



PART K - SPECIAL PRECINCTS

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K1 Land to which Part K applies

Part K applies to the land identified in Figure K1-1

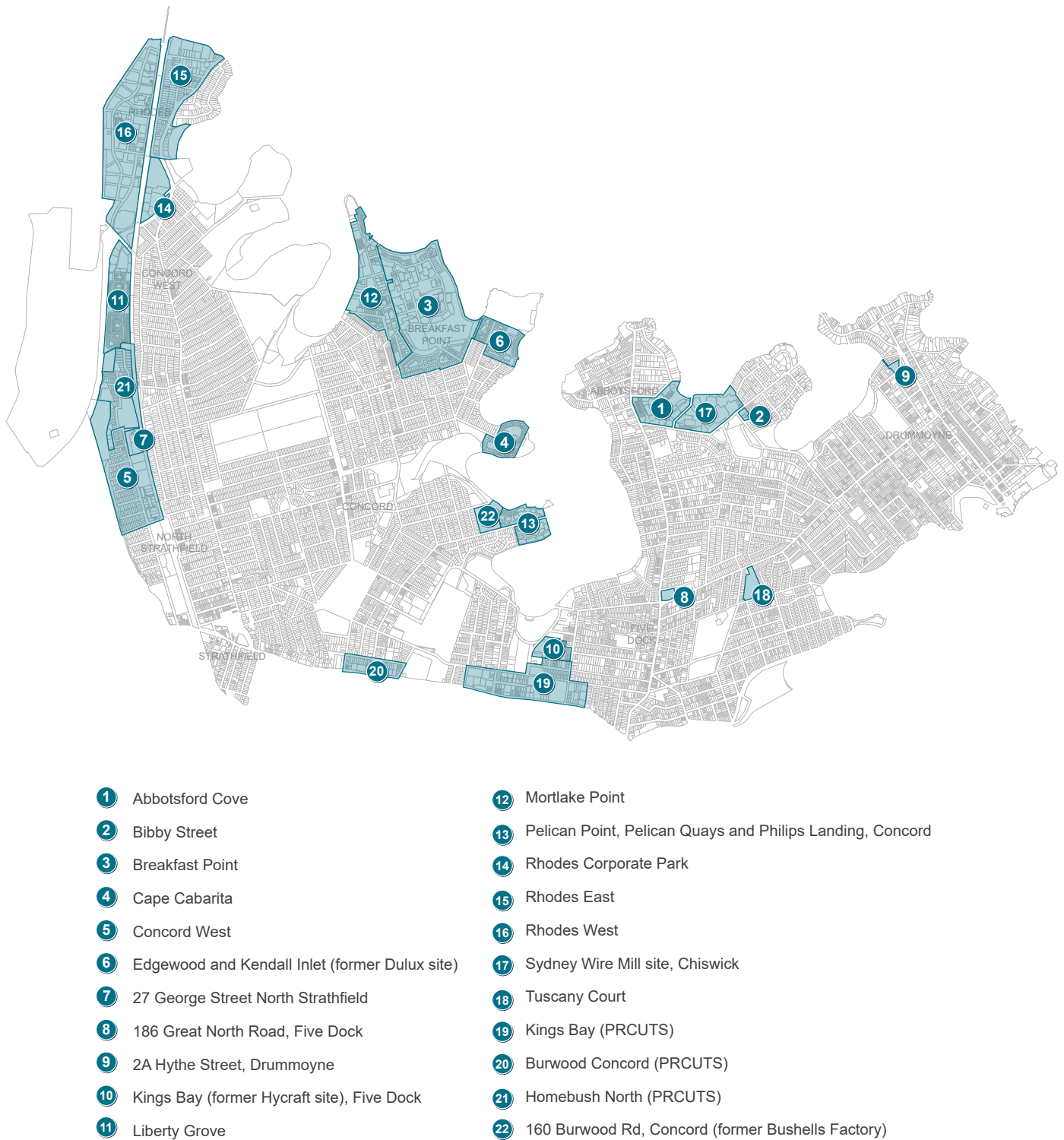


Figure K1-1 Special Precincts overview map

K2 Abbotsford Cove



Figure K2-1 Aerial photo (source: nearmap.com)



Figure K2-2 Council area map



Figure K2-3 Abbotsford Cove - Location Plan



K2.1 General objectives

- O1. To encourage and facilitate development on the site which, in terms of scale, bulk, form and character: reflects the physical context of the site; is sympathetic to surrounding residential development; and does not dominate the landscape;
- O2. To retain and incorporate existing significant buildings and trees and other site features, creating a sense of place and respecting the heritage values of the site;
- O3. To minimise the impact of the development in terms of overlooking, loss of view and loss of sunlight from adjoining and neighbouring properties;
- O4. To provide unrestricted public access to the foreshore and to the central area of public open space located between Abbotsford House and the Bay;
- O5. To provide for the active and passive recreation needs of the residents of the development which should include the rehabilitation of the Clubhouse pavilion and incorporate recreation facilities such as a swimming pool and tennis courts; and
- O6. To provide a publicly accessible street network as an extension of the existing street network.

K2.2 Specific provisions

Design, Scale and bulk

Controls	
C1.	To achieve a development outcome which, in terms of its design, scale and bulk, responds in a sympathetic and harmonious manner to the site, the bay and surrounding residential development.
C2.	To control the externalities of any future development and ensure that future residents of the site enjoy a high standard of amenity and environmental quality.

The height of buildings, including any car parking levels should comply with the height limits for the five residential precincts specified in Figure K2-5 Precinct, Setbacks and Height Control Plans and detailed below:

Great North Road Precinct

Controls	
C3.	The 7.5m height limit is compatible with the existing residential development on Great North Road.

Blackwall Point Road Precinct

Controls	
C4.	The 11m height limit allows 4 levels of residential development above existing ground level. This height has been determined by considering the height and location of existing vegetation, the slope of the land and proximity to Abbotsford House.
C5.	On the Blackwall Point Road frontage a 9m setback to accommodate the root systems of existing vegetation will be necessary. The buildings will also be effectively screened from neighbouring development by the existing stand of weeping fig trees.

Melrose Crescent Precinct

Controls	
C6.	The 16.5m height limit takes into consideration: the substantial fall of the site along the eastern boundary, the height of existing buildings on the site, the location next to the Lysaght site and portion of unmade road (Melrose Crescent) creating an opportunity for a buffer area.
C7.	A 45° envelope control for development, where the Melrose Crescent Precinct adjoins the Open Space Precinct (see Figure K2-4 Indicative 45° Building Envelope) will ensure minimal impact when viewed from the water.

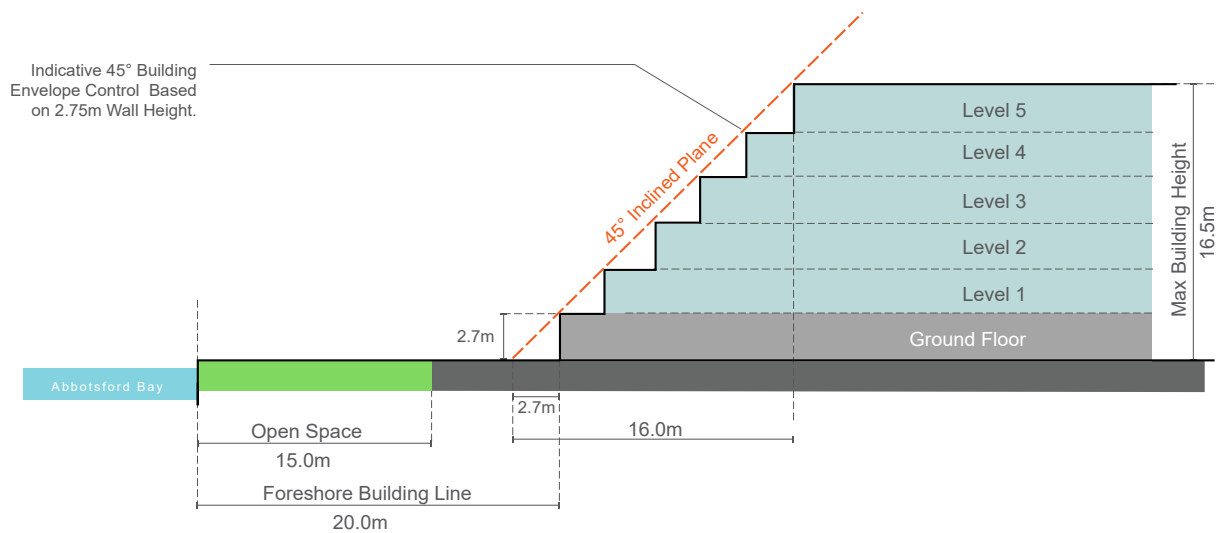


Figure K2-4 Indicative 45° Building Envelope

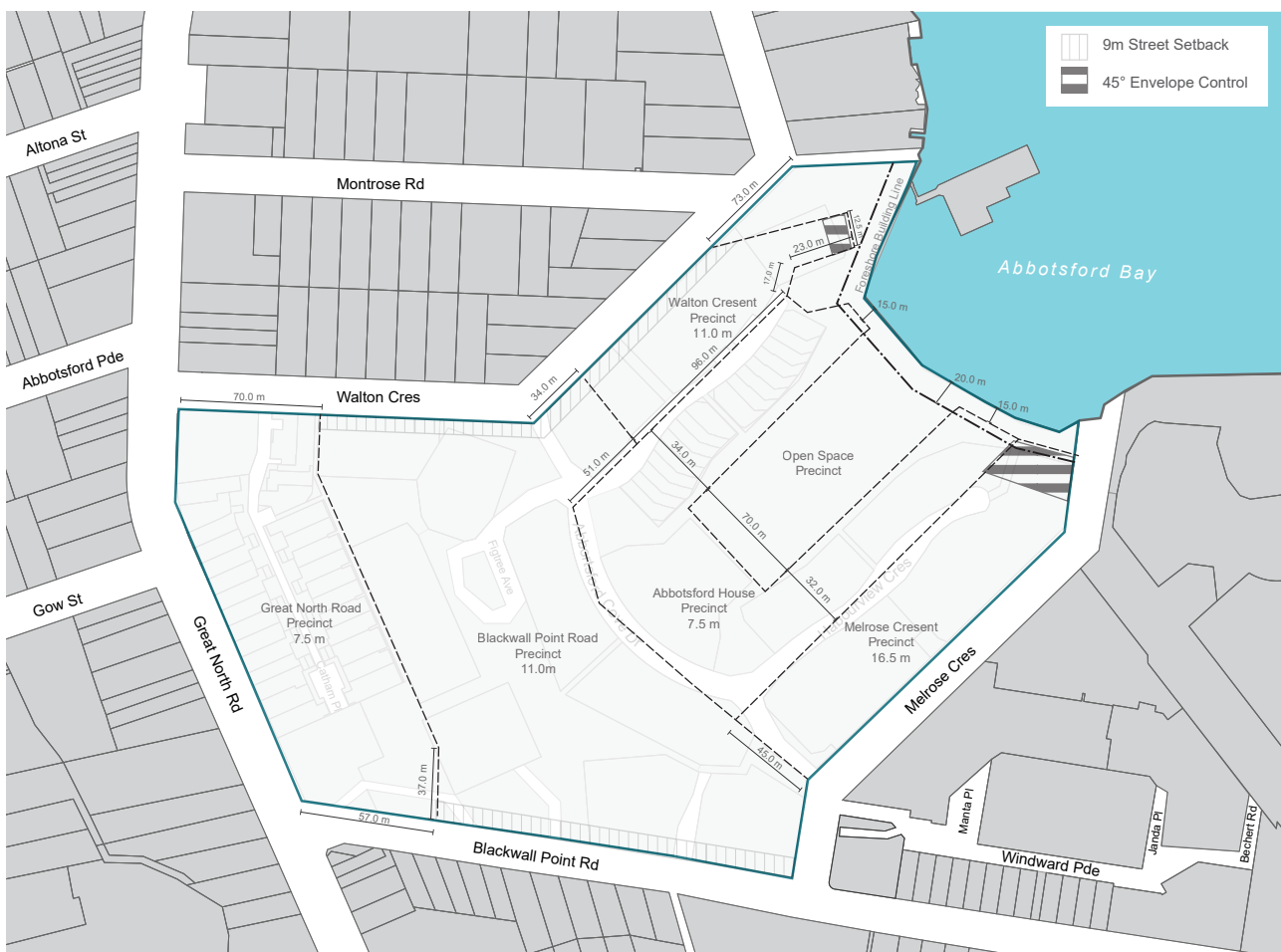


Figure K2-5 Precinct, Setbacks and Height Control Plans



Walton Crescent Precinct

Controls	
C8.	The 11m height limit together with the 9m setback will provide for development which will read as 1/2 storeys from Walton Crescent.
C9.	A 45° envelope control for development where the Walton Crescent Precinct adjoins the Open Space Precinct (see Figure K2-4 Indicative 45° Building Envelope) will ensure minimal impact when viewed from the water and from Walton Crescent.

Abbotsford House Precinct

Controls	
C10.	The 7.5m height limit complements Abbotsford House and provides an appropriately scaled edge to the open space.

Open Space Precinct

Controls	
C11.	Any structure located in the Open Space Precinct should not exceed 3.6m in height.

Site coverage

Controls	
C12.	Buildings must occupy less than 30% of the site area.

Setbacks

Controls	
C13.	A 20m Foreshore Building Line applies to the site (see Figure K2-4 Indicative 45° Building Envelope).
C14.	A 9m building setback applies to parts of the Blackwall Point Road and the Walton Crescent Precincts (see Figure K2-5 Precinct, Setbacks and Height Control Plans).
C15.	Any building to be located near to an existing tree must take account of the drip lines and root systems of that tree.

Design and Form

Controls	
C16.	A 45° building envelope control will control building form on the Abbotsford Bay edge of Melrose Crescent Precinct and Walton Crescent Precinct to minimise impact of the development when viewed from the water (see Figure K2-4 Indicative 45° Building Envelope).

Landscaped and Open Spaces

Objectives

- O7. To provide for public and private open space that meets user requirements for recreational and social activities and for landscaping;
- O8. To ensure that significant trees are retained or where possible relocated on the site; and
- O9. To assist on-site drainage by the provision of at ground landscaped open space.

Controls	
C17.	To ensure adequate provision of open space maximum permissible site coverage of buildings over the entire site is 30%.
C18.	Landscaped areas should generally be dominated by vegetation and not masonry elements. Hard paved areas should, where possible, be kept to a minimum in order to reduce stormwater runoff, although wheelchair access must be considered.

K3 Bibby Street



Figure K3-1 Aerial photo (source: nearmap.com)



Figure K3-2 Council area map



Figure K3-3 Bibby Street Precinct - Location Plan



The following objectives and controls have been created to ensure an appropriate form and scale of development is provided for the former industrial precinct bound by Bibby Street, Blackwall Point Road and Burns Crescent, Chiswick.

K3.1 Objectives and provisions

Built form and scale

Objectives

- O1. Orientate new buildings to the north so as to maximise solar access for new dwellings;
- O2. Build to the building envelope line at the Bibby Street/Blackwall Point Road and Bibby Street/Burns Crescent corners of the site to create a higher density residential “node” complementing existing development on the adjacent corners of the Bibby Street/Blackwall Point Road intersection;
- O3. Establish a continuous building line along Bibby Street;
- O4. Protect the solar access and privacy of existing neighbouring properties and respond to the topography and slope of the study area by establishing building height limits which “step down” the slope of the site; and
- O5. Relate to the existing low density residential properties by “stepping down” the height and scale of new buildings towards the north east of the site.

Controls

C1.	The maximum number of storeys permitted on the site is shown in Figure K3-4 Maximum Heights.
C2.	The minimum boundary setbacks are shown in Figure K3-5 Access and setbacks.
C3.	Vehicle Access points are to be provided in accordance with Figure K3-5 Access and setbacks.
C4.	Fencing on the site is to be designed so that sight lines for both pedestrians and vehicles are not obscured.
C5.	Roof forms, plant and lift overruns are to be designed to be simple compact forms that are visually unobtrusive.

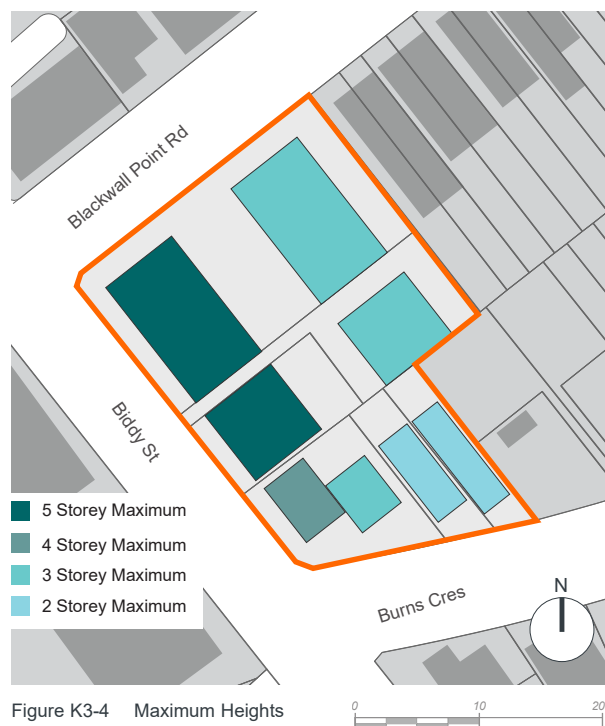


Figure K3-4 Maximum Heights

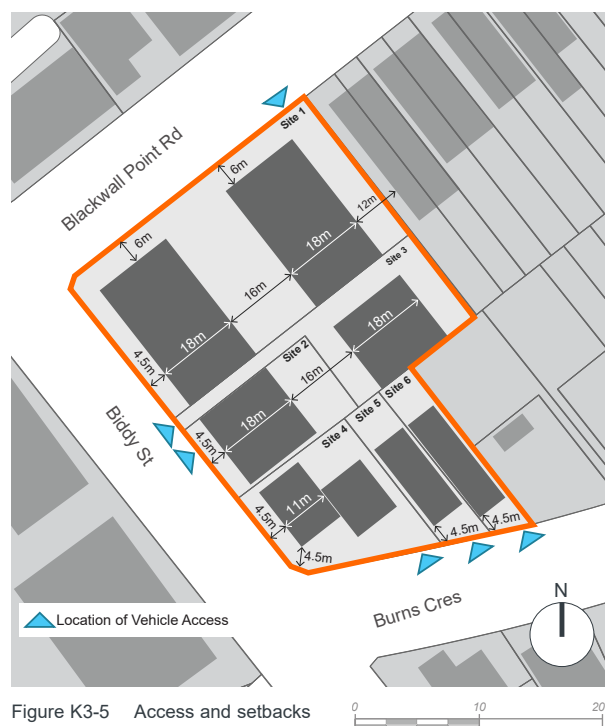


Figure K3-5 Access and setbacks

K4 Breakfast Point



Figure K4-1 Oblique aerial photo (source: nearmap.com)

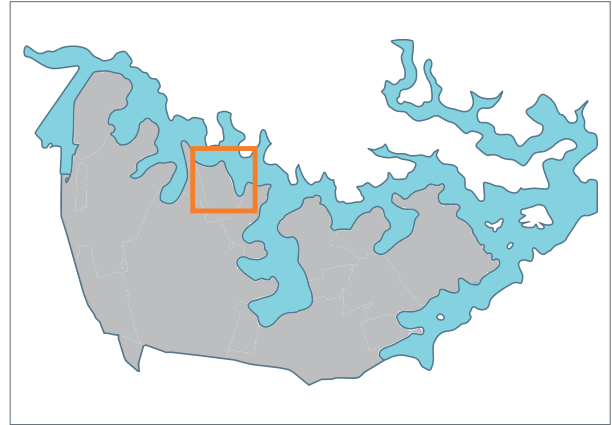


Figure K4-2 Location within LGA



Figure K4-3 Location Plan

K4.1 Introduction

Breakfast Point is a 51.82 hectare master-planned residential development on a waterfront remediated industrial site 9km west of Sydney CBD, in the City of Canada Bay. Breakfast Point is predominantly a Community Scheme development. Only houses fronting 'perimeter' streets beyond the AGL site are not within a Community Scheme.

