DESIGN GUIDELINES

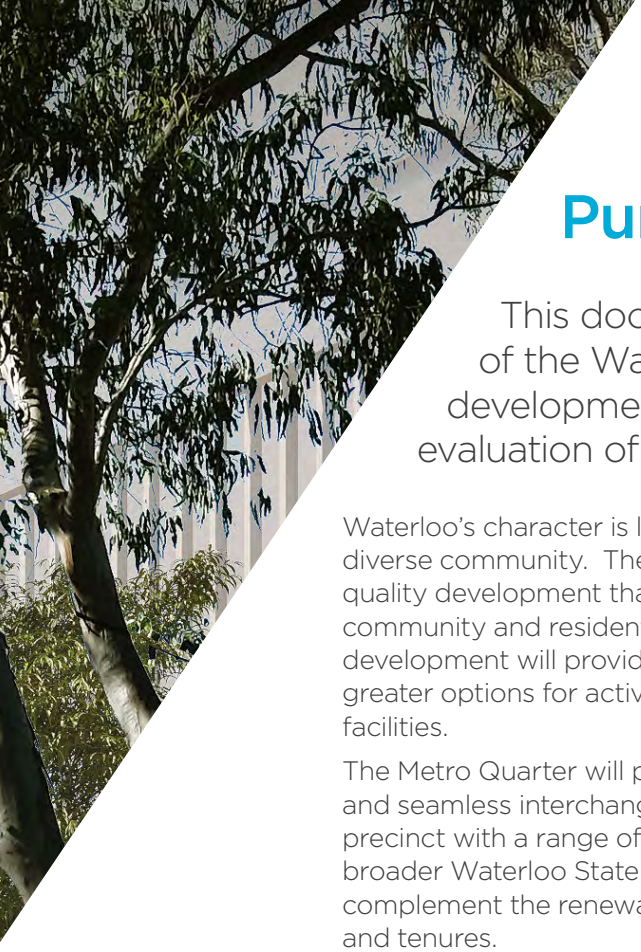
APPENDIX K

NSW GOVERNMENT | sydney METRO

Waterloo Metro Quarter

Design Quality Guidelines

November 2018



Purpose of the Document

This document is intended to guide the design of the Waterloo Metro Quarter integrated station development and provides a resource to assist the evaluation of design quality and excellence.

Waterloo's character is layered, proud, distinct and resilient and is represented by a diverse community. The Waterloo Metro Quarter (Metro Quarter) will deliver a high quality development that integrates the new metro station with retail, commercial, community and residential uses including social and affordable housing. The development will provide new areas of public domain and pedestrian connections, greater options for active transport and provide space for cultural and community facilities.

The Metro Quarter will provide a high standard customer experience with safe and seamless interchange with other transport modes and an activated station precinct with a range of retail services. The development will act as a gateway to the broader Waterloo State Significant Precinct (SSP) with services and facilities that will complement the renewal of social housing and provide a diversity of housing types and tenures.

The Metro Quarter consists of the new metro station and complementary development of the land above and adjacent to the station to provide a vibrant mixed use precinct. The development opportunity will act as a catalyst for the Government's urban renewal program for the Metro Quarter and the Waterloo Estate.

This guideline addresses the Secretary's Environmental Assessment Requirements (SEARs) for the Metro Quarter State Significant Development application and covers the key design parameters for built form, public domain, movement, connectivity and interfaces between the station and development.

This design guideline has been prepared with reference to:

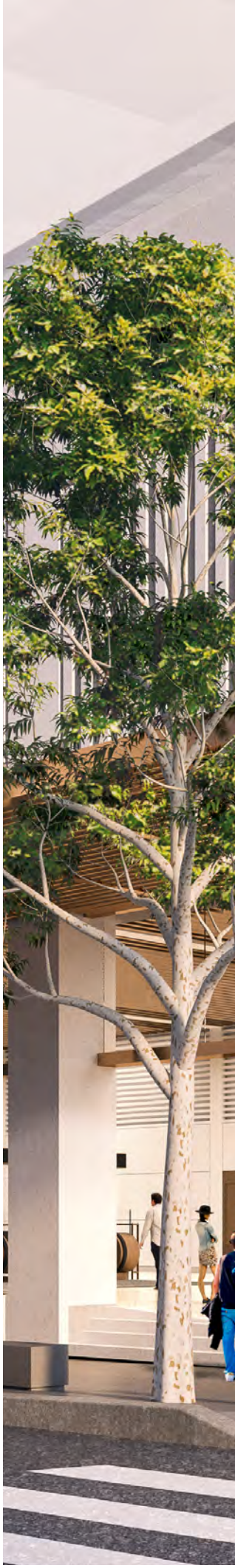
1. Concept State Significant Development Application Design Report for Metro Quarter Over Station Development SSD 9393
2. Sydney Metro City & Southwest: Chatswood to Sydenham Design Guidelines (June 2017)
3. Draft Explanation of Intended Effect and draft Development Control Plan, Metro Quarter State Significant Precinct (July 2018)
4. Metro Quarter State Significant Precinct Urban Design and Public Domain Study (July 2018)
5. Waterloo Precinct Placemaking Framework and Strategy (November 2017 and April 2018) and Waterloo Arts and Cultural Study
6. Heritage Impact Statement, Metro Quarter State Significant Development Application (November 2018.

Separate approval pathways for the station and the over station development have required the preparation of separate design guidelines for each component. These guidelines build on those accompanying the 'Sydney Metro City & Southwest: Chatswood to Sydenham Design Guidelines' and as such should be read in conjunction with them.

A key focus of these guidelines is to set clear design objectives for the OSD elements that integrate with the station, and to ensure consistency in the design approach for both elements. It is intended that the guidelines also inform and complement the future Station Design and Precinct Plan and Interchange Access Plan and are to be considered as part of the Sydney Metro Design Excellence Strategy for the site.

The NSW Government's aims for the Metro Quarter integrated station development are to:

- Support the NSW Government's planning strategies and objectives including the *Greater Sydney Region Plan (2018)* and the *Eastern City District Plan (2018)*
- Enable the development of a mixed use precinct at the site which caters to a range of different uses and works to create a fully integrated station precinct at Waterloo
- Support a range of spaces that would cater for the social and economic needs of the local Waterloo community
- Enhance customer experience and urban amenity through the development of an integrated design concept that ensures delivery of a quality public domain area with strong connections to the site's surroundings
- Create an urban environment that drives high usage of the Sydney Metro network responding directly to the principle of transit oriented development
- Provide opportunity for the over station development to be delivered as early as possible with the aim of opening the over station development concurrently or shortly following completion of Waterloo Station
- Enable a building form which maintains adequate solar access to public open spaces and nearby residential areas
- Provide a sensitive relationship between the proposed development of the Metro Quarter and its surrounding heritage context
- Achieve design excellence in the final integrated station development
- Enable a new transport interchange that prioritises public and active transport
- Establish new publicly accessible open space in the form of plazas that would provide access to the station entries, connect the Metro Quarter with surrounding streets and functions as spaces for passive recreation and social interaction
- Embrace sustainability initiatives including lower levels of on-site car parking, stormwater re-use and water sensitive design and measures intended to improve the environmental performance of buildings
- Support the provision of affordable and social housing.



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Site Overview

Figure 1 – Site context and proposed Metro Quarter development

The Metro Quarter is bounded by Botany Road, Wellington, Cope and Raglan streets. The site boundary for the State Significant Development application excludes the heritage listed Waterloo Congregational Church at No. 103 Botany Road. The total area of the site is 1.91 hectares and has a developable area of 1.28 hectares. It is approximately 220 metres in length with street frontages of 64 metres to Raglan Street and 62 metres to Wellington Street. The site has a fall of about 2 metres from north to south.

