

# **Attachment B7(c)**

**Urban Design and Public Domain Study  
Part 3 – Waterloo Estate (South) – Land and  
Housing Corporation**





Fig. 6.01 Indicative CGI: Waterloo Common  
Source: Virtual Ideas, 2020

# 6.0 PLACE

## PLANNING PROPOSAL REQUIREMENT

The built form should be developed in line with the design process described in the NSW Government Architect Better Placed strategy:

- A precinct plan that integrates:
- Public domain
- Infrastructure
- Staging
- Building types
- Height distribution and massing

Provide a Public Domain Plan identifying any proposed public spaces, walkways, laneways, shared paths and streets, including an accurate CAD set-out showing the boundaries of any streets, walkways or other public spaces and servicing considerations to the public domain.

## SSP STUDY REQUIREMENT

### Urban Design

2.6 Prepare a precinct plan that integrates: the public domain plan, community facilities plan, indicative subdivision plan, infrastructure plan, staging plan and building types and massing for the site. Demonstrate how this fits within the overall State Significant Precinct and surrounding context.

2.10 Provide sufficient detail of the building types to demonstrate future compliance with amenity standards including the Apartment Design Guide and to support any calculations that convert building envelopes to gross floor area and development yields

2.11 Demonstrate how the urban design principles have informed the allocation and location of proposed land uses.

2.12 Integrate the public domain plan identifying proposed public park, square and streets and pedestrian/cycle paths.

### Public Domain: Public Open Space & Streets

3.4 Provide an open space plan for the precinct, locating precinct park(s) derived from site analysis, benchmarking assessment and urban design principles. Demonstrate how accessibility to the new park(s) is maximised by surrounding street interfaces, and location in relation to slope; and how the flexibility and extent of use is maximised by locating away from busy roads, noise and pollution, how size is suitable for the number and types of users, and location in relation to existing parks optimises use for the surrounding community

3.6 Provide a layout plan of the public streets, lanes and walkways, identifying street hierarchy, typologies, movement patterns for all modes of travel, connectivity to existing context and the development lots. Provide detailed sections and plans for typical conditions in each type of street, demonstrating innovative and best practice design for high density, highly connected, and active transport priority environments.

3.9 Provide a public domain plan incorporating the open space plan and street layout and demonstrate how it responds to the analysis and the urban design principles.

3.13 In all of the above, demonstrate consideration and application of City of Sydney public domain codes where appropriate, including the Streets Code and Technical Specifications, Legible Sydney Wayfinding Strategy and Design Manual, and any other relevant City of Sydney draft Codes.

## ADDRESSED IN

Urban Design Report  
Appendix 710

Chapter 4.0-5.0

Appendix 73

Appendix 74

Appendix 78

Appendix 75, Chapter 6.2

Chapter 6.2

Chapter 4.0

Chapter 6.0  
Appendix 73

## ADDRESSED IN

Chapter 4.0 - 6.0

Appendix 73

Appendix 74

Appendix 75

Appendix 77

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Chapter 6.0

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**“Make sure you understand the people who live here first. Take time to get to know us...”**

*Survey respondent\**

- This chapter describes the character of:
- The key public domain spaces
  - The urban and built form that is shaped by them
  - The interface of these with adjacent areas or items for particular consideration.

The key components within the Indicative Concept Proposal, and the three sub-precinct character areas of Waterloo South, contribute to the character of the sub-precinct through their relationship to other open spaces, the street and lane network, and how they relate to adjacent built form. They also identify a range of opportunities for activation and community life that each place can support.

The proposed urban and built form is shaped by the open space and public domain structure, responses to topography and landscape features, and the urban experience of street-life, streetwalls and perceptions of height and density.

The Estate is currently an island site in terms of its connectivity to the adjacent areas, its urban framework of streets and blocks and its unique built form typologies, and so presents a contrast to the surrounding areas. The public domain and built form interfaces with the adjacent context at the neighbourhood scale stitch Waterloo South into the surrounding context. The public and private domain interfaces relate to the pedestrian scale and defines the relationship between the activity and privacy of places and spaces.

\* "Let's Talk Waterloo - Visioning Report Key Findings", KJA, May 18, p.42.

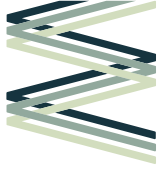


Fig. 6.14 Indicative CGI: Waterloo Village Green 'Big Roof'  
Source: Virtual Ideas, 2020

## 6.1 KEY PLACES AND STREETS

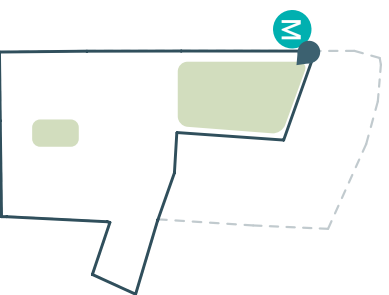
6.1.1	Village Green
6.1.2	Waterloo Common
6.1.3	Streets
6.1.4	George Street
6.1.5	Street Typologies

**“The green space in between the buildings is very important to us. It is a meeting point for friends. We like that we can see this green space from our balconies”**

*Survey respondent\**

This section describes the key places of Waterloo South; the Village Green, Waterloo Common and the George Street activity street which connects them. The key places are hubs of activation, engagement and social connectedness, and are complemented by mixed-use community hubs that will provide activation and programming to support the social life of the community.

The street typologies that connect and support the key places are regarded as places in themselves which contribute to the range of public domain spaces that can accommodate activities and opportunities for social connectedness. These range from local streets, shared slow streets and laneways to pedestrian only laneways and through-site links.



\* "Let's Talk Waterloo - Visioning Report Key Findings", KJA, May 2018, p76

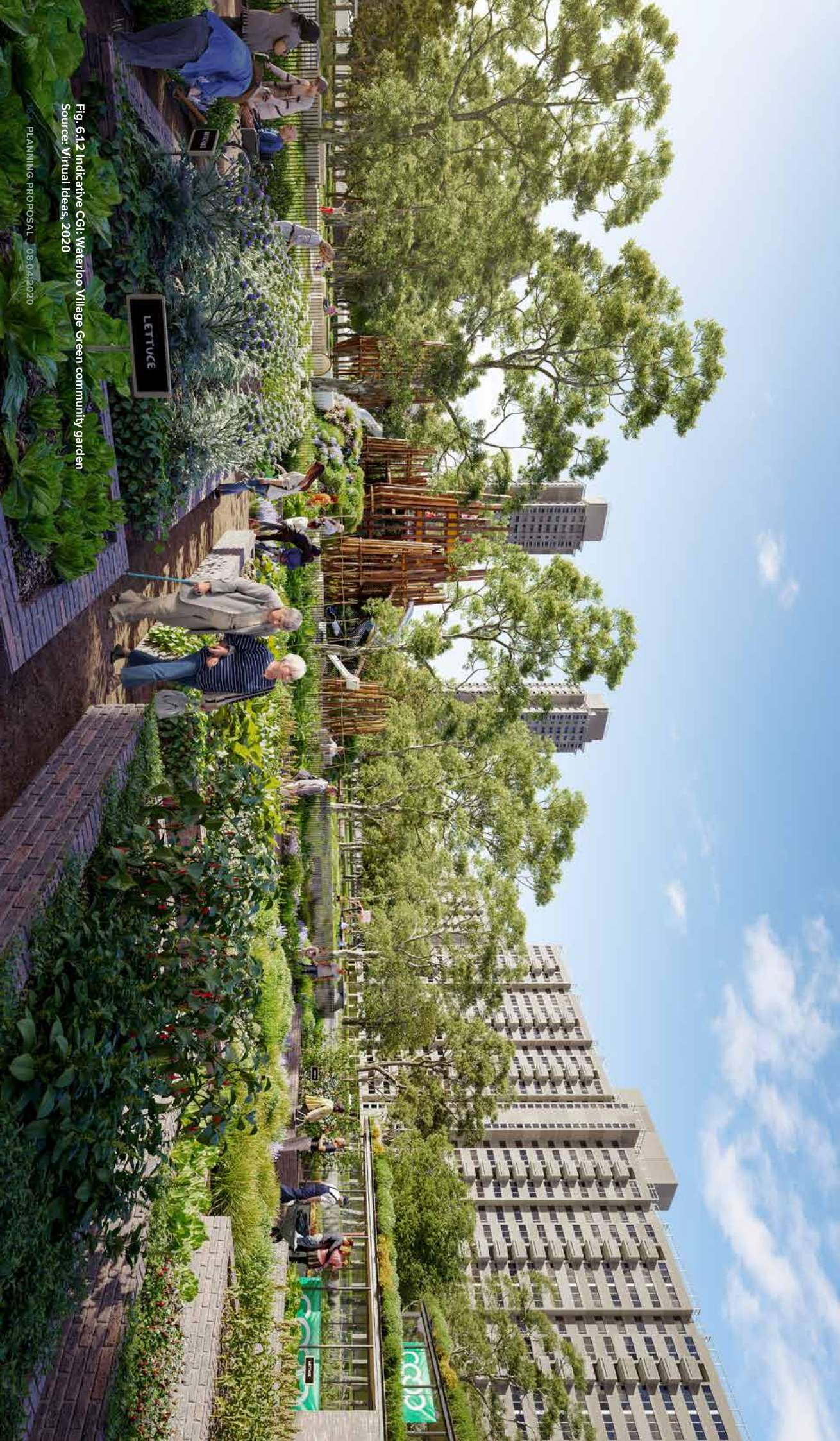
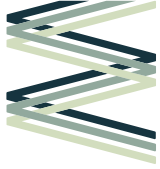


Fig. 6.1.2 Indicative GCI: Waterloo Village Green community garden  
Source: Virtual Ideas, 2020

# 6.1:1 VILLAGE GREEN

## A place to come together

Located next to the Waterloo Metro Station, the Village Green maximises its spatial opportunity by providing a community area (Gadigal Garden) for gathering under the Big Roof pavilion (4), central lawn (1) for active recreation and community breakout space, as well as the opportunity to provide a large community garden (3). Activity zones (2) to the park's south take advantage of the topography to overlook the central lawn and provide opportunities for play space, picnic areas, fitness and youth zones. Smaller, passive zones within the park balance the active zones and provide for passive uses.

The big roof (4) on the north-western corner of the park provides a temporary public exhibition space with the potential to host key cultural and community events. Pavilions along the western edge of the park help define the park and provide an urban interface between the Metro Quarter and the central area of the park. The pavilions create areas of breakout space for uses such as cafes and retail to spill out into, taking advantage of the aspect and providing day to night activation.

The water story is woven through WSUD treatments and water play (5). A strong connection is provided through program. The location of the park retains significant high and moderate value trees to provide mature landscape elements and retain the character of the existing streets.

Refer to Appendix 7.3 for further information



**2.25Ha**  
**CENTRAL PARK**  
 WSUD COMMUNITY GARDENS  
 PLAY & YOUTH AMENITIES LAWN AREA



Fig. 6.1.3 Potential Uses in Waterloo Village Green

- Legend**
- ① Open lawn
  - ② Activity zone (i.e. play spaces)
  - ③ Multi-sports courts, picnic areas)
  - ④ Community garden/small urban farm
  - ⑤ Big roof pavilion, Gadigal Garden
  - ⑥ Blue line water story
  - ⑦ Park Amenities (i.e. BBQ, picnic areas)





Fig. 6.14 Indicative CGI: Waterloo, Common activity area  
Source: Virtual Ideas, 2020

# 6.1.2 WATERLOO COMMON

## Waterloo South's local park

Connected to the Village Green by the George Street activity street, Waterloo Common will provide additional social and cultural amenity for the community who live, work and play in the southern part of Waterloo South. Opportunities for social interaction will be strengthened by a series of programmed spaces within the park that will provide a vibrant local community hub for all ages. These include community gardens, an urban plaza, play space and passive shaded lawns for community use. A tree retention zone will retain a cluster of existing high and moderate value trees adjacent to the park. These trees, along with those retained within the park will provide enhanced shade amenity.

Refer to Appendix 7.3 for further information

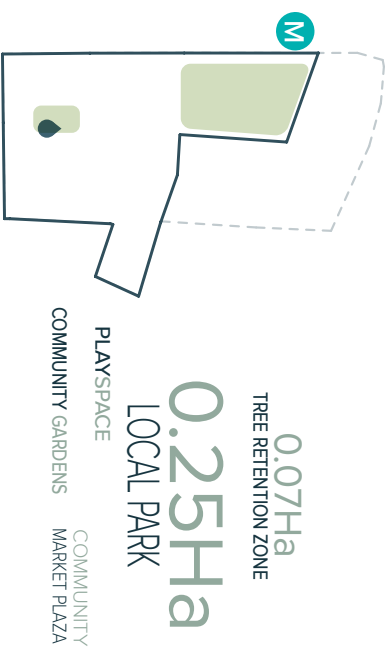


Fig. 6.1.5 Potential Uses in Waterloo Common

- Legend**
- ① Urban plaza
  - ② Activity zone
  - ③ Youth and fitness facilities
  - ④ Community gardens
  - ⑤ Lawn + existing trees
  - ⑥ Blue line water story

0m 50m



Fig. 6.1.6 Indicative CGI: Pedestrian laneway (6m)  
Source: Virtual Ideas, 2020

## 6.1.3 STREETS

### Streets as active places and energised spaces

The streets of Waterloo South are extensions of, and connections to, the public domain that serves to connect the community to all facilities, services and public open spaces. Across Waterloo South the street typologies promote a Pedestrian Priority Precinct. The street network comprises the following:

- **George Street (20-25m)**
    - Transformation of George Street into an activity street, with a varying width between 20 - 25 metres.
    - Provides the primary north-south movement corridor, activated at street level by retail and services and activity zones along the street.
  - **Local Streets (20.2m)**
    - Existing local streets of 20.2m redefined as slow streets with footpath widening, traffic calming devices, street planting and reduced vehicular speeds.
    - Prioritises pedestrian safety and a safe environment for the community.
  - **Shared Slow Street (20m)**
    - Shared Slow Streets include a shared carriageway buffered by planting on either side.
    - The design speed of all slow streets is below 40 kilometres per hour.
  - **Neighbourhood Laneways (9 - 10m)**
    - Wider laneway connection between existing local streets.
    - The carriageway is a pedestrian priority shared zone for pedestrians, cyclists and vehicles.
  - **Park Laneways (9m)**
    - Park Laneways run alongside Waterloo Common.
    - Provides secondary connections north - south within Waterloo South.
  - **Pedestrian Laneways (9m)**
    - Shared laneways for pedestrians and cyclists only.
    - Shaded by tree planting alternating with seating offset to one side.
  - **Pedestrian Laneways (6m)**
    - Pedestrian only laneways.
    - Shaded by a single line of street trees and seating along their centre.
- Refer to Appendix 7.3 for further information

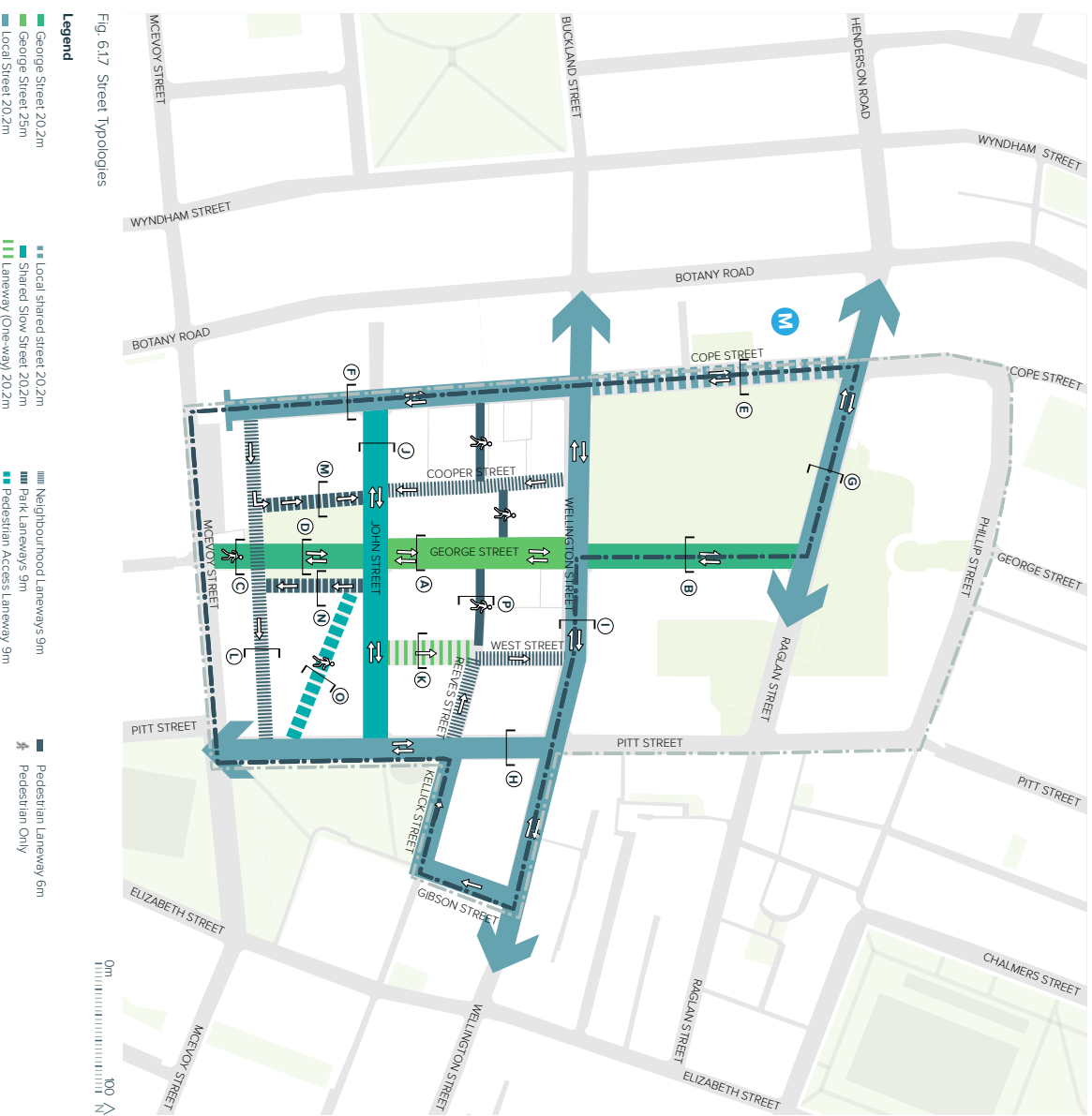




Fig. 6.1.8 Indicative CGI: George Street, community hub plaza  
Source: Virtual Ideas, 2020

# 6.1.4 GEORGE STREET

## A future activated and connected green community spine

George Street is an activated street that will become the primary north-south movement corridor that connects the Estate. George Street will connect Waterloo South's two primary open spaces, the Village Green and Waterloo Common, strengthening Waterloo's Green Grid and pedestrian connections.

