

BARANGAROO SOUTH MASTERPLAN

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Contents

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Note: Images are illustrative depictions of design concepts only

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1

INTRODUCTION & OVERVIEW

Introduction

The key aims of the Barangaroo South Masterplan are to:

- Respond to the recommendations of the Barangaroo Review to relocate the Hotel; and
- Describe changes to the masterplan in reference to Barangaroo Concept Plan Amendment MP06-0162 Mod 4 (Mod 4).
- Describe proposed changes to the masterplan north of Globe Harbour; and
- Elaborate on the design of the public realm within the existing masterplan south of Globe Harbour.

This document summarises concept revisions to the masterplan of Barangaroo South in response to the state premier's commentary following the Barangaroo Review of Mod 4.

The Barangaroo Review was undertaken in August 2011 at the instigation of the Minister for Planning primarily to examine the reasonableness of process as well as review the design of Concept Plan Amendment Mod 4.

The review deemed the fundamental principles of the Mod 4 Concept Plan to be well founded, however it recommended that the location of the hotel over the harbour be reconsidered.

The proposed Barangaroo South Masterplan relocates the hotel to the north of Globe Harbour and, in response, reconsiders the placement of the residential towers and the public realm in the area known as stage 1B.

Moving the hotel from the pier in the water to a land site has a number of effects on the pattern, grain and adjacent development sites of Barangaroo South. A series of design studies and workshops, undertaken between September 2011 and September 2013, systematically analysed and refined the composition of built-form and public realm in response to this shift.

To ensure a cohesive and legible approach to the site, the geometrical logic of the radial fan arrangement previously established in Mod 4 has been extended to cover the whole of Barangaroo South.

The design of the residential towers has adopted the recommendations of the studies undertaken by RSH+P for the massing, distribution, height and available views. This has resulted in taller, more slender towers than in the Mod 4 Concept Plan, capitalising on premium views of the Opera House and of the Harbour Bridge that become available. The distribution of the residential and hotel towers also considers an equitable approach to view sharing, minimizing over-looking and maximising solar penetration.

Lend Lease has undertaken extensive internal consultation and commercial assessment in regards to the re-planning of site 1B. An international design competition was undertaken by Crown Limited and Lend Lease for a 6 star hotel in early 2013 and information supplied by the operator has been integrated into the masterplan to ensure the hotel podium & tower is successfully absorbed into the urban grain.

This Masterplan will elaborate on the recommendations of the DRP 48 review in the design of the public realm throughout the Barangaroo South. It includes the redistributions of road layouts, waterfront spaces, wind mitigation, and a civic approach to the design of public spaces at the southern entrance of the site.

In addition to the above, the masterplan also draws upon the precedents and outcomes achieved throughout the world's cities to demonstrate that Barangaroo South will be a vibrant mixed-use precinct that offers a variety of experiences, contributes to the liveliness of the existing Sydney CBD, and creates physical and natural landmarks.

An indicative design layout of the Masterplan has been provided to illustrate how the site may be developed. The built form and massing illustrated will be subject to further resolution by Lend Lease's design team through the delivery of subsequent Project Applications.



Bird's Eye View of the entire Barangaroo Site

Design Vision

Sydney exhibits the traits of all successful maritime cities, with its buildings and public spaces embracing the harbour. Its architectural form and city skyline demonstrate a bold, confident approach in pushing new ideas forward. This approach is a founding principal for the redevelopment of Barangaroo.

This former mechanised container port facility at East Darling Harbour – which forms the Barangaroo site – does not currently integrate with the CBD. Its creation by the infill of former harbour wharves in the 1960s compounded the blighting of Sydney's western edge and has led to a 'concrete backyard' on the edge of the thriving core of Sydney.

Our vision for Barangaroo South – the urban component of the Barangaroo development – will breathe new life into this wasteland and will completely transform it into a new, publicly accessible, waterfront precinct. It will reconnect it with the city and draw the CBD down to the western side of the most beautiful harbour in the world.

Our vision is underpinned by several key elements, against which the architecture, urban and landscape design can be taken forward over the coming years. The development of Barangaroo South will:

- Create a new area of the city that is open, inviting and inclusive; that celebrates the harbour and opens a new 'front door' to the city from the west. It will provide significant new areas of high quality 'people space' on the site, including public realm along the entire water's edge. Almost 40 per cent of the Barangaroo South site will be usable public open space, rising to 65 per cent across the Barangaroo development as a whole;
- Establish a critical mass of overlapping activities and building uses that promote a live-work-leisure-learn and socially/economically diverse community in one dynamic vibrant quarter, and offer a much-needed addition to Sydney's urban make-up;

- Form an integrated extension of Sydney's commercial district with strong public transport connections to the rest of the city. It will attract major international financial and professional services organisations to support the city's growth, with world-class buildings designed to respect and respond to the heights, density and morphology of buildings in the adjacent CBD;
- Construct a world leading sustainable community, which puts back more than it takes. With aspirations such as carbon neutral, zero waste and water positive, it will adopt a precinct-wide approach to infrastructure, energy use, water and waste management. New planting, roof gardens and parks, use of the water to create great public places, with new transport options, cultural and learning facilities, retail, residential, leisure and offices, in healthy, smart buildings, tuned to their environment and designed to achieve six star Green Star rating for commercial. The development of Barangaroo South will set world leading environmental and sustainability benchmarks for all to follow; and

introduce a landmark building directly on the waterfront that is a focal point for the western edge of the city, that defines the cultural and public space at the heart of Barangaroo South, celebrates the harbour, attracts visitors, and makes a statement about Sydney's role as a major South East Asian financial centre and a 21st Century world city.

- This building should become a 'must see' destination and a new 'marker' for Sydney's global image, sitting on the western edge of the city and providing a western architectural counterpoint to the icons of the previous century – the Opera House at the eastern edge and the Harbour Bridge on the centreline.

Our vision for Barangaroo South returns this neglected part of the waterfront to Sydneysiders, which until now, has effectively been beyond their reach, as a dynamic, contemporary city quarter that celebrates and promotes Sydney's diversity, climate and lifestyle. In time, we believe it will become an integral part of the city's image and a valuable architectural legacy.



Role of the Master Plan

A Concept Plan for the redevelopment of the Barangaroo South precinct was approved by the NSW Minister for Planning on 16 December 2010 (MOD 4). The Concept Plan provides the framework for development of Barangaroo South. In general terms, the approved Concept Plan provides:

- Maximum building heights
- Maximum building area, defined as ‘Gross Floor Space’ (GFA) for the entire site, for smaller areas within the entire site and for a range of individual uses that could be accommodated on the site.
- A Design Vision and Built Form controls to support its implementation through individual building approvals.
- An overarching vision for the more detailed design and development of the public domain.

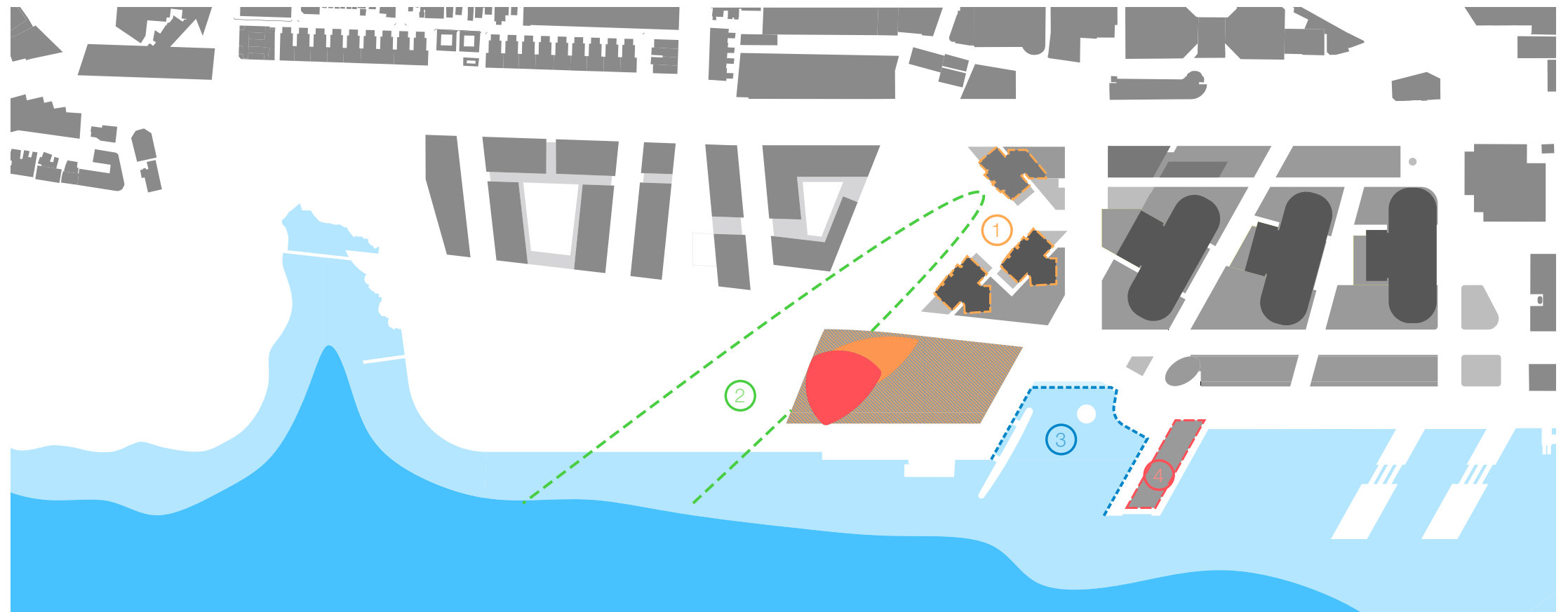
The Concept Plan is supported with a range of technical and design reports that support, justify and underpin the now approved development. A significant element of these supporting documents is the Master Plan, which essentially provides a detailed description of an “Indicative Design” that gives a measure of life to the overarching planning approval framework for the site.

Following approval of Concept Plan MOD 4, detailed planning applications have been prepared and approved, for the three major towers on the Barangaroo South site, known as the International Towers, Sydney, as well as the first two residential buildings, located on the foreshore of the site.

Relocation of the Pier Hotel

Following the Barangaroo Review in May - August 2011, the NSW Government requested Lend Lease to consider the potential for relocation of the hotel building approved on a pier structure in Darling Harbour to an on-land location. Following extensive consultation between Government and Lend Lease, agreement was reached to relocate the Hotel to the north-west corner of the Barangaroo South site.

This major shift in thinking brought on by the Government’s desire to relocate the hotel creates a significant catalyst for review of the Concept Plan and the potential built outcomes that may result.



Revised master plan diagram illustrating the impact of the relocated hotel to the north-west corner of the site including; the Residential Towers (1), Radial Park (2), Globe Harbour (3) and the Community Centre (4).

As previously highlighted, most of the buildings and floor space located in the southern part of the site are approved and committed. As such, review of the Concept Plan must necessarily focus on the area north of the C3 building. Allied to this, an opportunity exists to further develop the form and character of the public domain throughout the entire Barangaroo South site, thereby providing a strong and coherent basis for the creation of Sydney’s latest and pre-eminent waterfront precinct.

Impact on the Masterplan

The hotel’s relocation has an impact on both the pattern and grain of the Barangaroo South precinct, and the distribution of public realm and open spaces. In order to be able to create an on-land site for the hotel without creating an overly dense centre to Barangaroo South, a number of additional modifications need to be made to the overall masterplan:

1 Residential Towers

Conceptually, the residential towers belong to the dense urban nature of Barangaroo South. By considering them collectively with the hotel, they are integrated in to the body of the masterplan. The hotel becomes the dominant landmark form, with building heights spiralling down towards Hickson Road. The spaces between each tower is given equal priority to potential vistas, ensuring adequate space around each building.

2 Radial Park

The public open space which had previously faced the north of Globe Harbour has been redistributed to the north of the residential towers as the Radial Park.

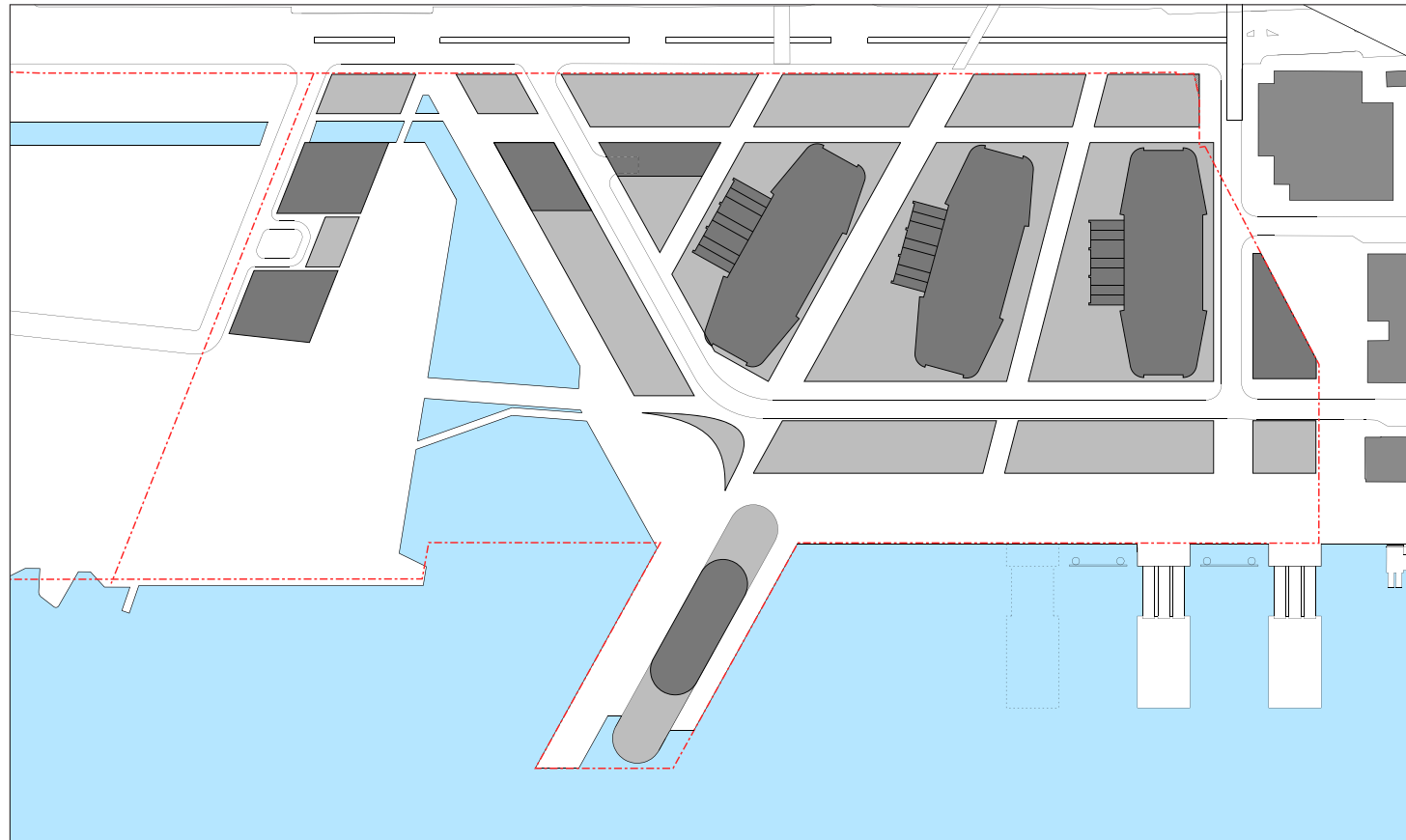
The Radial Park forms a seamless extension into Barangaroo Central and vice versa.

3 Globe Harbour

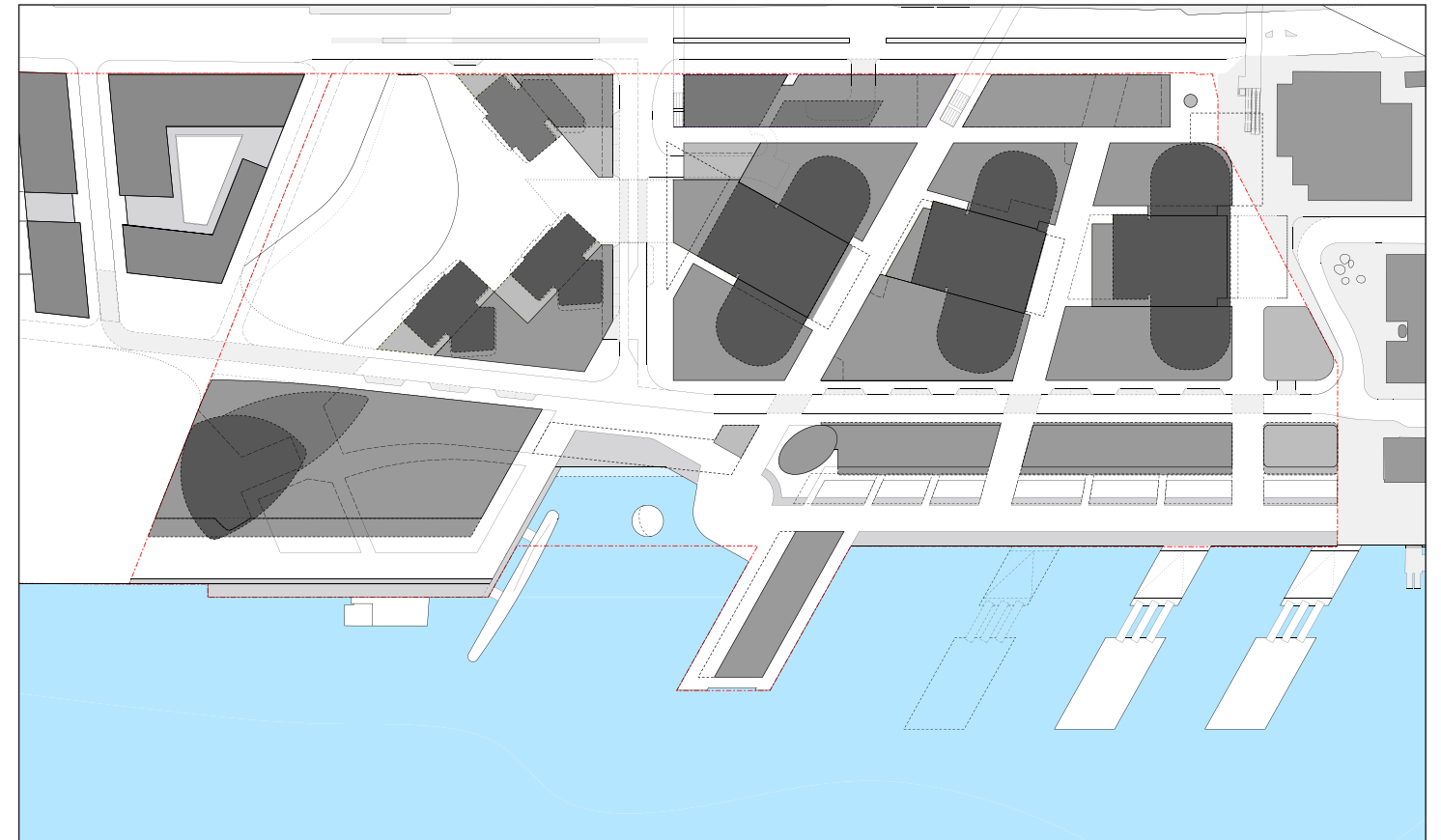
The scale of Globe Harbour has been reduced, giving it a more urban character, and making it appropriate in size to the activities clustered around it. The waterline has been reconfigured to respond to existing site features and constraints and ensured that the hotel is integrated into the built form of Barangaroo South. A stepped landscape brings activity to the waters edge whilst also maintaining necessary flood defence levels for building thresholds.

4 Community Centre

On the waterfront promenade the hotel has been removed but a pier retained in its place. At the threshold to Globe Square it is vital and public in nature, with a lower scale pavilion building which functions as a cultural and information centre. This building form defines and contains the southern edge of Globe Harbour.



Concept Plan Amendment MOD 4 Plan (NTS)



Current revised master plan (NTS)

The Revised Masterplan

As noted, the request to relocate the pier hotel has resulted in the need to address a number of changes to the form and location of development at Barangaroo South. These changes are not contemplated by the present planning framework approvals, and as a result, an application for a revised planning framework must be made to the NSW government.

This document represents a revision to the master plan that was prepared to support the current Concept Plan Approval. In this respect, this revision is a key supporting document within an application to modify the present Concept Plan in order to provide for relocation of the hotel and other consequent adjustments to development in Barangaroo South.

The Master Plan is the culmination of an extensive period of urban design investigation, testing and refinement. As a whole, it represents an indicative design for Barangaroo South that also informs and underpins the key planning approvals criteria of land use zoning, maximum floor space, building heights

and envelope and built form guidelines contained in a Concept Plan Modification Planning Application. In this way, the Master Plan does not in itself constitute part of the eventual development approval. Rather, key principles and criteria, such as those identified, are drawn from the Master Plan, and are supported by it within a separate application for planning approval.

2

SITE ANALYSIS

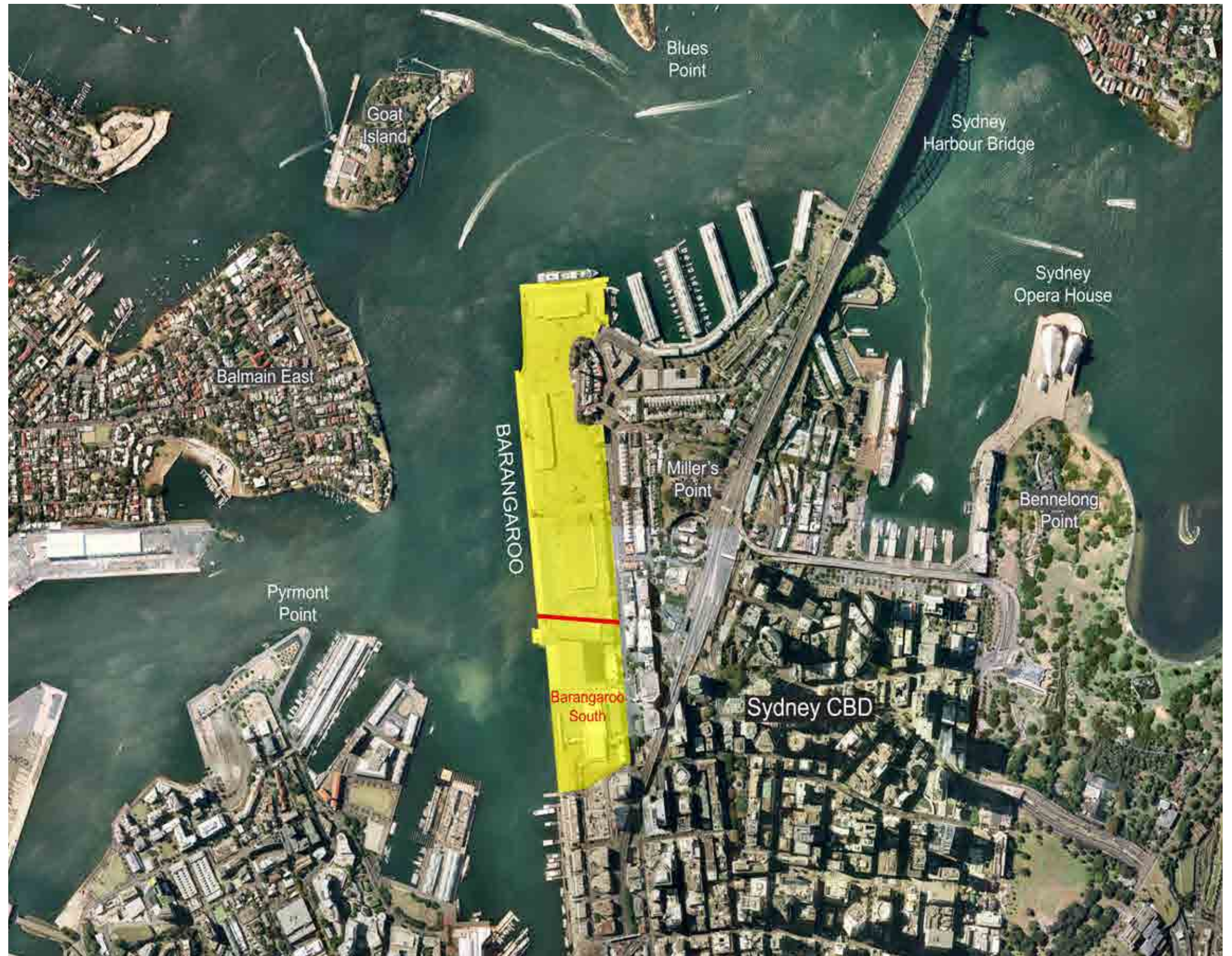
Urban Context

Site and Setting

Sydney's spectacular harbour setting makes it one of the world's most striking and scenic cities. Its location ensures a temperate climate, cooled by sea breezes in summer. These factors combine to promote a lifestyle that celebrates the outdoors.

Over the past 50 years, the city has developed a highly distinctive appearance. Building upon the iconic nature of the Sydney Harbour Bridge and the Sydney Opera House, the dense concentration of high-rise office buildings of the city's central area contrasts dramatically with the domain parklands and surrounding natural harbour.

Sydney Harbour is remarkable in itself because of its complicated shoreline arising from its geological origins as an ocean inlet into a sunken sandstone river valley. A remarkable number of headlands survive as natural landscape. Today, these features combine to create a unique series of visual contrasts: water, vegetated headlands and a dense urban fabric quite unlike any other city in the world.



Barangaroo within the wider Sydney context

Local Environment

1. 1.5m tidal range
2. Noise from the Western Distributor
3. Breezes off the harbour and prevailing north easterlies
4. Sun path and effects of overshadowing
5. A flat, man-made surface
6. Department of Environment, Climate Change and Water (DECCW) Declaration Area
7. Hickson Road
8. Low scale residential and commercial
9. Sandstone Cutting

Barangaroo faces directly onto the harbour, looking west towards Pyrmont, Balmain and Goat Island, with Lavender Bay to the north. Behind it to the east rises the large-scale cityscape of Sydney's CBD. The overriding use is commercial, there are small-scale pockets of residential, community and leisure use immediately adjacent to Hickson Road.

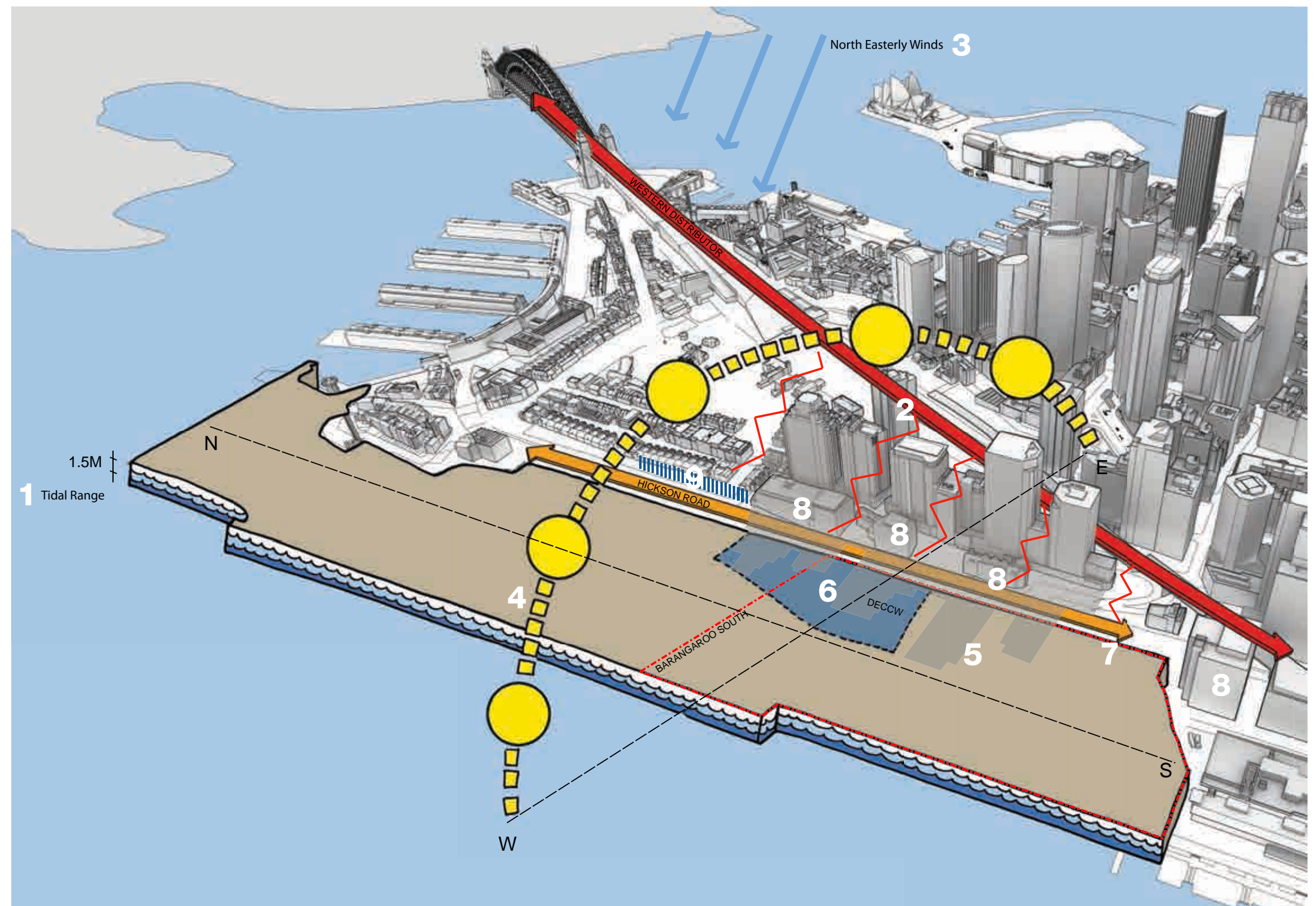
The site itself reflects the scale of the heavy industry once based here. It is broadly rectangular, with a straight dock edge and a fenced perimeter facing the city. Its key characteristic is the unrelenting flatness of the hard man-made apron. Not unlike a 'concrete backyard', it is singular and monotonous and lacking an internal network of streets or urban grid.

