

Waterloo Metro Quarter

UrbanGrowth NSW Development Corporation

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Draft Development Control Plan

Waterloo Metro Quarter

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5.9

Waterloo Metro Quarter

5.9.1: Locality statement

The Waterloo Metro Quarter (the Metro Quarter) is bounded by Botany Road, Raglan Street, Cope Street and Wellington Street, Waterloo as shown in **Figure 1**: Waterloo Metro Quarter.

The Metro Quarter is an integral part of one of Sydney's most distinct and diverse communities: Central to Eveleigh. Despite experiencing significant changes, Central to Eveleigh is resilient, forming a proud and inclusive community. In particular, the community has strong connections to opportunity, equity and social progressiveness.

Traditionally home of the Gadigal people of the Eora nation, the Metro Quarter was originally part of a broader wetland complex that encompassed lower lying land around Sheas Creek. With the arrival of Europeans, this natural landscape was heavily modified to support industrial uses. While the adjoining Waterloo Estate evolved to become a mainly residential area, firstly in the form of workers housing and then in the form of social housing, the Metro Quarter retained its industrial character.

Development of the Waterloo Metro Station provides opportunity for renewal of the Metro Quarter to enhance the adjoining Waterloo Estate and Botany Road Corridor, as well as Central to Eveleigh.

Drawing from the Central to Eveleigh heritage and its' co-location with a Metro Station, the Metro Quarter will be renewed as a local centre that forms the transport heart of the Waterloo Precinct. In this role, it will be a sustainable, mixed use and transit-oriented place for living, working and recreation, with a particular focus on catering for the day to day needs of local residents, workers and users of the Metro Station. The Metro Quarter will complement surrounding established and future neighbourhoods, in particular the Waterloo Estate, and will form the foundation for the desired future character of a renewed Botany Road Corridor.

The Metro Quarter will prioritise public and active transport. The Metro Station will be the focal point for the Metro Quarter, which will integrate with a bus interchange on Botany Road and proposed cycleways on Cope and Wellington Street through a high quality, attractive and safe public domain.

Publicly accessible open space in the form of plazas will provide access to the station entries and a shared way and through block link will connect the metro quarter with surrounding streets, and function as spaces for passive recreation and social interaction.

The public domain, including streets and publicly accessible open spaces, will reduce the amount and improve the quality of stormwater released into waterways such as Sheas Creek.

In addition to performing a stormwater function, other sustainable infrastructure will reduce the Metro Quarter's use of energy generated from non-renewable sources.

Existing heritage will be respected. In particular, the Waterloo Congregational Church will be retained and its setting enhanced to enable greater appreciation from the public domain.

The Metro Quarter will support a range of spaces that will cater for the special social and economic needs of the current and future Waterloo Precinct, including community facilities.

While of a scale that optimises public transport and land use integration, built form will respond to the attributes of existing important buildings and surrounding neighbourhoods. Built form will be vertically mixed, with retail uses at the ground floor, community and employment uses at lower levels and residential uses at upper levels. Residential parts of buildings will provide high quality living environments and will integrate a diversity of housing. Buildings will demonstrate design excellence.

Sustainability will be embraced in the precinct, including through lower levels of on-site carparking, stormwater re-use and water-sensitive design, and measures intended to improve the environmental performance of buildings.



Figure 1: Waterloo Metro Quarter

5.9.2: Waterloo Metro Quarter urban strategy

Objectives

- (a) Development creates a vibrant, mixed use local centre that is the gateway to the Waterloo Precinct and caters to the needs of the Metro Quarter, Waterloo Estate and users of the Metro Station
- (b) Development creates a distinct and memorable urban quarter that reflects its role as a transport hub while responding to local character
- (c) Development establishes the Metro Station and adjoining Cope Street Plaza as the focus of the Metro Quarter, providing an integrated public asset that draws together commuters and the local community
- (d) Development creates a vibrant, safe, high amenity and walkable public domain that caters for the different needs of a variety of users
- (e) Development promotes the use of the Metro Station as a key public transport hub and prioritises sustainable movement choices
- (f) Development provides for a seamless interchange between transport modes, in particular rail, bus, walking and cycling
- (g) Development promotes the growth of the Central to Eveleigh economy as a technical innovation and creative corridor linked with nearby metropolitan scale education and health facilities
- (h) Development contributes to meeting the economic and social needs of the Metro Quarter and Waterloo Estate
- (i) Development incorporates infrastructure that promotes economic growth, community cohesion and sustainability
- (j) Development creates an inclusive community that is welcoming to all
- (k) Development provides a greater amount and choice of housing
- (I) Development respects and celebrates the significant Aboriginal and other heritage values of the Central to Eveleigh community, including the Waterloo Congregational Church
- (m) Development exhibits high quality architecture within a cohesive variety of building forms and heights

Provisions

(1) Development occurs generally in accordance with **Figure 2**: Waterloo Metro Quarter Urban Strategy



Figure 2: Waterloo Metro Quarter Urban Strategy

5.9.3: Local infrastructure and public domain

Objectives

- (a) Development creates a high quality, integrated, permeable and multifunctional public domain that caters for movement, recreation and social interaction
- (b) Development promotes public and active transport and low car ownership
- (c) The public domain and adjoining built form provides for a high quality pedestrian experience