A future flexible framework of publicly accessible spaces will allow George Street to evolve into a Pedestrian Boulevard, be responsive to future development and act as a catalyst for activity along the corridor. These spaces can evolve and change over time, responding to the community's changing needs. Play spaces, outdoor gym facilities, food production and incidental play are equitably distributed along the corridor, with the Blue Line water story designed and arranged to meet water sensitive urban design (WSUD) best practice.

Refer to Appendix 7.3 for further information

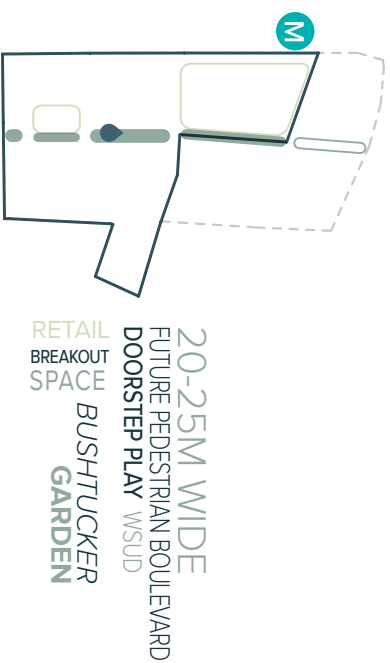


Fig. 6.1.9 George Street

- Legend**
- Blue Line water story
  - Plaza
  - Retained trees

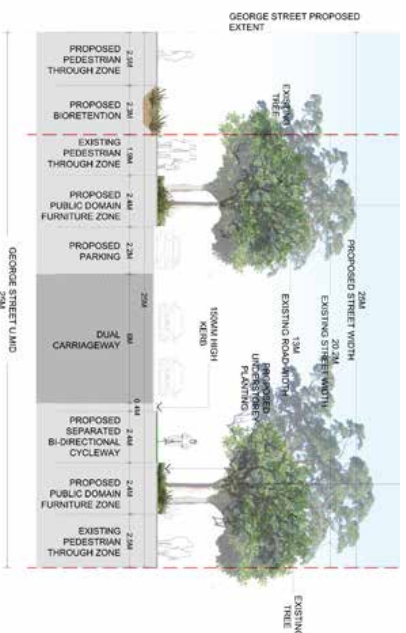


# 6.1.5 STREET TYPOLOGIES

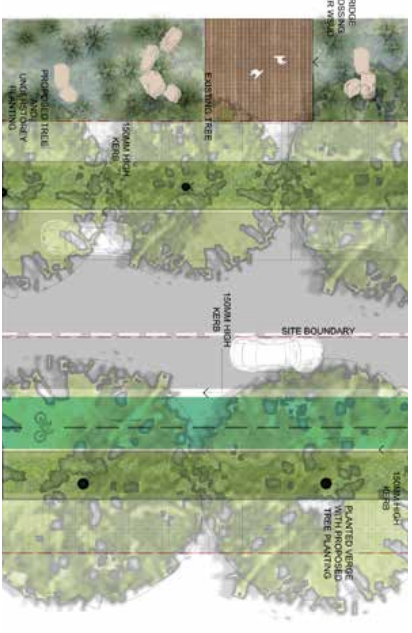
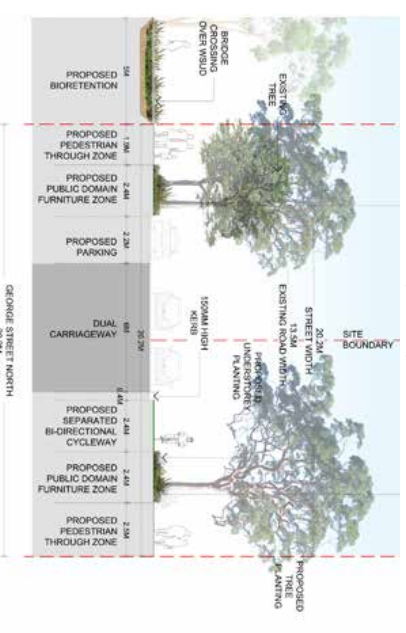
## GEORGE STREET

<b>KEY PUBLIC DOMAIN ELEMENTS</b>
<b>STREET TYPE</b>
George Street 20-25m wide.
<b>STREET GEOMETRY</b>
Refer to Appendix 7.3.
<b>FOOTPATH, KERB + CARRIAGEWAY</b>
<b>Footpath:</b> Paved, Concrete Unit Paver with Brick Inlay. <b>Kerb:</b> 150mm <b>Carriageway:</b> 6-6.5m
<b>FURNITURE TYPE</b>
To City of Sydney Standards for 'Village Centre' areas.
<b>LIGHTING TYPE</b>
City of Sydney: Bronze Smart Pole Refer to Appendix 7.3
<b>STREET TREE TYPE</b>
Refer to Appendix 7.3 for further information

**GEORGE STREET MID (25.0M)**



**GEORGE STREET NORTH (20.2M)**



**(A)** Fig. 6.110 George Street Mid 25.0m

**(B)** Fig. 6.111 George Street North 20.2m

The southern section of the Pedestrian Boulevard connects Wellington and John streets. It contains a number of urban plazas, a community building and other activation opportunities such as fitness, cafe breakout, doorstep play. Similar to the northern section of the Pedestrian Boulevard, the southern section presents a 'green' character and forms part of the ALMR. The WSUD initiatives found in the northern section, run the entire length of the Boulevard and continue through the southern section into Waterloo Common.

The northern section of the Pedestrian Boulevard adjoins the Waterloo Gateway Plaza and includes a series of active micro spaces along its length. A community building on the western edge encourages activation and breakout space, strengthening the relationship between the community and public domain. The Pedestrian Boulevard presents a 'green' character, delivering ample shade cover, the blue line water story and pocket lawns. The northern Pedestrian Boulevard is also an important movement route towards the Metro Quarter and Village Green, and contributes to the Accessible Local Movement Route (ALMR).

### GEORGE STREET SOUTH (20.2M)

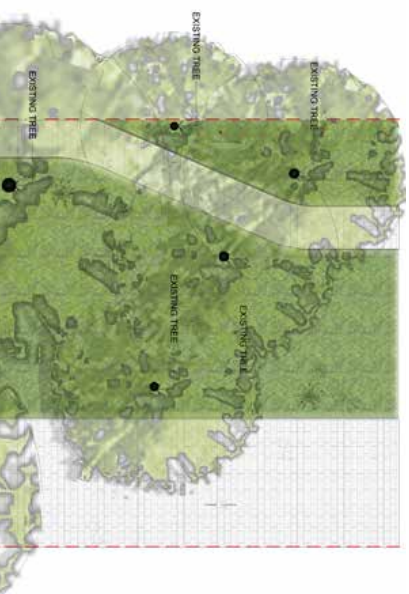
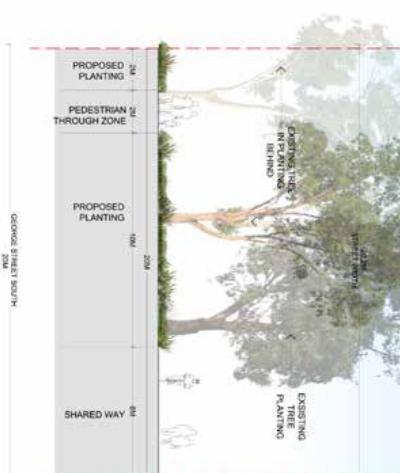


Fig. 6.112 George Street South 20.2m

The northern section of the Pedestrian Boulevard adjoins the Waterloo Gateway Plaza and includes a series of active micro spaces along its length. A community building on the western edge encourages activation and breakout space, strengthening the relationship between the community and public domain. The Pedestrian Boulevard presents a 'green' character, delivering ample shade cover, the blue Line water story and pocket lawns. The northern Pedestrian Boulevard is also an important movement route towards the Metro Quarter and Village Green, and contributes to the Accessible Local Movement Route (ALMR).

### GEORGE STREET LOWER (20.2M)

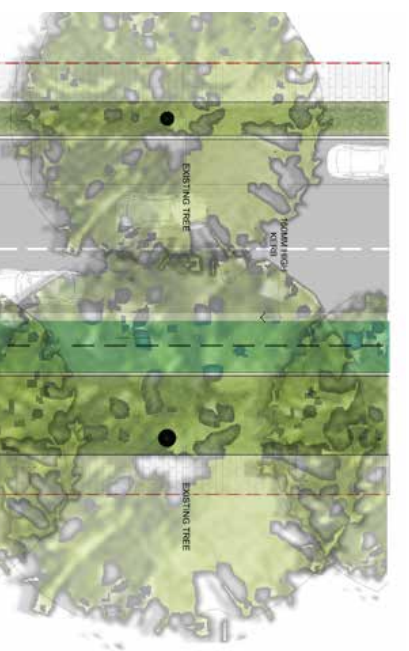
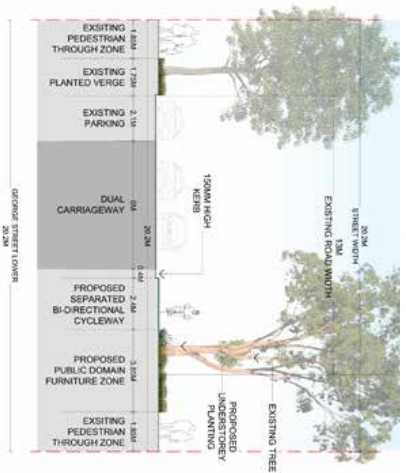
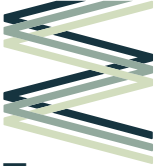


Fig. 6.113 George Street Lower 20.2m

The northern section of the Pedestrian Boulevard adjoins the Waterloo Gateway Plaza and includes a series of active micro spaces along its length. A community building on the western edge encourages activation and breakout space, strengthening the relationship between the community and public domain. The Pedestrian Boulevard presents a 'green' character, delivering ample shade cover, the blue Line water story and pocket lawns. The northern Pedestrian Boulevard is also an important movement route towards the Metro Quarter and Village Green, and contributes to the Accessible Local Movement Route (ALMR).

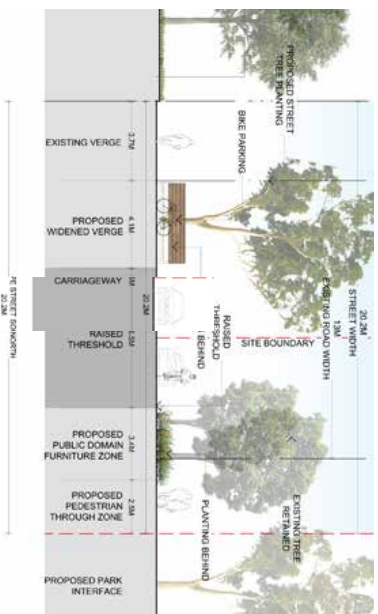




## LOCAL STREETS

<b>KEY PUBLIC DOMAIN ELEMENTS</b>
<b>STREET TYPE</b>
Local Street 20.2m wide
<b>STREET GEOMETRY</b>
Refer to Appendix 7.3 Local Streets
<b>FOOTPATH, KERB + CARRIAGEWAY</b>
<b>Footpath (Varies) :</b> Pitt, Cope, Wellington & Raglan Street: In situ Concrete Paving to match existing Cope Street (Metro): Concrete Unit Paver <b>Kerb (Varies) :</b> Pitt, Cope, Wellington & Raglan Street: In situ Concrete Kerb to match existing Cope Street (Metro): Concrete Unit Paver
<b>Carriageway (Varies):</b> Pitt, Cope, Wellington & Raglan Street: Dual Carriageway to match existing Cope Street (Metro): Shared Carriageway
<b>FURNITURE TYPE</b>
To City of Sydney Standards for 'Village Centre' areas.
<b>LIGHTING TYPE</b>
<b>(Varies) Pitt, Cope, Wellington &amp; Raglan Street:</b> City of Sydney: Endeavour Energy Pole <b>Cope Street (Metro &amp; South)</b> City of Sydney: Bronze Smart Pole Refer to Appendix 7.3
<b>STREET TREE TYPE</b>
Refer to Appendix 7.3 for further information

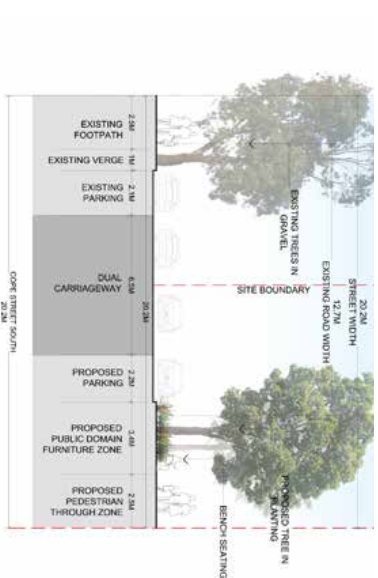
### COPE STREET (METRO - 20.2M) Between Raglan and Wellington streets



**E** Fig. 6.114 Cope Street, Metro

Cope Street Metro, as the threshold between the Metro Quarter and Village Green, is a shared slow street for pedestrian and cyclist safety. Ample bicycle parking, shade and seating options and the widening of the existing verge, will accommodate the high pedestrian traffic and provide the range of amenities needed in this area. This highly active street connects the Metro Quarter to the Estate, through the Activity Centre Plaza.

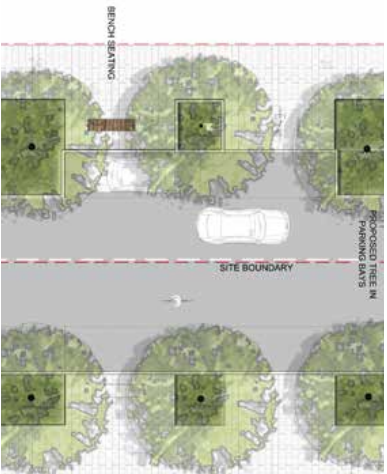
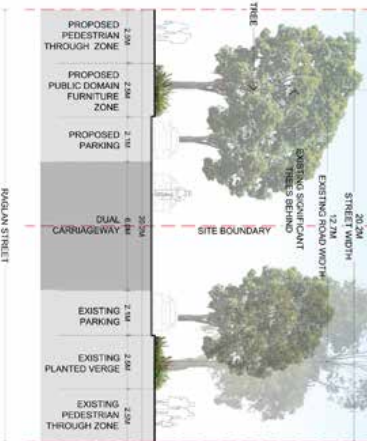
### COPE STREET (SOUTH - 20.2M)



**F** Fig. 6.115 Cope Street, North and South

The remaining sections of Cope Street both north and south, possess a more residential character. A dedicated regional cycleway distinguishes these sections of the street from Cope Street Metro. Bicycle parking and bench seating are provided along the edges, along with widened pedestrian through zones. A combination of existing and new street trees provides shade from their canopies.

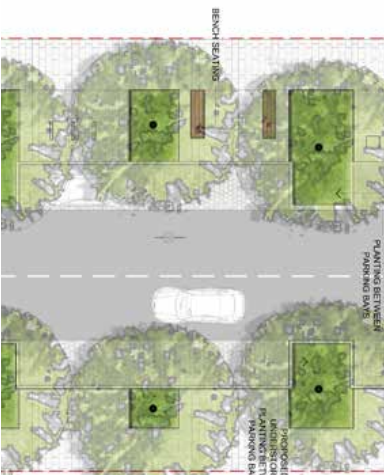
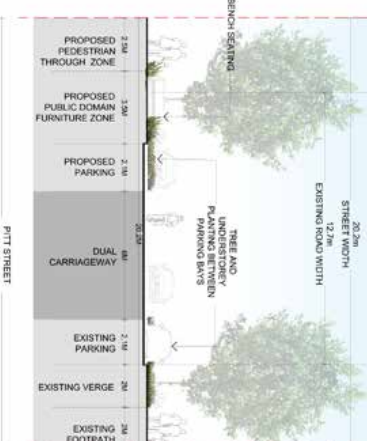
**RAGLAN STREET (20.2M)**



Ⓒ Fig. 6.116 Raglan Street

Raglan Street serves as a key east - west connection through the Estate. Parking bays will be provided in selected areas along this major local street, buffered by planting and tree pits. Larger building setbacks along Raglan Street accommodates the retention of existing trees which, combined with the street tree canopies, provides a 'green' street character.

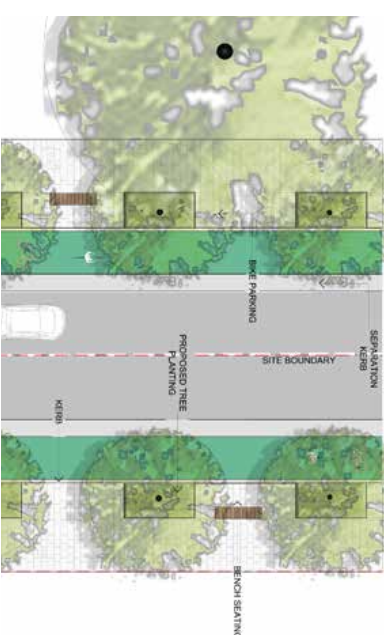
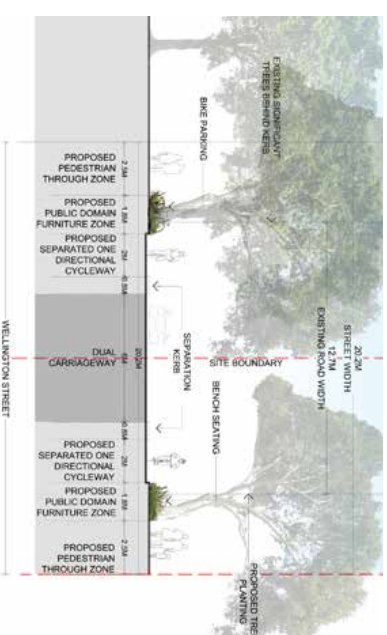
**PITT STREET (20.2M)**



Ⓓ Fig. 6.117 Pitt Street

Running along the Estate's eastern boundary, Pitt Street provides a dual carriageway, parking on both sides of the street and new amenities on the western side. Existing parking, verge and footpath are maintained on the street's eastern side, whilst a wider pedestrian through zone, bench seating and new street trees comprises the western side. Overall, the street exhibits a more residential character.

**WELLINGTON STREET (20.2M)**



Ⓔ Fig. 6.118 Wellington Street

Along both sides of Wellington Street are dedicated separated cycleways. A separation kerb distinguishes the cycleway from the roadway, whilst planting and street trees buffer the cycleway from pedestrian through zones. Similar to Raglan Street, building setbacks have been increased to accommodate the retention of existing trees which, combined with the street tree canopies, provides Wellington Street with a 'green' street character.