The AGL site, Breakfast Point, is a Schedule 2 site of Strategic Significance under State Environmental Planning Policy No 56 (SEPP 56). Under the provisions of SEPP56 Canada Bay City Council (CBCC), in conjunction with the developer, prepared the Breakfast Point Master Plan 2002. Council adopted this plan 3 September 2002 after receipt of the Director Generals concurrence.

The objectives and controls contained within this Part are a result of a consolidation of the following plans:

- Breakfast Point Master Plan 2002
- Breakfast Point Concept Plan 2005 (amended 2013), Issue 8, 22 November 2013
- Single Dwellings on Lots at Breakfast Point DCP

History and characteristics

The Breakfast Point site was previously the AGL gas works. It was the primary coal gas producing site providing the energy needs of Sydney for over 100 years. With the introduction of natural gas, coal gas production ceased and the site ended its industrial life.

The subsequent remediation action plan (RAP) clean-up resulted in all the vegetation, and all the soil and significant portions of the underlying bedrock, being removed from the site. The site was subject to extensive re-shaping with the remediation program. All replacement soil and re-vegetation was subject to certified consistency with the Landscape Masterplan.

The site has extensive water-frontage to the north and east and higher land to the south and west. It is well protected from cold winter winds and benefits from cooling summer sea breezes. The land has a highly desirable residential orientation with good opportunities for incorporating passive ESD principles.

K4.2 Desired future character

Breakfast Point establishes a new community within an 'urban village' which embodies the principles of traditional neighbourhoods. The precinct positively relates new development to its urban context and achieves a transition to existing residential areas.

Access and open space linkages connect to the surrounds and the network of pathways for pedestrians and cyclists throughout the site encourages active transport. The precincts' waterfront location is celebrated through the creation, retention and enhancement of vistas and physical connections to the Parramatta River.

A continuous foreshore shared path along the waterfront maximises public access to the waterfront. Large areas of open space such as the Village Green, the area surrounding the Country Cub facility and Silkstone Park further add to the amenity of the precinct. The Village Centre to the west of the site offers convenience retail services, and various facilities and focal points are available for community use.

The range of dwelling types from lower scale detached houses to medium and higher rise apartment buildings offers a diverse choice of housing. Built form addresses and defines streets and open spaces, and the adaptive reuse of heritage items provides a connection to the site's past as the AGL gasworks.



Medium rise building typology in a landscaped setting

K4.3 General objectives

The following principles are a summarised version of the site planning principles contained in the Breakfast Point Masterplan (2002):

- O1 To establish a new community within an urban village which embodies the principles of traditional neighbourhoods.
- O2 To positively relate new development to its urban context and achieve a transition to existing residential areas.
- O3 To provide a high level of continuity to the surrounds through access links, built form, landscape and open space linkages.
- O4 To provide safe and convenient access to and through the site for all users and to establish a hierarchy of streets which respond to different types of circulation.
- O5 To create a network of pathways for pedestrians and cyclists throughout the site.
- O6 To ensure the creation, retention and enhancement of significant vistas to and from the site, and to and from the Parramatta River.
- O7 To maximise views, access and connection to the waterfront.
- O8 To ensure that the views of the site from the street and the harbour form a harmonious vista which includes vegetation in harmony with the buildings and view corridors.
- O9 To achieve quality urban design with high levels of amenity at the street level and create a sense of community.
- O10 To provide a variety of community focal points with different characters and functions.
- O11 To provide significant areas of parkland providing easy access for the community to the waterfront.
- O12 To provide a choice of residential dwellings in a variety of forms.
- O13 To give definition to the public domain by ensuring buildings address the streets and give form to open spaces.
- O14 To conserve heritage items with compatible uses and ensure adjacent development is of sympathetic scale and character.
- O15 To provide a village centre which includes a convenience shopping centre, shops and services for the community and surrounds.

K4.4 Access, parking and circulation

Objectives

- O16 To provide a co-ordinated access and circulation network designed to conveniently and safely serve the Breakfast Point community in terms of pedestrian movement, bicycles, public transport, service and emergency vehicles, private motor vehicles and car parking.
- O17 To connect and integrate the network with the existing external network.
- O18 To minimise and equably share any impacts on the residential amenity of the surrounding community.
- O19 To provide a level of public access and permeability comparable to that existing in the adjacent residential neighbourhood.
- O20 To facilitate increased public access to the foreshore.
- O21 To minimise hardstand area and potential surface run-off and maximise potential stormwater absorption and area available for soft landscape treatment.

Figure K4-4 Access & Circulation Principles shows the primary access and circulation network established at Breakfast Point.

Site Access

Controls

- | | |
|-----|---|
| C1. | <p>Public vehicle access points to Breakfast Point are to be from:</p> <p><i>Tennyson Road:</i></p> <ul style="list-style-type: none"> • at the main gates of the AGL works; • approx. 150 metres north of the Emily Street intersection; • opposite Whittaker Street; and • at the existing gateway in vicinity of Northcote Street. <p><i>Kendall Street:</i></p> <ul style="list-style-type: none"> • at the intersection of Bishop and Medora Streets <p><i>Emily Street:</i></p> <ul style="list-style-type: none"> • via Adams Street from Brays Road <p><i>Medora Street:</i></p> <ul style="list-style-type: none"> • opposite Medora Lane |
|-----|---|

Internal Road Hierarchy

Controls	
C2.	The road hierarchy is planned around development blocks or precincts described by a network of 'open access way' roads connecting to the external public road system. Each development site will have access to the public road system via open access ways.
C3.	All roads are community owned and maintained.

Public Access

Controls	
C4.	All Breakfast Point internal streets are 'open access' ways under the Community Land and Management Act. 'Open access' ways are effectively 'public space' under the Local Government Act 1993.
C5.	Open access ways can be considered as 'public roads' with the exception that the Community Association, not the Council, is responsible for maintenance.
C6.	Private Access Ways are provided where the function is for purely resident or service access to a distinct development or building. Private access roads may have restricted public access.

Traffic Calming

Controls	
C7.	Contained carriageway widths, surfaces, street geometry and landscaping are to be the primary traffic calming devices in the design of access streets.
C8.	Speed humps, chicanes and similar devices are not to be used.
C9.	Roundabouts, where required, are to be designed to accommodate buses and large rigid trucks, and should incorporate landscape beautification.

Road Standards

Controls	
C10.	AMCORD, Australian Standards and Council requirements are the guiding principles in the detail design of roads. The achievement of urban design objectives, on-street parking, heritage preservation and other considerations may determine standards varying from AMCORD guidelines.

Public Transport

Controls	
C11.	A bus route is to pass within 400m (approx 5 minutes walk) of any dwelling. The collector link and foreshore connector roads are designed to accommodate bus services.
C12.	A ferry terminal is to be integrated into the existing pier and accommodate convenient access to people with disabilities.
C13.	A bus stop is to be provided on the foreshore connector road approximately 75m from the pier.
C14.	Commuter parking is to be provided with convenient access to the pier precinct. Parking provision is to be sufficient to cater for other water and land based activities in the pier precinct.

Pedestrian Movement

Foreshore Access

Controls	
C15.	A combined public pedestrian/ cycleway is to be provided linking the northern end of Tennyson Road and Cabarita Park on a foreshore strip of land in public ownership.
C16.	Open access connections to the foreshore public open space are generally no greater than 200m apart.
C17.	The design of foreshore access system is to consider maintenance and emergency vehicle use.
C18.	Open access way streets are to include pedestrian footpaths to provide for public pedestrian movement within the site and connections to the external network, and to the foreshore.
C19.	Provision for through-block links are to be made where necessary for reasonable convenience.

Cycleways

Controls	
C20.	Combined pedestrian/ cycleway paths are to be provided to open space areas in accordance with Council's policy.
C21.	Combined pedestrian-cycle paths are to be provided to the collector link and foreshore connector link.
C22.	Residential access streets are to be cycle shareways.

Emergency and Service Vehicle Access

Controls	
C23.	The road network is to be designed to facilitate emergency and service vehicle access.
C24.	Large sized trucks must be able to safely negotiate to within 20m of every building.
C25.	Roads and turning areas are to be designed to discourage reversing movements.
C26.	Wherever possible loop access roads are to be used. Cul-de-sacs are to incorporate the minimum turning circle of large rigid trucks.

Sustainable Development

Controls	
C27.	All roads and movement systems are to be designed to minimise hardstand area and surface run-off, and to maximise the area available for soft landscape treatment and its potential stormwater absorption.

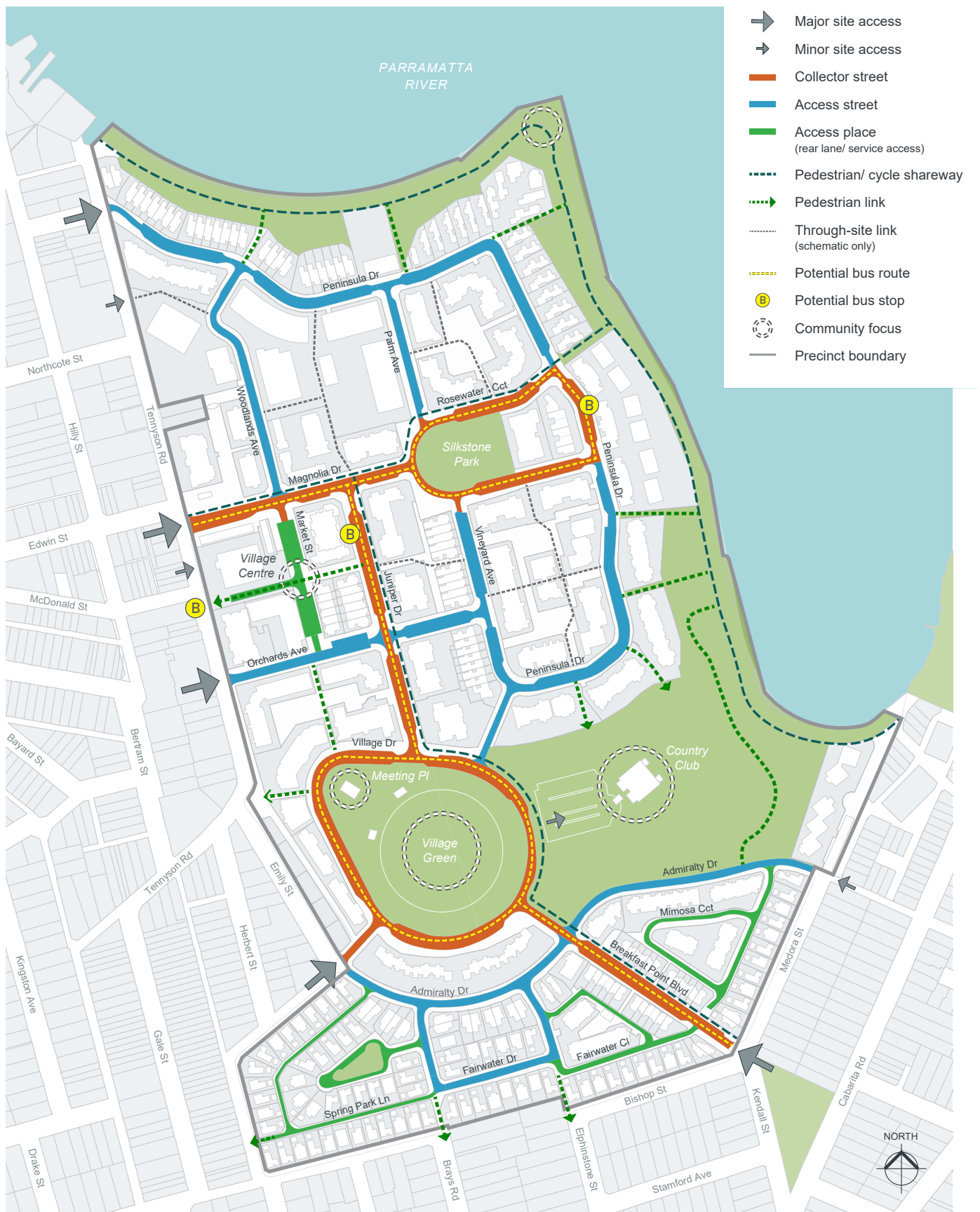


Figure K4-4 Access & Circulation Principles

K4.5 Land use principles

Uses in Breakfast Point are residential and a range of potential adaptive uses for heritage items possible under the Remediation Certification. Permitted land use at Breakfast Point is in accordance with LEP 2013, which zones the land R2 Low Density Residential, R3 Medium Density Residential, B1 Neighbourhood Centre, RE1 Public Recreation and RE2 Private Recreation.

All of the land within the Breakfast Point precinct is zoned either R2 Low Density Residential or R3 Medium Density Residential with the exception of the area occupied by the Meter Readers' Office which lies within the B1 zone. Figure K4-5 and details below describe the land use principles:

Residential

Breakfast Point is planned as primarily a residential neighbourhood. The LEP permits and other compatible uses to the extent that they contribute residential amenity, convenient services and employment.

Residential (Transitional)

The initial development planned at Breakfast Point was single family dwelling sub-division to the south and south west of the site to provide an early environmental buffer between long-term development and neighbouring residential areas.

Open Space (Public)

A 15m wide open space extending the full length of the water frontage of the site is to be dedicated for public foreshore access. This area is immediately behind the sea wall which is owned and maintained under the Community Scheme.

Open Space (Community)

Open Space planned and provided under the Community Scheme includes the Village Green, Silkstone Park and all landscaped areas within the Community Scheme.

Community buildings, eg the Meeting Hall, the Recreation Club and active recreation facilities are planned and built within this open space. This area also includes some restricted private open space 'rights' under easements.

Recreation & Social Uses

The Meeting Hall, Recreation Club and related recreation facilities are located on Open Space within Lot 1 of the Community Scheme.

Village Centre

Adjacent to the remnant Mortlake Village precinct, a neighbourhood community convenience shopping and service centre has been built, comprising a convenience store, café, several small shops, a child care centre and market square, together with Community Scheme management and security offices. Work/ live terraces and shop-top apartments have been also built in this village precinct to enhance 24 hour activity and security.

Heritage/ Adaptive Re-use

The uses for LEP 2013 scheduled heritage items are to be appropriate to the heritage conservation guidelines for the individual items, and comply with the relevant remediation certification. The economically sustainable preservation of the item will be a primary issue in the consideration of applications.

Commercial/ Heritage Curtilage

The curtilage of heritage items certified for 'non-residential' uses. Uses compatible with heritage constraints and/ or remediation certification.



Figure K4-5 Land Use Principles

K4.6 Landscape & open space

At least 12 hectares of open space has been provided at Breakfast Point. This includes the Village Green and oval, the Foreshore Park, Silkstone Park, the pocket park at Spring Park Circuit and the sidewalks. This open space, being part of Lot 1 in the Community Scheme, is community owned.

Objectives

- O22 To ensure that landscape and open space will be a major defining characteristic of Breakfast Point.
- O23 To increase filtration and reduce stormwater run-off.

Public Access to Open Space

Controls	
C28.	The public access network is to be legible, direct, safe, attractive and convenient.
C29.	Access to open space is to be well defined and provides a safe and active high quality public domain. Accessible open space for the recreation needs of residents is to be provided.
C30.	Foreshore access is to be clearly identifiable for public use.
C31.	Located no further than 3 minutes walk from any part, the continuous Village Green/Foreshore public open space complex, together with the Central Park will provide for the active and passive open space needs of all Breakfast Point residents, and to the wider community.
C32.	Playgrounds and similar specific small facilities, together with a community recreation club and multi-purpose community meeting hall are to be integrated into this landscaped complex.
C33.	A 15m wide foreshore strip extending the full length of the harbour frontage behind the seawall is dedicated public land.

C34.	<p>Public Open Space (open access under the Community Land Management Act) provision is to include:</p> <p><i>Village Green</i></p> <ul style="list-style-type: none"> A formal fenced playing field, constructed over an area which includes the entombed stratum, extending to include a multi-purpose community meeting hall. <p><i>Foreshore Area</i></p> <ul style="list-style-type: none"> Incorporating a continuous 15 metre wide minimum width along the whole of the foreshore in Council's ownership, and additional community open space averaging a total of 30 metres width. <p><i>Waterfront Park</i></p> <ul style="list-style-type: none"> An informal east sloping area linking the Village Green to the Foreshore area, incorporating a community recreation club and associated facilities, constructed over a designated restricted area. <p><i>Silkstone Park</i></p> <ul style="list-style-type: none"> A formal, elevated, passive recreation park, providing a sense of arrival from the Tennyson Road approach and providing vistas to the harbour and beyond. <p><i>Spring Park</i></p> <ul style="list-style-type: none"> A pocket park has been provided in Spring Park Close. <p><i>Market Square</i></p> <ul style="list-style-type: none"> A open space is to be incorporated in the design of the Village Centre precinct. Its function is to provide for community activities, markets, performances, and any promotional activities which enhance the community spirit and vitality of the centre.
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Community & Private Open Space

Controls	
C35.	Community and private open spaces are to be provided and integrated into the design of each development precinct or project to adequately meet the needs of its residents.

C36.	<p>Issues to be considered in design include:</p> <ul style="list-style-type: none"> • Streetscape enhancement • Privacy landscaping and screening • Climate and sun control • Swimming pools etc • BBQ areas • Private outdoor living and dining • Service areas • Shade • View & outlook enhancement • Boundary delineation • Solar Access • Environmentally Sustainable Design Standards 								
C37.	The quantity and quality of communal and private open space and landscape treatment will be on a merits based assessment of each Development Application.								
C38.	<p>Indicative private open space provisions are as follows:</p> <p><i>Upper level dwellings: balcony, terrace</i></p> <table border="1"> <tr> <td>1-2 bedroom</td><td>min area 8m² min dimension of 2m</td></tr> <tr> <td>3+ bedroom</td><td>min area 12m² min dimension of 2m</td></tr> </table> <p><i>Ground level dwellings: patio, terrace</i></p> <table border="1"> <tr> <td>1-2 bedroom</td><td>min area 16m² min dimension 4m</td></tr> <tr> <td>3+ bedroom</td><td>min area 35m² min dimension of 4m</td></tr> </table>	1-2 bedroom	min area 8m ² min dimension of 2m	3+ bedroom	min area 12m ² min dimension of 2m	1-2 bedroom	min area 16m ² min dimension 4m	3+ bedroom	min area 35m ² min dimension of 4m
1-2 bedroom	min area 8m ² min dimension of 2m								
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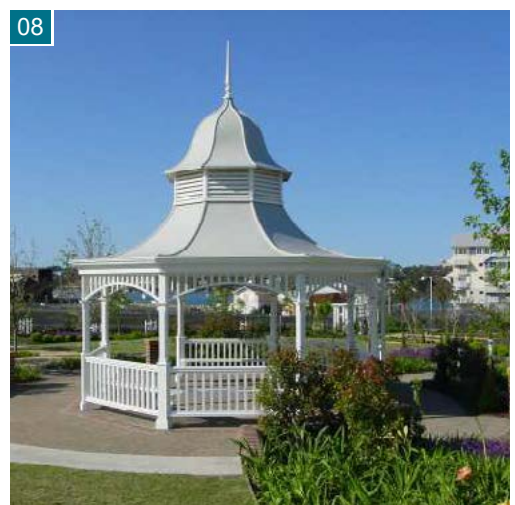
Community Facilities

Controls	
C39.	Community facilities included in the urban village, while owned and managed under the Community Plan, are publicly accessible.
C40.	The Village Green is maintained as a full sized sports oval, with associated amenities and picnic facilities.

