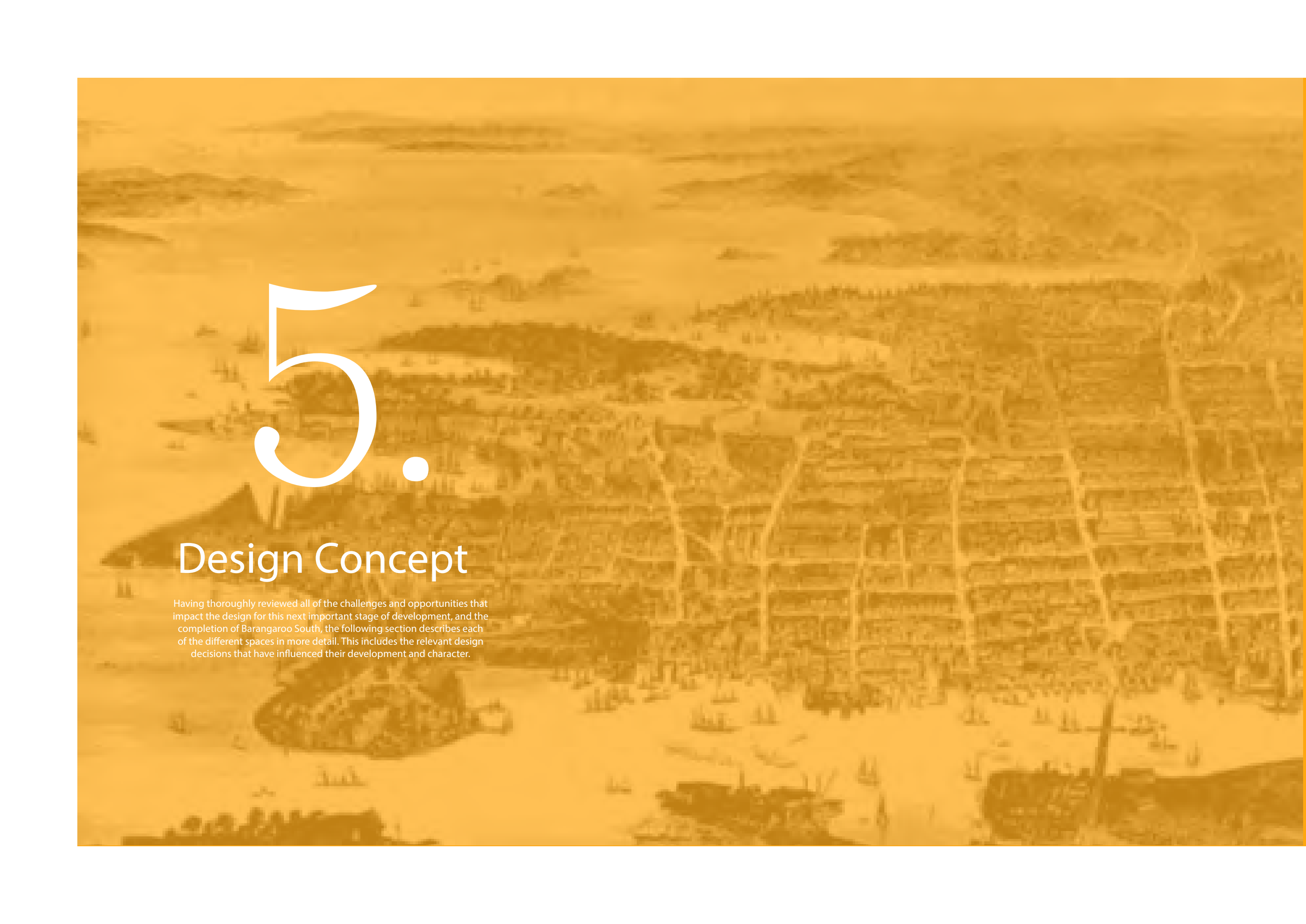


An aerial photograph of a coastal landscape, overlaid with a semi-transparent orange filter. The image shows a body of water in the foreground, with a grid of land parcels extending into the distance. The parcels are separated by thin lines, possibly roads or boundaries. The overall tone is warm and monochromatic due to the orange overlay.

5.

Design Concept

Having thoroughly reviewed all of the challenges and opportunities that impact the design for this next important stage of development, and the completion of Barangaroo South, the following section describes each of the different spaces in more detail. This includes the relevant design decisions that have influenced their development and character.

5.1

Public Realm Areas

PUBLIC REALM SPACES AND PLACES

The public realm for Stage 1B is composed of a number of different spaces and places, each defined primarily by their different use and role within this part of the development. An overarching goal of the public realm for Stage 1B is to promote a unified and cohesive urban environment however each space will ultimately have its own unique personality that will depend on use, adjacencies and hierarchy.

Co-ordinating these various spaces so that this entire piece of the development successfully engages with the remaining parts is particularly important. This integration depends on the execution, legibility and quality of the design of all of the public realm.

The Stage 1B public realm has been developed into a series of character zones. These zones have helped to reinforce relationships between various portions of the site and the city, whilst also recognizing the differences in each of the existing conditions and uses. Each zone has its own particular characteristic; the streets adopt the character of the rest of the City's streetscape through the use of an approved palette of materials and furniture whereas Hickson Park takes on a connected but totally different character.

The following diagrams indicate the different spaces that collectively combine to create the public realm for Stage 1B. They are described further as follows:

WATERMANS QUAY

Watermans Quay is the only true east west orientated street in Barangaroo. Its character and detailing will be developed according to the City of Sydney public realm standards. In comparison to other streets Watermans Quay it is wide. It will include generous street tree planting composed around the basement entries for the future Residential buildings and Tower One.

BARANGAROO AVENUE

Barangaroo Avenue is an extension of the existing street northward to the boundary of Barangaroo Central. It provides the primary access to Port Cochere of Crown Sydney and R4A. It also engages directly with Watermans Cove on its western edge.

HICKSON PARK

Hickson Park will become a significant new urban park in the CBD. It will provide opportunities to relax and meet away from the busy Barangaroo Streets. The park is sunny and protected from cold winds in winter + shady to allow respite in summer. Hickson Park will be composed as a simple yet contemporary space that includes a large flexible lawn area and significant tree planting.

WULUGUL WALK AND BOARDWALK

Wulugul Walk will complete part of the continuous foreshore walk and will join the existing respective completed parts in Stage1A and Barangaroo Central. It will continue a double avenue of tree planting in front of Crown Sydney and around Watermans Cove. The Boardwalk will provide the canvas for a variety of new activities and events and will incorporate the existing former Spirit of Tasmania loading dock into a usable part of the public realm.