Provisions

5.9.3.1 Street, pedestrian and cycle network

- (1) Development occurs generally in accordance with **Figure 3**: Waterloo Metro Quarter Local Infrastructure and Public Domain
- (2) Development occurs generally in accordance with **Figure 4**: Waterloo Metro Quarter Street Pedestrian and Cycle Network
- (3) Development occurs generally in accordance with **Table 1**: Waterloo Metro Quarter Street Pedestrian and Cycle Network
- (4) Development occurs generally in accordance with Figure 5 to Figure 12
- (5) A Public Domain Plan is prepared that proposes a high quality, co-ordinated public domain addressing:
 - a. street trees and other vegetation
 - b. paving and other hard surfaces
 - c. lighting, including the use of LED
 - d. seating
 - e. refuse bins
 - f. signage, including wayfinding signage
 - g. public art
- (6) The pedestrian network is:
 - a. aligned with key pedestrian desire lines
 - b. has generous widths to accommodate the forecast metro generated pedestrian flows
 - c. incorporates opportunities for respite and pause
 - d. is integrated with active frontages
- (7) A shared way and through-block link provide direct connections between the southern Metro Station entrance and the Waterloo Estate with the Botany Road southbound bus interchange
- (8) The shared way is publicly accessible, is provided through the site to the immediate north of the Waterloo Congregational Church and provides a pedestrian and cyclist connection between Botany Road and Cope Street
- (9) The through site link is publicly accessible during the operational hours of the Metro Station and may be enclosed in an arcade configuration
- (10) Footpath layout, design and width caters for the high pedestrian flows generated by the Metro Station
- (11) Footpath widening is provided at key locations aligned with major pedestrian flows such as:
 - a. Raglan Street
 - b. Cope Street
 - c. intersection of Botany Road / Henderson Road / Raglan Street

- (12) Development contributes to the provision of improved pedestrian crossing points at adjoining intersections
- (13) Marked pedestrian crossings are established:
 - across the western side of the Raglan Street and Cope Street intersection connecting the northern station entrance with the northern side of Raglan Street
 - across the southern side of the Raglan Street and Cope Street intersection connecting the northern station entrance with the Waterloo Estate
 - c. across Cope Street connecting Cope Street Plaza and the Waterloo Estate
- (14) On site pedestrian paths have a maximum gradient of 1:20
- (15) A cycleway is provided adjoining the site in Wellington Street
- (16) On-site bicycle parking is provided for residents in accordance with the City of Sydney DCP 2012 rates of 1 space per dwelling and 1 visitor space per 10 dwellings
- (17) 400 on site-bicycle parking spaces are provided for non-residents such as customers of the metro station
- (18) 120 on-site bicycle parking spaces are provided in the public domain for share bikes and casual visitors
- (19) Non-resident bicycle parking and visitor spaces are provided together in a bike hub that is accessible to both residents of the Metro Quarter and the public domain and also included end of trip facilities such as showers
- (20) A bus stop is provided for southbound movements on Botany Road adjoining the site
- (21) Development prepares a Construction Management Plan
- (22) Development prepares a Travel Management Plan



 $\textbf{Figure 3:} \ \textbf{Waterloo} \ \textbf{Metro} \ \textbf{Quarter Local Infrastructure and Public Domain}$



Figure 4: Waterloo Metro Quarter Street, Pedestrian and Cycle Network

 Table 1: Waterloo Metro Quarter Street, Pedestrian and Cycle Network

Туре	Reservation Width	Lane width	On road cycle lane	Footpath width
Main Street	17.5m	2 travel lanes:		2 x 3.5m variable
Botany Road		2 x 3.25m		
		2 parking lanes:		
		2 x 2.3m		
Local Street	19.8m	2 travel lanes		2 x 5.5m to 7.8m variable
Cope Street		2 x 3.25m		
Local Street	20.1m	2 travel lanes	Bi-directional cycle lanes	2 x 3.6m to 4.0m variable
Wellington Street		2 x 3.75m	2 x 2.5m wide with separato	r
Local Street	20.5m	3 travel lanes		2 x 4.0m variable
Raglan Street		3 x 3.25m		
		1 x parking lane		
		1 x 2.75m		
Share way	13.5m	1 x travel lane		2 x 3.5m – 4.0m variable
		1 x 6.0m		



Figure 5: Waterloo Metro Quarter Street, Pedestrian and Cycle Network Section Locations

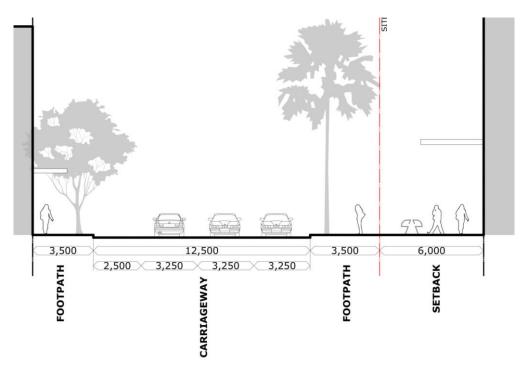


Figure 6: Section A - A – Local Street Typical Section – Raglan Street

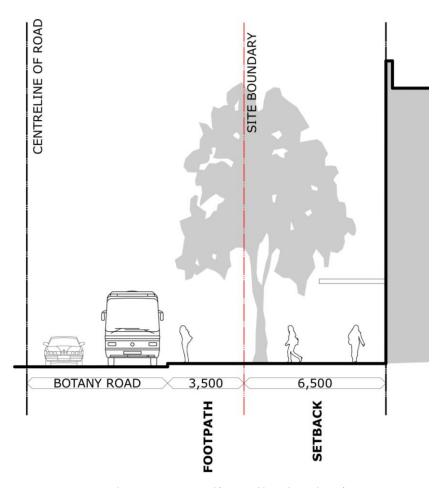


Figure 7: Section B - B - Main Street Typical Section - Botany Road (Bus southbound interchange)