C41.	<p>The Village Centre is to maintain its local convenience retail and community function, i.e. by ensuring that adequate space is provided for the following:</p> <ul style="list-style-type: none"> • a local convenience supermarket • flexible shop space for approximately 10 specialty shops grouped around the open market square • flexible live/ work terrace dwellings
C42.	<p>The following other community facilities are to be provided/ maintained:</p> <ul style="list-style-type: none"> • a child care centre • a multi-purpose meeting hall to the north-west of the Village Green with strong connections to the Village Centre precinct • recreational facilities including a gymnasium, aerobics room, swimming pools, tennis courts, putting green, dining, library and function rooms.

Planting Principles

Controls	
C43.	An informal indigenous planting palette should be adopted for informal, passive open space areas, foreshore reserve and to the major recreation centre open space.
C44.	A formal planting palette should be adopted for streets, squares and areas of strong urban character. Deciduous species should be used extensively for solar access and shade control and to provide seasonal variety and colour.
C45.	Paving, fences, garden walls and all other built or service elements in the landscape are to be designed for minimum impact, to blend with soft landscape and be visually inconspicuous.
C46.	Vertical walls and horizontal paving are to be separated by a planting strip of ground cover or shrubs.



01.Mimosa Apartments, 02.Kendall Bay Waterfront, 03.Hunters Wharf Walkway, 04.Breakfast Point Boulevard, 05.Community Hall, 06.Silkstone Park, 07.The Village Green, 08.Pavillion at Silkstone Park



Figure K4-6 Landscape & Open Space Principles

K4.7 Ownership & subdivision pattern

Land Ownership

The ownership structure is in principle:

- Public (Council) Ownership - A 15m wide portion of Foreshore Public Open Space extending over the whole of the length of the water frontage, behind the sea wall. The maintenance and upkeep is the responsibility of the community association under Community Scheme DP 270347.
- Freehold Torrens Title - All single family dwelling lots having frontage to existing public streets (Medora, Bishop, Adams Street and Brays Road) are individually owned Torrens Title fee simple lots.
- Lower Stratum (Entombed Cell) - The AGL retains ownership and responsibility for the containment cell stratum located a minimum of 1m below the finished surface in the vicinity of the Village Green.
- Community Schemes - The remainder of the site will be within Community Schemes.

Master Community Scheme

Comprises land indicated in Figure K4-7 including all 'open access' ways (streets and public pedestrian paths) on the land. This community scheme will be responsible for the management and maintenance of all roads, facilities, landscape and service infrastructure on the site, including Council's waterfront land.

Other Community Schemes

A separate community scheme includes internal Torrens Title single dwellings and duplex dwellings. A separate community scheme also exists for the strata titled apartments.

Public Access and Permeability

Under the Community Scheme all streets, and the vast majority of community open space areas are 'open access ways'. Easements provide for public access rights, obligations and law enforcement as if in public ownership. Some community open space areas are subject to restrictive easements for services or private use. Refer to registered community plan DP 270347.

The objective is to free the Council of liability for the ongoing service and maintenance costs on the site whilst ensuring access and permeability to all normally 'public' facilities.

Subdivision Pattern

The subdivision pattern is designed and staged to reflect the rehabilitation and sequential ownership transfer program for the site. Each stage is to be certified prior to transfer of ownership and its availability for development. Seven 'super lots' have been created to facilitate this. The subdivision yields:

- A land-subdivision creating individual single family lots fronting existing streets (Brays Road, Bishop, Adams and Medora Streets)
- Community subdivisions for land north of the perimeter, single family lots and another community subdivision for the remainder of the land
- A separate lot will be created over the 15m wide waterfront, vested in Council
- A stratum subdivision encompassing the containment cell underground to remain with AGL



01. Pedestrian link to Community Hall, 02. Silkstone Park, 03. Community event

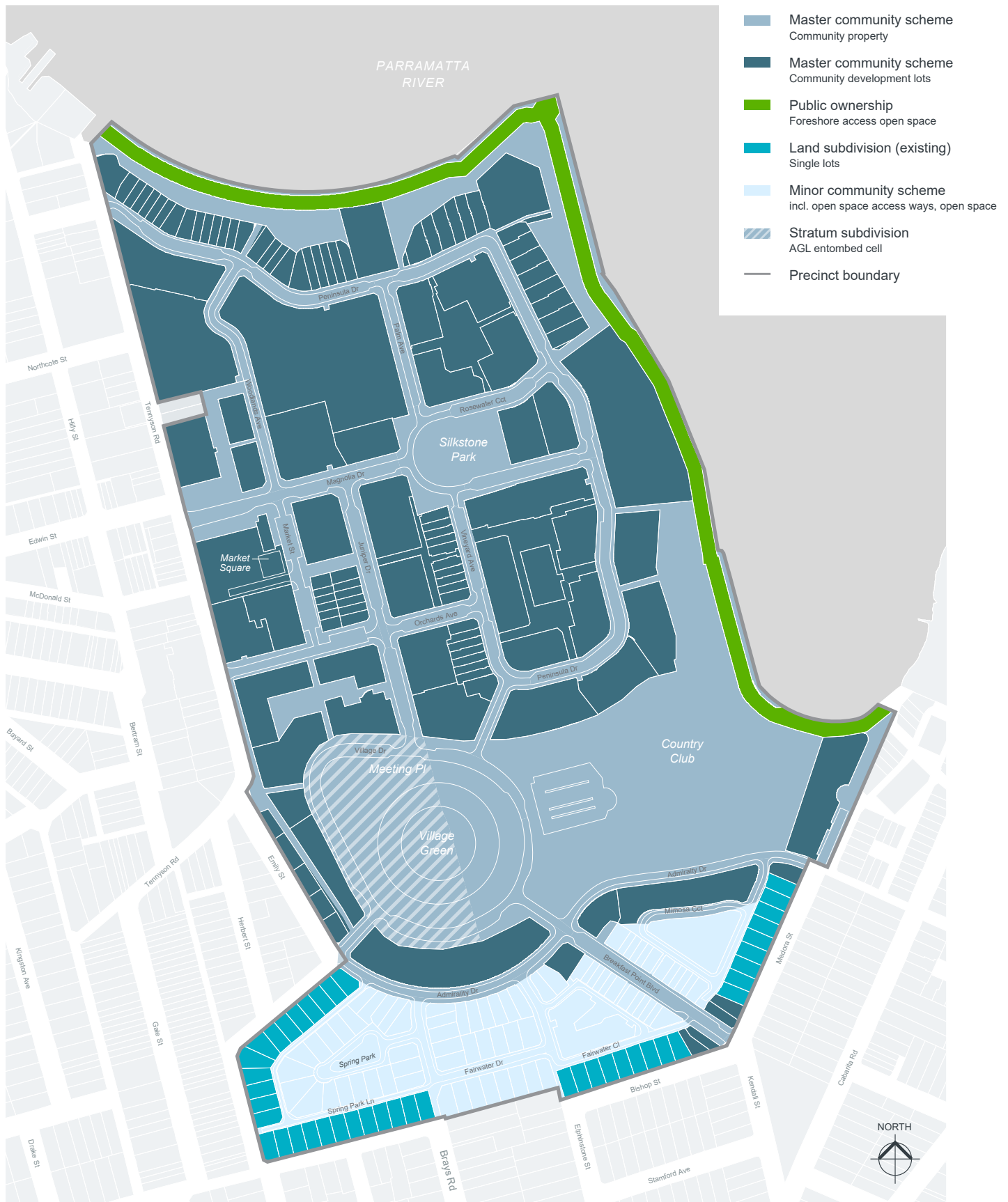


Figure K4-7 Ownership Principles

Precincts

The majority of Community development lots (Master community scheme) have been arranged into Precincts as indicated by Figure K4-8 Precincts

K4.8 Floor space ratio

Objectives

- O24 To ensure that buildings are compatible with the bulk and scale of the desired future character of the locality,
- O25 To provide a suitable balance between landscaping and built form
- O26 To minimise the effects of bulk and scale of buildings.

Controls

C47.	The maximum floor space ratio for the land identified in Figure K4-3 must not exceed 0.67:1.
C48.	Development applications are to be accompanied by a cumulative compliance schedule demonstrating that the total floor space ratio of all development within the Breakfast Point precinct does not exceed 0.67:1.



Figure K4-8 Precincts

K4.9 Building envelopes & built form

Objectives

The building envelope and built form objectives are to provide reference points for Council's merits-based assessment of Development Applications at Breakfast Point. They are:

- O27 To acknowledge and enhance the prominent visual relationship Breakfast Point has to Parramatta River and its environs.
- O28 To provide a complementary interface with the surrounding urban fabric, and transition between existing and new, higher density, living areas.
- O29 To provide a vision for the future built character of Breakfast Point.
- O30 To establish principles of building arrangements and envelopes and their relationships to site features, adjacent development, and the public domain.
- O31 To provide a high standard of amenity and quality of living environment for residents.

Parramatta River Visual Catchment

The visual character of Breakfast Point viewed from the River, its foreshores and viewpoints beyond is to comprise:

Foreshore Open Space Edge

Controls	
C49.	A foreground dominated by informal vegetation and tree planting above the sea wall.
C50.	Building foreshore setbacks generally are to be varied and no less than 30m.
C51.	To provide visual connection to inner areas, individual building facades fronting the foreshore should be articulated and no more than 60m long.
C52.	Compatible public or community structures and facilities may occur in the foreshore open space.

Pier Precinct (Active Waterfront Area)

Controls

- | | |
|------|--|
| C53. | A formally landscaped area, focusing on the pier and associated water-based uses. Buildings in this precinct may include commercial uses at low level, and to provide interest, variety and counter-balance the scale of the pier. |
|------|--|

Skyline

Controls

- | | |
|------|--|
| C54. | The skyline is to comprise of articulated low-to-mid rise roof forms interspersed with vegetation. |
| C55. | Roof forms are to be simply designed, modulated to a scale, and in materials and colours recognising the significant views to the site. |
| C56. | Roof plant and fixtures are to be fully integrated into the roof design. |
| C57. | Taller buildings are to be located towards the centre of the site, on higher land, with building height reducing towards the waterfront and adjacent development boundaries, two to five storey buildings predominate. |

Interface with Existing Residential Areas

Controls

- | | |
|------|---|
| C58. | Development fronting the adjacent residential streets (Medora, Bishop, Adams Street and Brays Road) is to comprise dwellings or attached dwellings. |
|------|---|

Streetscape & Public Domain Character

The vision for Breakfast Point is:

- A built environment which optimises available light and sun to private and public domains within an orchestrated landscaped setting.
- A vigorous and interesting public domain reinforced by landscape and its defining, proportioned, and articulated architectural edges.



Figure K4-9 Building Envelope Principles & Heights

Building Height

Controls	
C59.	Building heights are to be designed to minimise the amenity impact of new development on adjoining areas and to ensure that buildings are appropriately scaled in relation to street widths and open spaces.
C60.	The maximum permissible height for any building at Breakfast Point is 9 storeys.
C61.	Refer to Figure K4-9 Building Envelope Principles & Heights which shows building heights in storeys.

Figure K4-13 on page K-35 demonstrates how the roof level of a building with a flat roof is lower than the ridge level of a similar building with a pitched roof. This results in improved view access.

Solar Access, Light & Privacy

Residential development at Breakfast Point is to be in accordance with State Environmental Policy No65 – Design Quality Residential Flats standards. Where SEPP 65 does not strictly apply, (e.g. single, attached and two storey apartments) the relevant amenity principles are adopted as the guideline for minimal acceptable residential amenity standards.

Controls	
C62.	The location, planning and orientation of buildings and open space is to maximise opportunities for solar access, natural light and privacy to dwellings.
C63.	Buildings are to be sited and designed to maximise available sunlight to north-facing windows of living areas and principal areas of open space, having regard to slope, views and overshadowing.
C64.	Solar access to each dwelling is to be maximised. Sunshine is to be available to a main living area and private open space of each dwelling for a minimum of three hours duration between the hours of 9am and 5pm at 21 June (mid winter).

C65.	Privacy design performance criteria should be in accord with the NSW Model Code: A Model for Performance-Based Multi-Unit Housing Codes: NSW Dept Urban Affairs and Planning 1997
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Mass & Proportion

Objectives

- O32 To provide for streetscape relief, pedestrian, landscape, breeze and view corridors.
- O33 To maintain an appropriate residential scale to the Breakfast Point streetscape.

Controls

C66.	Building facade lengths should not exceed 60 metres without a pronounced break or relieving treatment.
------	--

Roof Form & Colour

Objectives

- O34 To minimise the visual prominence of roofs being overlooked by residents of higher dwellings.
- O35 To provide an articulated skyline to Breakfast Point from distant viewpoints.
- O36 To provide visual relief to the streetscape.
- O37 To encourage subtle contrast and variety within a consistent design theme.
- O38 To encourage the use of dormer style windows.

Controls

C67.	Hipped and gable type roofs with wide eaves are to be the predominant roof form.
C68.	All roof top services, vents, lights, are to be integrated into the roof design.
C69.	Roof materials may vary. Roof colours are to be inconspicuous grey tones.
C70.	Flat roofs with carefully selected finishes and considered detailing may be used to facilitate view sharing.

Facade Treatment

Objective

O39 To enrich the streetscape in detail.

Controls	
C71.	Facades, particularly those defining streets are to provide modulation of light and shade through finessed secondary architectural detail, contrasting with heavier wall and roof elements.
C72.	Contributing elements could include eaves, sun control, hoods, louvres, shutters, pergolas, verandahs, balconies, balustrades, porticoes, loggias, dormers, roof lanterns and ventilators.

Setbacks & Addressing the Street

Objective

O40 To reinforce the streetscape character.

Controls	
C73.	Subject to adequately meeting amenity performance requirements, all buildings are to define (be parallel to) the streets and have their primary pedestrian access and address from their primary street frontage.
C74.	Setbacks from the street are to reflect the precedent/s established for the street.

Colour & Light

Objective

O41 To enhance the amount of light and reflected light available to public and private domains in a comparatively dense built environment.

Controls	
C75.	The predominant primary walls are to be light soft colours.
C76.	The predominant colour for secondary architectural detail is to be white.

Ancillary Built Elements

Controls	
C77.	All built elements (fences, garden and retaining walls etc.) not part of a building are to be designed to blend into the landscape to minimise their visual intrusiveness.

Building Types

The following residential building types are anticipated at Breakfast Point responding to different locations, market sectors and lifestyles.

- Single houses - located opposite existing single dwellings and also within Community Scheme No.1, opportunity for rear access
- Semi-detached houses - rear and street car access
- Terraces - 2-3 storey, rear and semi-basement carparking
- Apartment building 2-3 storeys - semi basement carparking
- Apartment building 5 storeys - lift access, semi-basement and basement carparking
- Apartment building 9 storeys - expression of top, middle and base, basement carparking
- Waterfront houses - large single dwellings, terraces and duplexes with courtyard gardens, attached double garages

Retail, commercial and community buildings are anticipated as 1 and 2 storey, with residential development over (upper levels) where appropriate.

Adaptable Housing

Controls	
C78.	A minimum of 5% of the total dwellings are to be designed as readily adaptable to the requirements of the Essential Features of AS4299-1995 'Adaptable Housing'.
C79.	Adaptable housing is to be located within 300m of the Village Centre.



01.Five storey apartment building, 02.Vertical articulation of facade, 03.Two storey corner built form, 04.Detached two storey family dwelling, 05.Articulated building entry, 06.Buildings addressing open space, 07.Semi detached housing typology, 08.Corner treatment, 09.Detached dwelling, 10.Heritage-listed Meter Reader's Office, 11.High density apartments



Figure K4-10 Urban Design Principles

K4.10 Heritage conservation

The buildings and structures scheduled as heritage items in Canada Bay Local Environmental Plan are to be conserved and adaptively reused.

No heritage item is to be demolished, altered, removed or modified without Council consent. Listed heritage items are:

Gate House and Gates

Brick building with slate roof, flanked by weighbridges.

Possible uses: Security, Commercial

Office No.1

Early 20th Century brick office building with tile roof, bullnosed iron awnings, arches over windows.

Possible uses: Information and estate management, Commercial

Brick Wall to Tennyson Road

Brick wall with engaged piers and spandrels. Additional openings will be made in the wall to provide vehicular access for cars and service trucks and to increase visual and pedestrian connections to adjacent urban precinct.

A Conservation Management Plan has been prepared in relation to this structure.

Meter Readers Office

Brick and slate building with pilasters and large overhanging eaves, which are supported by wooden brackets. Formerly contained a roofed walk-through bay to hold the time-keeping appointments.

Possible uses: estate management, commercial.

Blacksmiths Workshop

Polychromatic brick building with classical influences such as pilasters, string course and pediment. Roof trusses are lightweight and cast iron semi-circular headed windows have 12 panes of circular openings with louvres.

Possible uses: community recreation and amenities, commercial

Plumbers Workshop

Two storey brick building with parapet string course, semi-circular arches, surmount doors and multi-paned windows.

Possible uses: An interpretive display illustrating the historical roles of Breakfast Point, its locality and people is to be provided on site. The facility should include indoor and outdoor exhibits.



01.The Gatehouse, 02.Tennyson Rd Wall, 03.Blacksmiths Workshop



Figure K4-11 Heritage Conservation Principles

K4.11 Remediation

The land has been remediated under an audited Remediation Action Plan (RAP).

Land Use and Development Constraints

The four certified remediation zones are as follows:

1. Unrestricted Residential Zone

There are no restrictions on land use in this zone. Development anticipated in the certification of this zone includes all forms of residential buildings, child care and school facilities, commercial and industrial buildings, recreational facilities and open space.

2. Restricted Residential Zone

There are no restrictions on this type of land use in this zone, however, development is constrained by a Section 88b Instrument attached to the land title. This instrument effectively prohibits construction or disturbance below RL AHD 13.00.

Development anticipated in the certification of this zone includes all forms of residential buildings, child care and school facilities, commercial and industrial buildings, recreational facilities and open space.

Council will not grant Development Consent in this zone involving construction or disturbance below RL AHD 13.00, unless the Application includes a 'Work Method Statement' certified by the site auditor.

3. Non Residential Zone

This land includes areas which may contain low level residual contamination, It includes the area above the 'containment cell stratum'.

The anticipated uses in this zone include open space, playing fields, commercial or industrial, roads and infrastructure. Limited residential development could be permitted in this zone subject to certification by the site auditor.

4. Commercial/ Industrial Zone

This land includes areas under existing buildings proposed to be retained. The nature and extent of development and construction in this zone is constrained by a Section 88b Instrument attached to the land title.