The metro station has been approved under CSSI 15-7400 (CSSI Approval) and includes demolition of the existing buildings on the site, excavation and construction of the station elements (concourse, platforms, lobbies, lifts, escalators, retail spaces and public domain works). Provision is made for plant servicing, egress and structures to support the development above the station. Sydney Metro has progressed the station design and established principles and criteria to guide further detailed design of the station.

Site Context

Significant features of the site and its context include:

1. A network of parks within 800 metres of the site and opportunity to connect to the City of Sydney's liveable green network along Raglan and Wellington Streets
2. There is opportunity to add to the existing urban tree canopy through a mix of deciduous and evergreen planting
3. The Alexandria Heritage Conservation Area (HCA) located to the west, which mostly comprises terrace houses. Nearby heritage items include historic pubs and hotels and a former bank building along Botany Road
4. Waterloo Congregational Church is located mid-block along Botany Road. The church, together with the other heritage items on Botany Road, establishes parameters for the scale, setbacks and street wall height of the development podium
5. A walking and cycling network through Waterloo that connects Central Sydney to Green Square. The main movement barriers are Botany Road and the Eveleigh rail corridor
6. The lack of natural surveillance and quality of street trees along Botany Road results in limited activation, visual interest and poor amenity for pedestrians
7. High pedestrian activity between the site and Alexandria Park, Australian Technology Park (ATP), Redfern Village and Waterloo Estate
8. Flooding constraints on Cope Street and Wellington Street that affect the design of ground level retail and basement entries
9. Wind impacts from the west and south that need to be addressed through building design to ensure adequate comfort for pedestrians and outdoor seating areas
10. The PANS OPS height surface of 126.4 metres which limits the height of buildings and cranes underneath aircraft flight paths.
11. A rail corridor passing under the site protected in accordance with State Environmental Planning Policy (Infrastructure) 2007.

Figure 2 – Locality map

Sydney Metro

Sydney Metro's vision is *"transforming Sydney with a new world class metro."* The design outcomes for the Metro Quarter are underpinned by the design objectives for all Sydney Metro projects.

Figure 3 – Sydney Metro project

Design objectives

The design objectives for the Sydney Metro City & Southwest are:

Ensuring an easy customer experience.

Sydney Metro places the customer first. Stations are welcoming and intuitive with simple, uncluttered spaces that ensure a comfortable, enjoyable and safe experience for a diverse range of customers.

Being part of a fully integrated transport system.

Sydney Metro is a transit-oriented project that prioritises clear and legible connections with other public and active transport modes within the wider metropolitan travel network that intersect with this new spine.

Being a catalyst for positive change.

Sydney Metro is a landmark opportunity to regenerate and invigorate the city with new stations and associated development that engage with their precincts, raise the urban quality and enhance the overall experience of the city.

Being responsive to distinct contexts and communities.

Sydney Metro's identity is stronger for the unique conditions of centres and communities through which it passes. This local character is to be embraced through internationally benchmarked high quality station architecture and public domain that is well integrated with the valuable inherited urban fabric of existing places.

Delivering an enduring and sustainable legacy for Sydney.

Sydney Metro is a positive legacy for future generations. A high standard of design across the corridor, stations and station precincts, that sets a new benchmark, is vital to ensuring the longevity of the metro system, its enduring contribution to civic life and an ability to adapt to a changing city over time.

Sydney Metro City And South West Chatswood to Sydenham Design Guidelines

Sydney Metro City & Southwest includes a new 30 kilometre metro line extending the metro rail from the end of the Metro Northwest at Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Six new metro stations will be delivered at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo with new underground metro platforms at Central. In addition, all eleven stations between Sydenham and Bankstown will be converted to metro standards.

The Chatswood to Sydenham Design Guidelines, which form part of the CSSI Approval for Sydney Metro City & Southwest, establish objectives for the project and specific design drivers and strategies for Waterloo Station and its interface with the surrounding locality. These key design drivers and urban design strategies inform the design of the Metro Quarter.

Key design drivers

1. Contribute to the sense of place and public domain.
2. Create a new transport focus in Waterloo.
3. Integrate the station with local improvement plans.
4. Make a positive contribution to the regeneration of this new urban community.

Urban design strategies

Enhancing east-west permeability for walking and cycling

Raglan and Henderson streets will be the key connector between the new metro station, Australian Technology Park and Waterloo Estate. Through site links will enhance pedestrian connectivity and activity around the station.

Interchange facilities close to station entry

The location of bus stops on Botany Road will be reviewed to maximise connectivity. Convenient and safe access will be provided for bicycles, taxis and private vehicle drop-offs from Cope Street.

Public domain defined and activated

Space will be provided for customers to transfer between transport modes. The pedestrian environment of major streets will be upgraded and new laneway connections will be delivered between Cope Street and Botany Road.

Support renewal around the station

New buildings and publicly accessible spaces will contribute positively to the surrounding context and will be integrated with the existing heritage buildings, providing a high standard of environmental amenity.

Waterloo State Significant Precinct

The new metro station and Metro Quarter development act as a catalyst for the NSW Government's urban renewal program for Waterloo Estate.

Vision

The Waterloo Estate is located to the east of the new metro station and Metro Quarter. The Waterloo Estate comprises approximately 18 hectares of mostly government owned land and contains 2,012 social housing dwellings and 125 private dwellings. The transformation and renewal of the Waterloo Estate is being led by NSW Land and Housing Corporation with Urban Growth NSW Development Corporation preparing the State Significant Precinct application. The vision for the Waterloo State Significant Precinct is represented in Figure 4.