The site as it currently stands provides no shelter from the sun or wind, and its composition of landfill and concrete makes it an inhospitable environment for any natural habitats.

Of Barangaroo's total 22 hectares, and proposed 2.2km of foreshore frontage, the existing site of Barangaroo South occupies 7.4 hectares with 450m of foreshore.

Challenges

- Creating a sustainable environment
- Protection from the harsh, south westerly winter winds
- Creating connections to the foreshore
- Capturing daylight whilst providing shelter
- Creating variety, interest and a destination



Local Environmental Constraints affecting the Barangaroo South Site

Physical Constraints

1. Reclaimed harbour primarily constructed from fill
2. Reservation for future proposed Metro tunnels at the southern end of the site
3. Existing buried dock basin
4. Existing dock edge caissons
5. Margaret Street view corridor
6. Topography east of Hickson Road
7. Sydney's frame for high buildings

With the natural shoreline effectively following the western edge of Hickson Road, Barangaroo has been used for commercial shipping since the 19th century. It is fundamentally an artificial, man-made platform reclaimed from the harbour over many years, similar to the rest of Darling Harbour.

The site occupied by Barangaroo South has been constantly changing and evolving over the last two centuries to adapt and meet the changing requirements of shipping and commerce. Today the site comprises of a single rectangular hardstand apron that juts out into the harbour, the legacy of the advent of container shipping in the 1960's.

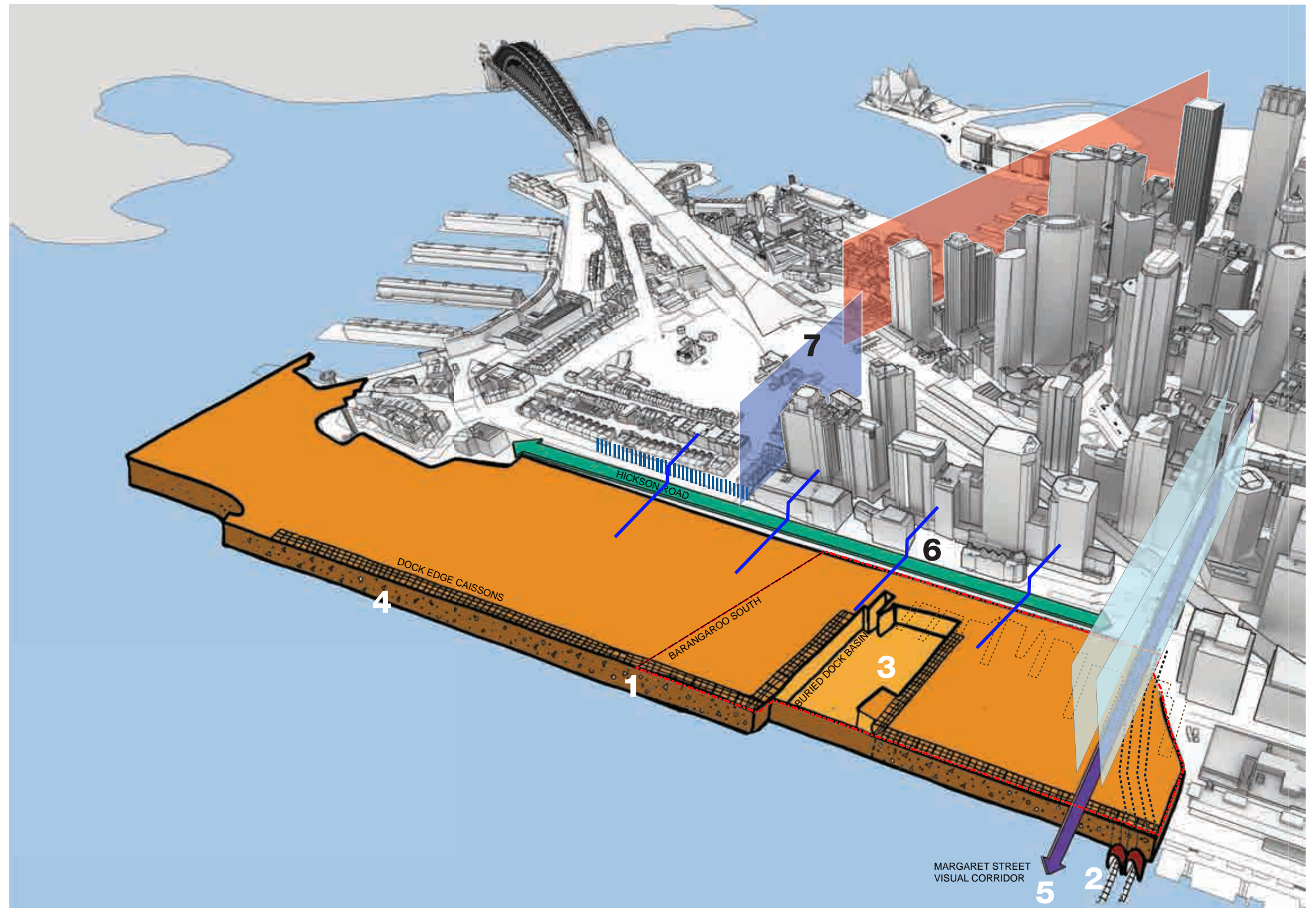
This apron hides and disguises the historical evolution of the site, and buries both its natural past and its archaeology. The existing ground conditions vary from areas of good compacted fill to those that are poorly compacted, as well as areas of unacceptable land contamination nominated as the DECCW Declaration Area.

The south of the site contains space for the possibility of a future Metro rail line as well as the retention of a viewing corridor from Margaret Street down to the harbour.

The topography that occurs at the eastern side of Hickson Road, which rises up to the city, currently presents a barrier in achieving a physical connection to the city.

Challenges

- Varying ground conditions with associated engineering challenges
- Remediation of contaminated land
- Safe-guarding proposed deep level Metro tunnels
- Maintaining view corridors
- Connecting to the city



Local Physical Constraints affecting the Barangaroo South Site

Site Opportunities

1. Repair and extend east-west and north-south connections
2. Complete the harbour foreshore public walking trail
3. Remake and reinterpret the former southern cove
4. Maintain important existing harbour views
5. Activate waterfront edges through variety

The greatest opportunity is to reconnect the site and the water's edge back into the city of Sydney, and to provide full access along the waterfront via a number of cross routes whilst bringing the density of the CBD across Hickson Road and developing a new vibrant community towards the harbour's edge.

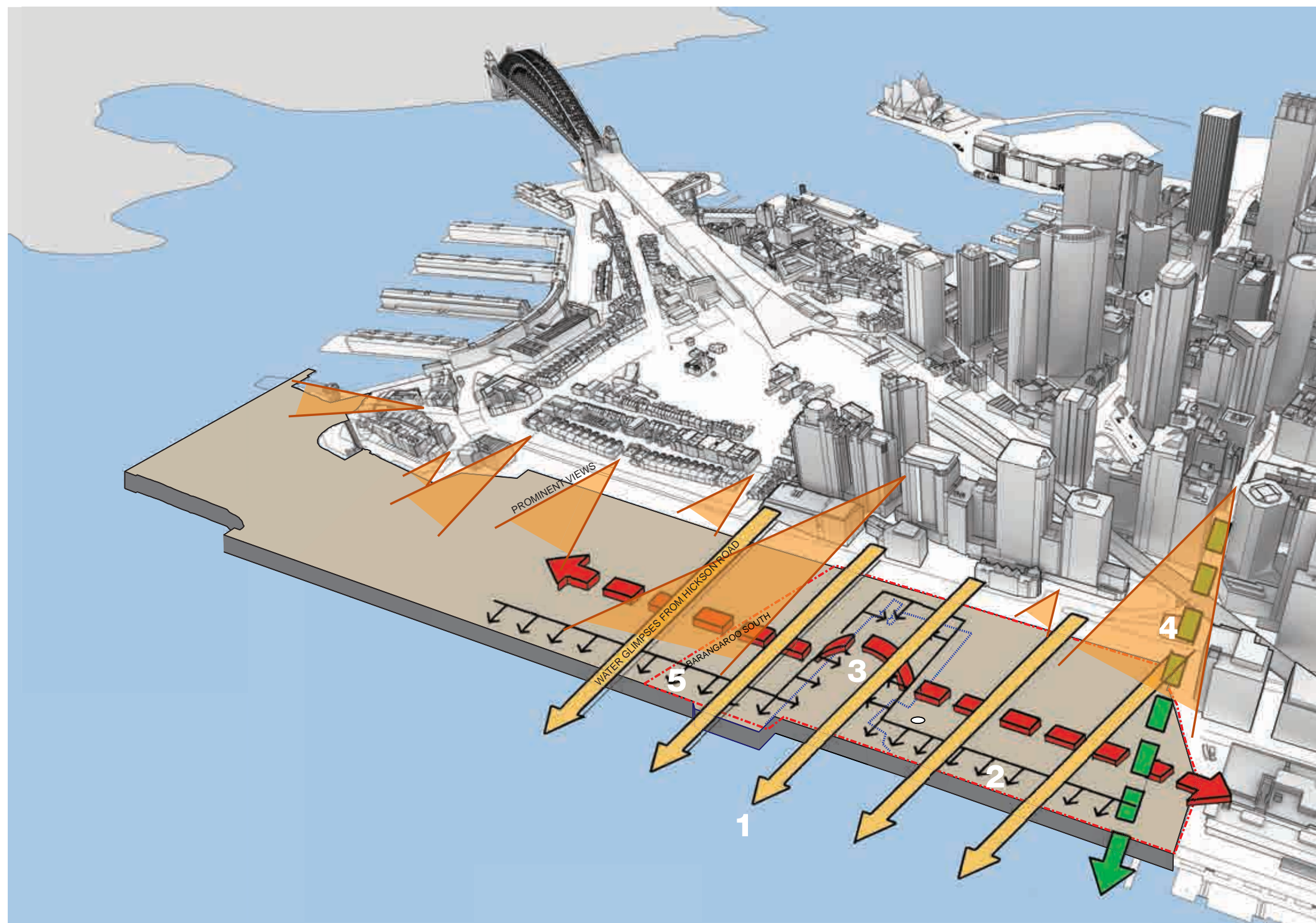
The topography that occurs at the eastern side of Hickson Road currently presents the first barrier in achieving this. Formulating a strong edge to the west side of Hickson Road unifies the street and contains traffic noise, enabling it to be developed to carry all forms of traffic and future light rail. Its edge should be broken to allow for the retention of views from Hickson Road through the development to the water.

By completing the connectivity between King Street Wharf and the headland and reinterpreting the existing dock basin into a southern cove, there is an opportunity to provide increased water frontage to the site. A variety of public activities unique to this location can be incorporated at the harbour's edge, exploiting low-level views and opportunities of proximity to the water.

With these two defined edges, there is an opportunity to bring the CBD further west with greater permeability from high and low level connectors across Hickson Road. There is also an opportunity to connect across the bay through ferry terminals and possible future metros, the city can reinforce its connection with the inner-west.

Challenges

- Creating a vibrant extension to the CBD
- Preserving existing views & creating new views across the site
- Permeability & accessibility
- Connecting to existing & proposed transport hubs
- Water views from Hickson Road
- Contain the site on its west and easterly edges with human scale built form



Opportunities in and around the Site

3

DESIGN PRINCIPLES

Design Principles

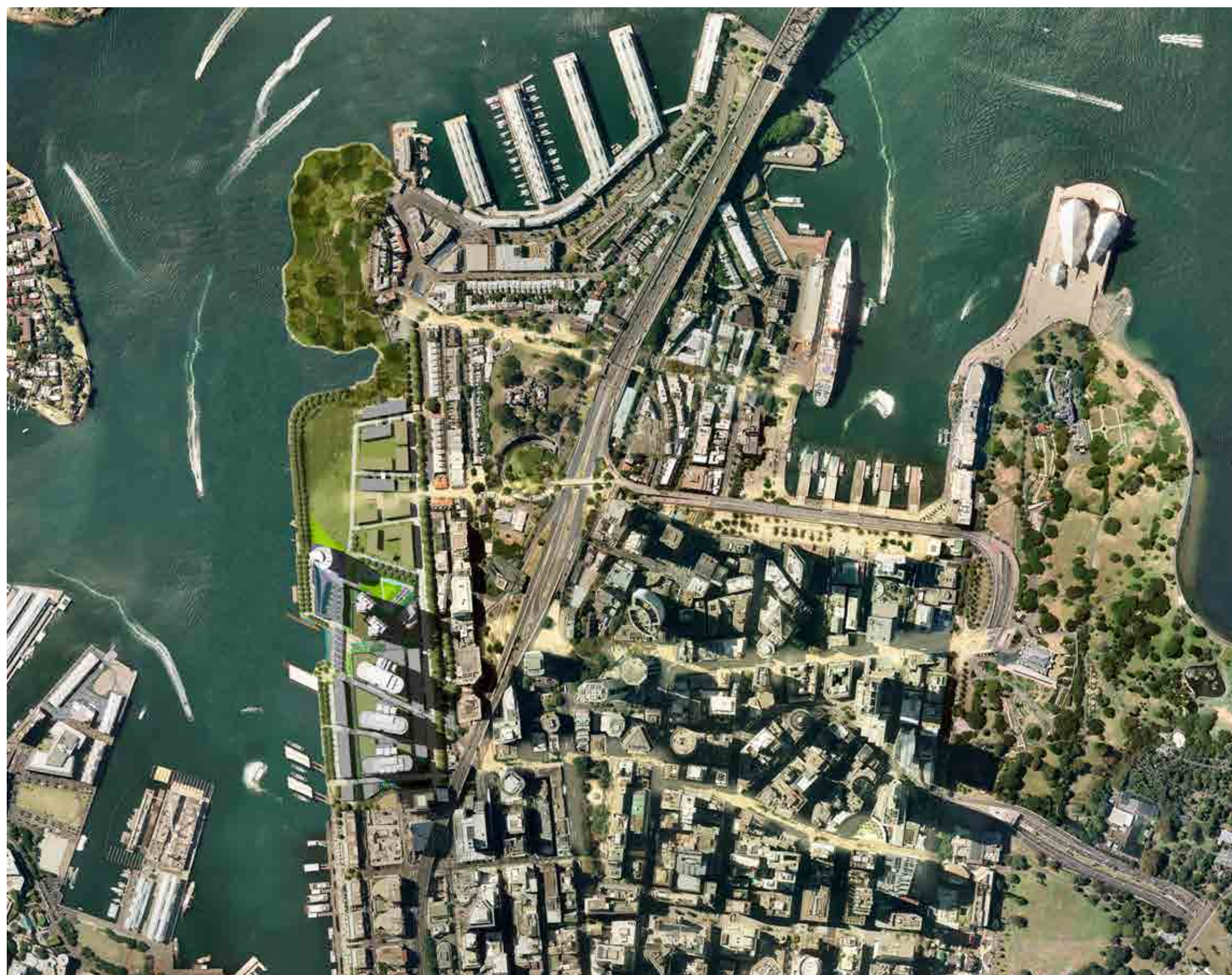
The urban design concepts and principles established in the approved Concept Plan Mod 4 remain fundamental to the vision and ambition for Barangaroo South Concept Plan, particularly in relation to:

- Place-making and creating a sense of place;
- Establishing communities;
- Promoting and enhancing connections to the water;
- Implementing sustainable design; and
- Creating a dynamic and vibrant waterfront precinct.

The design philosophy for Barangaroo South is therefore underpinned by the following key principles:

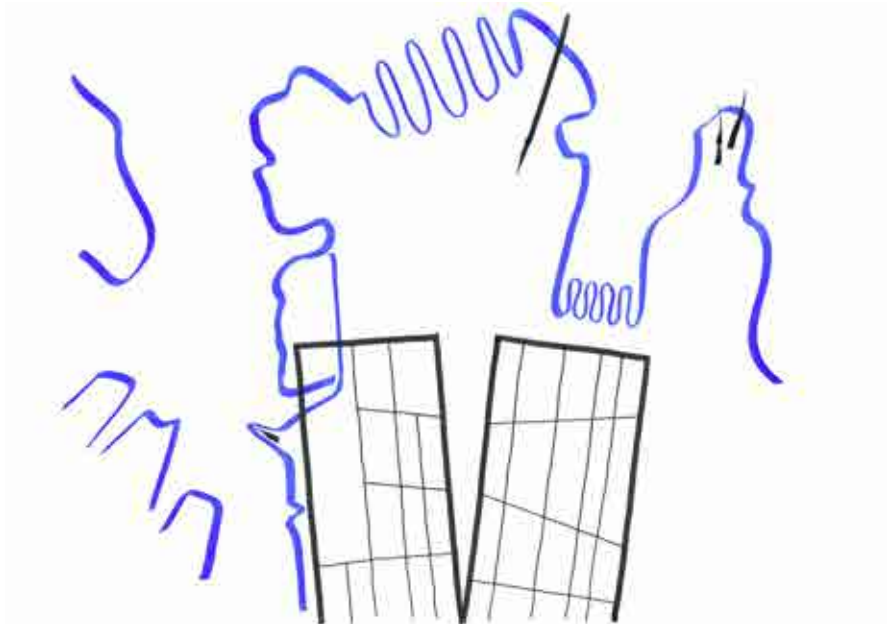
- Completing the city frame to book-end the city's western edge;
- Creating gateways, markers and place-making by establishing landmark buildings and spaces at strategic locations throughout the precinct and along its edges;
- Extending the city's natural north-west oriented grid into the site to reinforce already established east-west linkages; and
- Ensuring that the principal public spaces are bounded by human scale buildings and are easily accessed via a series of streets of differing character, width and proportion.

The following sections of the Urban Design Statement provide a detailed explanation of each of the proposed design principles and provide illustrations to articulate Lend Lease's vision for Barangaroo South.

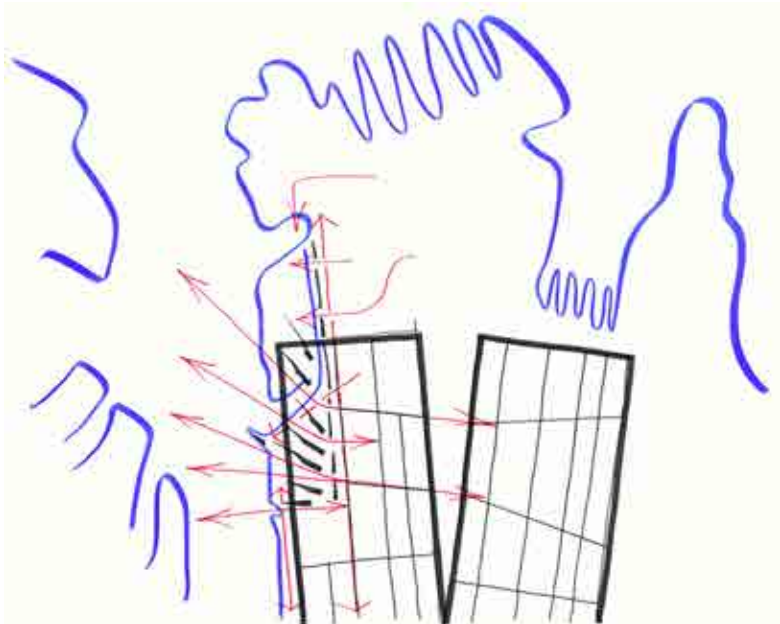


Barangaroo South Masterplan with an Illustrative Scheme

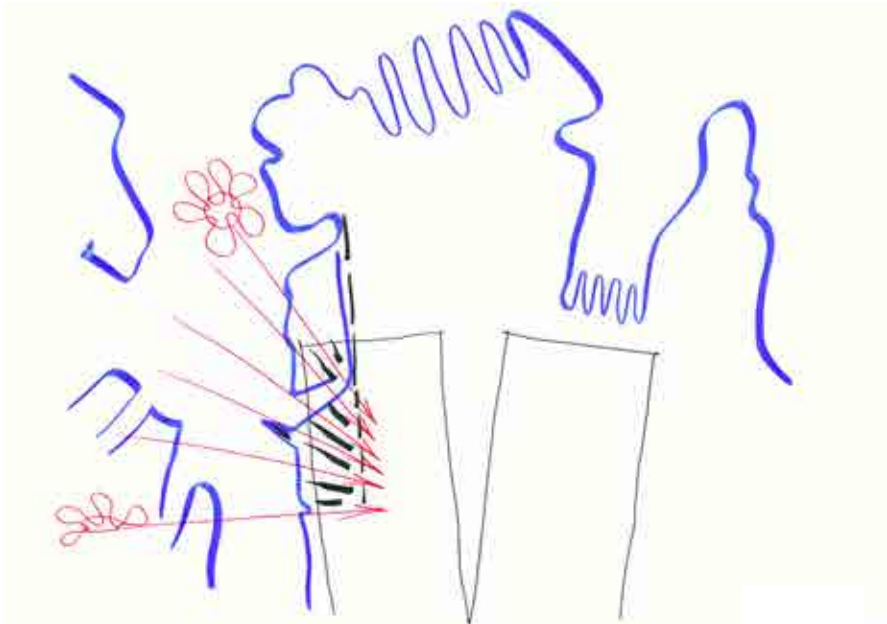
Original Key Design Principles



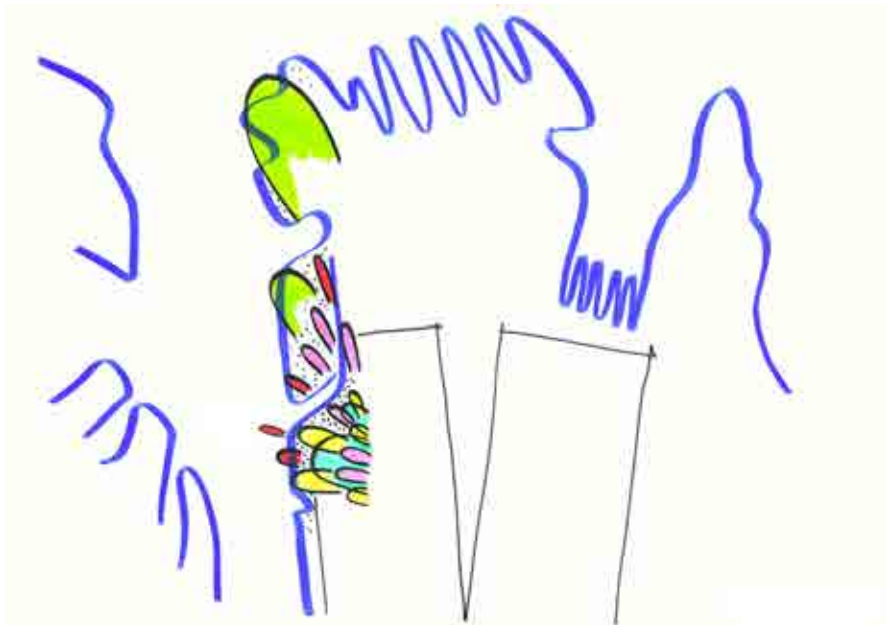
Framing Sydney



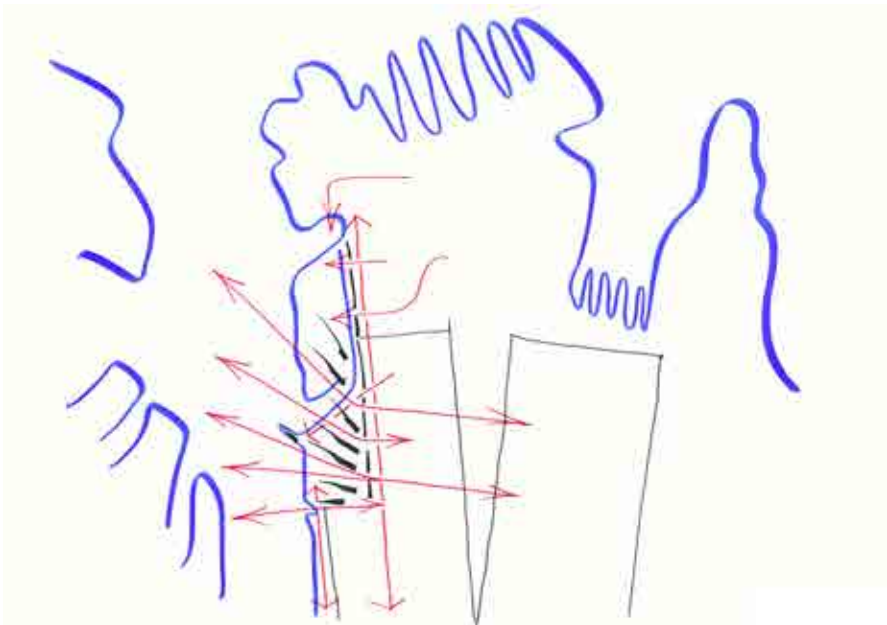
Extending the Grid



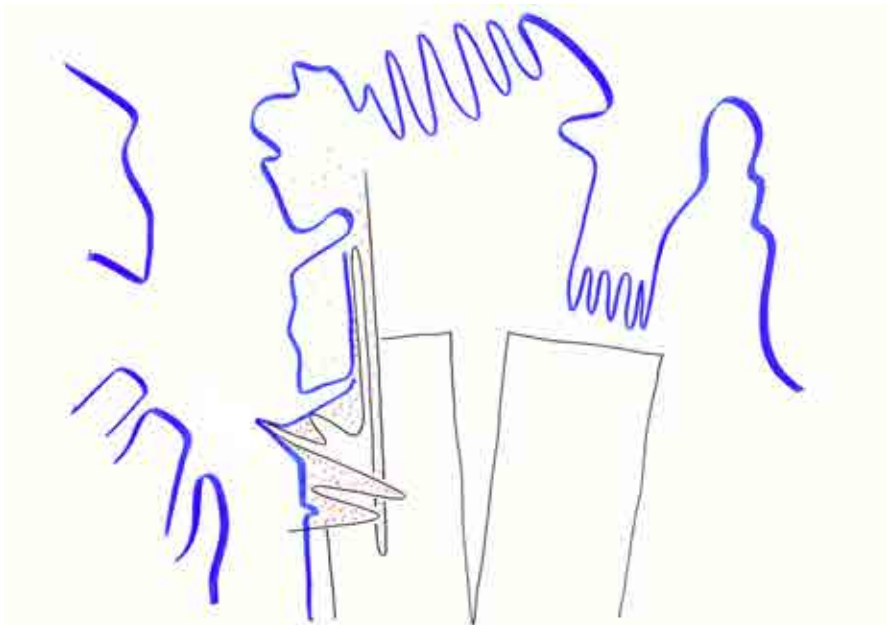
The Fan



A Place for the Future, Spaces,
A Mixed Use Community



Connections



Gateways and Markers

Framing Sydney

- A sense of place
- A sense of community
- Connected to the water
- Sustainable
- Taking the CBD to the western waterfront

Sydney's elevated centre of tall buildings (indicated in red) against the lower level foreshore along the harbour forms the city's frame.

Sydney's frame remains key to the Barangaroo South Masterplan. The Masterplan underpins the new north-west edge to the frame (indicated in blue) and reinforces the existing distinction in built development and parkland. The Masterplan will build on this by developing a harbour edge that will be home to commercial, residential, retail and entertainment spaces with the relocated hotel that completes the north-west corner.

