending across the Cumberland Plain to the horizon, set beneath a big sky. The view is bookended to the south (left of frame) by the tall buildings within Barangaroo South (One Sydney Harbour and the Crown Hotel and Resort) and high rise residential and commercial buildings at the southern end of Kent Street.

The view including the Approved Concept Plan is described in Section 6.2.4. The development envelope of the Approved Concept Plan projects marginally above the height of Langham Hotel and the tallest terrace houses. The towers in Barangaroo South are highly contrasting visual elements to the long and low, finely articulated heritage roofscape of Kent Street and the Approved Concept Plan of Central Barangaroo. The existing wide, broad sweep of the open landscape is substantially conserved within this view, albeit seen as a narrow band of land between the Central Barangaroo development envelope and the horizon.

The MOD 9 - exhibited increases the general height of the Central Barangaroo development envelope across all three blocks, comprising the modulated form of Block 5 stepping down to Blocks 6 and 7, then stepping up to the Block 7 tower at the north west corner of the development. Block 6 and 7 project marginally higher than the Approved Concept Plan, with the Block 7 tower seen in high relief against the sky, interrupting the view to the horizon.

The new elements effectively remove the remaining small section of the water view within White Bay. Block 7 further interrupts an already narrow view to the horizon, impacting the ability of the observer to visually interpret the continuity of the flat Sydney Basin horizon line north of Block 7.

The view including MOD 9 - RtS is described in Section 6.2.6. The form, scale and mass return somewhat to that of the Approved Concept Plan within the central portion of the view (Blocks 6 and 7). The height of Blocks 6 and 7 have been lowered to maintain the view beyond the roofline to the waters edge within White Bay, the roof of Jones Bay Wharf, Glebe Island and White Bay Power Station, the residential high rise buildings within Pyrmont and the ANZAC Bridge. Block 5 is taller, but positions the height at the southern end of the development against the bulk of Barangaroo South and the high rise buildings on Kent Street. Block 5 is predominantly screened from view by foreground vegetation, and is therefore visually recessive within the view.

The form, mass and scale of MOD 9 - RtS is considered to comprise visually subservient built form elements to the development within Barangaroo South, and particularly that of the tall and slender Crown Hotel and Resort and One Sydney Harbour towers. The new elements do not remove any more of the harbour view than obscured with the Approved Concept Plan. The taller Block 5 is visually recessive within the view given its position at the southern end of Central Barangaroo.

6.2.8 Visual Impact Assessment

The following is an assessment of visual changes between the Approved Concept Plan and MOD 9 - RtS at Central Barangaroo. Refer Table 13 for the General Assessment Criteria, Table 14 and Table 15 for View Sharing Assessment Criteria and Table 16 and Table 17 for Visual Impact Assessment and rating.

The visual impact rating is considered to be **Moderate**.



Figure 38 Existing view (AECOM, July 2023)



Figure 39 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, July 2023)



Figure 40 Visualisation showing the development envelope of MOD 9 - exhibited (AECOM, July 2023)



Figure 41 Visualisation showing the development envelope of MOD 9 - RtS (AECOM, July 2023)

Table 13 General Assessment Criteria - Observer Location 2: Sydney Observatory

Criteria	Rating				Comments
	H	M	L	N/A	
Distance to view					Between 170 m and 340 m
Observer type					View from open space - general park users, exercise groups, tourists and special events such as weddings.
Number of observers					Anticipated be moderate for much of the week and high to moderate on weekends.
Duration of observation					Typically moderate to low duration, with people strolling through the park over relatively short periods, and sitting for longer durations, e.g. eating their lunch during the week or picnicking on the weekend.
Visibility					Central Barangaroo is positioned within the central portion of the middle ground of the view, but only the top portion of the development envelope visible.
Visual absorption capacity					Central Barangaroo is positioned behind the fine grained, low roofline of Millers Point with a backdrop of Pyrmont and the western suburbs. The development is generally proportional to the surrounding built form and therefore the landscape has a moderate level of visual absorption capacity.

Table 14 View Sharing Assessment Criteria - Observer Location 2: Sydney Observatory