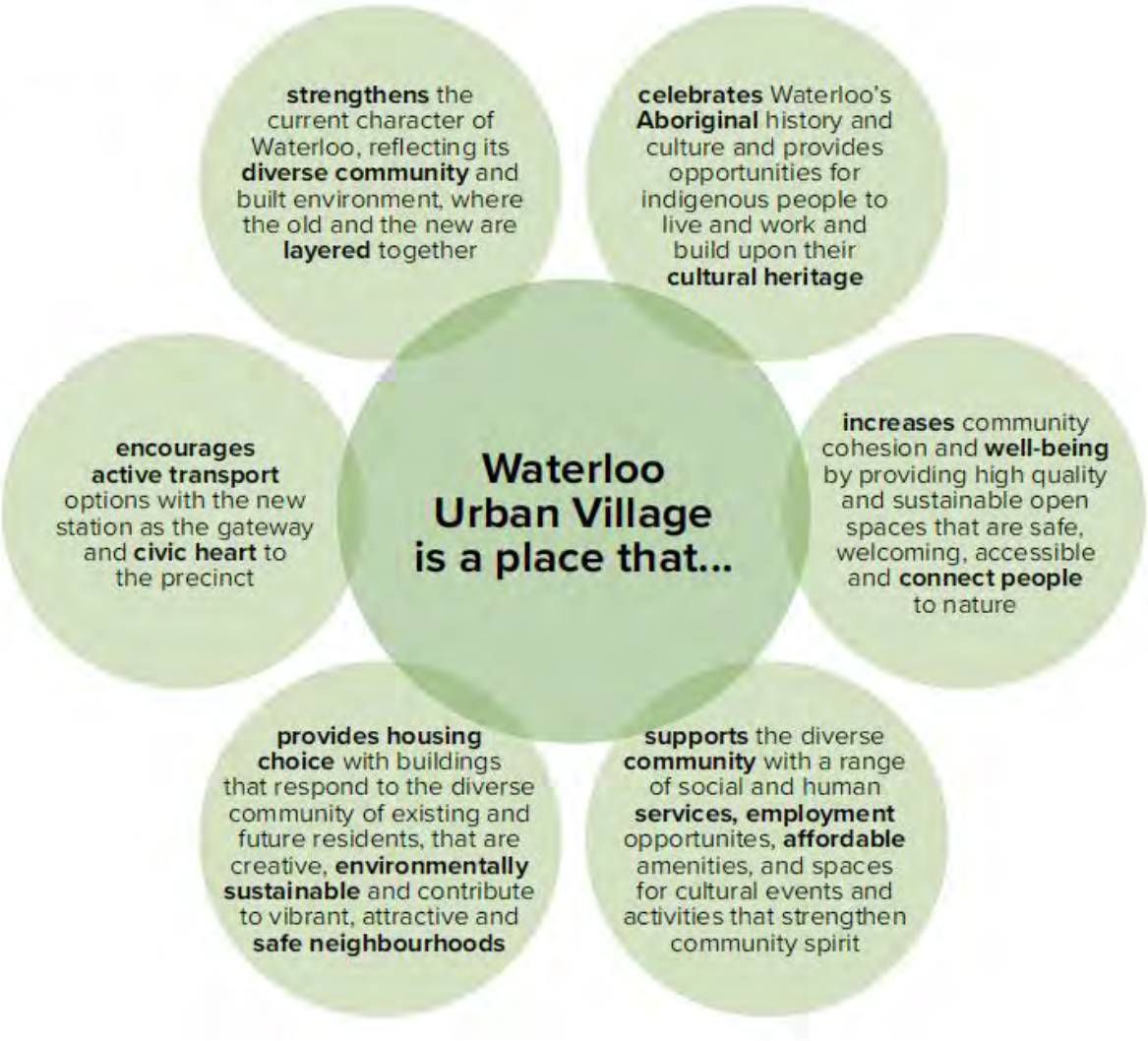

Figure 4 – Vision for the Waterloo State Significant Precinct
Source: Urban Growth NSW

Objectives and design principles

To achieve the vision for the Waterloo State Significant Precinct, the following objectives and design principles have been adopted:

Housing: a fully integrated urban village of social, private and affordable housing

- Locally responsive, distinctive and adaptable buildings, homes and spaces
- Diversity of homes and living choices underpinned by innovative delivery and tenure models
- Emphasise Waterloo's character areas and neighbourhoods
- A variety of indoor and outdoor shared spaces that support resident needs and well-being

Culture and design: a safe and welcoming place to live and visit

- A significant place shaped by the community for gathering in Waterloo
- Activated and engaging places for all
- Aboriginal people are intrinsic to Waterloo
- Embed local stories of people and place

Open space and environment: high quality public spaces and a sustainable urban environment

- Celebrate Waterloo's unique green attributes including topography, water and trees
- Promote a sense of well-being and connection to nature
- A high performing resilient environment

Transport and connectivity: a well connected inner city location

- An active transport hub and local centre working as one
- Highly connected neighbourhoods' prioritising walking and cycling for all

Services and amenity: new and improved services, facilities and amenities to support a diverse community

- Local services to meet every day and everyone's needs
- Flexible and adaptable land uses, infrastructure and buildings that are responsive to opportunities and needs
- Foster local economies and productive environments to create, learn and share.

Waterloo Metro Quarter OSD

The design objectives for the over station development are informed by the Waterloo Station Significant Precinct objectives.

Objectives

The urban design objectives for the Metro Quarter are to:

- Create a vibrant, mixed use local centre that is the gateway to the Waterloo Station and caters to the needs of the Metro Quarter, Waterloo Estate and users of the Metro Station
- Create a distinct and memorable urban quarter that reflects its role as a transport hub while responding to local character
- Establish 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
- Create a vibrant, safe, high amenity and walkable public domain that caters for the different needs of a variety of users
- Promote the use of Waterloo Station as a key public transport hub and prioritises sustainable movement choices
- Provide for a seamless interchange between transport modes, in particular rail, bus, walking and cycling
- Promote the growth of the Central to Eveleigh / local economy as a technical, innovation and creative corridor linked with nearby metropolitan scale education and health facilities
- Contribute to meeting the economic and social needs of the Metro Quarter and the Waterloo Estate
- Incorporate infrastructure that promotes economic growth, community cohesion and sustainability
- Help to facilitate the creation of an inclusive community that is welcoming to all
- Provide a greater amount and choice of housing, including affordable and social housing
- Respect and celebrate the significant Aboriginal and other cultural and heritage values of the Central to Eveleigh community, including the Waterloo Congregational Church
- Exhibit high quality architecture within a cohesive variety of building forms and heights.

Design approach

The following design approaches have been adopted for the Waterloo Metro Quarter over station development to respond to the opportunities and constraints of the site and the surrounding urban context.

- **Integrated** station development and public domain that delivers an active transport hub with seamless interchange, pedestrian priority and accessibility. Complementary interfaces between the station and development will be high performing and achieve activation ready functionality.
- **Inclusive** integrated station development and public domain that provides accessible amenity, services and open space, shared democratic spaces for both the commuter and community, and creates places for social interaction and activities for all.
- **Connected** integrated station development and public domain that is legible, safe and walkable day and night, acts as a gateway and community marker. The integrated station development stitches places into the surrounding context and has social connectedness and shared spaces.
- **Diverse** mix and layering of uses and employment with extended hours, fine grain and active street edges. Adaptable mixes of dwelling types and living choices are provided and are architecturally distinctive with variance.
- **Local** reflection of the proud community character and diversity in response to place and context. Local retail, business and services are fostered and embed the arts and local cultures.
- **Liveable** community that creates micro–neighbourhoods and vertical villages, public and community facilities, access to food sources and everyday needs. The integrated station development is contextual, resilient, uses with green infrastructure and high quality materials and finishes.
- **Culture** is respected in the integrated station development and public domain design by seeking endorsement and permission to use Aboriginal Creation and local stories that have been identified through the design phase.

Design Guidelines

The integrated station development will create a vibrant, mixed use local centre that serves as the gateway to the Waterloo Precinct and caters to the needs of the Metro Quarter, Waterloo Estate and metro customers. The built form and public domain will distinctively reflect the local character and respond to place and its context and deliver high quality architecture.

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Metro Station

Station design and integration

Waterloo Station is a cut and cover station as part of the Waterloo SSP renewal area. It will provide a new underground station with a direct connection from the area to the Global Economic Corridor. The station will service the surrounding residential precinct and support urban renewal and new employment opportunities.

This is to be achieved through:

1. Orientating the station entry towards Raglan Street to respond to commuter pedestrian flows
2. Providing a second door to the station entry convenient for customers travelling to and from the Waterloo Estate and bus interchange
3. Creating a unique arrival experience for the local community with a public plaza on Cope Street
4. Creating a pair of unique and complementary plazas adjacent to the station entry with a north facing plaza along Raglan Street and a plaza along Cope Street that engages with the Waterloo Estate and the Waterloo Congregational Church
5. Over station entry lobbies, end of trip facilities, plant rooms and the like are not expected to be located within the station. However, the detailed design may be amended to incorporate these elements as part of the integrated station development
6. The loading capacity of the station design allows for structures up to 10 storeys above the station boxes and up to 4 storeys above the Cope Street plaza (assuming conventional concrete structure)
7. The design of the station shall be integrated with the CSSI Approval, including the Station Design and Precinct Plan.

