

# URBAN DESIGN STATEMENT

**Rogers Stirk Harbour + Partners**



# Preface

*I first visited Sydney more than 20 years ago and was immediately captivated and enchanted by its fantastic quality of life and by the relationship of the city centre to the harbour. It is one of the most beautiful cities I know.*

*The development of Barangaroo offers an opportunity for Sydney to transform what is currently a 1.4km-long desolate and inaccessible area of concrete wasteland along the waterfront adjacent to the CBD into an integral part of the city.*

*Specifically, the development of Barangaroo South will extend the existing CBD towards the water's edge. The CBD sets the standard for the heights, density and morphology of the proposed buildings in Barangaroo South. A carefully studied landmark building – located on a pier in the harbour – breaks up the hard, regular shoreline and establishes a special dialogue with the three commercial towers behind it. A series of lower buildings of between 4-8 storeys introduces a human scale into the development, linked by a large number of 'people spaces' – pedestrian squares and streets distributed throughout Barangaroo South which ultimately lead to a large park to the north of the site.*

*This development also provides an opportunity to apply many of the principles that shape and drive the compact city. These are principles which I have been closely involved in helping to develop and implement in other cities, first working with former British Prime Minister, Tony Blair, as Chairman of the UK Government's Urban Task Force; then as Chief Advisor on Architecture and Urbanism to former Mayor of London, Ken Livingstone and subsequently as an advisor on design to his successor, Boris Johnson; and, currently, as an advisor to President Sarkozy of France on the long-term redevelopment of Paris.*

*The compact city is the only environmentally sustainable form of development. It is well designed, well connected and organised around public transport hubs. It is a melting pot where poor and rich are integrated, where people can live, work and relax in the same neighbourhood, and which encourages walking and cycling – while minimising the need for cars. The single most important driver of the compact city is the re-use of derelict land and intensifying development around transportation hubs, thereby limiting vehicle use. In contrast, urban sprawl is car dependent and any development of green belt land erodes the countryside.*

*Barangaroo South offers a great opportunity to take many of these principles and apply them to this 'concrete backyard' along the western edge of the CBD.*

*It will create a new, mixed-use area of Sydney with office, residential, retail, cultural and infrastructure developments.*

*It will promote a high quality of public realm adjacent to the existing city core, with almost 40 per cent of the total Barangaroo South site given over to public space, rising to 65 per cent across the wider proposed Barangaroo development as a whole.*

*And it will collect and link together existing and new forms of public transport as well as establishing connectivity across the city core from east to west.*

*Barangaroo South will be a striking design, providing Sydney with a quality of built environment which is lacking in the existing CBD. Continuing a great tradition in visionary civic and architectural thinking, it will strengthen Sydney's global reputation and give the city a new quarter of exceptional public spaces and stunning buildings which will stand as landmarks for generations to come.*



Richard Rogers

This report has been produced for Lend Lease for the purpose of supporting Lend Lease (Millers Point) Pty Ltd (Lend Lease) Concept Plan Amendment submission for the Barangaroo South Project and, in accordance with RSHP's normal practice, RSHP do not accept any responsibility or liability for the contents of this report towards any person other than Lend Lease or for the consequences of this report being used for a purpose other than the purpose for which it was commissioned. Further, this report consists of several sections which have been prepared as an overall, coordinated and integrated whole. RSHP do not accept any responsibility for the consequences of separating individual sections of this report from the whole.

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# 1

## INTRODUCTION & OVERVIEW



# Introduction

The approved Barangaroo Concept Plan establishes the urban design principles and planning framework for the redevelopment of the 22 hectare Barangaroo site. It articulates the desired outcomes for the precinct and sets the broad parameters for sustainable redevelopment through a series of concept strategies.

Following a detailed tender and design process, Lend Lease (Millers Point) Pty Ltd (“Lend Lease”) has been appointed as the developer for Stage 1 of the Barangaroo redevelopment: Barangaroo South. Lend Lease’s scheme proposes a series of design refinements which require the approved Concept Plan to be modified.

Rogers Stirk Harbour + Partners has been engaged by Lend Lease to prepare an Urban Design Statement for Barangaroo South. The Urban Design Statement accompanies Lend Lease’s Concept Plan Amendment and provides objectives, controls, and illustrations to guide the built form and allow flexibility for the design of individual buildings and spaces, within the certainty of a structured framework.