No.	Stage	Rating				Response
		H	M	L	N/A	
1	Existing view with Approved Concept Plan					As described in Section 6.2.4
1 (a)	Nature / extent of existing view					<i>The existing view comprises a panorama from the historic Sydney Observatory Hill Park at a location close to the north telescope of the Sydney Observatory. The view looks across Millers Point and the Approved Central Barangaroo Concept Plan to the well vegetated, low scale inner western Sydney suburbs in the background extending to Western Sydney and the horizon line. The view is framed to the south-west (left of frame) by existing high rise apartment blocks and towers within Barangaroo South. Looking north-west (to right of frame), sweeping harbour views are observed. A small edge of the western end of White Bay is also visible above the Approved Concept Plan development envelope.</i>
1 (b)	Compositional elements					<i>Key compositional elements comprise:</i> <ul style="list-style-type: none"><i>In the foreground, open, linear ridge-top parkland with large over-arching fig trees, which frame the view in Sydney Observatory Hill Park.</i><i>In the middleground visually consistent roofscape of small architectural elements (Victorian terraces), with a portion of this view containing the partial forms of the Approved Concept Plan. The long low line of the development envelope terminates with contrasting tall, slender towers within Barangaroo South to centre-left of frame.</i><i>The tall tower framing elements of Barangaroo South.</i><i>The characteristic harbour / land interface with well vegetated, low scale suburban promontories and bays with an expansive water view to the north-west (right of frame).</i><i>harbour edge of White Bay (part of) and taller elements seen against the horizon to centre of frame include the ANZAC Bridge central supporting towers and high rise residential development within Pyrmont.</i><i>The horizon line and big sky.</i>
1 (c)	Curtilages of important elements					<i>The land/ harbour interface to the north-west and the far end of White Bay.</i>
2	Nature / extent of any obstructions to view					The view to most of Darling harbour has already been lost beyond the Approved Concept Plan development envelope, however, the view to the north to the harbour and to the western edge of White Bay remains.
3	Number of observers					Moderate
4	Documented importance of view					Yes - Heritage reporting - City Plan Heritage (2006) and Davies (2006)

Table 15 Analysis of impacts - Observer Location 2: Sydney Observatory

No.	Analysis of impacts	Rating				Response
		H	M	L	N/A	
5	Document weighting					
5(a)	City Plan Heritage (2006)	●				Heritage report specifically commissioned to assess the impact of the East Darling harbour (now Barangaroo) Concept Plan on heritage items, including an assessment of important views from and to Millers Point within the context of Barangaroo. This location nominated as an important viewing point.
5(b)	Davies (2006)	●				Heritage report commissioned by City of Sydney (2011) for Millers Point and Walsh Bay areas, including identification of key views from Millers Point.
6	Quantitative evaluation					
6(a)	Extent of obstruction / new elements		●			The new elements in the view comprise the taller, quadrilateral block form for Block 5 and the more articulated forms of Block 6 and 7 which are a similar height to that of the Approved Concept Plan. Block 5 marginally removes a portion of the view to the base of the Crown Hotel and Resort and One Sydney Harbour, however, is visually recessive given screening vegetation in the foreground of the view. Blocks 6 and 7 do not obstruct any more of the view than the Approved Concept Plan.
6(b)	Is the view still sufficient to understand and appreciate the nature of and attractive or significant elements of the existing view?				●	Yes. Views to the most attractive and significant elements still visible around the Approved Concept Plan are retained.
		Yes	No	N/A		
7	Qualitative evaluation					
7.1(a)	Is significance attached to the view likely to be altered?		●			No.
7.1(b)	If so, which organisation / why?			●		N/A
7.2	Would the proposed change make the view less desirable / why?		●			No. MOD 9 - RtS maintains views to the water and landscape to the west seen around the Approved Concept Plan.
7.3	Should change to whether the view is static or dynamic be regarded as positive or negative / why?			●		The view will remain a dynamic one in that general water craft and cruise ships will still be seen moving through the harbour from this location.
7.4	If the present view attracts the public to the location, why / how will that attraction be impacted?			●		It would not be impaired. Items and elements within the view that would attract people to this location would be preserved by MOD 9 - RtS.
7.5	Is the present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?		●			No, in that the open horizon line is still present within the Approved Concept Plan and MOD 9 - RtS, and some water view is still available within White Bay with the White Bay Passenger Cruise Terminal still visible, indicating the linkage of this waterbody to the harbour proper.
7.6	If the present obstruction of the view is extensive, does that which remains still warrant preservation?	●				Yes.
7.7	If the view is altered by the insertion of new element(s), how does this alter the nature of the present view?	●				New elements within the view (the taller Block 5 and the more articulated roof of Blocks 6 and 7) would not alter the overall view.

Table 16 Visual impact assessment - Observer Location 2: Sydney Observatory

Analysis of impacts	Rating				Comments
	H	M	L	N	
Sensitivity	<div><div></div></div>				<p>The sensitivity of observers to the difference in view between the Approved Concept Plan and MOD 9 - RtS is considered to be High.</p> <p>Susceptibility of visual receptors to change:</p> <p>Sydney Observatory Hill Park comprises a setting where people currently take in an exceptional panoramic view, the value of which is widely acknowledged, as identified within planning and heritage documents. The attention of the park users can be expected to be trained on this view for much of the time.</p> <p>Value attached to views:</p> <p>With regard to the value of the view, the City Plan Heritage (2006) heritage study notes that ‘the quality of the view’ to the west will be conserved if ‘the harbour will remain visible and legible and the opposite foreshore (Peacock Point) will remain visible.’ Peacock Point is not visible from this location and MOD 9 - RtS maintains the water view to White Bay similar to that of the Approved Concept Plan. The observer location is a parkland setting, with an iconic view to Sydney Harbour an important part of the recreational appeal of the location.</p>
Magnitude of change			<div><div></div></div>		<p>The magnitude of change between the view to the Approved Concept Plan and MOD 9 - RtS is considered to be Low.</p> <p>Size or scale:</p> <p>The scale of change in the view is low, incorporating a change in the height of Block 5 to the south. The increase in the proportion of the view occupied by MOD 9 - RtS is low and the change is partially screened by foreground elements within the view.</p> <p>The degree of contrast between MOD 9 - RtS and the Approved Concept Plan is low as above. The form, mass and scale of MOD 9 - RtS is considered to comprise visually subservient built form elements to that of Barangaroo South.</p> <p>The period of time over which sensitive park users can be expected to take in the view is considered to be moderate as above.</p> <p>Geographical Extent:</p> <p>The elevated viewing location provides a small measure of looking down onto the ‘roof’ plane of the development, but effectively it is seen in elevation view.</p> <p>Given the viewing distance of between 170 m and 340 m, MOD 9 - RtS would be seen in a high level of detail.</p>