Figure 5 – Relationship of the station entry to the surrounding locality

Source: Waterloo Metro Quarter - Urban Design and Public Domain Study, Turner and Turf

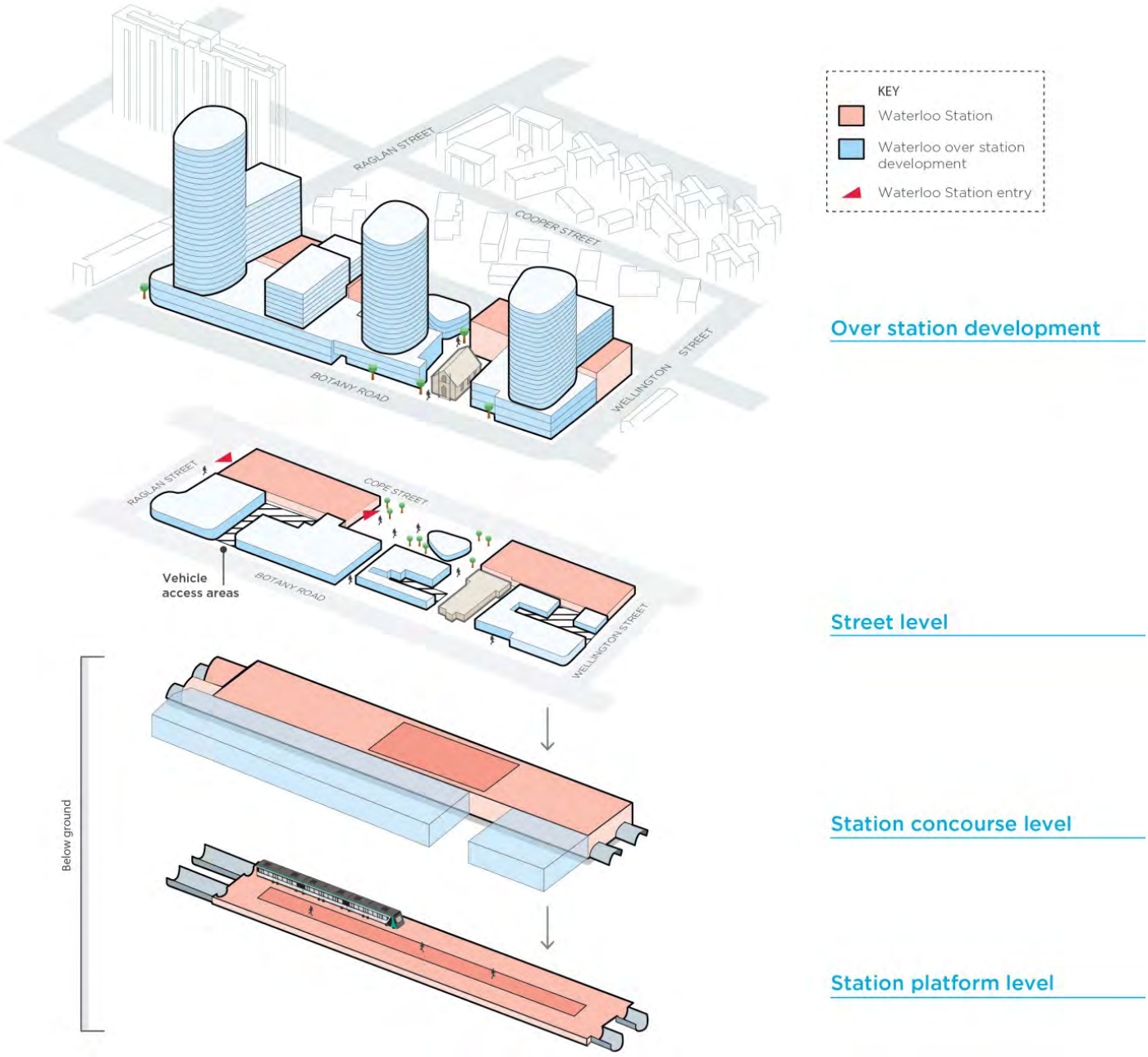


Figure 6 – Relationship between station and over station development
Source: Sydney Metro

Public Domain and Place

Figure 7 – Artist's impression of public domain and shared laneway alongside Waterloo Congregational Church

The public domain will establish a new community heart, creating a place that is activated, vibrant, and pedestrian and cycle friendly. New social spaces and plazas will provide a social and retail experience in a new urban setting where people can meet and relax in a safe and welcoming environment.

This is to be achieved through:

1. Maximising active frontages through the ground plane to respond to pedestrian movement
2. Addressing local flooding impacts through the design of the public domain
3. Delivering a high performing and activation ready public plaza on Cope Street that provides space for community activation and engagement
4. Creating a community focus and sense of ownership at its heart by providing a building within the Cope Street plaza that provides services and facilities for the community
5. Active frontages that support pedestrian movement and create moments for respite and pause
6. New pedestrian through site links that create direct and legible links between the station entry and the Botany Road bus interchange
7. Public domain that creates a sense of place and continuity throughout the development.
8. Redefining Cope Street as a slow street with considered design of kerb alignments, bicycle parking and street furniture
9. Street pavements and material palettes that will be consistent with the design objectives and key principles of the City of Sydney's *Sydney Streets Code*
10. Footpath paving that complements the existing urban fabric. Different paving could be used to denote significant spaces of the public domain such as the plazas on Cope and Raglan streets
11. Public domain furniture in accordance with the City of Sydney palette and, where possible, is co-located with trees to avoid clutter and create focus points for community activity
12. Selecting tree and landscape species that enhance the local character and diversity of species and will contribute to biodiversity and local food production (edible landscape)
13. Utilising low growing, flood tolerant understorey species to further define the public domain, provide habitat, assist with water sensitive urban design outcomes and do not obstruct sight lines across the site.

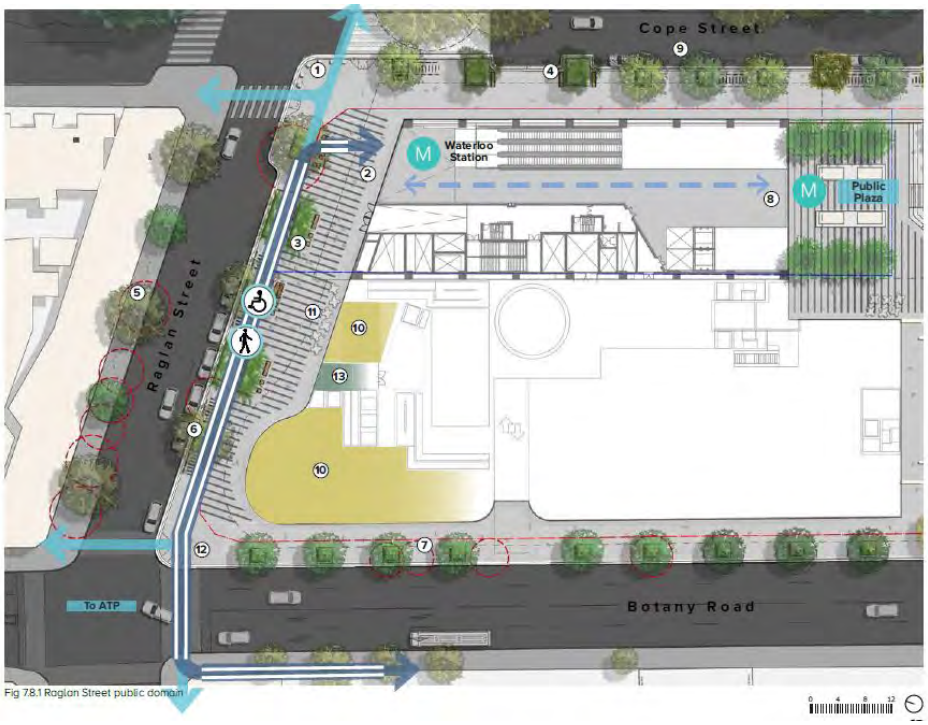


Figure 8 – Indicative design for Raglan Street plaza and public domain

Source: Waterloo Metro Quarter - Urban Design and Public Domain Study, Turner and Turf