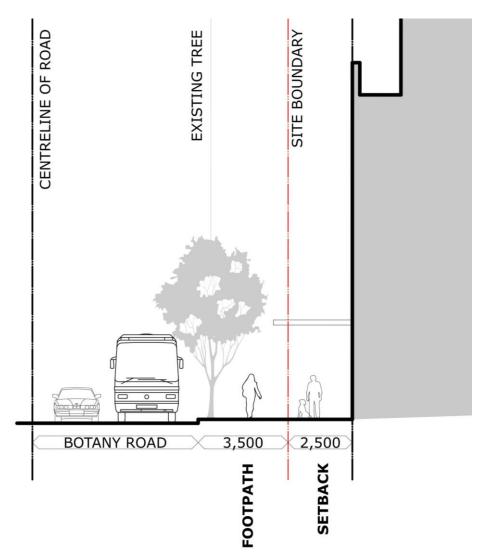


Figure 8: Section C - C - Main Street Typical Section - Botany Road (General)

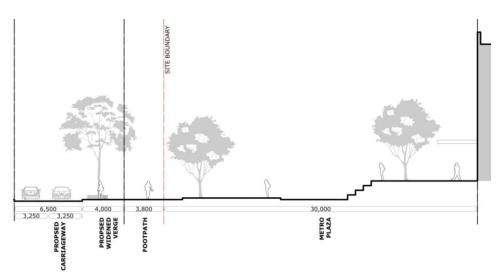
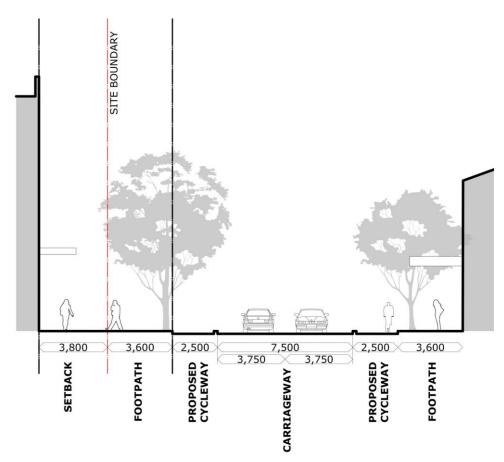


Figure 9: Section D - D - Local Street Typical Section - Cope Street (Cope Street Plaza)



 $\textbf{Figure 10} : Section \ E - E - Local \ Street \ Typical \ Section - Wellington \ Street$

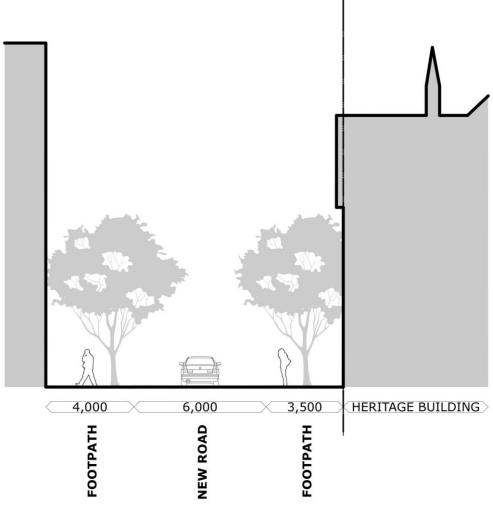


Figure 11: Section F - F - Share way Typical Section

Provisions

5.9.3.2 Carparking, access and circulation

- (1) Development occurs generally in accordance with **Figure 12**: Waterloo Metro Quarter Carparking, Access and Circulation
- (2) Two separate pedestrian access points, being a northern and southern access point, are provided to the Metro Station
- (3) Cope Street is reconfigured as a slow street (maximum 20k/h) that includes:
 - a. 2 opposite direction vehicle travel lanes
 - b. taxi waiting spaces
 - c. kiss and ride drop off spaces
 - d. short term drop off and pick up spaces
 - e. a widened footpath along the site's entire eastern boundary and a corresponding reduction in the width of the carriageway
- (4) Existing intersections are reconfigured to establish give-way intersections at:
 - a. Raglan Street and Cope Street, with right of way to Raglan Street
 - b. Cope Street and Wellington Street, with right of way to Wellington Street
- (5) Site access is provided as follows:
 - a. Botany Road site access: service vehicle access (left in / left out)

- b. Cope Street site access: residential access
- c. Wellington Street site access: residential access & service vehicle access (left in / left out)
- (6) The maximum number of on-site residential carparking spaces is in accordance with that specified for Category A for residential flat buildings under the City of Sydney LEP 2012 as follows:
 - a. for each studio dwelling: 0.1 spaces
 - b. for each 1 bedroom dwelling: 0.3 spaces
 - c. for each 2 bedroom dwelling: 0.7 spaces
 - d. for each 3 or more bedroom dwelling: 1 space
- (7) The maximum number of on-site retail carparking spaces is in accordance with the following formula under the City of Sydney LEP 2012 as follows:
 - a. $M = (G \times A) / (50 \times T)$ where M is the maximum number of carparking spaces, G is the gross floor area of all retail premises in the building in square metres, A is the site area in square metres and T is the total gross floor area of all buildings on the site in square metres
- (8) Development is encouraged to provide dedicated on-site carparking for:
 - a. car share spaces
 - b. accessible spaces
 - c. retail tenancy spaces
- (9) On-site car parking is provided underground in basement levels
- (10) Car parking basement level/s are shared across the residential taller buildings