Anticipated uses include commercial or industrial. Council will not grant Development Consent in this zone unless the Application includes a 'Work Method Statement' certified by the site auditor.



Figure K4-12 Remediation Zones

K4.12 Environmentally sustainable design

Objectives

- O42 To reduce dependence on non-renewable and environmentally detrimental energy resources.
- O43 To reduce household energy demands.
- O44 To provide convenient and pleasurable access alternatives to the use of motor vehicles for local trips.
- O45 To reduce residential waste to landfill.
- O46 To minimise pollutants to atmosphere, ground and water.

Controls

Controls	
C80.	90% of the individual population is within 5 minutes walking distance from the Village Centre.
C81.	All major destinations, the Village Green, the Recreation Centre, the Village Centre and Intensive Water Activities are located on a bus route.
C82.	A ferry/ bus interchange links the community to the regional employment centres of Sydney and Parramatta. Ferry usage is encouraged by provision of commuter parking at the wharf.
C83.	A comprehensive pedestrian/ cycleway network provides safe, convenient and attractive links between facilities.
C84.	Priority is given to deciduous trees and shrubs to the north of internal and external living spaces to maximise solar and light availability in winter.
C85.	The extensive foreshore landscape area is predominantly planted using indigenous species, remnant mangroves in Kendall Bay are retained.
C86.	Hardstand areas, roads and other impervious surfaces are minimised.

K4.13 Definitions

"Storey" means a floor which has more than 50% of its volume above finished ground level.

"Finished ground level" means finished ground level which is determined at any point by straight-line interpolation between the designed (or built) levels at street frontage, adjacent allotment or open space boundaries.

"Existing ground level" means existing ground level which is determined at any point by straight-line interpolation between the existing levels at street frontage, adjacent allotment or open space boundaries.

A basement bounding wall is not to exceed 1.5m above the finished landscaped level unless adequately screened to Council approval.

An attic area wholly within a roof space, except for dormer style windows, is not a storey.

A mezzanine, as defined under the Building Code of Australia (BCA), may not be considered a storey subject to Council's merits assessment.

"Community" referring to land or property means land within Lot 1 of the Community Scheme DP 270347.

"Community plan" means the registered deposited plan under Community Scheme DP 270347.

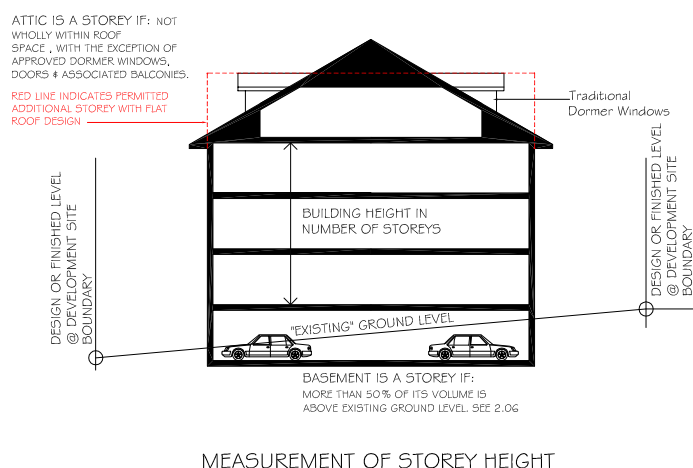


Figure K4-13 Measurement of storey height

K4.14 Provisions for single dwellings

The following additional provisions for single dwellings apply to the area identified in Figure K4-14 Additional provisions for single dwellings location map.

Objectives

- O47 To preserve and enhance the established character of existing streets to the perimeter of the Breakfast Point site.
- O48 To ensure the bulk, scale, pattern and character of the new dwellings are consistent with existing development.
- O49 To avoid abrupt changes in visual character between the existing development and the Breakfast Point development.
- O50 To provide high standards of residential amenity to the new development.
- O51 To encourage best practice in Environmentally Sustainable Development.



Figure K4-14 Additional provisions for single dwellings location map

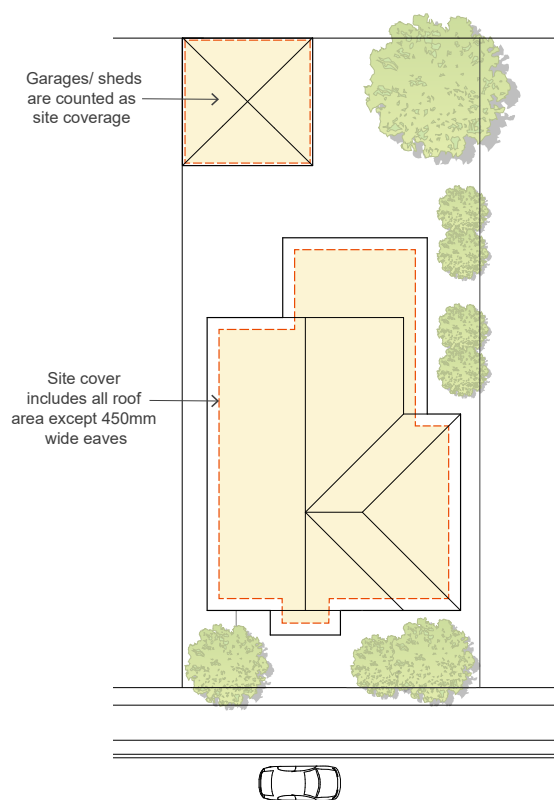


Figure K4-15 Building site cover

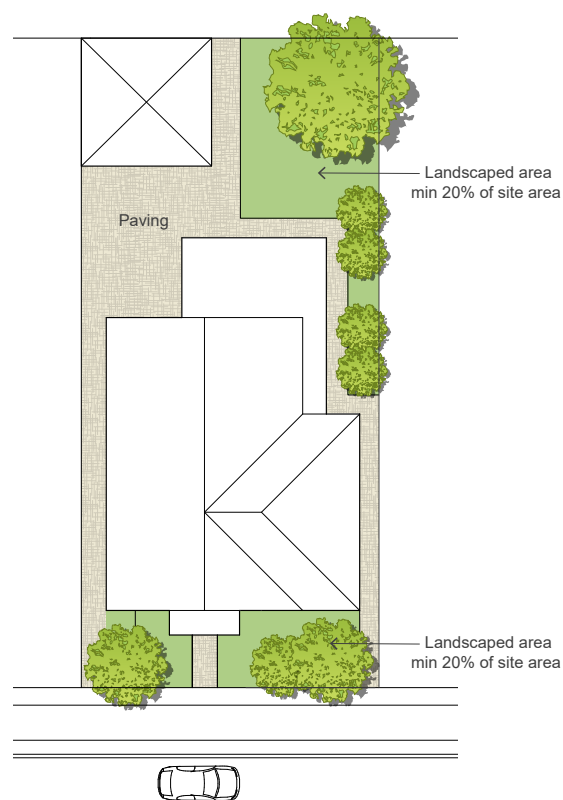


Figure K4-16 Landscaped area

Subdivision

- O52 To maintain the streetscape character and the planned residential density.

Controls

- C87. One single dwelling only is permitted per lot. Subdivision is prohibited.

Building Site Cover

- O53 To maintain sufficient land available for private open space, light and sun penetration, landscape, storm-water absorption and flow in accordance with sustainable development principles.

Controls

- C88. No more than 50% of a lot area is covered by built development. Built development includes all roofed areas except eaves extending up to 450mm from external walls. Refer to Figure K4-15.

Landscaped Area

- O54 To ensure the residential precinct has an atmosphere of a 'garden suburb'.
- O55 To provide adequate site absorption of storm water and to provide for reasonable photosynthesis in line with sustainable environmental principles.

Controls

- C89. A minimum of 20% of the site area is to be soft landscape, grass, ground-cover, shrubs, and trees. Refer to Figure K4-16.

Dwelling Setbacks

Primary Frontage

- O56 To complement the character of existing neighbouring streetscape.
- O57 To maintain generally consistent landscape area between kerb and dwellings on both sides of the street.
- O58 To encourage elements that break down the visual bulk and scale of buildings in the streetscape.

Controls

C90.	Main House Walls: minimum 5m setback.
C91.	Single storey elements such as pergolas, verandas, terraces, porticos, bay windows and partially enclosed elements: minimum 3m setback. Refer to Figure K4-17.
C92.	Main house setbacks may be averaged to provide an area between the house and the front boundary equal to that area provided by a 5m setback. A minimum setback for any part of 3m must be maintained. Refer to Figure K4-18.

Adjoining Lots (Side Boundary)

- O59 To provide separation between houses fronting streets.
- O60 To provide opportunity for landscape between dwellings.
- O61 To permit reasonable solar and light access between dwellings.

Controls

C93.	Wall height up to 3.6m above natural ground level: 1.0m minimum. Wall height up to 7.2m above natural ground level: 1.5m minimum. Refer to Figure K4-19.
C94.	Garden or retaining walls: when over 500mm high, to be setback a distance equal to the height of the wall.
C95.	Single storey garages wall height up to 3m: nil, provided all maintenance and services can be satisfactorily achieved wholly within the allotment, and solar access criteria can be met.

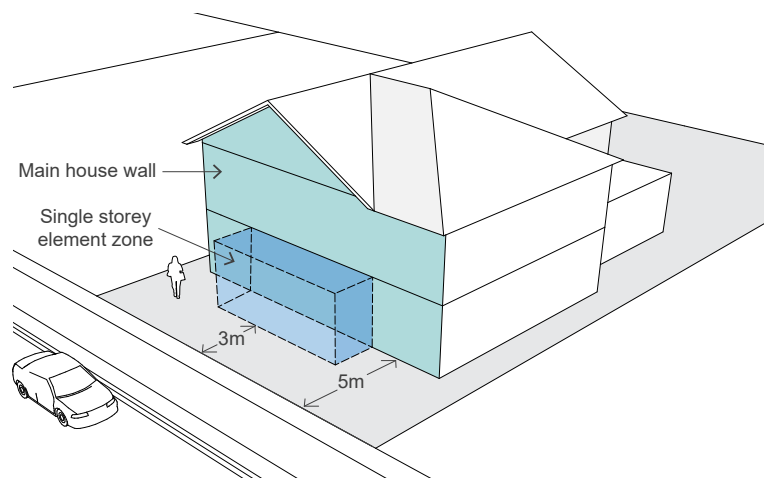


Figure K4-17 Minimum front setback requirements

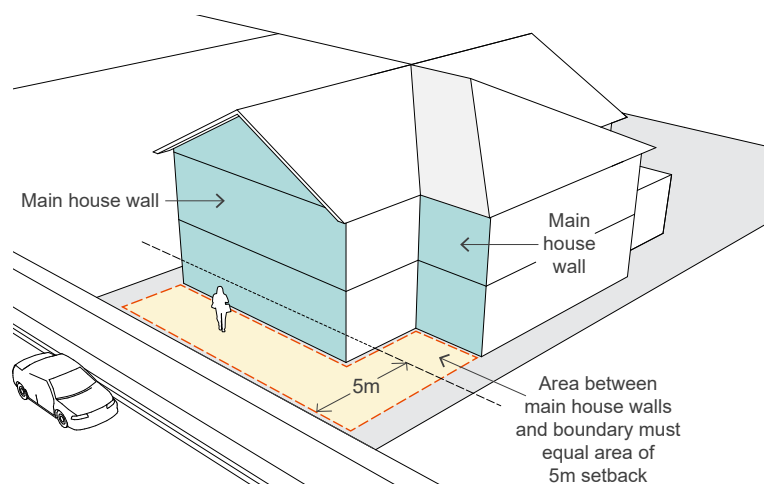


Figure K4-18 Minimum front setback requirements - alternative

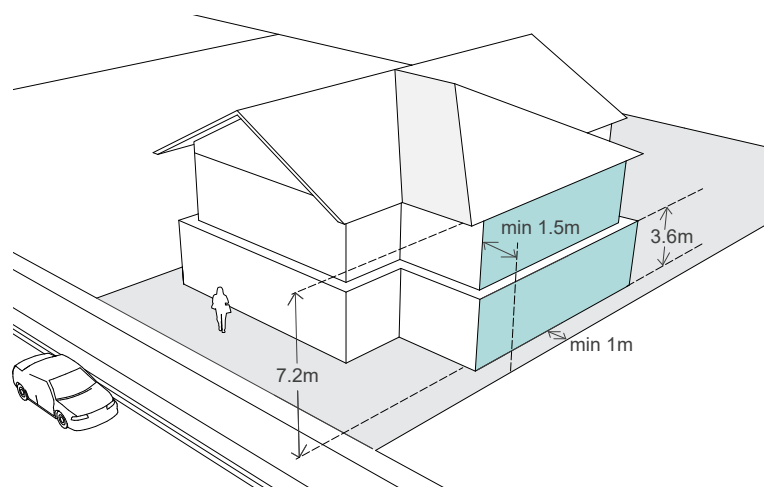


Figure K4-19 Minimum side setback requirements

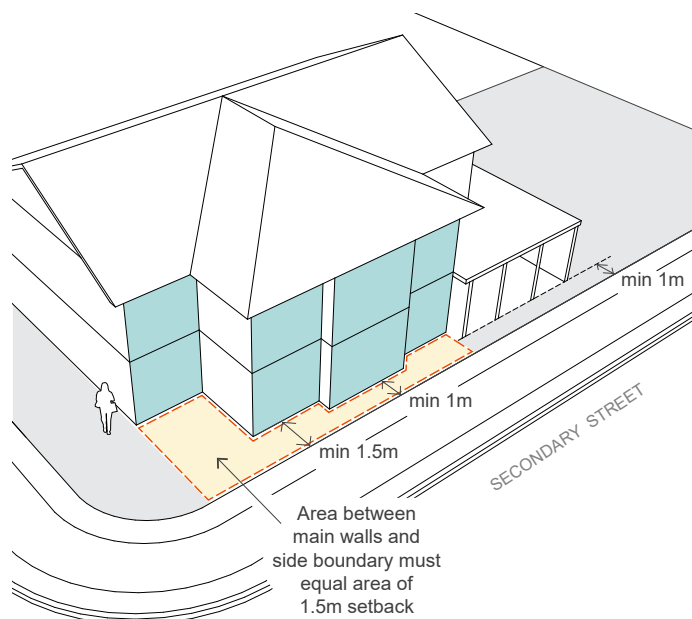


Figure K4-20 Secondary street frontage setback requirements

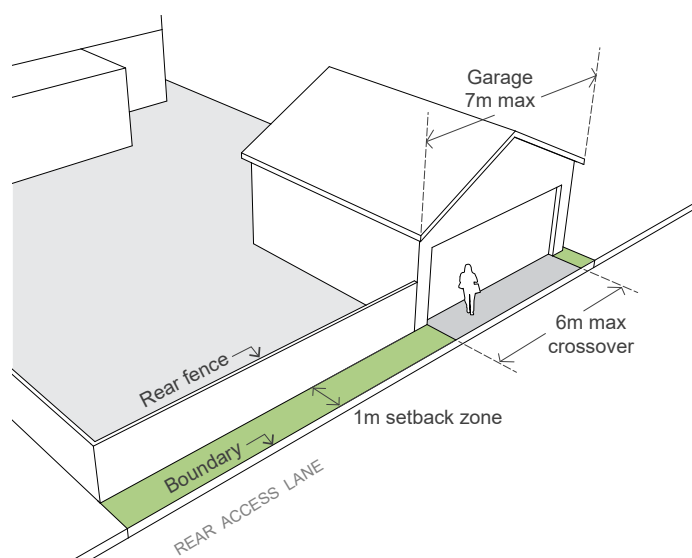


Figure K4-21 Required minimum setback from access lanes

Secondary Street Frontage (Corner Lots)

- O62 To maintain streetscape character whilst retaining reasonable privacy and security to private open spaces.
- O63 To encourage variation and relief in facade treatment facing public space.

Controls

C96.	Main House Walls: 1.5m minimum.
C97.	Pergolas, Verandas, Terraces, porticos and other partially enclosed elements: 1.0m minimum.
C98.	Main house setbacks may be averaged to provide an area between the house and the front boundary equal to that area provided by a 1.5m setback. A minimum setback for any part of 1.0m must be maintained. Refer to Figure K4-20.

Encroachments

Controls

C99.	Eaves, gutters and downpipes may encroach into setbacks in accordance with BCA and to 450mm maximum.
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Setback from Access Lanes

- O64 To provide a consistent access lane character softened by landscape.

Controls

C100.	<p>All structures, garages and fences are to be setback 1.0m from any boundary adjoining a lane. Refer to Figure K4-21.</p> <p>Note: This setback area is to be an easement in favour of the Community Association who will be responsible for its treatment and maintenance.</p>
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Access

- O65 To maintain existing streets as the address of new dwellings.
- O66 To ensure the design of dwellings presents a frontage to existing streets consistent with the existing street character.

Controls

C101.	Street numbers and mailboxes will be located on the streets to which the dwellings permitted by this DCP are required to have the primary frontage.
C102.	Public and visitor access will be from these streets.
C103.	On-street visitor parking will be provided on these streets.
C104.	On-street parking will not be available in lanes.
C105.	Dwellings will address and be designed to 'front' these streets.

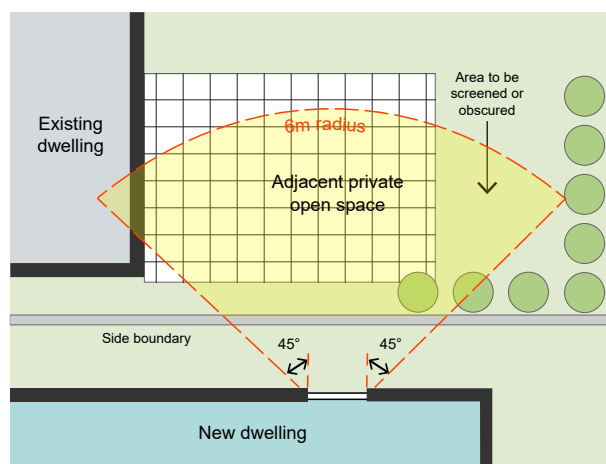


Figure K4-22 Screening of views to adjacent private open space from a side window

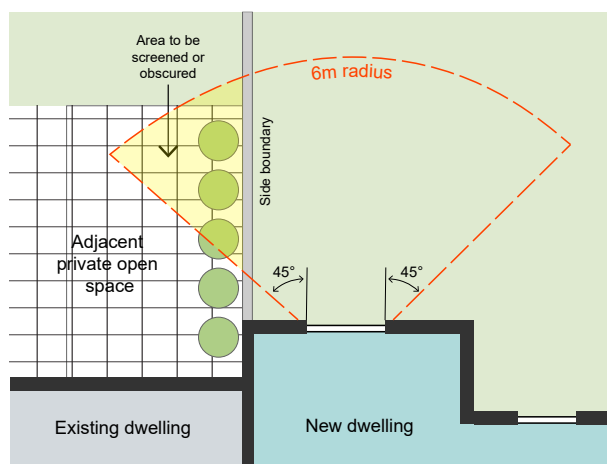


Figure K4-23 Screening of views to adjacent private open space from a back window

Tree Preservation

- O67 To preserve and maintain the master-planned prominence of landscape in the character of the residential street.
- O68 To assist in meeting environmentally sustainable development objectives.

Controls

C106.	All trees are subject to Council's Tree Preservation Order.
C107.	Street trees must not be interfered with without the prior consent of Council.
C108.	Existing trees within the site and on public land must be protected throughout construction.