WATERMANS COVE

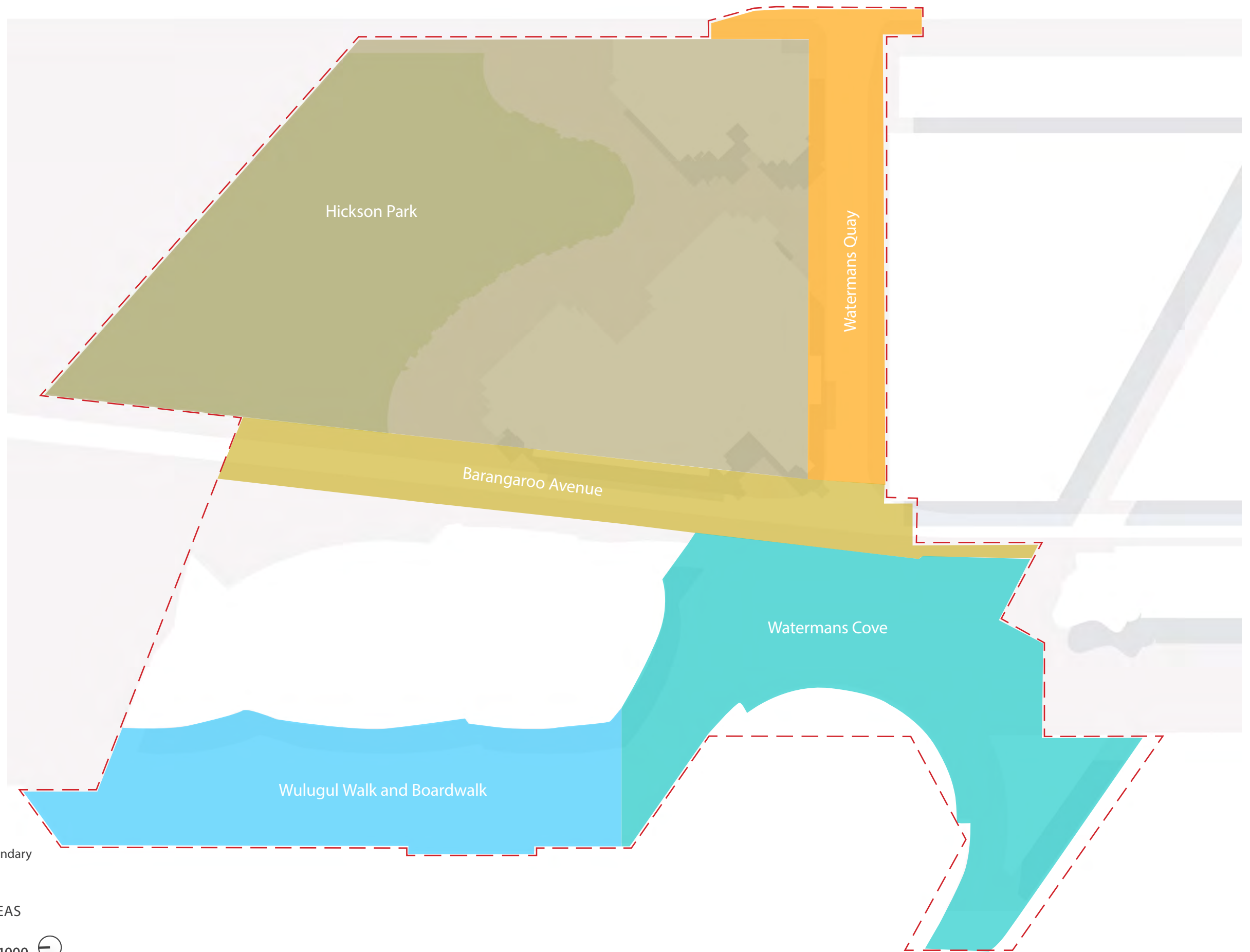
Arguably the defining place in Stage 1B and the whole of the development of Barangaroo. Watermans Cove will integrate a series of key axes and vistas to bring together various different characters into one place. Watermans Cove will become the site for major events and celebrations and will be a key place to get close to the water and engage with the magnificent Harbour.

LEGEND

- Watermans Quay
- Barangaroo Avenue
- Hickson Park
- Wulugul Walk and Boardwalk
- Watermans Cove
- Development application boundary

STAGE 1B PUBLIC DOMAIN AREAS

1:1000

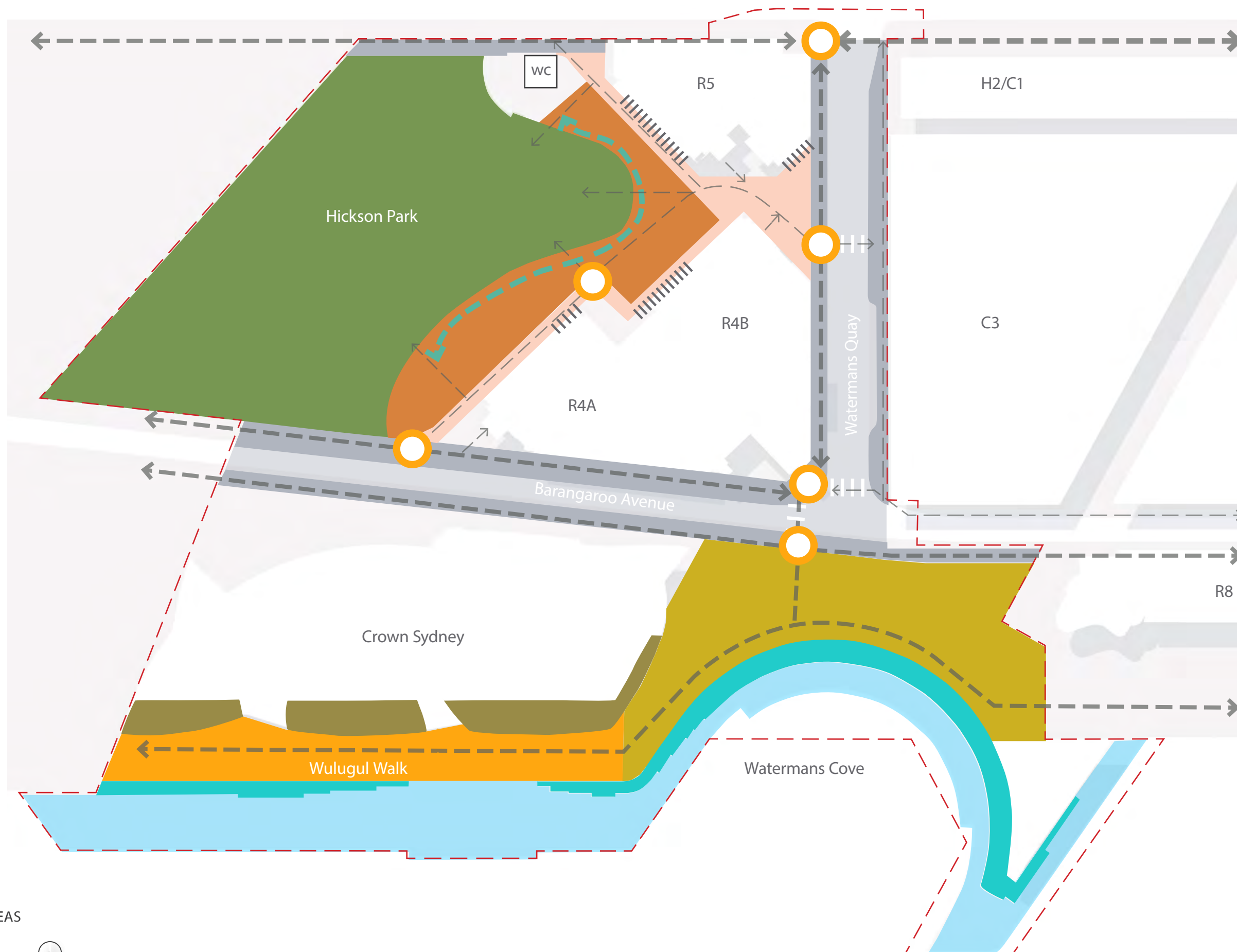


LEGEND

-  Pedestrian Node
-  Waterfront
-  Greenspace
-  Promenade
-  Waterfront Cove
-  Tree Belt
-  Streetscapes
-  Building Edges
-  Public steps + Terraces
-  Licensed Public Domain
-  Commercial Frontages
-  Park Paths
-  Pedestrian Crossings
-  Primary Pedestrian Routes
-  Secondary Pedestrian Routes
-  Roadways
-  Public Toilets

STAGE 1B PUBLIC DOMAIN AREAS

1:1000 



5.2

Events

ACTIVATION AND EVENTS WITHIN THE PUBLIC REALM

To activate spaces each part of the public realm is planned to have a clear and defined purpose and identity. The variety of scales and treatments of space offer the potential for a special collage of experiences to unfold. They will grow as places that are both extraordinary during the day and magical at night. The places are envisaged as green streets and spaces that will add to the unique character of the site and will reinforce the identity and brand of the place.

The adjacent diagrams define a number of spaces that can be programmed for particular events either individually or as a group for bigger festivals and community events. We envisage that Hickson Park and Watermans Cove will provide the most dramatic and flexible spaces to accommodate more significant events.

All event capacity numbers are indicative only, final capacity to be determined by events planner.