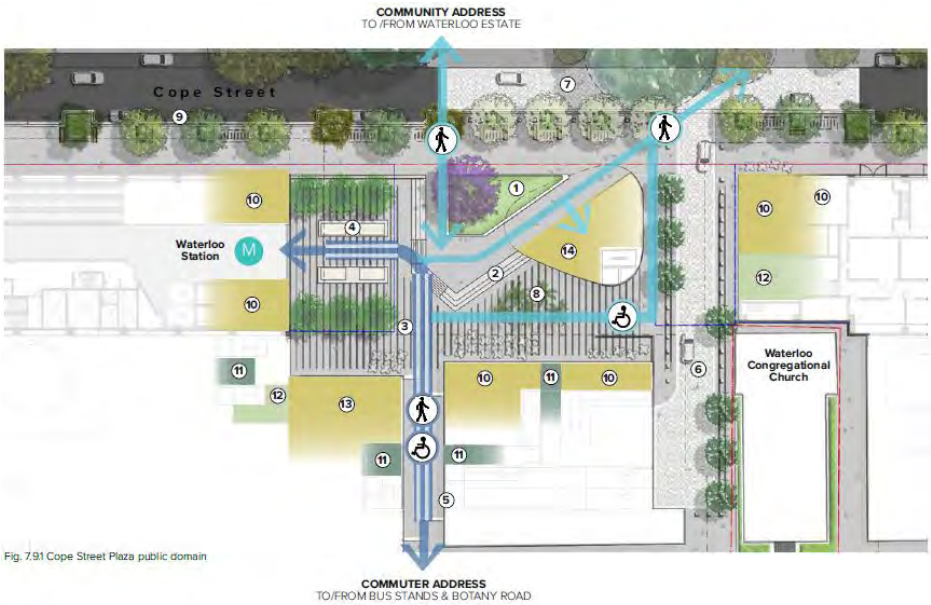


Figure 9 – Indicative design for Cope Street plaza and public domain

Source: Waterloo Metro Quarter - Urban Design and Public Domain Study, Turner and Turf

Street activation and building uses

Great places attract interest and encourage people to stay. Waterloo can be enhanced as a great place full of layered public life through distinct events and activation. Local retail, businesses, services and everyday needs should be provided as part of the over station development and peoples' experience is enhanced through public affordances, community facilities and public amenity.

This is to be achieved through:

1. Non-residential uses should cater to the needs of the local Waterloo community and could include local community services, convenience needs and a small scale supermarket
2. Diverse range of businesses and community activities that will support a vibrant day and night-time economy and are integrated with and activate the public domain
3. Allocating a minimum of 2,000m^2 of floor space within the podium levels for community uses and services.
4. Commercial uses within the podium levels that create opportunities for people to attain skills and employment
5. Provide uses that will activate and enliven the public domain should be located at ground level and provide a comfortable and convenient experience for metro customers and local community
6. Provide wind amelioration devices, including impermeable awnings to mitigate wind impacts for all outdoor trafficable areas around the development to ensure they are suitable for their intended uses
7. A tenancy mix that provides complementary uses, affordable convenience and diverse retail experiences and supports the metro station as a destination and gateway to surrounding neighbourhoods
8. Day and night time activity supported by local shops, hospitality, entertainment and cultural venues
9. Enabling a community anchor to be delivered early in the development
10. Establishing a community heart early in the development's delivery.
11. An engaging ground floor interface for pedestrian delight. Enable activation ready public domain, retail shells and flexible ground floor retail spaces
12. An events program which builds on existing events and supports development transition.

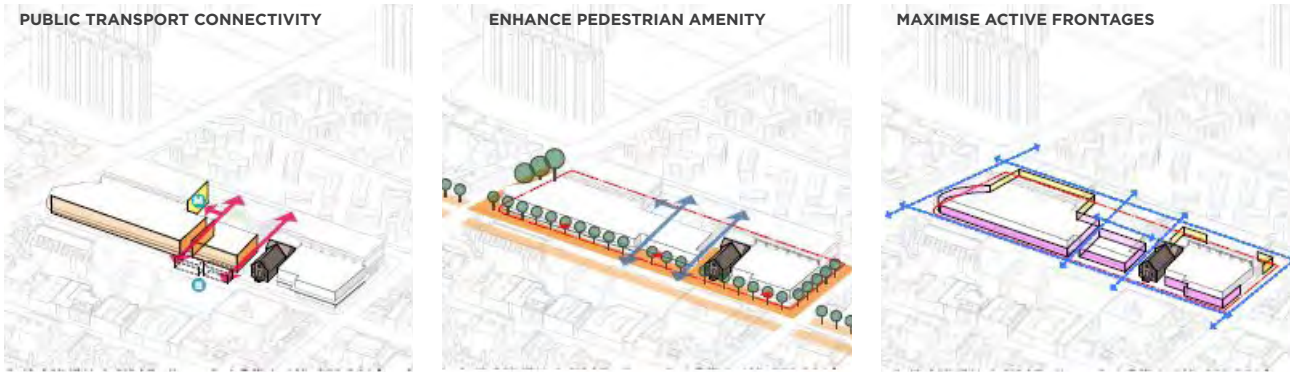


Figure 10 – Provide active frontages and amenity for pedestrians along transport connections

Source: Waterloo Metro Quarter - Urban Design & Public Domain Study, Turner and Turf

Figure 11 – Artist's impression of Cope Street plaza and the southern entry door to Waterloo Station

Public art

Public art is a vital ingredient in urban environments and can offer unique experiences, surprise and delight, and bring a diverse and changing community together. The Waterloo State Significant Precinct (SPP) Public Art Plan aims to facilitate these outcomes and ensure coordinated and complementary outcomes across the Metro Quarter. The Sydney Metro Public Art Strategy establishes a clear process for delivering public art across the Metro program, including at Waterloo station.

The two documents respond to the unique opportunities and constraints of these two distinct but integrated areas. Combined they provide curatorial guidance, a process for procuring artists, an approach to delivery and guidance for future detailed public art plans for specific works. All public art must be delivered to align with the curatorial statements, objectives and approaches set out in these documents.

The vision for public art within the Metro Quarter is to build an authentic sense of place through activating the site, animating public spaces, seamlessly integrating and embedding with future development and enabling the creative voices of the local community and its artists to be absorbed

This vision will be achieved through a coordinated approach to design that:

1. Delivers public art that connects and orients the Metro Quarter to its neighbouring villages, supporting pedestrian movement and experience
2. Supports an active street life, public access and personal safety
3. Integrates public art planning and delivery with landscaping, wayfinding and heritage interpretation
4. Ensures works within the station entrance are publicly visible and enhance the entry experience
5. Ensures locations coordinate with high movement corridors, sight lines and key entry and activation areas
6. Provides an integrated approach that allows the artist to respond to the site, embeds into the early stages of the design process and creates visual

Development of works and programs will also align with curatorial themes, supporting connection to place and community, that:

1. Respond to Waterloo's unique character and stories, including the Aboriginal stories of place and the areas contribution to a contemporary city
2. Acknowledge and enhance social connections and the community's experience of the public domain
3. Invite community cultural participation to deliver works that connect the Metro Quarter to the community
4. Explore a breadth of art typologies, including permanent, ephemeral, performance, integrated and embedded artworks as well as cultural activities and programs
5. Respond to the staging of development across the precinct, acting as an essential anchor for cohesion across a changing community

Built Form

Podium and Street Wall

The podium form and articulation should relate to the local context, demonstrate heritage and contextual sensitivity with scale and massing that relates to the pedestrian scale.

This is to be achieved through:

1. Responding to the neighbouring street scale and rhythm along Botany Road with a building podium that relates to the existing street scale, heritage items, urban grain and modulation and supports a "retail street" approach
2. Responding to the existing scale of development along Wellington Street through a low street wall height for the podium with buildings setback above to delineate the podium
3. Increased street setbacks along Raglan Street and Botany Road to improve the amenity of the pedestrian experience
4. Placing residential entries and lobbies away from Botany Road and, where possible, provide activation of other spaces and streets
5. Providing awnings along Botany Road and Raglan Street that continue the existing awning line of the adjacent streetscape
6. Reconnecting Waterloo Congregational Church with the local community by providing a new setting for the heritage building. This is achieved through
   a) Establishing a podium height along Botany Road that relates to the height of the church and the existing street wall height along Botany Road
   b) The alignment of the podium to Botany Road adjacent to the church is setback to align with the church to increase the church's visual presence within the streetscape and to increase views to and from the church along Botany Road
   c) Integrating the area in front of the church with public domain for the over station development (subject to land owner agreement)
   d) Setting back the Metro Quarter's podium from the southern side of the church to reveal the church as freestanding.