Table 17 Visual impact assessment results matrix - Observer Location 2: Sydney Observatory

		MAGNITUDE			
		HIGH	MOD	LOW	NEG
SENSITIVITY	HIGH	H	HM	M	N
	MOD	HM	M	ML	N
	LOW	M	ML	L	N
	NEG	N	N	N	N

6.3 Observer Location 3: High Street (South)

6.3.1 Observer Location Position

Observer Location 3 is positioned on at the intersection of High Street and Kent Street (refer Figure 42), at the foot of the Agar Steps (refer Figure 43). The view from this location looks west along High Street where it intersects with Kent Street, with the Langham Hotel on the north-western corner of the intersection. Note: where the street is seen to finish in this view, High Street turns 90° to the right and continues north for a further 300 m, along which terrace housing faces towards Barangaroo and Johnstons Bay.



Figure 42 Observer Location (Source: AECOM modified Google Map)

6.3.2 Observer Location Rationale

This Observer Location has been chosen for the following key reasons:

- Director-General’s requirement for a view from Kent Street
- Identified as part of an important view from this location in two local heritage studies City Plan Heritage (2006) and Davies (2006)
- The location provides a surprising view when walking north along Kent Street, where this may be the first occasion that the observer has been aware of how close they were to the harbour
- The view includes Block 5 and addresses the requirements of Condition C1 of the Instrument of Approval.



Figure 43 View looking east up Agar Steps from Kent Street (Source: AECOM)

6.3.3 Existing View

Figure 44 shows the existing view as of 3 August, 2023. This view is representative of the view seen from the bottom of the Agar Steps. The view to Barangaroo, Johnstons Bay and Balmain from Kent Street is framed between the Langham Hotel and terrace housing facing onto Kent Street, with High Street and fringing terrace housing seen in the middle ground. The framing elements of the view (the Langham Hotel and terrace housing) have a similar height and mass on either side of the High Street viewing corridor.

The view incorporates a framed view to the land / water interface, and suggests the sinuous character of bays and inlets. Mature trees at the western end of High Street partially screen views to the harbour and landscape beyond. Within the remaining, framed view, White Bay is seen in the centre of the view, with cruise ships occasionally berthed at the White Bay Cruise Terminal, such as the one seen within the view. The background of the framed view to the harbour includes the well vegetated suburbs of Balmain and Rozelle, rising to a ridgeline seen on the horizon.

The Crown Hotel and Resort rises above the terrace housing to the left of the centre of frame, along with the two towers of One Sydney Harbour. The extent of the sky seen from this location is also considered to be an important component of the view.

6.3.4 Approved Concept Plan

Figure 45 shows the view with the Approved Concept Plan development envelope in purple.

As can be seen, the Approved Concept Plan development envelope is visible in the ‘gap’ in built form on High Street to the landscape beyond. Block 5 is seen to the left of centre, from the trees on High Street extending south towards the Crown Hotel and Resort. The northern edge of the block is predominantly screened by the trees on High Street, which reduce the visual prominence of the Approved Concept Plan within the view. While Block 5 screens views to the water and the landform to the west, these elements were already partially screened by trees within the view. A small portion of the roofline of Block 5 is seen in relief against the sky.

Block 6 is visible to the right of the central view between terrace housing to the landscape to the west. It blocks approximately half of the view to the harbour and western shoreline and ridgeline visible between the High Street trees and the northern terrace housing, including the view to Balmain East.

Importantly, a view to the harbour and western shoreline and suburbs rising to the well vegetated ridgeline and horizon to the west is maintained, albeit through a narrowed viewing corridor.



Figure 44 Existing view (AECOM, July 2023)



Figure 45 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, July 2023)



Figure 46 Visualisation showing the development envelope of MOD 9 - exhibited (AECOM, July 2023)



Figure 47 Visualisation showing the development envelope of MOD 9 - RtS (AECOM, July 2023)

6.3.5 MOD 9 - exhibited

Figure 46 shows the view of MOD 9 - exhibited, with Block 5 to the left and Block 6 to the right in the centre of the frame. The gap between the blocks provides a narrow view of the ridgeline at Balmain and the sky view beyond, however, the view to the water is lost. The taller blocks sit above the roof line of the terrace housing in the middle ground, and also above the tree tops where High Street turns the corner.