LEGEND

- Market Stall
- Temporary Outdoor Dining
- Small Event - 500 people
- Medium Event - 1000 people
- Large Event - 2000 people
- Staging Area
- Flexible Event Space



MARKETS



OUTDOOR EVENTS - CONCERT/ CINEMA



FLEXIBLE EVENT SPACE

5.3

Public Areas Strategy

STRATEGIES FOR INTEGRATION AND ACTIVATION OF PUBLIC DOMAIN WITHIN THE SITE AND SURROUNDINGS

The scheme creates an integrated and cohesive public domain. A landscape of spaces which people will inhabit and enjoy, creating a place that is attractive, safe, uncluttered, and inclusive for all. This promotes a legible and cohesive development through a hierarchy of streets and spaces providing recognisable routes, places and landmarks to help people navigate through the city

The public domain creates places to explore and discover, relax and play, inspiring and enabling sustainable lifestyles for resident and visitors alike. This project also helps reconnect people with nature by creating a new urban landscape of connected spaces that integrate native species planting and habitat provision.

The public domain weaves into the buildings using a series of accessible and visually-stimulating interventions that engage with the public. This borrowed landscape of a rich and lush activated foreground uses combinations of beautiful planting, alfresco seating areas and framed vistas looking through to distant spaces. This will encourage permeable façades, regular moments for rest or activity, and enable installations by artists or performers

The public domain within Barangaroo South will be a rich tapestry of quiet and active connected spaces that plug directly in to the existing and future connections to the north, east and south. The strategy is;

- consolidate and enhance connections,
- providing visual and physical continuity across and along the streets

Amenity provision will aim to optimise variety to suit the varied user group needs, whilst maintaining character and quality. Multi-functionality and a layered landscape approach will help achieve this ambition and respond to the unique architecture.



MOMENTS OF REST + ACTIVITY



RELAX + PLAY



CONNECTED + INTEGRATED SPACES



SHADY, PERMEABLE SPACES TO RECONNECT + UNWIND



RELAX + PLAY



EXPLORE + DISCOVER



BEAUTIFUL PLANTING + INCLUSIVE ALFRESCO DINING

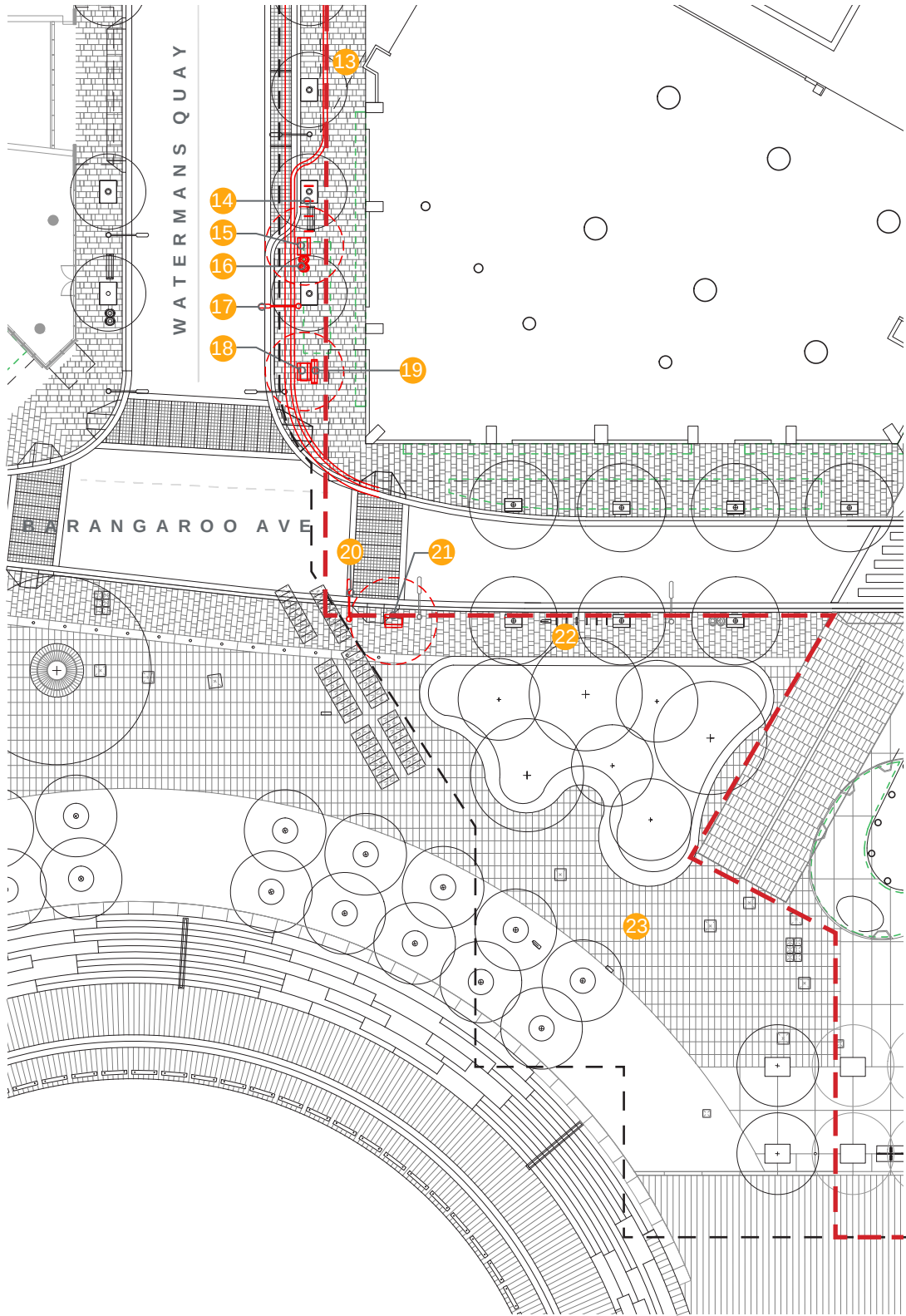
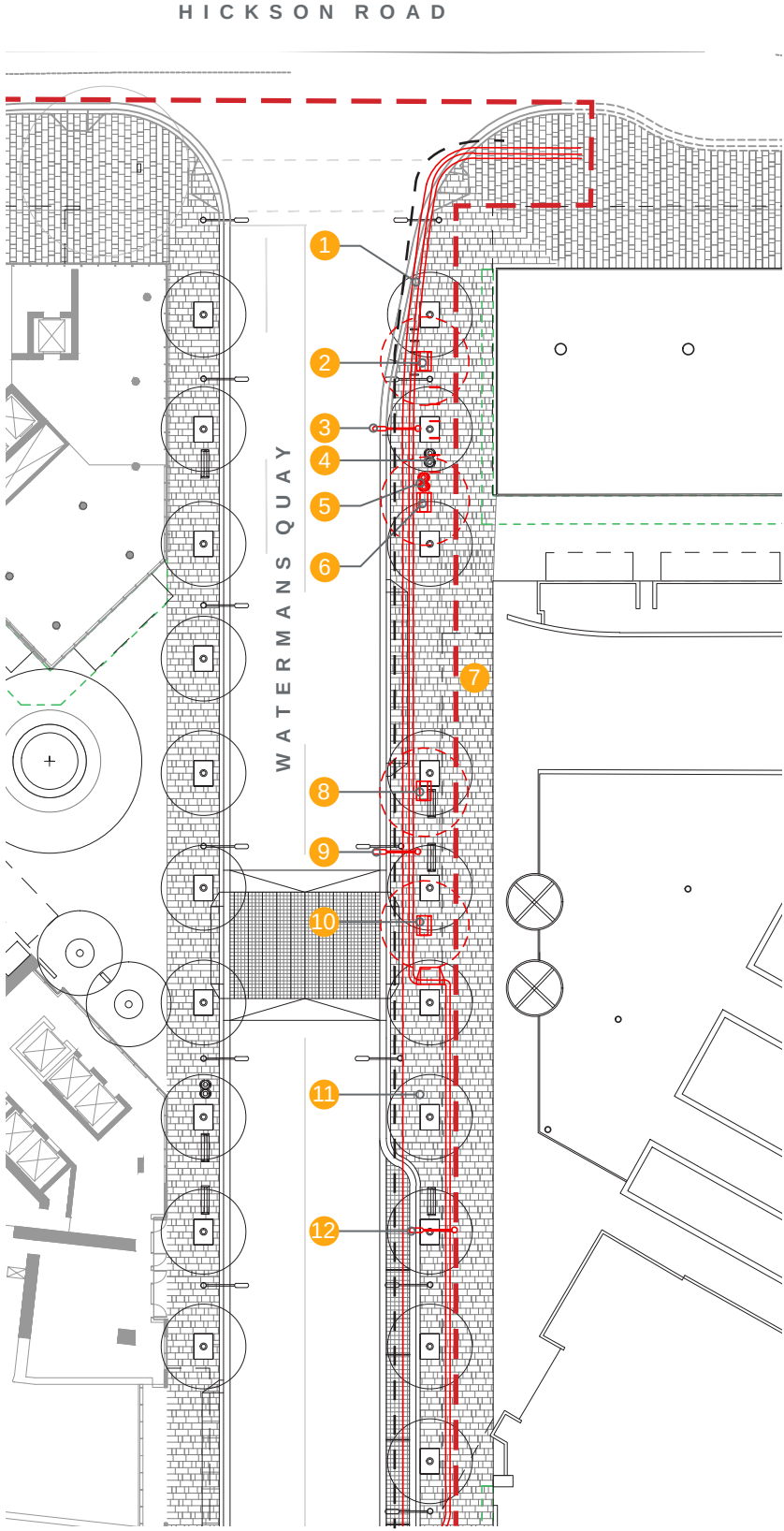
WATERMANS QUAY STAGE 1A AND
1B INTERFACE PLAN