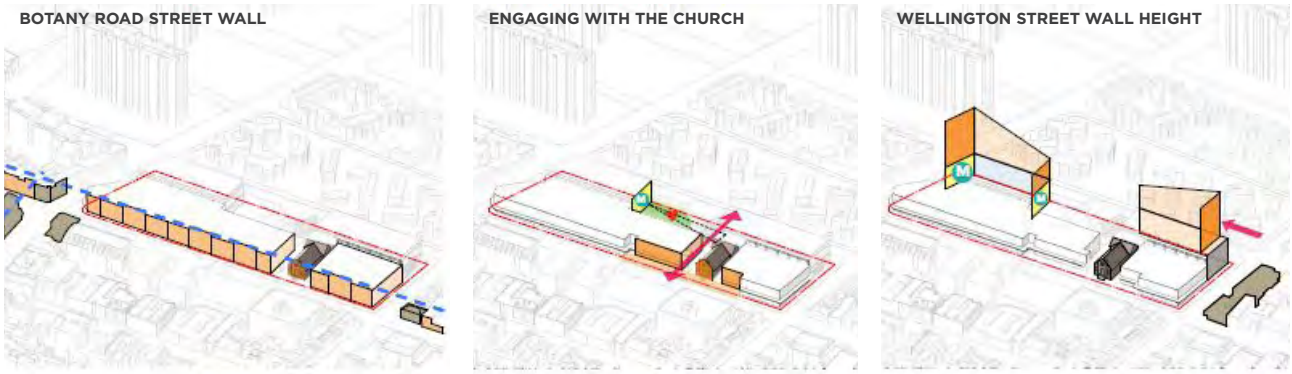


Figure 12 – Podium and Street Wall Heights

Source: Waterloo Metro Quarter - Urban Design & Public Domain Study, Turner and Turf

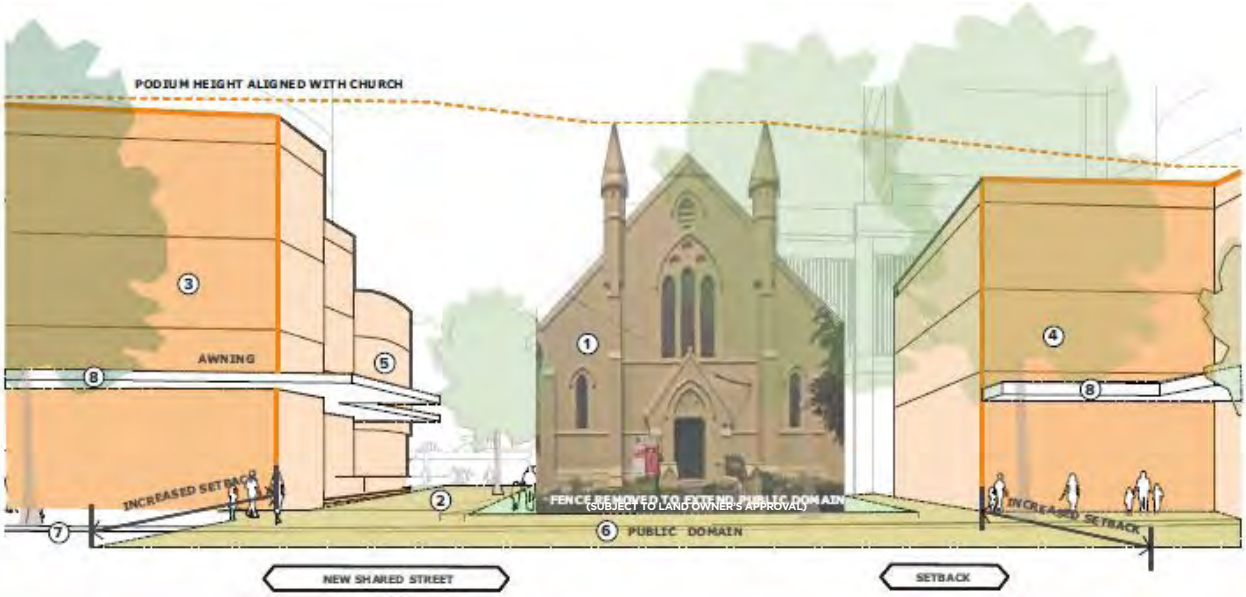
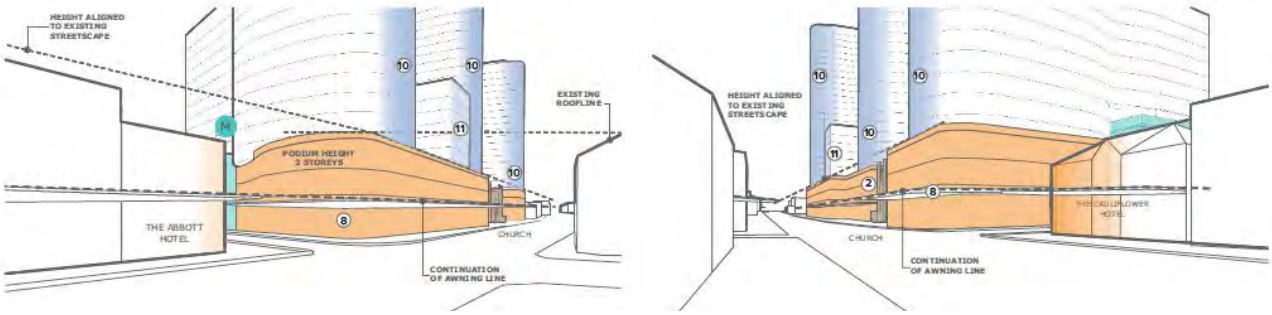


Figure 13 – Podium and Street Wall - Engaging Waterloo Congregational Church

Source: Waterloo Metro Quarter - Urban Design & Public Domain Study, Turner and Turf



Street view looking south *Street view looking north*

Figure 14 – Podium and Street Wall - Botany Road

Source: Waterloo Metro Quarter - Urban Design & Public Domain Study, Turner and Turf

Built Form above the Podium

Provide exceptional and diverse built form above the podium that responds to the evolving height, scale and character of the area. The built form will respond to the site's proximity to local heritage items and conservation areas and minimise the overshadowing impacts on Alexandria Park and the wider public domain.