## The Urban Design Statement’s key aims are to:

- Describe the Barangaroo South site;
- Respond to the Director General’s Environmental Assessment Requirements issued by the Department of Planning for the Concept Plan Amendment;
- Formulate design principles informed by an analysis of the site and its context, and which are underpinned by the site’s specific opportunities and constraints;
- Prescribe the parameters of Lend Lease’s Concept Plan Amendment and establish urban design and built form controls to inform and guide the future development of Barangaroo South;
- Ensure design excellence and creativity are achieved across Barangaroo South;
- Provide design-based justification to support Lend Lease’s Concept Plan Amendment; and
- Describe an indicative design form that adopts the design principles, urban design controls and built form principles to demonstrate how the parameters of Lend Lease’s Concept Plan Amendment could be realised at Barangaroo South.

In addition to the above, the Urban Design Statement 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 Concept Plan Amendment 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.

The Statement’s structure is summarised below and is informed by Lend Lease’s Concept Plan Amendment Environmental Assessment Report, Modification Drawings and other supporting technical reports and studies.

**Section 1:** Introduction and Design Vision.

**Section 2:** Site analysis, including an overview of existing site conditions and opportunities and constraints.

**Section 3:** Explanation of the design principles that underpin the Concept Plan Amendment.

**Section 4:** Concept Plan Amendment and design justification for the proposed scope of amendments.

**Section 5:** Design excellence strategy including the establishment of urban design and built form controls to guide future Project Applications on the site.

**Section 6:** Indicative built form design that adopts the design principles, urban design controls and built form principles to demonstrate how Barangaroo South may be developed under the proposed Concept Plan Amendment.

To assist understanding of the places and addresses at Barangaroo South, indicative names have been given to the new streets, roads, lanes and public spaces, and these are used throughout this document. Actual names will be selected in the future, in conjunction with the Barangaroo Delivery Authority and the community.



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 confident and creative approach in pushing new ideas forward. This approach is what is now needed 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.

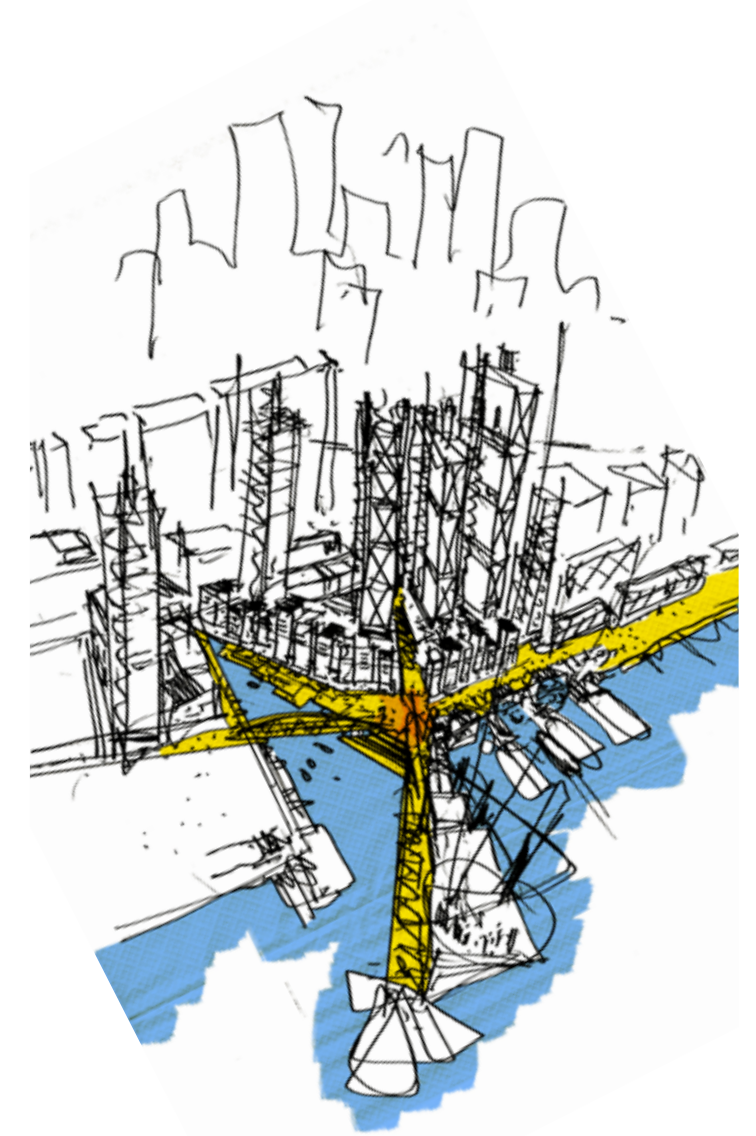
Our vision for Barangaroo South – the urban component of the Barangaroo development – will breathe new life into this wasteland and will completely transform it into a new, publicly accessible, waterfront precinct. It will reconnect it with the city and draw the CBD down to the western side of the most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