Landscaping

- O69 To ensure landscape and planting is considered and integrated with house planning and design.
- O70 To ensure sustainable development principles are acknowledged and that impacts on neighbouring amenity are considered at the planning stage.

Controls

C109.	A Landscape Principles Plan is to be submitted for approval with building plans and include detail of tree location, mature size, evergreen or deciduous, screening, hedges, shrubs, turf areas, fences, and paths and paved areas.
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Privacy

- O71 To ensure the siting, design and landscaping of buildings minimises direct overlooking into habitable rooms and private open space.
- O72 To ensure the siting, design and landscaping of buildings provides acoustic privacy to habitable rooms and open space.

Controls

C110.	Habitable room windows are to be predominantly oriented to the street and rear of lots.
C111.	Habitable room windows are to be located outside a 45° angle of view from any habitable room window of any adjacent dwellings within 6m. Refer to Figure K4-22.
C112.	Alternate screening, obscure glazing and other solutions will be considered on merits.
C113.	A minimum separation between habitable room windows and balconies of 12m is to be provided unless provided with approved screening.
C114.	Landscaped plans are to include planting designed to minimise overlooking adjacent private open spaces.

Swimming Pools and Surroundings

- O73 To ensure the construction and use of swimming pools does not unduly impact on neighbourhood amenity.

Controls	
C115.	Prohibited: Pools between dwellings and the primary street frontage and above ground pools.
C116.	Safety requirements are to be to Australian Standards, and Statutory requirements.
C117.	Pools and surround paving are to be setback a minimum of 1.0m from any boundary. This setback is to be soft landscape treated.

Fencing

Primary Street Frontage Fencing (Front Fence)

- O74 To provide a consistent street-scape character.
- O75 To maintain a landscaped dominated street-scape visual environment.
- O76 To minimise 'built elements' in front of dwellings.

Controls	
C118.	Fences are to be no greater than 1m in height. Refer to Figure K4-24.
C119.	Front fence treatment is to extend along side boundaries to the line of the adjacent front wall of the dwelling or 5m from the front boundary whichever is greater. Refer to Figure K4-24.
C120.	Fences are to be of semi-open design with low shrubs planted behind. Materials can include masonry, timber picket, metal spearpoint and combinations. Refer to Figure K4-26.

Rear Lane, Side Street and Public Area Fencing

- O77 To provide a consistent fencing character throughout the estate.
- O78 To permit reasonable privacy and security without streets and public access ways being dominated by paling fences.

Controls	
C121.	Maximum 1.8m in height, lapped and capped timber paling fence to estate detail, painted Dulux Timbercolour Birch Grey or equal. Refer to Figure K4-25.
C122.	Paling fences to boundaries fronting side streets or public access ways are not to extend more than 2/3 the length of boundary.
C123.	The paling face of fencing is to address streets and public areas.

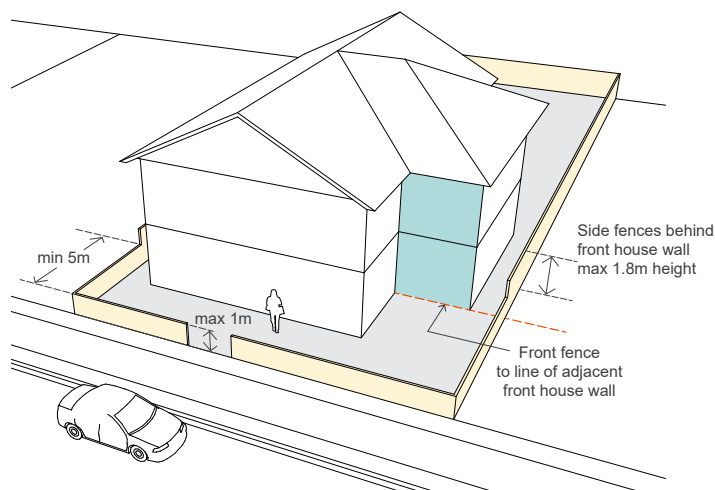


Figure K4-24 Front and side fence requirements

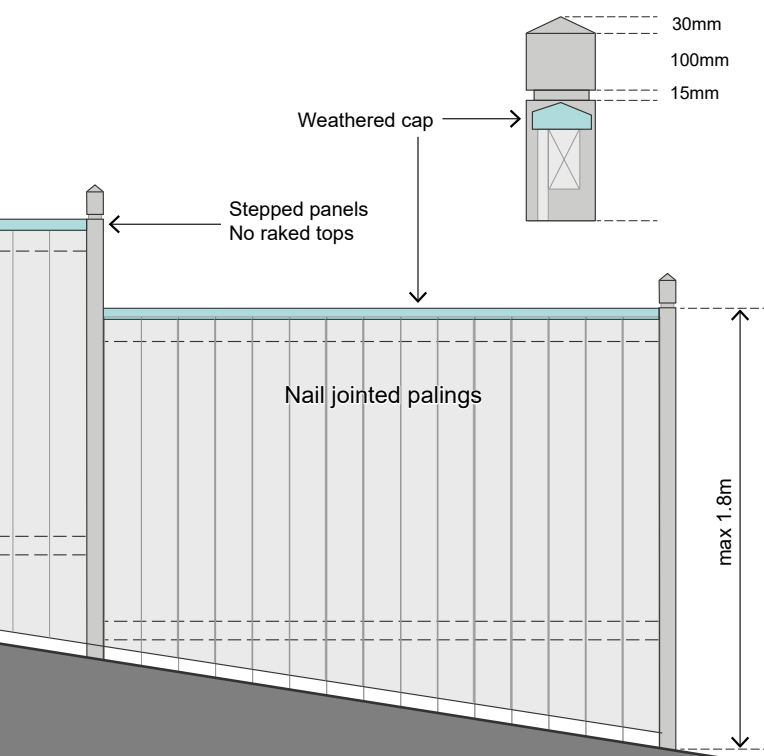


Figure K4-25 Fence detail (adjoining allotment)

Adjoining Allotment Fencing (Side and Rear)

O79 To provide privacy and security to private outdoor spaces.

O80 To allow for containment of domestic pets permitted under the management plan.

Controls

- | | |
|-------|--|
| C124. | Maximum 1.8m high lapped and capped timber paling fence to estate detail, painted Dulux Timbercolour Birch Grey or equal. Refer to Figure K4-25. |
| C125. | No side fence is to be closer to the street than the main house wall facing the street. Refer to Figure K4-24. |

Adjoining Community Open Spaces

O81 To provide a natural landscaped edge to the community open space whilst providing for individual privacy and security.

Controls

- | | |
|-------|--|
| C126. | Maximum 1.8m high black galvanised pipe and chain wire fences and gates backed by screening landscape. |
|-------|--|

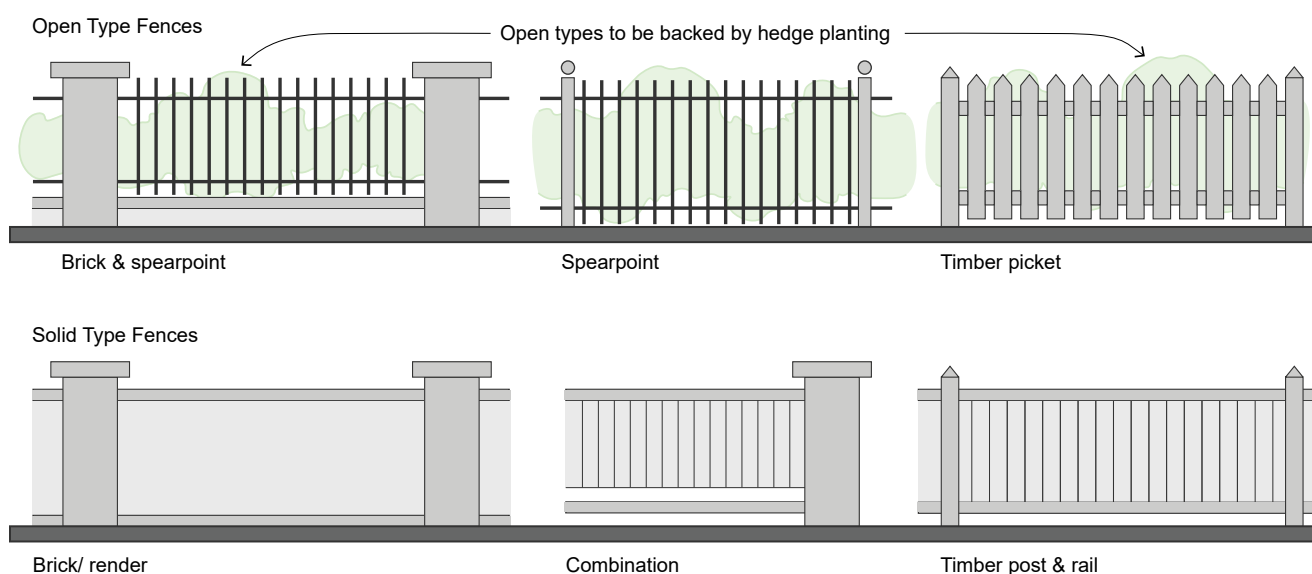


Figure K4-26 Fence types

Mail Box and Street Number

- O82 To facilitate location of individual dwellings and to maintain consistency in visual elements contributing to street-scape character.

Controls

C127.	Each dwelling is to have a mailbox, and a clearly visible street number unit to the primary street frontage integrated in fencing treatment to Australian Post requirements.
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Building Form, Height & Character

Wall Height and Storeys

- O83 To preserve views and outlooks.
- O84 To minimise shadow and privacy impacts.
- O85 To ensure buildings reflect the natural slope of the land.
- O86 To maintain a consistent two storey residential scale.
- O87 To provide residents reasonable expectations for adjacent development.

Controls

C128.	The external wall height is to be no greater than 7.2m above the natural ground level at any point. Refer to Figure K4-27.
C129.	A higher gable treatment up to the maximum ridge height of 9.5m may be permitted, where it can be shown that there is no additional impact on neighbourhood amenity. Refer to Figure K4-27.
C130.	No building shall exceed 2 storeys in height.
C131.	Attic accommodation wholly within the roof space may be permitted subject to satisfactory design of dormer or skylight windows in terms of streetscape and neighbours amenity.

Roof Height and Shape

- O88 To maintain a consistent visual roof-scape character and form, compatible with existing Concord residential precincts, when viewed from the public domain and higher buildings and vantage points.

Controls

C132.	A minimum roof pitch of 27.5° is required. Refer to Figure K4-27.
C133.	The maximum ridge height is to be 9.5m above the natural ground. Refer to Figure K4-27.
C134.	Flat, curved and other nontraditional roof forms will only be considered where Council can be satisfied they are appropriate under the circumstances.

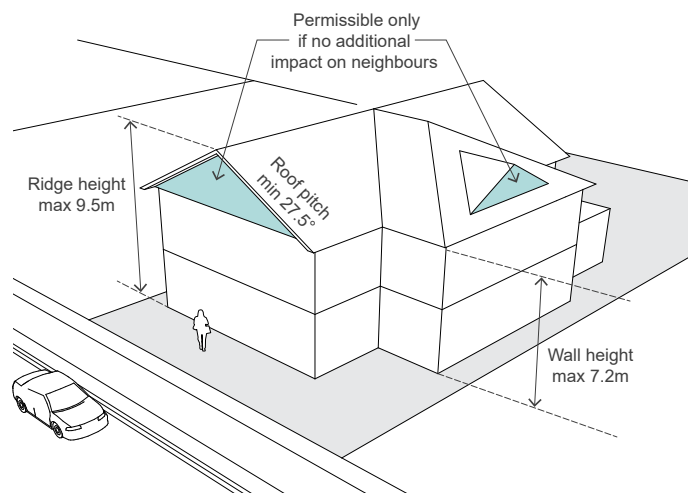


Figure K4-27 Maximum heights and minimum roof pitch

Streetscape Character

O89 Design, detailing and finish is to:

- be in scale with the existing development in the street.
- add visual interest.
- enable differentiation between dwellings viewed from the street.
- provide entries readily apparent from the primary street.
- convey a sense of address.

O90 Garages and parking are to be sited and designed to minimise impact on the street.

Controls

C135.	The front door and some main windows are to face the primary street frontage.
C136.	Street facades are to be articulated by elements such as bay windows, dormer windows, verandas, pergolas, balconies, gables, etc.

Note: vehicle access prohibited from Brays Road, Bishop Street, Medora Street and Adams Lane.



Example of a well articulated facade with the main entry, windows, balconies and a verandah clearly addressing the street

External Materials, Finishes and Colours

O91 Materials, Finishes and Colours are to:

- be compatible with those found in the existing surrounding residential precinct.
- reflect light between dwellings and heat away from dwellings without undue glare or rogue reflections.
- avoid harsh contrasts in tone, colour or texture.
- assist in creating the desired light, bright, warm and cheerful neighbourhood character.

O92 Provide a backdrop for the desired landscape dominated streetscape.

Controls

C137.	<p>Wall Materials are to be:</p> <ul style="list-style-type: none"> • Facebrick with appropriate joints, rendered or bag rendered. Masonry, painted, timber or FC weatherboard cladding, painted or approved combinations of the above. • Wall colours are to be light reflective pastel shades. No walls are to be darker than the traditional 'liver brick' found in the precinct. • Strongly mottled facebrick blends are inconsistent with the desired character and are not permitted. • Brick joints are to blend, not contrast, with brickwork.
C138.	<p>Roof Materials are to be:</p> <ul style="list-style-type: none"> • Tile, slate, shingle, or ribbed metal sheet. • Roof Colours are to be low reflectance. • Glazed finishes and materials causing nuisance glare are not permitted. • Strong colours, mottled blends or flashed tiles are not permitted.
C139.	<p>Secondary Elements, trim, eaves, gutters, windows, joinery, etc, can be used to provide contrast in texture and colour to the primary wall and roof surfaces.</p>

Roof Mounted Fixtures

- O93 To avoid unattractive adhoc installations detracting from the roofscape and skyline outlook viewed from vantage points within and beyond the neighbourhood.

Controls

C140.	No more than one miniature UHF type antenna mounted no higher than 1.5m above the highest point of the roof is permitted per dwelling.
C141.	No satellite disc receivers or similar devices are to be installed.
C142.	Solar collectors are to be mounted at the same pitch as the roof and are not to be visible from the street. Roof mounted water storage units are prohibited.

Ancillary Buildings

- O94 To ensure that the visual character of the neighbourhood is not prejudiced by ad-hoc sheds, outbuildings and the like.

Controls

C143.	No ancillary buildings or structures, including prefabricated sheds, are to be erected on any lot without consent.
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Example of a building and fence design that successfully addresses the public domain and allows for views to and from the street



Wall colours are to be light pastel shades and wall materials can be rendered facebrick, weatherboard or a combination



Example of roof materials and colours that integrate into the neighbourhood and are low reflective/ non-glare

ESD Principles

Energy Efficiency

- O95 To achieve energy efficient housing using passive solar design, that provides residents with year-round comfort and reduces energy consumption.

Solar Access and Orientation

- O96 Orientation, layout and landscape are to make best use of natural ventilation, sunlight and solar energy.

Controls

C144.	Buildings are to be oriented to maximise solar access to living areas.
C145.	Windows are to be located and shaded to reduce summer heat load and permit entry of winter sunlight.
C146.	Exterior shading devices are to be used, eg. eaves, balconies, verandas, pergolas, window shutters, adjustable louvres, landscape devices.
C147.	Living areas are to be located to the north side of the dwelling.
C148.	Sun is to be available to a living area for at least three hours between 9am and 5pm on 21 June (mid winter).

Building Materials and Landscape

- O97 Materials and insulation are to be selected to assist thermal performance and maintain internal comfort levels.
- O98 To encourage the use of building materials and finishes which maximise the use of renewable energy sources.

Controls

C149.	High thermal mass materials are to be used for living areas and are to be designed to receive maximum sun during cooler months.
C150.	Insulation is to achieve an 'R' value (AS 2627.1993) of: <ul style="list-style-type: none"> • R2.0 for roofs and ceilings. • R2.0 for walls - except where the construction materials used embodies an equivalent total R value.
C151.	Deciduous trees are to be planted to provide summer shading and allow winter sun entry.
C152.	Outdoor clothes drying areas are to be provided with sun and breeze access.
C153.	Details of finishes, materials and colours are to be submitted to Council with the Development Application.
C154.	The applicant is to demonstrate that materials used in construction: <ul style="list-style-type: none"> • Maximise renewable resources. • Are energy efficient (low embodied energy). • Are generally non-polluting, durable, recyclable or reuseable.
C155.	No rainforest timbers or timbers cut from old growth forests are to be used. All timber used on site is to be stamped accordingly.
C156.	Porous pavers or similar which increase infiltration and reduce stormwater runoffs are to be used on driveways, and pathways wherever possible. The total impervious pavement is not to exceed 25% of the site area.

Ventilation

O99 Building design is to assist internal air movement to provide acceptable thermal conditions.

Controls

C157.	Dwellings are to be oriented to catch cooling summer breezes.
C158.	Window and door openings are to be located to facilitate cross-ventilation.

Service and Appliances

O100 To maximise energy efficiency and minimise energy consumption.

Controls

C159.	Development Applications are to demonstrate how energy conservation measures are incorporated in the design, including: <ul style="list-style-type: none"> • Hot water systems using renewable or low pollutant energy sources. • Energy efficient reticulation planning and insulation. • Energy efficient appliances.
C160.	Energy efficient lighting.

Water Management

O101 To control freshwater consumption by reducing demand and integrating systems and appliances in dwelling design.

Controls

C161.	New dwellings are to incorporate: <ul style="list-style-type: none"> • Low flow shower roses. • Dual flush toilets. • Water efficient washing machines. • Irrigation systems, if used, that are micro or drip type soil moisture sensor controlled.
C162.	A storm water management plan is to be submitted with the development application.

Waste Management

O102 To provide adequate waste storage facilities and to facilitate recycling with a view to minimising waste entering land fills.

Controls

C163.	Development Applications are to indicate: <ul style="list-style-type: none"> • Adequate space for at-source separation of waste within each dwelling. • Facilities for storing recyclable and waste products in locations which are not directly visible or are screened from public areas and which do not pose a threat of noise, odour or safety and which are readily accessible to Council's waste contractors.
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Definitions

Wall Height: Is measured vertically from the Natural Ground Level to the highest of the following: underside of the eaves, guttering, parapet, capping, and top of wall or wall plate supporting roof framing.

Primary Frontage: The primary street frontage is the lot frontage edged heavy black on the DCP Map ([fig 1](#))

Secondary Frontage: A corner lot boundary fronting a street other than a primary street frontage.