The development of the last large brownfield site in Sydney's CBD is book-ended by the western foreshore on one side and Hickson Road on the other. The redevelopment will aim to be sympathetic and complementary to the current environment.



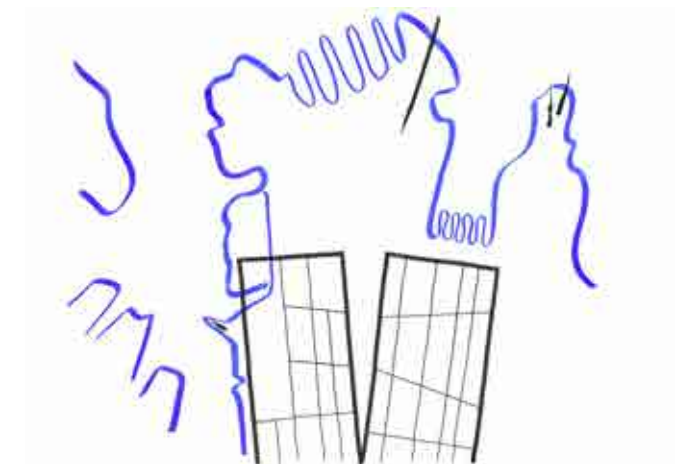
Central Park – New York



Central Park – New York



The framing of Sydney's CBD



Framing Sydney - MOD 4 key planning principle sketch

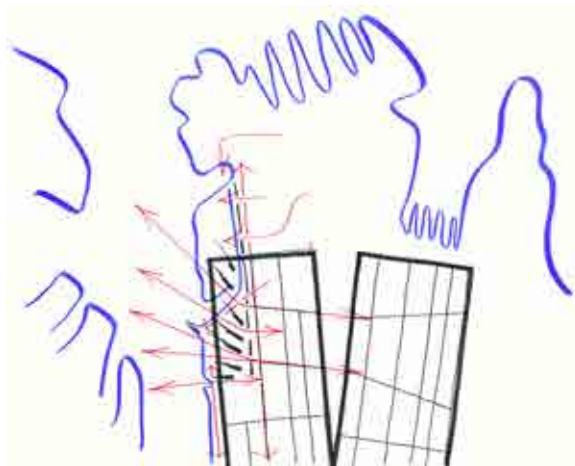
Extending the Grid

- Connecting into the existing CBD
- Respond to the sun path and site boundaries
- Create an elegant skyline facing the water
- An environmentally-driven fanned grid

The existing city grid is abruptly terminated at Hickson Road through the cutting of the sandstone cliffs at the boundary of the old container port.

Barangaroo South locks into the city grid at the Hickson Road perimeter of the site. It follows a radial arrangement that responds to the sun path and site boundaries as the grid fans out. This maximises sustainable outcomes and responds to the changing nature of the site and its context with the city.

The proposal will extend major north-south connections through Barangaroo South, engaging its major arteries with the rest of the city allowing people to move easily across the city from north to south. It becomes the sight-line that sets out the planning of the new city district of Barangaroo South.



Extending the Grid - MOD 4 key planning principle sketch



Connecting to the existing CBD



The radial geometry connecting into existing grid

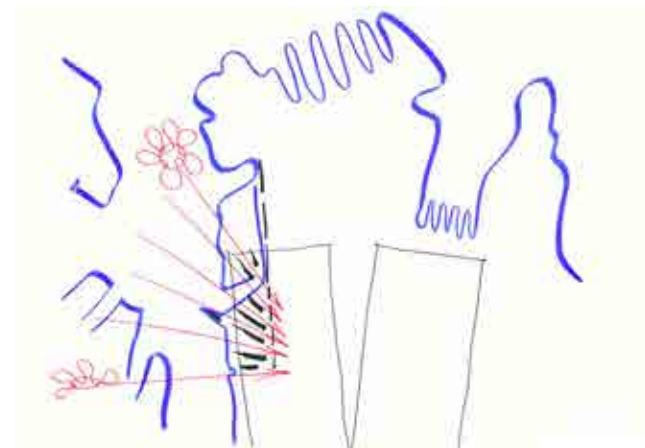
The Fan

- Sunlight and daylight penetration
- Elegant and slender buildings to complement the city skyline
- Dynamic
- Opening towards the water

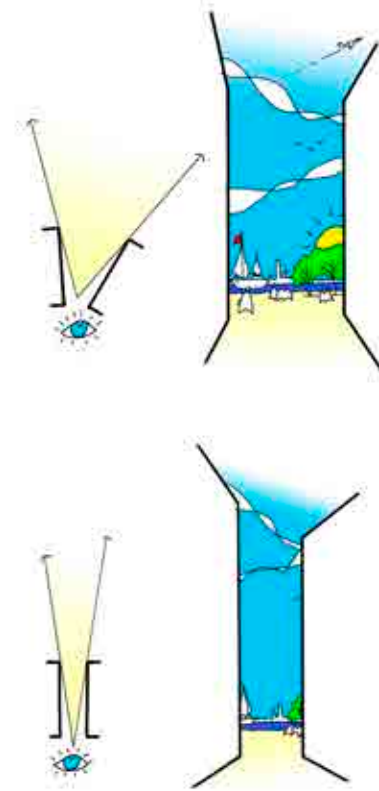
A radial, fanned arrangement responds to the changing nature of the site and its context with the city. The fan geometry provides deeper sunlight and daylight penetration into the spaces between buildings whilst ensuring that vistas expand towards the water. This enables a more democratic arrangement eliminating distinction between absolute waterfront and second tier sites.

The proposed Barangaroo South Masterplan extends and strengthens the fan arrangement introduced in Mod 4 to ensure an optimal sustainable solution of increased daylight and sunlight to the ground level and public areas.

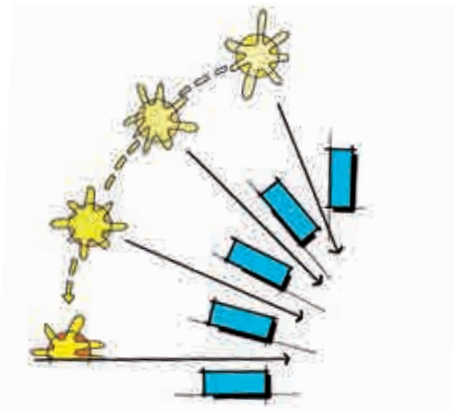
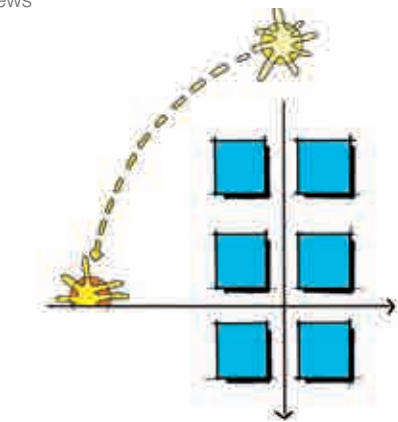
The new development will complete the westerly city grid established by Hickson Road and all other roads intersecting at Wynyard Park.



The Fan - MOD 4 key planning principle sketch



Fan opens up views



Fan opens up solar



Fan opens up views and solar aspect

A Place for the Future

- Carbon neutral and water positive
- Low energy buildings
- Climate responsive design
- Future-proofed infrastructure
- Sustainable transport strategy

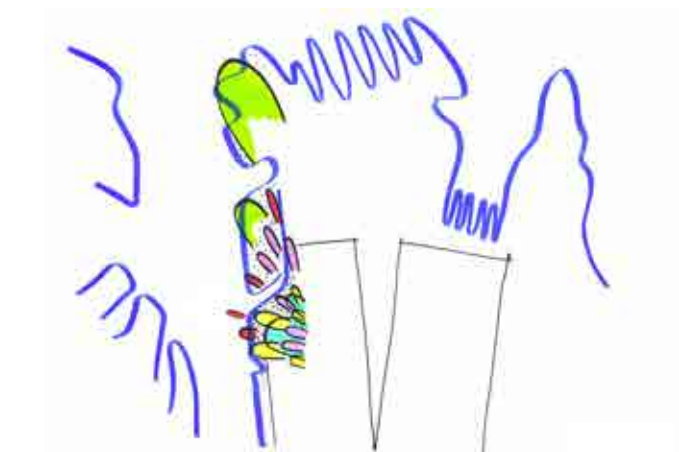
At the very heart of the design philosophy is a complete and total commitment to creating the world's leading sustainable community. Our project aspirations as set out above are to reach new standards in sustainable design, with Barangaroo South becoming the world's first carbon-neutral, zero waste, water positive development.

Barangaroo South will not only showcase commercial buildings of 6 green star environmental standards, but it will help make sustainable living a natural and easy way of life for its community.

The development will be climate positive as well as socially and economically diverse and sustainable; the buildings will be healthy and smart, tuned to their environment.

The precinct will be water positive; treating, recycling and reducing water use. It will use renewable energy and a precinct-wide energy infrastructure with harbour water cooling.

Public spaces are evenly distributed along the Barangaroo South section of the waterfront ribbon, providing continuity within the precinct and also ensuring connection to the Central Parklands and Barangaroo North Headland Park.



A Place for the Future, Spaces, A Mixed Used Community
MOD 4 key planning principle sketch



Accessible Public Waterfront



Barangaroo site-wide sustainability

Connections

- Integration with the Sydney CBD
- An expansion of the city
- Repair and extend east-west connections
- Create new north-south connections
- A public waterfront accessible for all
- A catalyst for developing Sydney's infrastructure

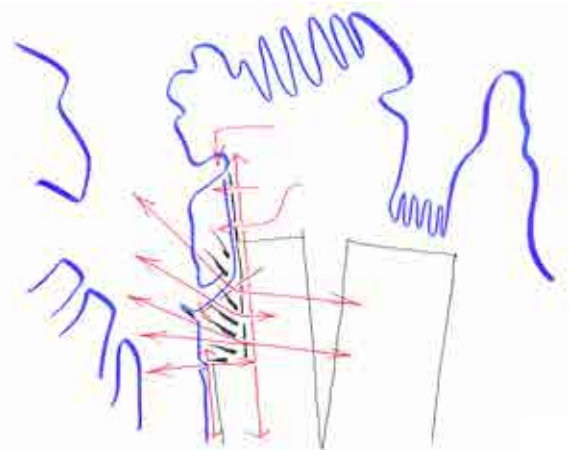
Barangaroo South will inspire and link together existing and new forms of public transport, providing the gateway to and from the west. It will establish connectivity across the city core from east to west, and will promote a better quality public realm within the existing city core.

The introduction of ferries, the potential for metro access and the Wynyard Station pedestrian links will make this one of the most connected spaces in the city. This in turn will generate greater future activity to the south and east, re-balancing the city and encouraging vibrant high density interaction at Barangaroo South.

Connection Plan and Routes

The focus of the redevelopment will allow for the creation of many seamless connections between the site and the CBD so that people are naturally drawn to Barangaroo.

The radial street arrangement focuses on the principal major connection at Margaret Street, revealing a sequence of vistas to the waterfront as one approaches Barangaroo from the city at this point.



Connections - MOD 4 key planning principle sketch

Ferry terminals, additional buses and a potential metro stop along Hickson Road will all add significant public transport to support Barangaroo South, and the development will be part of the cycle networks and the pedestrian walkways.

With all initiatives in place, Barangaroo South will be well connected, easy to get to and easy to navigate. The main connections proposed are described below.

North-South Connections

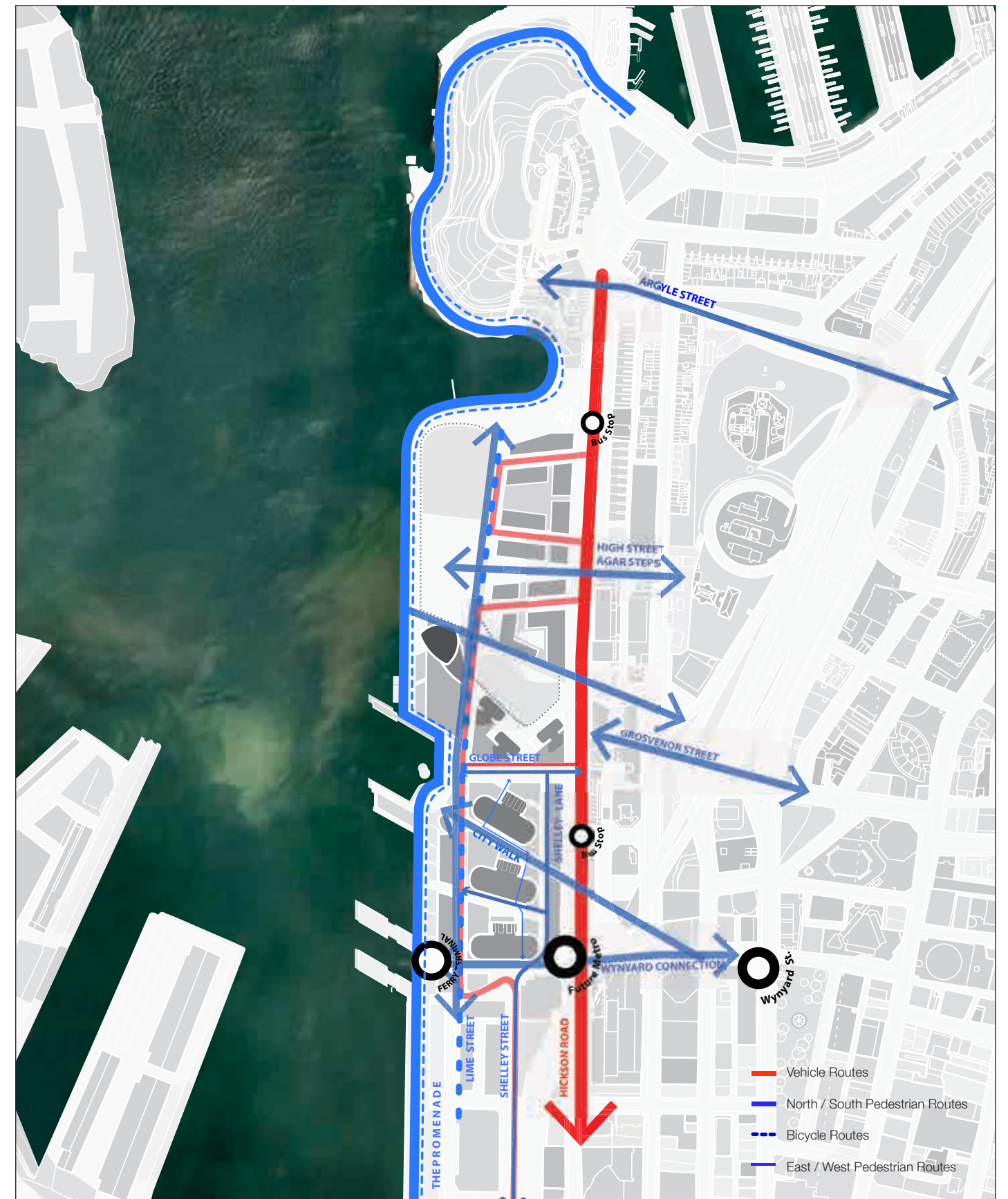
Hickson Road will be one of the key transport arteries, allowing people to move easily from the city's north to south and is transformed from a road activated on one side by commercial and residential activity, to a boulevard environment with activity on both sides.

Lime Street is the main vehicular route and retail street within the development. Within site 1A, it is framed by low rise buildings on its western edge and low level podiums at the base of the commercial towers to the east. It continues north to site 1B for the Hotel and residential towers and Barangaroo Central, before returning to Hickson Road south of High Street and Agar Steps. Shelley Street is conceptually extended through Barangaroo South as Shelley Lane, a pedestrianised laneway that links Hickson Place to Globe Street and Globe Harbour.

The main pedestrian route is the Waterfront Promenade, which extends along the waterfront from the ferry terminals, into Globe Square, around Globe Harbour towards the hotel. From here the public foreshore walk continues north to Barangaroo Central and the Headland Park.

East-West Connections

Connections to the CBD are paramount. There are a number of pedestrian crossing points envisaged over Hickson Road. Each introduces or repairs a connection east to west, linking the existing communities and spaces to Barangaroo South, including the new pedestrian-only City Walk Bridge and Wynyard Walk Bridge, which link Barangaroo South with Wynyard Station. A third future bridge at 189 Kent Street would also provide a high level link between the city and the site.



Pedestrian & Vehicular Connections

Gateways & Markers

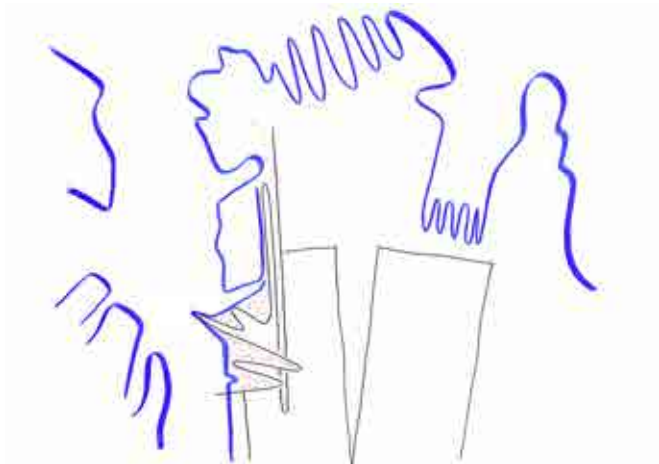
- A marker along the foreshore
- The focal point for Barangaroo South
- A new Sydney icon and attraction for visitors frames the new public space
- A cultural focus
- Communal and accessible to all

Memorable cities in history are marked by the clear reading of contrasts between the major monuments and the built form of the rest of the city. The contrasts between the spires and domes of historic European cities with their general urban fabric give these places their memorable image.

In Sydney, its colonial-era monuments (such as Town Hall and St Mary's Cathedral) have been eclipsed by the high-rise development of the last 40 years. However, the freestanding nature and the memorable form of the Sydney Harbour Bridge and Sydney Opera House and their connection with the harbour have given them a key role in the image of the city.

The Barangaroo South Masterplan continues this theme developing buildings of distinct character alongside the water's edge without crowding the water or limiting its access by the public.

The scheme for Barangaroo South has three generic categories of buildings: 'landmark' or foreground buildings, core buildings and space-defining edge buildings.



Gateways and Markers - MOD 4 key planning principle sketch

The landmark buildings of the Barangaroo South Masterplan are the re-located hotel and the new community building located on the public pier. These are both structures with a memorable sculptural form and are accessible by the public. They define Globe Harbour and create a unique sense of place. Located on the north west corner of the site, this sculptural form addresses the parkland at Barangaroo Central.

The core buildings are the three principal office towers sitting on top of a network of pedestrian spaces, laneways, and the high-rise apartment towers that frame the new urban park connecting Hickson Road to Barangaroo Central park and complete the network of pedestrian routes that terminate in the park. Richly articulated with radial geometry and variable heights, they provide the bulk of the space within the development.

The edge buildings are the waterfront residential ribbon and Hickson Road frontage colonnaded buildings. These mediate between the established scale of the King Street Wharf foreshore development to the south and the historic context of Millers Point to the east and north. These buildings are of human scale and contrasting character. They respond to the specific requirements of the public spaces and waterfront and achieve the same urban design objectives proposed by the podium elements, including the creation of human scale buildings around the main public spaces to improve climate outcomes.

Barangaroo will provide a missing link in the series of facilities and attractions that represent the current cultural ribbon around the Sydney city foreshore. This ribbon supports the city's identity and enhances Sydney's reputation as an internationally-recognised and unique cultural experience.



The “Cultural Ribbon”

Land Spaces

- 24hr public access to the waterfront
- Overlapping activities for dynamic and active spaces
- Priority given to people, not cars
- Creating variety and interest at street level

The ambition for Barangaroo South is to establish a sequence of desirable public spaces that will become icons for greater Sydney. The Barangaroo South Masterplan will constitute a critical mass of overlapping activities and building uses that promote live-work-leisure-learn in one dynamic vibrant quarter that is in itself a natural extension and development of the surrounding city.

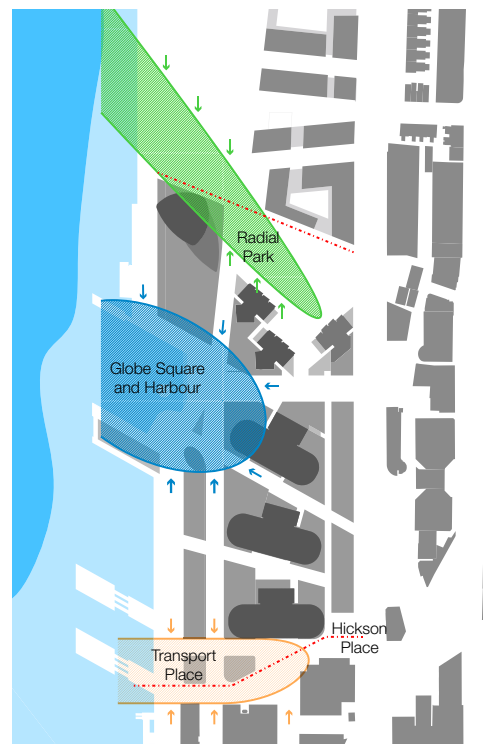
It will prioritise the public realm and everyday experience for workers inhabitants and visitors. Priority will be given to pedestrians in the choice of materials and design of shared-surfaces.

It will be of its place, a present day vernacular that promotes Sydney's diversity, climate and lifestyle, becoming a part of Sydney's heritage in the future.

The ground level is prioritised as natural public realm giving access along the entire waterfront and to all major public spaces 24 hours a day, 7 days a week, as required.



Land Spaces



Public Spaces



Activities, Spaces & Streets

Waterfront Spaces

- Varied waterfront spaces, extended water edge experiences.
- One of the world's great waterfront promenades.
- Bringing water back into Barangaroo.

The southern cove, known as Globe Harbour, is at the location of the last piece of water in-filled in the 1960s to create the container port. It is emphasised and framed by creating an inflection in the foreshore walk and water's edge.

The Barangaroo South Masterplan changes the character of the Mod 4 Globe Harbour into a 'city cove' framed and defined by the relocated hotel and the public pier. A counterpoint to the naturalistic 'park cove' of the Headland Park.

The pier frames Globe Harbour to the south and provides new vistas of Darling Harbour and the Inner West suburbs and provides for a new public facility along the water. It takes the form of a protective arm, sheltering the new cove and Globe Square, the new waterfront public space.

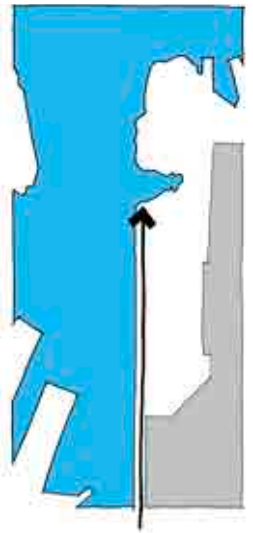
Globe Square extends the breadth of waterside activity by bringing people to the water level, allowing them to touch and feel it. It is also a place for enjoying the Sydney sun all day long. This space nestles at the heart of the site, is intimate in scale when compared to the harbour edge but large enough to provide a major focus of water activity.



Waterfront spaces



Augmenting the cultural ribbon



Existing profile



Mod 4



Mod 8 proposal

A Mixed Use Precinct

- Urban heart of the Barangaroo area
- An appropriately activated community
- A destination along the Cultural Ribbon
- A greater number of residents distributed throughout the precinct
- Diversity in building types and uses

Barangaroo South will form the urban heart of the greater Barangaroo redevelopment. It is an opportunity to extend the CBD west, bridging Hickson Road and completing the city grid. To be an effective extension to the west of the existing CBD, it will need to provide a diversity of uses and functions to guarantee its success.

Within the development there is a clear definition of uses and building typologies, which are all held together to create a unified precinct. The Barangaroo South Masterplan proposes residential towers to the north and public pavilions to the south as bookends to the development; a low-rise ribbon of predominantly residential buildings facing the harbour, and the predominantly commercial buildings facing Hickson Road. Held between these are the commercial towers with podia containing retail and office entrances activating the base providing a human scale at street level.

A mix of building forms will reflect the mix of uses and allow the precinct to adapt and meet the changes of the future. By ensuring that Barangaroo South is not being dominated by a 'single building' typology, the precinct will be more adaptable to the changing needs of commerce and the increasing shift towards live-work arrangements. This mix of uses is also positive for the Environmental Sustainability Platform through having a variety of energy demands at different times of the day and night.

Completing this suite of buildings, in the heart of the site is the hotel and the community facility on the public pier. These will offer a variety of functions, programs and events that appropriately activate the precinct 7 days a week with a high throughput of different uses throughout the day.

Barangaroo South will offer a sequence of varying public spaces. From the precinct's southern gateway - Transport Place (and its marker Hickson Place), to Globe Harbour (and Globe Square) through to Radial Park. These are connected by a mix of retail, cafes and restaurants on the waterfront promenade.



Diversity of Uses in Barangaroo South

Linked in with the wider cultural ribbon of the city, Barangaroo South will become a destination in its own right.

A variety of retail offerings will support the needs of the new precinct, ranging from fresh food, boutiques, fashion and an array of cafes and restaurants.



Diversity of Uses around Central Sydney

4

MASTERPLAN

Introduction

Barangaroo South Masterplan - Indicative Design



The Barangaroo South Masterplan



This section provides a detailed explanation of the Barangaroo South Masterplan addressing planning objectives and key principles within its proposal. The sections are organised by the key zones of Barangaroo South.

The changes made to the built form maintain the underlying principles and outcomes of the 2010 MOD 4 Concept Plan and can be examined in relation to two fundamental principles:

1. The desire to relocate the hotel to a 'land site' from its previous pier location on the harbour.
2. The requirement to better define a southern gateway to the Barangaroo South site.

The Relocation of the Landmark Hotel

In direct response to the Barangaroo Review's recommendation (August 2011) that a hotel located 'on-water' was perceived as the privatisation of Sydney Harbour, the hotel has been moved to a land-based site.

The hotel cannot be successfully relocated without considering a series of other components within the masterplan. Additional developments have been made as follows:

- Reconfiguration of Globe Harbour.
- Formation of a radial parkland that links Hickson Road to the waterfront via Barangaroo Central.
- Provision for a community function on the pier formerly occupied by the hotel.
- Relocation and redistribution of the residential towers.
- Reconfiguration of streets and connections.

The Southern Gateway

Developing a southern gateway to the Barangaroo South precinct is an opportunity to transform a formally vehicular focused area into a civic place of arrival.

Necessitating a reconfiguration of Margaret Street, connections can be made between the Barangaroo ferry terminals and Wynyard Station, and the Barangaroo South precinct itself with its neighbouring buildings and the wider context of Sydney's CBD.

For this to be achieved these amendments have been made:

- Development of Transport Place into a pedestrian orientated civic space.
- Creation of Hickson Place at the corner of the site formerly occupied by building C6.
- Redefinition of buildings R1 + R7 to be 'pavilions'.