Figure 12: Waterloo Metro Quarter Carparking, Access and Circulation

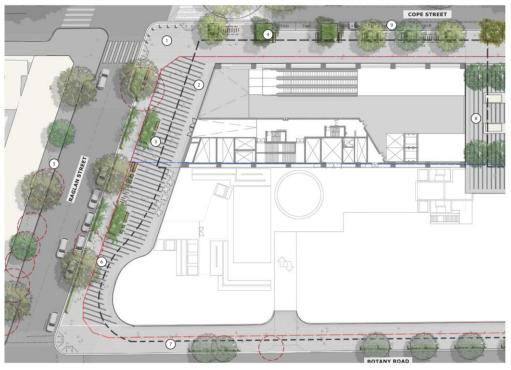
5.9.3.3 Publicly accessible open space

- (1) Development occurs generally in accordance with **Figure 3**: Waterloo Metro Quarter Local Infrastructure and Public Domain
- Development occurs generally in accordance with Table 2: Waterloo Metro Quarter Open Space Network

Table 2: Waterloo Metro Quarter Open Space Network

Туре	Requirement	Guideline
Publicly accessible plaza Cope Street Plaza	Has a minimum area of 1400sqm to be publicly accessible at all hours and provides a link between the southern entrance to the Metro Station, Cope Street and the Waterloo Estate and accommodates a range of informal passive recreation activities	 Located adjoining the southern Metro Station entrance Has an extensive open boundary with Cope Street Is an open, largely hard paved urban space that caters for the needs of commuters and the Metro Quarter community Responds to site flooding constraints through demarcation into three distinct but integrated components: a lower plaza at the same level as the adjoining Cope Street public domain that features a raised lawn area (including a landmark tree) that provides for informal leisure, gathering and breakout space for the Metro Station and the community facility a bleacher terrace providing for seamless movement between the lower area and upper area as well as providing for seating and mediation of the change in level required to achieve entry datum to the Metro Station an upper plaza at the same height as southern Metro Station entrance that provides for a range of informal, passive recreation activities such as seating, gathering and social interaction, and is bordered on its western edge by active frontages that include seating within the plaza
Publicly accessible plaza Raglan Street Plaza	Has a minimum area of 580sqm to be publicly accessible at all hours and provides a link between the northern entrance to the Metro Station, Raglan Street and locations to the west such as the Australian Technology Park and accommodates a range of social interaction	 Located adjoining the northern Metro Station entrance Has an extensive open boundary with Raglan Street Is an open, largely hard paved urban space that caters for the needs of commuters and the Metro Quarter community Integrates with an extension of the public domain at the intersection of Raglan Street and Cope Street Trees and associated vegetation in the western part of the Raglan Street Plaza create two parallel rows of coordinated deciduous plantings to: delineate areas of primary pedestrian through movement and pause and linger space

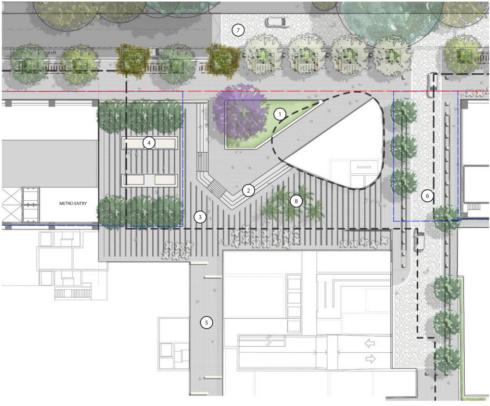
 provides shade in summer and solar access in winter to social interaction spaces and active frontages along the plaza's southern edge



KEY

- 1 Raglan Street and Cope Street social corner.
- 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.
- 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)
- Araucaria heterophylla to provide shade at ground level and allow sunlight into above building levels
- Street trees along Botany Road to provide shade and a comfortable pedestrian environment. Species (Lophpstemon confertus) according to City of Sydney's 2015 Street Tree Masterplan.
- 8 Waterloo Station Cope Street Plaza entry (community door)
- (9) Kiss'n'ride bays along Cope Street.

Figure 13: Indicative concept – Cope Street Plaza



KEY

- Raised lawn to provide informal leisure, gathering and breakout space from the metro station surrounding buildings and the community building.
- Bleacher terrace to elevate the public domain from flood levels and provide informal seating with views across Cope Street and on to the Waterloo Estate.
- Upper Publicly accessible plaza with cafe outdoor space, connection to Botany Road and community entrance to Waterloo Station.
- (4) Skylights into below metro station

- (5) Pedestrian link from Botany Road to the Publicly accessible plaza.
- 6 New shared street.
- (7) Cope Street 'slow' street.
- Ulmus parvifolia to provide summer shade and winter sun across the Upper Cope Street Plaza

Figure 14: Indicative concept – Raglan Street Plaza

5.9.3.4 Stormwater management

- (1) Development occurs generally in accordance with **Figure 15**: Waterloo Metro Quarter Stormwater Management
- (2) Development complies with Flood Planning Level requirements as stipulated by the Consent Authority
- (3) Development protects the Metro Station from flooding
- (4) Building surfaces are to be designed to accommodate possible flood flows without damage or potential for erosion
- (5) Building entry points are oriented away from locations on Botany Road and Cope Street where there is a greater risk of flooding
- (6) A Flood Management Plan is prepared as part of the first stage of development
- (7) Carpark entrances are ramped up to respond to Probable Maximum Flood (PMF) levels

- (8) Development incorporates suitable shelter in place facilities
- (9) Water Sensitive Urban Design (WSUD) measures are incorporated into the Metro Quarter and the surrounding street network to improve stormwater quality flowing into waterways such as Sheas Creek, and potentially include:
 - a. gross pollutant traps
 - b. passive irrigation
 - c. bio-retention areas
 - d. rainwater harvesting