Early Design Sketch



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SITE ANALYSIS



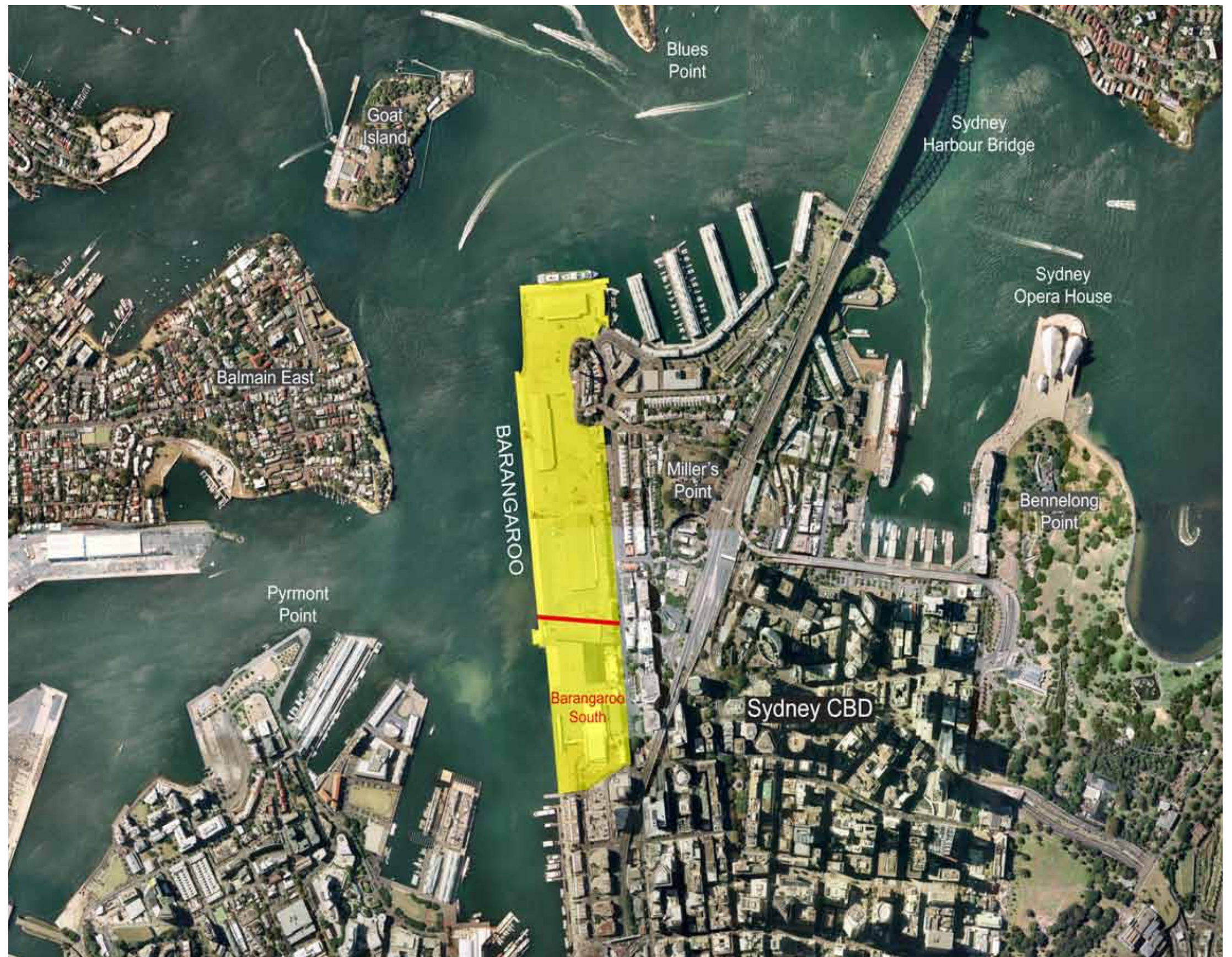
# Urban Context

## 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.

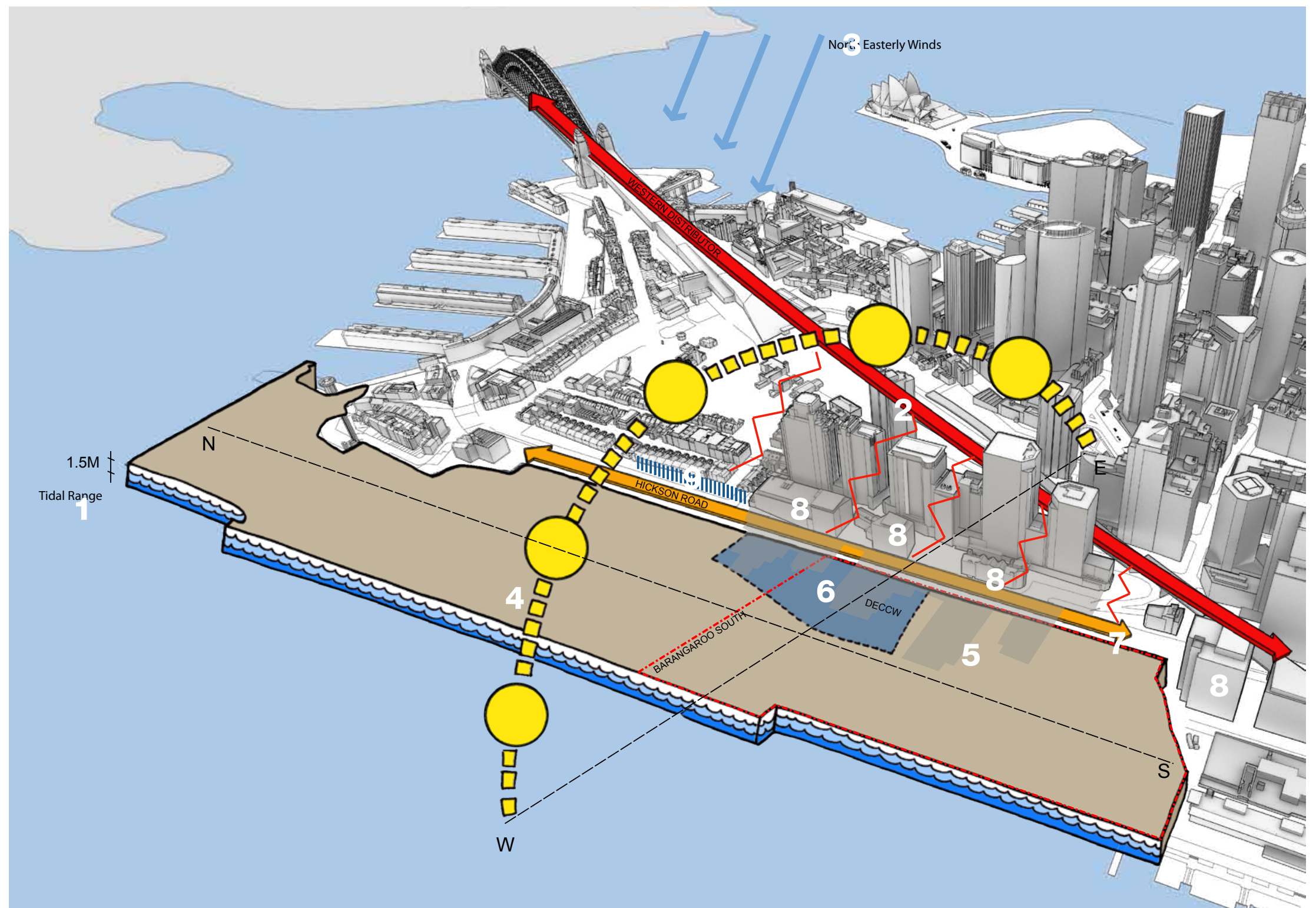
The site itself reflects the scale of the heavy industry once based here. It is broadly rectangular, with a straight dock edge and a fenced perimeter facing the city. Its key characteristic is the unrelenting flatness of the hard man-made apron. Not unlike a 'concrete backyard', it is singular and monotonous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

