

## 7.5 CULTURE AND DESIGN



### A safe and welcoming place to live and visit

A range of passive surveillance strategies, active uses at street level and long trading hours will provide a safe environment day and night.

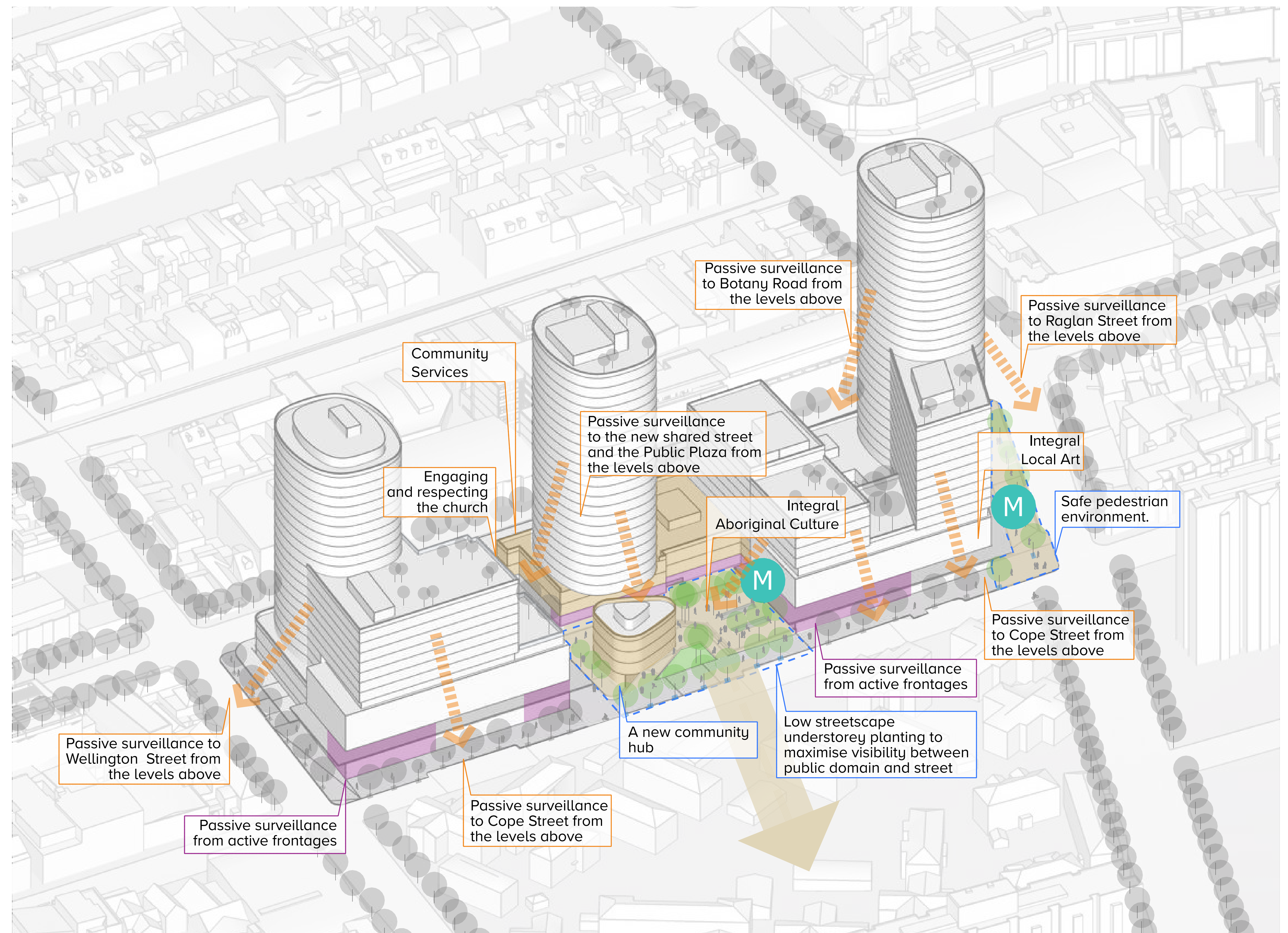


Fig 7.5.1 Culture and Design diagram





ADAPTABLE BUILDINGS

UP TO 700  
DWELLINGS

APPROX. 5-10%  
**SOCIAL**  
AFFORDABLE

15% PUBLICLY ACCESSIBLE  
OPEN SPACE

LOCALLY RESPONSIVE

Fig 7.5.2 View from Green Square to Waterloo Metro Quarter towards Central Sydney.  
The Green Square development site shown in this image is an indicative Artist impression only, not to scale, subject to approvals and may change. No warranty or representation is given to its accuracy or completeness. To the maximum extent permitted by law, Landcom and Mirvac (including its agents and employees) disclaims any liability whatsoever in connection with, reliance upon or the use of this image.



## 7.6 HOUSING



**Integrated social, private and affordable housing with access to a range of public and communal open spaces, retail, services and transport.**