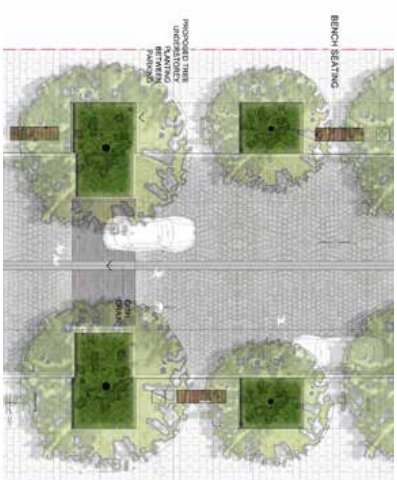
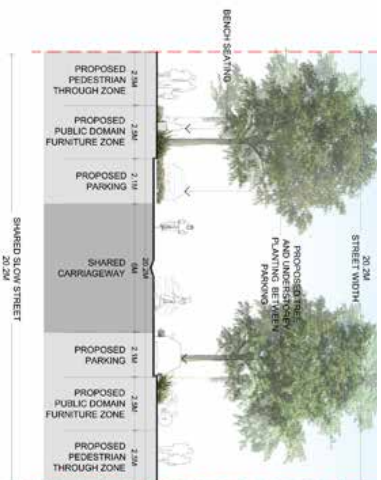


# SHARED STREET AND LANEWAYS

<b>KEY PUBLIC DOMAIN ELEMENTS</b>
<b>STREET TYPE</b>
Shared Streets & Lanes 9 - 20.2m wide
<b>STREET GEOMETRY</b>
Refer to Appendix 7.3 Shared Streets & Lanes
<b>FOOTPATH, KERB + CARRIAGEWAY</b>
<b>Footpath (Varies):</b> Lanes: Brick Paving with Granite sets Shared Streets: Granite Unit Paving with Concrete Unit Paving
<b>Kerb (Varies):</b> Lanes: Flush
<b>Shared Streets:</b> Raised faced to match adjacent Unit Paver
<b>Carrigeaway (Varies):</b> Lanes: Shared Dual Carrigeaway Shared Streets: Shared Single Carrigeaway
<b>FURNITURE TYPE</b>
<b>(Varies) East-West Lanes &amp; Shared Streets:</b> To City of Sydney Standards for 'Village Centre' areas.
<b>North-South Lanes:</b> Unique & Site Specific
<b>LIGHTING TYPE</b>
<b>(Varies) East-West Lanes</b> Wall mounted / Catenary Lighting
<b>North-South Lanes:</b> Unique & Site Specific
<b>Shared Streets:</b> City of Sydney: Bronze Smart Pole Refer to Appendix 7.3
<b>STREET TREE TYPE</b>

Refer to Appendix 7.3 for further information

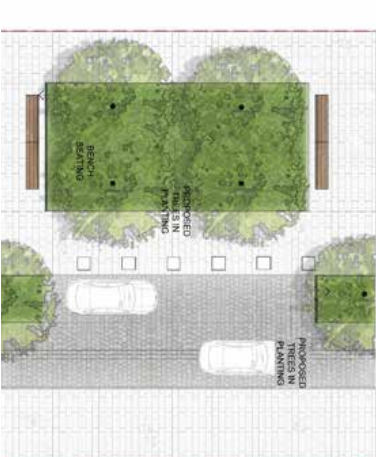
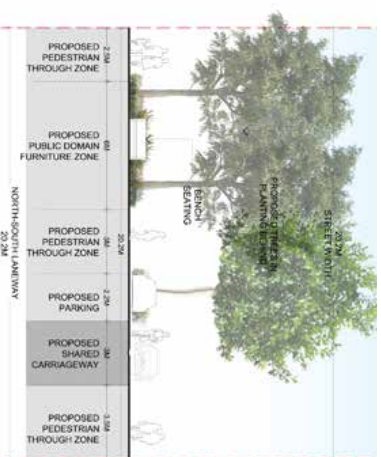
## SHARED SLOW STREET (20.2M)



① Fig. 6119 Shared Slow Street

Variation in pavement treatment distinguishes shared slow streets from the surrounding streetscape. Concrete sets are used within the shared carriageway, with a contrasting brick strip visually dividing the shared carriageway. Bench seating, planting and street trees complete the streetscape and buffer the carriageway from the pedestrian through zones on either side.

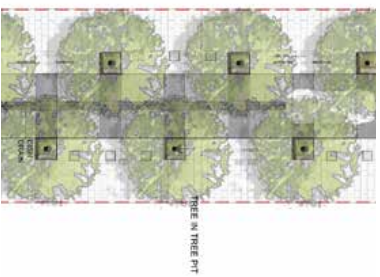
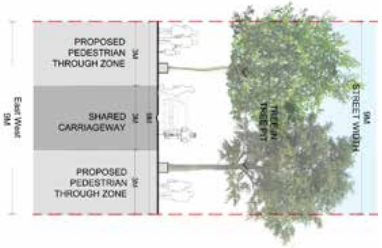
## LANEWAY ONE WAY (20.0M)



Ⓚ Fig. 6120 Laneway One Way 20m

The Neighbourhood Laneways provide a single direction shared carriageway. Concrete blocks provide safety barriers on the carriage edge, buffering the carriageway from the pedestrian through zone. Street trees, planted in pits, alternate between the blocks and provide shade amenity as well as visually softening the streetscape.

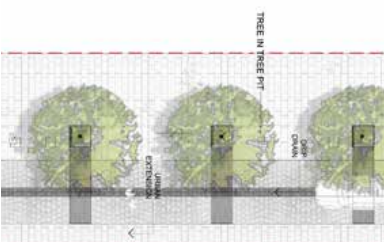
**NEIGHBOURHOOD LANEWAY (9.0-10.0M)**



**L** Fig. 6.121 Neighbourhood Laneway

The Neighbourhood Laneways provide a single direction shared carriageway. Concrete blocks provide safety barriers on the carriage edge, buffering the carriageway from the pedestrian through zone. Street trees, planted in pits, alternate between the blocks and provide shade amenity as well as visually softening the streetscape.

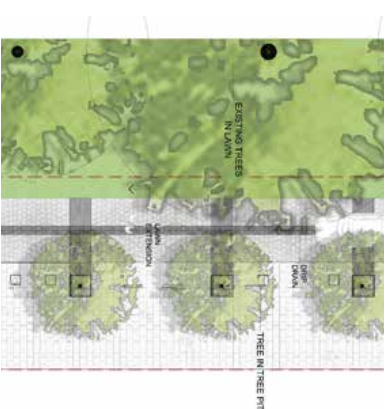
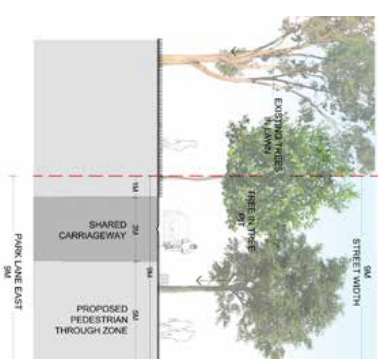
**PARK LANEWAY (WEST - 9.0M)**



**M** Fig. 6.122 Park Laneway (West)

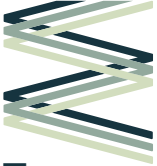
The Park Laneway on the western edge of Waterloo Common provides a single shared carriageway with ample bicycle parking, seating options and canopy planting.

**PARK LANEWAY (EAST - 9.0M)**



**N** Fig. 6.123 Park Laneway (East)

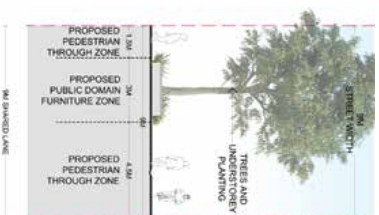
The Park Laneways to the east of George Street provides ample pedestrian through zones, adding to the public open space. A single shared carriageway is buffered to the pedestrian through zone by street tree planting, bicycle parking and seating options.



# PEDESTRIAN LANEWAYS

<b>KEY PUBLIC DOMAIN ELEMENTS</b>
<b>STREET TYPE</b>
Pedestrian Lane 6m - 9m wide
<b>STREET GEOMETRY</b>
Refer to Appendix 7.3 Pedestrian Lanes
<b>FOOTPATH, KERB + CARRIAGEWAY</b>
<b>Footpath:</b> Brick Paving with Granite Sets <b>Kerb:</b> Flush
<b>Carriageway:</b> None Pedestrian Only Street
<b>FURNITURE TYPE</b>
Unique & Site Specific
<b>LIGHTING TYPE</b>
Unique & Site Specific Refer to Appendix 7.3
<b>STREET TREE TYPE</b>
Refer to Appendix 7.3 for further information

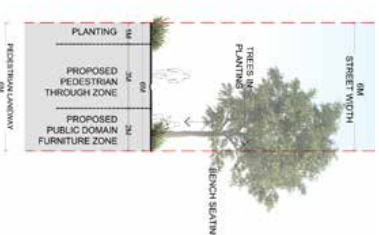
**PEDESTRIAN LANEWAY (9.0M)**



**(Q)** Fig. 61.24 9m Pedestrian Laneway

The Pedestrian Laneway contains designated movement corridors for cyclists and pedestrians. Trees planted in tree-pits, and bench seating, are offset along the length of the lane, distinguishing the cycle corridor from the pedestrian through zones on either side. Brick pavement treatment in these areas identifies the nature of the street as a 'pedestrian only' zone.

**PEDESTRIAN LANEWAY (6.0M)**



**(P)** Fig. 61.25 6m Pedestrian Laneway

These narrower laneways are primarily for pedestrians only, using a darker brick pavement treatment to indicate this. A single line of trees in pits and bench seating, down the centreline of the laneway provides two equally wide spaces for pedestrian movement.



Fig. 6.1.26 Indicative CGI: Neighbourhood laneway (9m)  
Source: Virtual Ideas, 2020



Fig. 6.21 Indicative CGI: George Street pocket park  
Source: Virtual Ideas, 2019

## 6.2 URBAN AND BUILT FORM

- 6.2.1 Approach to Height
- 6.2.2 Tall Buildings
- 6.2.3 Building Heights
- 6.2.4 Building Height Distribution
- 6.2.5 Building Typologies
- 6.2.6 Individual Lot Analysis

**“...make it a place where we can be proud to live.”**

*Survey respondent\**

—

This section describes the urban and built form strategies that underlie the Indicative Concept Proposal. Together with the public domain and open space elements, the urban and built form elements frame the public domain. The massing and height strategy across the masterplan provides for varied heights across Waterloo South to create visually interesting urban forms that respond to the opportunities and challenges of the site, builds upon the existing context, responds to environmental constraints, and provides amenity to both the public and private domain.

Urban and built form elements, shaped by the open space and public domain configuration, promote a diversity of built form, clear definition of the public domain, and street-walls that frame the experience at eye level, whilst taller buildings provide markers, landmarks and height diversity.

\* "Let's Talk Waterloo - Visioning Report Key Findings", KJA, May 18, p23.



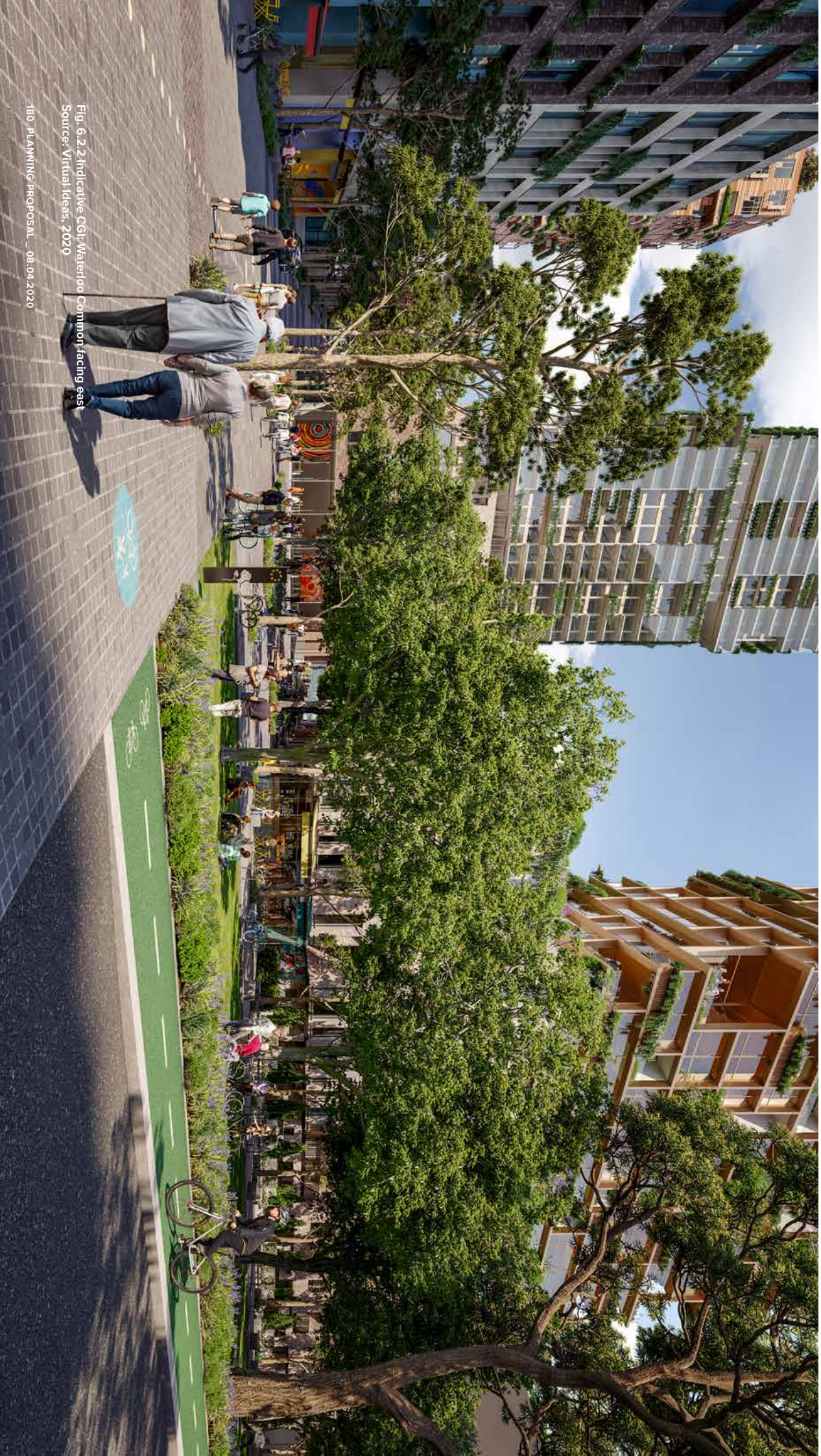


Fig. 6.2.2 Indicative CGI: Waterloo Common facing east  
Source: Virtual Ideas, 2020

# 6.2.1 APPROACH TO HEIGHT

As a pedestrian priority precinct, Waterloo South will be experienced as a walkable place. The form, proportion, articulation, variation, modulation, depth, materiality, texture and colours of the urban elements, together with the public domain, shape the pedestrian experience.

The public domain has been arranged with a focus on the public realm experience through varied open space, street and movement networks. The private domain is arranged with a focus on providing diverse and flexible urban and built forms that allow for a range of architectural responses.

Urban and built form elements, shaped by the open space and public domain configuration, promote a diversity of built form responses, clear definition of the public domain, and street-walls that frame the experience at eye level, whilst taller buildings provide markers, landmarks and height diversity.

Blocks contain a variety of built form which allows for different options to accommodate a variety of housing, as well as satisfy considerations for ground level activation, relationship to context, and solar access provisions to public, communal, and private open space.

Building heights across Waterloo South are distributed to define the street edge at the pedestrian scale and provide legibility and orientation at the local and neighbourhood level. The mix and range of tall buildings will create a visually interesting skyline with slender forms, achieved through small floor plates that respond to solar access and wind mitigation.

Low rise typologies frame the public space and create the street level pedestrian experience. Mid rise typologies define the public domain and create the local level experience. Tall buildings define Waterloo South at the neighbourhood level.

Built form diversity operates at Street (low-rise: 1 to 4 storeys + attic), Local (mid-rise: 6 to 8 storeys + attic), Neighbourhood (tall: 15 to 20 storeys and district / landmark buildings: 29 to 32 storeys) levels, as buildings heights are experienced differently at the street or eye level.

**Refer to Appendix 7.5 and 7.7 for further information**

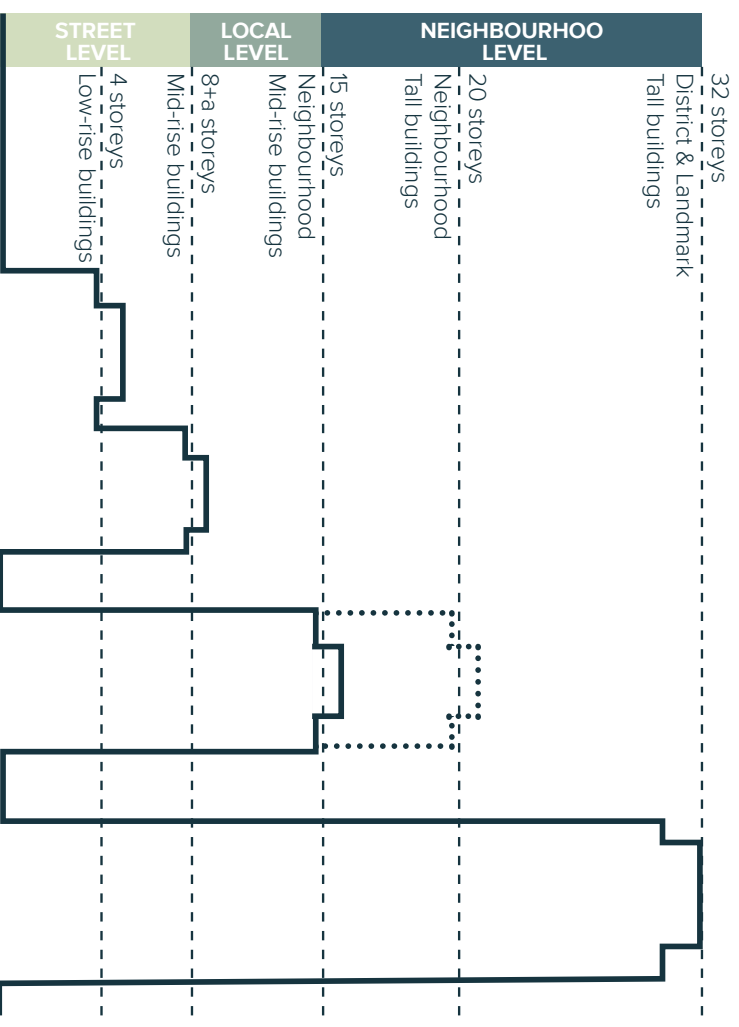
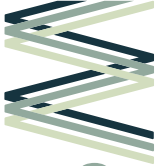


Fig. 6.2.3 Building height diagram



## 6.2.2 TALL BUILDINGS

**Focusing height close to the new Waterloo Metro Station supports liveability by placing people close to transport, jobs, retail, education and recreation opportunities**

### A MULTI-CENTRE CITY<sup>1</sup>

With the new metro station, and increased services and amenities, Waterloo South will become a new urban village and local centre contributing to the City of Sydney's network of villages and multi-centre city strategy. Waterloo South is set within a context that will fundamentally change over the next 40 years.