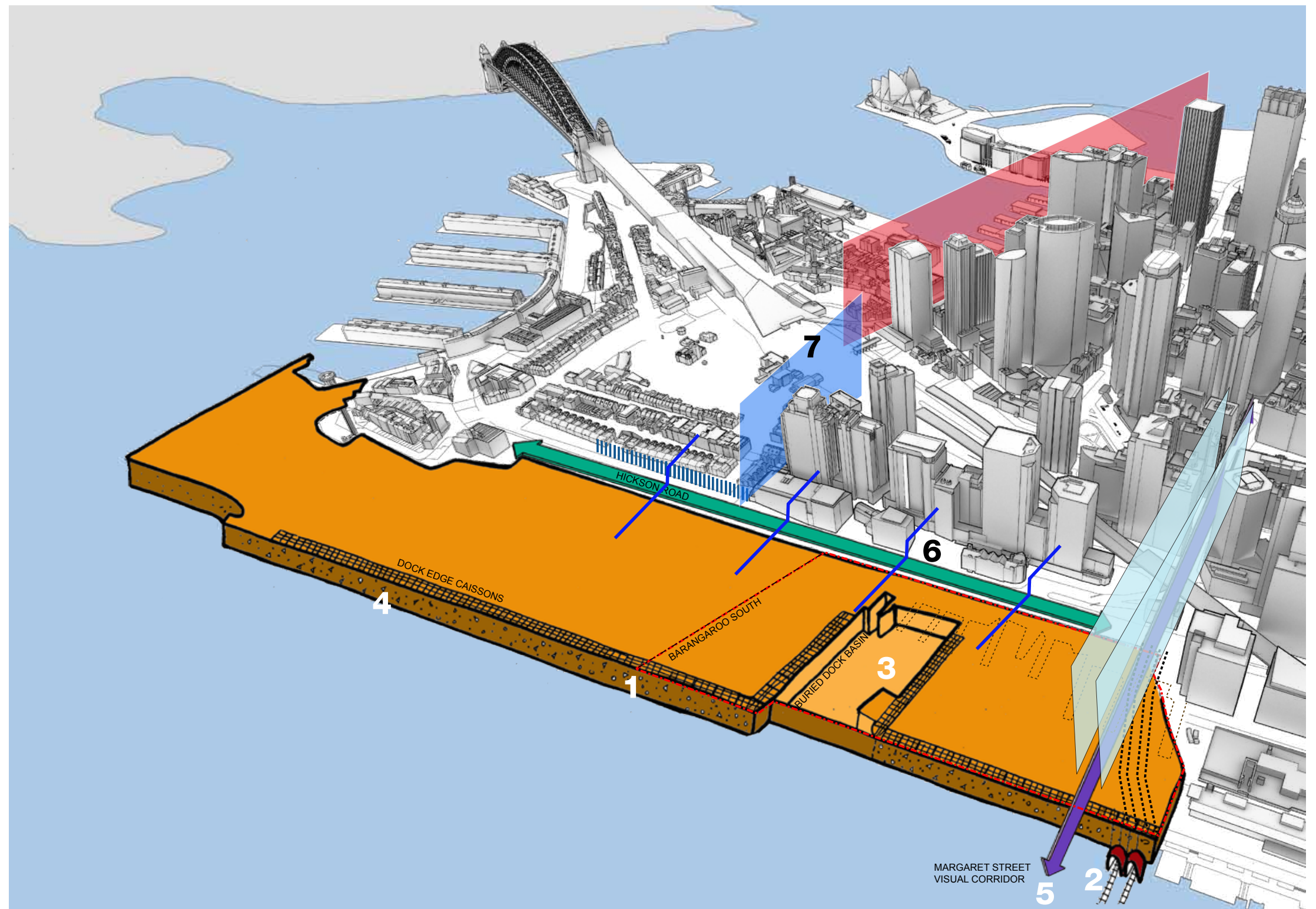
This apron hides and disguises the historical evolution of the site, and buries both its natural past and its archaeology. The existing ground conditions vary from areas of good compacted fill to those that are poorly compacted, as well as areas of unacceptable land contamination nominated as the DECCW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