This is to be achieved through:

1. Placing taller buildings near the corner of Botany Road and Raglan Street to provides a visual marker and gateway. This will identify the metro station entry from key locations in the precinct such as the views from Australian Technology Park to the west and from Waterloo Estate to the east
2. Providing a second marker building near the corner of Botany Road and Wellington Street that is lower than the station marker building (above) and defines the threshold to the Waterloo Estate renewal. The building height responds to the solar access requirements of the areas to the south
3. Maximising permeability and separation between buildings and marking through-site links to provide outlook for residents and to achieve solar access and natural ventilation requirements
4. Limiting the height of buildings above the station buildings to ensure the scale of the built form steps down toward to the Cope Street plaza
5. Allowing a nil setback for the buildings above the podium facing Botany Road where articulated building shapes or other measures effectively ameliorate wind impacts on the ground plane

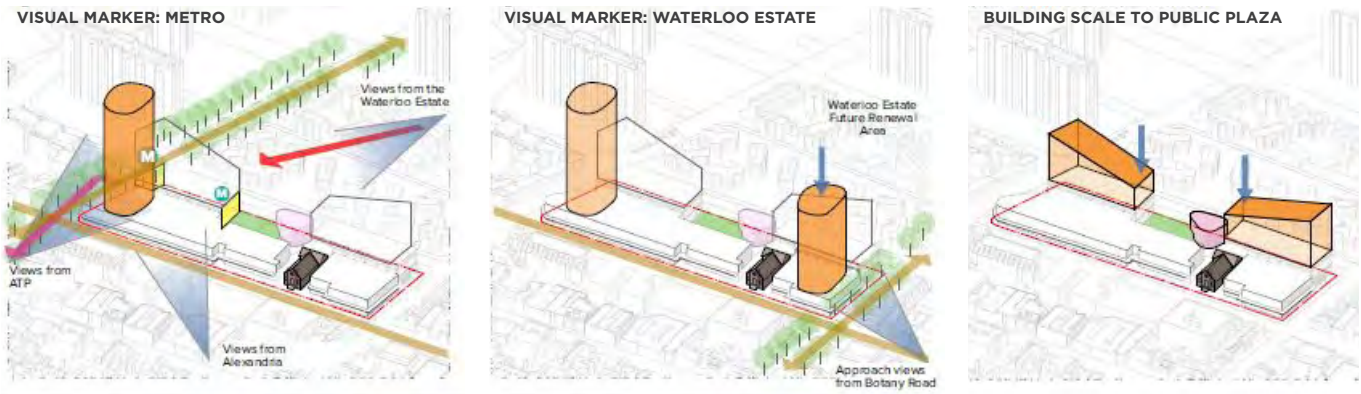


Figure 15 – Proposed tower configuration and building separation

Source: Waterloo Metro Quarter - Urban Design & Public Domain Study, Turner and Turf

6. Mitigate the potential noise impacts from Botany Road and achieve acoustic levels in accordance with the Apartment Design Guide and City of Sydney requirements:
   - Orientate buildings to reduce the length of frontages facing Botany Road with no single aspect apartments facing the street
   - Balconies are provided as re-entrant to the building facade
   - Operable windows are located off protected balconies instead of the external facade
   - Bedroom windows typically face east, north or south to minimise noise impacts from Botany Road to the west
   - Ventilation requirements should be satisfied as per the NSW Apartment Design Guide requirements
7. The building articulation zone (shown by the dashed lines in Figure 11) extends 1.5m beyond the building envelope area and is an allowance for architectural expression and modulation that does not contribute to the gross floor area
8. Maintaining solar access to private open space and living areas and adjoining open space such Alexandria Park in accordance with City of Sydney guidelines
9. Provide a minimum area of communal open space in accordance with NSW Apartment Design Guide
10. Communal open space and roof top gardens can be provided above the podium. The design will need to consider potential wind impacts and incorporate appropriate amelioration to provide amenity and comfort.

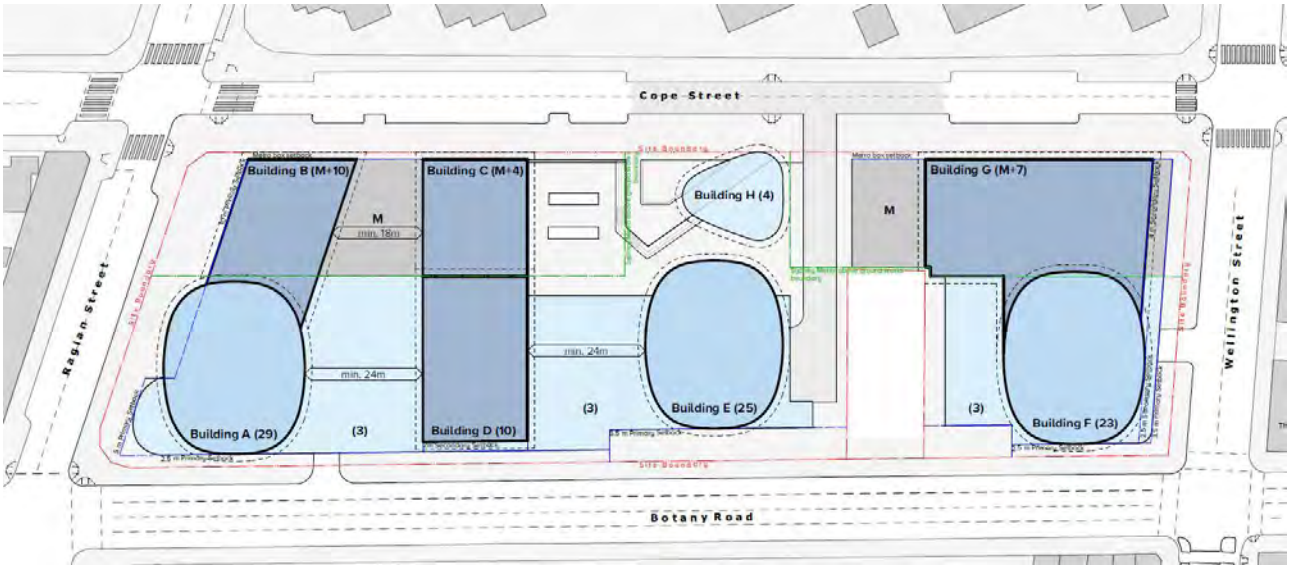


Figure 16 – Proposed building configuration and separation

Source: Turner Architects

Movement and Connectivity

Figure 17 – Artist's impression of Raglan Street

Access, permeability and amenity for pedestrians and cyclists will be prioritised in the design to facilitate legible, safe and convenient movement for customers.

This is to be achieved through:

1. A second door to the metro station entry and a public plaza to Cope Street
2. Clear and direct pedestrian through-site pedestrian link from Cope Street and Botany Road that provides a safe and convenient connection from the metro station to the bus interchange
3. Widening the footpath on the southern side of Raglan Street between the metro station and Botany Road
4. Providing adequate footpaths and setbacks on Botany Road in the vicinity of the bus interchange to provide additional footpath capacity for pedestrians
5. Providing bike parking for metro customers in accordance with the CSSI Approval, as well as additional facilities for residents and non-residents in accordance with City of Sydney rates
6. Relocating the existing southbound bus stop on Botany Road to the middle of the block between Raglan Street and Wellington Street
7. Ensuring the design of the over station development does not preclude the provision of a cycleway along Wellington Street in the future
8. Redefining Cope Street as a "slow street" through considered design of kerb alignments, traffic calming measures, landscaping and street furniture
9. Limiting vehicular movements across the site with a single shared zone from Cope Street providing access to the northern basement car parking
10. Servicing and loading located at the site edges with access from Botany Road and Wellington Street. Shared service vehicle access for the station and OSD is to be provided within the OSD with vehicle access via Botany Road.