The increase in height of the buildings results in the roofline of both blocks being viewed in relief against the sky, as well as the vertical edges of the northern end of Block 5 as well as the southern end of Block 6. This substantially increases the visual prominence of the development within the view. The loss of the view to the water also shifts the focal point along High Street from the landscape beyond Central Barangaroo to Central Barangaroo itself, as the glimpse view through to the horizon and vegetated hillside of Balmain / Rozelle does not imply its relationship to the harbour.

6.3.6 MOD 9 - RtS

Figure 47 shows the view of MOD 9 - RtS, with the development envelope resulting in a framed view to the harbour and western shoreline rising to the ridgeline seen on the horizon.

The taller Block 5 is seen rising above the trees at the western end of High Street, with the northern corner and roofline seen in relief against the horizon. Block 6 is visible to the right of the centre of the view, with the vertical southern edge of the development in sharp contrast with the more horizontal elements of the western shoreline and horizon beyond.

The view to the harbour and western shoreline and suburbs rising to the well vegetated ridgeline and horizon to the west is maintained, albeit through a narrowed viewing corridor.

6.3.7 Comparison of Existing, Approved Concept Plan, MOD 9 - exhibited and MOD 9 - RtS

The existing view comprises a framed feature view across Johnstons Bay, to Balmain, which also comprises a low horizon line set not that far above the harbour edge. The State heritage listed terrace housing on Kent Street and High Street are important elements of the view. The view is all the more valued for the fact that for first-time recreational observers walking through the Millers Point Conservation Area the view is come upon by surprise, and will for many comprise their first understanding of their proximity to the harbour. The tall towers of Barangaroo South rising in the background to the left of frame also provide a cue to the substantial development south of Central Barangaroo.

The Approved Concept Plan comprises a relatively low development envelope seen within the central portion of the view along High Street. Blocks 5 and 6 block approximately half of the view to the harbour, western shoreline and view to the landscape to the west within the view, given the partial screening of the view beyond High Street by trees at its western end. The built form within Central Barangaroo essentially becomes part of the framing elements along the axial view down High Street to the harbour and western shore, including White Bay and Balmain / Rozelle.

The MOD 9 - exhibited development envelope included substantially taller buildings and blocked the view to the water within the view corridor to the west. This increases the visual prominence of the development within the view, essentially making Central Barangaroo the focal point along High Street rather than the view to the landscape beyond.

MOD 9 - RtS returns to a similar outcome experienced with the Approved Concept Plan, maintaining a view between Block 5 and 6 to the water and western shoreline. The raised height of Block 5 to the south slightly increases the visual prominence of the development within the view due to the roofline and top northern corner of the block visible against the sky, however, the partial screening of the block by trees at the western end of High Street mitigate this to some extent. The development envelope is seen within the context of South Barangaroo towers and is therefore visually subservient within this setting.

6.3.8 Visual Impact Assessment

The following is an assessment of visual changes between the Approved Concept Plan and MOD 9 - RtS at Central Barangaroo. Refer Table 18 for the General Assessment Criteria, Table 19 and Table 20 for View Sharing Assessment Criteria and Table 21 and Table 22 for Visual Impact Assessment and rating.

The visual impact rating is considered to be **Moderate to Low**.

Table 18 General Assessment Criteria - Observer Location 3: High Street (South)

Criteria	Rating				Comments
	H	M	L	N/A	
Distance to view				●	100m
Observer type				●	View from a key street - public domain.
Number of observers	●				High Street is likely to be a key pedestrian entry Point to Central Barangaroo, particularly given access from the High Street Steps and any future access to Central Barangaroo provided. Observer numbers are likely to be high once the connection is established.
Duration of observation			●		Once Central Barangaroo is developed, the duration of observation is expected to be low as people stroll down High Street to Barangaroo.
Visibility	●				The visibility of both the Approved Concept Plan and MOD 9 - RtS from this location is high, including a high level of detail.
Visual absorption capacity		●			Given the small viewing window along High Street within the greater view, where the foreground elements of built form along Kent Street are key, but the position of Central Barangaroo within the focal point of the view, the visual absorption capacity is considered to be moderate.

Table 19 View Sharing Assessment Criteria - Observer Location 3: High Street (South)

No.	Stage	Rating				Response
		H	M	L	N/A	
1	Existing view with Approved Concept Plan					As described in Section 6.3.4
1 (a)	Nature / extent of existing view					Refer toSection 6.3.3 and 6.3.4
1 (b)	Compositional elements					A highly visually consistent group of period residences, with Langham Hotel comprising a visually incongruent element, in the foreground. The development envelope blocks approximately half of the view to the harbour and landscape beyond.
1 (c)	Curtilages of important elements					The residential terrace housing remains visually prominent and provides a key framing element for the view.
2	Nature / extent of any obstructions to view					The Approved Concept Plan development envelope obstructs approximately half of the landscape beyond it, however, becomes a framing element within the axial view along High Street.
3	Number of observers					Anticipated to be high when Central Barangaroo is developed.
4	Documented importance of view					Yes - Heritage reporting - City Plan Heritage (2006), Davies (2006) and City of Sydney (2011).