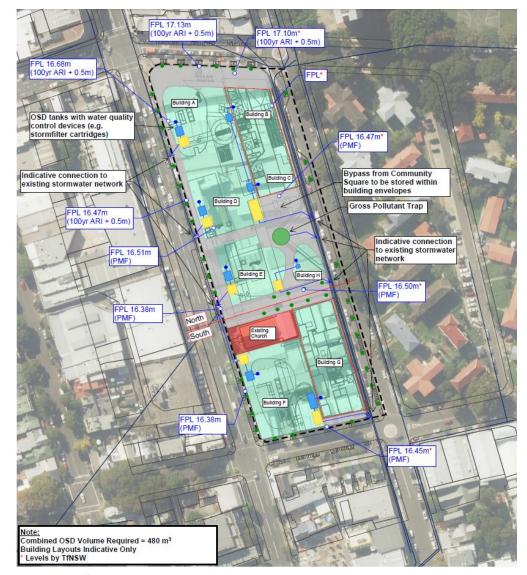


Figure 15: Waterloo Metro Quarter Stormwater Management

5.9.3.5 Public art

- (1) Development incorporates public art that creates an authentic sense of place drawing from and reflecting Central to Eveleigh's strong Aboriginal and other heritage values
- (2) Public art that provides for heritage interpretation is contemporary, innovative and creative, and is created by local artists
- (3) Development occurs generally in accordance with the Public Art Plan prepared by Milne & Stonehouse and dated June 2018, and in particular reflects the concepts of:
 - a. Aboriginal Heart
 - b. H20
 - c. Nourish, Thrive and Grow
 - d. Compass and Calendar
 - e. Making Waves/Watershed

5.9.3.6 Urban forest

- (1) Trees within the public domain, and in particular within streets, contribute to the achievement of the City of Sydney's urban forest outcomes as outlined in its Urban Forest Strategy, including by:
 - a. ensuring tree canopy covers a minimum of 20% of streets adjoining the Metro Quarter
 - b. incorporating street trees as an integral part of any public street reconfiguration, including the provision of conditions conductive to establishment and growth
 - being endemic to Sydney and creating diversity within plant families, genera and species
 - d. considering species that currently prosper in slightly warmer climates to cater for climate change
 - e. incorporating deciduous trees to provide better solar access during cooler months, particularly to north facing spaces
 - f. provide a visually prominent tree to demarcate Cope Street Plaza
 - g. where appropriate, incorporating trees at upper levels of built form, including podiums and on roof tops

5.9.3.7 Lighting

(1) Lighting in or of the public domain complies with AS4282-1997

Note: Given station operating, the Metro Quarter public domain will need to facilitate convenient and safe access to and from the station. This will require extensive and longer than typical operation night-time illumination, in particular to Cope Street Plaza

5.9.4 Building layout, form and design

Objectives

(a) Building layout, form and design balances its regional significance with responsiveness to local character

- (b) Development incorporates a cohesive mix of different building typologies to provide visual interest and break up the apparent scale of built form, in particular when viewed from locations to the west
- (c) Building have high quality façade design and finishes, in particular where they are located in prominent or otherwise highly visible locations

Provisions

(1) Development is generally in accordance with **Figure 16**: Waterloo Metro Quarter Built Form



Figure 16: Waterloo Metro Quarter Built Form

5.9.4.1 Height of buildings

- (1) Height of buildings is generally in accordance with **Figure 16**: Waterloo Metro Quarter Built Form
- (2) Development generally tapers down in height form north to south

5.9.4.2 Building setbacks

- (1) Development occurs generally in accordance with **Figure 17**: Waterloo Metro Quarter Setbacks
- (2) Development occurs generally in accordance with **Table 3**: Waterloo Metro Quarter Setbacks

Note: building setback provisions for the Metro Quarter do not apply to the already approved Metro Station structures, which will be designed and constructed consistent with the CSSI Approval (SSI 15_7400).

- (3) Building setback to the Waterloo Congregational Church are:
 - a. 6.5m minimum from the northern face of the Waterloo Congregational Church at the ground level
 - b. 4m minimum from the southern face of the Waterloo Congregational Church at the ground level
 - c. 13m minimum from the northern face of the Waterloo Congregational Church at taller building level
 - d. 14m minimum from the southern face of the Waterloo Congregational Church at taller building level



Figure 17: Waterloo Metro Quarter Setbacks

Table 3: Waterloo Metro Quarter Setbacks

Botany Road			
Primary	6.5m where shown in Figure 18: Waterloo Metro Quarter Setbacks to respond to the Waterloo Congregational Church		
Primary	2.5m for all other parts of Botany Road		
Secondary	2 for a mid-rise building		
Secondary	Om for a taller building Note: while a Om setback is permitted, the intent is to achieve and appropriate balance between a Om setback and a greater setback to mitigate the visual appearance of building bulk and scale when viewed from the adjoining Botany Road public domain		
Cope Street			
Primary	0m from property boundary		
Secondary	Om from property boundary Note: while a Om setback is permitted for a building within Cope Street Plaza, the intent is to achieve and appropriate balance between a Om setback and a greater setback to mitigate the visual appearance of building bulk and scale when viewed from the adjoining Botany Road public domain		
Wellington Street			
Primary	3m minimum from property boundary		
Secondary	Where on the metro station part of the site, 4m minimum from the property boundary		
Secondary	Where not on the metro station part of the site, 2.5m minimum from the property boundary		
Raglan Street			
Primary	Where adjoining Raglan Street Plaza, 10m minimum from the property boundary		
Primary	Where not adjoining Raglan Street Plaza, 5m minimum from the property boundary or Where the layout and design of the building demarcates the Botany Road and Raglan Street landmark site, 4m minimum from Raglan Street		
Secondary	Where for a taller building overhang, 5m minimum from the property boundary		
Secondary	Where to demarcate the Botany Road and Raglan Street landmark site, 4m minimum from Raglan Street		

