

WATERMANS COVE INFRASTRUCTURE PLAN

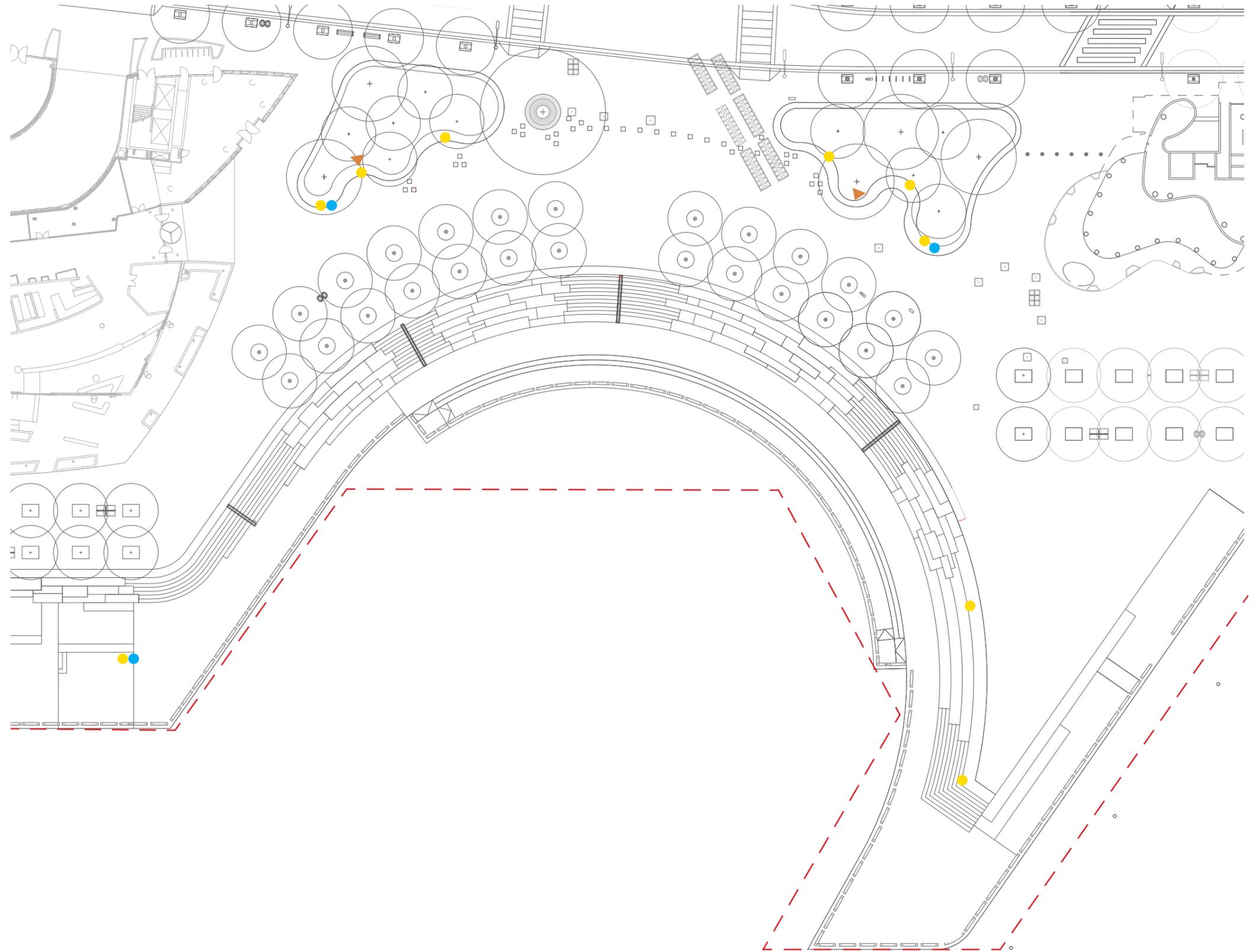
The adjacent diagram shows the current indicative locations of required infrastructure for Watermans Cove.