K5 Cape Cabarita



Figure K5-1 Aerial photo (source: nearmap.com)



Figure K5-2 Council area map

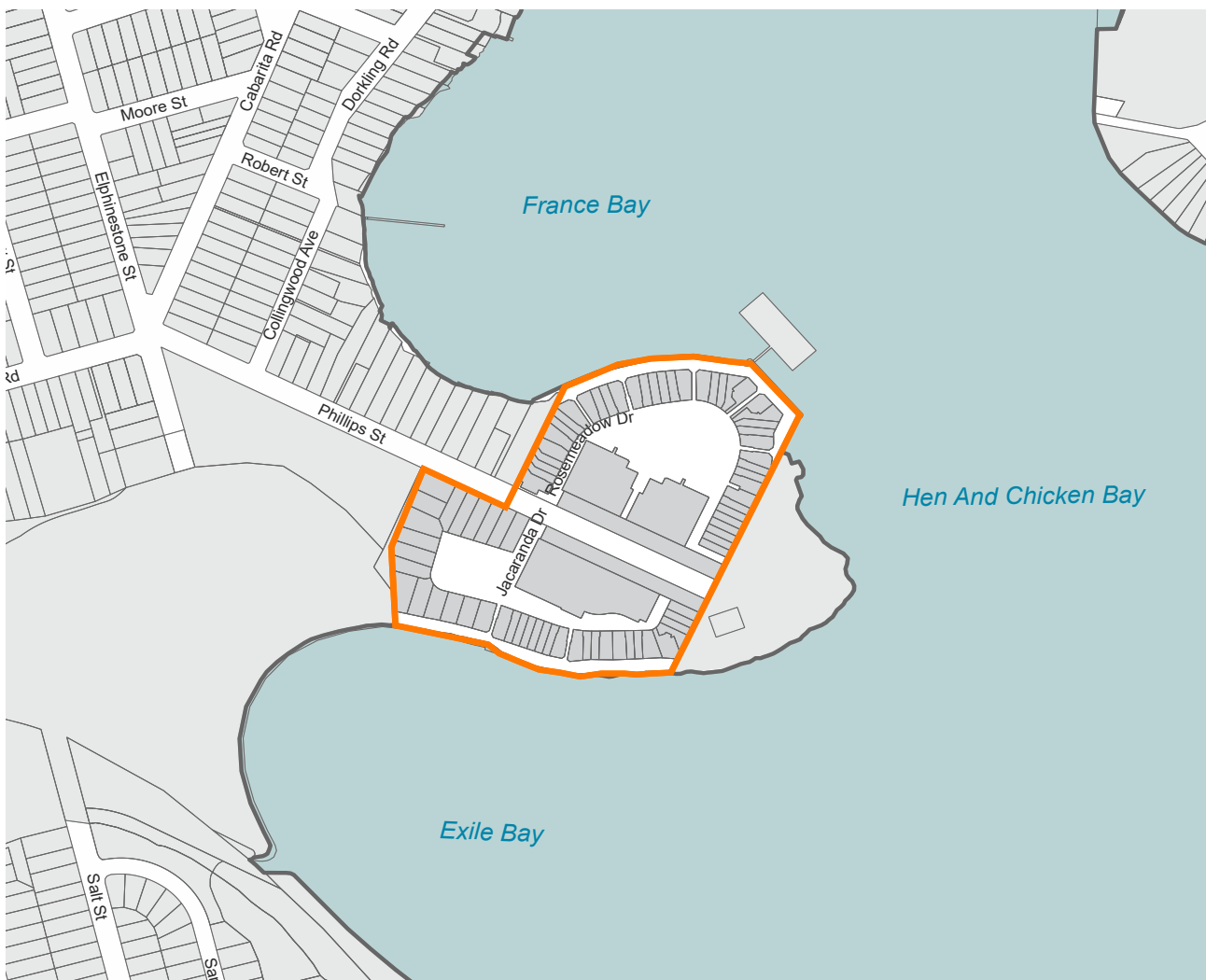


Figure K5-3 Cape Cabarita - Location Plan



K5.1 General objectives

- O1 Provide a pleasant, functional and safe environment to and along the foreshore for cyclists and pedestrians;
- O2 Maintain significant views and vistas into and out of the site;
- O3 Ensure adequate provision of landscaping and usable private and public open space;
- O4 Provide for pedestrian and cycle linkage through the site to adjoining areas;
- O5 Maximise visual and acoustic privacy to adjoining properties and within the development itself;
- O6 Ensure adequate daylight and sunlight are maintained to existing development, new development and open spaces;
- O7 Ensure the existing streetscape character is enhanced;
- O8 Ensure development and access networks are integrated with the existing built and natural environment;
- O9 Ensure development presents an appropriate bulk and scale to public areas having regard to existing development and the topography of the site; and
- O10 Ensure the design orientation of buildings and materials used in construction utilise renewable resources.

K5.2 Specific provisions

Design and Siting - Streetscape

Objective

- O11 To integrate new development in a manner which complements the character of the area and relates to the pedestrian environment.

Controls

C1.	Development on public street frontage has had regard to the character of existing development in the vicinity of the site including: <ul style="list-style-type: none"> • setbacks of existing buildings on Cabarita Road; • landscaping; • fence height; • spaces between dwellings; • views through the site; and • roof pitch.
C2.	New development and fences contribute to and is integrated into the overall streetscape at a scale which relates to the pedestrian environment.
C3.	Building height plane to apply from the existing boundary with Phillips Street.
C4.	Buildings are to be setback a minimum of 9 metres from the Phillips Street frontage.
C5.	Building facades are to be orientated towards public street frontages (See Figure K5-5 Site Controls).
C6.	Buildings are not to exceed the following (See Figure K5-5 Site Controls): <ul style="list-style-type: none"> • 5 storeys in height along the Phillips Street frontage; • 3 storeys in height adjoining Massey Park Golf Course; and • 2 storeys in height adjacent to the boundaries with No.31 Phillips Street, Prince Edward Park and the waterfront areas.
C7.	Fences having frontage to public open space or public roadway are: <ul style="list-style-type: none"> • not to exceed 1 metre in height of solid construction; and • not to exceed 1.8 metres if of 'open' type design.
C8.	Continuous wall and/or fencing for more than 20 metres should have some visual or physical relief.
C9.	Seating areas in a landscaped setting are to be provided every 100 metres along the frontage.

Side boundaries

Objective

O12 To minimise the impact of new development on adjoining areas.

Controls	
C10.	Buildings adjoining side boundaries will not adversely impact on the amenity enjoyed by existing adjoining dwellings. Consideration has to be given to: <ul style="list-style-type: none"> • maintaining of views; • overshadowing of private open space to give visual relief; • minimising the impact of bulk and scale of new development on adjoining areas; • fence design and height relates to and does not detract from Cabarita Park; • buildings are separated or articulated and do not present blank walls; and • maintenance of privacy.
C11.	Compliance should be achieved with the building height plane (see Figure K5-6 Building Height Plane Diagram).
C12.	Fences adjoining Prince Edward Park should not exceed 1.8 metres in height and be of 'open' appearance.

Foreshore Frontage

Objective

O13 To ensure the integrity of the foreshore is maintained and enhanced for public enjoyment

Controls	
C13.	Development along the foreshore contributes to the character of the foreshore. The development has had regard to: <ul style="list-style-type: none"> • minimising the visual impact of development as viewed from the water and the foreshore access way; • creating a visually integrated environment which contributes to a sense of safety and security for users of the public open space, (see also 'Access and Landscaping' sections); • the provision of cycleways, pedestrian pathways; and • providing appropriate street furniture, lighting and planting for the comfort, safety and security of users.
C14.	Building height plane to apply from the property boundary.
C15.	An average setback of 13.5 metres, having a minimum width of 9 metres, is to be provided from the high water mark to the development for a public foreshore accessway (see Figure K5-5 Site Controls).
C16.	Buildings are to be setback a minimum of four metres from the public foreshore accessway.
C17.	The location of buildings should not result in overshadowing to the foreshore between the hours of 9am to 3pm (EST) or 10am to 4pm (Daylight saving time).
C18.	The foreshore access is to be in a landscaped setting and comprise: <ul style="list-style-type: none"> • a pedestrian pathway with minimum dimensions of 1.0 metre; and • a cycleway with minimum dimensions of 0.8 metres with a separation distance of 0.7 metres.

Height of Building

Objective

- O14 To ensure the building envelope relates to the topography of the site, providing an appropriate bulk and scale, having regard to the foreshore location, streetscape and adjoining properties.

Controls	
C19.	<p>Building height has had regard to:</p> <ul style="list-style-type: none"> • maintenance of significant views from buildings to public areas; • topographic variation minimising visual impact as viewed from the water, streetscape and public open spaces and conformity with the treeline along the Cabarita Road frontage; • overshadowing of open spaces and other buildings; • setbacks from adjoining developments; • character of the surrounding area; and • the human scale and relationship to open space.
C20.	<p>Buildings should not exceed the building height plane on all boundaries and development should be no higher than:</p> <ul style="list-style-type: none"> • 5 storeys within a distance of 50 metres from Phillips Street Subject to the height restrictions placed on other boundaries; and • the ceiling height for buildings greater than two storeys shall be no greater than 2.7 metres (see Figure K5-5 Site Controls and Figure K5-6 Building Height Plane Diagram).

Bulk and scale

Objective

- O15 To ensure the location, layout and design of buildings has regard to the impact of development on views from surrounding public spaces and within the development.

Controls	
C21.	<p>The development has had regard to:</p> <ul style="list-style-type: none"> • massing to reduce its visual impact from open spaces, roadways and the Parramatta River; • separation between buildings should provide view corridors through the site; • privacy between buildings; and • providing a reasonable level of solar access to dwellings and open spaces.
C22.	Buildings comply with the building height plane, floor space ratio, and landscaping provisions.

Building Design

Objective

- O16 To ensure a high quality design which is integrated into the existing environment

Controls	
C23.	<p>The design of buildings:</p> <ul style="list-style-type: none"> • provides variety and presents as a cohesive development; • includes architectural features which reflect the character of Concord (see also street frontage and shading); and • garages and carparks are not intrusive or visually dominant.
C24.	Generally, buildings are to have pitched roof forms.
C25.	Access driveways are to provide a landscaped entry.
C26.	Solar hot water tanks are to be located within the roofspace of development.

Views

Objective

O17 To maintain views through the site from public spaces.

Controls

C27.	Buildings are designed to: <ul style="list-style-type: none"> • maximise views of Parramatta River and public open space within and throughout the development; • minimise obstruction of views from other buildings; and • provide vistas.
C28.	A view corridor is to be maintained from Phillips Street, through the development to the foreshore on both sides.

Paved Areas

Controls

C29.	Porous pavers or similar treatment which increases infiltration and reduces stormwater runoffs is used extensively on driveways, pedestrian access routes and for pathways in public and private outdoor open space.
C30.	The total impervious surfaces used for vehicular access driveways are not to exceed 10% of the total site area.

Landscaping and Open Space

Objective

O18 To ensure adequate and appropriate provision of usable private, communal and public open space and landscaping to meet all user needs, having regard to microclimate, security, safety, privacy, visual appearance and biodiversity.

Controls

C31.	Landscaping should have regard to: <ul style="list-style-type: none"> • retention of significant vegetation, which is not affected by the remediation of the site; • the relationship between buildings and open spaces; • enhancing pathway and street connections within the site and between adjoining sites; • providing privacy to adjacent development; • location and function of open space • providing for thermal comfort of the users in terms of shade and shelter; • using native species, where appropriate; • surveillance of communal open; • enhancing the visual appearance of the development; • differentiating between private and public open space; • assists in stormwater management; and • complements the materials and colours used in the development.
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Open Space provision

Objective

O19 To provide quality open space for the enjoyment of users.

Controls

C32.	Open space includes: <ul style="list-style-type: none"> adequate pedestrian and cycle linkages through the development and along the foreshore; communal spaces which have access to sunlight for year round use; landscaping to enhance the amenity of the environment and enjoyment of the users; promoting a sense of security and safety for users; provides for passive and active recreational needs for the residents; and has regard to the heritage items on the site.
C33.	A landscaped area of 50% of the site area.

Public Foreshore Access

Objective

O20 To provide foreshore access which is clearly identifiable for public use.

Controls

C34.	Public foreshore access is appropriately landscaped to minimize the impact of development as viewed from the water. The entrances to the foreshore are designed to reinforce its public accessibility.
C35.	Directional signage is to be provided at the entrance to the foreshore path.

Public and Communal Open Space

Controls

C36.	Open space follows pedestrian/cycle desire lines through the site creating visually appealing spaces for both passive and active recreation.
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Private Open Space

Objective

O21 To ensure adequate usable private open space to meet the needs of residents

Controls

C37.	The development provides usable private open space which is of sufficient dimensions having regard to the size of the dwelling and: <ul style="list-style-type: none"> allows for outdoor seating and dining; provides outdoor drying facilities screened from public view; and provides for landscaping at ground level.
C38.	For above ground development, the open space may take the form of a balcony directly connected to the dwelling with the following minimum requirements: <ul style="list-style-type: none"> 1 bdr - minimum area of 6m² having a minimum dimension of 2m; 2 bdr - minimum area of 8m² having a minimum dimension of 9m; and 3 bdr or greater - minimum area of 12m² having a minimum dimension of 2m.
C39.	For development at ground level the following requirements apply: <ul style="list-style-type: none"> 1 bdr - minimum area of 10m² having a minimum dimension of 3m; 2 bdr - minimum of 16m² having a minimum dimension of 4m; and 3 bdr or greater - minimum area of 35m² having a minimum dimension of 4m.

Lighting

Objective

O22 To provide lighting which enhances the security and appearance of the development

Controls

- C40. The applicant has demonstrated that provision has been made for adequate lighting which enhances the appearance of the development and maximises security of:
- building entrances;
 - public spaces and pathways;
 - driveways and carpark; and
 - without impacting on adjoining properties

Car Parking Provision

Objective

O23 To ensure adequate, safe and convenient provision of parking, cycle facilities and pedestrian access which is integrated into the overall design of the site and adjoining areas.

Controls

- C41. Adequate parking is provided having regard to:
- existing and future public transport provision;
 - cyclist and pedestrian linkages through the site to adjoining areas;
 - efficient and effective entry and egress to the sites;
 - adequate resident and visitor carparking and parking for disabled;
 - adequate bicycle storage facilities; and
 - safe, convenient parking and access which minimises conflicts between motorist, cyclists and pedestrians.

C42.	Secure resident parking spaces are to be provided for all dwellings in apartment buildings at basement level with internal access to the development.
C43.	Secure resident parking spaces may be provided in ground level enclosed garages for attached or detached dwellings at ground level.
C44.	Basement car parking is to be generally naturally ventilated and have access to some natural lighting.
C45.	Parking spaces located above ground are in a landscaped setting, and are not directly visible from the Phillips Street frontage.
C46.	Parking is not permitted between the building and street alignment. Parking shall be in the form of a garage, basement car park, covered carport or an equivalent open area.
C47.	Entry driveways are in a landscaped setting with the appearance of being open and accessible.
C48.	Security gates are not to be installed at entry and exit points into the development

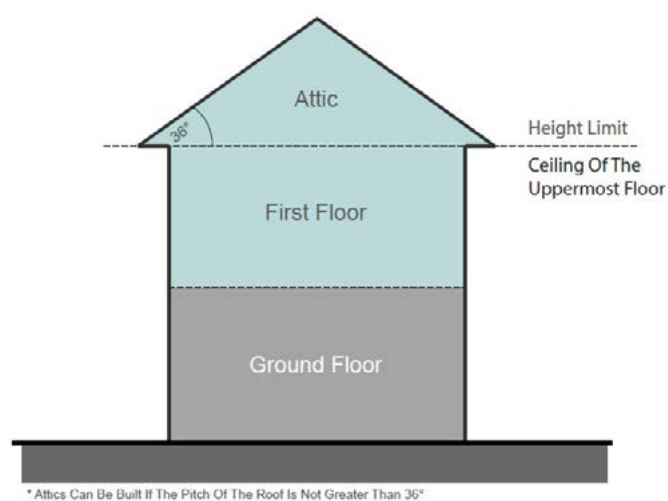


Figure K5-4 Attic Pitch Controls

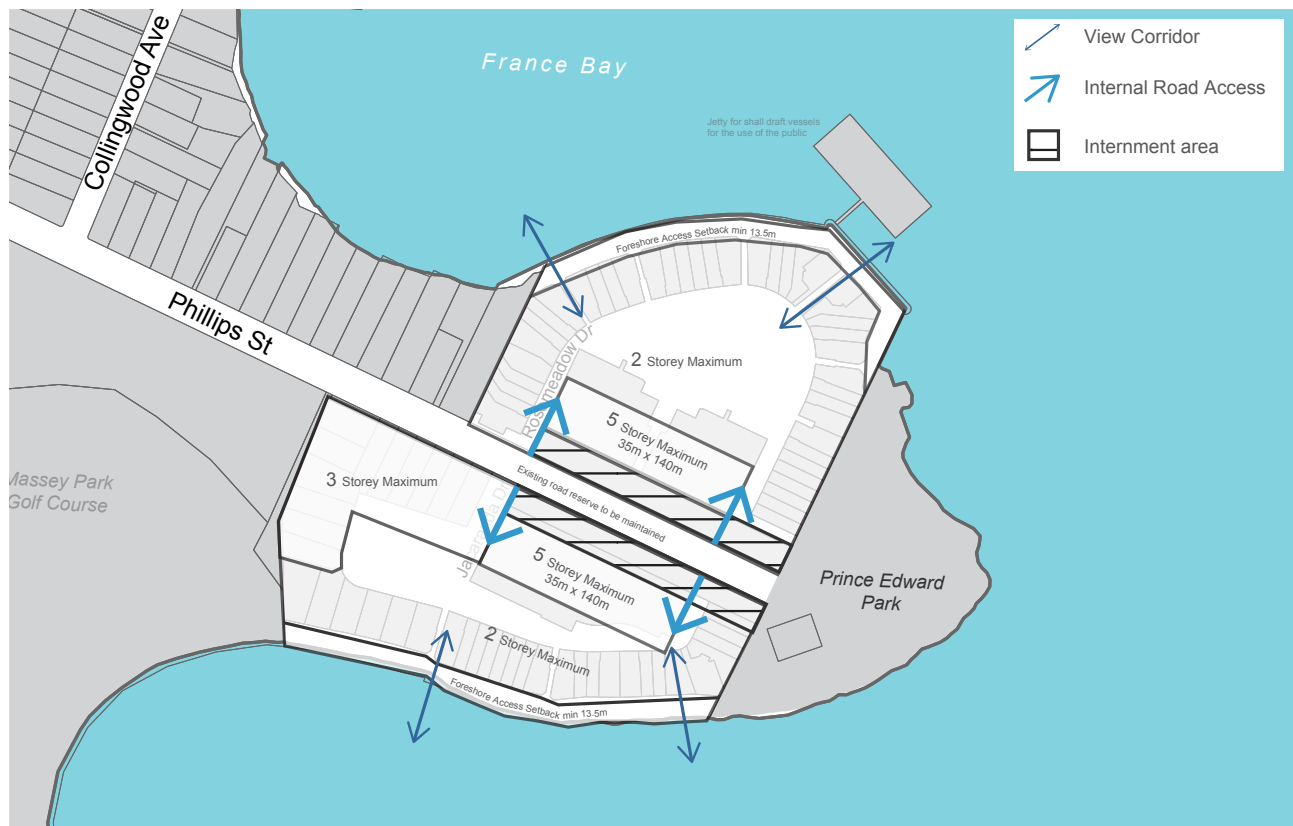
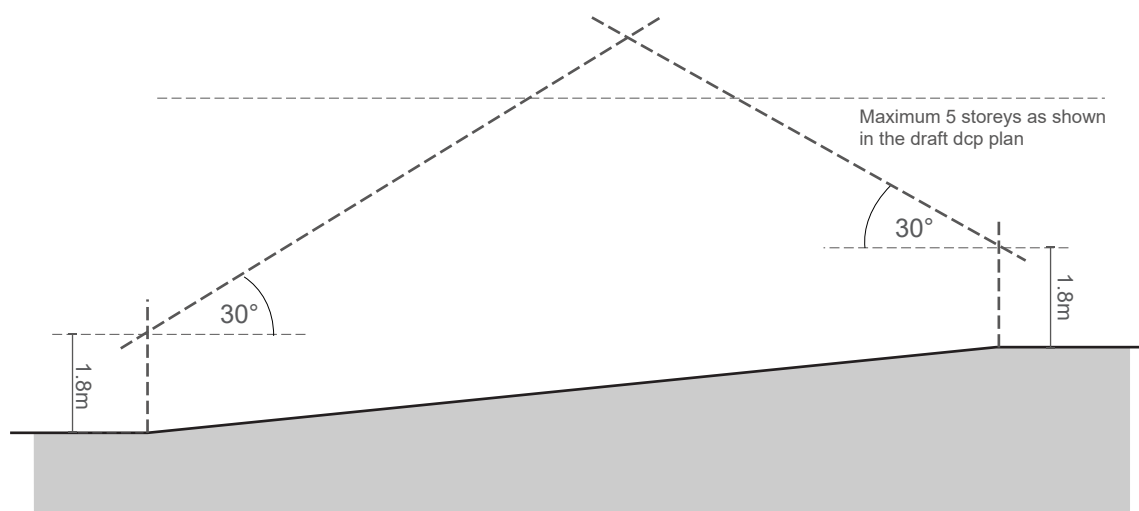


Figure K5-5 Site Controls



* Building height plane applies to all boundaries in this precinct

Figure K5-6 Building Height Plane Diagram

K6 Concord West

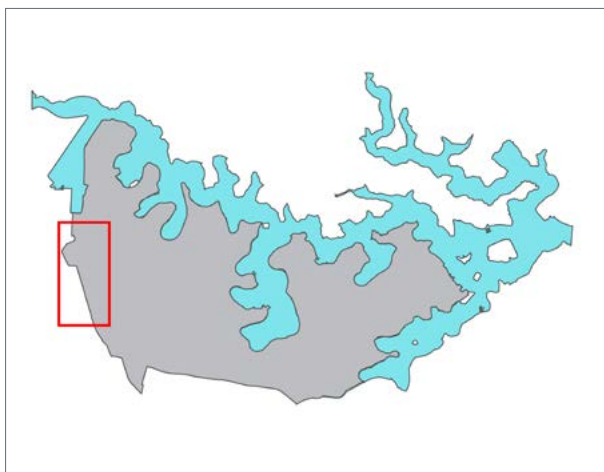


Figure K6-1 Council area map

K6.1 Introduction

Context

The Concord West Precinct (the Precinct) is bound by Liberty Grove to the north, Pomeroy Street to the south, the main Northern Railway Line to the east and Powell's Creek Reserve to the west. The area is characterised by a variety of built form and uses, including a mix of dwelling houses, town houses, apartment buildings, education and industrial uses. In terms of vehicle movement the precinct is effectively self-contained, with George Street forming the only vehicular access point to the surrounding road network at the southern end of the precinct.