The Central Sydney Strategy 2016 - 2036 Key Move 4 provides for employment growth in new tall building clusters in areas of Central Sydney that are less constrained by solar access requirements. This allows opportunities for growth, efficient land use, delivery of community infrastructure and innovative design<sup>2</sup>. New tower clusters are envisaged to form southwards towards Redfern as the future southern gateway to Central Sydney that supports the City of Sydney's multi-centre city strategy<sup>3</sup>. The proposed distribution of heights work within the multi-centre city strategy's hierarchy of heights.

With the renewal of Waterloo South into a new urban village and the Metro Quarter's over station development (OSD) into an activity centre, at the same time the new metro station delivers increased connectivity. Waterloo South has the potential to grow into a new strategic centre within the City's multi-centre strategy. This capacity is provided through the adaptable basement, ground and level 1 that allows for non-residential uses to increase in pace with the increased demand required by a growing population as part of the

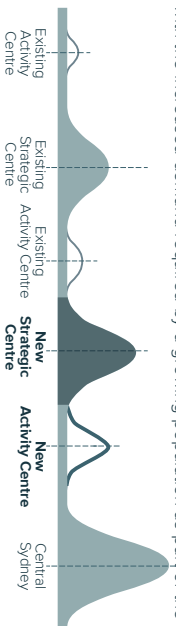


Fig. 6.2.4 A multi-centre city diagram

<sup>1</sup> Adapted from Central Sydney Strategy 2016 - 2036, City of Sydney, p219.  
<sup>2</sup> Central Sydney Strategy 2016 - 2036, City of Sydney, p201.  
<sup>3</sup> Refer Appendix 7.4 for further details on the retail strategy.

### TALL BUILDING CLUSTERS

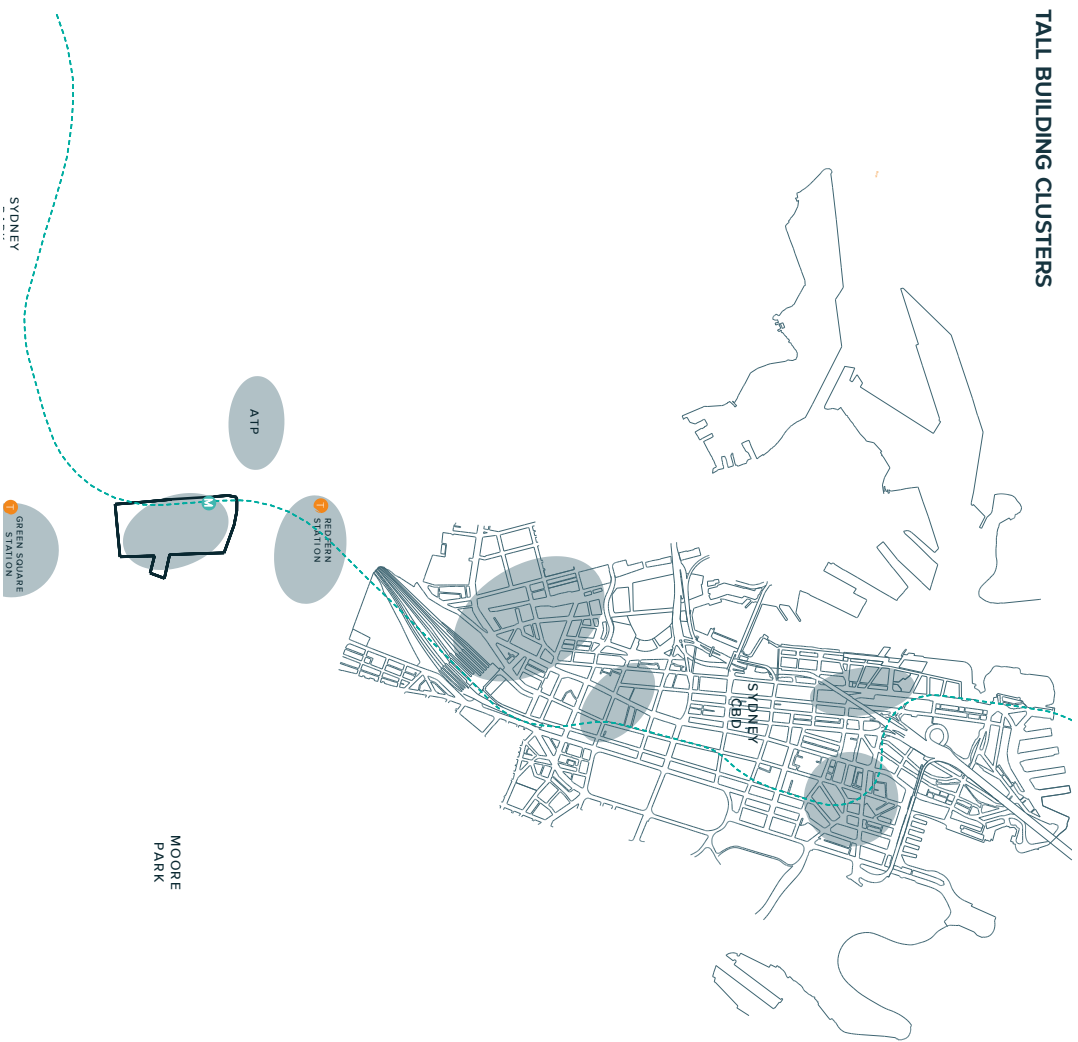


Fig. 6.2.5 A multi-centre city  
 Source: Adapted from Central Sydney Strategy 2016 - 2036, City of Sydney, 2016

**Legend**  
  
 Estate  
 Train Station  
 Metro Station  
 Tall Building Cluster

## Within the surrounding context, tall buildings reinforce an area's identity and support way-finding and legibility. Some become landmarks that identify and are intrinsically linked to it's locality

Through considered design and location, tall buildings can be distinct and defining components of an area's character contributing to a visually interesting skyline and as recognisable landmarks that assist legibility and wayfinding. In the local vicinity, these buildings include:

- Central Park (34 storeys) in Chippendale
- The TNT buildings (18 storeys) in Redfern
- Ovo (28 storeys) in Green Square

This is consistent with the City of Sydney's tall building strategy in areas surrounding the Estate that includes provisions for tall buildings as part of the City's strategy<sup>1</sup> to achieve built form diversity. When completed, the skyline around the Estate will comprise:

- Buildings between 20-25 storeys in Lachlan Precinct
- Buildings up to 20 storeys in Danks Street South Precinct
- Buildings up to 28 storeys in Green Square
- Buildings up to 24 storeys in Redfern

### LANDMARK BUILDINGS AT DISTRICT LEVEL

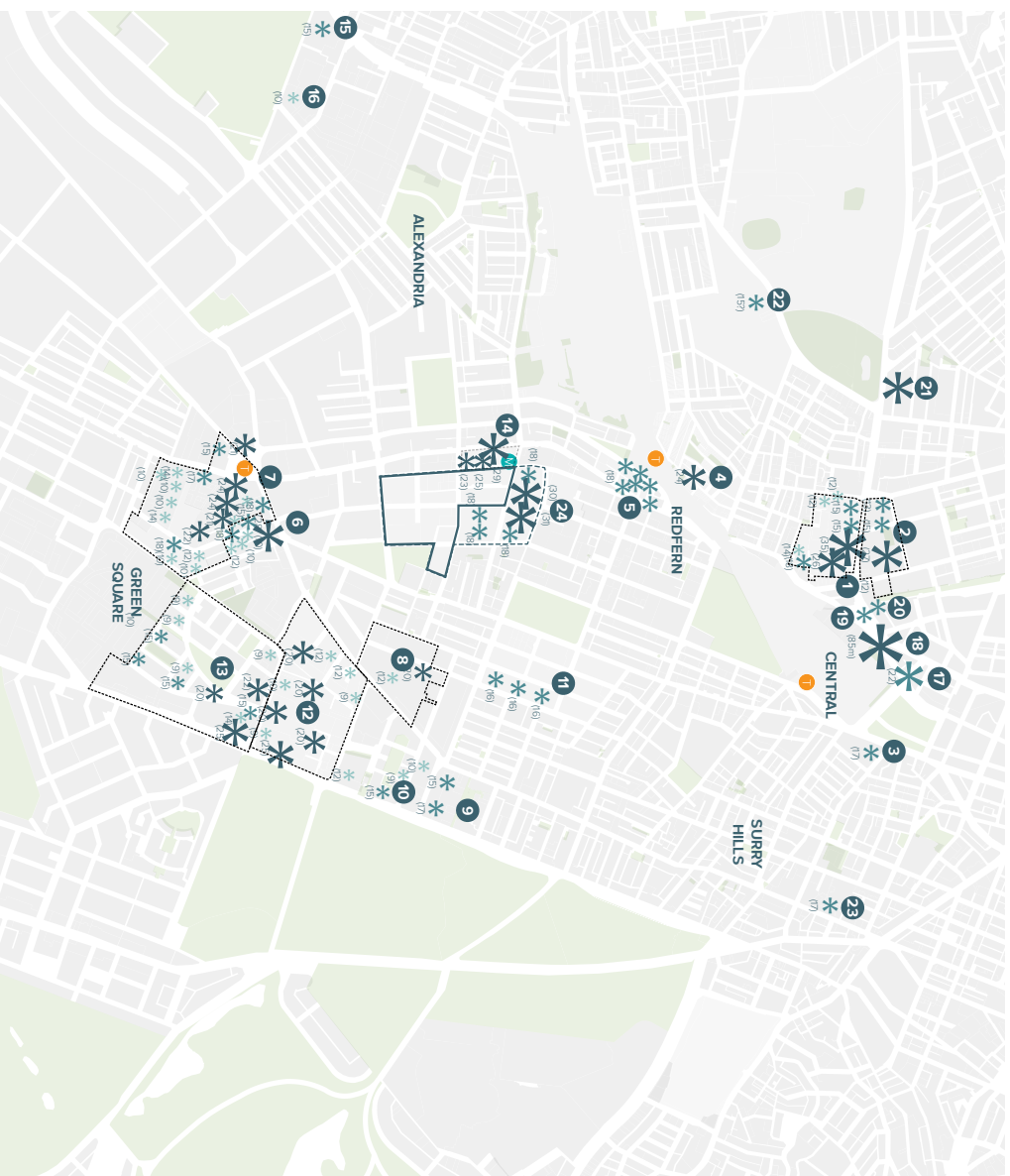


Fig. 6.2.6.1 Landmark, local and tall buildings around Waterloo Estate

Source: Relevant DAs and Planning Proposals, City of Sydney and Department of Planning & Environment, 2019

- Legend**
- \* Landmark Building (220 Storeys)
  - \* Neighbourhood Tall Building (75-19)
  - \* Neighbourhood mid-rise Building (9-14 Storeys)
  - \* Central Park
  - \* UTS Tower within UTS Broadway Precinct
  - 1 Danks Street South Precinct
  - 2 Moore Park Gardens
  - 3 Centennial Plaza
  - 4 Col James Student Accommodation
  - 5 TNT Apartments
  - 6 OVO by Mirvac
  - 7 Green Square Town Centre
  - 8 Waterloo Metro Quarter
  - 9 Zenvu Apartments
  - 10 Sydney Park Village
  - 11 Service NSW
  - 12 Central Station Clock
  - 13 Mercure Sydney Tower
  - 14 Cheron Crown Square by Meriton
  - 15 Lachlan Precinct
  - 16 Victoria Park Zealand
  - 17 Marcus Clarke Building TAFE NSW
  - 18 Broadway Shopping Centre Clock Tower
  - 19 Jane East Russell Building USD
  - 20 St Margarets
  - 21 Maraval, Turanga, Daniel Solander, Marlon, James Cooks and Joseph Banks

<sup>1</sup> Refer to City of Sydney DCP 2012 and planning documents.

## Tall buildings, like those in a similar context in Redfern, Green Square and Central Park, have the potential to become landmarks that reinforce Waterloo South's identity and support wayfinding and legibility

Tall buildings locate people closer to infrastructure that includes transport, open space, retail, services and facilities. Tall buildings have been organised across Waterloo South in response to the street, local and neighbourhood level experience. Key influences to their location, configuration and placement are:

- Street Level:
  - To provide a comfortable and engaging pedestrian environment

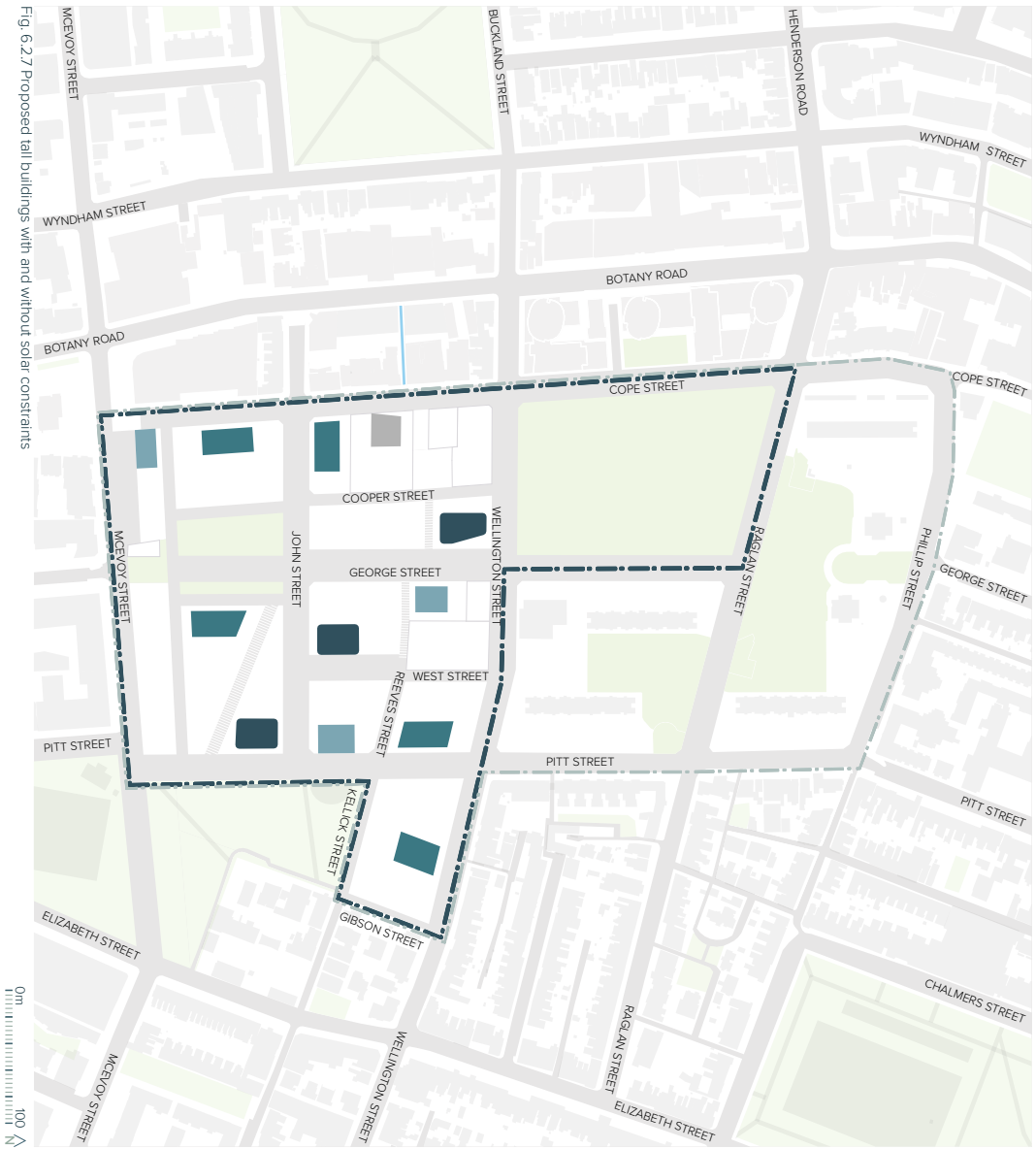
- Local Level:
  - To respond to existing and future context
  - To respond to key views and vistas
  - To align to key view corridors
  - To define the public domain experience

- Neighbourhood Level:
  - To locate district maximum heights next to key entry points into the Estate
  - To respond to solar access requirements
  - To respond to solar access requirements for:
    - Existing public open space
    - Proposed Raglan Street Plaza at the Metro Quarter
    - Proposed public open space
    - To existing and future surrounding context

- District Level:
  - To provide landmarks that assist in way-finding and orientation through the Estate and in the skyline
  - To locate district maximum heights next to new open space, and along George Street and Blue Line connecting to the future metro station
  - To respond to solar access requirements
  - To respond to solar access requirements for:
    - Existing public open space
    - Proposed Raglan Street Plaza at the Metro Quarter
    - Proposed public open space
    - To existing and future surrounding context

Refer to Appendix 7.5 for further information

## TALL BUILDINGS



- Waterloo Estate
- Waterloo South
- Ⓞ Waterloo Metro Station
- Private Sites
- Ⓞ Proposed Tall Building within Private Sites (TS)
- Tall Building (Neighbourhood - 15-20 storeys)
- Tall Building (District & Landmark - 29-32 Storeys)

**TALL BUILDING STRATEGY**

**15 - 20 Storeys (Neighbourhood Tall Buildings)**

Neighbourhood buildings are distributed across Waterloo South in close proximity to the open space network that includes both existing and future public open space.

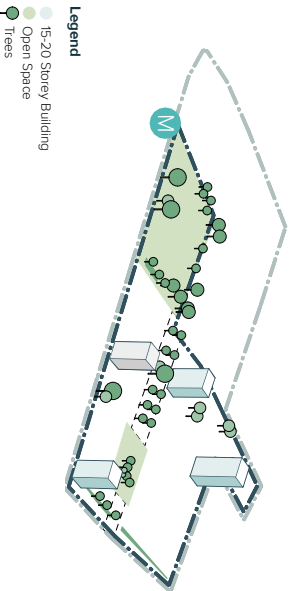


Fig. 6.2.8 Proposed neighbourhood buildings in close proximity to open spaces

**BUILDING SEPARATION STRATEGY**

Building separation amenity to adjacent built form.