- Development application boundary
- - - Extent of stage 1A works
- Stage 1A works already constructed
- Proposed Stage 1B works

- 1 Existing kerb and gutter to be removed
- 2 Existing tree and pit to be removed
- 3 Existing smart pole to be relocated
- 4 Existing bike rack to be relocated
- 5 Existing bin to be relocated
- 6 Existing tree and pit to be removed
- 7 Existing paving to be salvaged and re-laid
- 8 Existing tree and pit to be removed
- 9 Existing smart pole to be relocated
- 10 Existing tree and pit to be removed
- 11 Existing taxi zone to be relocated
- 12 Existing smart pole to be relocated
- 13 Existing paving to be salvaged and re-laid
- 14 Existing bike rack to be relocated
- 15 Existing tree and pit to be removed
- 16 Existing bin to be relocated
- 17 Existing smart pole to be relocated
- 18 Existing tree and pit to be removed
- 19 Existing seat to be relocated
- 20 Existing smart pole to be relocated
- 21 Existing tree and pit to be removed
- 22 Existing paving to be retained
- 23 Existing pre cast concrete to be removed



KEY PLAN

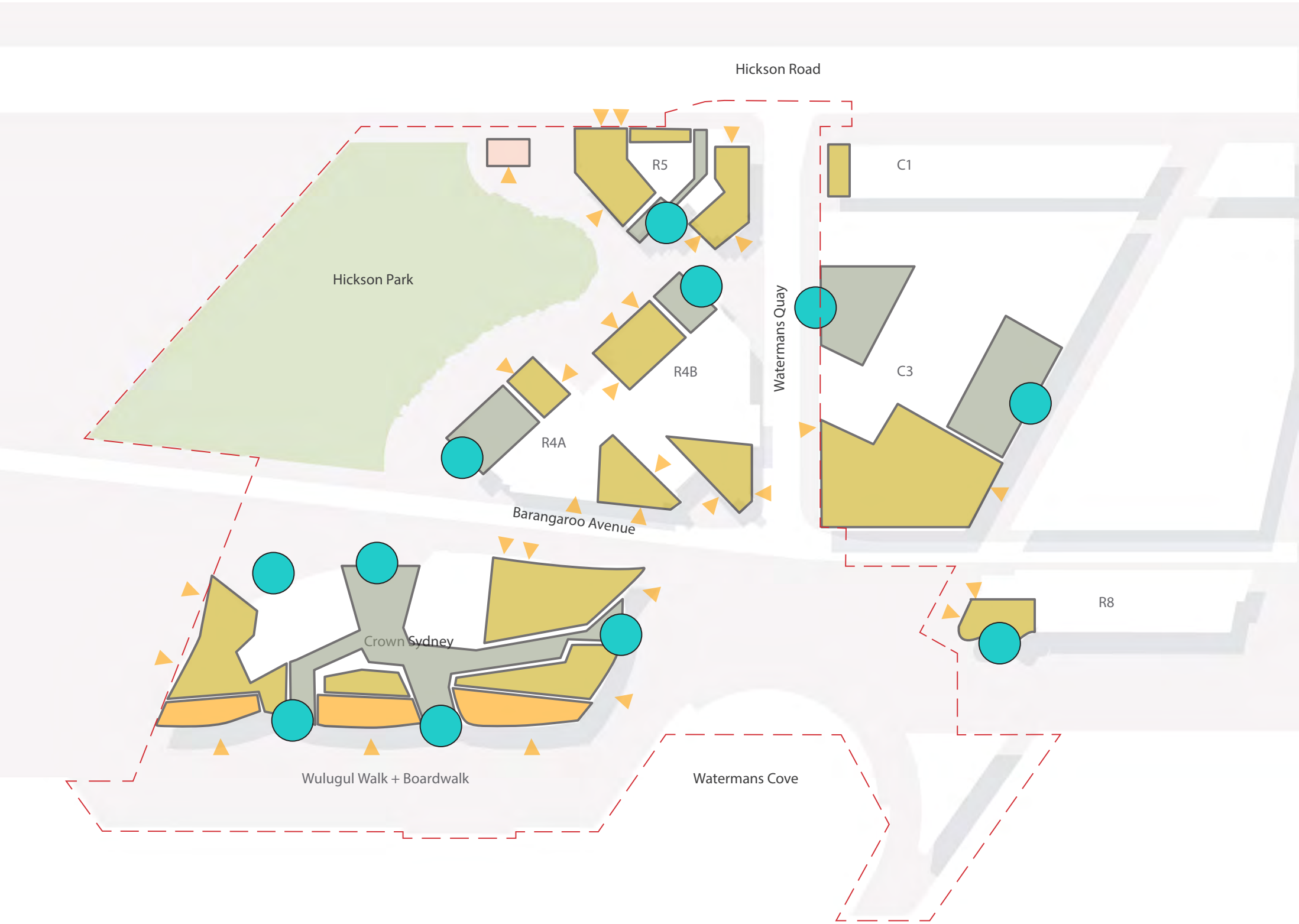


GROUND LEVEL USES

The streetscapes on both sides of the two main streets in Barangaroo South will be activated by a variety of entry lobbies and retail frontages. Key main building lobbies that have influenced the design of the public realm include the lobby for International Tower 1 in Stage 1A and the R4A lobby on Barangaroo Avenue. The diagram opposite also identifies the many other minor entries into the other ground floor retail areas that are proposed at the edges of the streets.

LEGEND

- Main Building Entrance
- Alternative Entry
- Retail/restaurant
- Lobby
- Amenities Block
- Licensed Public Domain
- Development application boundary



VEHICLE CIRCULATION

Vehicular Circulation from Watermans Quay will include two way public traffic for access to the various destinations of Barangaroo South. Significant traffic flow is also expected for access to the various driveway and basement entries on both streets. The northern part of Barangaroo Avenue is expected to be particularly busy due because it is the primary access for the porte cochere for Crown Sydney and R4A. The public realm and street tree locations for the streetscapes will be required to address safety and sightlines constraints.