KEY PLAN

LEGEND

- Power outlet
- Water outlet
- ▶ Security camera on outreach arm
- ▶ Upright security camera



6.4

Bollard & Vehicle Deterrent Strategy

There is a need for the public realm to be resilient – yet flexible where possible – for potential vehicle attack. This requires the inclusion of a variety of vehicular deterrent barriers at certain locations. These have currently been located at areas where there are wide and open entrances off of the streets into large/key areas of public domain and also where these areas are deemed the most risk. The design has evolved to include a suggestion for these areas pending the detailed evaluation, and subsequent recommendations, by a security consultant. Therefore final sizes, locations, materials, etc. are all subject to design development.

PUBLIC DOMAIN CHARACTER

The design for these “barriers” have taken care to consider the overall aesthetic and character of the public domain and consider important key view lines and other functional requirements including access and regular maintenance for the Harbour Heat Exchange Pits located at the edge of Watermans Cove.

One of the overarching principles that have been applied has been to ensure that the character of the public realm has been carefully considered throughout the design and integration of the appropriate vehicular deterrents. This has included an approach that has ensured that the amount of additional “clutter” in the public realm has been minimised and that any additional elements would be able to also provide a meaningful contribution to the character – and use – of the respective spaces.

INTEGRATION WITH STREETScape ELEMENTS

In accordance with the above the design of the “bollards” has evolved into a carefully placed series of blocks that provide a strong relationship to the materiality of the place and that also form a distinctive part of the general furniture suite for the public

domain. We see them as a suite of different sized blocks that can facilitate casual sitting and gathering spots at the key arrival spaces. Rather than just a formal row of bollards we also see these elements composed in different parts of the public realm to encourage group seating and “catching up” spots.

In this way these blocks are able to appear not as a formal vehicular deterrent but a part of the public domain that appears to be an integrated and meaningful component.

Each specific location has required a careful consideration of adjacent elements – particularly along Watermans Quay and Barangaroo Avenue – including tree planting, light poles, bins and benches so that the key pedestrian access pathways are clear of obstruction. These important entrances into these spaces must continue to feel welcoming and accessible in addition to being safe.

In addition to the use of blocks we have also proposed some areas where a traditional City of Sydney bollard (or a slight adaption thereof) will be applied. This is in particular locations where a more urban and traditional approach to the selection and placement of bollards is required.

LOCATIONS

The various locations for the inclusion of the sandstone blocks and the CoS Bollards are described in greater detail below.

Watermans Cove (at the end of Waterman’s Quay)

The blocks final size will consider views down the street to the cove. There will need to be a small amount of blocks that are not permanently fixed into the pavement because of the need to move them periodically when access is required to the HHR pits. All of these blocks will be placed randomly but generally with a maximum gap of 1600mm.

Watermans Quay (between the residential towers)

The blocks final size will consider the key view into the park from the street. These blocks will be placed randomly but generally with a maximum gap of 1600mm.

R4A Porte Cochere (off Barangaroo Avenue)

These will take the form of the traditional bollard primarily to respect the more formal arrival to the tower. They will be of the City of Sydney suite of furniture to match others that are installed along Barangaroo Avenue.

Hickson Park (Barangaroo Avenue and Hickson Road interfaces)

The blocks final size will consider key views into the park. These blocks will be placed randomly but with a maximum gap of 1600mm. They will promote themselves as informal seats. They will be placed within a continuous flush sandstone edge that matches the width of the sandstone walls/tree belt edge. This follows the distinctive language of the rest of the furniture and walls within the park and appear as an extruded element on this important edge. Access is required for bump in and bump out of events into the park so some of these blocks would also be moveable or have additional bollards to facilitate access.