**Minimum 24 metres separation between neighbourhood tall buildings**

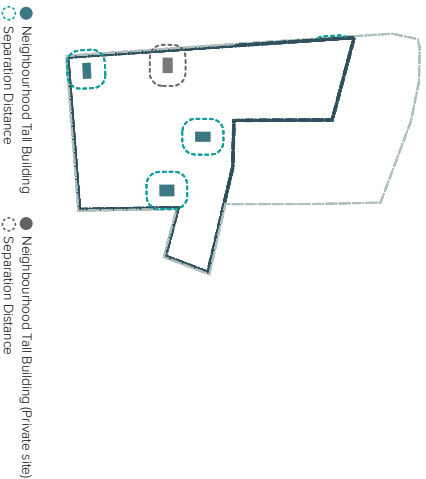


Fig. 6.2.11 Proposed location of local buildings

**30 - 32 Storeys (District Tall Buildings)**

District buildings are located at key entry points into Waterloo South as local markers.

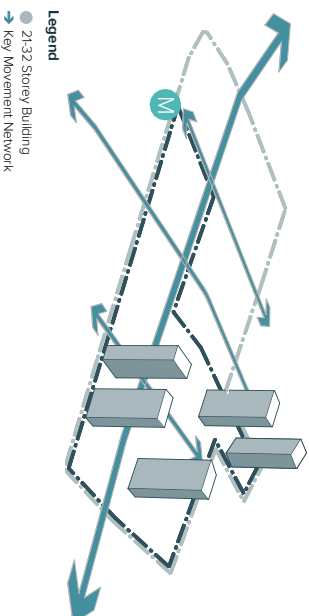


Fig. 6.2.9 Proposed district tall buildings along key streets

**Minimum 40 metres separation between district tall buildings**

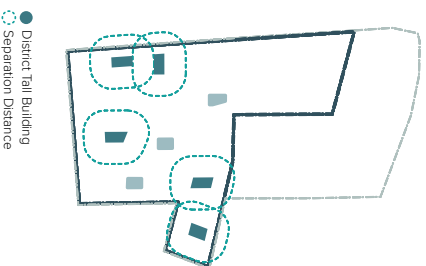


Fig. 6.2.12 Proposed location of district tall buildings

**29 - 31 Storeys (Landmark Tall Buildings)**

Landmark buildings are focused along topographical features such as Waterloo Park North and the Blue Line that connects surrounding neighbourhoods directly to the future metro station and provides landmarks at key locations on the skyline.

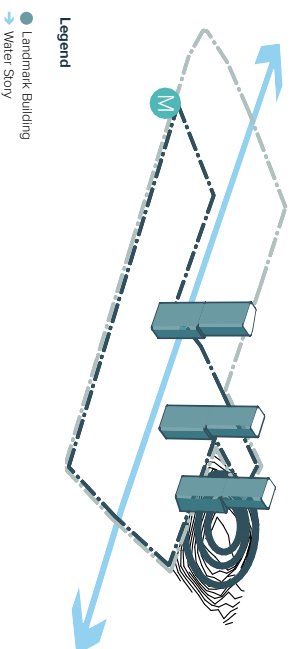


Fig. 6.2.10 Proposed landmark buildings along Blue Line

**Minimum 60 metres separation between landmark tall buildings**

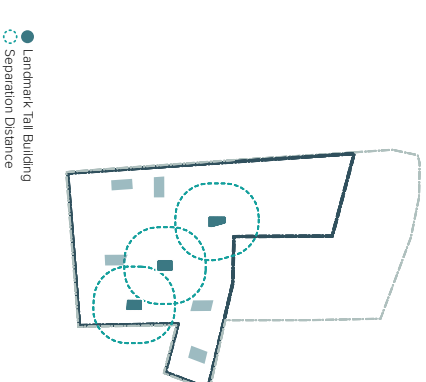
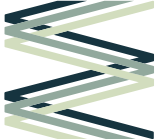


Fig. 6.2.13 Proposed location of landmark tall buildings



## 6.2.3 BUILDING HEIGHTS

**A range of heights are distributed across Waterloo South to provide diversity of building forms. From streetwall buildings that frame the street level experience to taller buildings that are visible landmarks within the district skyline**

Building heights across Waterloo South are distributed to define the street edge at the pedestrian scale and provide legibility and orientation at the local and neighbourhood level. Key strategies include:

- Height provided in less constrained areas to allow for lower heights to more critical interfaces.
- A fine grained, enriched and activated public domain provided through built form massing, scale and height that supports variety in architectural design and character.
- Open space amenities (including the Village Green, Waterloo Common and George Street).
- Built form along the key Blue Line alignment through Waterloo South that connects the surrounding context to the new Waterloo Metro Station and key destinations within Waterloo South.
- Places that are appropriately scaled and achieve solar access requirements.
- Respond to key views and vistas by creating a varied and visually interesting skyline.
- Buildings stepped in response to the topography and key view corridors.
- Transition in massing and scale to the existing context that includes the adjacent heritage conservation areas of Alexandria, Redfern and Waterloo.
- Transition in massing and scale to the future public domain.
- Creating a comfortable and engaging pedestrian environment.

Refer to **Appendix 75 for further information**

### BUILDING HEIGHTS

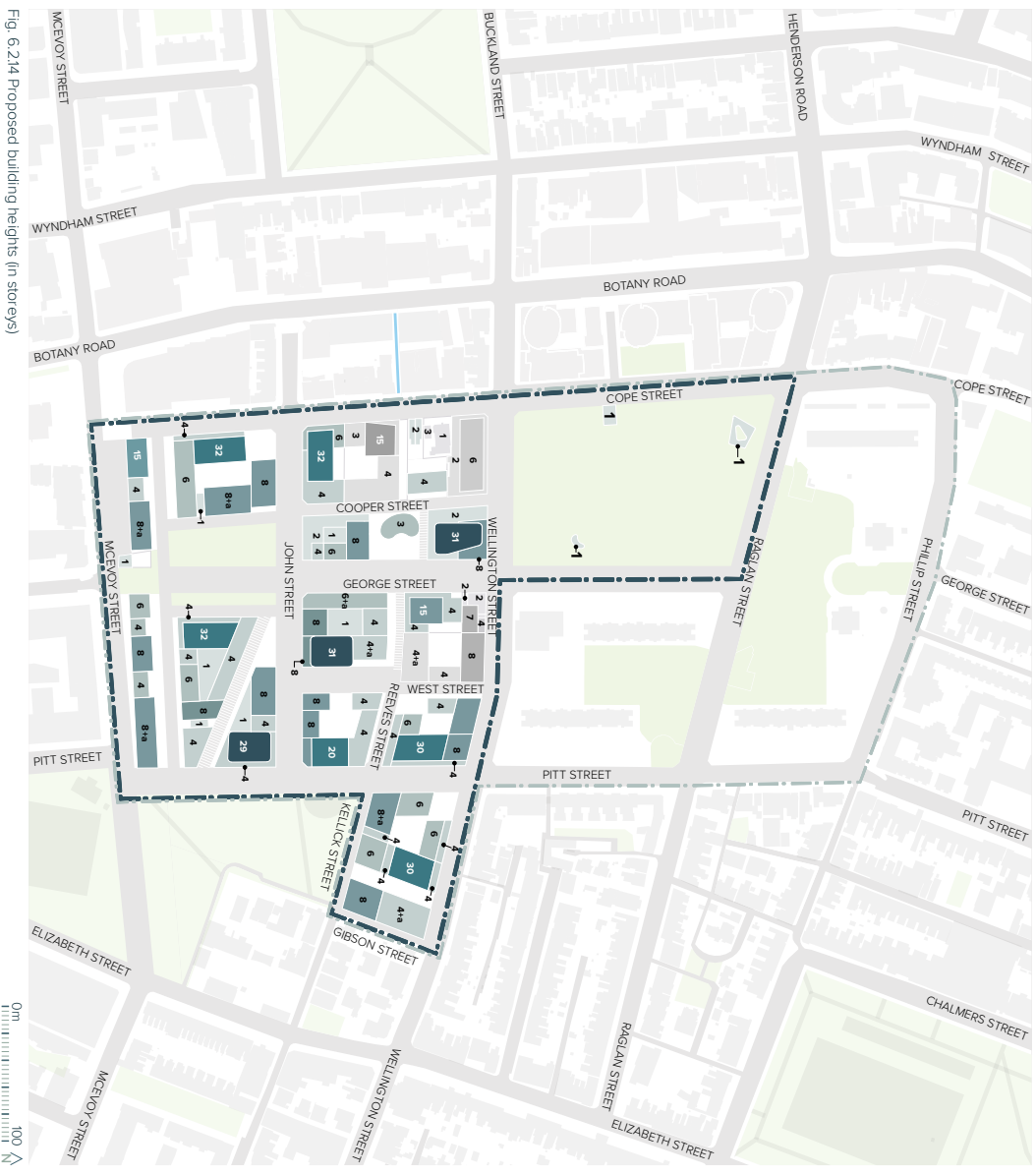


Fig. 6.214 Proposed building heights (in storeys)

#### Legend

- Waterloo Estate
- Waterloo South
- Waterloo Metro Station
- 1-4 No of Storeys for Buildings within Precinct
- 5-8 Buildings within Private Sites
- 9-15 Low-rise Buildings (1-4+attic storeys)
- 16-20 Mid-rise Buildings (6-8+attic storeys)
- 21-32 Neighbourhood Tall Buildings (15-20 storeys)
- District and Landmark Tall Buildings (29-32 storeys)

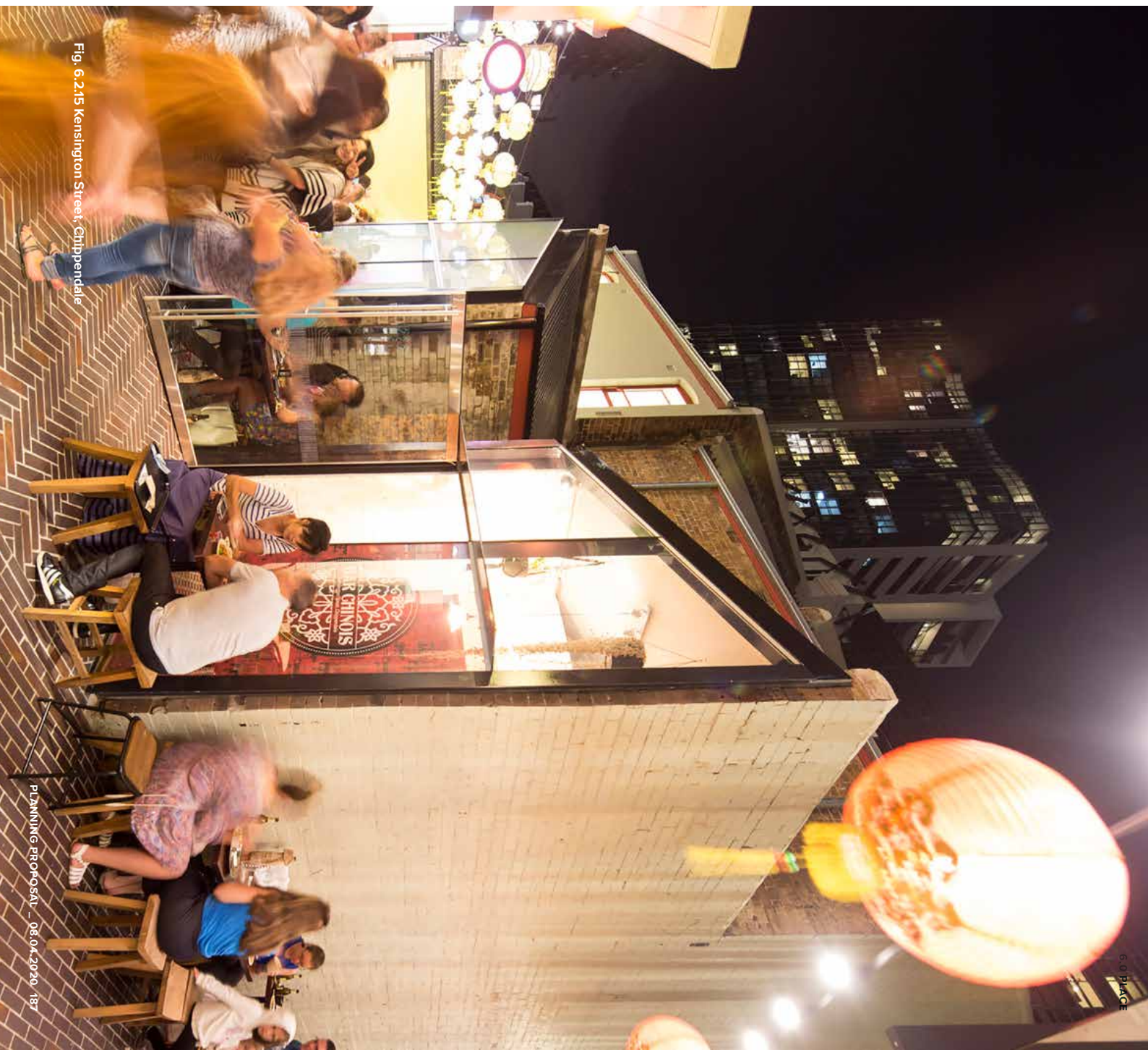
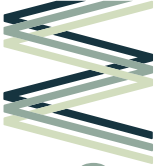


Fig. 6.2.15 Kensington Street, Chippendale





# 6.2.4 BUILDING HEIGHT DISTRIBUTION

## A variety of built form distributed across Waterloo South provides diversity and supports a rich and varied ground plane

- Low rise typologies define the street edge.
- Buildings frame the fine grained network of streets, through site links, public open spaces and private open spaces.

### LOW RISE - STREET LEVEL (1-7 STOREYS)

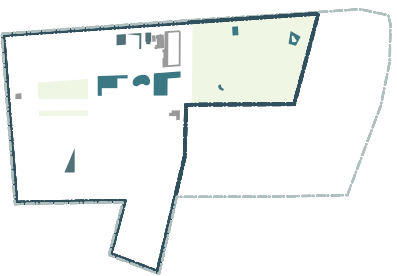


Fig. 6.2.16 Buildings of 1 to 3 storeys

#### 1 - 3 Storeys

- 1-2 storey buildings and streetwalls form podium base for taller buildings, define the street edge and assist with wind mitigation.



Fig. 6.2.19 Buildings of 4 storeys

#### 4 - 4+8 Storeys

- 4 storey buildings and streetwalls define the street edge.
- Buildings frame the network of streets, through-site links and publicly accessible open space, and provide a human scale at street level.

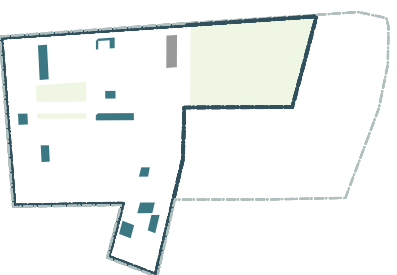


Fig. 6.2.21 Buildings of 6 to 6+attic storeys

#### 6 - 6 + attic Storeys

- Setbacks and changes in plane and/or materials to upper storeys provide a transition to existing context, where contextually appropriate, and reduce the visual bulk and scale at street level through variation in form and materiality.

A set of approaches, unique to Waterloo South, have been developed to respond to the interfaces to heritage items and the adjacent Heritage Conservation Areas. These include physical separation where it is possible, the setback of taller buildings above street-wall heights where they directly relate to adjacent buildings to be retained, and the transition in scale through a series of stepped forms where they form a continuous street wall.

Refer to Appendix 75 for further information



Fig. 6.2.17 Waterloo Street, Carlton  
Source: Milieu Property, 2016



Fig. 6.2.18 Palencia Cultural Civic Centre  
Source: Exit Architects, 2018



Fig. 6.2.20 Torneby, Greve, Denmark by Studio Local  
Source: World Architecture News, 2018



Fig. 6.2.22 South Kiburn Estate by Alison Brooks  
Source: Paul Riddle, 2017

## MID RISE - LOCAL LEVEL (8-14 STOREYS)

- Mid rise typologies define the public domain.

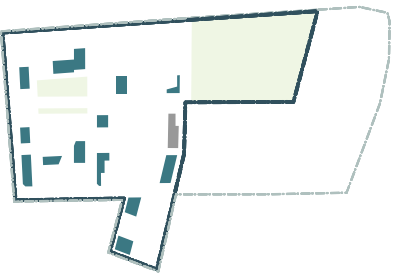


Fig. 6.2.23 Buildings of 8 to 8+attic storeys



### 8 - 8 + Attic Storeys

- 8 storey buildings and streetwalls defines the public domain
- Setbacks and changes in plane and/or materials to upper storeys provide a transition to existing context, where contextually appropriate, and reduce the visual bulk and scale at street level through variation in form and materiality.



Fig. 6.2.24 Camden Courtyards, UK  
Source: Sheppard Robson, 2017

## TALL BUILDINGS - NEIGHBOURHOOD / DISTRICT LEVEL (15-32 STOREYS)

- Tall building typologies provide identity through vertical diversity as integrated neighbourhood and free-standing markers.

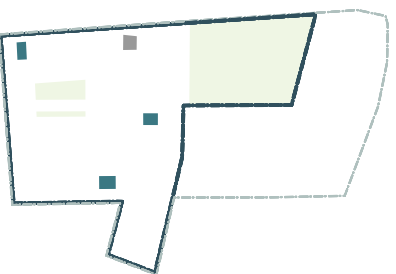


Fig. 6.2.25 Neighbourhood buildings of 15 to 20 storeys



### 15 - 20 Storeys (Neighbourhood)

- Neighbourhood tall buildings provide for a pencil 'infill' form that meets the ground, forming an 'extruded' fine grain pattern along the street that provides visual interest.



Fig. 6.2.26 Building Pleyredon 1101  
Source: Estudio Pablo Gagliardo, 2017



Fig. 6.2.27 The Book Company Headquarters, Source: N.E.I.D Architecture, 2017

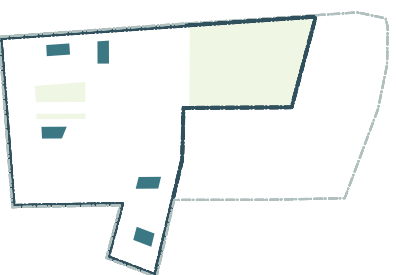


Fig. 6.2.28 District buildings of 30 to 32 storeys



### 30 - 32 Storeys (District)

- District tall buildings provide a transition in scale to create a diverse and attractive skyline.
- Heights relate to existing heights already within the area.
- Buildings are set back from the street edge on low to mid-rise podiums that define the street edge.