Key Planning Principles



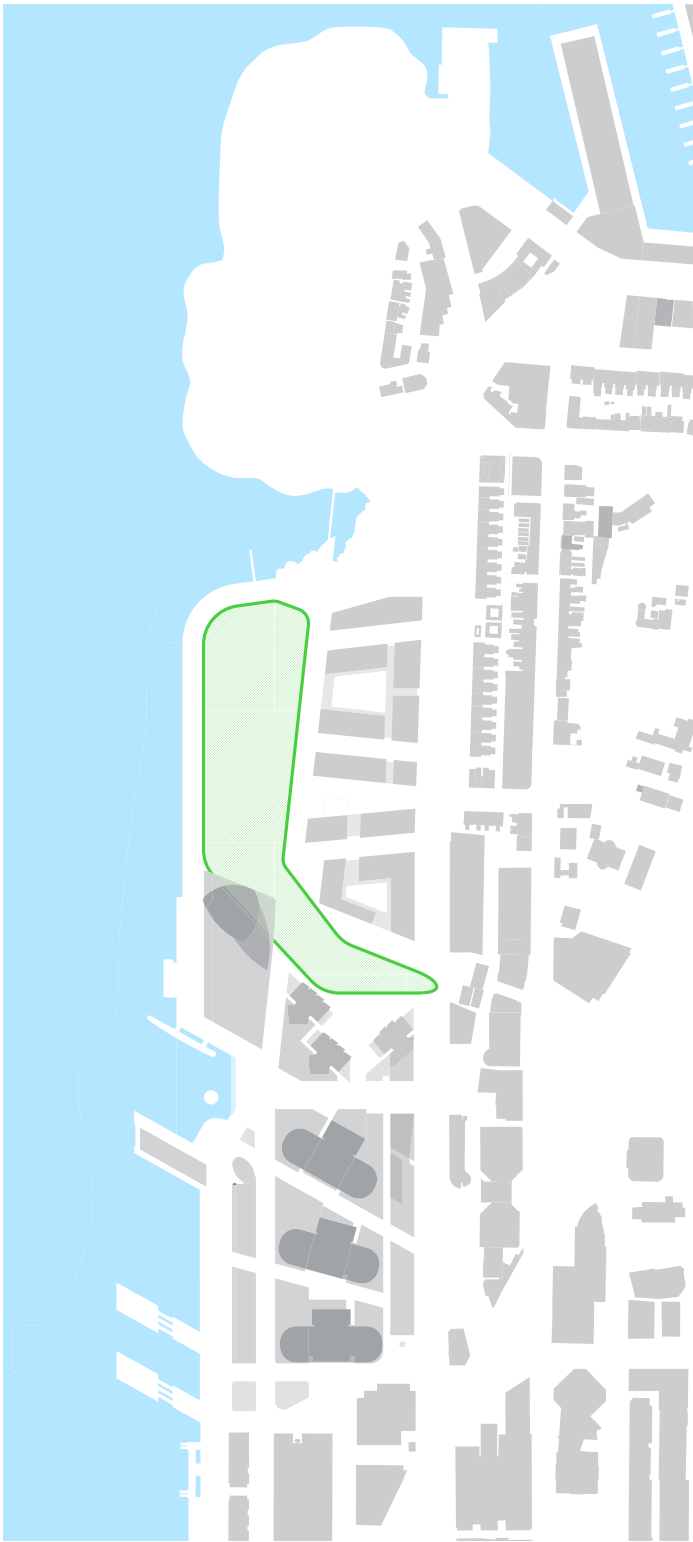
The Fan
The extension of the radial grid or 'fan' into the northern section of the site provides a framework for the location of the hotel and high-rise residential development.



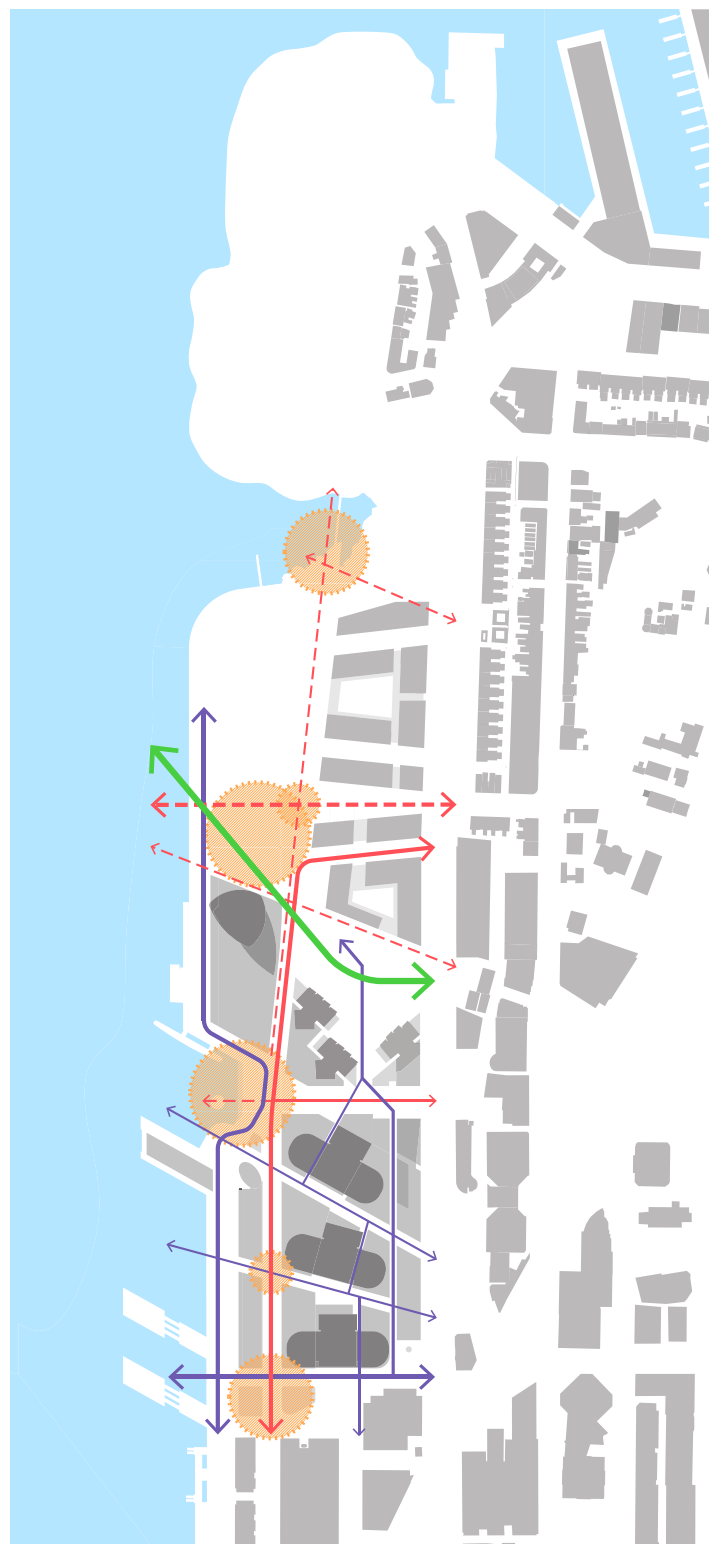
Framing the Key Public Spaces
The fan defines the site's key public spaces - Transport Place and Globe Harbour are aligned with the C5 + C3 tower axis while the Radial Park is contained by the hotel and residential developments.



Marking the City + Compacting the Urban Fabric
The hotel is a marker for the north-western edge of the city frame, whilst the residential buildings are pulled back from this line, integrating the high-rise towers into the high density built fabric of Barangaroo South.

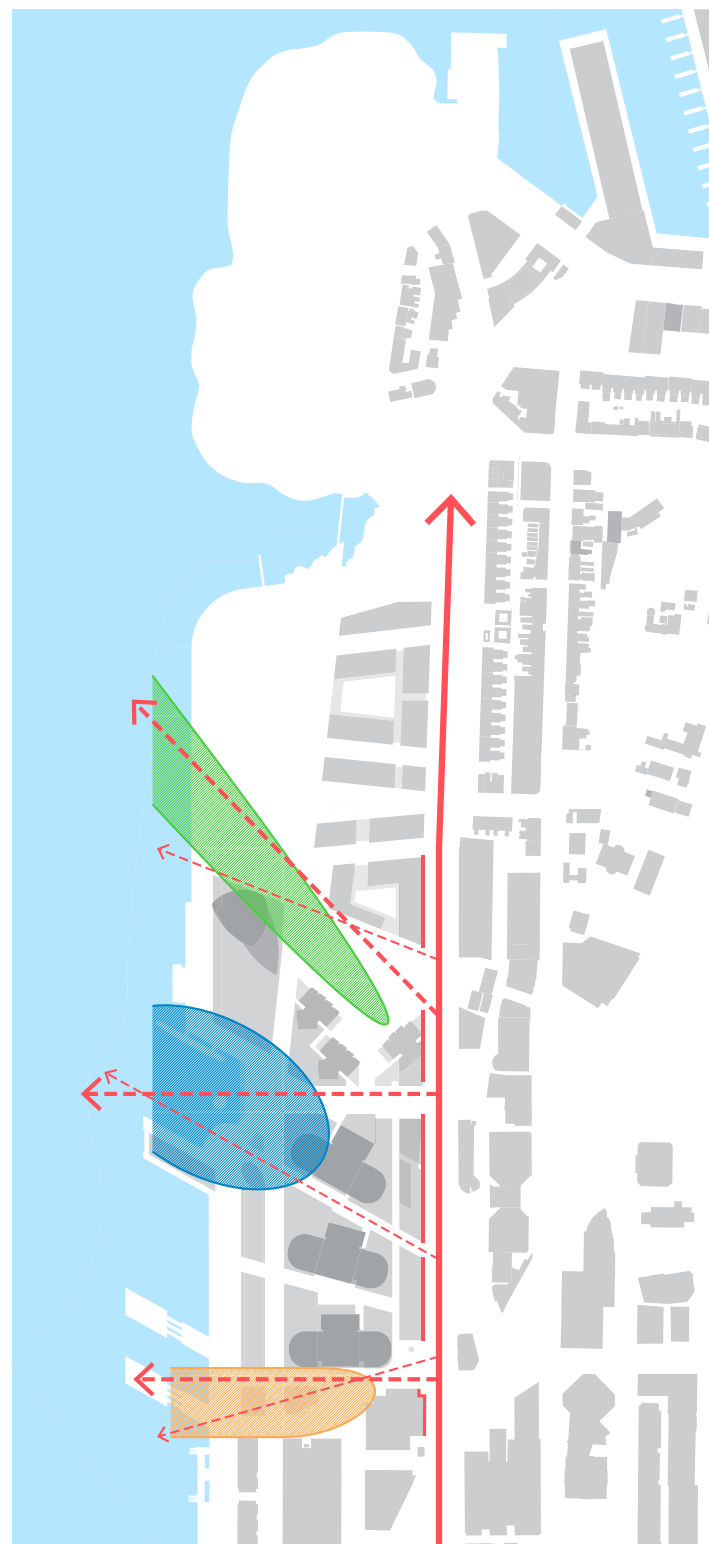


Bringing the Parkland to Hickson Road
The formation of Radial Park to the north of the residential towers brings the Central and Headland parklands to meet the edge of the city and Hickson Road.



Engaging Routes + a Sequence of Experiences

The key spaces are located at the intersections of the north-south routes with the east-west routes. This creates a sequence of varying experiences as people move through the site.



Reinforcement of Vistas

Opening up the urban fabric toward the harbour reinforces vistas from deep within the site accentuating the waterfront nature of the Barangaroo South development.

Objectives

- Maintain or create new North/South vistas and desire lines between the Headland Park and Barangaroo South.
- Ensure the Promenade walk is maintained and given varied character and scale as it transitions from Barangaroo South to the Northern Headland Park.
- Create a sequence of waterfront spaces to give variety to the public realm.
- Maintain the landmark status of the hotel and its dialogue with the backdrop of commercial and residential towers.
- Create a flexible framework in which to create compositions of tall and low buildings, which help to form and contain public waterfront spaces.
- Ensure the buildings and public realm at the northern boundary respect and interact with the Central Parkland Development.
- Clearly define the boundary between Barangaroo Central and the extended CBD district of Barangaroo South.
- Ensure the current building works under construction are not compromised and that key site constraints inform the proposed arrangement.

Proposals

- Extend the radial grid northwards, giving order to the composition of tall buildings.
- Locate the landmark hotel and the residential towers on the radial grid, maximising their relationship with Sydney's key iconic assets; The Harbour, The Bridge and The Opera House.
- Create a composition of tall buildings that ensures varying sunlit areas within Globe Harbour throughout the day.
- Make Globe Harbour an active waterfront space; a focus for the city extension at Barangaroo.
- Manipulate external ground levels so that visitors are given the opportunity to 'touch the water' whilst also protecting the site against anticipated rising sea levels in the future.
- Locate buildings and external structures to allow users of the promenade (pedestrians and cyclists) to engage with Globe Harbour as they pass through the Barangaroo South precinct.
- Create a principal axis with which to create a connection between the open space of Barangaroo Central and Hickson Road through to the existing CBD. Organised on the radial grid, this axis will also form a boundary to the dense urban structure of Barangaroo South.
- Adjust the alignment of Globe Street to form a civic place; a shared zone (pedestrian and vehicular) that formalises a northern entrance to the commercial towers, to the Central Parkland to Globe Harbour.
- To create a piazza opposite the Sussex Hotel of an appropriate scale to allow for future transport links and signal a sense of arrival to the visitor arriving from Wynyard Station.
- Provide potential for an increased mix of activity along Hickson Road and Shelley Lane by allowing flexibility in the commercial uses for buildings C1 + C8 with the possibility of a business hotel (H2).
- Continue the development of a site-wide basement support space to reduce the amount of back of house activities visible at street level.
- Create a waterfront land-based site for a Landmark Hotel, which continues to create dialogue with the commercial and residential buildings and Central Parkland and marks the North Western limit of the precinct.

Anchoring the City's Frame

A Landmark for Barangaroo

The location of the hotel at the most northerly point of Barangaroo South anchors the city frame and has the potential for a building with a strong identity as the landmark for Barangaroo south.

Objectives:

- To establish the hotel as a landmark
- Create a premier address and sense of arrival.
- Create a destination on the Waterfront Promenade

Proposals:

- Maximise the hotel's vistas towards the Harbour Bridge and Opera House by locating it on the north-west of the site and reinforcing its position as an icon completing the city frame.
- Minimise overshadowing of Globe Harbour and surrounding public realm; high-rise mass is concentrated toward the north-west.
- A hotel podium is integrated into the urban fabric to ensure active vibrant edges.
- Respect and enhance the public waterfront promenade by providing a varied character and scale as it traverses towards the Headland Park.
- Introduce hotel facilities that encourage public use and create activity seven days a week, creating a mixed use Barangaroo South precinct.

Key Principles

Location and the Fan

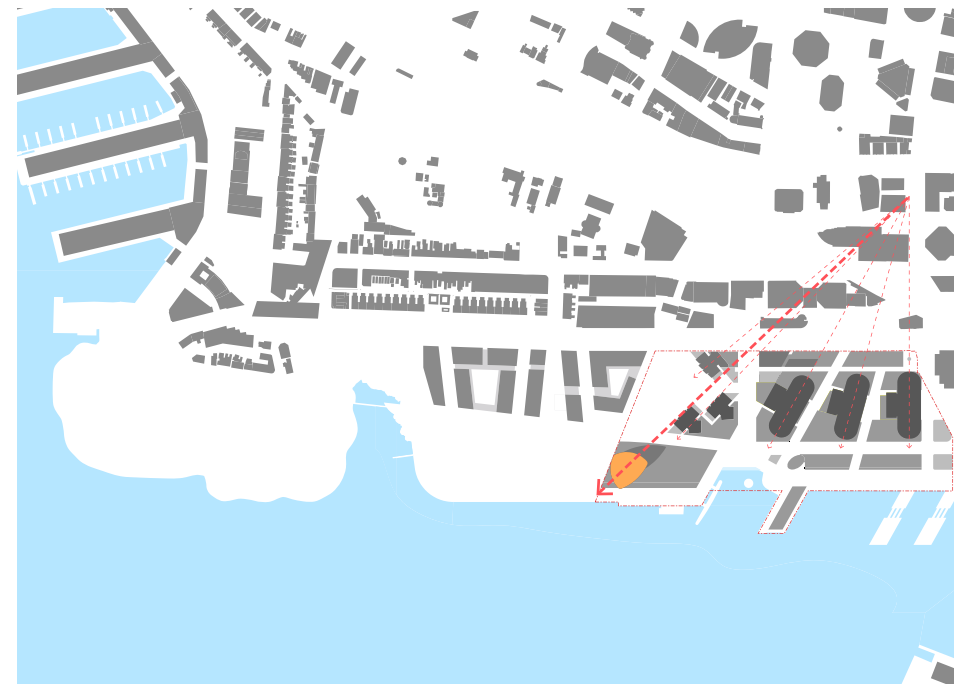


The hotel location is at the northern most point to ensure its prominence as the landmark of Barangaroo South.

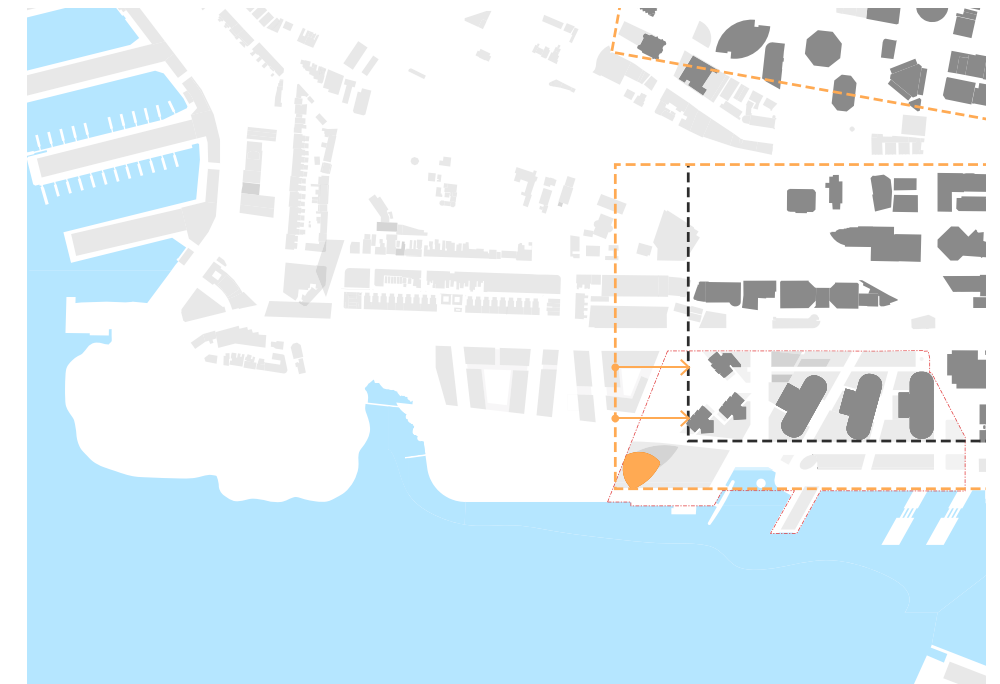
Urban Frame



The hotel forms a highest point on the harbour and book-ends the city grid.



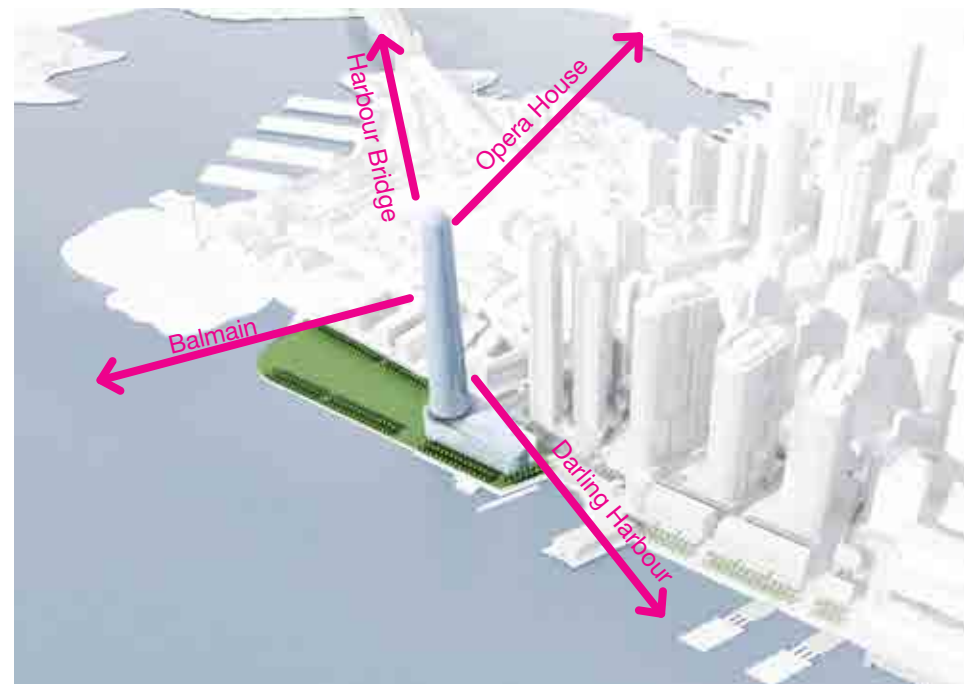
Located on the fan, the hotel is conceptually understood as part of Barangaroo South.



The hotel marks the pinnacle of Sydney's frame. The residential towers are stepped back to align with the existing Kent Street residential towers and integrate with the other high density towers in Barangaroo South. These towers form the backdrop to the landmark hotel.

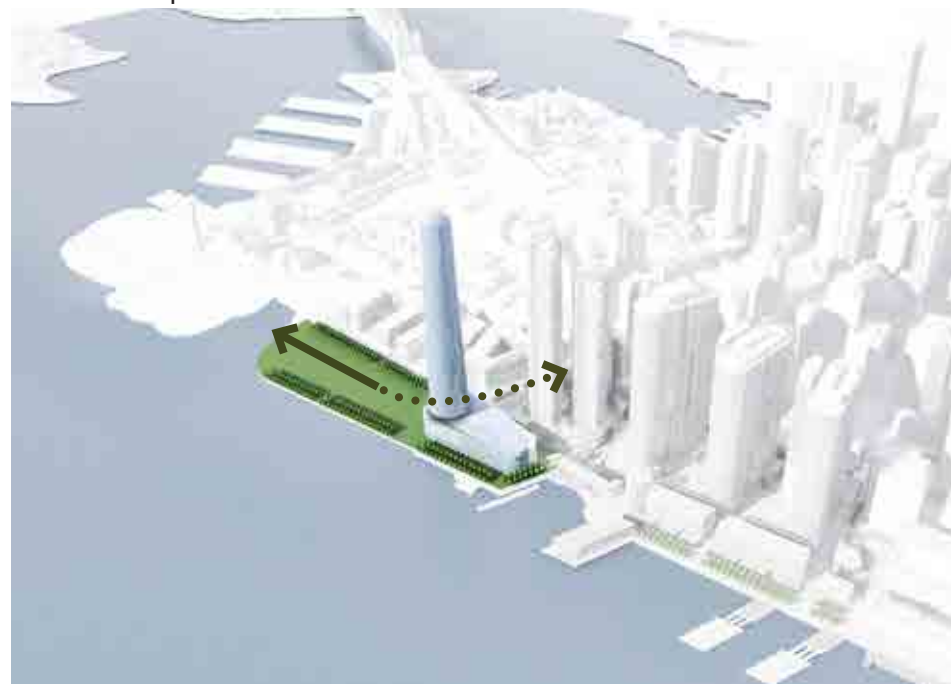


Views and Vistas



Views open up with increasing height

Relationship to the Public Realm

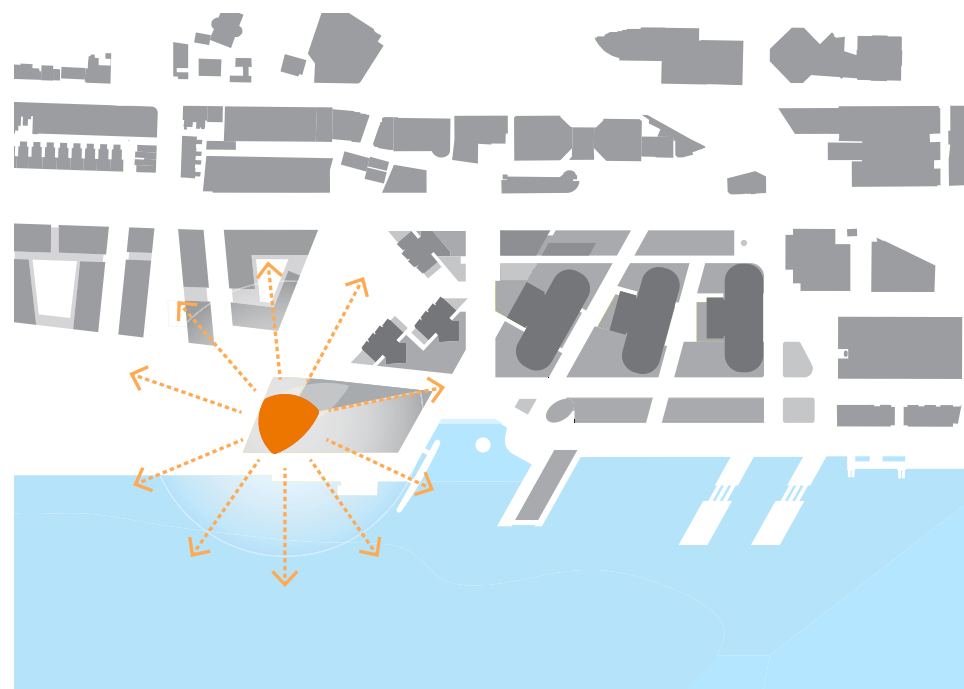


The hotel engages with and forms the backdrop to the Radial Park.

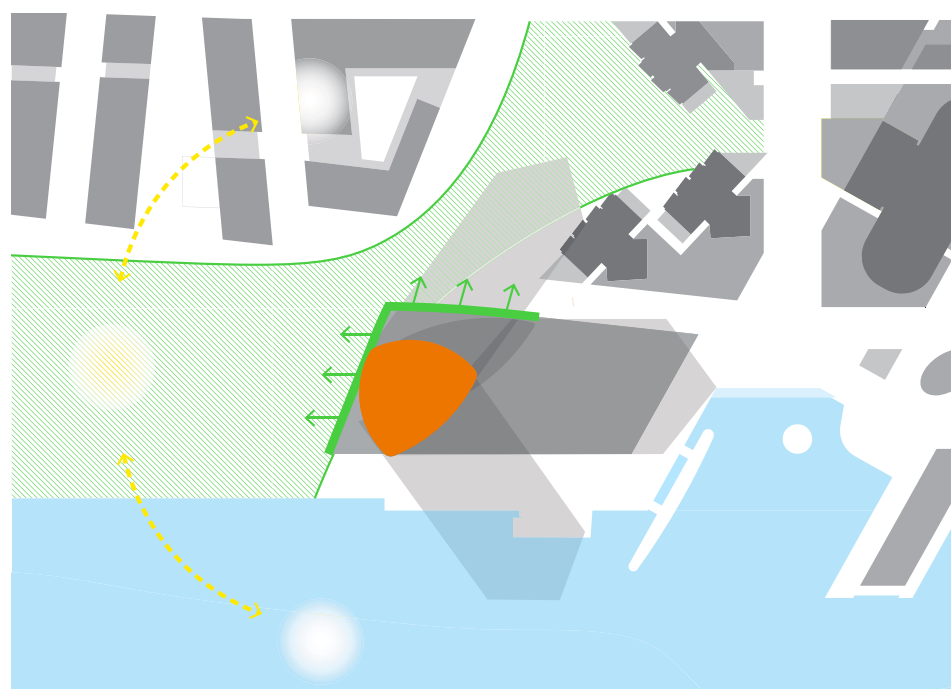
Waterfront Destination



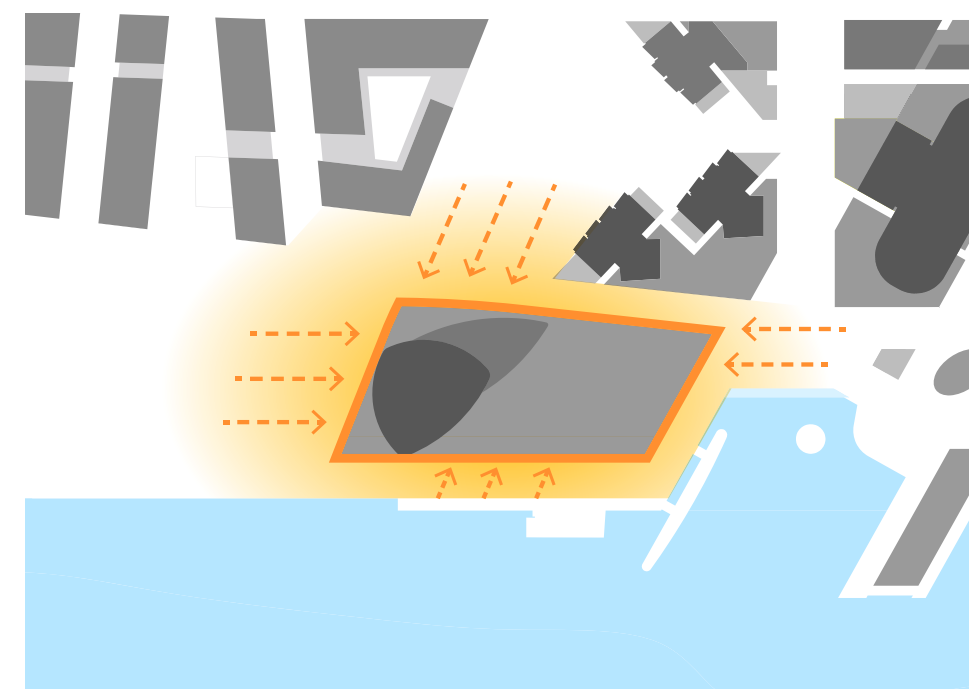
It is a destination on the waterfront promenade with open edges that encourage use and create activity all days of the week. The hotel with the Community building frames Globe Harbour and provides a variance in scale along the promenade.