Studies have identified a number of industrial sites within the precinct that are currently underutilised. The identified sites are well suited for residential purposes, featuring good access to public transport and local amenities.

Land to which this section of the DCP applies

This section provides development controls for specific areas addressed within the adopted Concord West Precinct Master Plan, Urban Design Study (May 2014). Currently, this section of the DCP applies only to the area/s listed below:

- Sub-Precinct 3, where the land is located at 3 King Street, Concord West (see Figure K6-2 Location Plan).
- Sub-Precinct 6, where the land is located at 2, 2A and 4 Rothwell Ave, Concord West (see Figure K6-2 Location Plan).
- Sub-Precinct 7, where the land is located at 25 George Street, Concord West (see Figure K6-2 Location Plan).

Desired Future Character

The desired future character of the precinct is a transit oriented community which features higher densities that maximise site renewal opportunities. Development proposals in the precinct are to achieve the following desired future characteristics:

- **Well Integrated Built Form:** Development will provide a considerate built form that steps down in height toward adjoining lower-rise residential areas. The siting, bulk and scale of development will ensure there are no significant adverse impacts to sunlight access and privacy within the precinct.
- **Mixed Use:** Development adjoining the public square will provide a focal point for the neighbourhood by providing active uses such as shops, cafes and restaurants.
- **Accessibility:** Development will better connect the precinct as a whole by creating a permeable street network for pedestrians and vehicles. Connections will strengthen existing or promote new routes to the station and open space.



K6.2 Public Domain and Movement

Pedestrian and Cycle Connections

Objectives

- O1 To improve pedestrian connectivity to open space and the Canada Bay Public School.
- O2 To create new access routes through sites to strengthen the connections to and between places.
- O3 To better connect the neighbourhood as a whole.
- O4 To make it easier and more attractive to walk and cycle through the neighbourhood.
- O5 To improve access to public transport and nearby commercial and retail areas.

Controls

C1.	Provide a new pedestrian connection between the western end of Station Avenue and the western end of Victoria Avenue within the area identified in Figure K6-3 Public Domain Plan.
C2.	Provide multiple mid-block pedestrian connections between George Street and the playing fields within the area identified in Figure K6-3 Public Domain Plan.
C3.	Provide a new mid-block pedestrian connection between Rothwell Avenue and Powells Creek Reserve within the area identified in Figure K6-3 Public Domain Plan.
C4.	All new pedestrian connections are to be a minimum 10 metres wide
C5.	All pedestrian connections and footpaths are to be publicly accessible 24 hours a day through access easements.
C6.	All new pedestrian connections are to be consistent with Safer-by-Design (or CPTED) principles (i.e. clear lines of sight).
C7.	Implement kerb build outs at intersections and other key pedestrian crossings to narrow the width of the street.
C8.	Provide an on-road or separated cycle path along George Street and King Street from Pomeroy Street to Liberty Grove as identified in Figure K6-3 Public Domain Plan.
C9.	Provide for new footpaths as indicated in Figure K6-3 Public Domain Plan.

New Shareways

Objectives

- O6 To improve connectivity and make it easier for people to walk through the neighbourhood.
- O7 To integrate future development sites into the existing neighbourhood fabric.

Controls

C10.	Provide a new north-south share way connecting Concord Avenue to Station Avenue which: <ul style="list-style-type: none"> • has built form between the share way and the eastern boundary; and • is publicly accessible.
C11.	Extend Station Avenue to the west as a share way to provide vehicular access to adjacent buildings and pedestrian access to the pedestrian network as identified in Figure K6-3 Public Domain Plan.
C12.	The new extended Station Avenue is to provide unobstructed views from the pedestrian tunnel under the rail line to Homebush Bay Drive.
C13.	Upgrade Concord Avenue and Station Avenue west of King Street to provide a seamless continuation of the share way as identified in Figure K6-3 Public Domain Plan.
C14.	All share ways are to be publicly accessible 24 hours a day through access easements.

Public Open Space

Objectives

- O8 To give the neighbourhood a meeting place and focal point.
- O9 To create a George Street and King Street 'spine' to visually unify the character of the neighbourhood.

Controls

C15.	Provide a public square at the end of Victoria Avenue in front of the railway station as identified in Figure K6-3 Public Domain Plan. The public square is to: <ul style="list-style-type: none"> • have a minimum area of 400m². • have minimum dimensions of 17m x 18m; and • feature characteristics for passive recreation such as hardstand paving, tree planting to provide shade, lighting and seating.
C16.	Tree planting on the verge of George Street and King Street from Pomeroy Street to Liberty Grove is to feature: <ul style="list-style-type: none"> • Regularly spaced planting of trees; and • Planting of consistent tree species.
C17.	Kerb build outs are to include rain gardens or low level landscaping where appropriate.

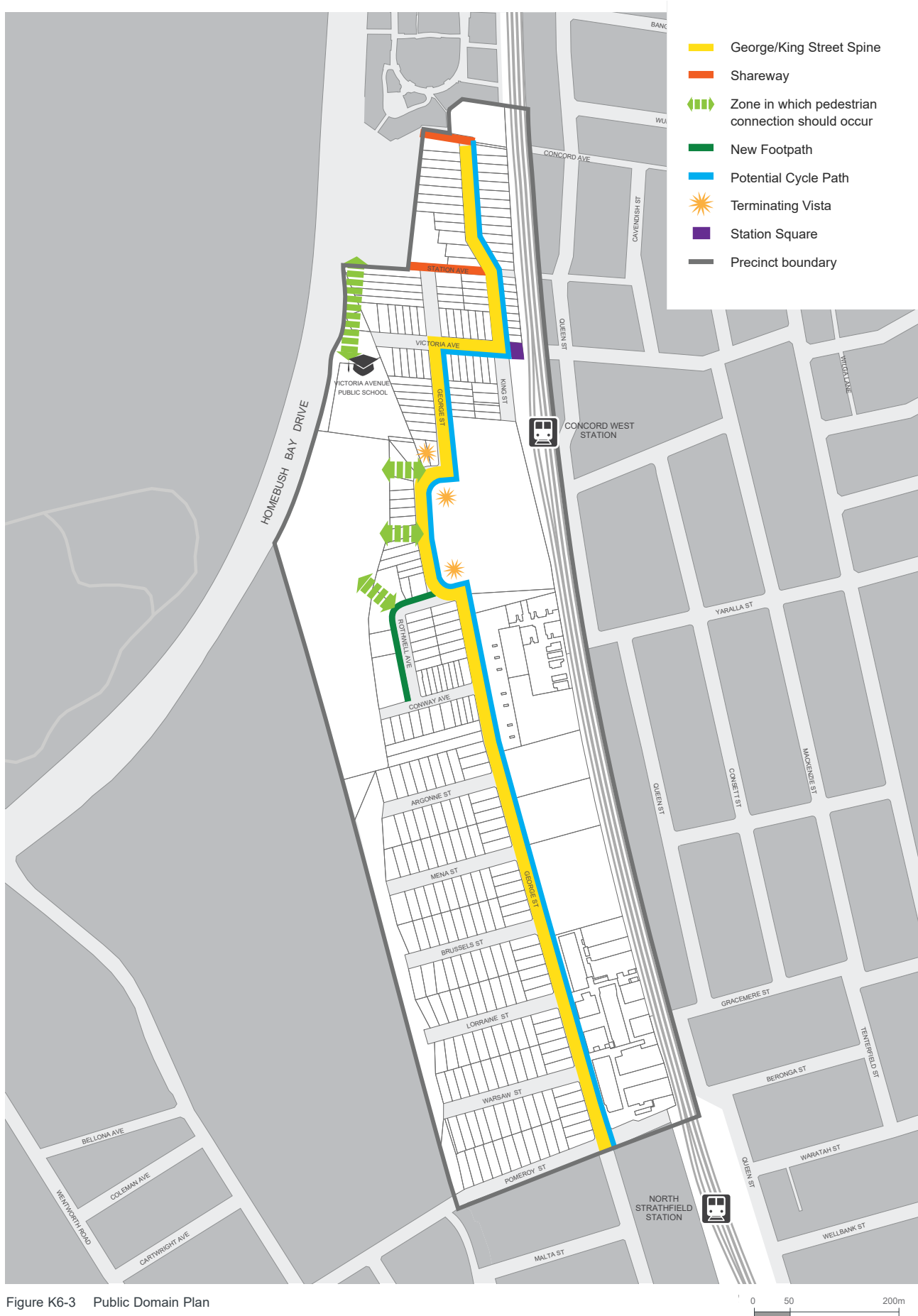


Figure K6-3 Public Domain Plan

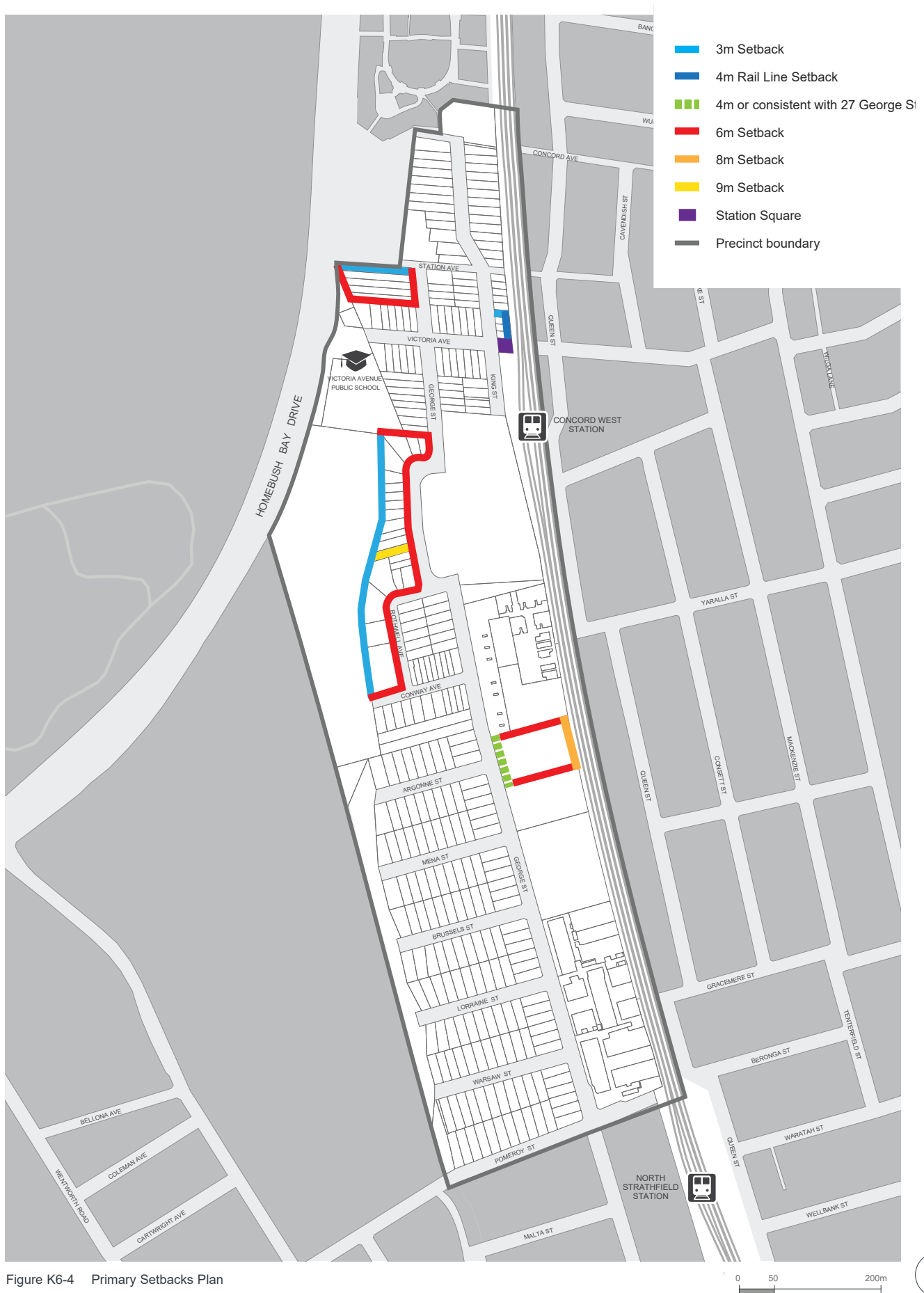


Figure K6-4 Primary Setbacks Plan

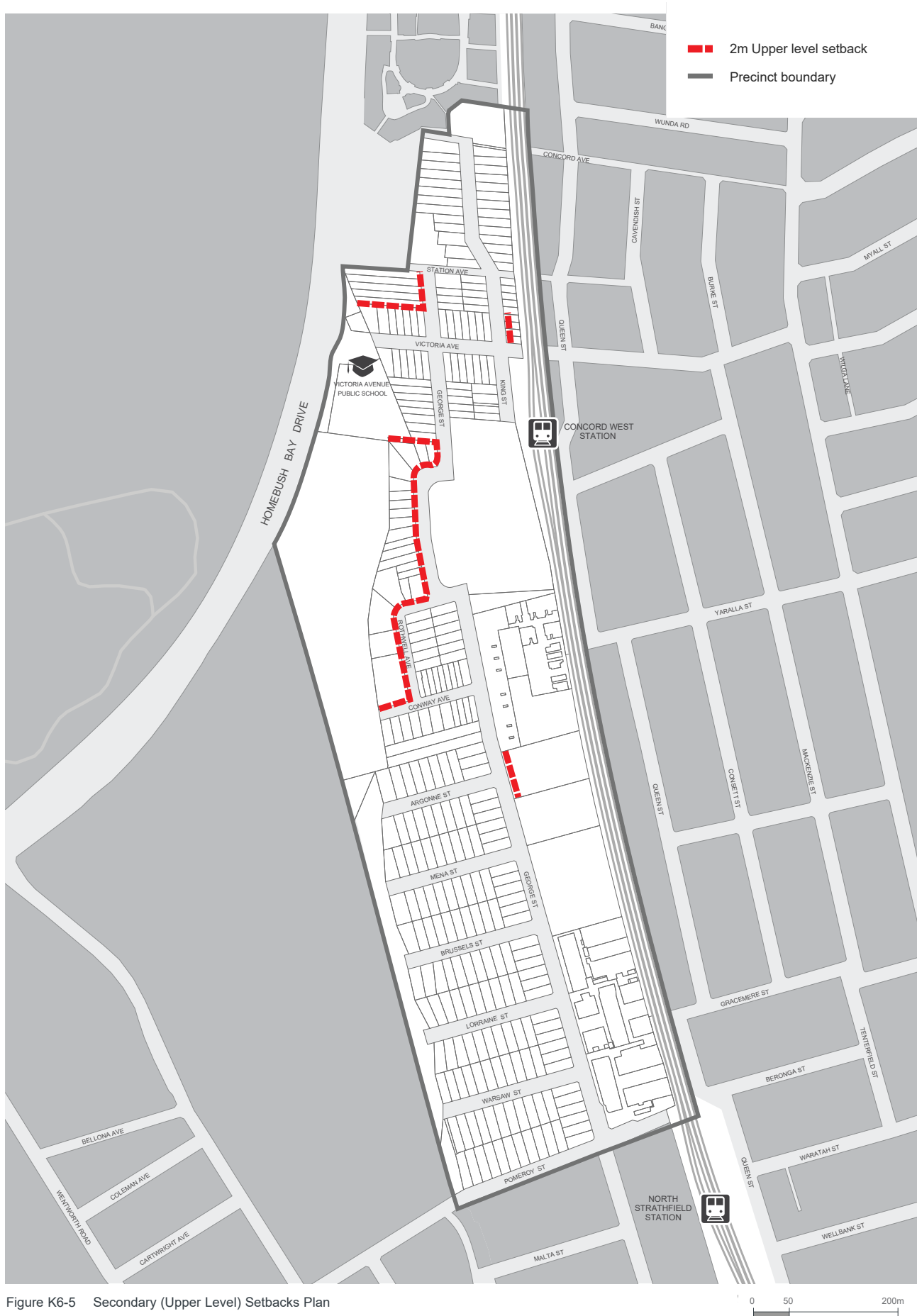


Figure K6-5 Secondary (Upper Level) Setbacks Plan



Figure K6-6 Maximum Building Heights Plan

K6.3 Built Form

Building Setbacks

Objectives

- O10 To minimise the impact of new development on existing development.

Controls	
C18.	Development setbacks are to be in accordance with Figure K6-4 Primary Setbacks Plan.
C19.	The upper most level of new development four storeys or higher is to provide a 2 metre setback in accordance with Figure K6-5 Secondary (Upper Level) Setbacks Plan.
C20.	The area within the primary setback of the street frontage is to be a deep soil zone and is to have no structures below.
C21.	Access points to underground parking are encouraged to be located between existing and new development if that will provide for increased building separation.