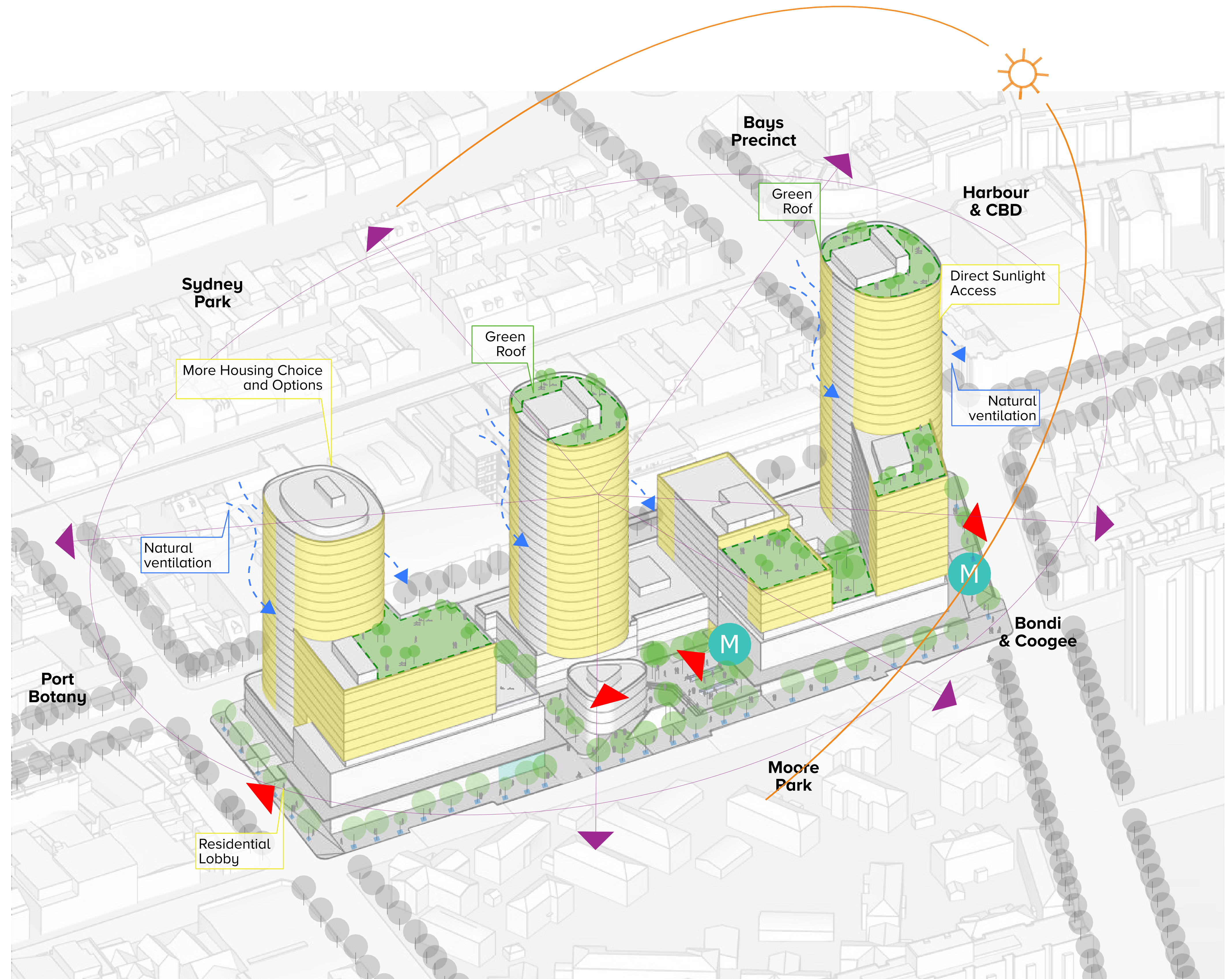
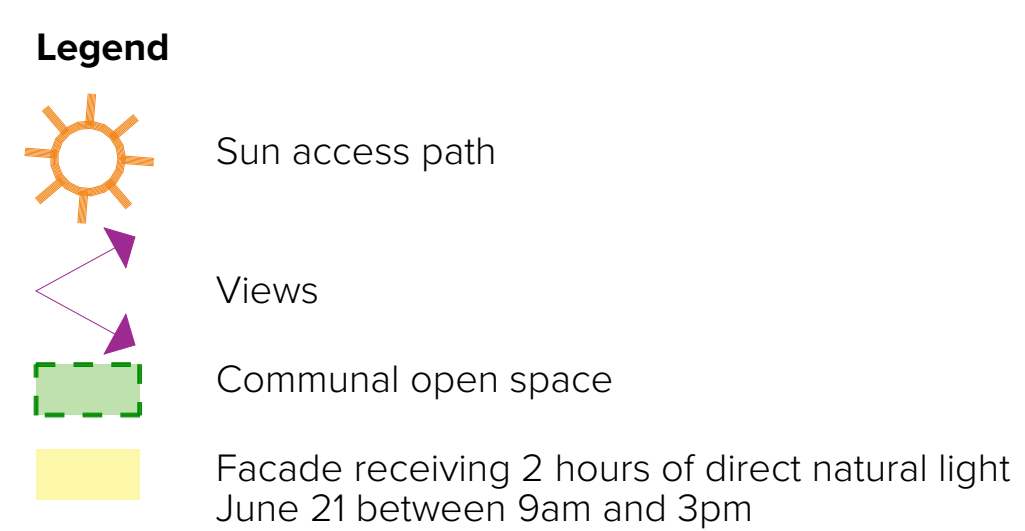


Fig 7.6.1 Housing diagram





Fig 7.6.2 View of the Raglan Street Plaza - view towards a residential lobby



## 7.7 A VIBRANT PUBLIC DOMAIN

### Create an active and welcoming public domain where people can meet, greet and relax in a safe environment

As a gateway to Waterloo and the surrounding neighbourhoods of Redfern and Eveleigh, the public domain would be a binding agent, uniting the Metro Station, retail and residential components whilst integrating the Metro Quarter into the existing urban fabric.

The Public Domain would establish a new community heart, creating a place that is activated, vibrant, and pedestrian and cycle focused.

New social spaces such as Raglan Street Plaza and Cope Street Plaza will draw in users to and from Waterloo Station, providing a social and retail experience amongst a new urban setting whilst creating moments to meet, pause and engage. The public domain would become the 'community door'. A place for people, a home for residents, destination for visitors and a workplace for commuters.

The Metro Quarter would become a dynamic space where commuters, residents and visitors would experience an urban social cohesion that engages with the existing local character whilst providing an environment that welcomes the community to Waterloo.

#### Legend

	Lawn		Benches
	P1- concrete unit		Bike Racks
	P2- concrete sett		Bus Shelter
	P3- brick banding		Bollard
	P4- brick		Footpath - Other
	Road		

TREES	
	Existing trees to be removed
	Existing trees to be retained
	Lophostemon confertus <b>Raglan Street / Botany Road</b>
	Angophora costata <b>Raglan Street</b>
	Livistona australis <b>Raglan Street / Public Plaza</b>
	Melaleuca quinquenervia <b>Cope Street</b>
	Banksia Integrifolia (Cope of three) <b>Cope Street</b>
	Syzygium paniculatum <b>Cope Street</b>
	Corymbia maculata <b>Cope Street</b>
	Corymbia eximia <b>Cope Street</b>
	Waterhousea floribunda <b>Wellington Street / Laneway / Metro Community Entry</b>
	Robinia pseudoacacia 'Frisia' <b>Botany Road</b>
	Jacaranda mimosifolia <b>Public Plaza</b>