LEGEND

- Underground carpark entrance
- Drop off area
- Traffic movement
- Future link
- Development application boundary



PEDESTRIAN + CYCLE CIRCULATION

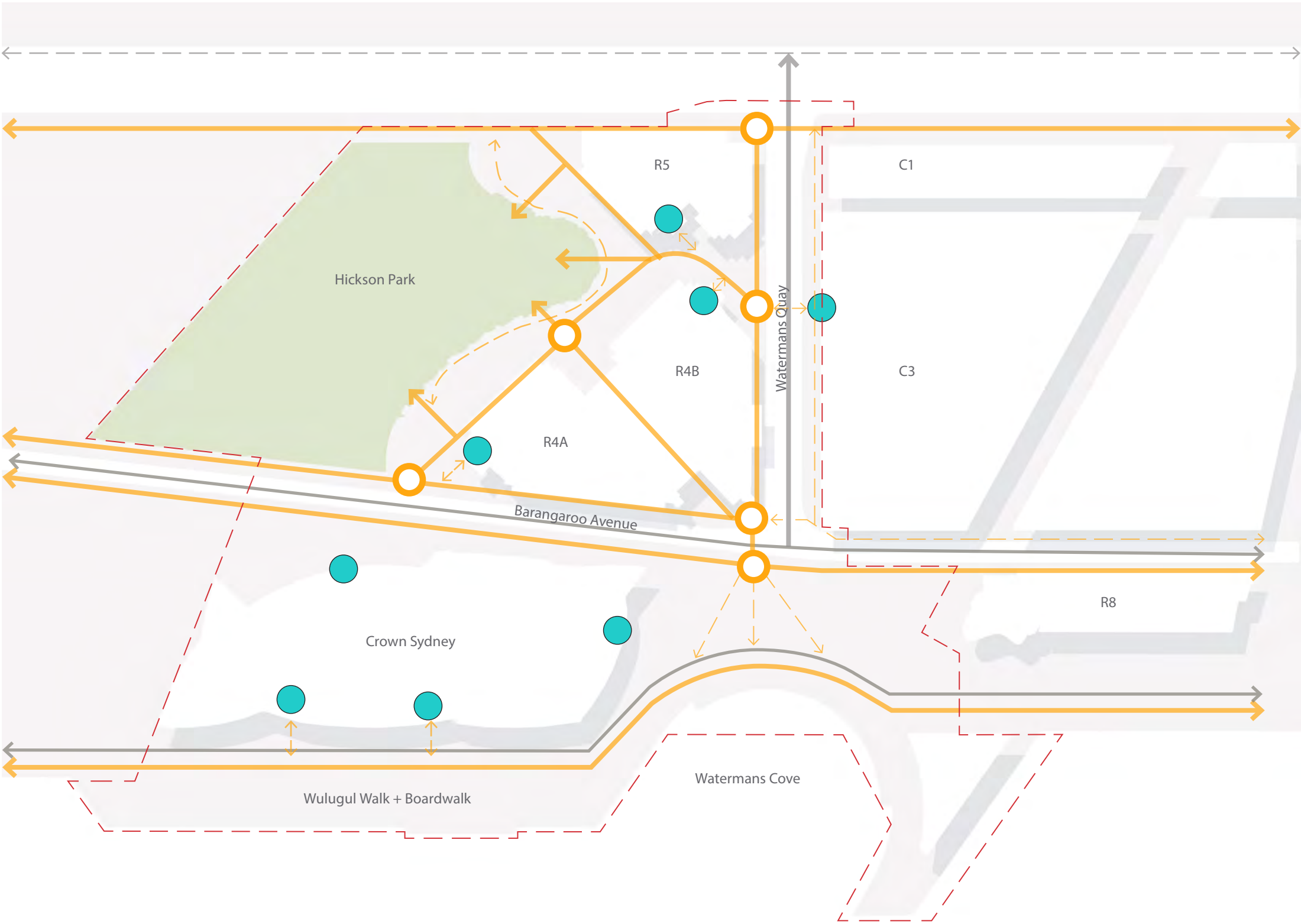
One of the key principles of the public realm is to create numerous clear connections to the city and the local context and in doing so provide a pedestrian friendly environment which connects the magnificent promenade of Barangaroo Reserve, Kings St wharf to complete a significant part of the continuous foreshore walk in this part of the Harbour. Barangaroo South as a whole needs to embed itself seamlessly into this part of the city and attract pedestrians from the adjacent neighbourhoods to frequent all parts of the generous public space, and the new city park that it will offer. Watermans Quay and Barangaroo Avenue will obviously be key streets that will facilitate these connections. A vital part of the design will therefore be to ensure that the key streets are significant urban spaces in their own right with generous tree planting and well thought out compositions of associated street furniture.

Once complete Barangaroo South will be subjected to a significant amount of pedestrian volume that will include visitors and tourists. However on a day to day level the design will need to accommodate the thousands of local residents and workers that will call Barangaroo home. Stage 1B is envisaged as a completely accessible and well connected precinct and will service the significant pedestrian movement is anticipated during peak times from Tower 1 (in Barangaroo South Stage 1A) through Watermans Quay to Hickson Park, Watermans Cove and Wulugul Walk

All ramps and stairs within Hickson Park and Watermans Cove will comply with Australian accessibility requirements and the relevant components of the Disability Discrimination Act.

LEGEND

- Main entry points
- Major pedestrian node
- ➔ Primary pedestrian route
- ➞ Secondary pedestrian route
- ➞ Proposed future commuter cycle network
- ➞ Primary cycle route
- - - Development application boundary



DRAINAGE

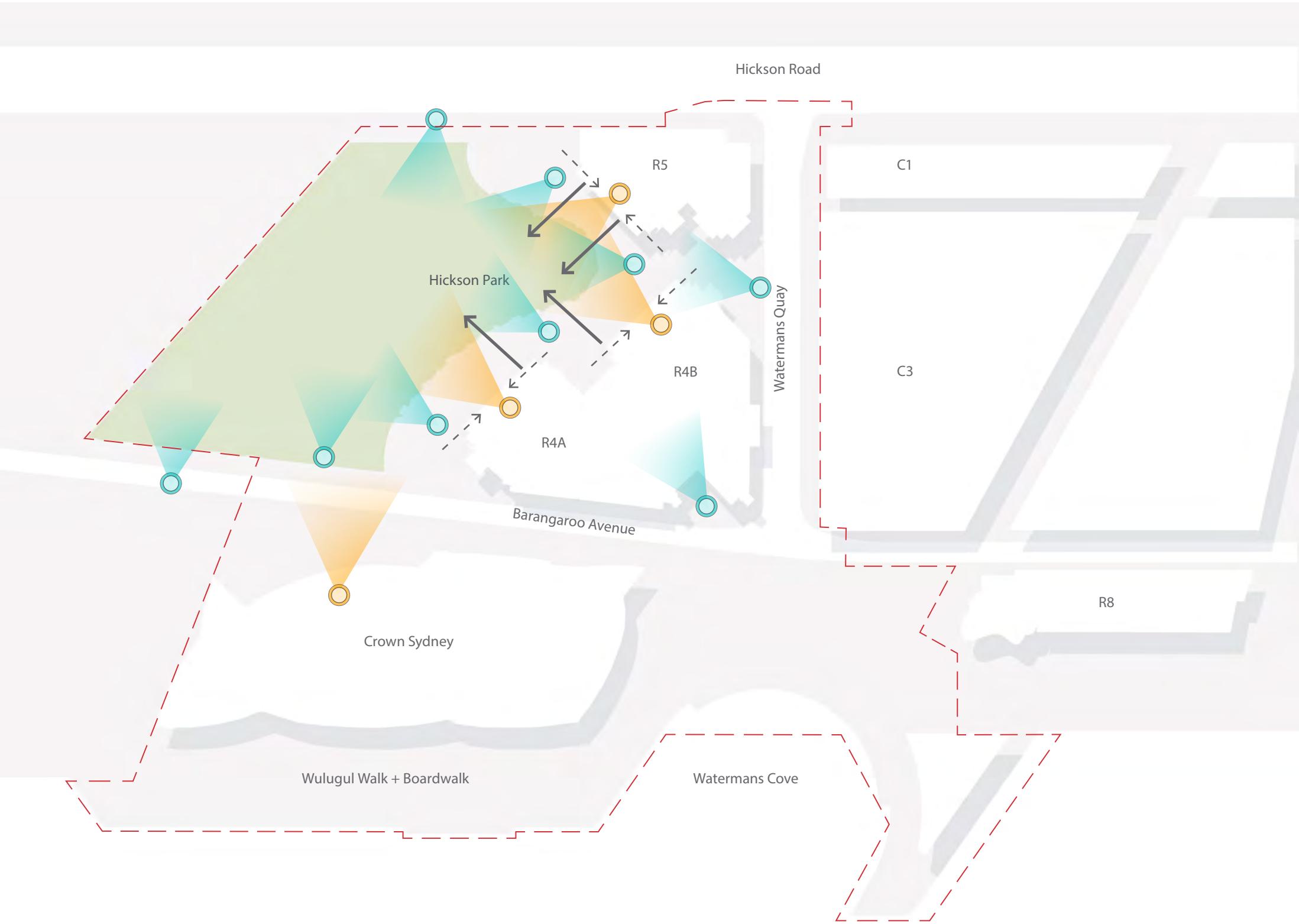
Stormwater run off for all of the streetscape pavements, including the eastern part of the cove, will be directed into the streetscape drainage. Run off for a significant part of the Cove and all of Wulugul Walk will be directed into the tree pits and will pass through soil and drainage media before being directed into the harbour. The Hickson park lawn area will be required to grade to drain and to interface with the adjacent existing levels of the street. There will be no need for a specific drainage design/infrastructure for the basement slab as these have been designed to individual falls (refer civil report and drawings for further detail).