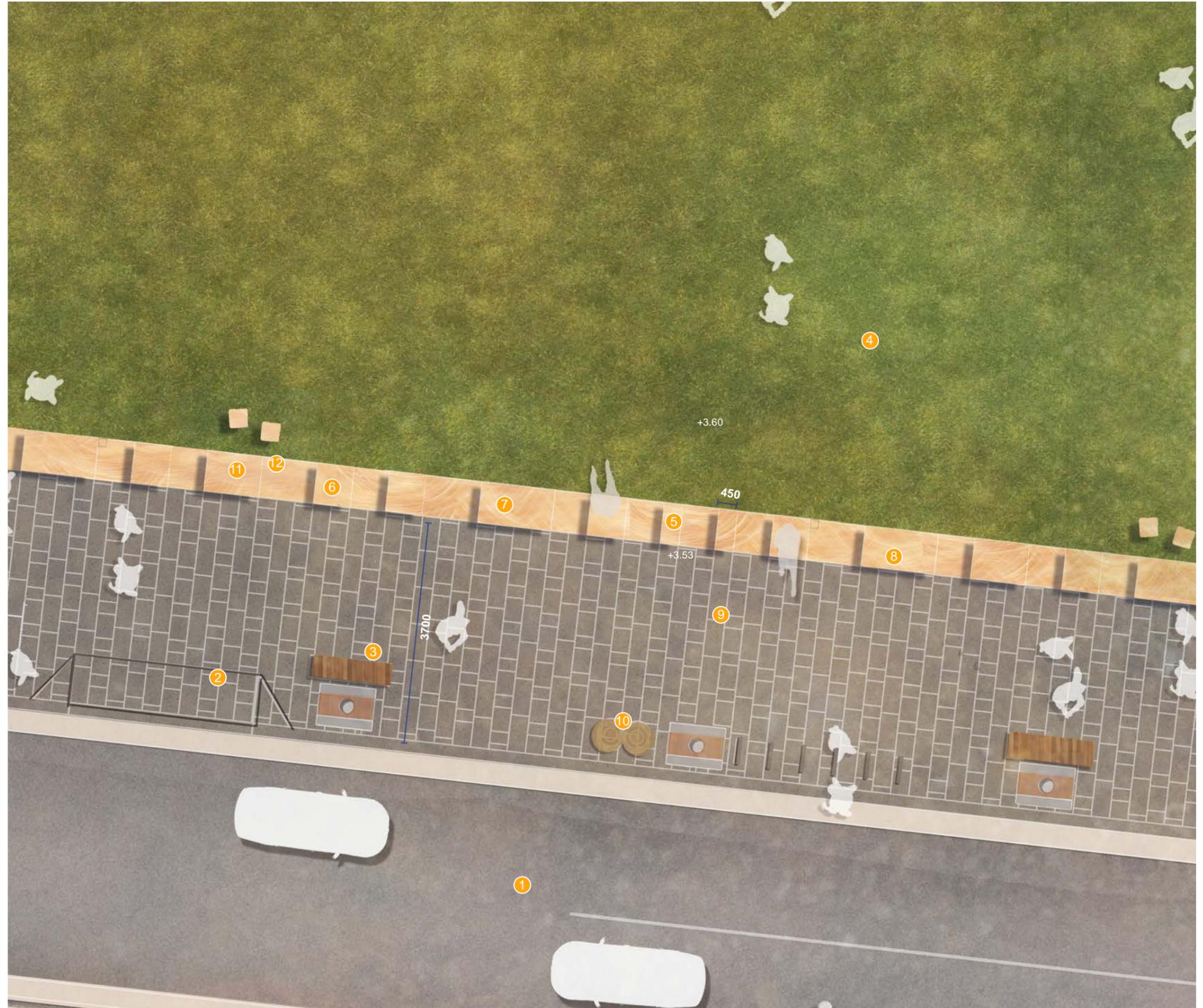
BARANGAROO AVENUE BOLLARD STRATEGY

- 1 Barangaroo Avenue
- 2 Temporary Bump-in Bump out crossover
- 3 City of Sydney standard bench
- 4 Hickson Park
- 5 Small sandstone blocks / vehicle deterrents
- 6 Medium sandstone seat / vehicle deterrent
- 7 Large sandstone seat / vehicle deterrent A
- 8 Large sandstone seat / vehicle deterrent B
- 9 City of Sydney granite paving
- 10 City of Sydney standard bin
- 11 Flush sandstone edge
- 12 Concealed drainage



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HICKSON ROAD BOLLARD STRATEGY

--- Development application boundary

- ① Hickson Road
- ② City of Sydney granite paving
- ③ *Ficus macrophylla* Signiture feature tree
- ④ Hickson Park
- ⑤ Small sandstone blocks / vehicle deterrents
- ⑥ Medium sandstone seat / vehicle deterrent
- ⑦ Large sandstone seat / vehicle deterrent A
- ⑧ Large sandstone seat / vehicle deterrent B
- ⑨ Regular sandstone seat