Figure 18 – Connectivity with transport and movement (indicative)

Source: Sydney Metro

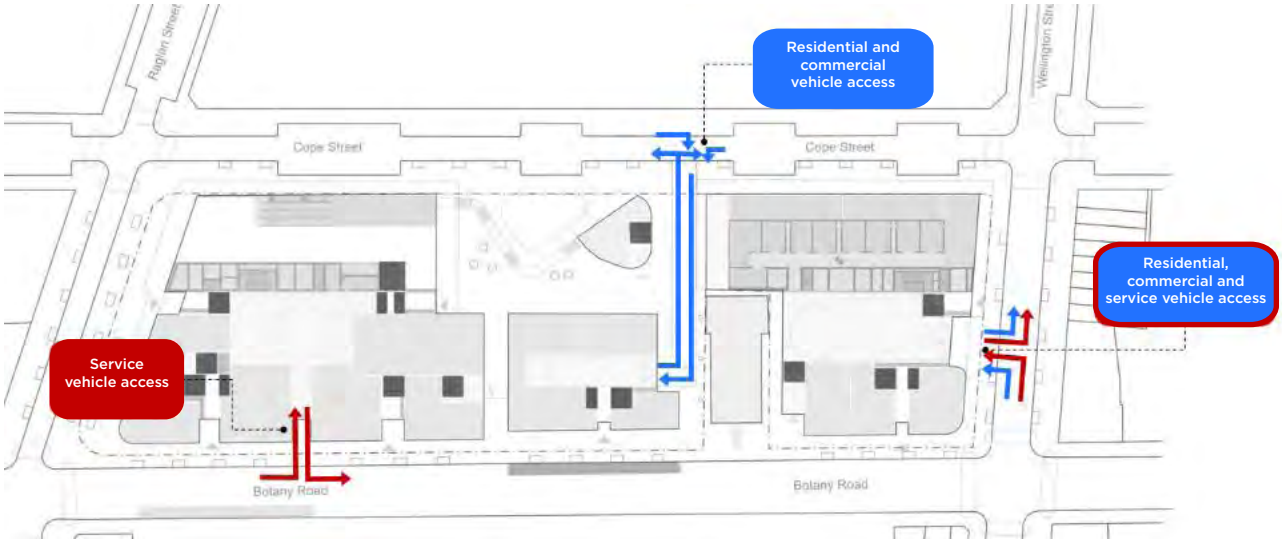


Figure 19 – Access for service, loading and residential vehicles

Source: Waterloo Metro Quarter State Significant Precinct Transport Study, Jacobs

Integration

Integration with the metro station

Provide an over station development that seamlessly integrates all the components of the development and leaves a positive legacy for future generations.

This will be achieved through:

1. Delivering an over station development that:
   a) Does not have any adverse impact on the function and/or operation of the metro station
   b) Can be constructed independently and maintained or modified without significant interference to the operation of the metro station
   c) Allows independent access, servicing and maintenance from normal station activities and operations
   d) Integrates efficiently with the station structure
   e) Connects the station entry, podium and over station development seamlessly.
2. The station design should incorporate the following where relevant:
   - Structural elements, building grids, column loadings, building infrastructure and services to enable the construction of future over station development
   - Space required for future lift cores, access, parking and building services for the over station development
3. Permissible uses should be functionally separated at ground level to assist in pedestrian circulation and servicing needs
4. Back of house operations and services should be consolidated wherever possible while maintaining any required separation between the OSD and Sydney Metro
5. The building envelopes should include:
   - Space provisioning for mechanical plant required to service the future over station development. These spaces should be separate from the station requirements for plant and mechanical services
   - Adequate clearance zones to the station air supply intakes and mechanical ventilation for exhaust and smoke discharge (in event of a fire)
   - Functional integration of the various uses and activities should be seamless and simplify the vertical division and coordination of the services wherever possible.

Integration with the Waterloo Estate State Significant Precinct

The new metro station will provide a catalyst for the Government's renewal and transformation plans for the Waterloo Estate. A wide range of development options will be explored for the Waterloo Estate State Significant Precinct (by others). The Waterloo Metro Quarter development will integrate with the future redevelopment of the area.

This is to be achieved through:

1. Providing a single metro station with two doors provides flexibility for the arrangement of future streets, pedestrian connections and open space within the Waterloo Estate State Significant Precinct
2. Increased street setbacks to Raglan Street allowing wider footpaths and public domain to be provided at the station entry
3. Improved and new pedestrian links between Cope Street and Botany Road connect the Waterloo Estate to public transport and to the neighbourhoods further to the west, including the employment area at ATP and schools and open space at Alexandria Park
4. A publicly accessible square on adjacent to the station entry provides a central activity hub that is flexible enough to respond to a wide range of options that could be considered for the Waterloo Estate
5. Active frontages are provided along the Cope Street edge of the Waterloo Metro Quarter site. This will support a vibrant, active and pedestrian focussed street that complement the future development on the eastern side of Cope Street, which could be open space, retail uses or a combination of both
6. Local community focussed businesses and activities provided within the podium levels of the Waterloo Metro Quarter development will support the needs of the community
7. Late night retail, entertainment and live music venues could improve night time safety and surveillance within the area.

Design Excellence

This design guideline complements the design excellence strategy for the Waterloo Metro Quarter. The benchmark framework demonstrate the design quality aspirations for the integrated station development.

The design excellence strategy for the Waterloo Metro Quarter comprises four key elements:

1. **Design Excellence Evaluation Panel:** a Panel will be established to provide an independent evaluation of the Waterloo Metro Quarter integrated station development proposals to support design excellence by performing the "jury role" in the competitive design process.
2. **Design Review Panel:** The Sydney Metro DRP will be reconvened after the competitive design phase has been completed. The DRP will provide on-going design review of the station design and overstation development.
3. **Design excellence benchmarks:** The design benchmarks demonstrate the design aspirations for the integrated station development. They illustrate the expected quality and guide the design outcomes.
4. **Architectural diversity:** The lead architect will be responsible for establishing the design framework of the Waterloo Metro Quarter and coordinating the design of the station, ground plane, podium levels and any buildings immediately above the station. At least three additional architects will design the taller buildings fronting Botany Road and the community building in the Cope Street plaza.

   The design team must comprise:

   - A multidisciplinary team with a full complement of design professionals and experts tailored to meet the unique project characteristics.
   - Diversity within the design team including emerging and/or small practices and inclusion of an aboriginal role to ensure their cultural relationship to place is embedded within the design process.
   - An integrated design team with considered and significant senior leadership and clear professional roles and responsibilities.
   - Local experience and expertise on relevant projects which display design leadership, excellence and innovation in approach and outcomes.

Principle	Metro Station	Podium
Integrated	✓	✓
Inclusive	✓	✓
Connected	✓	
Diverse		✓
Local	✓	✓
Liveable		✓
	Crossrail Place, UK	Woodwards, Vancouver
	Norreport Station, Copenhagen	Nightingale 1, Melbourne
	Otahuhu Station, New Zealand	Day Street Apartments, Sydney

Elements					Performance Indicators
Towers	**Plaza Building**	**Retail and services**	**Public domain**	**Public art**	
✓	✓	✓	✓	✓	• Active transport hub with seamless interchange • Pedestrian priority and accessibility • Complimentary station and over station interface • High performing and activation ready functionality
✓	✓	✓	✓	✓	• Accessible amenity, services and open space • Shared democratic spaces recognizing both commuter and community • Places for social interaction and activities for all
✓	✓		✓	✓	• Legilble, safe and walkable day and night • Acts as a gateway and community marker • Place stitches into surrounding context • Social connectedness and shared spaces
✓		✓		✓	• Mix and layering of uses and employment with extended hours • Fine grain and active street edges • Adaptable mix of dwelling types and living choices • Architectural distinctiveness and variances
✓	✓	✓	✓	✓	• Reflect the proud community character and diversity • Response to place and context • Foster local retail, business and services • Embed the arts and local culture
✓			✓		• Micro-neighbourhoods and vertical villages • Public affordances and community facilities • Access to food sources and everyday needs • Contextual, resilient, and green infrastructure, materials and finishes.
Case Study Benchmarks					
Central Park, Sydney	Folkestone Quarterhouse, UK	Chophouse Row, Seattle	Monash University Northern Plaza	Centre Hospitalier, Montreal	
Upper House Carlton, Melbourne	Community Centre Maj, Czech Rep	Nakameguro Station, Tokyo	Afghan Bazaar Cultural Precinct, Melbourne	Landlines, Brisbane and Jonathon Jones	
Nisji Building, Canberra	Guggenheim Ideas Lab, New York City	Wesbrook Village, Vancouver	Prince Arthur's Landing, Thunder Bay CA	Art Moves, TfNSW and Green Square	

Figure 20 – Waterloo Design Benchmark Framework

NSW GOVERNMENT

sydney METRO