- LEGEND
- Major drainage
 - Minor drainage
 - Development application boundary

VIEWS INTO HICKSON PARK

Hickson Park will be surrounded to the south by the future residential buildings. It will be looked on from the higher floors and podia of these buildings but will also need to facilitate clear views under tree canopies from the various ground floor lobbies and retail spaces. Other key inward views into the park will, in the main, be defined by the buildings these will include the Strada and the main entry into the park from Watermans Quay. One other key aspiration for the design of the park is that it maintains clear views towards the future parklands in Barangaroo Central.

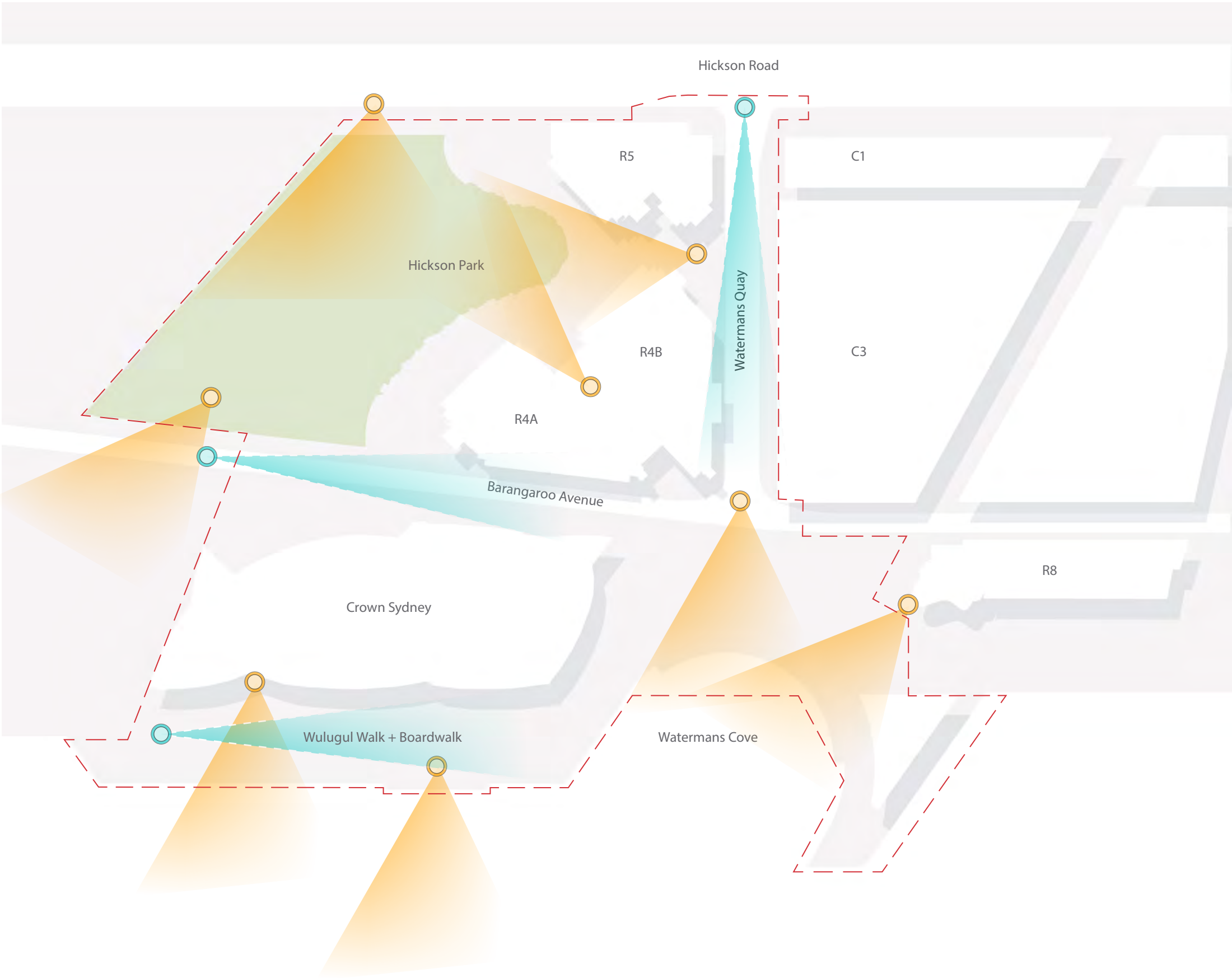


- LEGEND
- Upper floor views
 - Park entry views
 - Retail + F&B views
 - Linear edge views
 - Development application boundary

KEY VIEWS

The site has several significant views that are defined by the orientation of the streetscapes and buildings. Some of the most significant are those that terminate in distant views across the water to the headlands beyond. There will be a variety of views of the public realm from the higher levels of the buildings and podia that will offer residents and workers different opportunities to appreciate the Park and Cove in particular.

Key views will be framed by tree planting where possible. This will include definition of the strong linear views to the north and south on Wulugul Walk and, for the Cove, definition of the linear views created by the axis of Watermans Quay and Shipwrights walk.



LEGEND

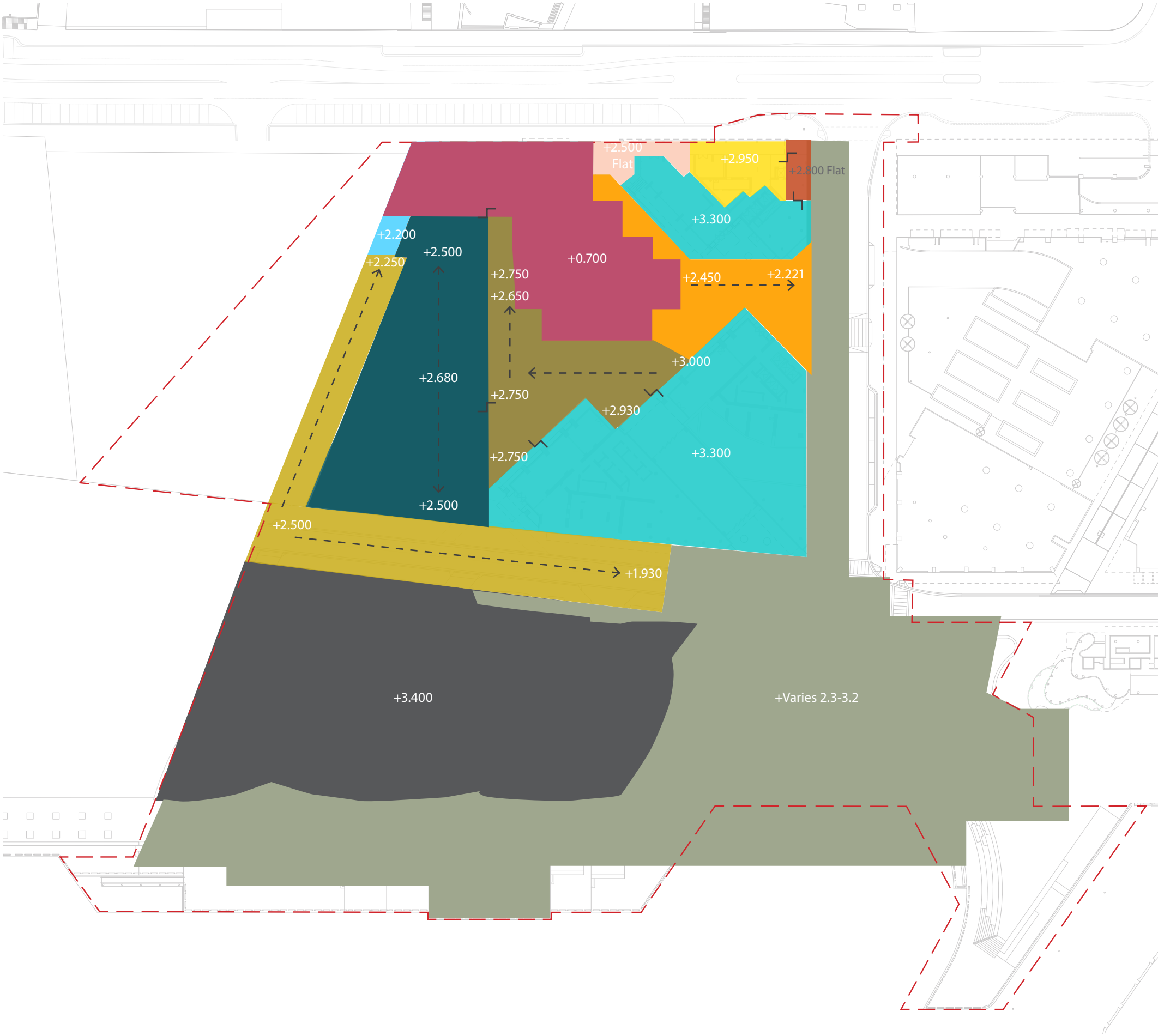
- Key views
- Filtered views
- Development application boundary