The hotel's location at the northern most point maximises the hotel's views across the harbour and other tourism assets. Its location also increases visibility of the landmark hotel from the existing city.



Located at the northern-most point and on the edge of the water, its location ensures minimum overshadowing of the surrounding public realm. The hotel's podium engages the Radial Park at its threshold point between Barangaroo South and Barangaroo Central.



The hotel podium is part of Barangaroo South's urban fabric to ensure vibrant and active edges to the surrounding public realm and accessibility from all sides.

Compacting the Urban Grid

Locating the Residential Towers

Objectives

A set of objectives were established to underpin the new location of residential towers.

- Extend the radial grid northwards and position the towers on axis.
- Maximise solar penetration and maintain view corridors by creating significant breaks between the towers. This will also minimise the perceived bulk and scale of the group of residential towers.
- Respect existing view corridors from neighbouring buildings.
- Position the residential towers in locations which will best benefit from their relationship to Sydney's iconic landmarks; The Harbour, The Bridge and the Opera House.

Proposal

Location of the residential towers to the south is the most advantageous and respectful of these objectives by compacting the 'urban frame' of larger towers. This allows for increased sunlight access onto the public realm.

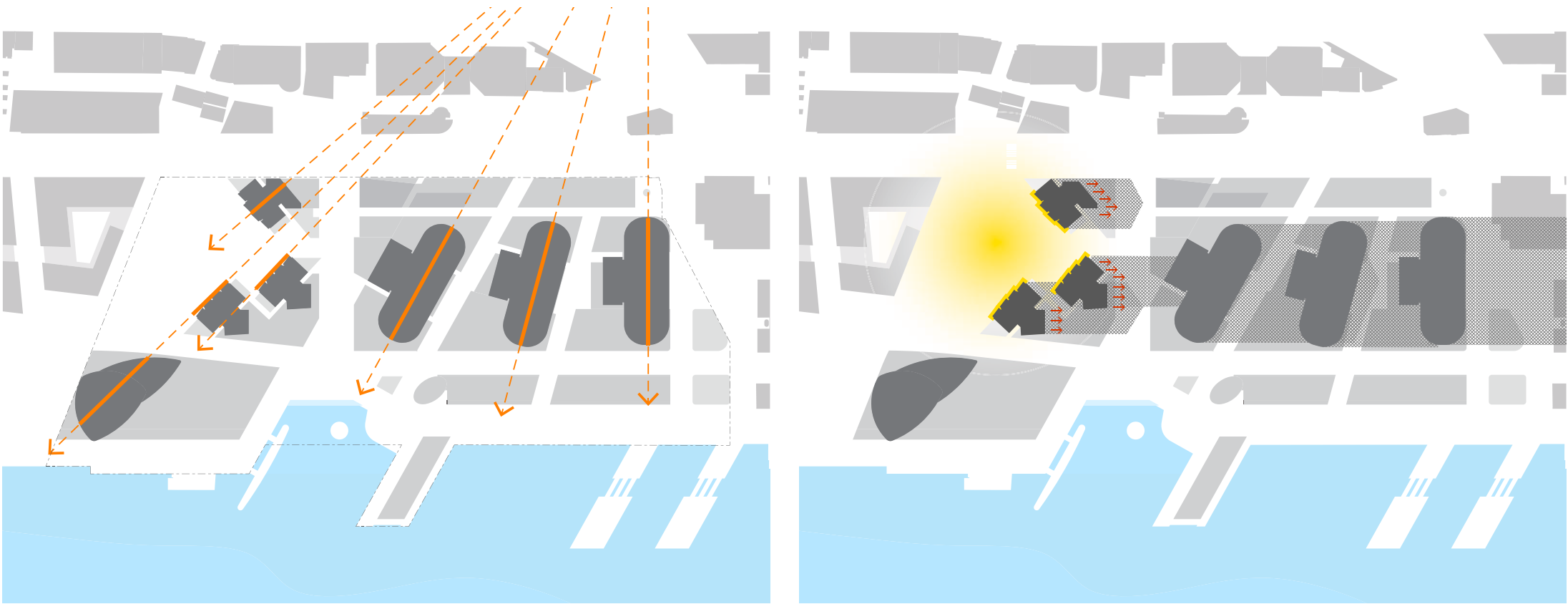
- The residential towers are orientated on the radial fan.
- The towers form a backdrop to the Radial Park and the Landmark Hotel whilst also creating a composition.
- Towers are positioned to maximise view corridors, view sharing and solar penetration to surrounding sites.
- Re-organise the northern end of the previous Mod 4 residential ribbon in to the three towers.

- Residential towers are integrated in to the Barangaroo South precinct.
- Move the public realm to be positioned on the threshold of Barangaroo Central, creating an opportunity of shared amenity and a point of transition between the two zones of the site.
- Develop taller and slimmer towers to maximise prime views of the Opera House and the Sydney Harbour Bridge and reduce overshadowing to adjacent sites.
- Create separation between the towers, ensuring visual permeability from the city to the water.
- The towers ascend in height, from the lowest tower at Hickson Road to the pinnacle of the Landmark Hotel.

Key Principles

Key principles and considerations which determine the location and orientation of the residential towers

- Radial fan
- Compacting the urban grid
- Vistas and orientation
- View sharing and corridors
- Setbacks and constraints

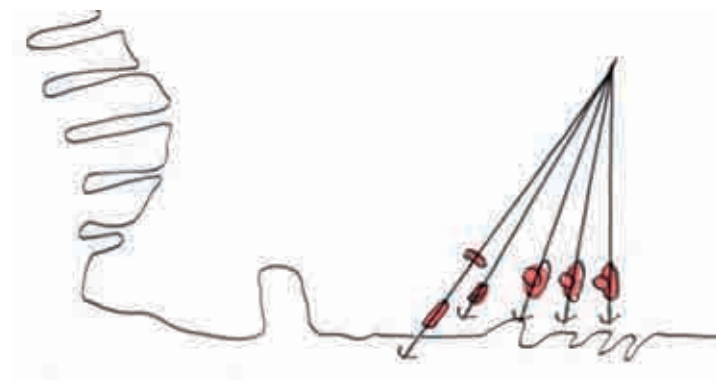


Radial Fan

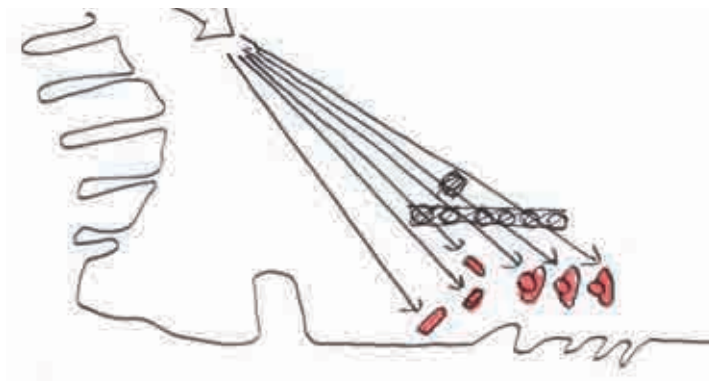
The towers are located and orientated to the radial fan so that the towers can be identified as part of Barangaroo South.

Compacting the Urban Grid

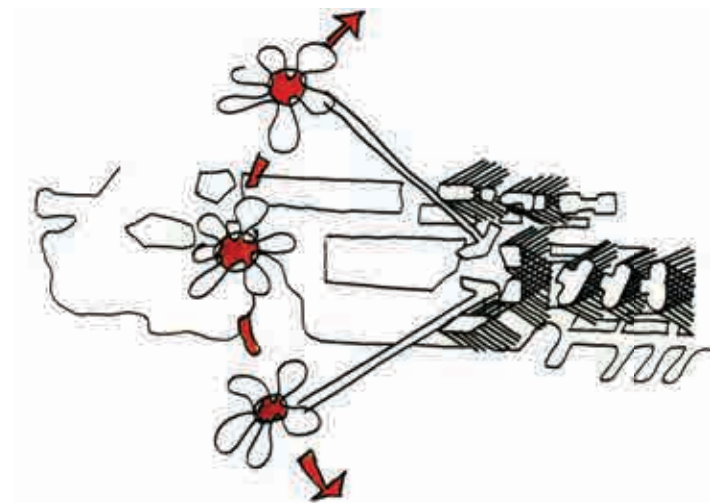
Positioning the towers south towards the commercial towers compact the urban grid of background towers and creates a larger piece of public realm at the threshold of Barangaroo South and Central. The position also increases solar access to the Radial Park.



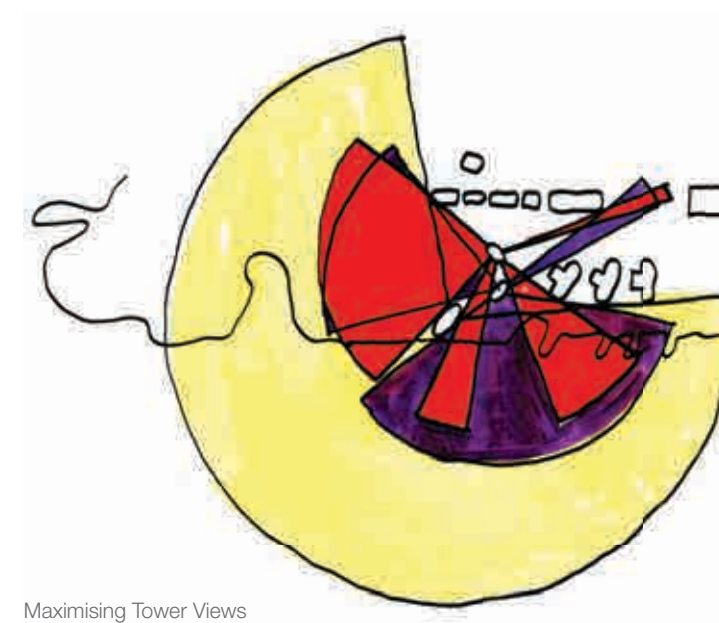
Orientating the towers along the radial fan



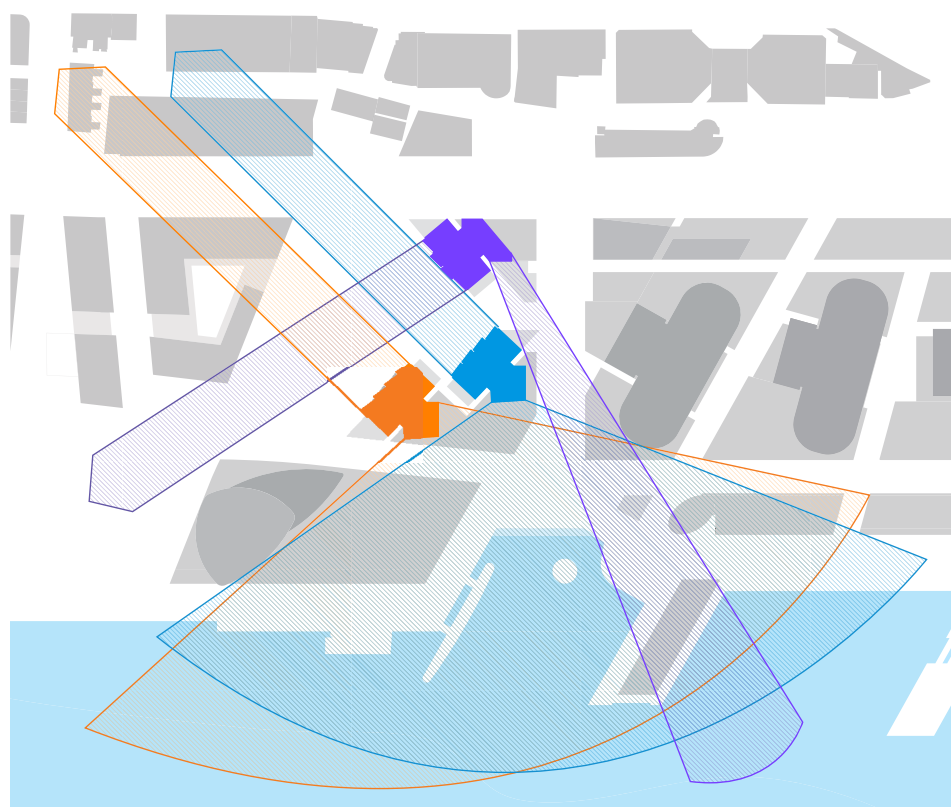
Creating an individual identity of towers from the North



Towers set to south for greater sunlight penetration to Radial Park

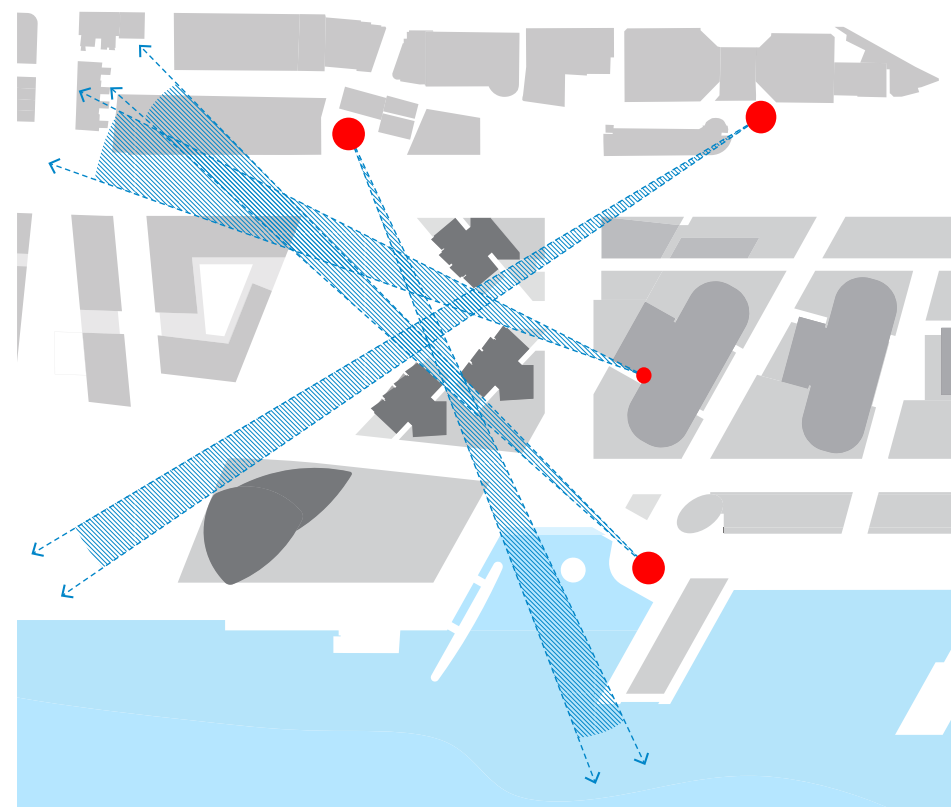


Maximising Tower Views



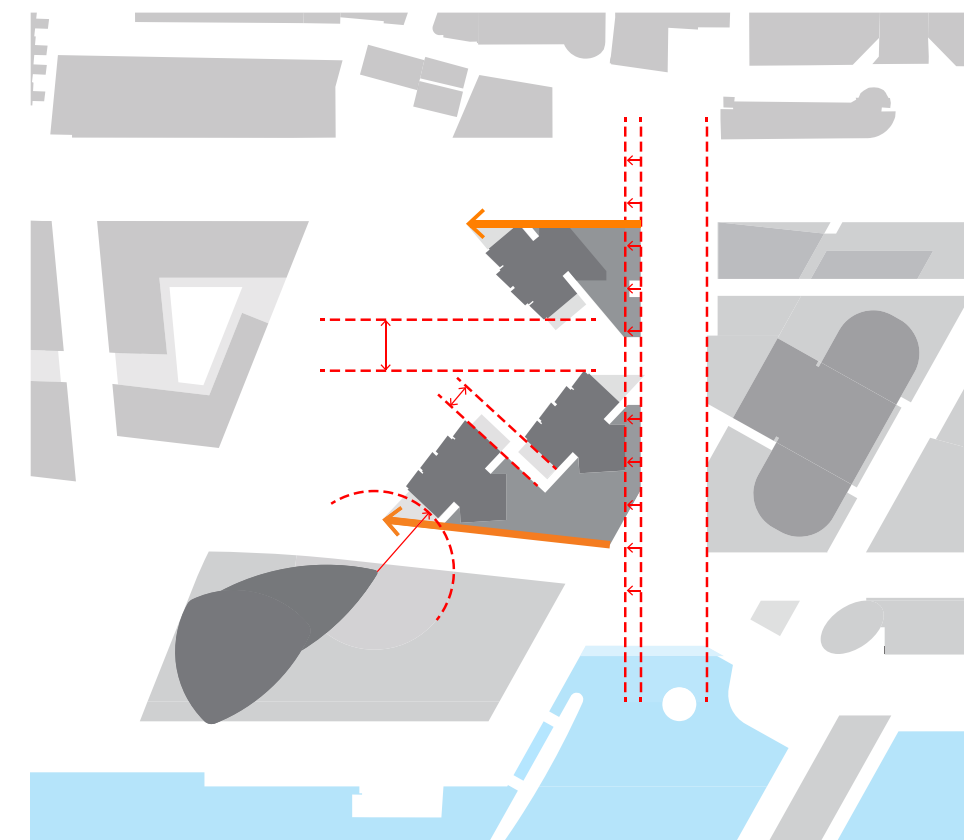
Vistas and Orientation

Northern elevation acknowledges the primary aspect; rear apartments offer western panoramas



View Sharing and Corridors

Adequate separation between the towers preserve existing views and ensure visual permeability through the development from adjacent and nearby public spaces. It also allows for an individual identity per tower from the north avoiding a “wall” elevation.



Setbacks and Constraints

Constraints to conserve human scale streetscape on the ground plane and maximises privacy for the residents. The podiums establish a minimum street frontage on Lime Street and Hickson Road.

Bringing the Park to the City's Edge

Radial Park

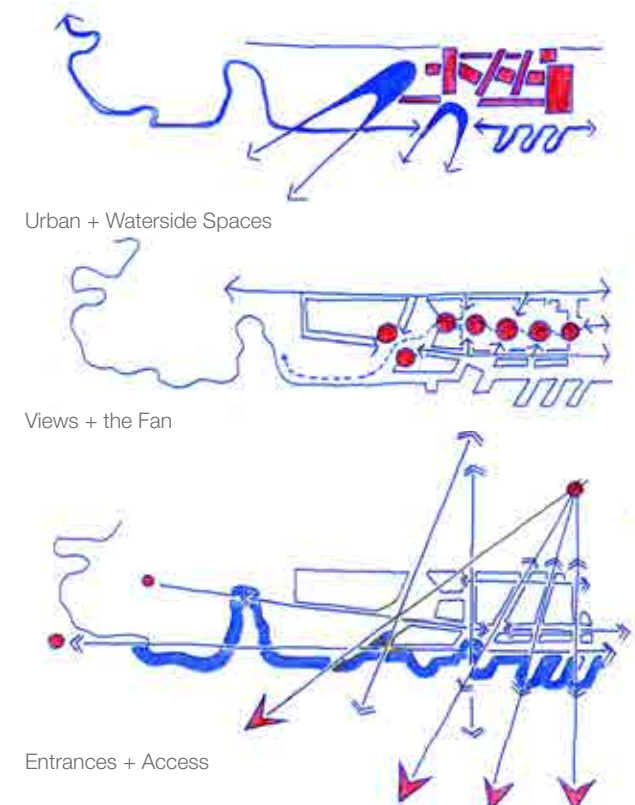
The relocation of the Landmark Hotel and the consequent re-positioning of the residential towers has presented the opportunity to create a large piece of public realm at the northern threshold to Barangaroo South.

Objectives:

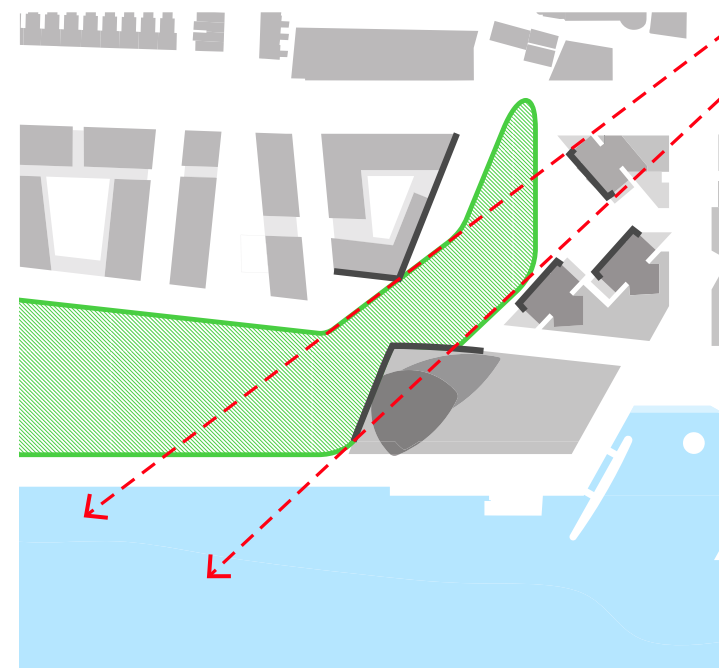
- The park is to have a high level of solar exposure.
- The park is a gateway as well as a destination on the waterfront promenade.
- The park is orientated on the fan
- To provide a public amenity for the local community

Proposal:

- The newly formed Radial Park provides the opportunity to link the Central Parkland to the city and the potential to become a shared amenity between Barangaroo South and Barangaroo Central.
- It is a moment of expansion and connection, breaking the edge of built form along Hickson Road. Orientated on the radial fan, it also visually connects to the Central Parklands and event spaces with clear vistas to the harbour beyond.

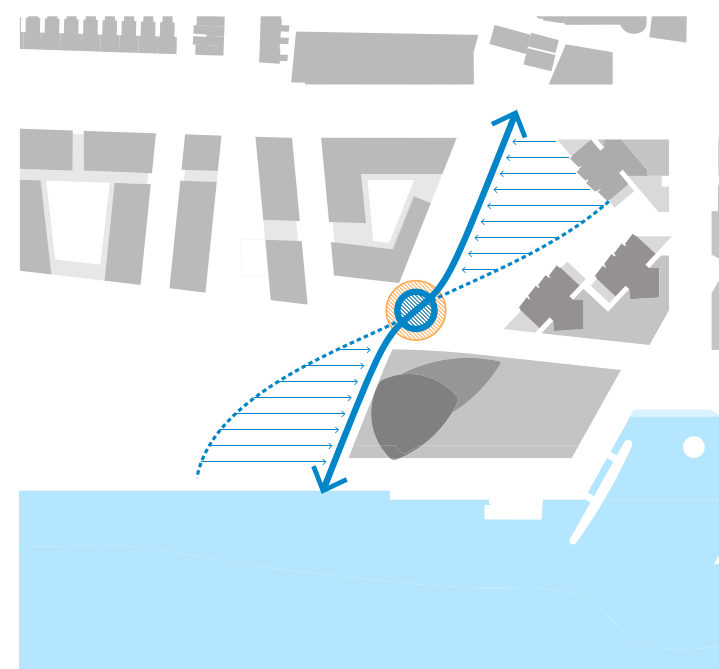


Key Principles



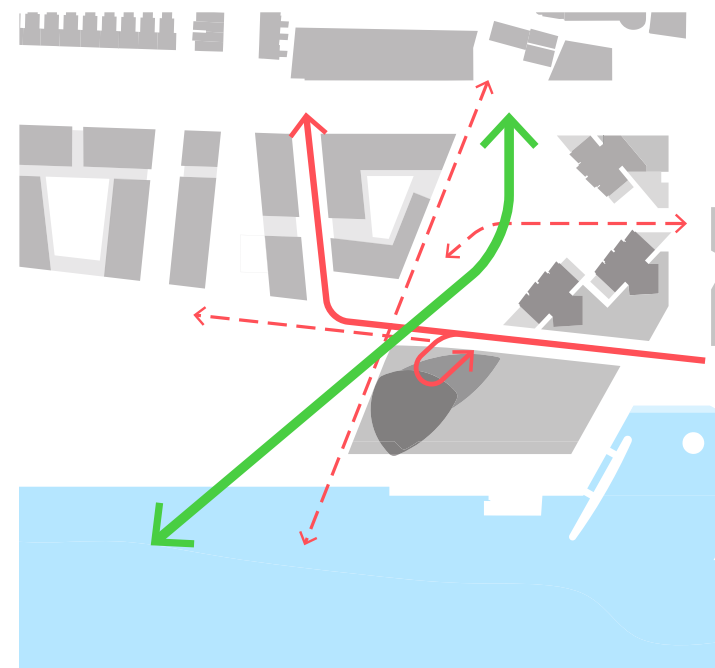
Radial Park through to Hickson Road

The Radial Park is framed by the fan grid. It avoids focus on building R5 by diverting to Hickson Road to connect with the existing city fabric.



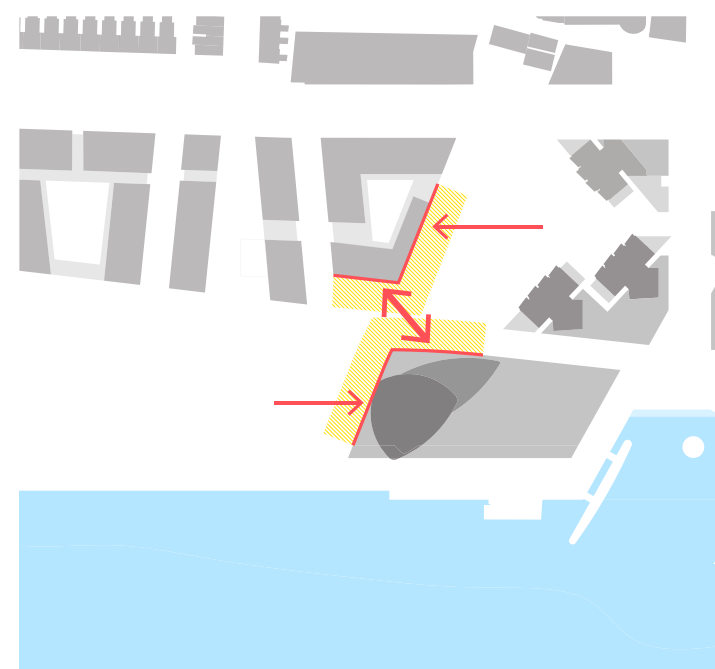
Linking Water

A water element provides a literal link to the harbour and a natural focus to the park, connecting the rest of Barangaroo Central and Radial Park. It acknowledges the nodal plaza by changing its character and language.



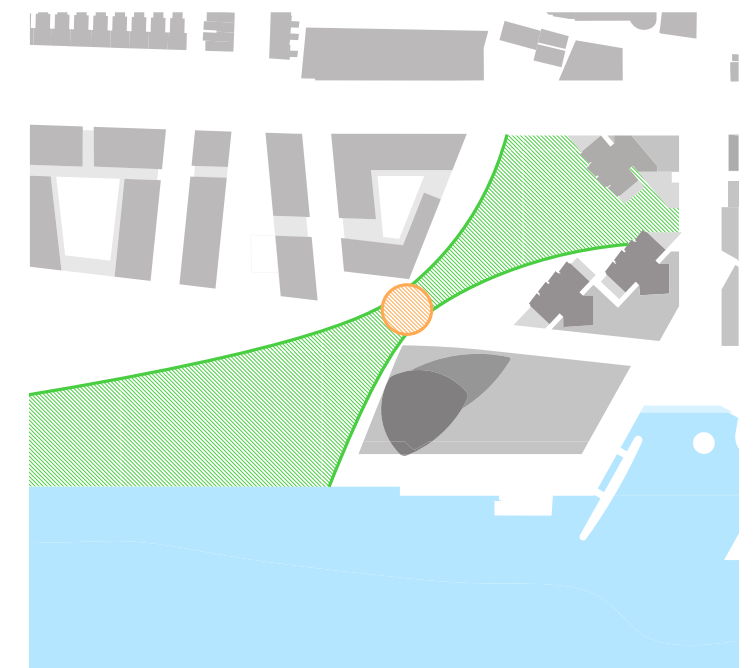
Routes + Destinations

Lime Street, the hotel porte cochère and an east-west route converge on the radial axis - creating intensity and variety without allowing the vehicles to dominate.