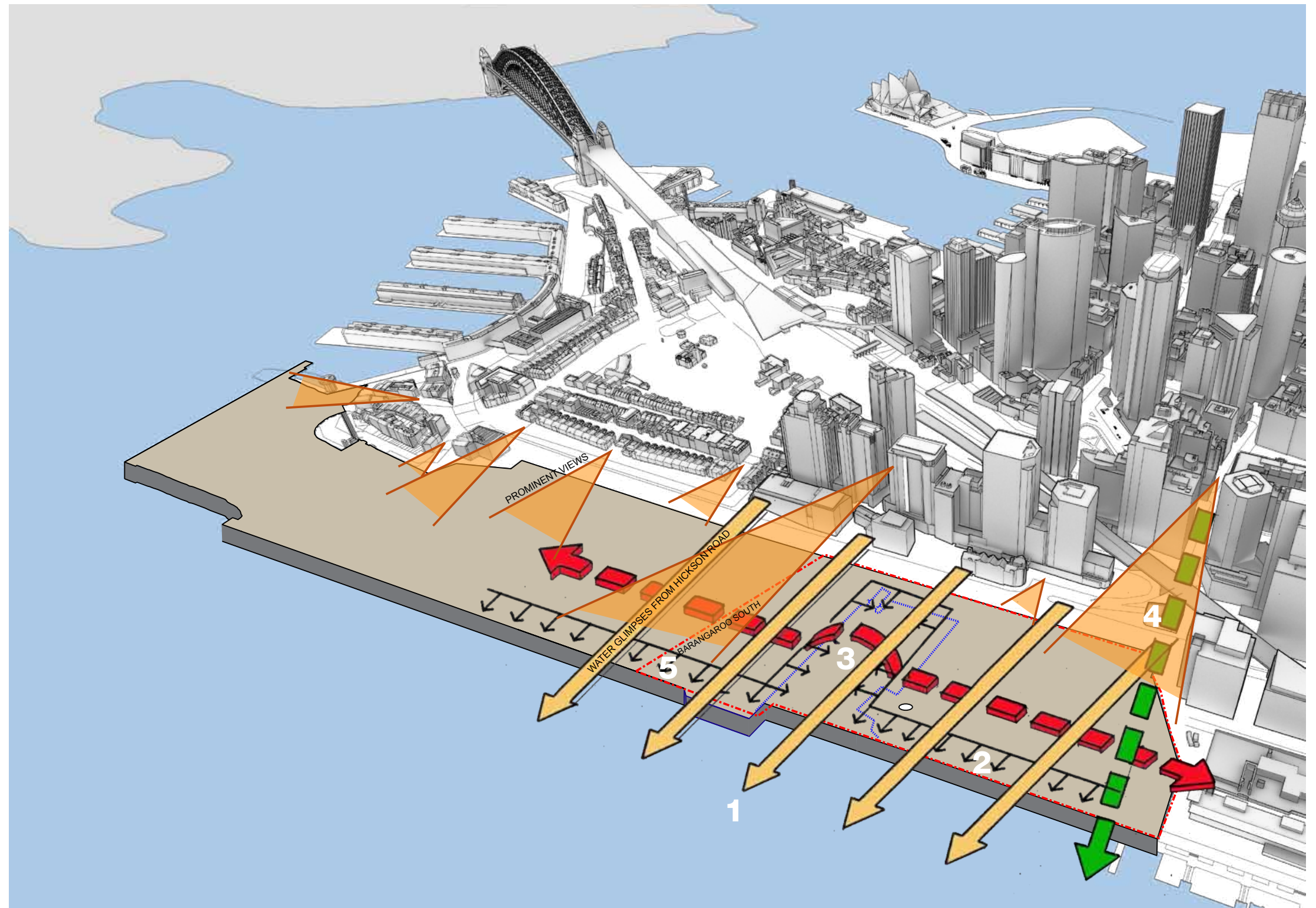
The topography that occurs at the eastern side of Hickson Road currently presents the first barrier in achieving this. Formulating a strong edge to the west side of Hickson Road unifies the street and contains traffic noise, enabling it to be developed to carry all forms of traffic and future light rail. 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