BASEMENT SLAB EXTENT

Only small portions of the area of public realm in Stage 1B are not over proposed basement slab or the existing concrete apron. The extent of these slabs are shown in the diagram opposite.

Each of these slabs have a different grade and level, particularly in Hickson Park. The slabs for proposed buidlings are however flat and are set above +RL 3.3. The large area of suspended existing apron will be required to be removed over the proposed new Cove however the existing former Spirit of Tasmania loading dock structure will be retained with all new proposed works being constructed above.

- Slab at +3.400 Flat
- Slab at +3.300 Flat
- Slab at +3.000 - +2.650
- Slab at +2.950
- Slab at +2.800 Flat
- Slab at +2.450 - +2.221
- Slab at +2.680 - +2.500
- Slab at +2.500 Flat
- Slab at +2.500 - +1.930
- Slab at +2.500 - +2.250
- Slab at +2.200 Flat
- Slab at +2.300
- Slab at +0.700
- Step



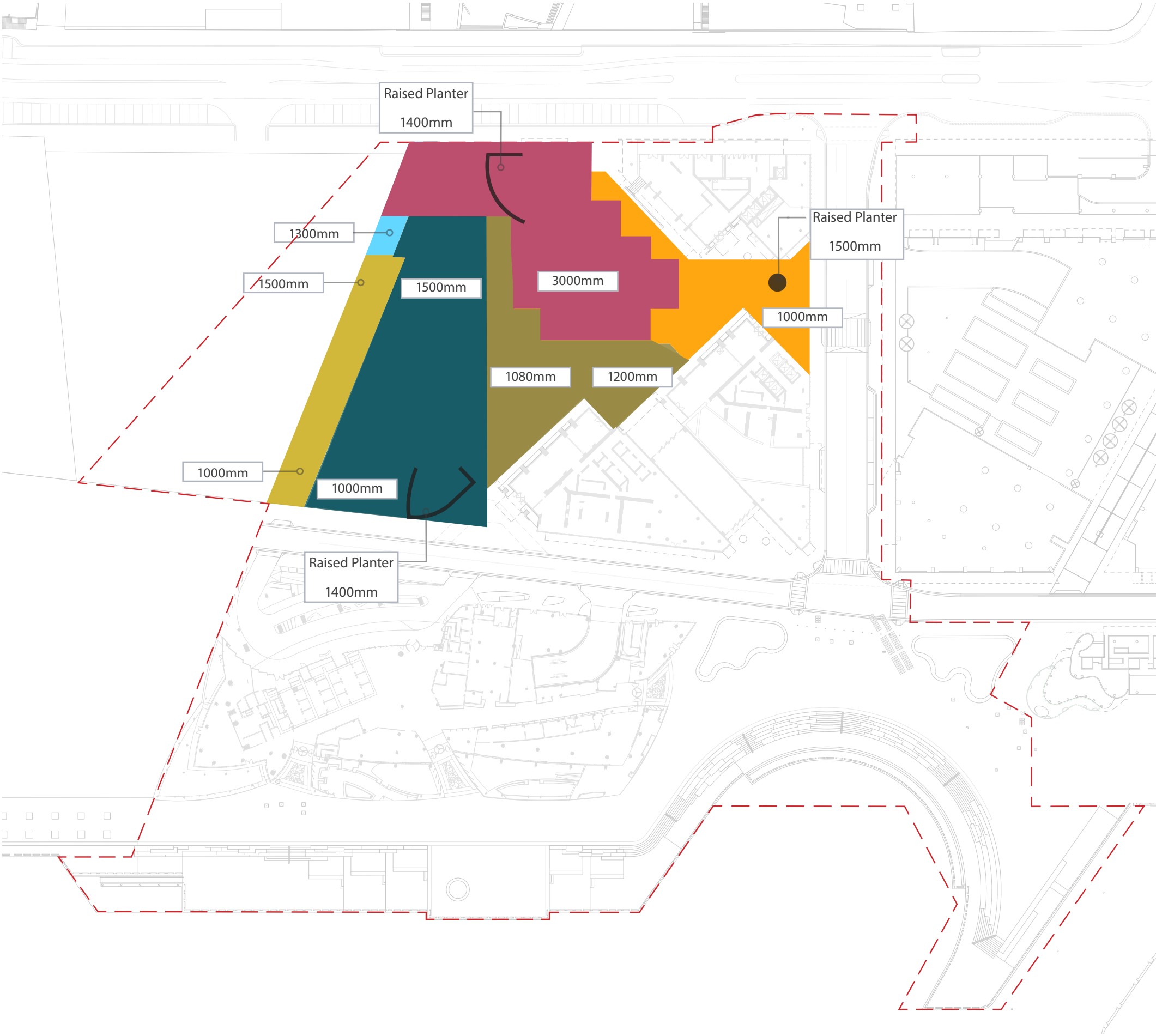
HICKSON PARK - AVAILABLE SOIL VOLUME

The following diagram demonstrates the typical available soil depths for the tree planting over slab for Hickson Park. An area for deep soil has been accommodated in the eastern section of the park. The other slabs are subject to significant fall and the available soil depth will therefore vary considerably. However in accordance with preliminary discussions with the project arborist and soil scientist the following typical soil depths have been determined.

- Not less than 3000mm for the deep soil zone
- Not less than 1200mm for trees planted within the tree belt
- Not less than 1400mm for signature fig tree planting

The available soil depth is also affected at the interface areas with the park to Hickson Road and Barangaroo Avenue. This however does not pose an issue as there is ample soil depth for turf.