Table 20 Analysis of impacts - Observer Location 3: High Street (South)

No.	Analysis of impacts	Rating			Response
Identification		H	M	L	N/A
5	Document weighting				
5(a)	City Plan Heritage (2006)	<div></div>			Heritage report specifically commissioned to assess the impact of the East Darling harbour (now Barangaroo) Concept Plan on heritage items, including an assessment of important views from and to Millers Point within the context of Barangaroo. This location nominated as an important viewing location.
5(b)	Davies (2006)	<div></div>			Heritage report commissioned by City of Sydney (2011) for Millers Point and Walsh Bay areas, including identification of key views from Millers Point.
5(c)	City of Sydney (2011)	<div></div>			Public domain study that specifically addressed the issue of views from Millers Point to the west across Barangaroo based on Approved Concept Plan.
6	Quantitative evaluation				
6(a)	Extent of obstruction / new elements			<div></div>	Both the Approved Concept Plan and MOD 9 - RtS result in new built elements within the view, framing a retained (albeit narrower) view to the harbour and western shoreline. The only difference in the view between the two modifications would be a height increase in Block 5, which would slightly increase the visual prominence of that block within the view but would not screen any additional important elements within it.
6(b)	Is the view still sufficient to understand and appreciate the nature of and attractive or significant elements of the existing view?			<div></div>	Yes, the retained view to the harbour is enough to understand the context of the view location to the harbour.
		Yes	No	N/A	
7	Qualitative evaluation				
7.1(a)	Is significance attached to the view likely to be altered?		<div></div>		The view to the harbour and shoreline / ridgeline is maintained.
7.1(b)	If so, which organisation / why?			<div></div>	N/A
7.2	Would the proposed change make the view less desirable / why?		<div></div>		No, as per Item 7.1(a) and (b) above.

No.	Analysis of impacts	Rating			Response
7.3	Should change to whether the view is static or dynamic be regarded as positive or negative / why?				There would be no change in the dynamism of the view, given the maintained view to the harbour and passing water craft. There would be a flow of pedestrian traffic along High Street accessing Barangaroo via the High Street Steps or any future access to Central Barangaroo within the view.
7.4	If the present view attracts the public to the location, why / how will that attraction be impacted?				There would be no impact to the attraction of the view between the Approved Concept Plan and MOD 9 - RtS.
7.5	Is the present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?				No.
7.6	If the present obstruction of the view is extensive, does that which remains still warrant preservation?				Yes. Any visual clues to the nature of the landscape beyond is worthy of preservation.
7.7	If the view is altered by the insertion of new element(s), how does this alter the nature of the present view?				The increase in height of Block 5 would make that block more visually prominent within the view, however, the change would not be seen altering the view to any important elements within it. The Central Barangaroo built form would be considerably visually subservient to the tall tower blocks of Barangaroo South seen to the south within the view.

Table 21 Visual impact assessment - Observer Location 3: High Street (South)

Analysis of impacts	Rating				Comments
	H	M	L	N	
Sensitivity					<p>The sensitivity of observers to the difference in view between the Approved Concept Plan and MOD 9 - RtS is considered to be Moderate.</p> <p>Susceptibility of visual receptors to change:</p> <p>High Street comprises a setting where first-time visitors to the Millers Point Conservation Area would be surprised by the nature and extent of this view, in many cases having been unaware up to this point that they were so close to the harbour. They can be expected to take in an exceptional panoramic view. The attention of the passerby can be expected to be trained on this view for a short period of time as they pass through the area.</p> <p>Value attached to views:</p> <p>The view to the harbour is widely acknowledged for its importance within the context of the Millers Point Heritage Conservation Area and this observer location in particular, as identified within planning and heritage documents. Refer Items 5(a), (b) and (c) above. The City Plan Heritage (2006) heritage study notes that 'the quality of the view' to the west will be conserved if 'the harbour will remain visible and legible and the opposite foreshore (Peacock Point) will remain visible.' MOD 9 - RtS increases the scale and mass of development when seen from this location, however, maintains the harbour view.</p>
Magnitude of change					<p>The magnitude of change between the view to the Approved Concept Plan and MOD 9 - RtS is considered to be Low.</p> <p>Size or scale:</p> <p>The scale of change in the view is low, incorporating an increase in the height of Block 5, which is partially screened from view by trees at the western end of High Street. The composition of the view remains that of a subservient, relatively low consistent height development envelope with the Approved Concept Plan to the overall view which includes the towers of Barangaroo South in the background. There is no change between the Approved Concept Plan and MOD 9 - RtS to the view seen to the harbour and western shoreline and horizon beyond.</p> <p>The period of time over which sensitive receptors to the Millers Point Heritage Conservation Area can be expected to take in the view is considered to be low.</p> <p>Geographical Extent:</p> <p>The geographical extent of MOD 9 - RtS increases slightly to that of the Approved Concept Plan due to an increase in the height of Block 5.</p>