Fig. 6.2.29 Geysir, Stockholm  
Source: C.F. Møller, 2017



Fig. 6.2.30 Geysir, Stockholm,  
Source: C.F. Møller, 2017

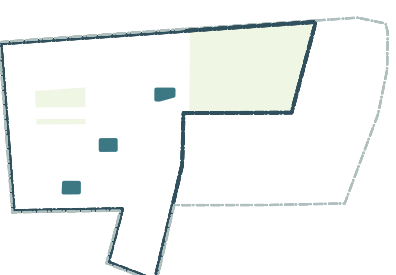


Fig. 6.2.31 Landmark buildings of 29 to 31 storeys



### 29 - 31 Storeys (Landmark)

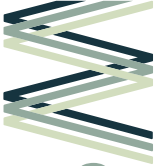
- Landmark tall buildings define key places within Waterloo South along the Blue Line that connects to the Waterloo Metro Station.
- Buildings are set back from the street edge with mid-rise podiums that define the street edge.



Fig. 6.2.32 Santa Fe tower, Mexico City  
Source: Sorido Madaleno Architects, 2018



Fig. 6.2.33 Bosco Verticale  
Source: Stefano Boeri Architeti, 2014



## 6.2.5 BUILDING TYPOLOGIES

### A range of building typologies provide flexible urban forms that allow for a range of architectural responses

Low-rise buildings of 1 to 4+attic storeys includes retention of existing terrace houses, heritage buildings and items that contribute to the streetscape. These buildings define the street edge, provide a transition to lower scale buildings and provide the immediate eye level experience. Low to mid-rise buildings of up to 6 + attic storeys define the street edge, frame the fine grain network of streets, lanes, links and public domain spaces, and are the predominant pedestrian experience when combined with awnings, active frontages, and landscaping within the public domain or building setbacks.

Mid-rise local buildings up to 8 + attic storeys complete the street wall and define the street at a local level. The majority of buildings are 4 to 8+ attic storeys.

Tall buildings at a neighbourhood level serve as markers at various scales. Three Neighbourhood tall buildings from 15 to 20 provide slender fine grain infill forms, height diversity, and opportunities for dwellings at higher levels that benefit from district views. Other tall buildings act as geographic markers and landmarks to Waterloo South. District tall buildings, between 30 to 32 storeys, relate to the existing heights already within the area and are located at gateways to Waterloo South, whilst Landmark tall buildings, between 29 to 31 storeys, define key places within Waterloo South and also correspond to the key alignments that connect surrounding areas to George Street, the Village Green and the Metro Quarter.

Refer to Appendix 7.5 for further information

#### COMMUNITY ANCHORS

Community buildings play an important role in improving the quality of life by providing facilities and affordable services to meet the community's needs

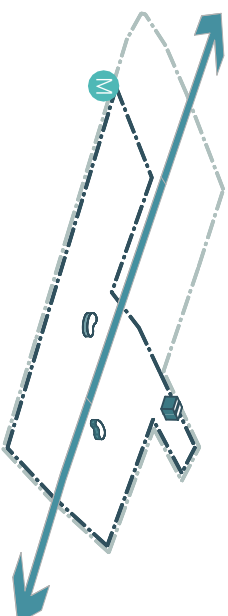


Fig. 6.2.34 Community buildings

- Legend**
- Waterloo Estate
  - Waterloo South
  - Waterloo Metro Station
  - Community Facilities
  - Water Story
  - Sub-precincts

Three key community hubs are proposed, co-located with retail and open space amenities, to provide a community focused hub within the sub-precinct character areas. One is a building in the round (experienced on all sides) but all and have the opportunity to become community anchors within the sub-precinct area.



Fig. 6.2.35 The Word, UK  
Source: Faulkner Brown, 2016



Fig. 6.2.36 Royal Arena, Denmark  
Source: SKN & HKS, 2017

#### ROW APARTMENTS

Row apartments have a smaller number of dwellings per core and have the flexibility to respond to changes in topography and the height of the surrounding context

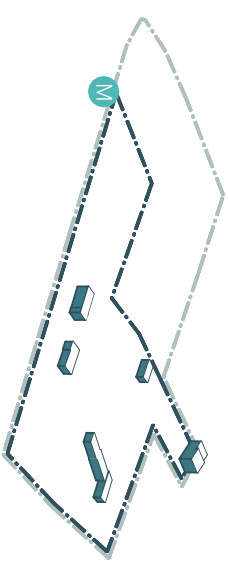


Fig. 6.2.37 Row apartment buildings

- Legend**
- Metro Station
  - Row Apartments

Row apartments typically comprise 2-4 apartments and have the flexibility to be stepped to suit changing topographical conditions. Building alignments can respond to the heights of adjacent buildings, with changes in material or upper level setbacks aligned to adjacent properties, to maintain a consistent and integrated neighbourhood character. This typology is suited to areas where there is a significant change in level and adjacent to existing context.



Fig. 6.2.38 North Melbourne Townhouses  
Source: Headman White, 2014



Fig. 6.2.39 Union Balmain

**LINEAR**

The linear typology provides opportunities for consistent setbacks to the street, a sense of address and passive surveillance of the public domain

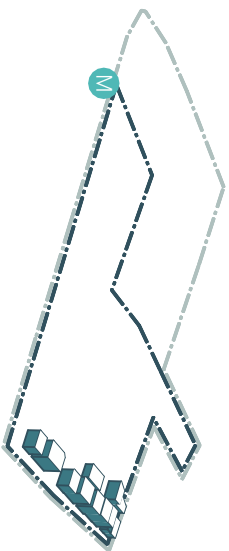


Fig. 6.2.40 Linear buildings

- Legend**
- Linear Building

The linear typology provides multiple entries to the front and rear; opportunities for consistent setbacks to the street; a sense of address and passive surveillance of the public domain.



Fig. 6.2.41 Camden Courtyards  
Source: Sheppard/Robson, 2017



Fig. 6.2.42 Residence Ham  
Source: CAAN Architects, 2012

**COURTYARD**

The courtyard typology provides increased social interaction opportunities for residents, and multiple street addresses that activate the street and rear laneways by encouraging activity and passive surveillance.

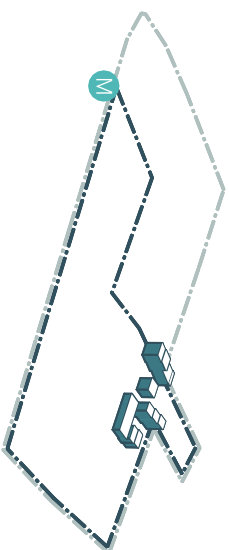


Fig. 6.2.43 Courtyard buildings

- Legend**
- Courtyard Building



Fig. 6.2.44 Massey - Co  
Source: MFR Architects, 2012



Fig. 6.2.45 Diversity

**MIXED-USE COURTYARD**

The mixed-use courtyard typology extends the public domain with through-site connectivity and ground level non-residential uses that promote activity, passive surveillance and social interaction opportunities for the community

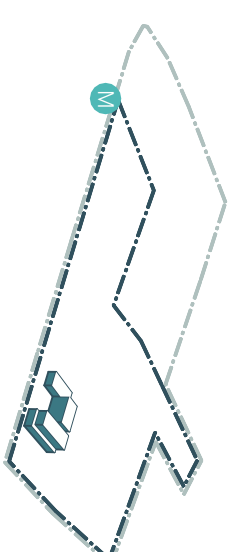


Fig. 6.2.46 Mixed-use courtyard buildings

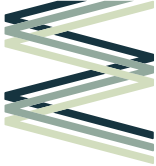
- Legend**
- Mixed Use Building with Publicly Accessible Courtyard



Fig. 6.2.47 Casba Danks Street by SJB Architects



Fig. 6.2.48 Casba by SJB



## TALL BUILDING

The tall building 'neighbourhood' typology provides a small footprint that reinforces the fine grain urban pattern vertically by meeting the ground, with the opportunity to become a local marker

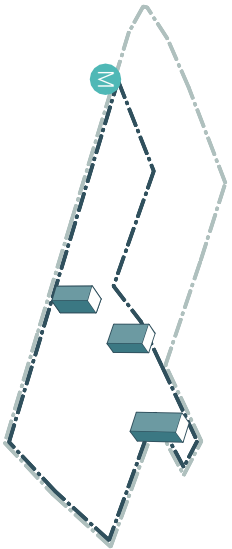


Fig. 6.2.49 Neighbourhood tall buildings

- Legend**
- Waterloo Estate
  - Waterloo South
  - Neighbourhood Tall buildings
  - Waterloo Metro Station

## TALL BUILDING (PODIUM)

The tall building podium typology responds to the street, local and neighbourhood scale by providing setback tall building forms, that are visible on the skyline, on podiums that relate to the scale of the pedestrian experience

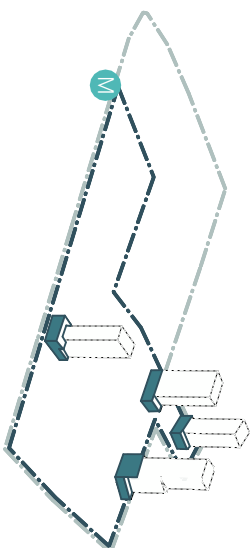


Fig. 6.2.53 Tall buildings with podium

- Landmark Building with Podium

The ground level provides the street level interface and pedestrian experience, the podium provides a consistent streetwall to define the public domain, and the tall building above has the potential to be a local marker.

## HYBRID BUILDING

The hybrid typology provides an integrated mix of uses, a clear street address with active frontages, and a stepped, varying form that is environmentally responsive

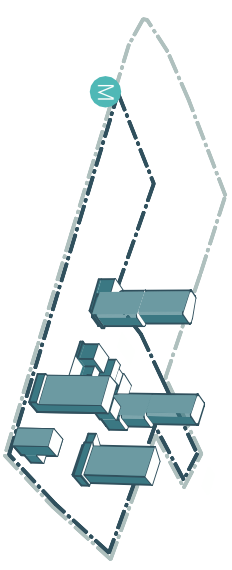


Fig. 6.2.56 Hybrid buildings

- Hybrid Building



Fig. 6.2.50 The Address-Tajna  
Source: Turner, 2019



Fig. 6.2.51 Unit Urban Living  
Source: Basiches Arquiteos Asociados, 2014



Fig. 6.2.52 10, Harover Street  
Source: Squire & Partners, 2013



Fig. 6.2.54 Paragon, Zealand  
Source: Turner, 2018



Fig. 6.2.55 East Village, Zealand  
Source: Turner, 2018



Fig. 6.2.57 One Central Park, Sydney by Fosters & Partners; Ateliers Jean Nouvel and PTW  
Source: Nikkei Asian Review, 2018



Fig. 6.2.58 Lombard Wharf, London by Patel Taylor  
Source: Designboom, Peter Cook, 2017



## 6.2.6 LOT S INDIVIDUAL LOT ANALYSIS

### Lot S was selected to test outcomes and verify the projected yield targets

The individual lot study tests the design ideas and strategies, their outcomes and verifies the projected amenity for the existing and future context against the Place Performance Measures, Apartment Design Guide and the City of Sydney Development Control requirements.

#### LOT S

Lot S was chosen for detailed site study as it contains a mix of built form heights and typologies with a mix of building uses that includes residential, retail and supermarket uses.

A summary of the key criteria has been provided in Table 2. Refer to Appendix 7.5 for the Lot S Individual Lot Analysis

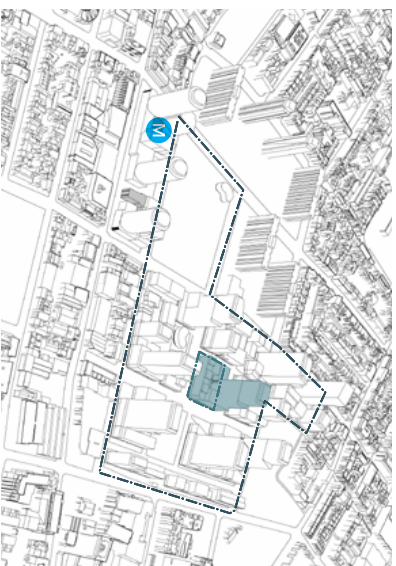


Fig. 6.2.60 Selected lot analysis

- Legend**
- Waterloo South
  - Built form
  - Waterloo Metro Station
  - Lot Study

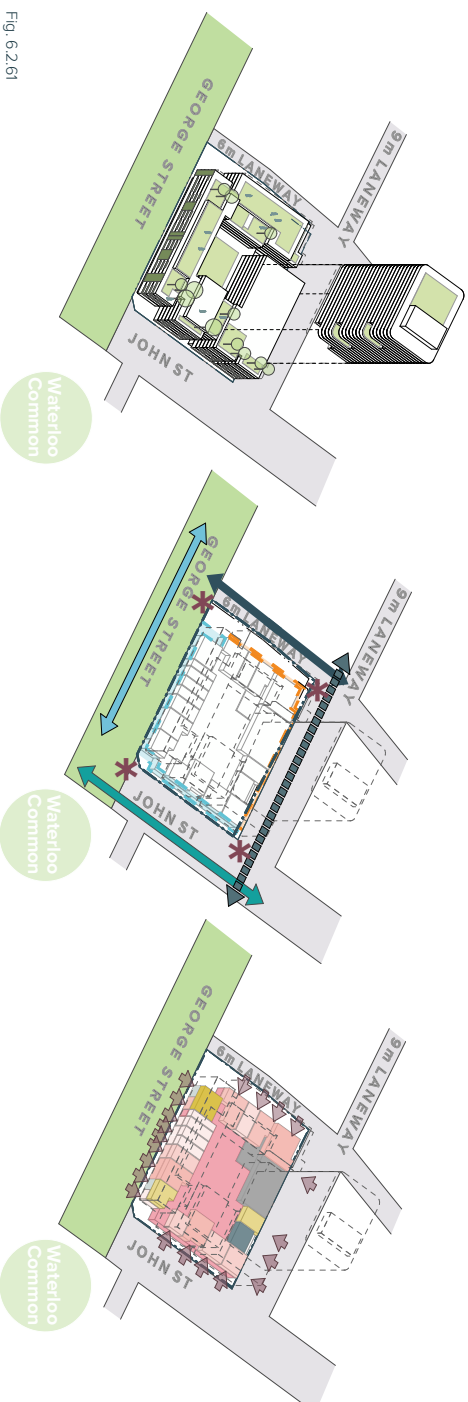


Fig. 6.2.61

ADG DESIGN CRITERIA	PRIVATE DOMAIN	PUBLIC DOMAIN INTERFACE
<b>Urban Forest</b>		Setback and landscape zones provide for new trees
<b>Open Space</b>		1,570 m <sup>2</sup> (38% of site area)
<b>Landscape Replacement Area (LRA)</b>		Additional 1,690 m <sup>2</sup> (42%) landscape area (to achieve target 80% of site area LRA)
<b>Ground Level Connectivity</b>		Corner set-backs provide social corners and view lines between routes
<b>Active Frontages</b>		193 m (87%)
<b>Lot Efficiency</b>		Efficiency ranges from 63% to 70% for residential uses and 90% for non-residential uses
<b>Gross Floor Area (GFA)</b>		27620 m <sup>2</sup>
<b>Dwellings</b>		304
<b>Solar Access to Communal Open Space</b>		Complies receive 2 hours between 9am to 3pm at mid-winter
<b>Solar Access to Building Facades</b>		Complies 73% primary facades receive 2 hours between 9am to 3pm at mid-winter
<b>Cross Ventilation</b>		Complies 60-63% of dwellings active cross-ventilation
<b>Solar Access</b>		Complies 71-75% of dwellings receive 2 hours between 9am to 3pm at mid-winter
<b>Apartments with No Direct Winter Sun</b>		7%
<b>Maximum Number of Apartments per Core</b>		12

Table 2

## 6.3 INTERFACES

- 6.3.1 Landscape, Urban Grain & Built Form
- 6.3.2 Responding to the Existing and the Future Local Context
- 6.3.3 Heritage Interfaces
- 6.3.4 Contextual Interfaces
- 6.3.5 Public and Private Interfaces

**“More of everything and space for it.”**

*Waterloo community participant\**

The Estate is currently an island site disconnected by its street network and block structure from the finer grain of the surrounding area. The built form of free-standing buildings with significant slab and tower forms is also unique and in contrast to the lower residential dwellings of adjacent areas. This presents an opportunity for contrast to the surrounding context whilst also creating a considered relationship to that context.

This section describes the Indicative Concept Proposal response to various interfaces. The masterplan provides a transition to interfaces with **heritage conservation areas** (HCAs) and heritage items. Adaptive re-use of existing buildings helps to retain and build upon heritage items or buildings that contribute to the **character of the street**. Contextual interfaces respond to the **adjacent existing and future context**. **Public and private domain interfaces** provide transition areas of semi-private space that support social interaction and protects the amenity of residents.

\* "Let's Talk Waterloo - Visioning Report Key Findings", KJA, May 18, p.71.





Fig. 6.3.1 Indicative CGI: Cope Street facing north, Waterloo Village Green pavilion  
Source: Virtual Ideas, 2019

# 6.3.1 LANDSCAPE, URBAN GRAIN & BUILT FORM

**Waterloo's place character is reflected in the eclectic lot structure and built form that has evolved over time.**

The urban fabric of Waterloo and surrounding areas comprises a network of open spaces and streets, with a range of building types and sizes that is mixed, and reflects its' history of ad hoc growth over time. The existing open spaces and trees within the Estate were established as part of the Endeavour Estate. The original vegetation within the Estate had been cleared as part of the early subdivision of the late 19th century and the 'slum clearance' of the 1940s.

The street network reflects the original layout established with the first systematic development of the area, circa 1880s. The major changes to the street network were undertaken with the 'slum clearance' program undertaken with the construction of the Endeavour Estate, north of Raglan Street. As part of the re-development, a number of the original streets were closed off.

The built form is a mix of building typologies. Low rise typologies define the terraces in the heritage conservation areas, Victorian townhouses and warehouses. Medium rise typologies define the street wall edge. They comprise the new residential flat buildings and commercial / retail buildings of the adjacent urban renewal and employment hubs. High rise typologies mark the location of key activity centres. They comprise new residential flat buildings.

## URBAN FABRIC ELEMENTS



1943 LOT STRUCTURE

Fig. 6.3.2  
Source: Waterloo Estate South - Urban Forest Study, Atrerra, 2020  
1943 aerial clearly indicating the trees in the nearby parks while there appears to be no significant trees within the Estate.



1975 LOT STRUCTURE

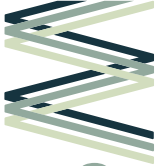
Fig. 6.3.3  
Source: Waterloo Estate South - Urban Forest Study, Atrerra, 2020  
1975 aerial indicating the trees in the nearby parks. Note there appears to be very few trees within the Estate. Some Young trees are noted along George Street, John Street and the corner of Pitt Street and Phillip Street.