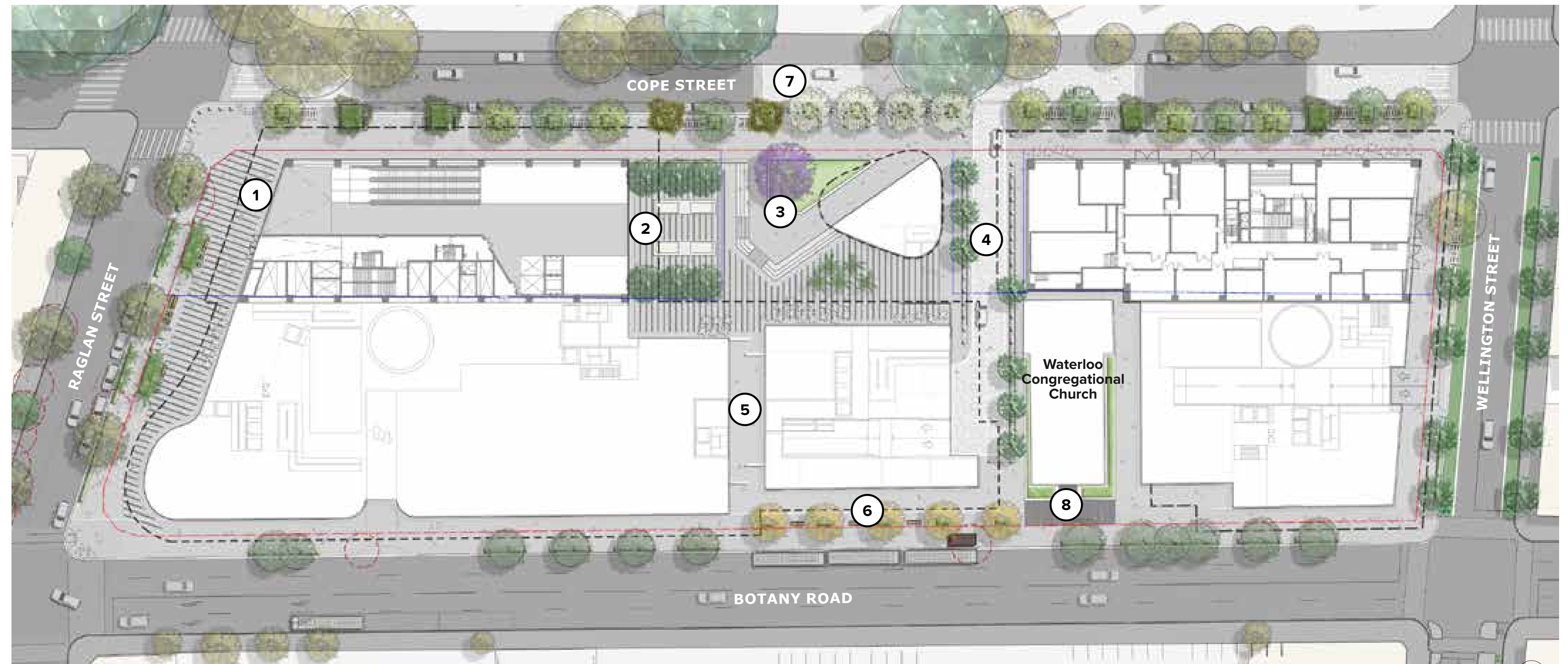


Fig 7.7.1 Waterloo Metro Quarter public domain

#### Key:

- ① Waterloo Station entry
- ② Waterloo Station secondary entry
- ③ Cope Street Plaza
- ④ New shared street
- ⑤ Pedestrian through-site link from Botany Road to the Public Plaza.
- ⑥ Bus stops
- ⑦ Cope Street converted to 20km/h slow street.
- ⑧ Upgraded church interface
- ⑨ Raglan Street Plaza



The Federal Government's Australia's Strategy for Protecting Crowded Places from Terrorism, and associated self assessment and self audit tools, would be considered within Metro land ownership areas, subject to further detail design and future interface agreements.

# LAND OWNERSHIP

Land ownership has been clearly demarcated to facilitate management and maintenance of the public domain.

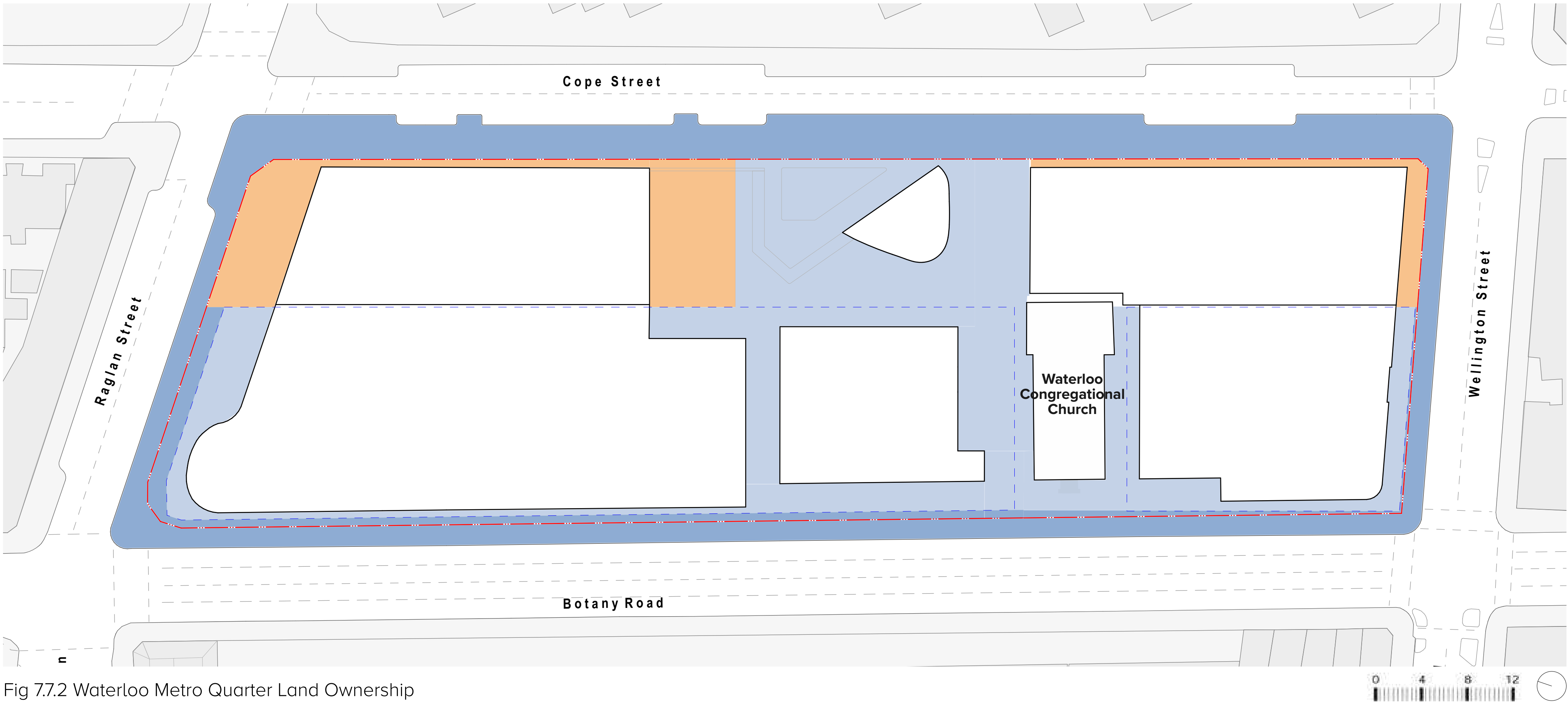


Fig 7.7.2 Waterloo Metro Quarter Land Ownership

**Key:**

- Site Boundary
- Basement Boundary
- Existing Public Space owned and managed by the City of Sydney & Public Space intended to be dedicated to the City of Sydney
- Publicly Accessible Private Land (Sydney Metro)
- Publicly Accessible Private Land (Private Ownership)

NOTE 1: Ownership subject to detailed design (final basement structures)  
NOTE 2: Easement contemplated for public access to Metro Station over land in private ownership (subject to detailed design)





# Enhancing Waterloo’s urban forest and greening

Street trees are the predominant elements that will define the Metro Quarter public domain character and atmosphere. Street tree species have been chosen based on the City of Sydney’s Street Tree Masterplan and the need to provide a mix of species to encourage diversity between native and exotic, deciduous and evergreen trees contributing to the City of Sydney’s Urban Forest Strategy.

Low growing understorey species have been selected to further define the streetscape, social spaces and provide habitat within an urban environment, increasing local biodiversity and to avoid obstruction of sight lines across the site and along streets providing for a safe and healthy environment.

With consideration to WSUD, open mass planted tree pits with flood tolerant species have been integrated into the public domain of which species such as lomandra and dianella provide elements for bush tucker of which the plants provide edible qualities such as flowers, roots and seeds.

The planting strategy along Botany Road is undergoing further design development and refinement in discussions with RMS and the City of Sydney.