5.9.4.3 Building form and design

- (1) Development comprises three distinct building typologies:
 - a. podium
 - b. mid-rise
 - c. taller building
- (2) The podium:
 - a. is divided into separate parts
 - b. has a height aligned with that of the uppermost part of the Waterloo Congregational Church (the bellcotes)
 - engage with the adjoining public domain, providing opportunities for passive casual surveillance through design measures such as extensive, transparent windows, balconies and other devices
- (3) Taller buildings:
 - a. have floor plates less than 800sqm gross floor area
 - b. have a visually slender form
 - c. have a shaped or curved profile
 - d. are well separated
 - e. reinforce the visual prominence of the Botany Road and Raglan Street and Botany Road and Wellington Street corners
- (4) Development ensures the safety of the metro and the Metro Quarter community, with consideration given to metro box loading and the required clearances zones to openings such as mechanical grilles for exhaust and fire discharge or fire rated construction on adjoining buildings
- (5) Permanent (eg buildings) or temporary structures (eg cranes) do not have an adverse impact on the operation of Sydney (Kingsford Smith) Airport, including through lighting or reflection

5.9.4.4 Building typologies and use

- (1) Development occurs generally in accordance with **Figure 18**: Waterloo Metro Quarter Building Typologies and Use
- (2) Development includes residential, retail, community and where appropriate, entertainment uses
- (3) Development includes a diverse mix of non-residential uses that support and complement the operation of a Metro Station
- (4) Development improves the wellbeing of the Metro Quarter and Waterloo Estate community, including through the provision of a diverse range of services
- (5) Development provides a mix of social and business enterprise that can provide appropriate employment opportunities for local residents, including flexible workspace for creative industries and 'start up' business
- (6) Development provides a vibrant and comprehensive convenience and food based retail offer
- (7) Development is encouraged to provide the following land uses:
 - a. supermarket
 - b. small, convenience based retail and services premises
 - c. food and beverage
 - d. cafés
 - e. medical centre
 - f. gym
 - g. bank

- h. community services
- i. social services
- j. health services
- k. recreational premises
- I. late night / live music venues (where appropriately located and designed to minimise adverse amenity impacts)
- m. co-working space
- (8) Development does not include non-food anchors like department stores or discount department stores
- (9) The location of uses, in particular at the ground plane, is responsive to the movement patterns generated by the Metro Station
- (10) Only non-residential uses are located at the ground and podium levels
- (11) Development has a layout and design that is consistent with Crime Prevention Through Environmental Design (CPTED) principles



Figure 18: Waterloo Metro Quarter Building Typologies and Use

5.9.4.5 Active frontages

- (1) Development at the ground plane has a layout and design that activates the adjoining public domain, including through measures such as:
 - a. locating high activity areas such as seating overlooking the public domain
 - b. incorporating large doors or windows
 - c. not locating activities that are sensitive to public view, such as offices, overlooking the public domain
 - d. not including grilles or other security measures
- (2) Fine grain retail tenancies are located surrounding Cope Street Plaza and along key pedestrian movement corridors, in particular between the Metro Station and the south-bound bus interchange on Botany Road
- (3) Larger format retail is located on the Botany Road frontage of the site
- (4) Larger format retail or showrooms have an internal layout and present large expanses of transparent glass frontages that enable ready perception of indoor activity from the adjoining public domain
- (5) Vehicular access to the site is located and designed to minimise disruption to active frontages
- (6) Visually coherent, high quality cantilevered awnings at the ceiling height of the ground level that achieve adequate protection for pedestrians from rain, wind and sun are provided along the full length of active frontages
- (7) Development is at the same level as the adjoining public domain

Note: development may be higher than the level of the adjoining public domain for flood mitigation purposes. In these circumstances, innovative design such as having entry thresholds and less flood sensitive activities at the same level and flood sensitive activities elevated above the ground plane should be considered (refer Figure 19 - Possible flood mitigation design)

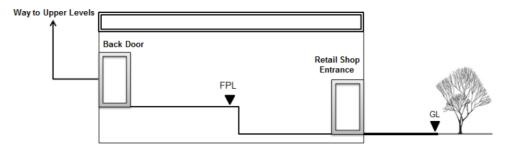


Figure 19: Possible flood mitigation design

5.9.4.6 Acoustic and visual privacy

- (1) Dwellings that have openings such as doors or windows facing Botany Road incorporate layout and design measures to attenuate noise to acceptable levels (acceptable levels are defined in the City of Sydney DCP), including measures such as:
 - a. operable openings located off balconies rather than the external building façade
 - b. indented balconies
- (2) Residential uses are only provided above podium level
- (3) Living areas and bedrooms are located as far as practicable from Botany Road

Note: this measure should be balanced with the desire to create an urban character streetscape to Botany Road and providing opportunities for passive casual surveillance of the adjoining Botany Road public domain

- (4) Bedroom openings face north, south or east
- (5) Mechanical plant and other sources of industrial noise are located and designed to minimise noise impacts on sensitive uses such as dwellings

5.9.4.7 Development levels

(1) Development achieves flood protection outcomes while activating the adjoining public domain, in particular at the corner of Cope Street and Wellington Street

5.9.4.8 Staging and implementation

(1) Development is integrated with delivery of the Metro Station and enables activation of the surrounding public domain from the day of the Metro Station opening

5.9.4.9 Utilities

(1) Development is provided with fibre to the premises NBN connection

5.9.4.10 Solar access

- (1) Development enables sunlight to at least 50% of the total area of Cope Plaza or Raglan Street Plaza for at least 3 hours between 9am and 3pm on 21 June
- (2) Development maintains sunlight to at least 50% of the total area of Alexandria Park for at least 4 hours between 9am to 3pm on 21 June
- (3) Development does not result in any additional overshadowing of the Alexandria Park Heritage Conservation Area after 11am on 21 June