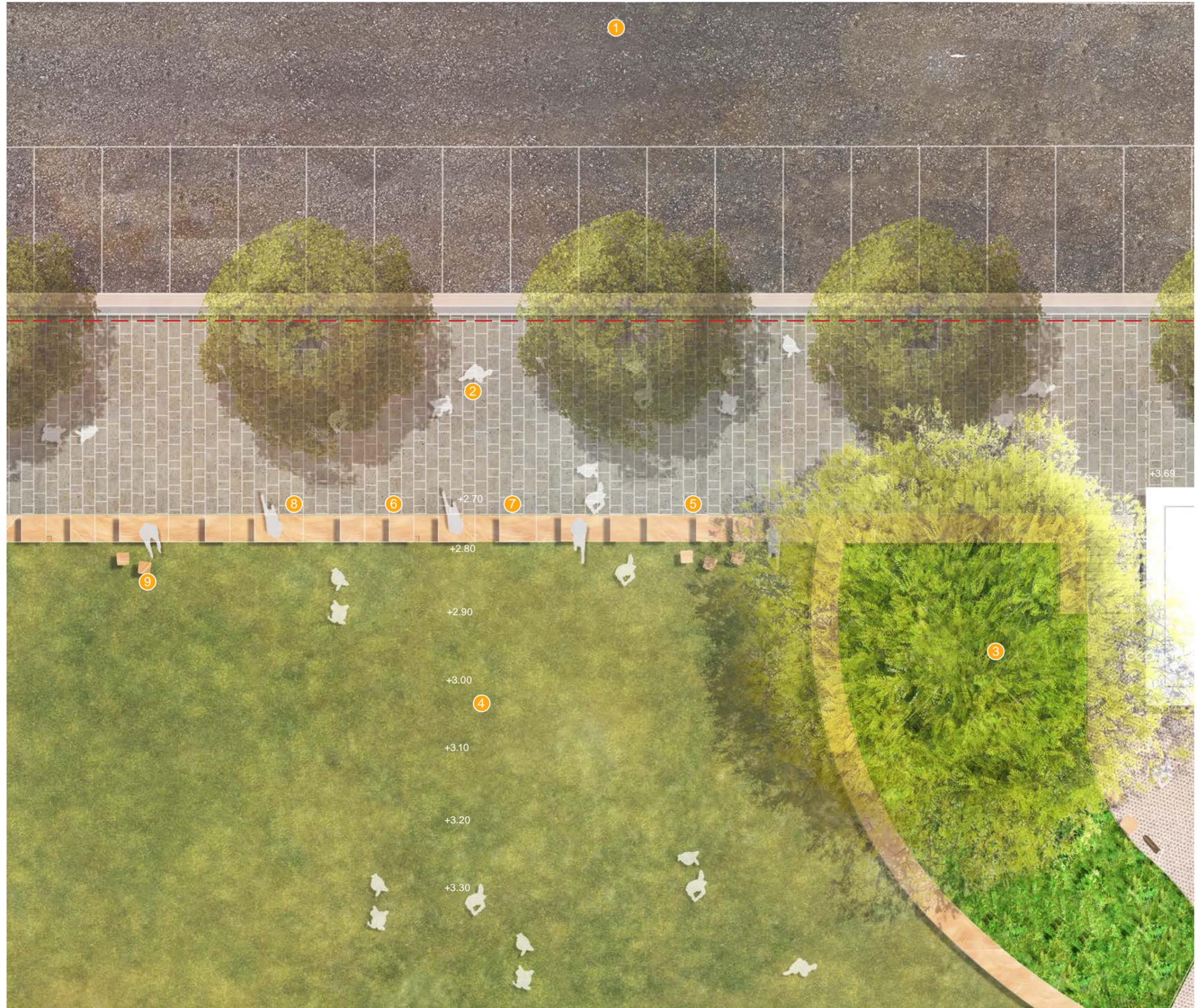
KEY PLAN

1:150

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KEY PLAN 1:150

WATERMANS COVE BOLLARD STRATEGY

- 1 Barangaroo Avenue
- 2 Barangaroo Avenue pedestrian crossing
- 3 Cove paving - pre-cast concrete paver
- 4 Cast iron fig tree grate
- 5 Raised planter/seat
- 6 Porphyry paving
- 7 Concrete blocks / vehicle deterrents
- 8 Underground heat exchange infrastructure pits
- 9 "removeable" concrete blocks



KEY PLAN

1:150

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