Fig 7.7.3 Trees and understorey planting diagram

0 4 8 12

## Key: Soil depth

- ① Available tree pit soil depth: 2.37-2.97m (within Sydney Metro boundary)
- ② Available tree pit soil depth: 2.17- 2.37m (within UGDC Boundary)
- ③ Lawn raised between 150-400mm above adjacent footpath level. Available tree pit soil depth for Jacaranda mimosifolia: 1.32-1.57m (within UGDC Boundary)
- ④ Available tree pit soil depth: 1.4m (within UGDC Boundary)
- ⑤ Available tree pit soil depth: 1.00-1.86m (within Sydney Metro boundary)

## Key: Trees and understorey

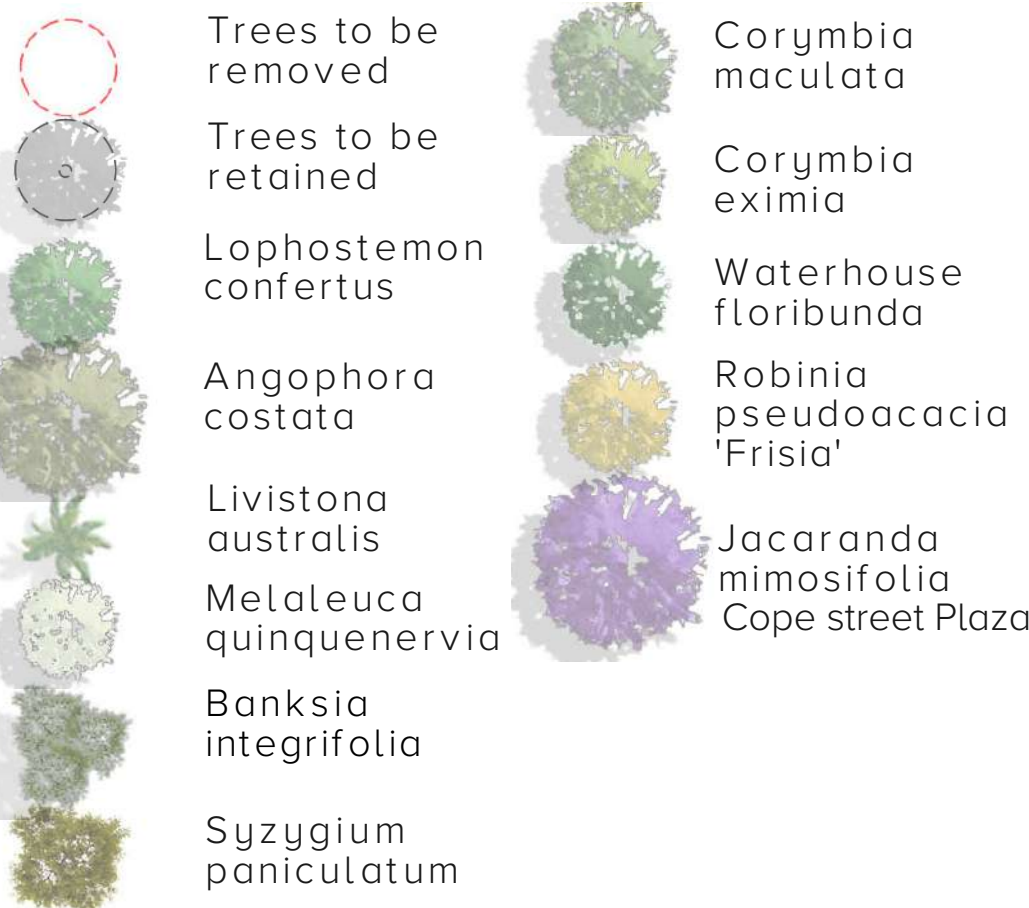
### Trees



### Understorey



## Legend





# Integrated water sensitive urban design within the public domain contributes to the Metro Quarter’s urban stormwater objectives

Incorporation of Water Sensitive Urban Design features within Waterloo will contribute to a green and resilient urban environment. The suggested strategy for the Metro includes stormwater filter cartridges in on-site detention (OSD) tanks to assist with pollution reduction and water quality (Water Quality, Flooding and Stormwater Report, AECOM, 2018).

To further support this strategy, throughout the Metro streetscapes, bio-retention tree pits have been incorporated to assist with treating runoff through filtration and reduce stormwater runoff volumes along pedestrian pathways in rainfall events.

Widened footpaths along Cope Street, provides the opportunity to utilise the former kerb alignment as the new invert level therefore directing runoff into the tree pits through kerb inlets along adjacent pathways and roadside.

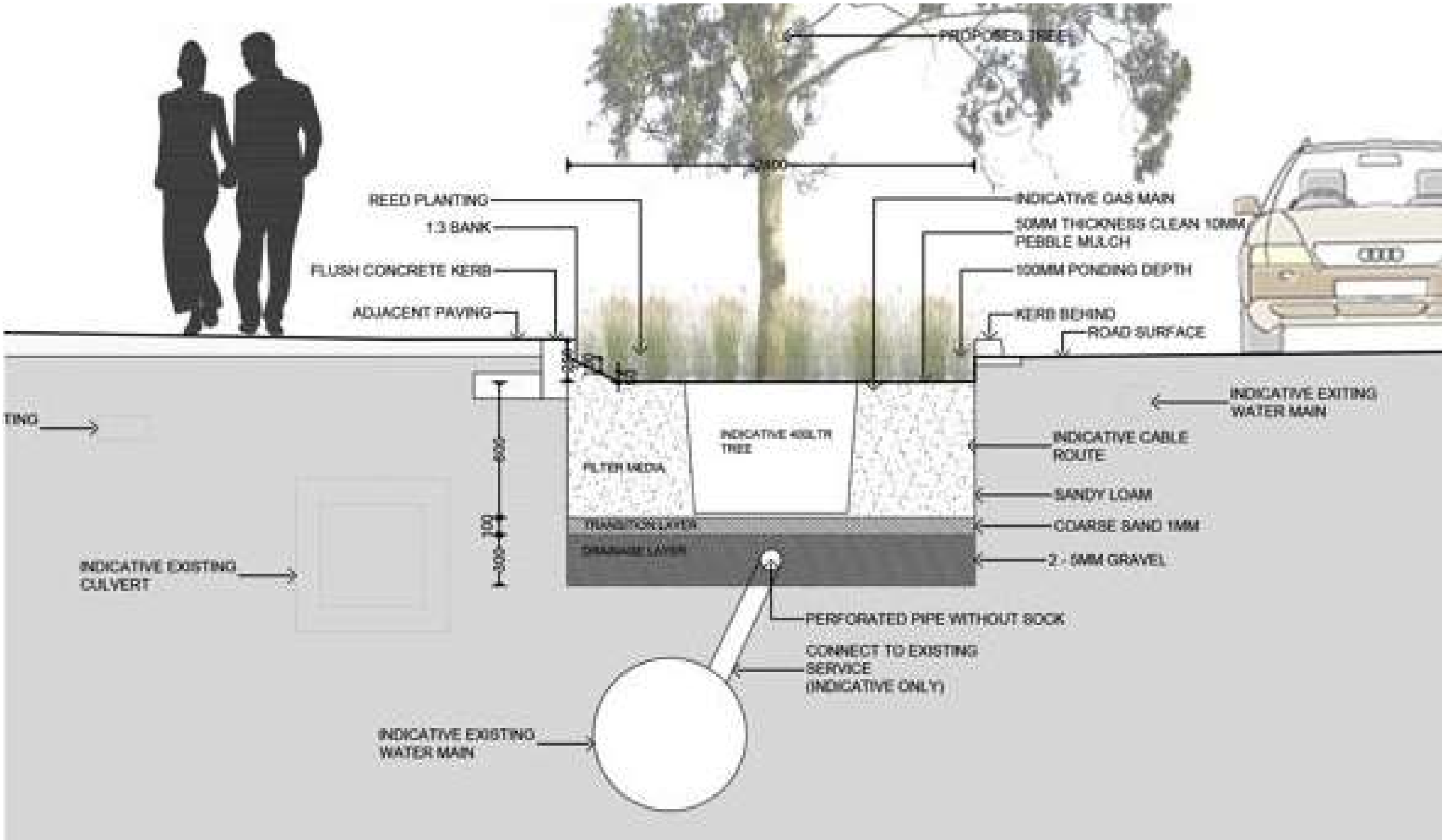
Plant selection has been considered to integrate flood tolerant species within the understorey mix to further assist with stormwater management and pollutant filtration.