5.9.4.11 Wind

(1) The layout and design of the public domain and the built form, including placement, orientation, shape and external design of buildings, ensures the suitability of areas for their intended use in terms of the impact of wind on comfort and safety

Note: suitability of areas for their intended use can be guided by proposed City of Sydney requirements that specify an hourly mean wind speed, or gust equivalent mean wind speed (GEM) (whichever is greater for each wind direction) must not exceed 8m/s for comfortable walking, 6m/s for standing and 4m/s for sitting based on 5% probability of exceedance

- (2) Cope Street Plaza is located in the eastern part of the quarter screened from direct southerly and westerly winds by built form
- (3) The western entrance to the shared way is narrowed by built form to provide greater protection from direct westerly winds
- (4) Taller buildings incorporate rounded corners to enable a smooth flow of wind

- (5) Where there is potential for significant downwash of wind from buildings, development incorporates impermeable canopies, awnings, pergolas or other appropriate wind mitigation devices over or within the affected public domain
- (6) Balconies are recessed into the elevation of buildings
- (7) Balconies with exposure to wind from more than one aspect incorporate wind deflective elements such as full height screens to one aspect
- (8) Wind deflective elements are incorporated within podium level private communal open space
- (9) Impermeable awnings are included:
 - a. along the four corners of the quarter
 - b. along the western elevation of the central building podiums
 - c. over the shared way between Taller Building E and the Waterloo Congregational Church
- (10) Subject to CPTED considerations, planting of densely foliating evergreen trees and shrubs within and around the quarter boundary is encouraged to further enhance levels of pedestrian comfort

5.9.5 Sustainability infrastructure

Objectives

- (a) Development creates an integrated sustainable infrastructure network incorporating transport facilities, public domain, water systems and vegetation to:
 - a. reduce energy consumption
 - b. reduce carbon emissions
 - c. minimise greenhouse emissions
 - d. reduce the urban heat island effect
 - e. improved air quality
 - f. improve absorption of carbon

Provisions

- (1) Measures intended to reduce energy consumption and carbon emissions are consistent with the following principles:
 - a. are affordable for all in the community
 - b. achieve low or zero carbon
 - c. are efficient in consumption
 - d. are resilient in supply and network security
 - e. are flexible and adaptable
- (2) Development achieves:
 - a. a 6 star Green Star communities rating
 - b. a 5 star Green Star buildings rating
- (3) Development is encouraged to exceed BASIX targets
- (4) Communal open space provided on podium roofs incorporates substantial areas that enable rainwater infiltration
- (5) Tree canopy covers a minimum of 20% of streets adjoining the Metro Quarter
- (6) The size and spatial configuration of rooftop elements such as building plants and lift overruns maximise opportunities for the installation of solar photovoltaic systems to generate renewable energy

- (7) Buildings are rounded and oriented away from the west and Botany Road to minimise undesirable solar gain and noise from the road
- (8) Buildings incorporate shading on western façades to minimise undesirable summer afternoon solar gain
- (9) Building massing and spatial configuration is designed to encourage desirable cross ventilation through the Metro Quarter
- (10) Rainwater and / or stormwater harvesting tanks are incorporated to meet BASIX water requirements
- (11) Rainwater and / or stormwater captured on site is used to irrigate publicly accessible open spaces
- (12) Development is to incorporate appropriate waste reduction and recycling measures
- (13) For residential uses, residual waste and recycling chutes are provided in separated but co-located arrangements
- (14) Residential and commercial/retail waste disposal rooms are separate
- (15) Development is encouraged to provide centrally plumbed hot water systems within building to provide more efficient delivery of hot water
- (16) Development is encouraged to incorporate green roofs and or green walls, in particular where fronting Botany Road, to:
 - a. provide amenity and improve microclimate conditions
 - b. create comfortable spaces for recreation

5.9.6 Community facilities

Objectives

(a) Development provides community facilities that cater for the needs of the Metro Quarter and Waterloo Estate community

Provisions

- (1) Development includes floorspace that is suitable for community facilities that:
 - a. is multi-purpose and flexible
 - b. is located at podium levels
 - c. provides opportunity for social and human services providers to establish operations
 - d. is encouraged to include alternative community-focussed uses such as a social enterprise café and community support services, such as NSW Land and Housing Corporation services, bulk billing health services, government service centre
- (2) Private communal open space is encouraged to incorporate facilities such as community gardens that encourage local food production and community interaction

5.9.7 Housing

Objectives

(a) Development facilitates the creation of a diverse, inclusive, healthy and socially connected community through the provision of a mix of dwelling types, tenures, sizes and price-points that consider the needs of renters, investors and owner occupiers

- (b) Development increases the amount of affordable housing
- (c) Development provides for a mix of traditional and innovative dwelling types and sizes, including those that specifically cater for demand for small households

Provisions

(1) Development is to provide between five and ten percent of dwellings as "affordable housing"

Note: 'affordable housing' means housing for very low income households, low income households or moderate income households.