2017 LOT STRUCTURE

Fig. 6.3.4  
Source: Waterloo Estate South - Urban Forest Study, Atrerra, 2017  
2017 aerial of the site illustrating the relatively dense tree canopy, dominated primarily by Hill's Weeping Figs, Tallowoods and some other scattered Eucalyptus (Nearmap, February 2017)

Fig. 6.3.5



## 6.3.1 LANDSCAPE, URBAN GRAIN & BUILT FORM

**Adjoining neighbourhoods are composed of a layered urban fabric**



### REDFERN

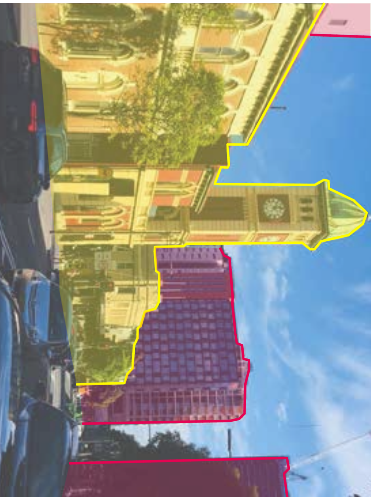


Fig. 6.3.6 Redfern Street Village low density, retail strip with towers at Redfern Station

The area of Redfern is largely residential. The civic and commercial centre is Redfern Street, which cuts across the area and contains major civic, religious and commercial buildings. The Redfern Estate Heritage Conservation Area (HCA) to the north of the Metro Quarter has single storey cottages, Victorian terraces and recent medium rise developments. Factories and warehouses are scattered throughout.



Fig. 6.3.7 Low rise character strip next to Redfern Waterloo Commercial Zone towers, view from Raglan Street

### ALEXANDRIA



Fig. 6.3.8 The Alexandria Park HCA from Henderson Road, with Waterloo Estate beyond

Alexandria is largely an industrial suburb with medium to high density residential areas. Distributed within this fabric are pockets of industrial buildings and terrace housing that are part of the Alexandria Park HCA to the west of the Metro Quarter.



Fig. 6.3.9 Medium density residential development on Botany Road, with low scale building between

**GREEN SQUARE**



Fig. 6.3.10 Zetland HCA, directly adjacent to new high density residential development

One of Sydney's oldest industrial lands, Green Square is evolving into a new town centre, with a mix of low, mid and high rise buildings. It is part of an overall masterplan that sets out the built form structure and grain that connects to, and integrates with the surrounding residential Zetland and Alexandria HCAs.

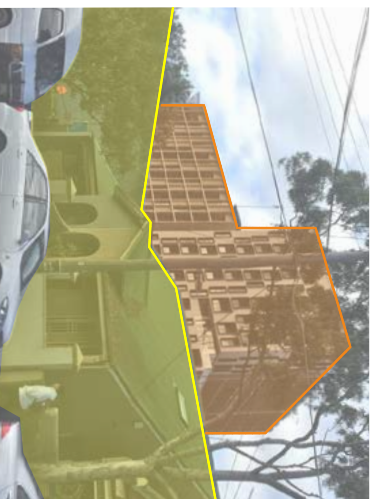


Fig. 6.3.11 Low density dwellings in Elizabeth Street adjacent to urban renewal high density residential development

**WATERLOO**



Fig. 6.3.12 Terrace houses adjacent to urban renewal Estate at the corner of McEvoy and Kensington Street

Waterloo's urban fabric has been shaped by a history of growth and renewal, with the resulting diverse mix of housing typologies reflecting evolving models for living. This narrative is reflected in the environment and comprises a diverse mix of built form, grain and uses adapted over time to meet changing housing demands.



Fig. 6.3.13 Redfern Estate HCA near Redfern Oval with Waterloo Estate beyond; view from Phillip Street

## 6.3.2 RESPONDING TO THE EXISTING AND THE FUTURE LOCAL CONTEXT

Waterloo's urban fabric has been shaped by a history of growth and renewal. We can learn from and incorporate this past while contributing a new layer that responds to existing and future needs and builds upon Waterloo's unique character

Waterloo's urban fabric has been shaped by a history of growth and renewal, with the resulting diverse mix of housing typologies reflecting evolving models for living. This narrative is reflected in the environment and comprises of a diverse mix of built form, fine grain and mix of uses adapted over time to meet changing housing demands.

The Alexandria Park and Redfern Estate Heritage Conservation Areas (HCA) are characterised by 1, 2 and 3 storey, low scale residential dwellings and similarly low-scale industrial warehouse typologies with heights comparable to the surrounding residential scale.

Tall buildings are clustered around the existing railway stations at Redfern and Green Square. The Estate also has a grouping of tall buildings to the northern portion, with the tall buildings forming a gateway at the bottom of George Street.

Likely future development along Botany Road Corridor - running between the Redfern and Green Square Station Precincts - and the proposed Metro Quarter development serves as a transition zone to the Alexandria Park HCA to the west, beyond Wyrndham Street.

### EXISTING AND FUTURE CONTEXT

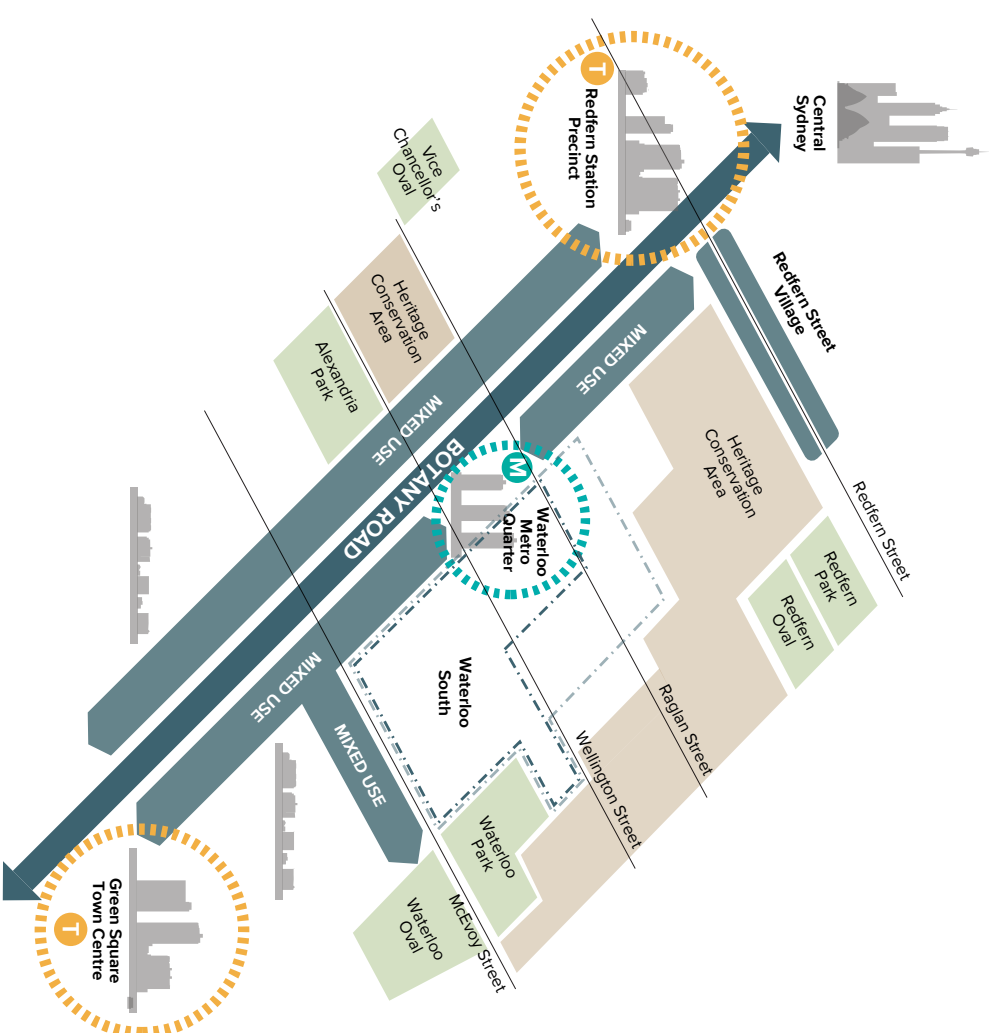


Fig. 6.314 Waterloo SSP within the existing and future context

#### Legend

- Waterloo
- Estate
- Train Station
- Metro Station

- Open space
- Heritage conservation area (HCA)

- Mixed use
- Existing strategic centre

- Active transport hub



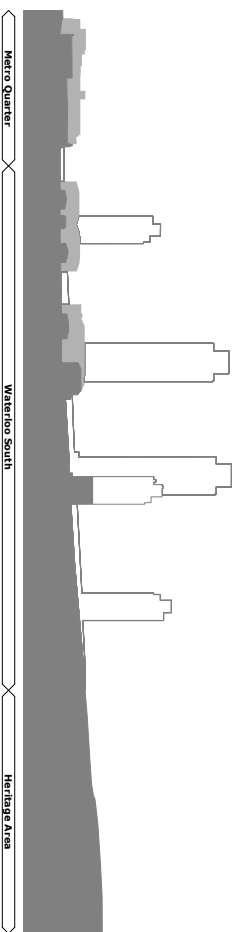
## Height defined in response to local context and amenity

The nearest centres of activity to Waterloo South have heights ranging from 18 storeys in Redfern (TNT building located at 161 Redfern Street, Redfern) and 28 storeys at Green Square (Ovo building at 30 Ebsworth Street, Zetland). Although the surrounding context is a mix of built form typologies and densities, the pre-dominance of heritage conservation areas (HCAs) with low rise buildings, and the airspace constraints, have modified the height range of existing strategic centres.

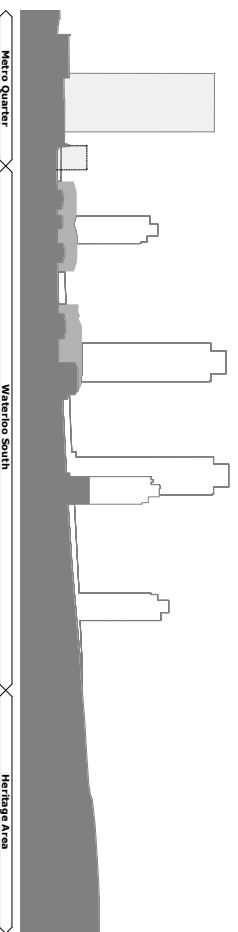
As part of the Redfern Waterloo Growth Area, Waterloo South is set within a context that will fundamentally change over the next 40 years.

These changes are all part of Waterloo's ongoing cycle of growth and renewal which has seen it change from a thriving wetland pre-colonial settlement, to a refuge for displaced Gadigal people, through the establishment of early industry and workers housing, and a place that accommodated many new immigrants, to the emergence of social housing in larger developments that gradually replaced the original buildings and block pattern. Each cycle has brought with it changes to the building stock to suit the particular needs of the time, resulting in a lot pattern and built form that is layered and diverse. A layered response, with a diversity of uses, height and built form, is considered to be both appropriate and contextual in the ongoing cycle of renewal.

### EXISTING CONDITION



### FUTURE DEVELOPMENT ALONG BOTANY ROAD CORRIDOR AND THE METRO QUARTER



### WATERLOO SOUTH RENEWAL

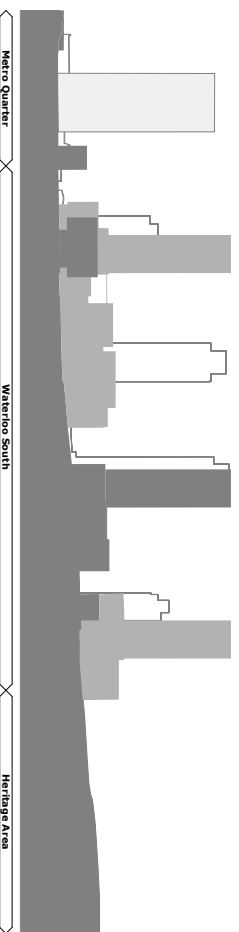


Fig. 6.315 Evolution of Waterloo SSP



# 6.3.3 HERITAGE INTERFACES

## WELLINGTON STREET INTERFACE (EAST)

A four to six storey streetwall height is provided along Wellington Street as a transition from the existing context which varies from 2-4 storeys along Wellington Street, to the taller buildings to the centre of Waterloo South



Fig. 6.3.16 Pitt Street looking towards Wellington Street  
Source: Google Maps, 2018

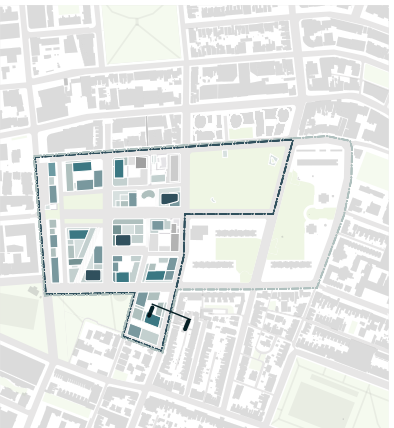


Fig. 6.3.17 Key plan

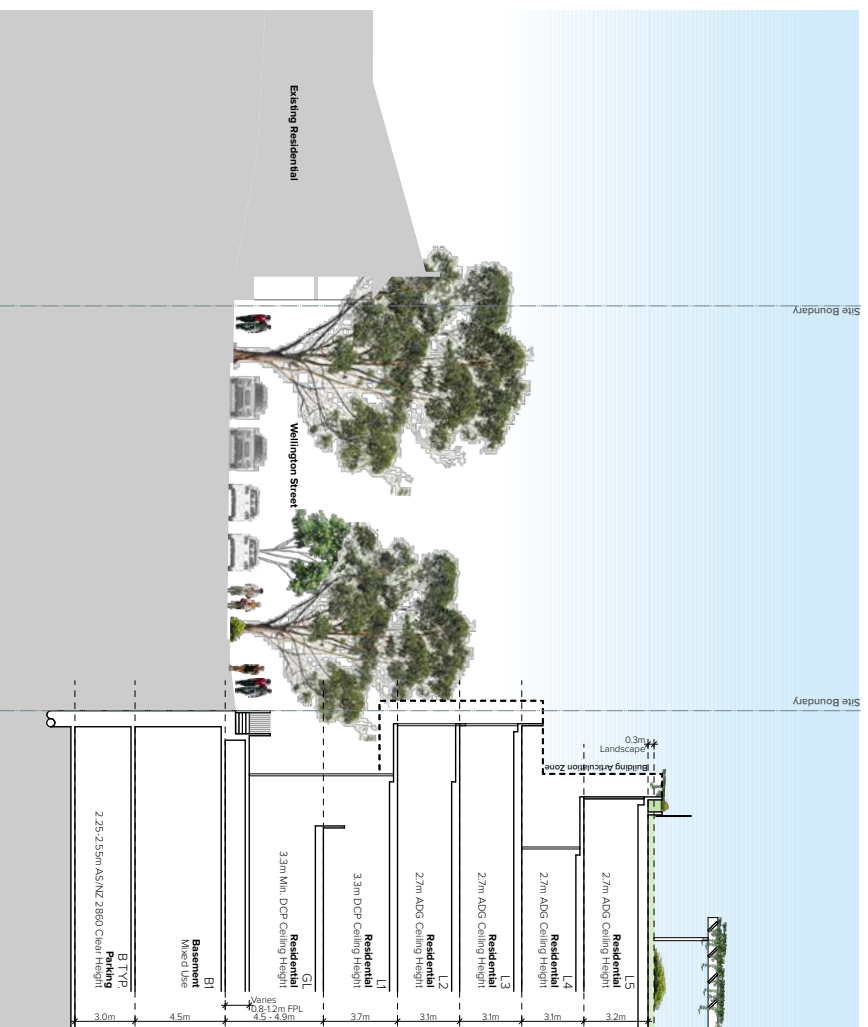


Fig. 6.3.18 Wellington Street (East) interface

## PITT STREET INTERFACE (SOUTH)



Fig. 6.3.19 Pitt Street looking towards Mcevoy Street  
Source: Google Maps, 2018

Building heights range from predominantly four to eight storeys providing a defined edge to Waterloo Park opposite. Setbacks or change in materials above six storeys provide a relationship to the canopy. Taller building forms take advantage of the park-side location for outlook and address.



Fig. 6.3.20 Key Plan

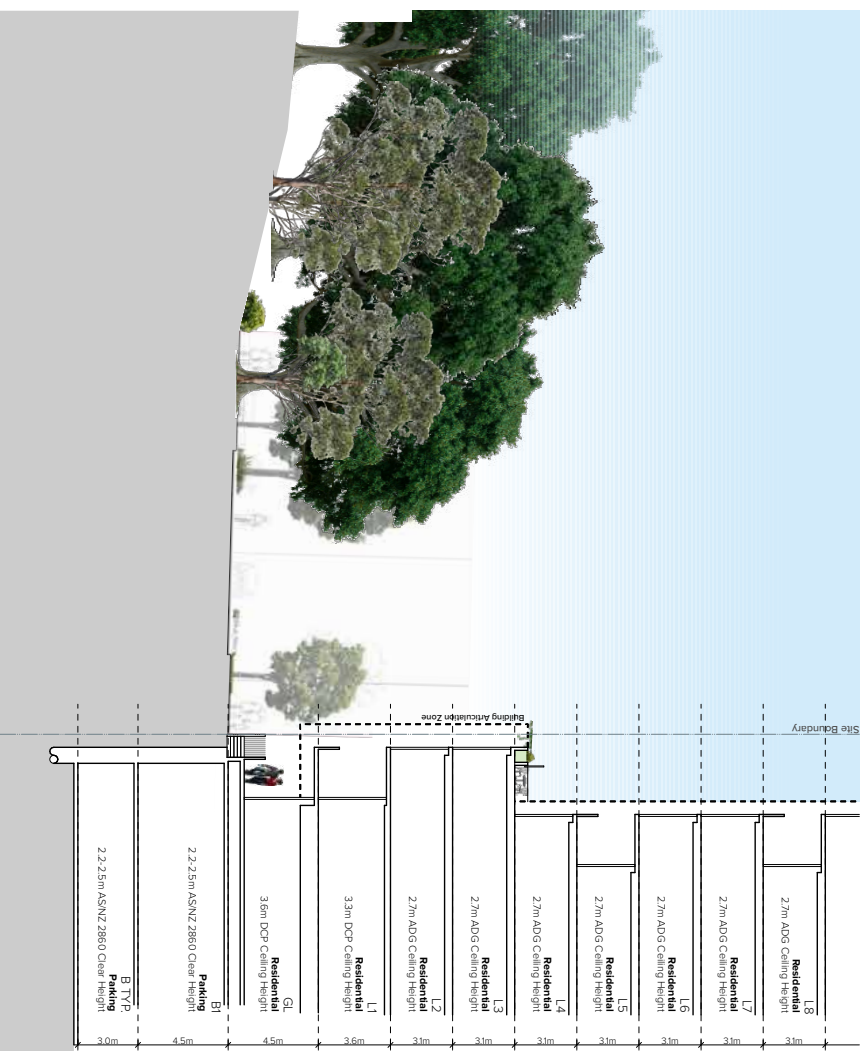


Fig. 6.3.21 Pitt Street (South) interface





# 6.3.4 CONTEXTUAL INTERFACES

## COPE STREET INTERFACE (SOUTH)

A four storey streetwall height is provided along Cope Street as a transition from the existing context, that varies from 2 to 4 storeys along Cope Street, to the taller building forms that are setback above the streetwall.