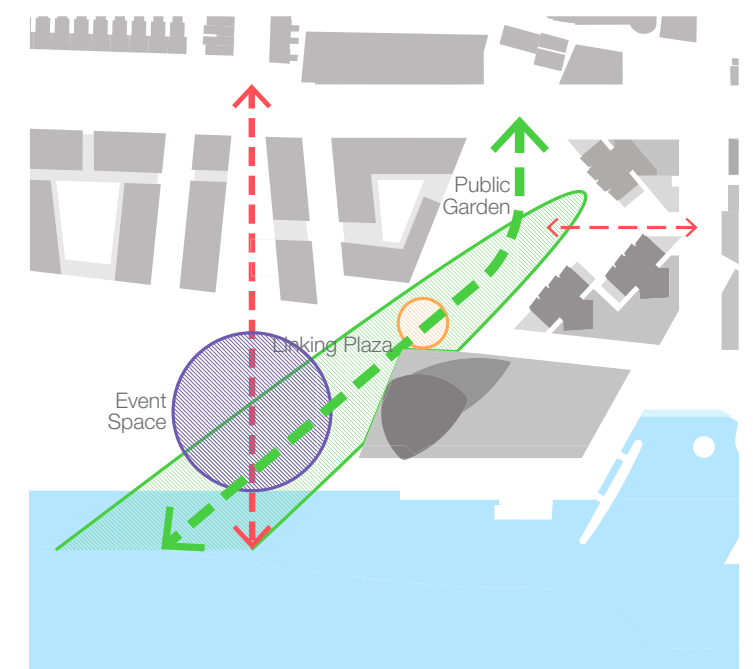
Building Focus

The development of the public realm encourages the Landmark Hotel and buildings of the Barangaroo Central to acknowledge and provide a backdrop to each another.



Compression + Intensity

The built fabric compresses the park at this critical intersection. A public plaza acknowledges this moment whilst also addressing the hotel.



Series of Spaces

A variety of public spaces are created - a major event space to the north of the hotel; the linking plaza; and a quieter sheltered landscape by the residential towers with vistas to the water

Establishing an Ordering Device

Commercial Buildings and the Radial Fan

Three commercial towers form the backdrop to the Landmark Hotel and the variety of public spaces. They are vital in ensuring that Barangaroo South becomes an extension of and is integrated into Sydney's existing CBD.

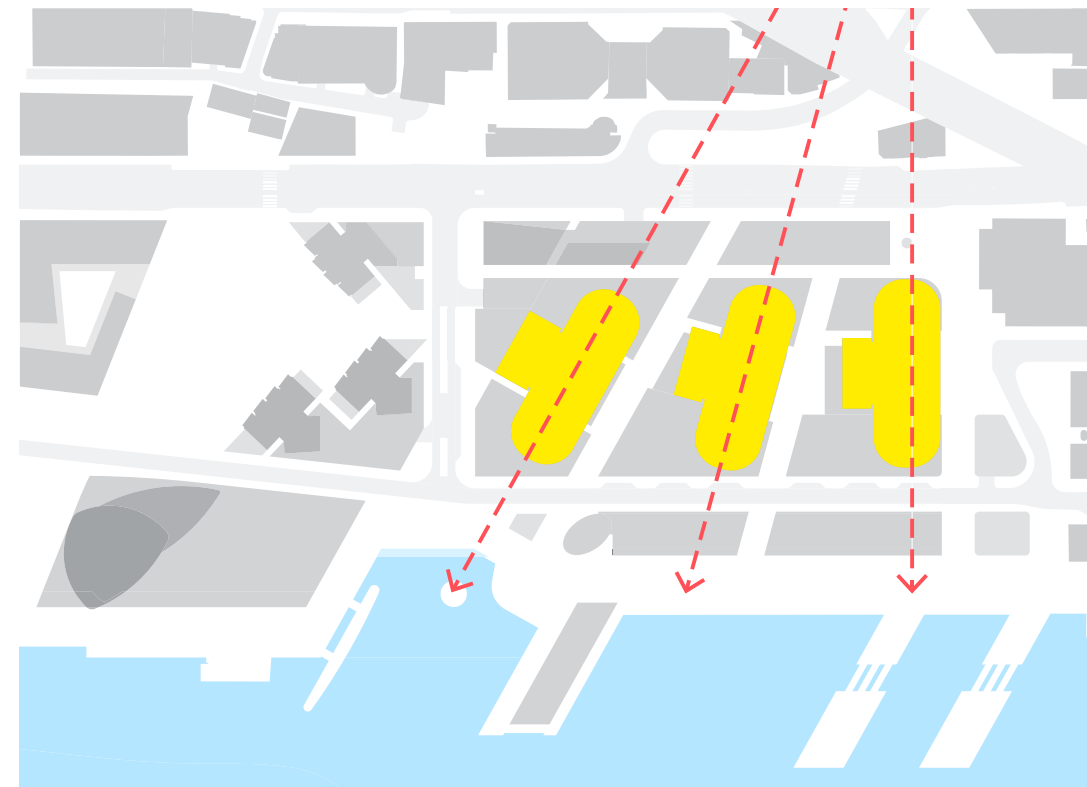
Objectives:

- Ensure solar penetration and view corridors through the precinct to the water.
- Create activated and pedestrian based connections.

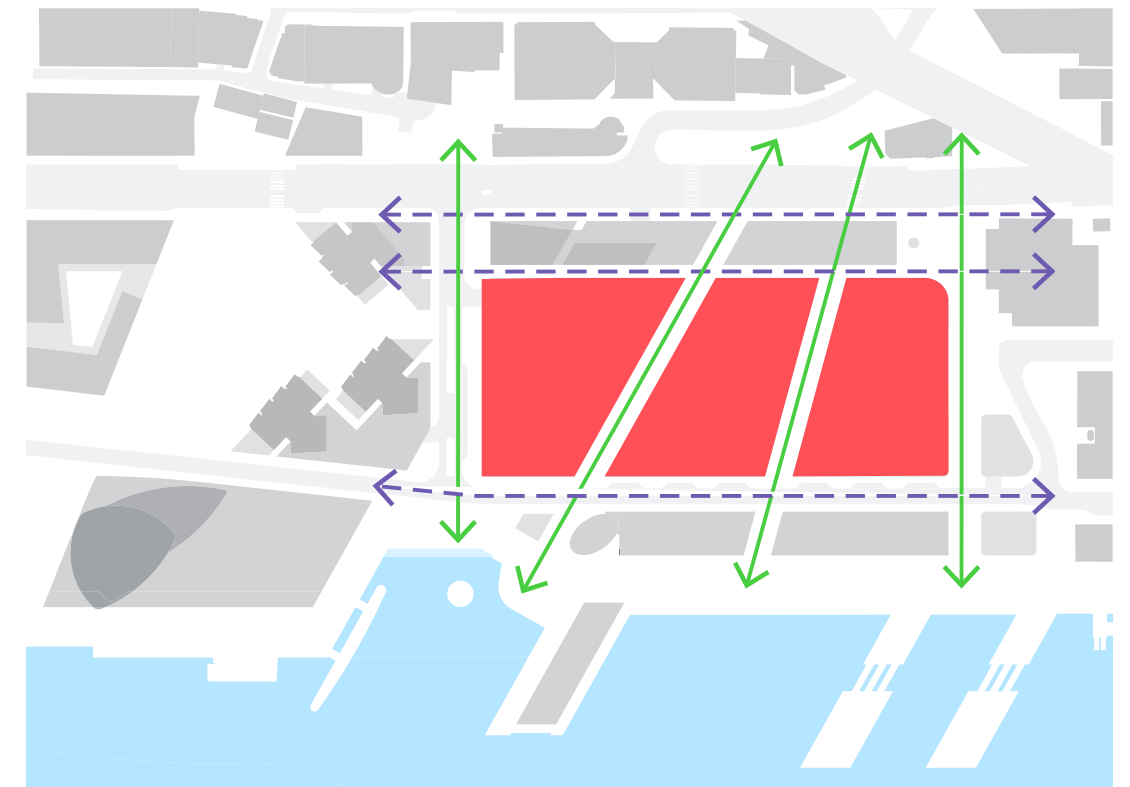
Proposals:

- The scale of the towers is a direct response to the international demand of financial and professional services for offices with more than 2000m² floorplates.
- The towers are orientated on the radial grid ensuring solar penetration, view sharing and direct views corridors to the water.
- The primary north south routes (Lime Street and Shelley Lane) in the precinct are defined by the podiums of the commercial towers.
- The three storey podiums at the base of the towers act as a scaling device between the large towers and the public realm. Primarily retail at ground level and commercial or retail above they activate the pedestrianised 'walks' carved through the podiums and off which the towers will have their primary address.
- A secondary route will weave through the podiums.

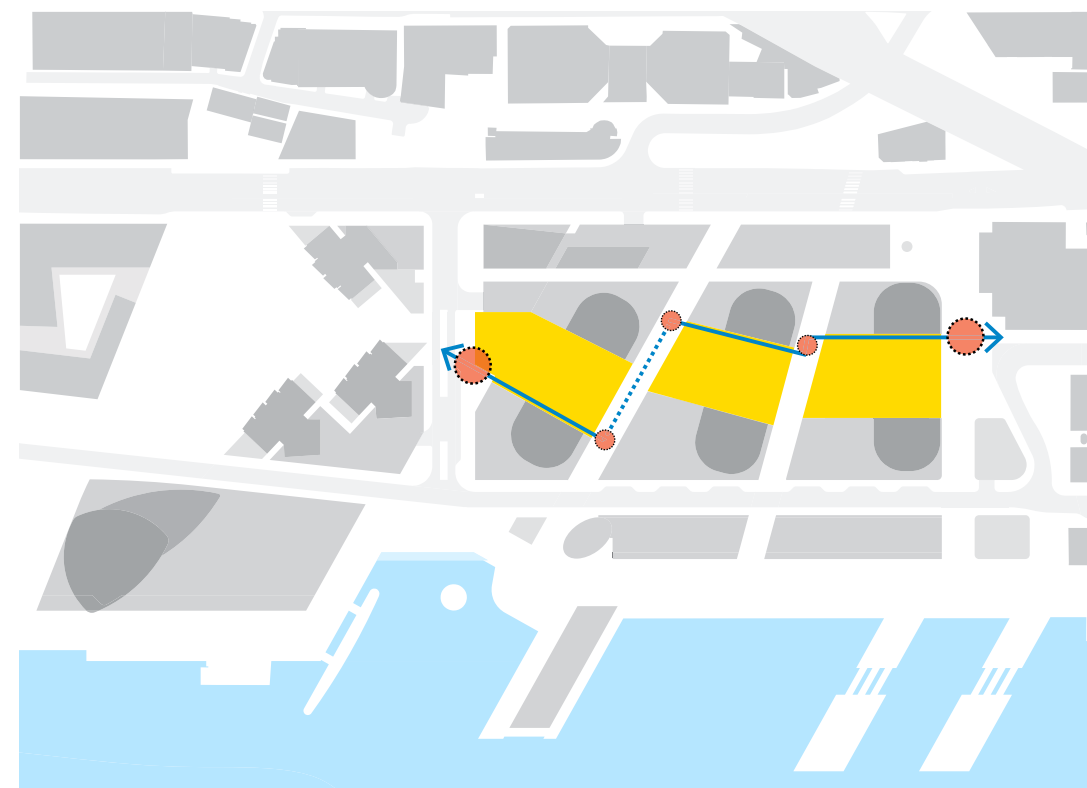
Key Principles



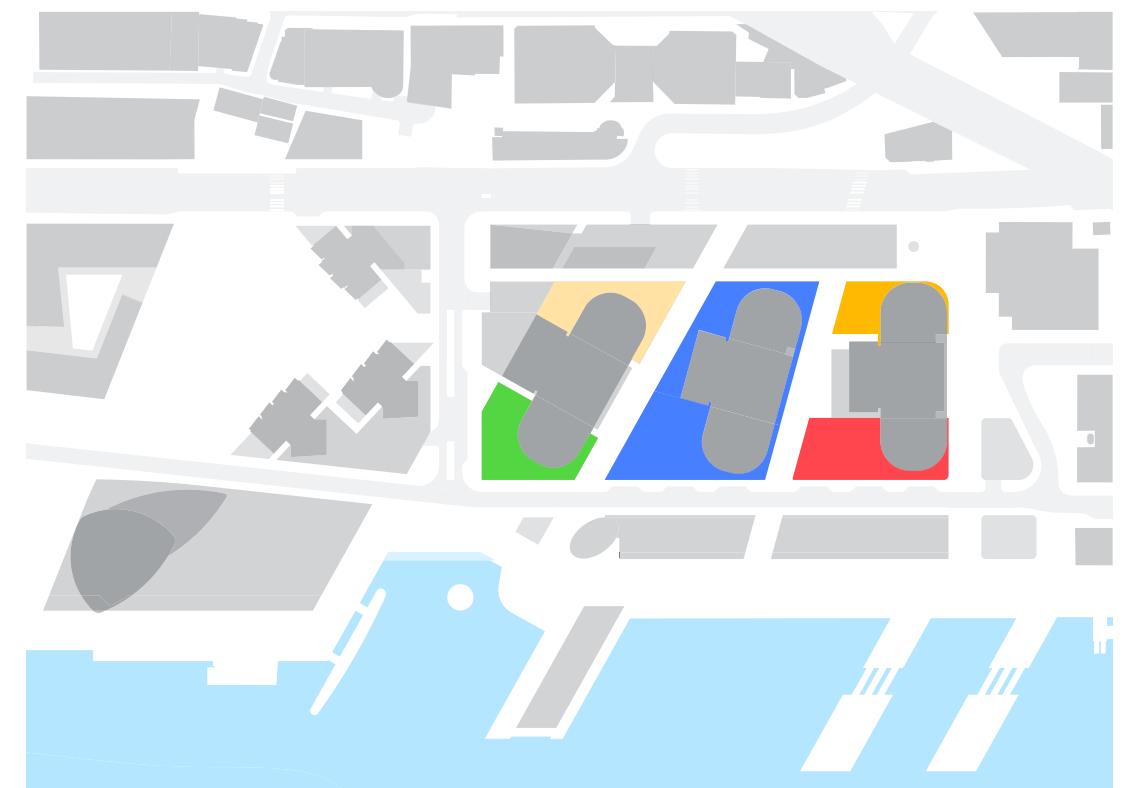
Towers orientated to the radial fan



Connections between the podium



Dual frontage lobbies with a secondary route through the blocks. Nodal points are created at the intersection of the secondary route and the Civic Walks.



The central podium as the unifying element amongst a variety of podium treatment to ensure variety across Barangaroo South.

Continuing the Harbour

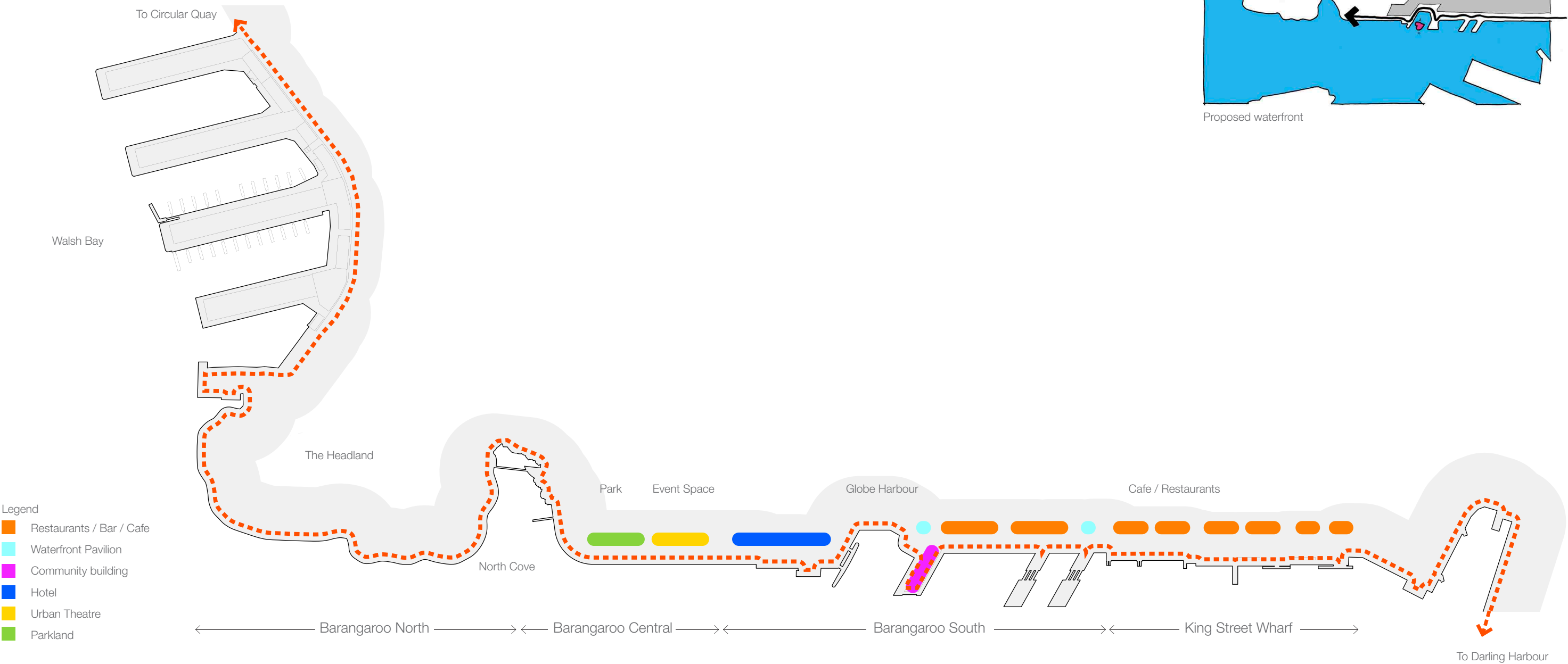
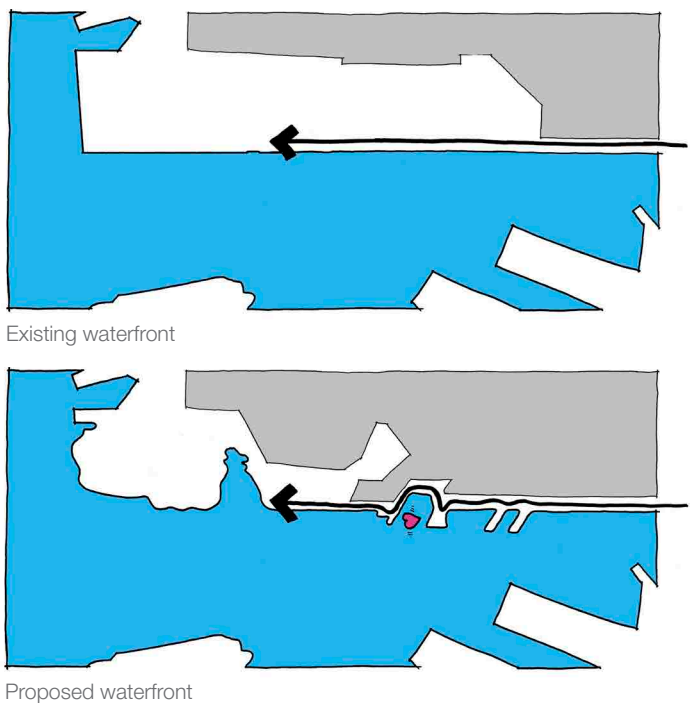
Waterfront Promenade

The Waterfront Promenade is an integral part of Sydney's foreshore walk from Pyrmont to Woolloomooloo. It begins at the southern end of King Street Wharf and continues as a ribbon of waterfront cafes, bars and restaurants with tree planting northward to Barangaroo Central, Headland Park, through to Walsh Bay and onwards to the Opera House and beyond.

Proposals:

- The promenade is a continuous pedestrian route of varying experiences and vantage points which completes Sydney Harbour's cultural ribbon.
- Globe Harbour is a key focal point on the Waterfront Promenade, a point of difference

- on the linear route, identifying a new waterfront experience to the north.
- Low level residential buildings define the eastern edge of the promenade at Barangaroo South, helping to mitigate the size of the commercial towers and create a human scale environment.

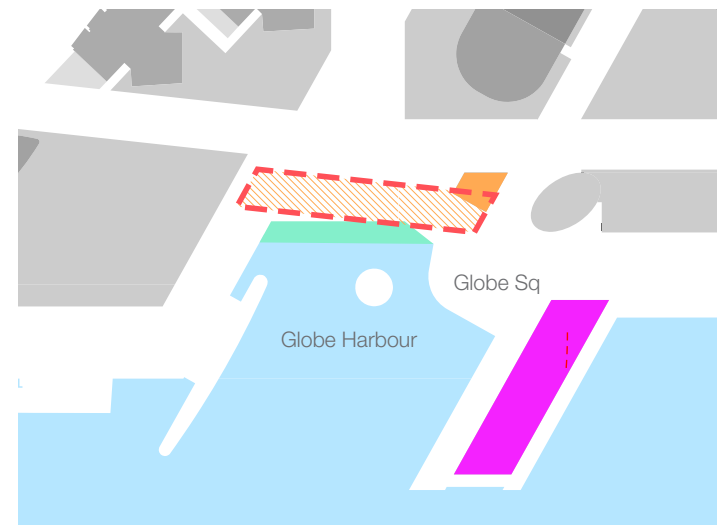


Barangaroo as part of the foreshore walk connecting Darling Harbour to Walsh Bay with a variety of destinations and experiences along the walk

Redefining the Cove

Globe Harbour

Barangaroo South's cove, Globe harbour, is redefined, responding to the re-positioning of the Landmark Hotel and the development of the public pier. The veranda shading structure, the pier and community building, the hotel and podium form the edges and enliven Globe Harbour.



Globe Harbour

- Enclosure is created by the surrounding built form including; the landmark hotel, pier, and community building, retail podia and the residential buildings.
- A moment of convergence for several routes and connections.
- Continuity of the waterfront promenade is ensured whilst simultaneously providing potential for an event space.
- A variety of experiences is created integrating the hotel with its surroundings whilst also preventing it from dominating the typology of public activity in the area.
- A change in the public domain level creates a physical connection with the water.
- Opportunity is provided for a community facility on the public pier.
- Globe Harbour is a deep water body - a true harbour.
- The proposal makes use of the existing revetment wall and minimises the amount of additional excavation required.
- The proposal reveals existing features of the original inlet.

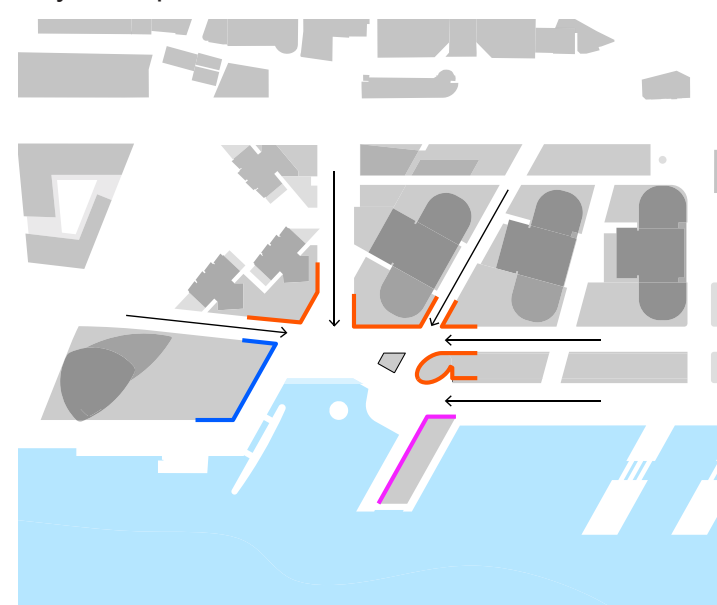
Veranda

- A threshold marker.
- A scaling device to mitigate the visual impact of the hotel podium at street level and visually integrates the podium into the Barangaroo South precinct.
- Announces and celebrates the Globe Harbour steps.
- A focus for events and activities at the water's edge.
- Provides shade to the stepped landscaping at the water's edge.
- Provides continuity at Lime Street to prioritise the water's edge over the visual link to Globe Street.
- Creates a frame to the water from the Globe Street view corridor.
- A roofscape with good solar exposure for the possible provision of photovoltaic cells.
- Provision for a freestanding retail pavilion to activate the space and define the extension of City Walk.

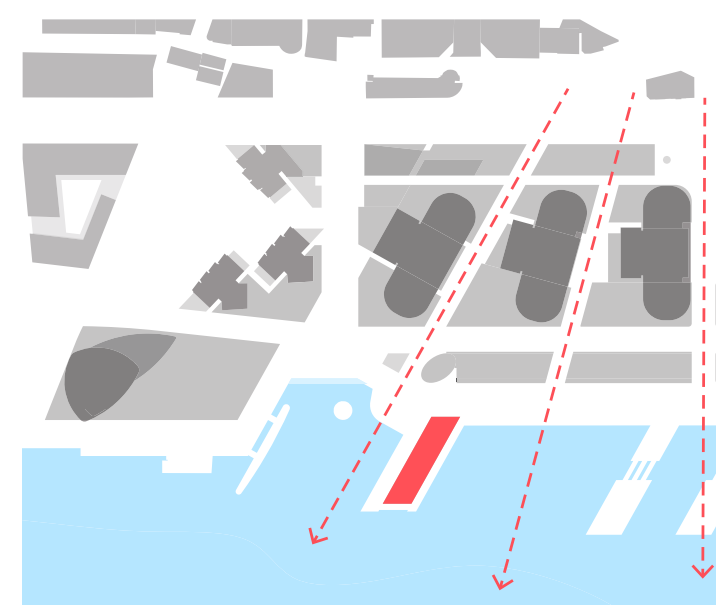
Community Building

- Building form is orientated on the radial grid .
- A community building integrated into Sydney's Cultural Ribbon.
- Forms a street line which enables the processional nature of City Walk to extend the water.
- Provides an opportunity for a public viewing platform beyond the line of the promenade from which to experience Darling Harbour, further out into the harbour and the headland.
- Prioritises public use of a prime waterfront, water-based site.
- Enhances the mix of uses and diversity of building forms within the Barangaroo South precinct.
- A counterpoint to the sculptural form of the Landmark Hotel.
- Provides passive wind protection on the pier and to Globe Harbour.

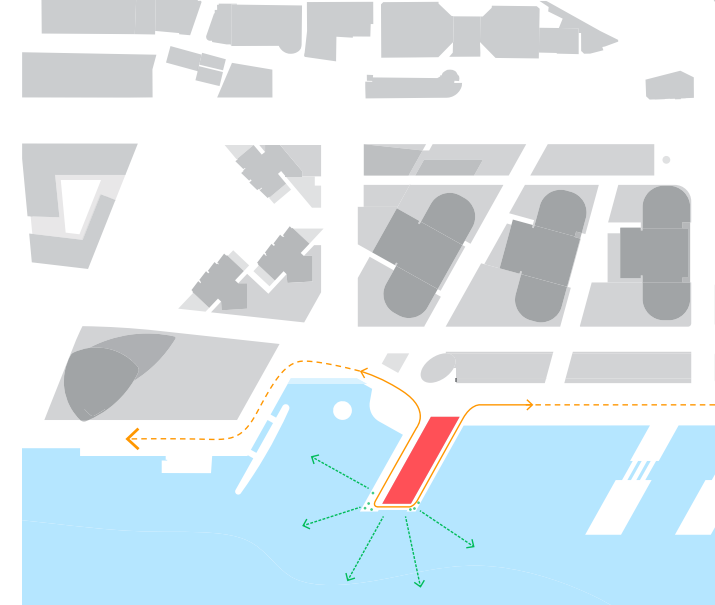
Key Principles



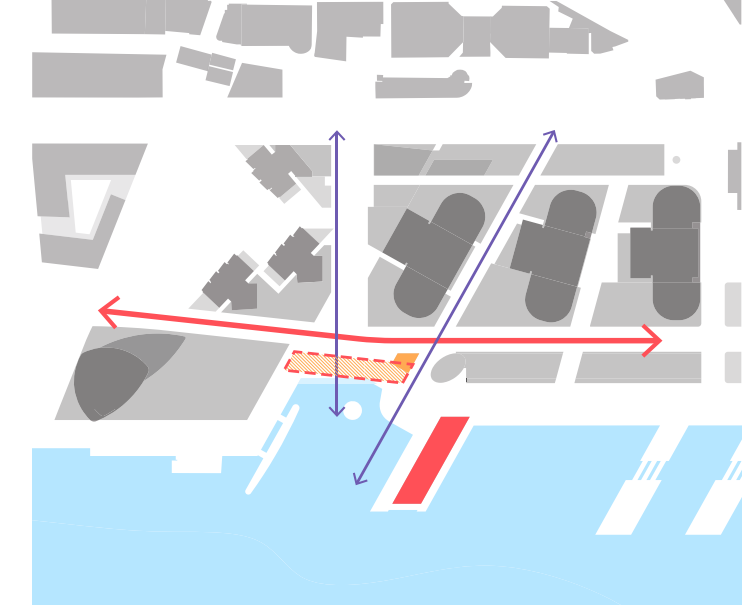
Edges of the surrounding built form creates a sense of enclosure for Globe Harbour where routes converge.