Fig 7.4 WSUD diagram

0 4 8 12

## Section through tree pit



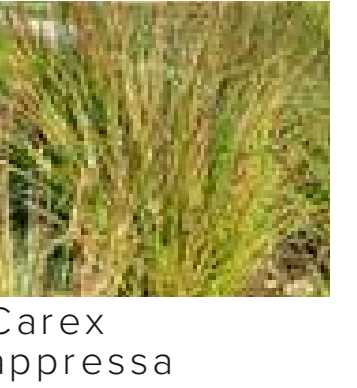
## Key: Plant species



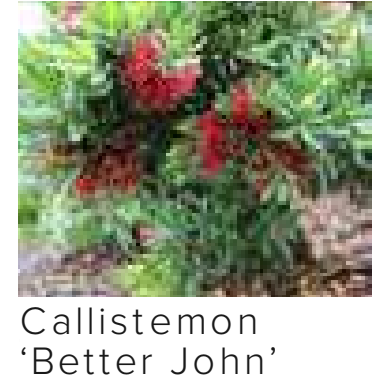
Lomandra longifolia



Dianella caerulea



Carex appressa



Callistemon 'Better John'



Juncus usitatus

### Legend

- Bio retention tree pits (310m<sup>2</sup> 3.1% of the public domain area)
- Permeable surface / filtration tree pits on structure (236m<sup>2</sup> 2.4% of the public domain area)
- Kerb inlets located on adjacent pathway and roadside
- Pavement invert level (former kerb alignment)



# Delivering a ground plane that is seamless and reflective of Waterloo

Waterloo Metro will become in important environment for people to meet and socialise. Street pavements and material palettes must be consistent with the design objectives and key principles of the City of Sydney Streets Design Code and Australian Standards.

A single use paving type has been chosen to marry the Metro Quarter into the existing urban fabric and signifying Waterloo as an urban village. Where social nodes or significant spaces are established, signature brick paving in the form of banding or a ‘mat’ has been applied to spaces such as Raglan Street Plaza, The Cope Street Plaza and the Waterloo Congregational Church emphasising the significant character of the Metro Quarter whilst reflecting the surrounding architectural elements and emphasising the local character of Waterloo.

Public domain furniture is to be in accordance with City of Sydney palette as well as provide purpose built elements that help identify the sites characteristics and culture. Street furniture is to be co-located with trees to avoid clutter and to create focus points for community activity.

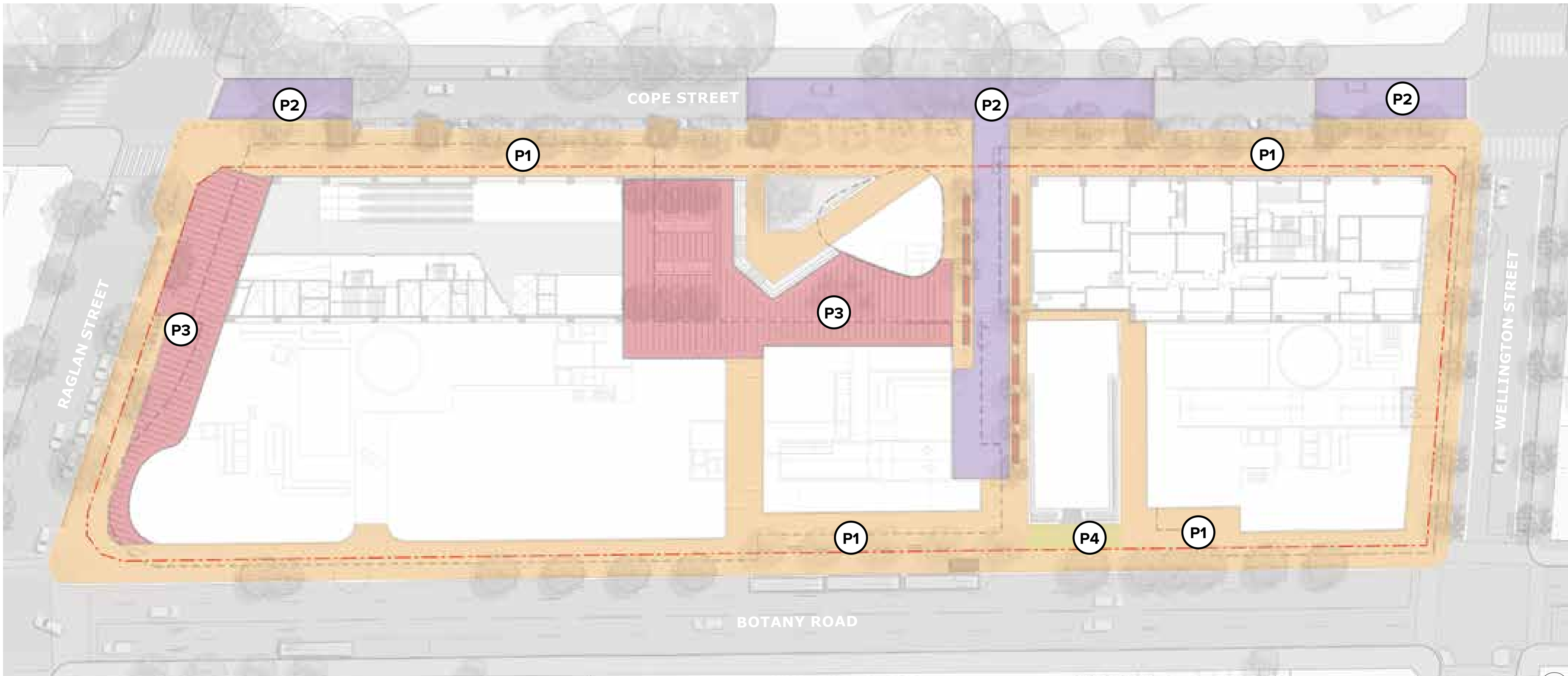


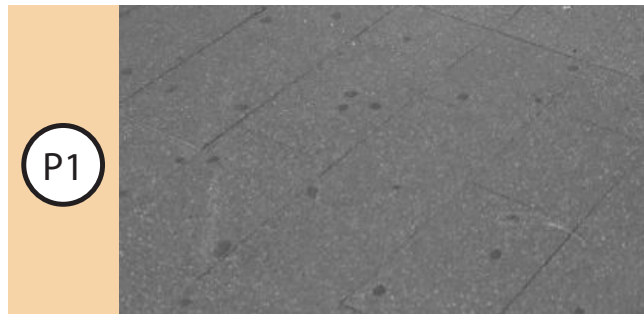
Fig 7.7.5 Paving diagram

## Key: Paving, walls and street furniture

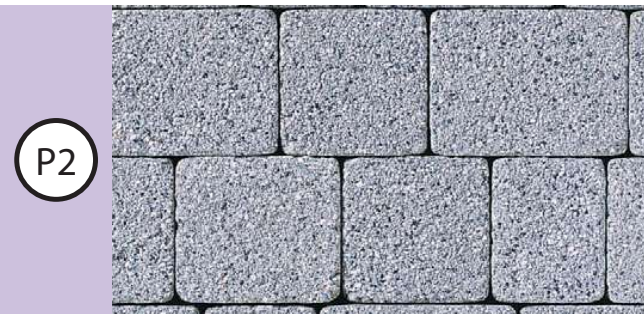
### Legend

- P1** CoS Concrete Unit Type 1
- P2** CoS Concrete Unit Sett
- P3** Boral Blue Bricks Banding
- P4** Special Application Brick