Table 22 Visual impact assessment results matrix - Observer Location 3: High Street (South)

		MAGNITUDE			
		HIGH	MOD	LOW	NEG
SENSITIVITY	HIGH	H	HM	M	N
	MOD	HM	M	ML	N
	LOW	M	ML	L	N
	NEG	N	N	N	N

6.4 Observer Location 4: Munn Reserve

6.4.1 Observer Location Position

Observer Location 4 is located in Munn Reserve, looking south along Hickson Road and High Street towards Barangaroo South and Central Barangaroo, with Millers Point to the east (refer Figure 48).

6.4.2 Observer Location Rationale

This observer location has been chosen for the following key reasons:

- Director-General's requirement
- Identified as part of an important view from this location in two local heritage studies City Plan Heritage (2006) and Davies (2006)
- The location comprises an entry point to Barangaroo Reserve
- The view includes Block 5 and addresses the requirements of Condition C1 of the Instrument of Approval.

6.4.3 Existing View

Figure 49 shows the existing view as of 12 July, 2023. This view is seen from the top of the turfed area within Munn Reserve looking south. The view is framed by the State heritage listed corner shop and terrace housing along High Street to left of frame, and Dalgety Bond Store to the right.

In the centre of the frame, Hickson Road is seen below, set against the Hickson Cutting. The 'v' shape created by the level change of High Street above the Hickson Road Cutting, with heritage listed sandstone columns and cast iron palisade fencing atop the cutting are distinctive within the view, with ornate cast iron fencing between High Street and the bond store. The path in the immediate foreground leads into Barangaroo Reserve to the west. The backdrop to the view comprises city towers to left of frame, Kent Street residential towers left of Hickson Road and One Sydney Harbour and the Crown Hotel and Resort to the right of Hickson Road.

Major construction work is seen on Hickson Road for Central Barangaroo and part of the Sydney Metro station.

6.4.4 Approved Concept Plan

Figure 50 shows the view with the Approved Concept Plan. The Central Barangaroo development envelope is shown in purple, visible against the backdrop of the towers of One Sydney Harbour.

As can be seen, the development envelope is viewed as a long quadrilateral element with a small set-down. The development envelope creates a substantial 'wall' within the view in the middle ground, filling the previous void between fore and back ground built form. This shifts the overall composition of the view to a more axial view along Hickson Road, terminating in a gap between tall tower buildings within the Sydney CBD.



Figure 48 Observer Location (Source: AECOM modified Google Map)

6.4.5 MOD 9 - exhibited

Figure 51 shows the view with the MOD 9 - exhibited development envelope. The development can be seen to comprise a moderately higher development envelope than for the Approved Concept Plan. From this angle the development envelope appears to be a fairly consistent height. The northern elevated block form on Block 7 is seen projecting above the Dalgety Bond Store in this view, partially screening Crown Hotel and Resort.

6.4.6 MOD 9 - RtS

The MOD 9 - RtS development envelope (refer Figure 52) returns to a long, rectangular form similar to the Approved Concept Plan, but with the height of the blocks rising to the taller Block 5 at the southern end of Central Barangaroo, stacked against the taller elements within Barangaroo South.

6.4.7 Comparison of Existing, Approved Concept Plan, MOD 9 - exhibited and MOD 9 - RtS

The existing view (described in Section 6.4.3) comprises an elevated view from Munn Street overbridge looking south along Hickson Road. The view is framed to the left by the State heritage listed corner shop and terrace housing on High Street, and to the right by the Dalgety Bond Store. High Street and the Hickson Cutting, in conjunction with the Munn Street overpass and the Dalgety Bond Store, comprises a threshold between the historic, low scale development - reflecting the original topography of the Millers Point Conservation Area - with the highly engineered, flat expanse of Hickson Road and Barangaroo projecting west from the base of the cutting. Hickson Road and Barangaroo are seen in transition with extensive construction underway.

The Approved Concept Plan incorporates a long and relatively low development envelope for Central Barangaroo, marginally set-down in the centre. The mass, scale and form of the development envelope somewhat reflects in horizontal form the simplicity of the Dalgety Bond Store in the foreground. The development fills the void between fore and back ground elements to the west, focusing the view along Hickson Road into the distance.

The MOD 9 - exhibited development envelope generally comprises a taller development envelope to that of the Approved Concept Plan, including a tower within Block 7. The height of the north-eastern corner of Block 7 is similar to that of the Approved Concept Plan. The Block 7 tower will remove some sky view, however, the bulk of the form is obscured behind the Dalgety Bond Store and viewed against the backdrop of the substantial Crown Hotel and Resort tower and podium.