Note: A household is taken to be a very low income household, low income household or moderate income household if the household:

- (a) has a gross income that is less than 120 per cent of the median household income for the time being for the Greater Sydney (Greater Capital City Statistical Area) (according to the Australian Bureau of Statistics) and pays no more than 30 per cent of that gross income in rent, or
- (b) is eligible to occupy rental accommodation under the National Rental Affordability Scheme and pays no more rent than that which would be charged if the household were to occupy rental accommodation under that scheme
- (2) "Affordable housing" is to be managed by a registered community housing provider for 10 years from the date of the issue of the occupation certificate

Note: A condition of consent is to be imposed requiring a restriction to be registered, before the date of the issue of the occupation certificate, against the title of the property on which development is to be carried out, in accordance with section 88E of the Conveyancing Act 1919, to ensure the above

- (3) Affordable housing:
 - a. has a high level of amenity, including having regard to orientation, outlook and views
 - b. has equal access to shared facilities to private dwellings such as communal private open space
 - c. has an external appearance that is not distinguishable from private dwellings

5.9.8 Heritage

Objectives

- (a) Development retains significant heritage items within the Waterloo Metro Quarter
- (b) Development respects the heritage values of the Waterloo Metro Quarter and its setting
- (c) Development enhances the heritage values of the Waterloo Metro Quarter and its setting by removing unsympathetic surrounding development
- (d) Development exposes and celebrates significant elements within the Waterloo Metro Quarter and its setting
- (e) Development provides appropriate setbacks from heritage items
- (f) Development provides appropriate building form and scale with consideration for heritage items in the vicinity of the Waterloo Metro Quarter

- (g) Development enhances and complements existing character in its design but does not replicate heritage buildings
- (h) Development responds appropriately to heritage items and conservation areas in the vicinity of the Waterloo Metro Quarter
- Development responds to significant corner typologies in the vicinity of the Waterloo Metro Quarter

Provisions

5.9.8.1 Setbacks

(1) Development is setback from the Waterloo Congregational Church generally in accordance with **Figure 18** – Waterloo Metro Quarter Setbacks

5.9.8.2 Bulk, scale and height

- (1) The height and façade articulation of the Botany Road ground level development and any awnings considers the proportion, scale and architectural features of the Congregational Church
- (2) The height, proportion, scale and architectural articulation of the Botany Road podium for new development considers the proportion scale and architectural features of the Congregational Church
- (3) The height, proportion, scale and architectural articulation of any adjacent new development to the Congregational Church considers the proportion scale and architectural features of the Church

5.9.8.3 Layout and design

- Development incorporates articulated corner forms which define each corner in its context, having specific regard to heritage items in the vicinity, including;
 - a. The Cauliflower Hotel at 123 Botany Road, Waterloo
 - b. The Former CBC Bank at 60 Botany Road, Alexandria
 - c. The Cricketers Arms Hotel at 56-58 Botany Road, Alexandria

5.9.8.4 Materiality

(1) Development incorporates materiality that appropriately responds to heritage items in the vicinity, and also reflects the industrial heritage and character of Waterloo

5.9.8.5 Public domain

- (1) Development incorporates a publicly accessible shared way to the immediate north of the Waterloo Congregational Church to significantly enhance visibility of the church as a distinct built form item
- (2) Subject to landowner's consent, the existing later fence and vegetation at the front of the Waterloo Congregational Church site is removed to enable greater visibility from the Botany Road public domain

- (3) Subject to landowner's consent, the setting of the Waterloo Congregational Church is integrated into the public domain design for the Metro Quarter, in particular through selection of consistent paving materials
- (4) Development incorporates the Waterloo Congregational Church through the provision of visual and physical connections between the Church, the Metro Station, and the public domain
- (5) Public domain and built form incorporates materials that reference the industrial heritage of the Metro Quarter, including brickwork
- (6) The public domain incorporates public art that celebrates the heritage values of the Metro Quarter

5.9.8.6 Excavation in the vicinity of heritage items

(1) Excavation beneath or adjacent to heritage items and/or buildings in heritage conservation areas will only be permitted if it is supported by both a Geotechnical Engineering report and a Structural Engineering report.

5.9.8.7 Heritage assessments

- (1) A Heritage Impact Statement is to be submitted for development applications which have the potential to impact heritage items or buildings within heritage conservation areas.
- (2) The consent authority may not grant consent to a development application that proposes substantial demolition or major alterations to a building older than 50 years, until it has considered a heritage impact statement, so as to enable it to fully consider the heritage significance of a building and the impact that the proposed development has on the building and its setting.
- (3) The Heritage Impact Statement is to be prepared by a suitably qualified person, such as a heritage consultant. Guidelines for the preparation of Statements of Heritage Impact are available on the website of the Heritage Branch, NSW Department of Planning at www.heritage.nsw.gov.au.
- (4) The Heritage Impact Statement is to address:
 - a. the heritage significance of the building or its contribution to a heritage conservation area;
 - b. the options that were considered when arriving at a preferred development and the reasons for choosing the preferred option;
 - the impact of the proposed development on the heritage significance of the heritage items or buildings within heritage conservation areas;
 and
 - d. the compatibility of the development with conservation policies contained within a Heritage Conservation Management Plan or Conservation Management Strategy, or conservation policies within the Sydney Heritage Inventory Report, as applicable.

5.9.8.8 Archaeological assessments

- (1) An archaeological assessment is to be prepared by a suitably qualified archaeologist in accordance with the guidelines prepared by the NSW Office and Environment and Heritage.
- (2) An archaeological assessment is to be submitted as part of the Statement of Environmental Effects for development applications affecting an

- archaeological site or a place of Aboriginal heritage significance, or potential archaeological site that is likely to have heritage significance.
- (3) An archaeological assessment is to include:
 - a. an assessment of the archaeological potential of the archaeological site or place of Aboriginal heritage significance;
 - b. the heritage significance of the archaeological site or place of Aboriginal heritage significance;
 - the probable impact of the proposed development on the heritage significance of the archaeological site or place of Aboriginal heritage significance;
 - d. the compatibility of the development with conservation policies contained within an applicable conservation management plan or conservation management strategy; and
 - e. a management strategy to conserve the heritage significance of the archaeological site or place of Aboriginal heritage significance.
- (4) If there is any likelihood that the development will have an impact on significant archaeological relics, development is to ensure that the impact is managed according to the assessed level of significance of those relics.