### Paving



Location: Cope st, Wellington st, and Botany Road  
Paving Type 1: CoS Concrete Unit Type 1



Location: Shared streets and Slow Zones  
Paving Type 2: CoS Concrete Unit Sett



Location: Metro Entry and Plaza  
Paving Type 3: Boral Blue Bricks Banding & CoS Concrete Unit Type 1



Location: Church Forecourt  
Paving Type 4: Special Application Brick

### Walls



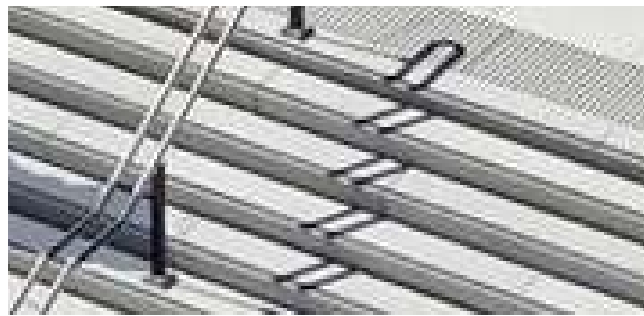
Brick Wall: Brick wall to match feature brick paving

### Stairs and Bleachers



Concrete Bleachers: Seating width Concrete Bleachers

### Concrete Steps



Concrete Steps: Concrete Steps integrated with Bleachers

### Furniture



Bench seat with back rest: Stainless steel frame and Blackbutt timber (as per COS standard)



Feature seating: Concrete cube seating

### Urban Elements



Bicycle Racks: U-shaped bicycle stand (as per CoS standard)



Waste Bins: Capsule Bin (as per CoS standard)



Bollards: as per CoS standard





the gateway

Fig 7.8 View of the Raglan Street Plaza - from Raglan Street looking east



## 7.8 RAGLAN STREET PLAZA

### The gateway into Waterloo

The Raglan Street entry for Waterloo Station will become the gateway into Waterloo for the surrounding neighbourhoods of Redfern and Eveleigh, connecting residents, commuters and visitors to the wider Sydney context. Along Raglan Street, the Raglan Street Plaza will become a vibrant pedestrian focused public space where commuters to and from ATP and Redfern will experience an urban plaza that engages with the existing local character and fine grain of the retail strip opposite.

#### A Vibrant and Welcoming Place

The Raglan Street Plaza, connected by new pedestrian crossings on Raglan Street and Cope Street, will draw in pedestrians to and from Waterloo Station, providing social and retail experiences within a new urban setting.

The footpath is increased in width to facilitate the Sydney Metro objectives of direct movement lines and generous circulation, providing opportunities for street furniture and planting along Raglan to create social nodes - moments to meet, pause and engage. Together with retail breakout spaces, the Raglan Street Plaza provides a vibrant and safe pedestrian environment that welcomes the community to Waterloo.

Key Plan:

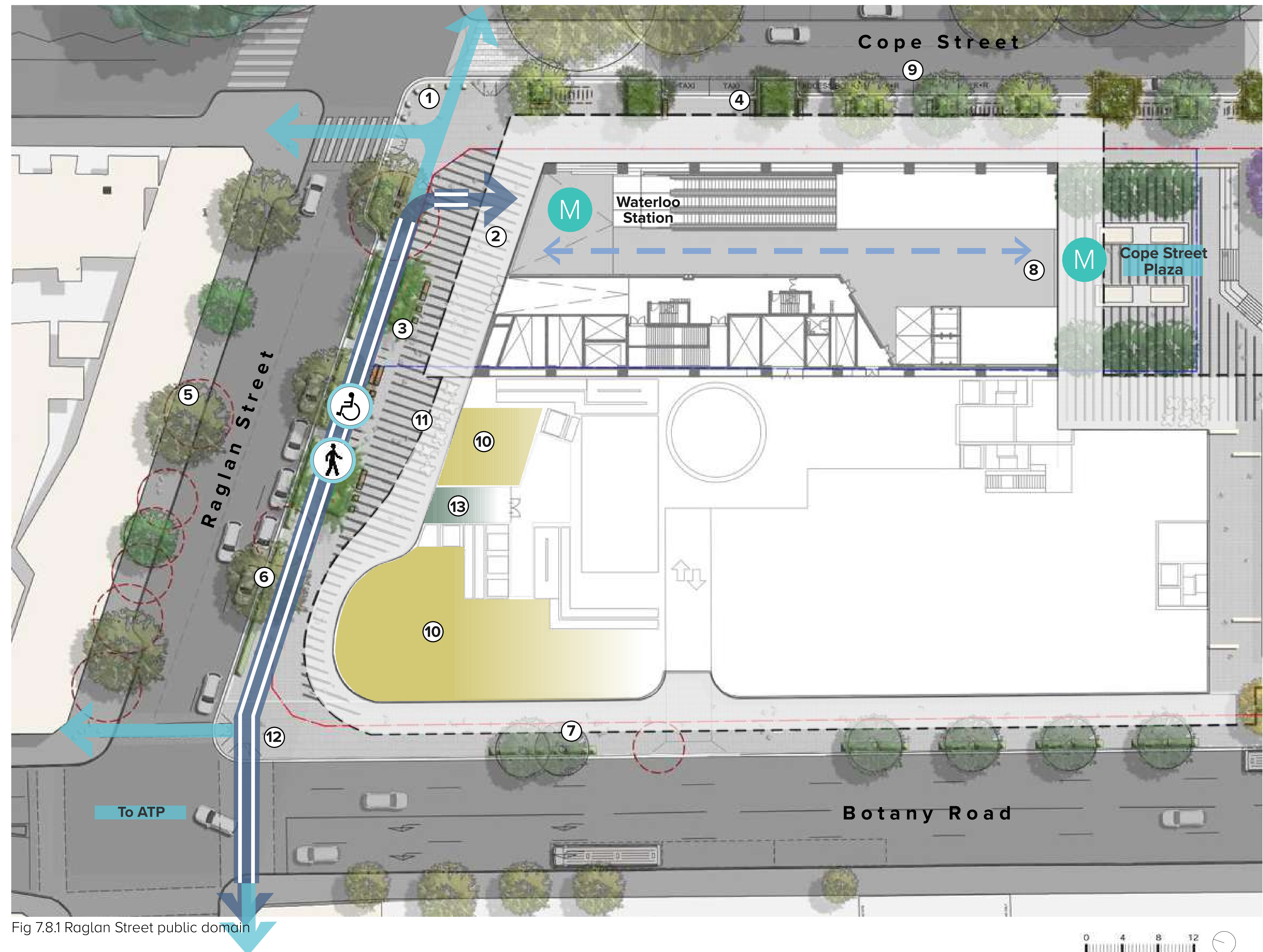
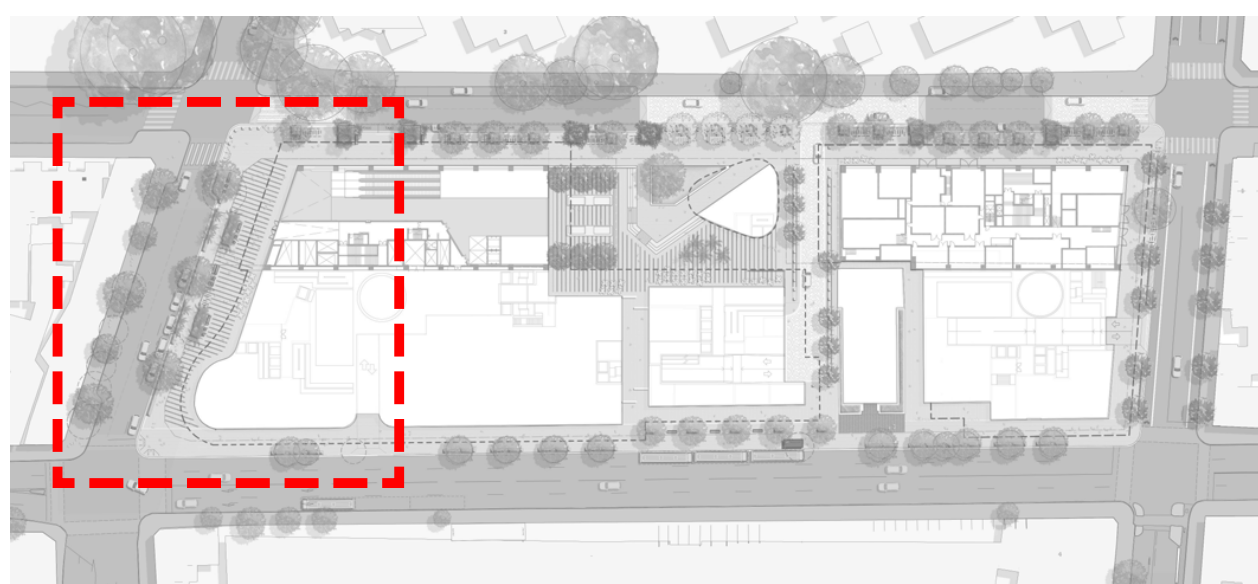