Figure 49 Existing view (AECOM, July 2023)



Figure 50 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, July 2023)



Figure 51 Visualisation showing the development envelope of MOD 9 - exhibited (AECOM, July 2023)



Figure 52 Visualisation showing the development envelope of MOD 9 - RtS (AECOM, July 2023)

MOD 9 - RtS returns to a similar development envelope to that of the Approved Concept Plan, with the height of the nearest two blocks (Block 6 and 7) similar in height. Block 5 at the southern end of the development, rises in height to meet the substantially taller Barangaroo South development. While this is a change between the Approved Concept Plan and MOD 9 - RtS, the stacking of height to the south is considered appropriate given the form of surrounding development and the axial view along Hickson Road, framed to the west by the Dalgety Bond Store in the foreground, Central Barangaroo in the middle ground, and Barangaroo South in the background.

6.4.8 Visual Impact Assessment

The following is an assessment of visual changes between the Approved Concept Plan and MOD 9 - RtS at Central Barangaroo. Refer Table 23 for the General Assessment Criteria, Table 24 and Table 25 for View Sharing Assessment Criteria and Table 26 and Table 27 for Visual Impact Assessment and rating.

MOD 9 - RtS this location is rated as **Moderate**.

Table 23 General Assessment Criteria - Observer Location 4: Munn Reserve

Criteria	Rating				Comments
	H	M	L	N/A	
Distance to view				●	Between 170 m and 450 m
Observer type				●	View from a key street - public domain, entry point by recreational users to Barangaroo Reserve.
Number of observers	●				Given this is an entry point to Barangaroo Reserve, observer numbers are regularly likely to be high.
Duration of observation			●		The duration of observation is expected to be low as people pass along Munn Street on their way into Barangaroo Reserve.
Visibility	●				The visibility of both Central Barangaroo from this location is high, including a high level of detail for Block 7 due to its close proximity to the observer location.
Visual absorption capacity		●			Central Barangaroo is positioned to the west of Hickson Road in a ‘gap’ between built form in the foreground (the Dalgety Bond Store) and the background (Barangaroo South). One Sydney Harbour comprises a solid backdrop with a low amount of surface articulation, in front of which Central Barangaroo would be seen. The visual absorption capacity of the landscape is considered to be moderate.

Table 24 View Sharing Assessment Criteria - Observer Location 4: Munn Reserve

No.	Stage	Rating				Response
		H	M	L	N/A	
1	Existing view with Approved Concept Plan					As described in Section 6.4.4
1 (a)	Nature / extent of existing view				●	Refer Section 6.4.4
1 (b)	Compositional elements				●	Key compositional elements comprise: <ul style="list-style-type: none">The visually consistent group of period buildings in the foreground and cast iron tall palisade fence to High Street edge and ornate cast iron low railing and fence to Munn StreetHickson Cutting, with Hickson Road set well below, and extending south from the observer location and providing a strong central focus to the view. The strong vertical relationship between Hickson Cutting and the Central Barangaroo development envelope;The tall tower development to both sides of the road and distant focal point of Darling Park office tower at the end of the road serve to reinforce the centrally focused nature of the viewThe MOD 9 - RtS development envelope.
1 (c)	Curtilages of important elements				●	High Street and Hickson Cutting for the residential terrace housing. Hickson Cutting and Hickson Road for the Central Barangaroo development envelope and Barangaroo South development.
2	Nature / extent of any obstructions to view				●	The Approved Concept Plan development envelope obstructs the view of the lower portions One Sydney Harbour.
3	Number of observers		●			Anticipated to be moderate to periodically high given it is an access point between the Millers Point Heritage Conservation Area and Barangaroo Reserve.
4	Documented importance of view	●				Yes - Heritage reporting - City Plan Heritage (2006), and Davies (2006).

Table 25 Analysis of impacts - Observer Location 3: High Street (South)

No.	Analysis of impacts	Rating				Response
		H	M	L	N/A	
5	Document weighting					
5(a)	City Plan Heritage (2006)	●				Heritage report specifically commissioned to assess the impact of the East Darling harbour (now Barangaroo) Concept Plan on heritage items, including an assessment of important views from and to Millers Point within the context of Barangaroo. This location was nominated as an important viewing location.
5(b)	Davies (2006)	●				Heritage report commissioned by City of Sydney (2011) for Millers Point and Walsh Bay areas, including identification of key views from Millers Point.
6	Quantitative evaluation					
6(a)	Extent of obstruction / new elements			●		The MOD 9 - RtS development envelope obstructs a very small portion of the lower northern face of the One Sydney Harbour towers.
6(b)	Is the view still sufficient to understand and appreciate the nature of and attractive or significant elements of the existing view?				●	Yes.
		Yes	No	N/A		
7	Qualitative evaluation					
7.1(a)	Is significance attached to the view likely to be altered?		●			No. The axial view along Hickson Road and to the Millers Point Conservation Area is maintained. The stacking of height to the south near Barangaroo South is appropriate within the context of the view, particularly as it reduces the contrast between the lower, horizontal composition of Central Barangaroo against the more vertical elements and taller towers to the south.
7.1(b)	If so, which organisation / why?			●		N/A
7.2	Would the proposed change make the view less desirable / why?		●			No.
7.3	Should change to whether the view is static or dynamic be regarded as positive or negative / why?			●		No change.
7.4	If the present view attracts the public to the location, why / how will that attraction be impacted?			●		The composition of the view would be maintained, the view to important heritage elements would be maintained. MOD 9 - RtS is sympathetic to the scale and composition of the surrounding built form and heritage items.
7.5	Is the present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?			●		N/A
7.6	If the present obstruction of the view is extensive, does that which remains still warrant preservation?			●		N/A
7.7	If the view is altered by the insertion of new element(s), how does this alter the nature of the present view?			●		Refer Item 7.1(a) above.