- Slab at +2.200 - +2.100
- Slab at +2.450 - +2.221
- Slab at +3.000 - +2.650
- Slab at +2.680 - +2.500
- Slab at +2.500 - +2.250
- Slab at +0.700

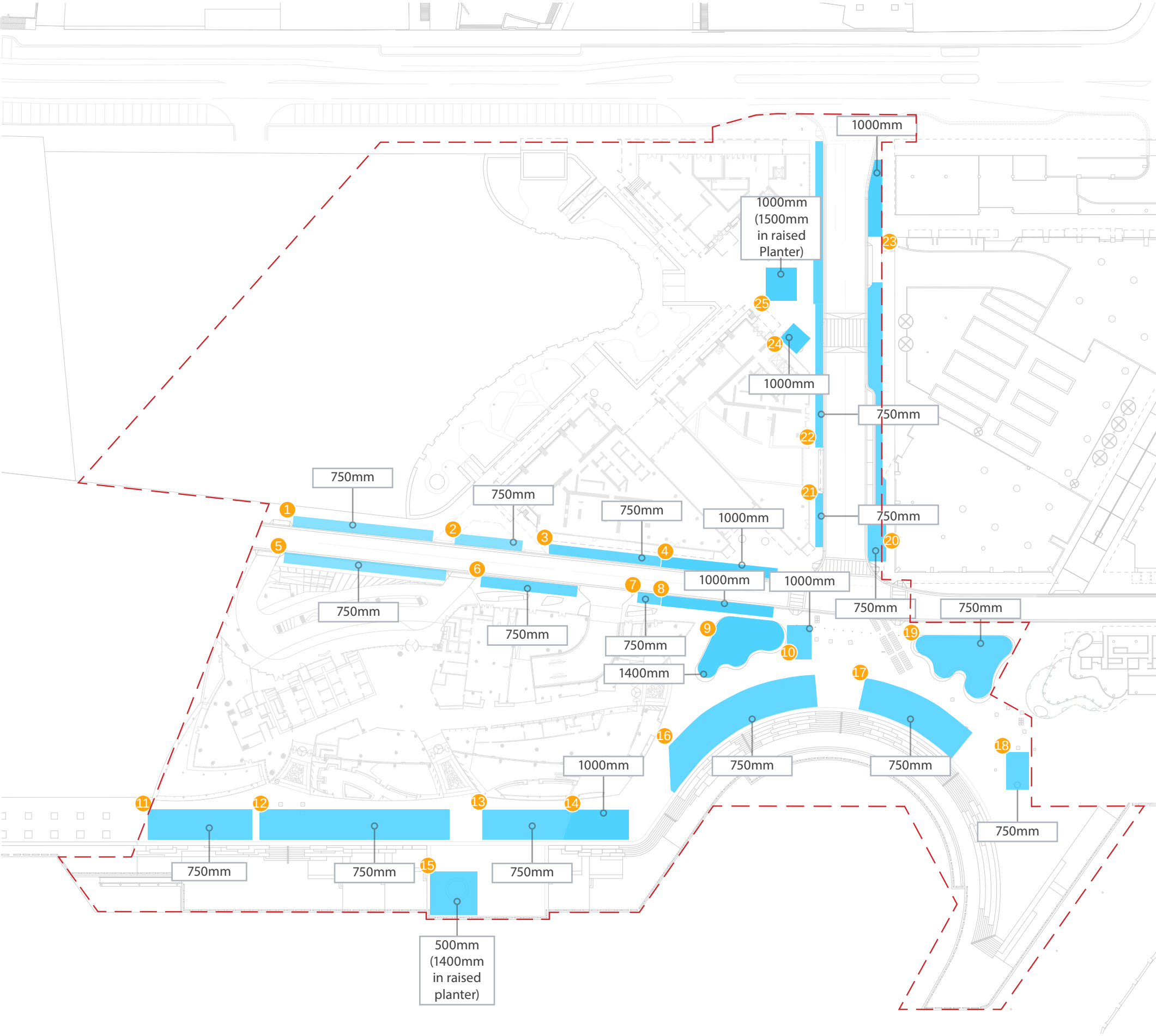


AVAILABLE SOIL VOLUME

The following diagram demonstrates the indicative available soil volume and nominal soil depths for the tree planting over slab, excluding Hickson Park. They will be further refined in the detail stage. We have coordinated with the project arborist and soil scientist for the purpose of these initial calculations have determined the following soil volume benchmarks:

- Not less than 18m3 soil per individual tree
- Not less than 100m3 soil per signature fig tree

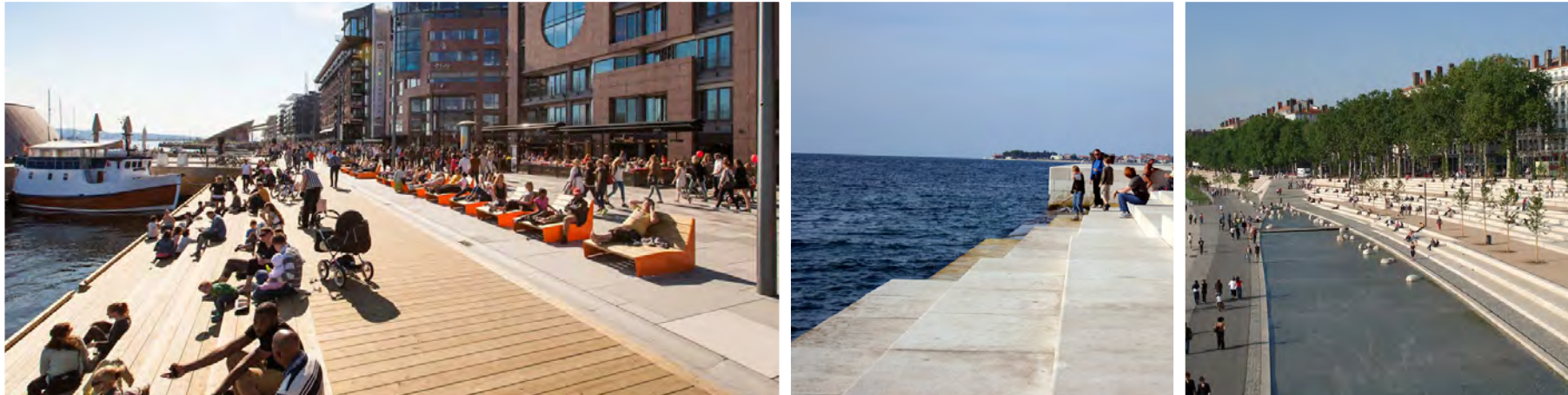
- 1 30000mm x 5000mm x 750mm = 90m3
- 2 12000mm x 4000mm x 750mm = 36m3
- 3 24000mm x 4000mm x 750mm = 72m3
- 4 18000mm x 4000mm x 1000mm = 72m3
- 5 40000mm x 3000mm x 750mm = 90m3
- 6 24000mm x 3000mm x 750mm = 54m3
- 7 8000mm 3000mm x 750mm = 18m3
- 8 18000mm x 4000mm x 1000mm = 72m3
- 9 Varies x Varies x 1400mm = 266m3
- 10 10000mm x 10000mm x 1000mm = 100m3
- 11 27000mm x 9000mm x 750mm = 182m3
- 12 48000mm x 9000mm x 750mm = 324m3
- 13 22000mm x 9000mm x 750mm = 148.5m3
- 14 12000mm x 9000mm x 1000mm = 108m3
- 15 14500mm x 14500mm x 500mm = 100m3
- 16 Varies x Varies x 750mm = 252m3
- 17 Varies x Varies x 750mm = 180m
- 18 8000mm x 6000mm x 750mm = 36m3
- 19 Varies x Varies x 750mm = 182m3
- 20 Varies x Varies x 750mm = 162m3
- 21 3000mm x 16000mm x 750mm = 36m3
- 22 Varies x Varies x 750mm = 180m3
- 23 Varies x Varies x 1000mm = 54m3
- 24 6000mm x 6000mm x 1000mm = 36m3
- 25 10000mmx 10000mm x 1000mm = 100m3



CHARACTER ZONES

Stage 1B encapsulates three distinct character zones. As part of our overarching strategy, we aimed to draw out and accentuate them. The following images and supporting diagrams demonstrate the look and feel of the Waterfront, Streetscape and Park characters and their respective location within Stage 1B.

WATERFRONT



STREETSCAPE



PARK



STAGE 1B PUBLIC DOMAIN CHARACTER AREAS

LEGEND

- 1 Park character
- 2 Streetscape character
- 3 Waterfront character
- Outside of 1B DA package
- Development application boundary



STAGE 1B PUBLIC DOMAIN MASTER PLAN

- Development application boundary
- Barangaroo South 1B boundary

- 1 Hickson Road
- 2 Watermans Quay
- 3 Watermans Cove
- 4 Barangaroo Avenue
- 5 Hickson Park
- 6 Wulugul Walk + Boardwalk
- 7 Former Spirit of Tasmania loading dock
- 8 Barangaroo Central
- 9 Barangaroo South Stage 1A
- 10 R5
- 11 R4B
- 12 R4A
- 13 Crown Sydney
- 14 International Towers Sydney Tower one
- 15 Amenities and Storage Building