Fig 7.8.1 Raglan Street public domain



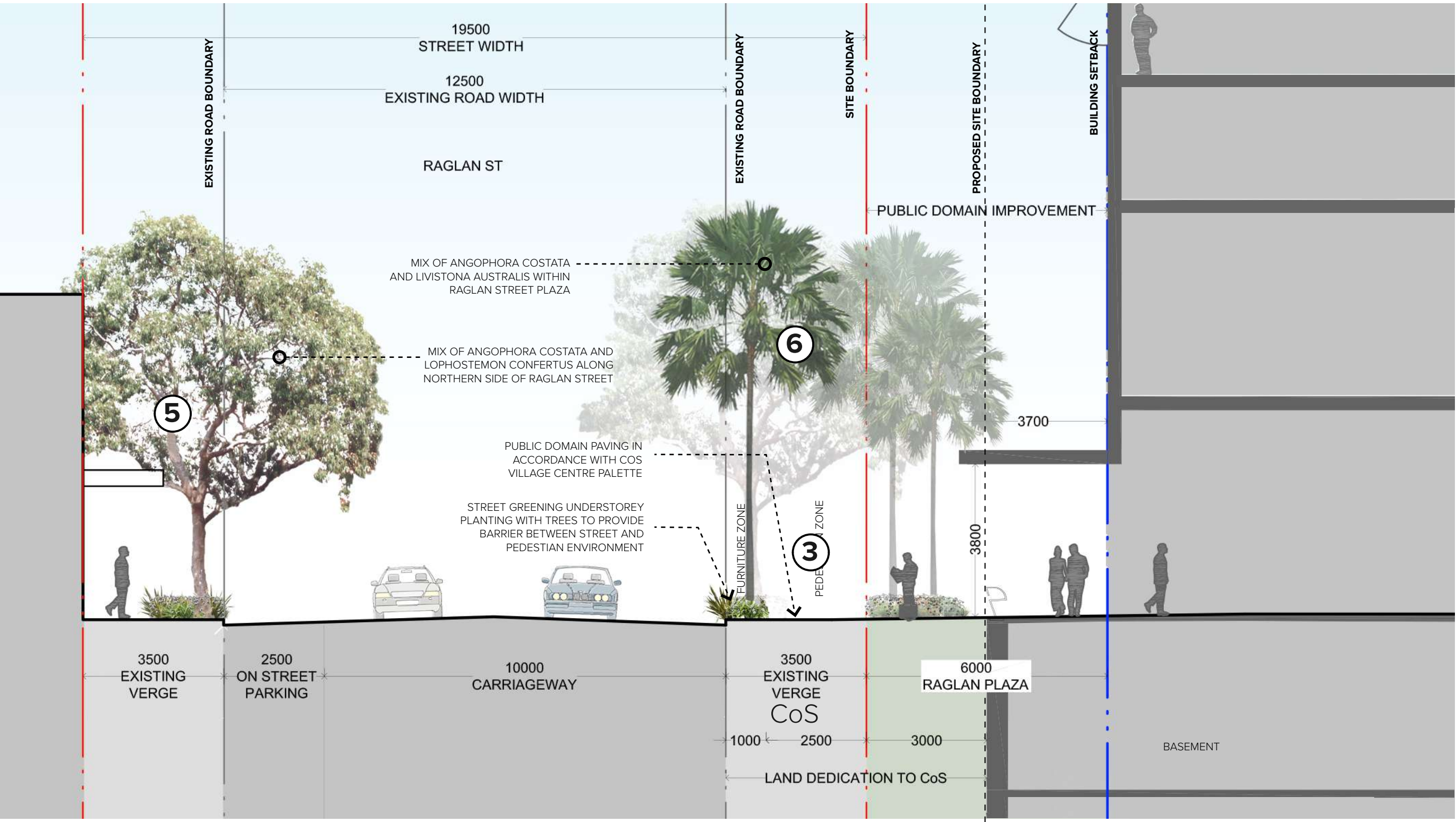


Fig 7.8.2 Raglan Street section looking east

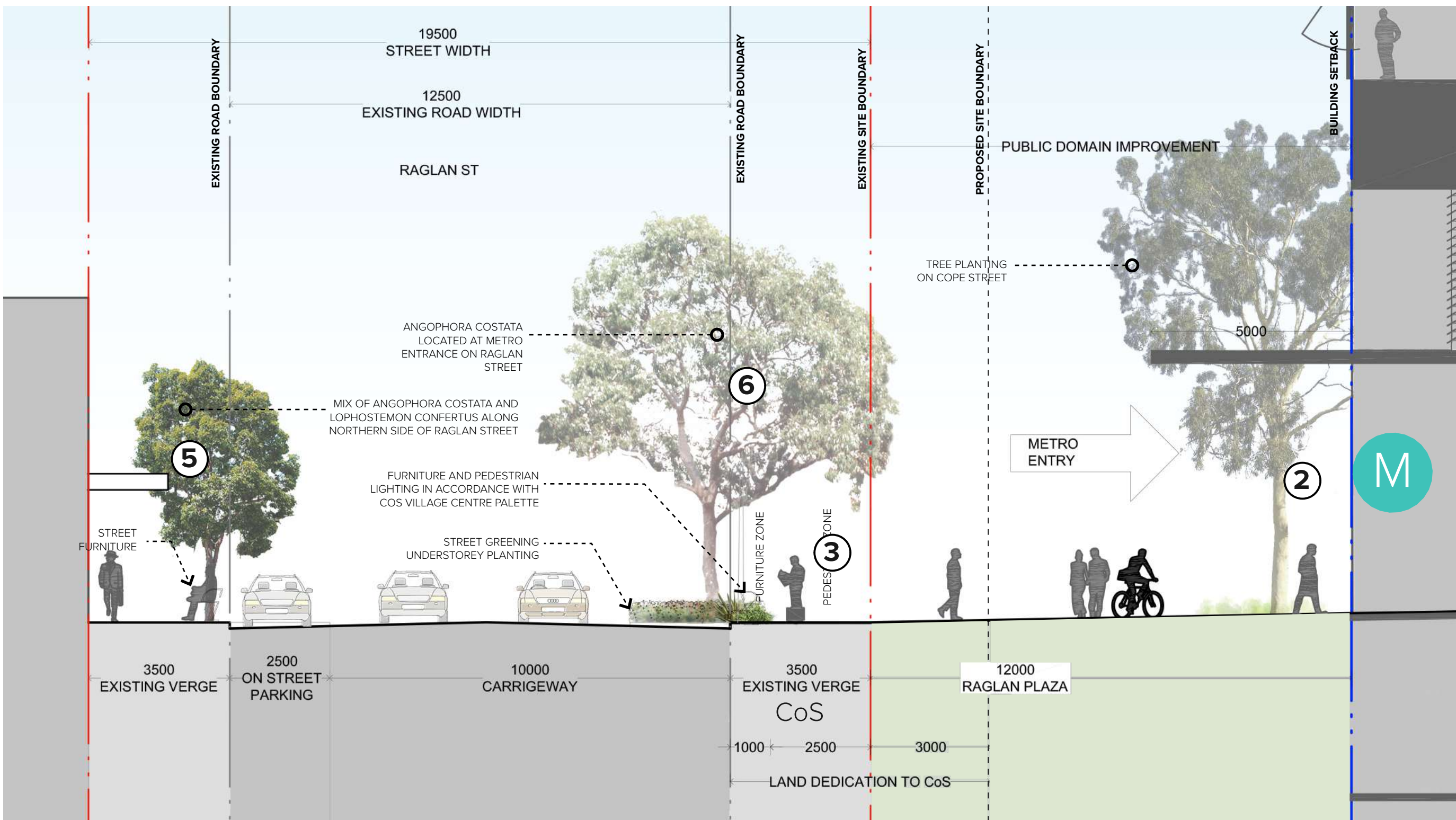


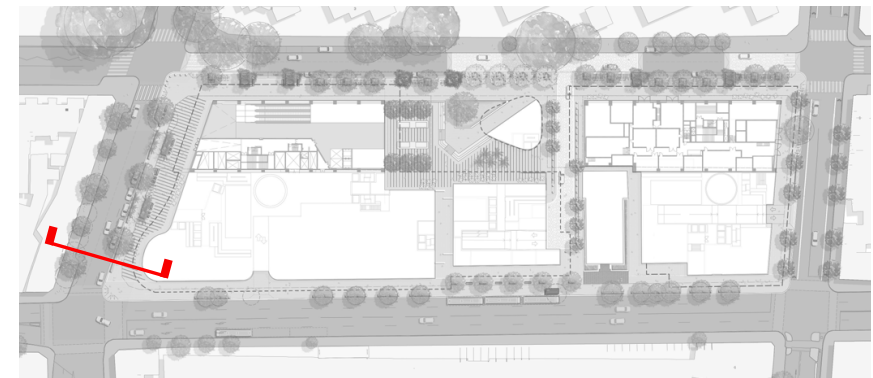
Fig 7.8.3 Raglan Street section at Metro Station entry looking east

Key:

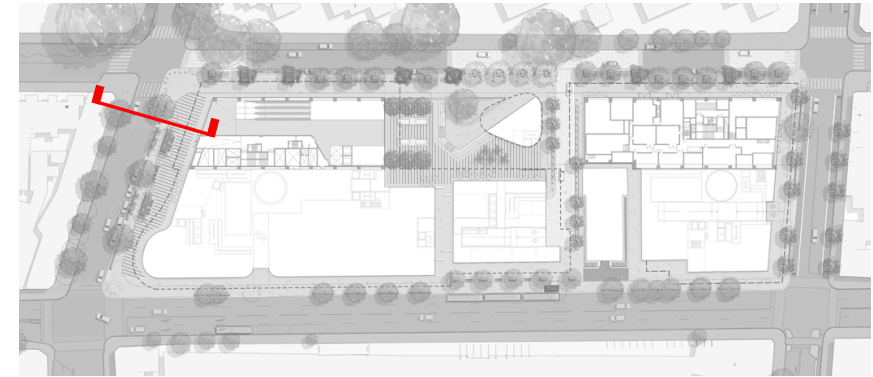
- ① Raglan Street and Cope Street social corner.
- ② Waterloo Station entry. Building setback to provide minimum 10m setback providing a pedestrian priority environment safe for commuters travelling to Waterloo Station from surrounding areas in particularly the Australian Technology Park.
- ③ Social nodes along Raglan Street. Planting, furniture and bike parking arranged along Raglan Street to provide social nodes and resting spots.
- ④ Street trees along Cope Street to provide shade and a comfortable pedestrian environment. Species (Corymbia eximia) according to City of Sydney's 2015 Street Tree Masterplan.
- ⑤ Existing trees to be removed and replaced with Angophora costata and Lophostemon confertus. Tree aligned to be upgraded to suitable locations and spacing for tree. (Refer to Arterra Report)
- ⑥ Mix of Angophora costata and Livistona australis within the Raglan Street Plaza
- ⑦ Street trees along Botany Road to provide shade and a comfortable pedestrian environment. Species (Lophstemon confertus) according to City of Sydney's 2015 Street Tree Masterplan.
- ⑧ Waterloo Station Public Plaza entry (community door)
- ⑨ Kiss'n'ride bays along Cope Street.

- ⑩ Cafe / Restaurant
- ⑪ Setback to provide outdoor area that is away from noise & wind sources.
- ⑫ New street crossing design to improve pedestrian safety.
- ⑬ Residential and commercial lobby
- ⑭ Main pedestrian flow
- ⑮ Accessible route

Key Plans:



Key Plan for Fig 7.8.2



Key Plan for Fig 7.8.3





Fig 7.8.4 View of the Raglan Street Plaza - view from intersection of Raglan Street with Botany Road