The pier and the Community building is defined by the City Walk axis and the radial fan.



The public pier offers a change in the route and vantage along the water promenade walk.



The Veranda provides a break yet holds the line of Lime Street.

Creating an Arrival to Barangaroo South

Transport Place

The reconfiguration of Shelley Street and the inclusion of two activated pavilions will define Transport Place; the Southern gateway to the Barangaroo precinct. It is the arrival point for the majority of users to Barangaroo South and an internodal connection point linking Wynyard Walk, the Barangaroo ferry wharf terminals, future metro and taxi drop-offs.

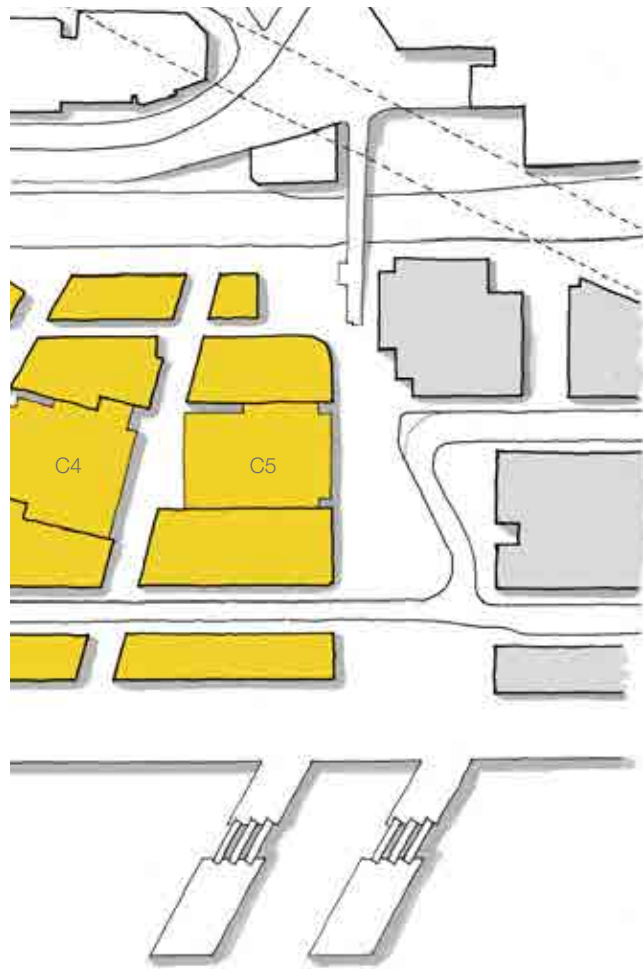
Objectives:

- Create a pedestrianised civic space appropriate in scale to Barangaroo South.
- Optimise the public view corridor from Margaret Street down to the water especially from Wynyard Walk.

Proposals:

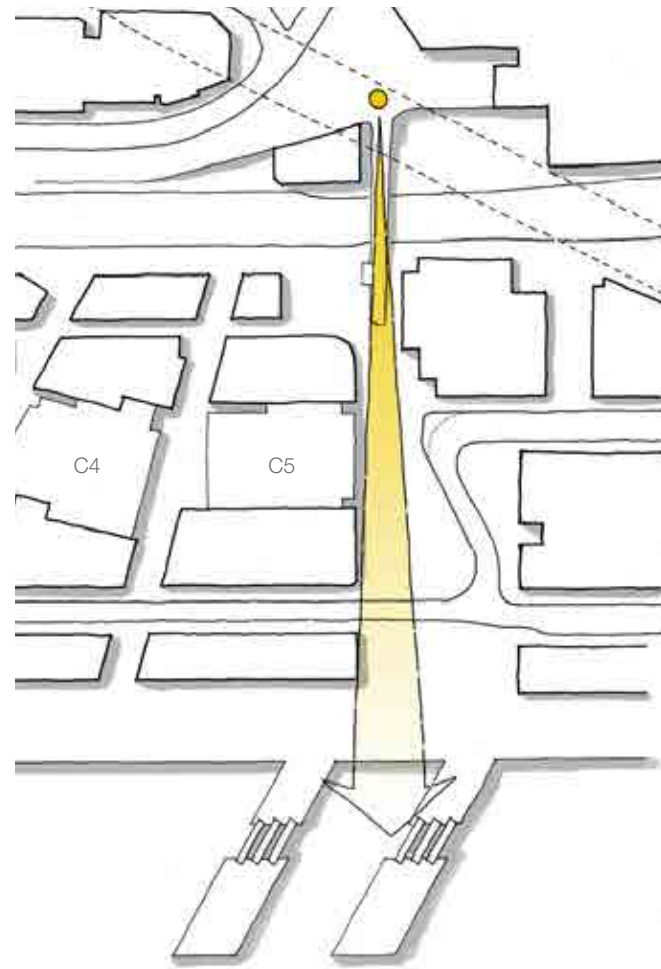
- Shelley Street is terminated west of Hickson Road and is truncated at C5.
- Modifications to street alignment creates the large southern civic plaza defined by adjacent buildings including existing buildings to the south and east as well as C5 podium and waterfront promenade residential buildings. This plaza enlarges the existing public domain.
- Waterfront and eastern buildings are re-defined as low height retail pavilions that activate Transport Place. Transport Place is the threshold to Barangaroo South and generates a dialogue between the new precinct and the existing city fabric.

- Wynyard Walk Bridge is an elevated pedestrian link which connects to Wynyard Station and arrives at Transport Place.
- The scale of Transport Place recognises the volume of people expected to visit Barangaroo South.



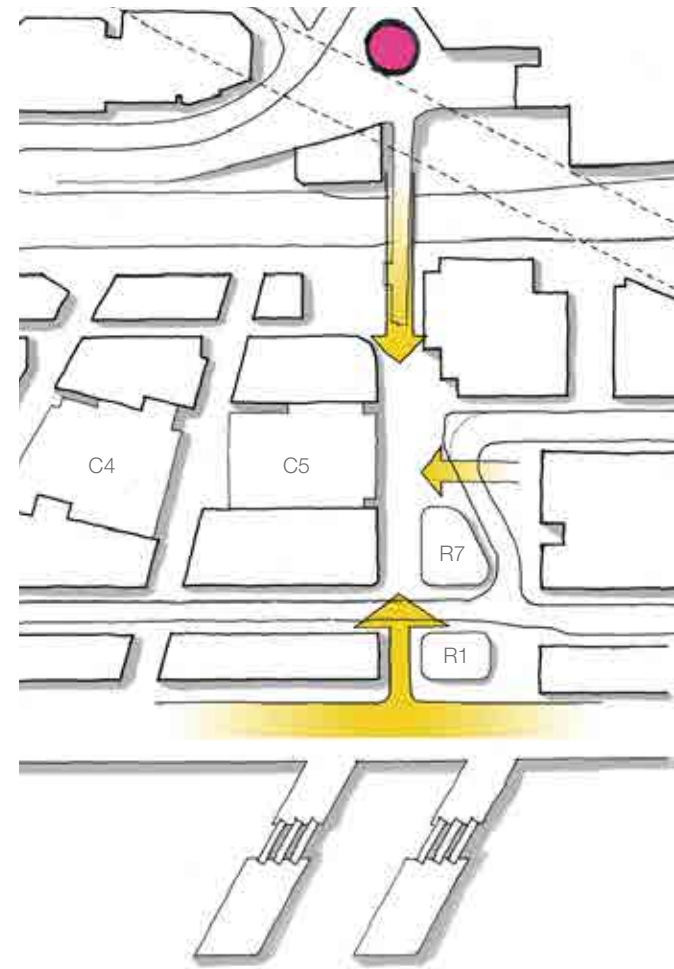
Threshold of New and Old

Transport Place is located at the junction of the new Barangaroo South and the existing city fabric



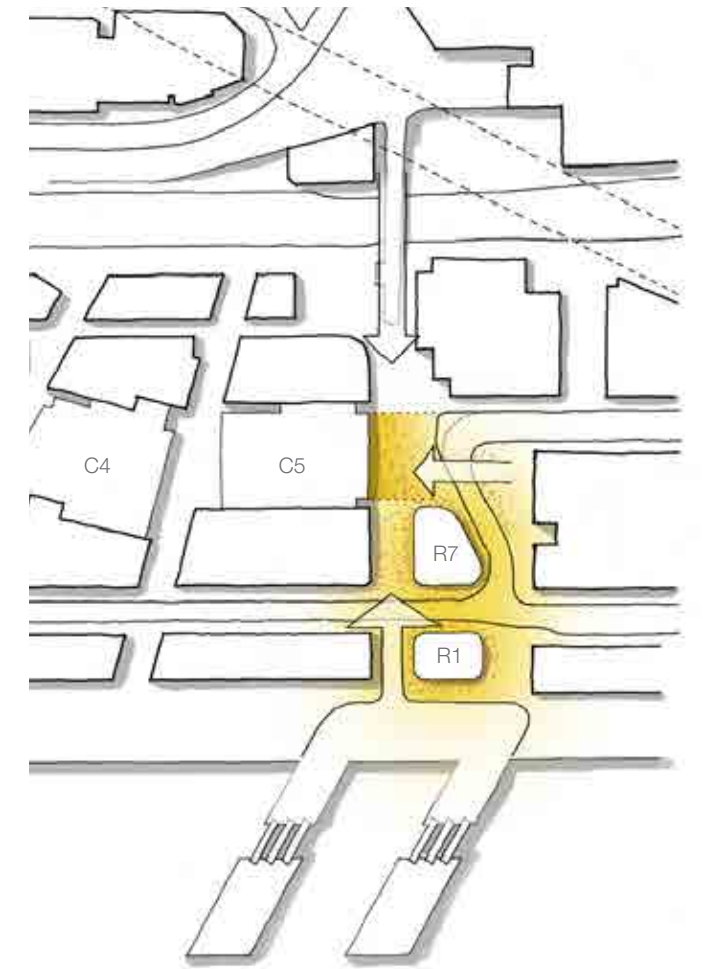
View Corridors

A direct view to the water from Wynyard Walk



Internodal Arrival Point

Visitors arrive from Wynyard Walk to the east from the train station, taxi drop off to the south and ferries from the west.



Nature of Transport Place

The realignment of Margaret Street creates an opportunity for a large pedestrian civic plaza outside of the commercial lobby and activated by the small scale buildings in the public domain.

Marking the Southern Gateway

Hickson Place: The Marker

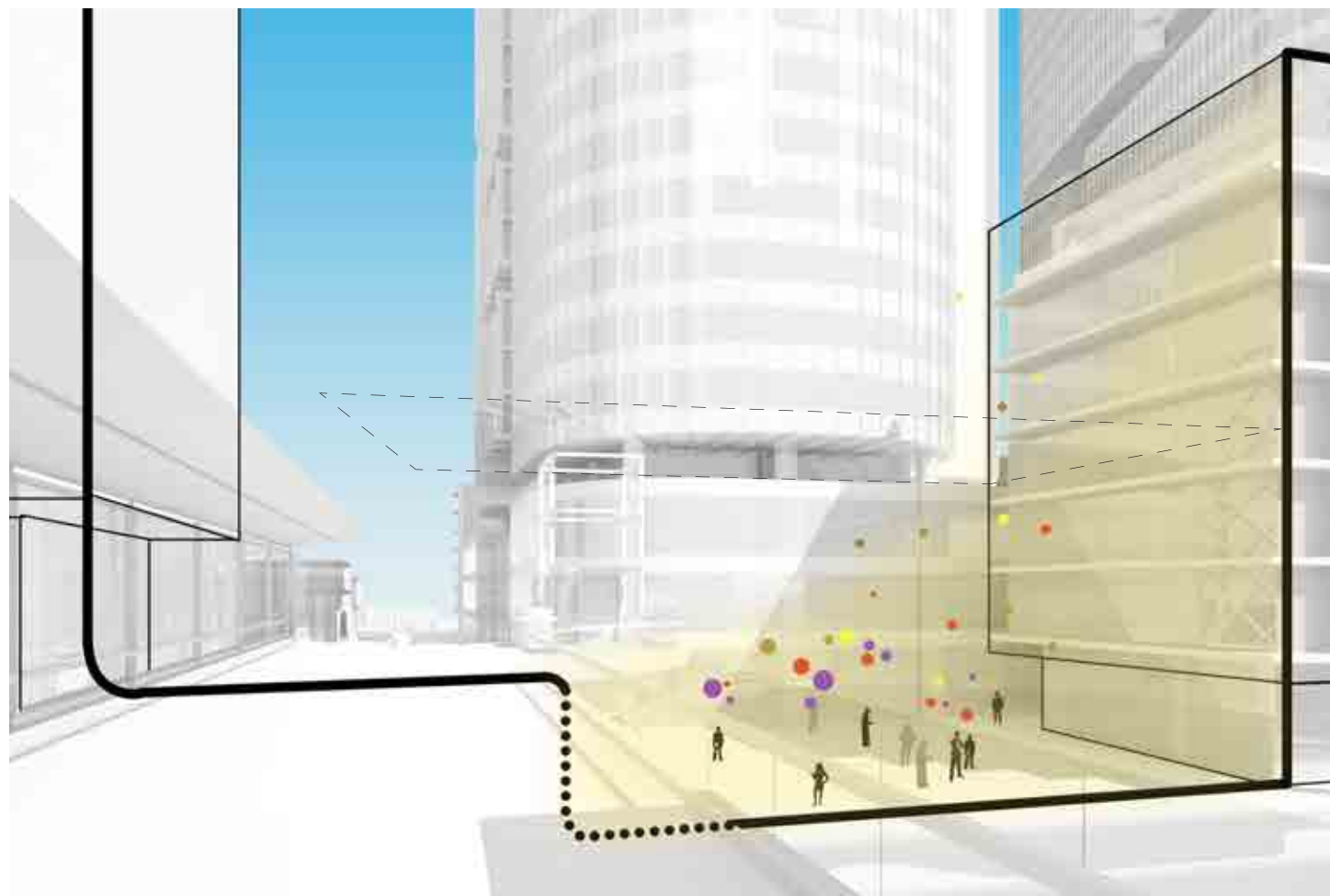
A marker to the southern precinct of Barangaroo, Hickson Place is a key orientation space and provides direct and legible way-finding for all users moving through the precinct.

Objectives:

- Arrival at the precinct via Wynyard Bridge is to be considered as a formal urban gesture; a pedestrian feed into Transport Place, Shelley Street and Shelley Lane.
- Ensure an active piazza for standing and moving activities, civic gathering and social interaction.
- Respect and respond to the scale of the historic Sussex Hotel opposite on Sussex Street.
- Connect Shelley Lane and Sussex Street.

Proposals:

- Encourages art and cultural activities to ensure a vibrant, well used, civic space.
- Allows for future provision of a metro station entry.
- A wind mitigation canopy around the south eastern corner of building C5 will ameliorate the comfort conditions at Hickson Place allowing a wide range of activities to take place .
- Provides the potential for a retail presence to help activate and enliven Hickson Place 24/7.



View from Wynyard Walk arriving to Barangaroo South. Hickson Place's location is at a key orientation point next to Transport Place, the southern gateway to Barangaroo. The surrounding massing forms Hickson Place.

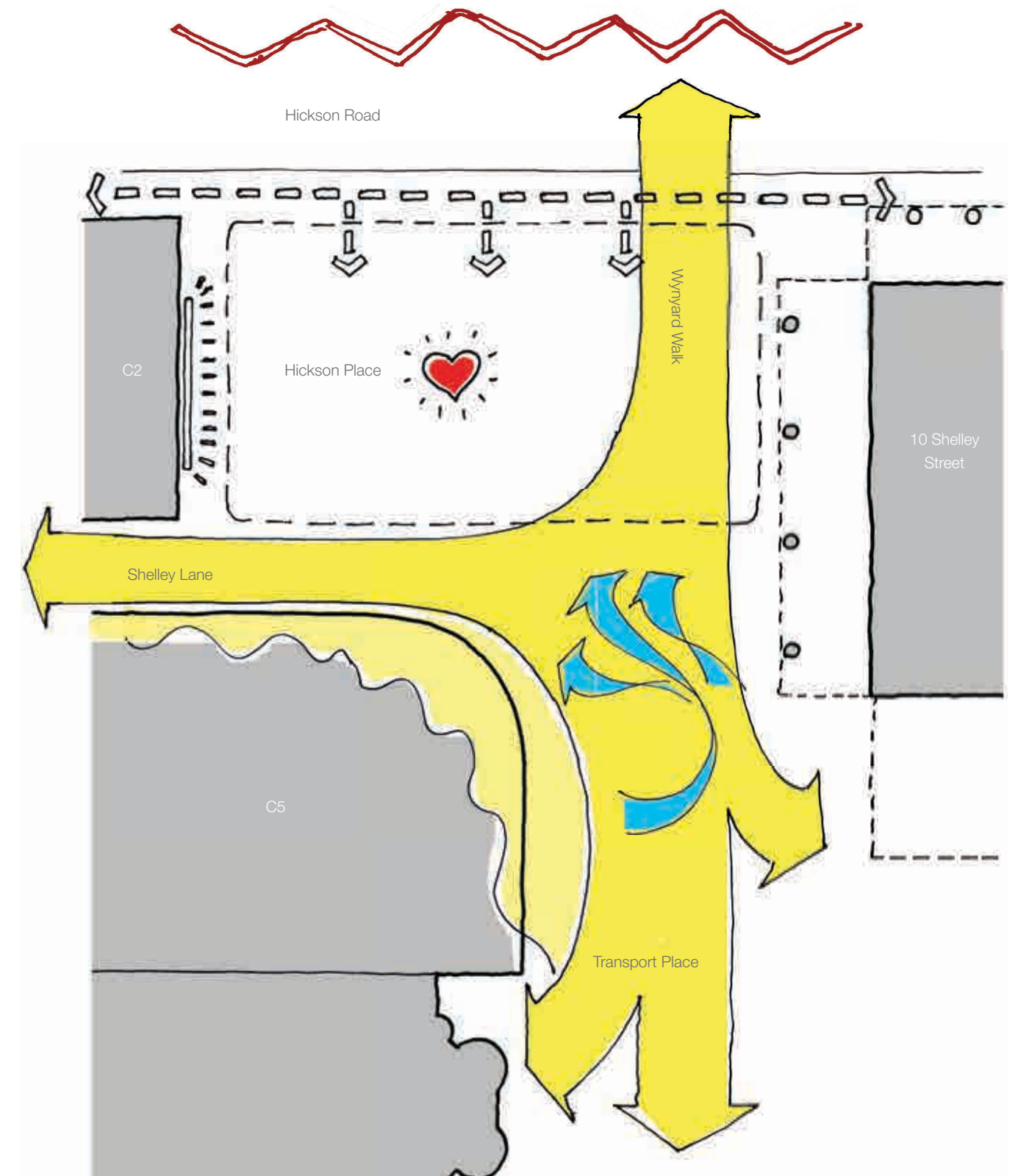
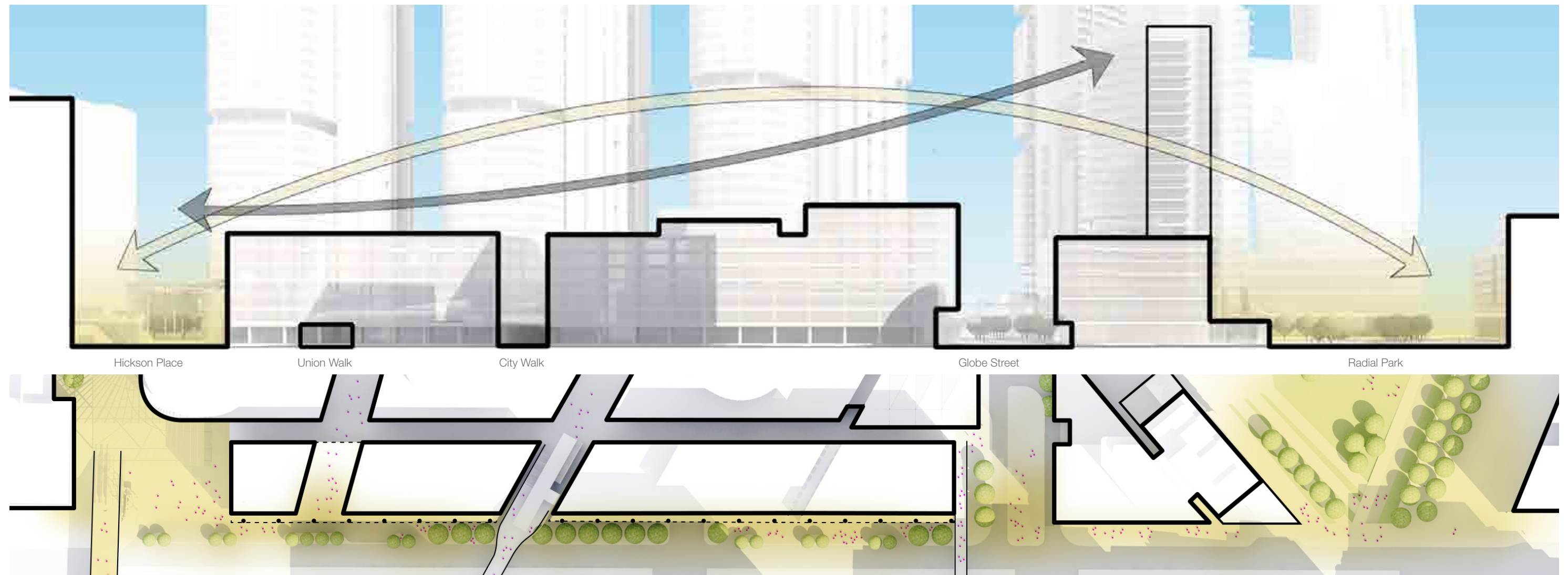
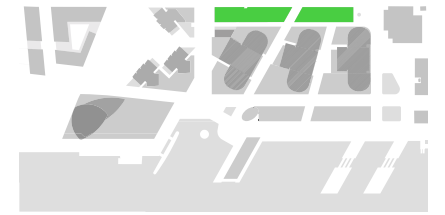


Diagram illustrating the constraints forming Hickson Place, including existing building conditions with Hickson Road to the east, C5 podium (west) and KPMG to the south forms Hickson Place.

Defining Barangaroo's City Edge

Hickson Road Buildings



Changes in height mediate the change from Hickson Place to the Radial Park whilst holding the street edge. Yellow arrow: Hickson Road Buildings connect the thresholds of Barangaroo South. Black arrow indicates the ascending Hickson Road Buildings

Prior to the demolition of the finger wharves, Hickson Road presented a strong defined water gateway with its long, large-scale brick arcade. Similarly, The Hickson Road buildings are conceived as a row of mixed use buildings that define the city edge to Barangaroo.

Objectives:

- Define Hickson Road's street wall.
- Create a buffer between the scale of the Barangaroo towers and Hickson Road.
- Form a consistent streetwall on ground level

Proposals:

- A colonnade creates a zone of consistent scale and establishes a defining rhythm. This works in tandem with a contre allée providing short term parking, drop-off points and taxi ranks to demarcate the space as pedestrian friendly, whilst avoiding the misconceived doubling up of pavement space.
- On ground level, breaks in the Hickson Road buildings create intimate points of entry to Barangaroo. These places are orientated to the radial fan and are connect with the civic walks.
- The southern most Hickson Road building is cut back to create Hickson Place.

5

THE MASTERPLAN: INDICATIVE DESIGN

Commercial Precinct

The commercial towers (C3, C4 & C5) are positioned between Globe Street and Transport Place, off which the smaller tower is accessed.

Perceived as a tripartite set of 'sibling' buildings, the tower forms fan out westward radially from the CBD. Maximising views through and around the buildings, this geometrical setting out of the towers also allows them to sit comfortably in relation to each other. Pill-shaped in plan, they are orientated generally so that their slender ends face the city and the water. This demonstrates the sibling composition to the City and the water (east and west elevations).

Sharing a common chassis each tower is divided vertically into three separate rises, each one relating to an expressed vertical circulation core located to the north of the floorplate. Panoramic lifts create an animated and highly articulated core, whilst external solar shading gives each tower its individual character and emphasises its verticality.

Stepping in height from the south the three towers present a holistically considered composition. The shorter tower responds directly to the civic nature of transport place and its elevational relationship to the city to the south, whilst the taller northern tower (C3) is appropriately scaled to be viewed from the harbour bridge as a new addition to Sydney's world famous skyline. Tower C3 also signals the arrival at the commercial precinct and is appropriately scaled in relation to the neighbouring landmark Hotel.

The only certainty of 21st Century business is that markets will evolve and needs will change. Work places of the future will need more flexibility than ever to attract a growing workforce of free agents, part timers, mobile and virtual workers. With that in mind, flexibility is at the heart of the design philosophy for Barangaroo South's commercial office spaces.

Access to natural light and magnificent views is maximised. The linear floorplate can be easily manipulated to form open-plan seating, cellular office space, breakout spaces, offices and any arrangement that will be conducive to creativity, teamwork and high performance.

The tower portions of these buildings are located above three storey podium buildings. Defining the ground plane, from these a tightly arranged and scaled streetscape is carved.



The Bond, Sydney

The podium buildings define and create a variety of characters for the pedestrian routes that both surround the towers and separate them from each other.

Creating a variety of streetscape experiences, Lime Street is a vehicular city street and cuts perpendicular to the radial pedestrianised walks. Shelley Lane is more intimate in its scale; a pedestrianised laneway.

The Through Site Link is a north-south pedestrian route which connects the lobbies of all three towers. Traversing through the lobby of each tower, this link creates a nodal point when it crosses with one of the east-west thoroughfares - a moment of intersection and interaction.

Although dual sided and accessed from both frontages each tower encompasses a singular lobby experience. Visually connected to each other, the lobbies of the towers directly relate to each other across the pedestrianised streets, blurring the boundaries between inside and outside and enhancing the nature of the public space between them. The large volume of people using these lobbies in such tight urban spaces will ensure an unusual vitality to the pedestrian experience and positively enhance the city as a place to work and live.

The proposal aims to provide an innovative mix of commercial and retail function, with a variety of environments with a sustainable architecture, and forms the southerly face and key component to the connection to the wider CBD.



Solar shading: One Hyde Park, London



An open lobby



The fan of the commercial towers

The Mixed Use Edge and Bridges



The Mixed Use Edge

The edge of mixed use buildings along Hickson Road mediates between Barangaroo South and the existing Sydney CBD. Situated between the commercial towers and Hickson Road they are a buffer to the precinct and are an opportunity to create a strong urban street response.

It is proposed to create a wide unifying colonnade along the length of Hickson Road to engender a memorable quality as a welcoming “city façade” to the development. This colonnade is to be an inherent part of each building, with each part sharing a common scale and rhythm but potentially utilising different materials. The colonnade may share the qualities of the uniquely Sydney wharf building which are constructed from simple rhythmic frames. The arcade will provide sheltered access for the public along the length of the site, especially desirable during times of winter rain and summer heat.

The colonnade is combined with a European-style *contre allée*. The *Contre Allée* allows for short term parking and dropping off functions protected from the

boulevard at pedestrian friendly speeds. It ensures that the colonnade is the pavement and that trees can be planted appropriately along the edge of the boulevard. This is an accepted European model functioning well in pedestrian friendly city centres. Practically, it resolves the level changes inherent along Hickson Road and Shelley Lane, whilst also ensuring a flood defence system without the use of stairways and ramps.

Varied in height, the buildings along the tree lined boulevard will mediate between the height of Hickson Place to the south and the Radial Park to the north, rising to their highest point at the corner of Globe Street. This controlled profile will give a variegated, informal cornice line to the street whilst also holding its edge.

A variety of public spaces are created at ground level; physical connections between Hickson Road and Shelley Lane both beneath and between the buildings. These intimate spaces create points of expansion along the laneway. The streetscape is defined by the commercial tower podium buildings, the dual aspect Hickson Road retail units and a variety of lobby spaces.

Bridges

Facilitating the flow of pedestrians arriving to Barangaroo, a series of three pedestrian bridges will connect Barangaroo South with the existing city fabric. Arriving at Transport Place (Wynyard Walk), City Walk (City Walk Link) and Globe Street these bridges will have direct views to the water, preserving existing view corridors from the CBD.

The relationship between these bridges and the existing bridges at Walsh Bay will be considered – each one having its own distinct character whilst simultaneously reading as a group.