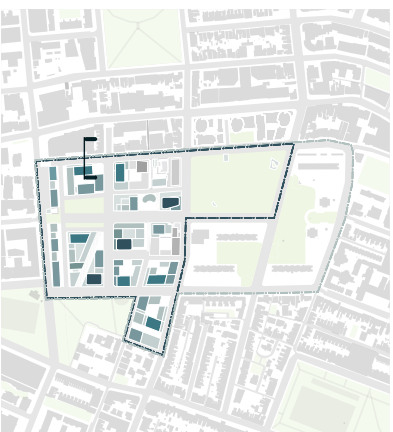


Fig. 6.3.22 Key plan

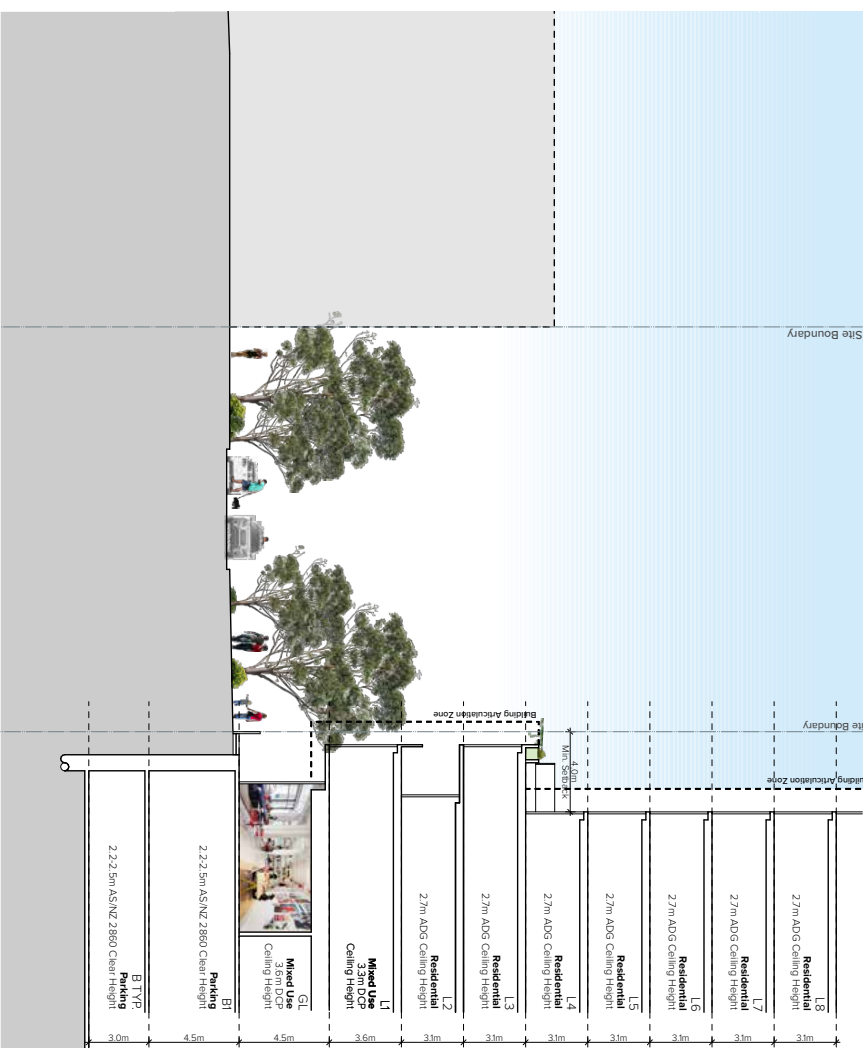


Fig. 6.3.23 Cope Street (South) interface

## COPE STREET INTERFACE (SOUTH)



Fig. 6.3.24 Cope Street looking north  
Source: Google Maps, 2018

Setbacks above 6 storeys maintain the predominant streetwall height adjacent to Waterloo South, with a transition to the neighbouring context streetwall of 4 to 6 storeys.

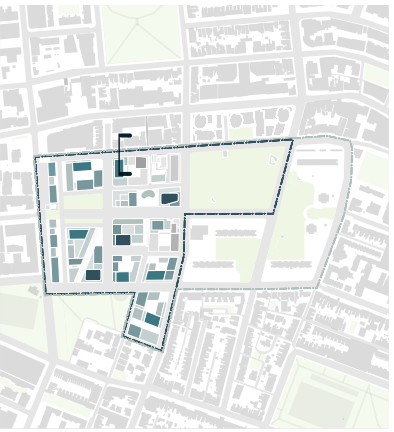


Fig. 6.3.25 Key Plan



Fig. 6.3.26 Cope Street (South) Interface



## WELLINGTON STREET INTERFACE (WEST)



Fig 6.3.27 Cooper Street looking towards Wellington Street  
Source: Turner, 2020

A six storey street wall height is provided along Wellington Street as a transition from the existing context to the taller buildings at the centre of Waterloo South.

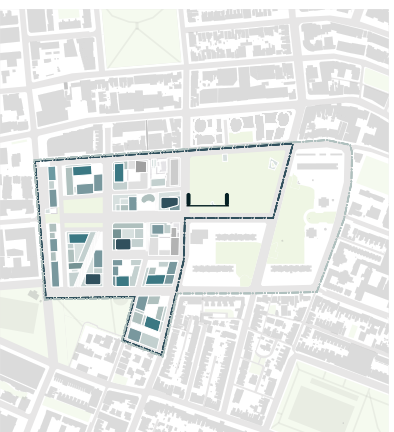


Fig 6.3.28 Key plan



Fig 6.3.29 Cooper Street heritage interface

# KELLY STREET INTERFACE



Fig. 6.3.30 Kelly Street looking towards Pitt Street  
Source: Google Maps, 2018

A six to eight-tall storey streetwall height is provided along Kelly Street as a transition from the existing context and neighbouring Waterloo Park to the taller buildings at the centre of Waterloo South. The streetwall provides a defined edge to the park and opportunities for good passive surveillance.

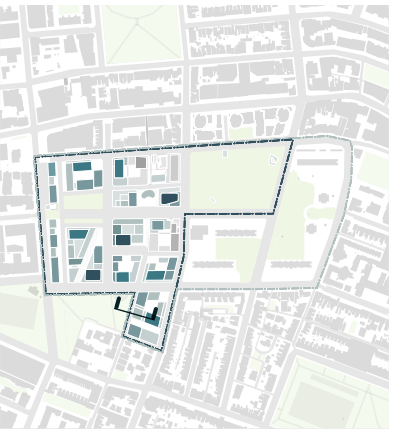


Fig. 6.3.31 Key plan

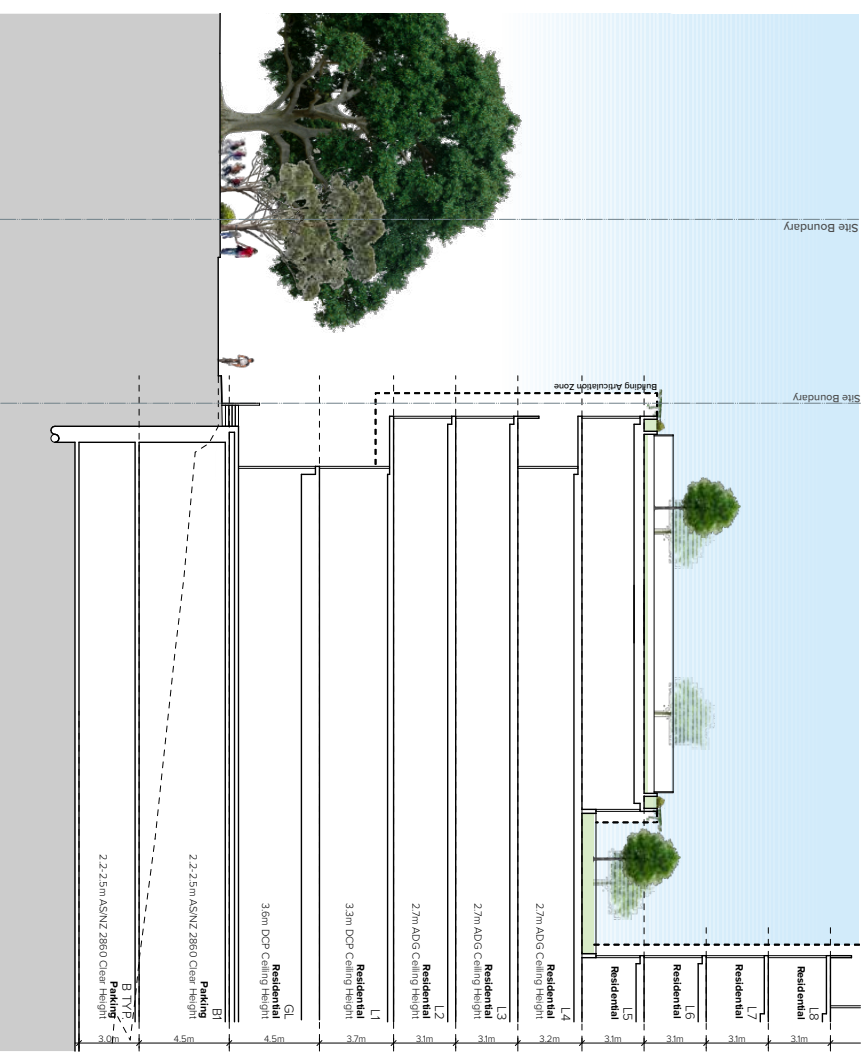


Fig. 6.3.32 Kelly Street Interface



## GIBSON STREET INTERFACE



Fig. 6.3.33 Gibson Street looking towards Kellick Street  
Source: Google Maps, 2018

A four to eight storey streetwall height is provided along Gibson Street as a transition from the existing context, of 2 storeys along Gibson Street, to the taller buildings proposed for Waterloo South.

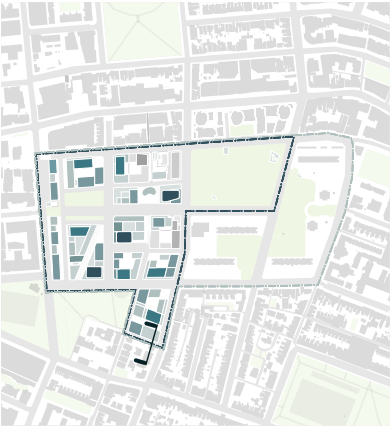


Fig. 6.3.34 Key plan



Fig. 6.3.35 Gibson Street interface

## MCEVOY STREET INTERFACE (EAST)



Fig. 6.3.36 Mcevoy Street looking towards Cope Street  
Source: Google Maps, 2018

A streetwall height that varies from 6 to 8+ storeys along Mcevoy Street is provided as a transition from the existing context, to the taller buildings of Waterloo South.

The building depth is limited to provide single loaded floorplate that is oriented to the north. This provides increased amenity for dwellings within these buildings from noise and air pollution generated by traffic along Mcevoy Street as well as a buffer for Waterloo South and the Estate.

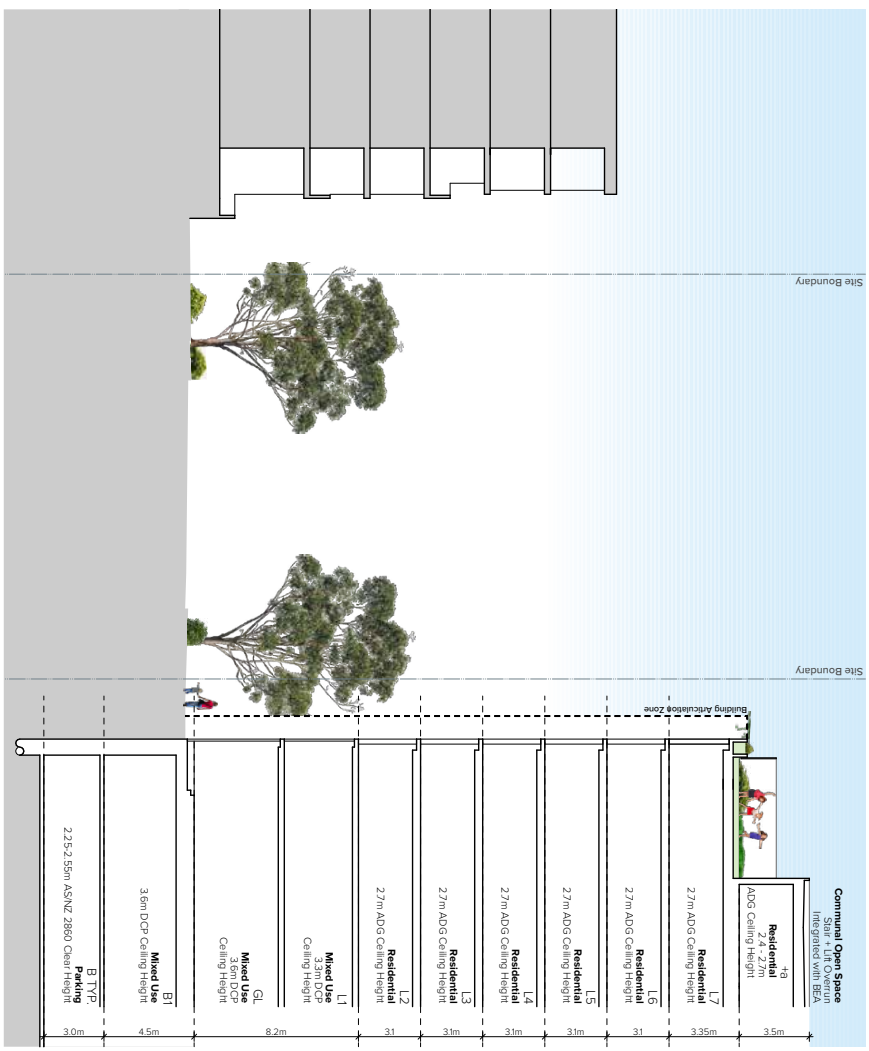


Fig. 6.3.38 Mcevoy Street (East) interface

Fig. 6.3.37 Key plan





Fig. 6.3.41 Indicative CGI: George Street, community hub plaza

Source: Virtual Ideas, 2019



# 6.3.3 PUBLIC AND PRIVATE DOMAIN INTERFACES

## 25M GEORGE STREET INTERFACE TO COMMUNITY BUILDING

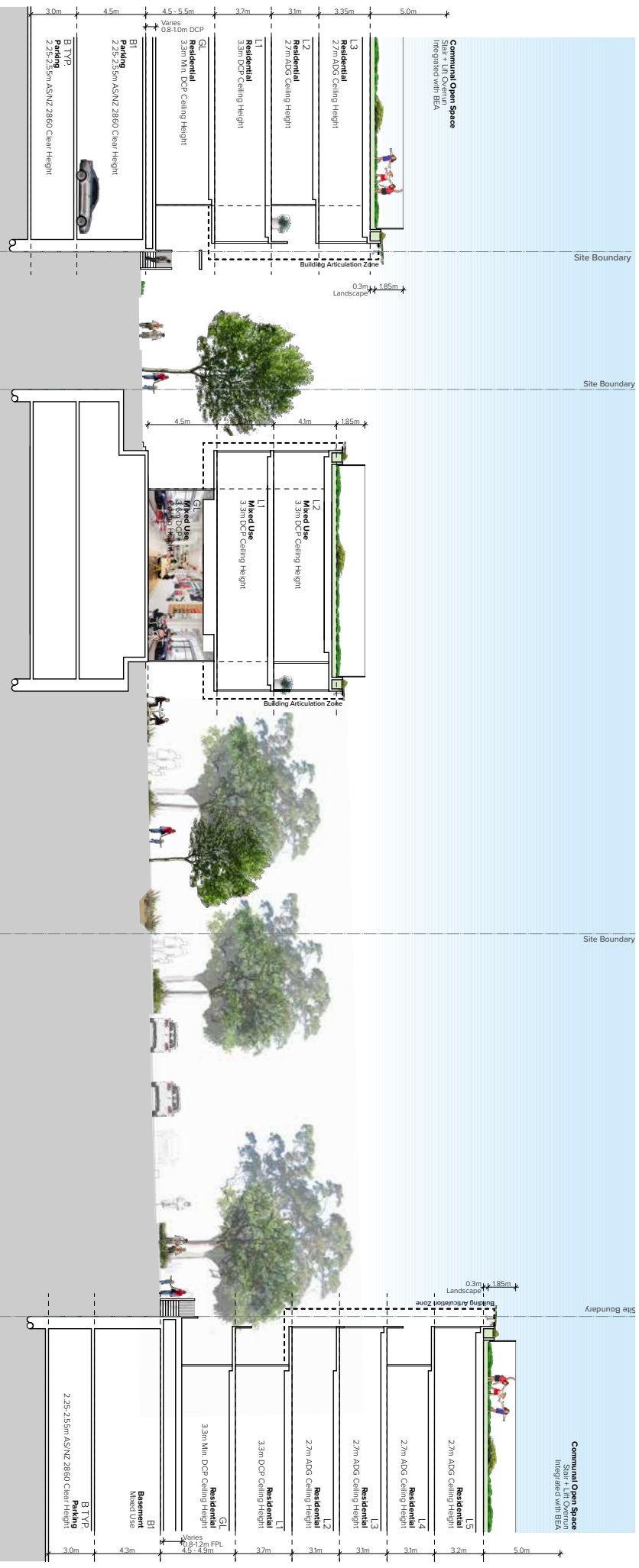


Fig. 6.3.4| George Street Activity Street





Fig. 6.2.43 Indicative CGI: Waterloo Common activity area  
Source: Virtual Ideas, 2020

A six to eight-traitic storey streetwall height is provided to the Waterloo Common interface as a transition from the park to the taller buildings. Along the Waterloo Common interface, streetwalls are varied between four to eight storeys for built form diversity. Changes in material and plane for buildings and breaks or setbacks for buildings above nine storeys maintain a maximum perceived streetwall height of 6 storeys.



Fig. 6.3.44 Key plan





Fig. 6.3.46 Indicative CGI: Social corner  
Source: Virtual Ideas, 2020