Table 26 Visual impact assessment - Observer Location 4: Munn Reserve

Analysis of impacts	Rating				Comments
	H	M	L	N	
Sensitivity	<div><div></div></div>				<p>The sensitivity of observers to the difference in view between the Approved Concept Plan and MOD 9 - RtS is considered to be High.</p> <p>Susceptibility of visual receptors to change:</p> <p>High Street comprises a setting through which recreational visitors to the Millers Point Conservation Area would be entering and leaving Barangaroo Reserve via the Munn Street access point. The unusual elevated, axial view along Hickson Road, within the context of the Millers Point Conservation Area is a compelling one, which has the potential to slow recreational users to better appreciate the view as they pass by. Central Barangaroo is visually ‘tucked into’ the gap between the foreground and background elements to the west, which reduces the overall visual prominence of the development within the view.</p> <p>Value attached to views:</p> <p>The value of this view is widely acknowledged, as identified within planning and heritage documents. Refer Items 5(a) and (b).</p>
Magnitude of change			<div><div></div></div>		<p>The magnitude of change between the view to the Approved Concept Plan and MOD 9 - RtS is considered to be Low.</p> <p>Size or scale:</p> <p>The scale of change in the view is low; comprising an increase in the height of the block furthest from the observer location. The proportional increase in the seen area of MOD 9 - RtS from this location is therefore low, relative to the overall view and the change is considered appropriate as it reduces the contrast between the vertical southern development and the more horizontal forms within Central Barangaroo.</p> <p>The taller block is seen against a backdrop of the very tall One Sydney Harbour.</p> <p>The period of time over which sensitive park users can be expected to take in the view is low, as above.</p> <p>Geographical Extent:</p> <p>The extent of the area over which the MOD 9 - RtS development envelope would be visible is similar to that of the Approved Concept Plan. Given the viewing distance of some 170m to Block 7, both the Approved Concept Plan and MOD 9 - RtS would be seen in a high level of detail.</p>

Table 27 Visual impact assessment results matrix - Observer Location 4: Munn Reserve

		MAGNITUDE			
		HIGH	MOD	LOW	NEG
SENSITIVITY	HIGH	H	HM	M	N
	MOD	HM	M	ML	N
	LOW	M	ML	L	N
	NEG	N	N	N	N

6.5 Observer Location 5: Clyne Reserve

6.5.1 Observer Location Position

Observer Location 5 is located within Clyne Reserve, looking south along Merriman Street towards Barangaroo. The reserve is positioned near a high point along the ridge line, east of the Stargazer Lawn within the Barangaroo Reserve.

6.5.2 Observer Location Rationale

This observer location has been chosen for the following reasons:

- Director-General’s requirements for a view from this location.
- Potential for a view of development in Central Barangaroo.

6.5.3 Existing View

Figure 54 shows the existing view as of 12 July, 2023. The view is looking south towards Central Barangaroo and includes State heritage listed housing on Merriman Street, with Barangaroo Reserve (Stargazer Lawn) to right centre and right of frame behind the tall palisade fence. The Crown Hotel and Resort and the two towers of One Sydney Harbour within Barangaroo South are seen protruding above the horizon at the end of the street, with city towers visible to the east (left of frame) beyond the housing.

The view includes groupings of mature street trees, with the Clyne Reserve and the adjoining area to the north subject to a high level of mature, large tree planting. An entry to Stargazer Lawn is located some 40m north of this point.

6.5.4 Approved Concept Plan

Figure 55 shows the Approved Concept Plan development envelope (in purple) positioned at the end of the street, but screened from view by trees.

The monumental scale of the Crown Hotel and Resort and residential towers are seen in sharp focus against the sky, creating an impressive sense of visual contrast with the long, low row of finely detailed, small heritage dwellings along Merriman Street. The lack of housing on the other side of the street adds to the theatre of the view.



Figure 53 Observer Location (Source: AECOM modified Google Map)



Figure 54 Existing view (AECOM, July 2023)



Figure 55 Visualisation showing the development envelope of the Approved Concept Plan (AECOM, July 2023)