Wynyard Walk

Wynyard Walk Bridge forms part of the connection from Wynyard Station to Barangaroo South. The majority of visitors arriving at the precinct will use this route, walking across Hickson Road at high level and descending into Transport Place adjacent Hickson Place.

City Walk Link

Walking down Napoleon Street reveals a visual connection to the water via City Walk. This connection to the city bridges across Hickson road, arriving between buildings C2 and H2. It is the processional walk of Barangaroo South, taking the visitor from the CBD to Globe Harbour at the heart of Barangaroo.

Northern Link

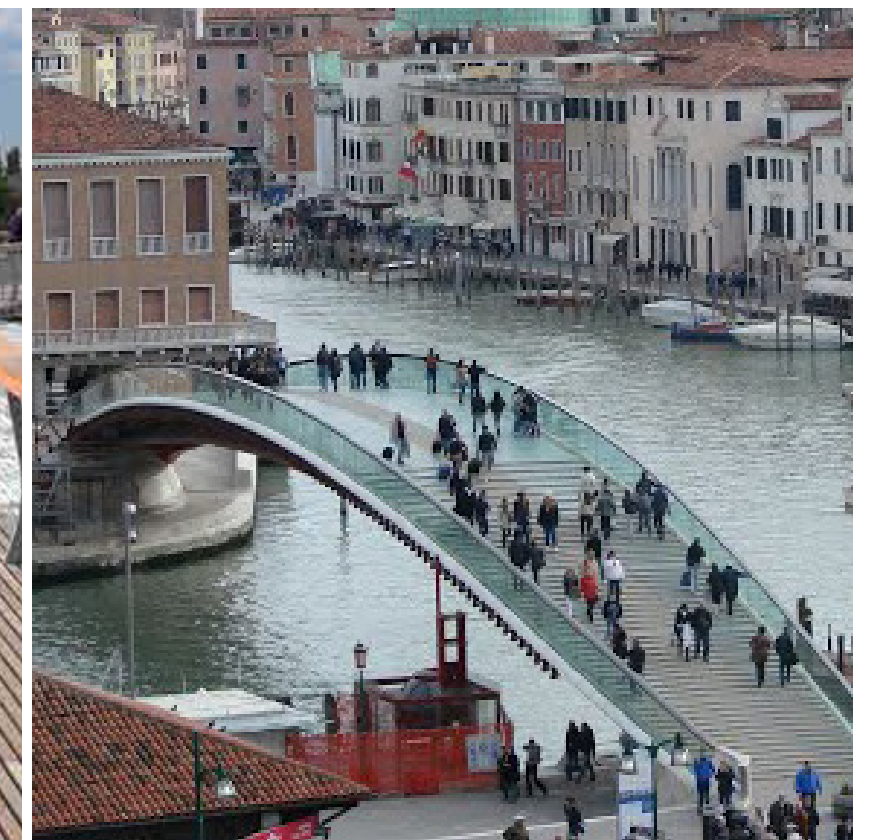
The Northern Link is a continuation of Gas Lane, across Hickson Road and to Globe Street.



View of Hickson Road buildings and its variegated heights

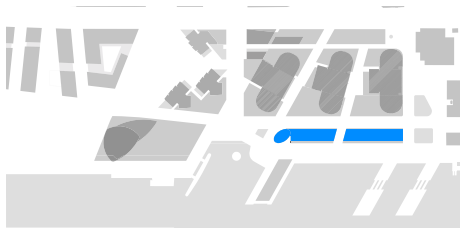


Castleford Bridge, Yorkshire



Ponte della Costituzione, Venice

Waterfront Promenade and the Residential Edge



The Indicative Design seeks to prioritise the water's edge for residential and amenity uses such as ground level cafes and restaurants. In urban terms, the low-rise residential buildings also acts to contain and hold back the commercial centre of the site as well as provide a localised drop in scale towards the water.

Parking and servicing for the residential apartments will be provided at the basement level and it is envisaged that the wider Barangaroo development will provide the outdoor amenity and recreation spaces needed to support such a community, while the site itself is well-connected to transport infrastructure and supported by a range of shops and amenities.

The 30 metre wide promenade will incorporate outdoor seating and a pedestrian route which extends the entire length of Barangaroo.

Residential Edge

The Residential Edge buildings are larger in scale and more civic oriented than the adjacent King Street Wharf buildings. They will remain human in scale and enjoy active uses, such as cafes and restaurants, at ground level. They reference the highly-successful waterfront apartment types of cities such as Amsterdam and Venice, as well as in the wharf apartments located on the eastern and western water edges of the CBD.

Vertical divisions to the facades and block divisions, as well as a variegated roof-line, will add interest and individuality to the blocks. There is a clear distinction between the elevations facing the harbour and those elevations facing Globe Street or Hickson Road. On the street-facing elevation, openings in the facade can be smaller, with movable components to ensure residents can control their privacy whilst retaining opportunities

to capture morning sunlight and encourage cross-ventilation.

It is envisaged that the facades facing the harbour will be more open and feature balconies and solar shading devices to control solar gain and add a level of animation. The water-facing elevation will be the most active: with direct access from living spaces, the residents will have an atmosphere of relaxed city living whilst still retaining a distinctly urban feel.

The drop in scale at the water's edge offers positive environmental effects by mediating the effects of the prevailing winds and sheltering the retail environment of Lime Street. The blocks themselves will be sheltered from adverse wind effects by trees, canopies and landscaping devices at ground level.

An increase in height at the northern end of the residential edge creates a special moment and a marker of arrival at Globe Harbour.



Concept Sketch of the Residential edge



Bi-fold systems



Timber clad Bi-fold shutters

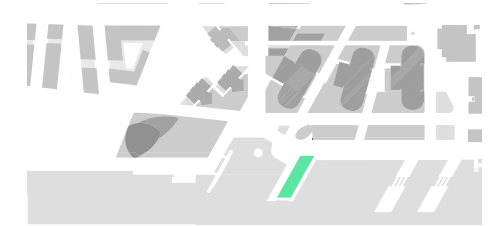


Perforated Screens with Bi-fold systems

Community Centre and the Public Pier

A low level marker to Globe Harbour, the pier is publicly accessible and offers the opportunity for the visitor to stand on the water. An extension to the linear foreshore walk, this protrusion in to the harbour not only increases the length of the waterside experience, it also provides variety, inviting the visitor into the harbour.

The pier creates an opportunity for a building which encourages public activity. The Community Centre will integrate a mix of uses and will be an exemplar of sustainability; the structure provides an opportunity for an accessible roof that can activate the water, create a viewing platform and also offer wind protection to Globe Harbour.



Globe Harbour from above showing veranda, Globe Square, Community Centre, and Pier



A public pier acts as a viewing platform on the harbour: Walsh Bay Pier



A publicly accessible roof, integrated with the pier and the building: Oslo Opera House



The community building frames the other side of Globe Harbour with a floating pier onto the water

Residential Towers and the Radial Park

Three high-rise residential towers are proposed within the Barangaroo South precinct. A spiralling composition mediating between the Landmark hotel and Hickson Road, these towers cluster around the Radial Park - an area of public realm which provides a focal point for the community and connects the central parkland to Hickson Road.

Each tower is orientated on the radial fan capturing spectacular metropolitan and Sydney Harbour views to the north and west. The two taller towers operate as a pair (R4) maximising views to the city, whilst the third tower (R5) is smaller in its scale, relating directly to the Radial Park and its connection to the water.

Each tower is split vertically into two separate halves and connected together with a glazed link to express verticality and reduce the visual mass of the towers. The northern half is the common chassis between the towers with expressed structure. As it faces Radial Park, the structure comes directly to ground in a series of glazed pavilions. The southern half is articulated with horizontal breaks to provide scale and grain and rests on the podium. These podiums form the street edge on Lime Street and a colonnade on Globe Street ensure a human scale at ground. It contains communal facilities and retail to activate the ground plane. R5 has a larger podium to include key worker's housing.

The proportions proposed for the towers will allow them to be expressed as elegant and slender forms. Unlike the low-rise residential buildings, which is responsive to street conditions, above the lower levels the towers will capture views in-the-round and be more sculptural in their expression. Each tower's rooftops should be articulated, providing an expressive addition to the skyline and an architecturally treated fifth elevation. The facades will respond to conditions imposed by the sun-path as well as the opportunities of long-distance views that change as the buildings rise. Edges can be made 'filigree' and lightweight by the use of balconies and solar shading devices that will vary according to aspect and need.

Bond Square and Napoleon Street are existing nodal points on the edge of the existing CBD; moments of pause before choosing which route to take. It is important that views of the sky are prevalent in these areas and the towers are located to reinforce this.

A civic plaza in front of the C3 northern lobby connects the commercial precinct and the Radial Park on the ground plane. Chamfering the corner of the R4 podium creates a relationship between this public realm and Globe Harbour.



The residential towers' chassis comes to ground at the Radial Park



View from SW of the towers landing on the podium with articulated breaks



Green façades



Wintergarden balconies



Trellis Screens

The Hotel – A Landmark Building



The hotel is the landmark statement for Barangaroo South and the city. Its location anchors the city frame and marks the transition between Barangaroo South and Central. As the tallest tower, its elevated height provides an opportunity to create an articulated pinnacle to Sydney's skyline. A building of distinct character with a sculptural form separate from the three sibling commercial towers in the background yet orientated to the fan.

At the upper levels, service apartments experience uninterrupted views of the city. The hotel's tower to the northern end of the hotel site tapers to the south as it approaches the water. The intermediate block addresses the scale of Radial Park as it fold towards Hickson Road. The lowest block, the podium of the hotel, minimises the impact of the hotel's scale on Globe Harbour, addresses the water, provides character to the waterfront promenade, and frames Globe Harbour crafting a sense of enclosure to the public space and minimises wind impact.

Its relocation from the pier to Globe Harbour provides a greater opportunity for overlapping of several functions. The podium is envisaged to be permeable, fully accessible building with pedestrian links connecting the promenade to Lime Street 24/7. Opportunities of locating verandas and terraces to the west and south faces creates movement and activity not only on the ground floor, but also through the podium levels activating Globe Harbour and creating a unique sense of place and multi-level activity distinctive to the rest of the Sydney's harbour foreshore.

Sitting on the threshold of Barangaroo Central and South, the landmark hotel is a key component in tying together Barangaroo Central and the Radial Park, and through setbacks and transparency can create drama, visual permeability and compression at the fulcrum point of the public plaza allowing views between Radial Park and the Central Park.



View from Barangaroo Central towards the landmark

Model/Hotel representation provided by Crown/Wilkinson Eyre Architects



Articulated glass facade - The Shard



Translucent louvers - Torre Agbar



Diagonal glass facade - 30 St. Mary Axe, London

The Public Domain Vision

The key principles that underpin the public domain vision for Barangaroo South are as follows:

- Reflect the geologic and industrial history in the material palette and composition of the site
- Highlight the movement from the land to the water through material transitions
- Express the site history of water, sandstone, and industry in the materiality of the ground plane.
- Any other built elements are separate from, and float over, this ground plane

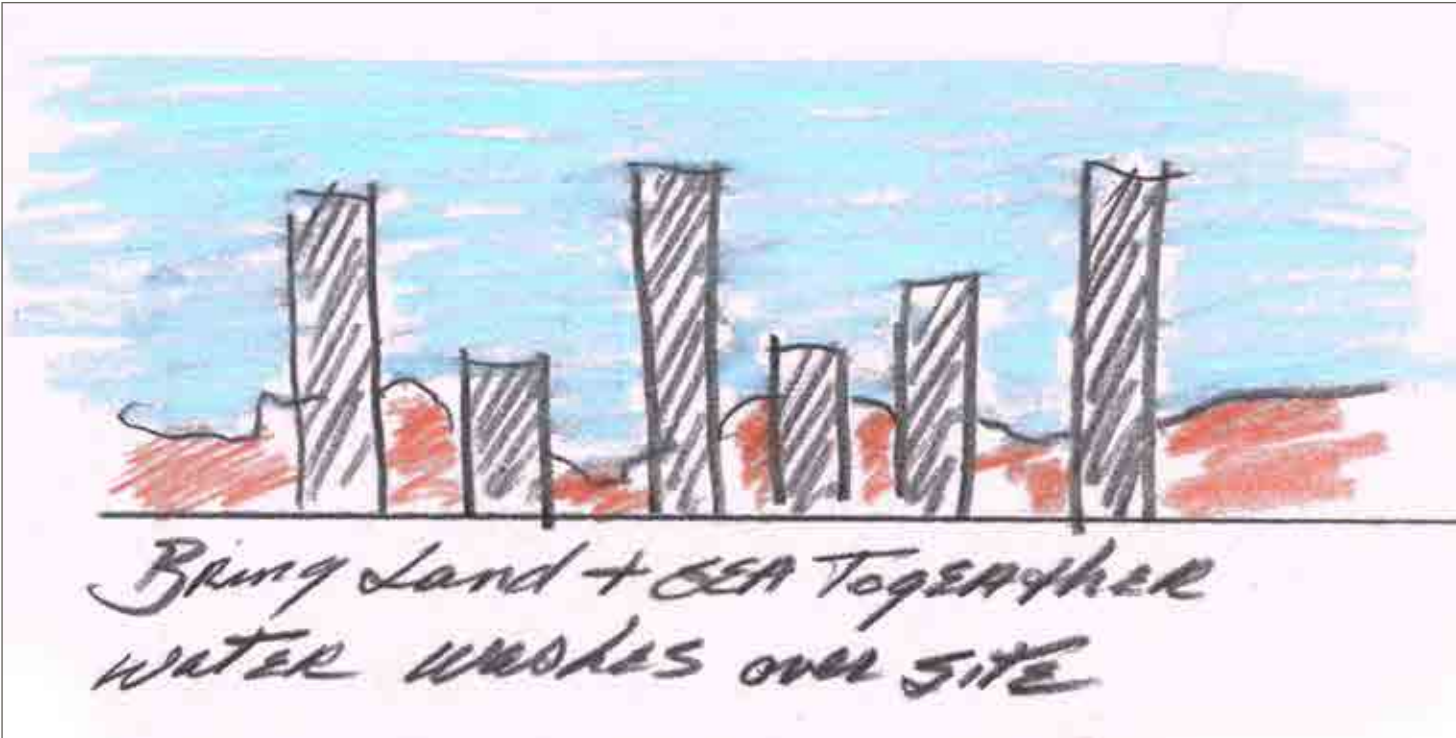
The Barangaroo South project site sits in a key location within the City of Sydney. It is the most urban precinct of greater Barangaroo, forming a key urban link between King Street Wharf to the south and Barangaroo Central to the north. In the east/west direction, Barangaroo South creates key pedestrian connections from the Central Business District to the waterfront. The public realm connects and unifies South Barangaroo with the city, creating opportunities for unique and significant public spaces within the precinct.

The overall design concept for the public realm is rooted in the site's geologic history as a shoreline bordered by large sandstone cliffs. Prior to settlement, the site consisted of open water at the harbour, to the

west of the steep sandstone cliffs upon which the city developed. These sandstone cliffs still exist on the edge of Hickson Road today. The harbour changed as its use for shipping and industry increased. Over time, wharfs extended into the bay, land was filled in between the wharfs, and eventually the site was covered with a concrete apron that extended the city's edge to the current site boundary.

The rich history of water, shoreline, and wharf development illustrates an interesting transition from land to water over time that informs the conceptual design and composition of the public realm. A main goal of the Barangaroo South public realm design is to accentuate and heighten this collective experience of moving from land to water through a combination of materials, transitions and uses.

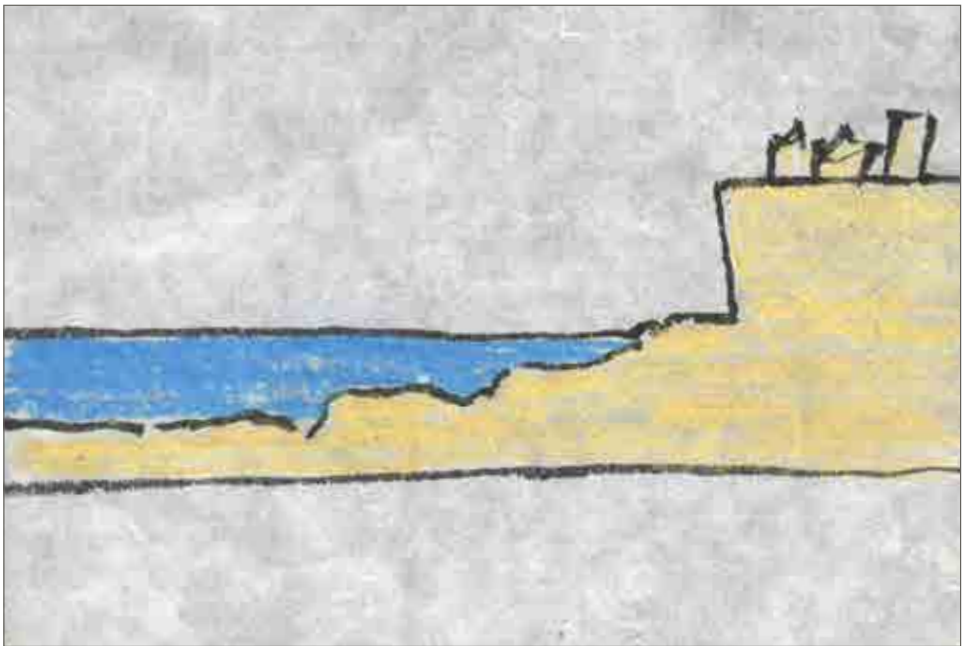
This transition also signifies a shift from the past, to the present, and towards the future. The progression through the public realm accentuates a passage through time and place, from the historic edge of land along Hickson Road, through a landscape grounded in the present activities within the development, to the water's edge with views focused outward and towards the future. Paving, planting and lighting will work together as elements that highlight this progression from Hickson Road to the waterfront.



The history of the site involves layers of water, land and industrial docks that brought the land and the sea together.



Plan Diagram. The bedrock of Sydney, and of the site, is sandstone. The new development is overlaid on this historic base.



Section Diagram. Historically, the site was seawater adjacent to the city, which was built up on sandstone cliffs.

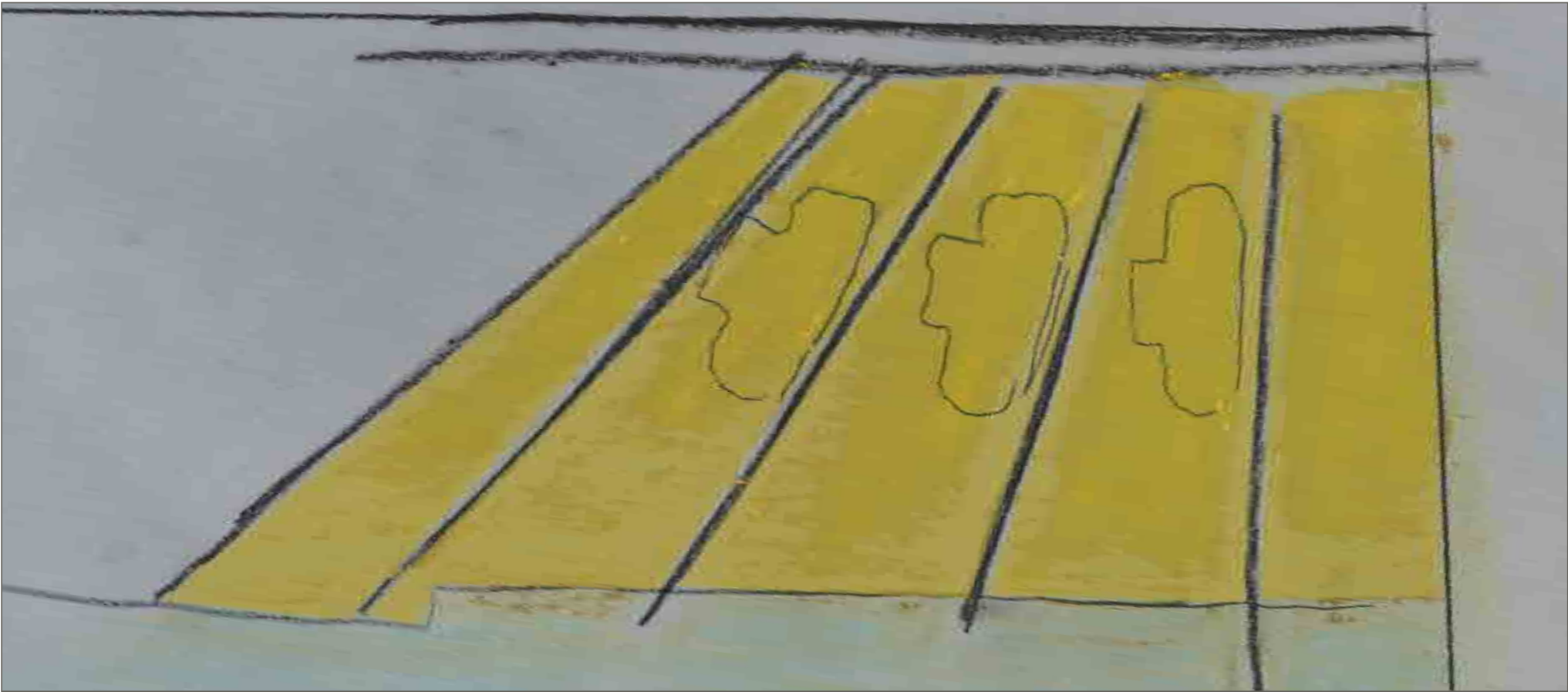


Section Diagram. The site concept integrates three historic layers into the site: sandstone, water and constructed ground that we eventually built above them during the site's industrial time period.

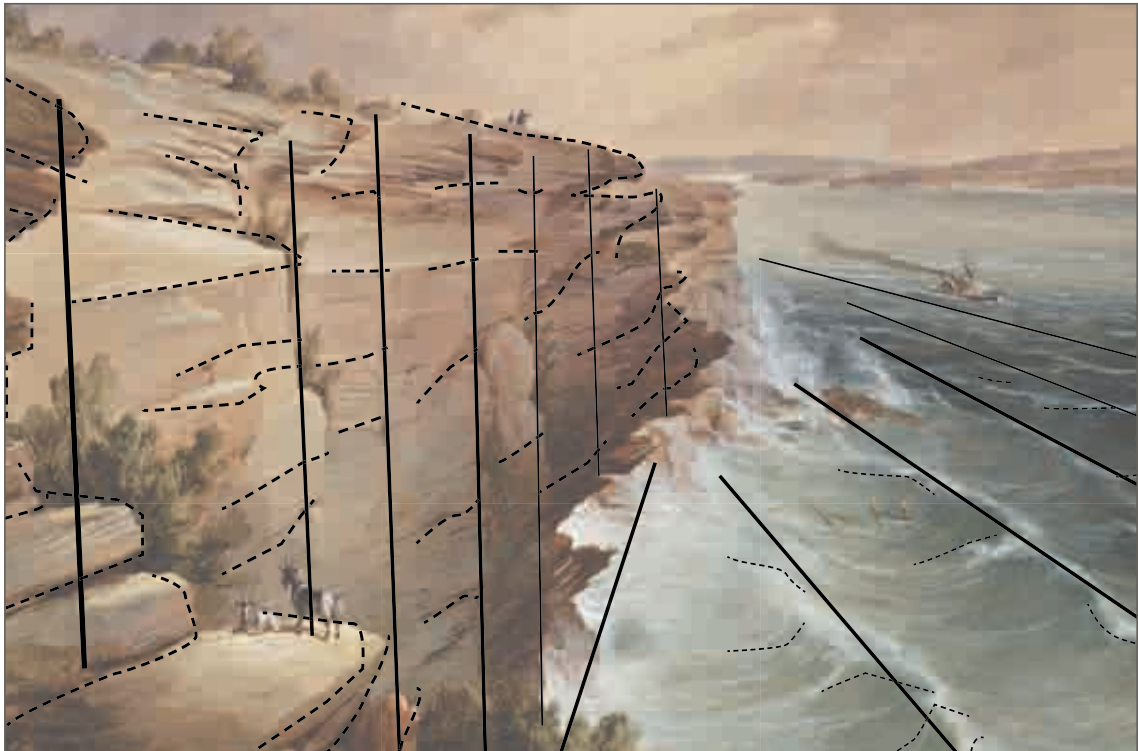
The concept for the public realm creates a framework for both the ground and other built structures in the landscape. The ground plane embodies the history of the solid sandstone base of the site, the water, and the industrial infrastructure that was built over these natural features. Any other elements in the landscape like benches, site furnishings or shade structures should be constructed of wood or metal. These built elements should float above the unified ground plane to be experienced as elements that are separate from the ground plane.

The concept for the orientation and grain of the ground plane material has its origin in the historical sandstone that forms the bedrock of Sydney. Sydney's sandstone cliffs have a distinct grain of strong vertical lines that are intersected by more minor horizontal joints of erosion. Translated to the site, these become major 'plate lines' that reference the strength and structure of the vertical lines on the sandstone cliffs. The major plate lines are aligned to the fan that forms the basis for the

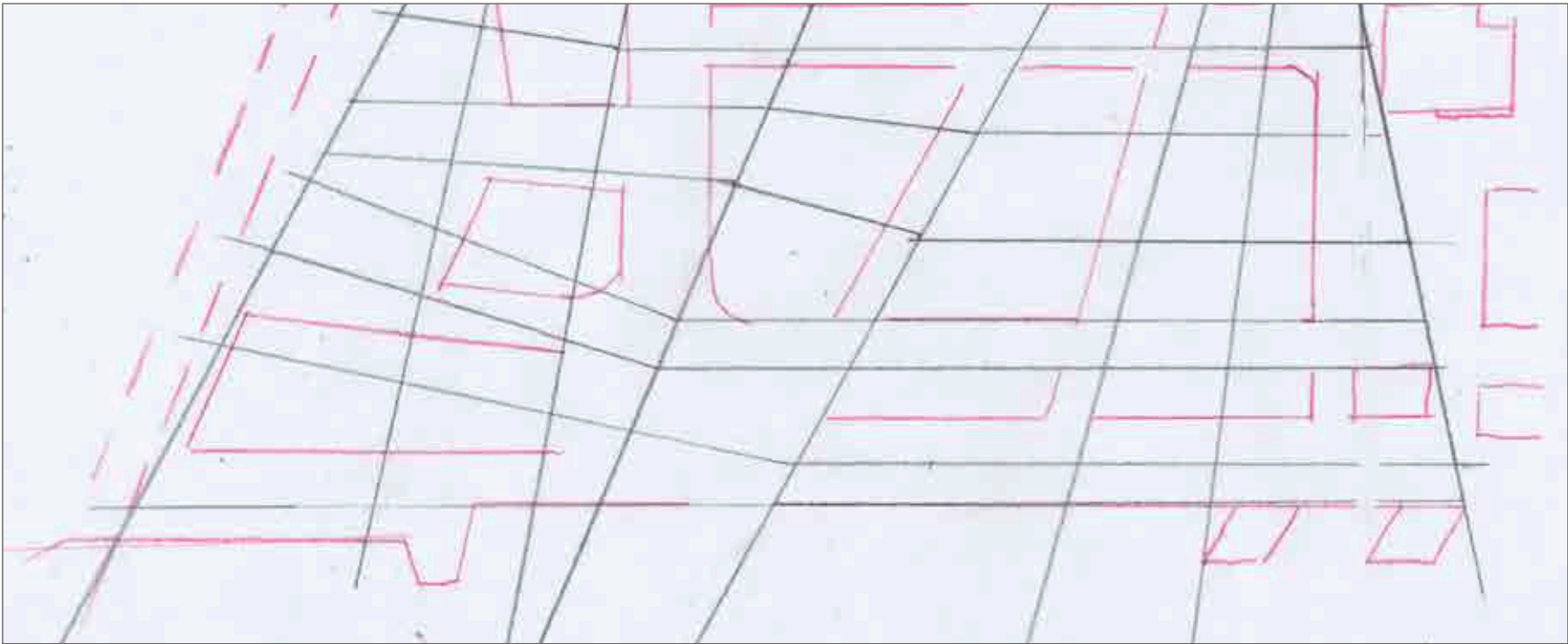
powerful orientation of the fan and grounds the grain and materiality of the site in the layers of history that have built up the site over time.



The masterplan structure of the fan orients the development towards the water. The major 'plate lines' reinforce the structure of the fan, which opens up towards the water.



The sandstone cliffs have major vertical lines of orientation that are intersected by more irregular, minor lines of erosion.



Translated to the site, major plate lines in the paving form the underlying paving structure of the site. The north/south grain of the paving intersects these lines in a more irregular way like the erosion lines on the sandstone cliffs.

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