Building Height

Objectives

- O11 To allow redevelopment while at the same time respecting the existing character of the neighbourhood.

Controls	
C22.	New buildings are to be consistent with Figure K6-6 Maximum Building Heights Plan. <i>Note: Maximum building heights are to be in accordance with the LEP. This control provides further, more detailed guidance, and is intended to articulate building height in storeys to better achieve the objective of this point, in particular minimising negative impacts on existing development.</i>
C23.	Development at Sub-Precinct 2 must provide a building height transition zone with a maximum of 4 storeys on land fronting George Street and adjacent to rear boundaries of adjoining properties facing Victoria Avenue. The maximum height of 6 storeys is to be provided towards the north-west corner of the site. Refer to Figure K6-8 Section C-C and Figure K6-9 Section D-D for more information.
C24.	Development at Sub-Precinct 3 is not to exceed two storeys within 10 metres of its northern property boundary. Refer to Figure K6-11 Section E-E for more information.
C25.	A maximum height of 6 storeys in Sub-Precinct 5 is to be limited to the portion of the site south of Lot 7 in DP 15973. A building height transition zone with a maximum height of 4 storeys is to be provided to the north of (and inclusive of) Lot 7 in DP 15973. Refer to Figure K6-13 Section F-F for more information.
C26.	The maximum 4 storey transition height as shown on Figure K6-18 Section J-J for Sub-Precinct 7 shall have a setback of 30m from the front boundary. The setback shall be consistent with the rear building line of the street facing building on adjoining allotments.

Building Articulation

Objectives

- O12 To provide well-articulated built form that reduces the visual bulk and scale of buildings.

Controls

C27.	Where a building is greater than 60 metres in length the facade is articulated through the use of: <ul style="list-style-type: none"> • significant recesses or projections. • deep balconies. • elements of a finer scale than the main structural framing including the eaves and overhangs. • vertical elements such as blade walls or fins.
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Ground Floor Residential

Objectives

- O13 To ensure ground floor dwellings have a high level of amenity and create a positive interface with the street.
- O14 To provide for increased passive surveillance of the public domain.

Controls

C28.	Dwellings on the ground floor facing the street are to have individual entries from the street.
C29.	Ground floor private open space is to be designed as a private terrace. <i>Note: The area and dimension of private open space is to be consistent with Part 6 (6.4.6) of the Canada Bay DCP.</i>
C30.	Where fronting a pedestrian connection, ground floor dwellings are to be designed to maximise passive surveillance.

Ground Floor Mixed Use

Objectives

- O15 To promote activity and interest and enhance the public domain, particularly at Station Square
- O16 To provide the community with a focal point.
- O17 To enhance safety and security at the station.
- O18 To provide for increased passive surveillance of the public domain.

Controls

C31.	Provide ground level active uses where fronting Station Square (see Figure K6-11 Section E-E). <i>Note: Active uses that are encouraged include Cafes, Restaurants and the like.</i>
C32.	Where fronting station Square development is to engage and activate the square through design measures that may include: <ul style="list-style-type: none"> • public seating that spills into the square. • design measures that enable an open frontage at ground level to the square; and • awnings that encourage the public to spend time during all weather types.

K6.4 General

Flooding

Objectives

- O19 To mitigate potential flood impacts on new and existing development.

Controls

- | | |
|------|--|
| C33. | New development is to be consistent with the findings, conclusions and recommendations of the Concord West Precinct Master Plan Flood Study. |
|------|--|

Important Views

Objectives

- O20 To ensure new development enhances vista opportunities.

Controls

- | | |
|------|--|
| C34. | <p>New development at terminating vista sites shown in Figure K6-3 Public Domain Plan are to include features or articulation to provide visual interest which may include:</p> <ul style="list-style-type: none"> • Expressive roof features. • Emphasised vertical elements. • Façade elements which vary in colour or in material type from those used at other parts of the building. |
|------|--|

Passive Surveillance

Objectives

- O21 To increase passive surveillance of public open space.
- O22 To encourage public use of open space by providing a safe environment.

Controls

- | | |
|------|---|
| C35. | <p>Where fronting Powell's Creek Reserve, the Canada Bay Primary School playing fields or Olympic Park, development is to engage and activate open space through layout and design measures which include:</p> <ul style="list-style-type: none"> • Orienting living areas and areas of principal open space toward open space, having large, transparent windows facing the open space. • Avoid dense screen vegetation within private open space. • Increasing opportunities for passive surveillance. • Avoiding large / expansive walls. • Providing low or transparent fencing. • Avoiding significant grade change of built form. |
|------|---|

Example Built Form Sections

Sub-Precinct 2

George Street Interface

Section C-C below illustrates height transition and upper level setback to George Street.



Figure K6-8 Section C-C

Interface Station Avenue

Section D-D depicts the principle of four storey built form where adjacent to existing housing and where the top level has a greater setback.

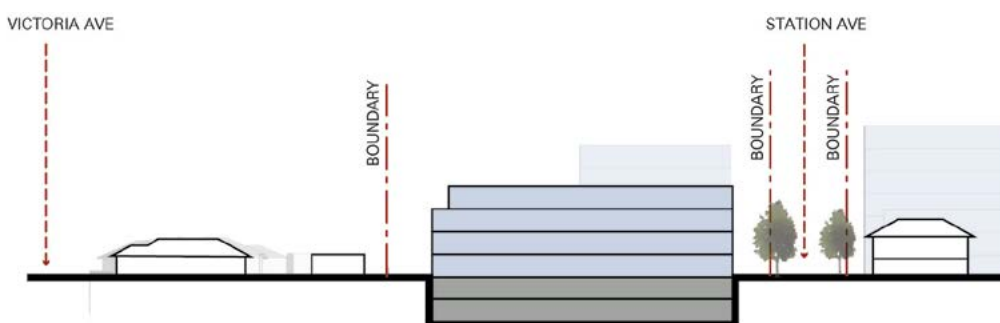


Figure K6-9 Section D-D



Figure K6-7 Key Plan Sub-Precinct 2

Example Built Form Sections

Sub-Precinct 3

King Street Interface

Section E-E below illustrates the building mass for the site immediately north of the future urban plaza. The northern boundary has a 3 metre setback and requires a two storey interface height with 10 metres of the northern boundary. Ground level active uses are to be provided at Station Square.

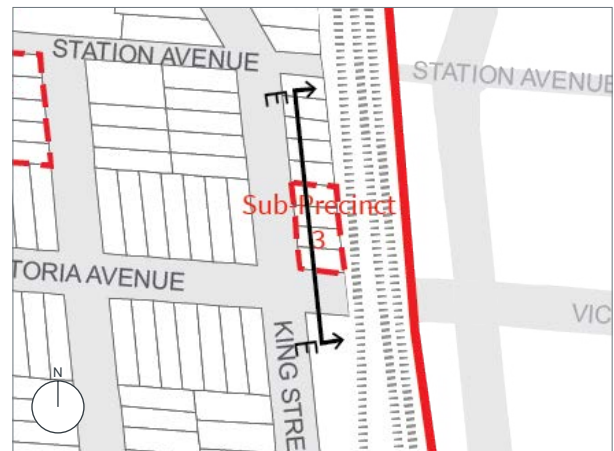


Figure K6-10 Key Plan Sub-Precinct 3

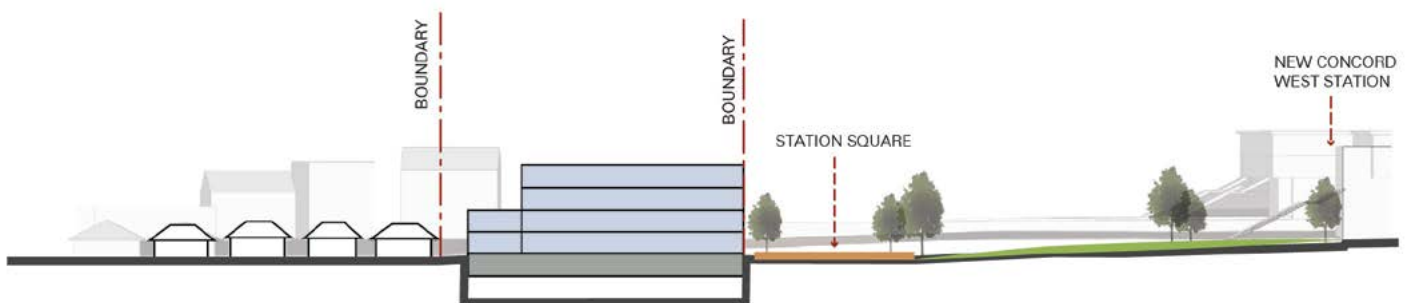


Figure K6-11 Section E-E

Example Built Form Sections

Sub-Precinct 5

George Street Interface

Section F-F below illustrates the stepping down of building heights from 6 storeys to 4 storeys at the northern interface to low scale residential.

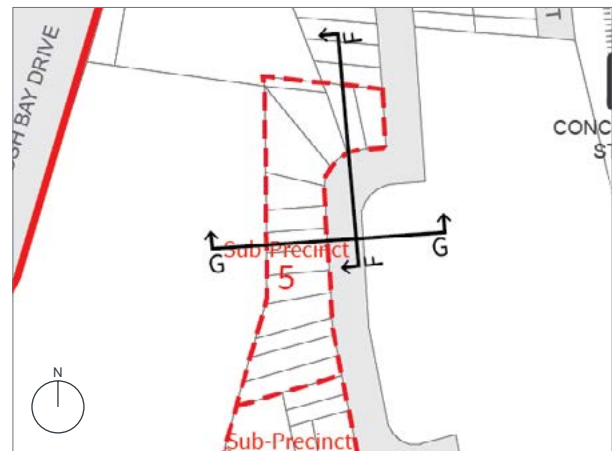


Figure K6-12 Key Plan Sub-Precinct 5

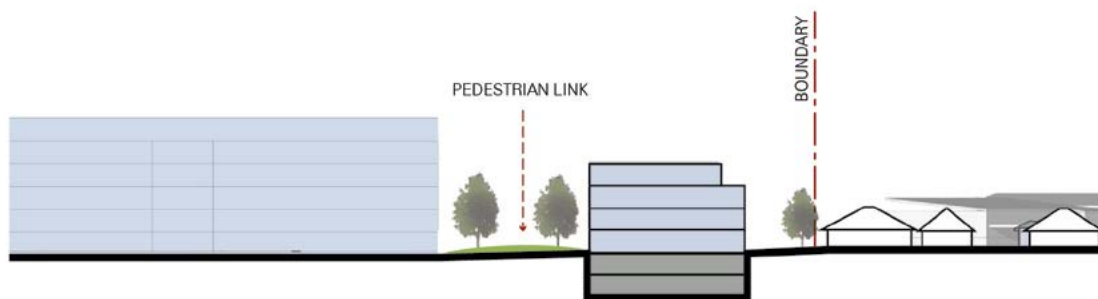


Figure K6-13 Section F-F

George Street Interface

Section GG depicts built form to George Street and upper level setbacks.

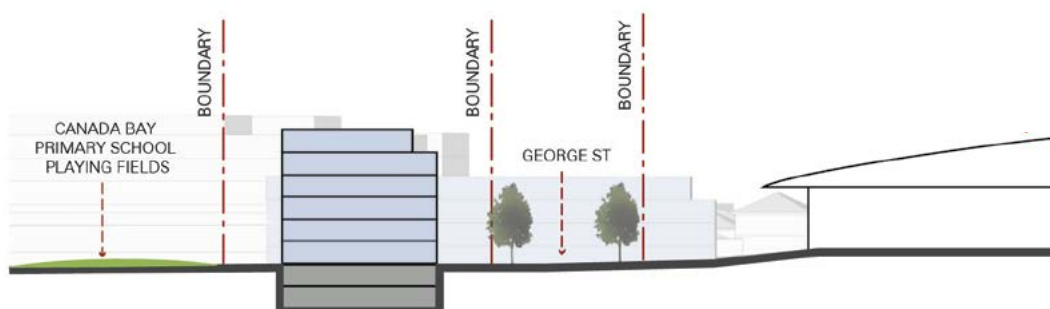


Figure K6-14 Section G-G

Example Built Form Sections

Sub-Precinct 6

Rothwell Street Interface

Section H-H below illustrates 4 storey built form to adjacent low scale residential.

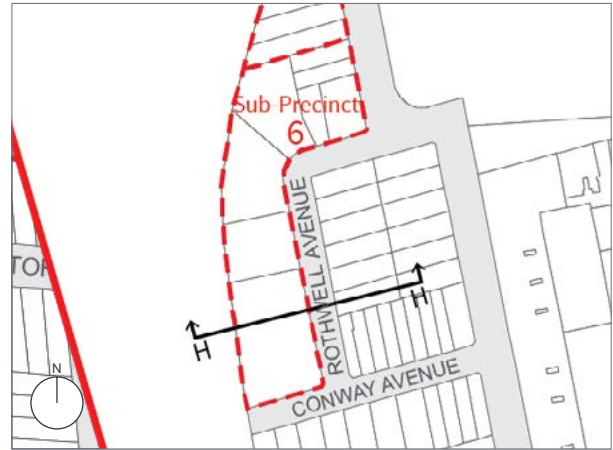


Figure K6-15 Key Plan Sub-Precinct 6

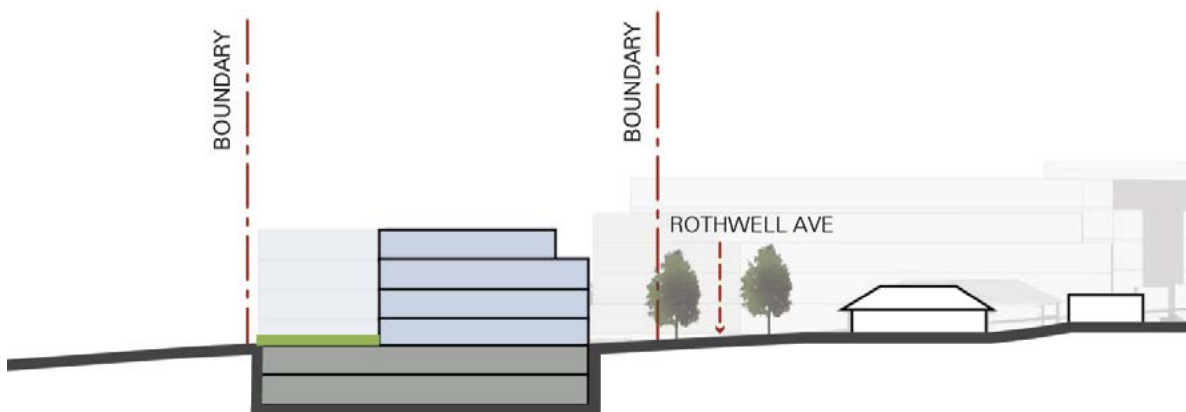


Figure K6-16 Section H-H

Example Built Form Sections

Sub-Precinct 7

George Street Interface

Section I-I below illustrates a 4 storey building height to George Street maintaining the existing street wall character of the neighbouring properties.

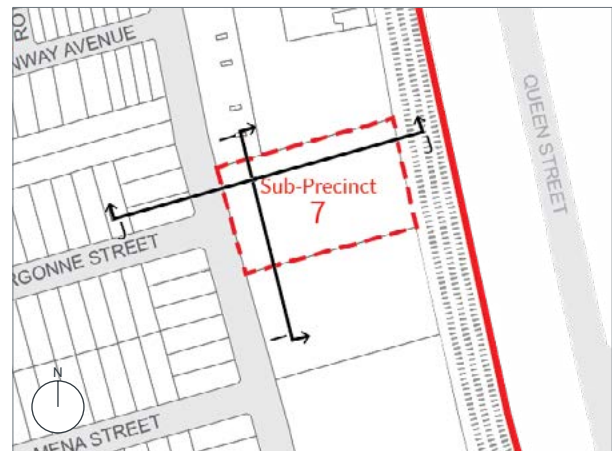


Figure K6-19 Key Plan Sub-Precinct 7



Figure K6-17 Section I-I

George Street Interface

Section J-J shows the transition in height from George Street to the rear of the site and in conjunction with neighbouring properties to the north and south.

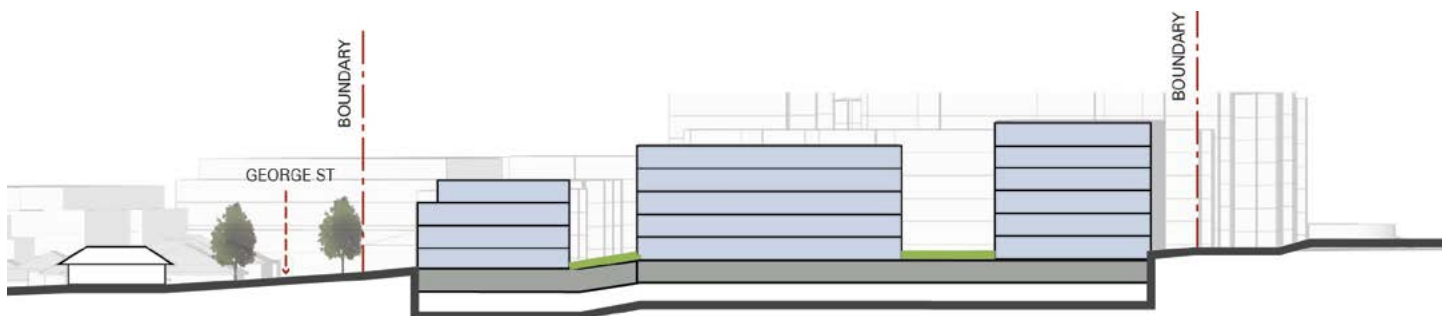


Figure K6-18 Section J-J

K7 Edgewood and Kendall Inlet (former Dulux site)



Figure K7-1 Aerial photo (source: nearmap.com)

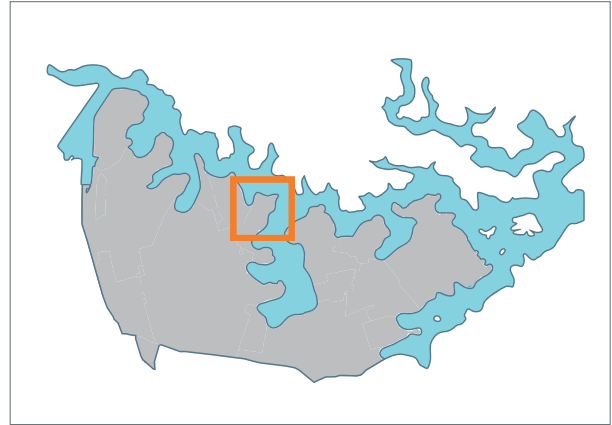


Figure K7-2 Council area map



Figure K7-3 Edgewood and Kendall Inlet - Location Plan



K7.1 General objectives

- O1 Provide a pleasant, functional and safe environment to and along the foreshore for cyclists and pedestrians;
- O2 Maintain significant views and vistas into and out of the site;
- O3 Protect the heritage buildings, Correys House and Strathroy, and their setting on the site;
- O4 Ensure adequate provision of landscaping and useable private and public open space;
- O5 Provide for pedestrian and cycle linkages through the site to adjoining areas;
- O6 Provide adequate carparking and bicycle storage facilities on the site;
- O7 Maximise visual and acoustic privacy to adjoining properties and within the development itself;
- O8 Ensure adequate daylight and sunlight are maintained to existing development, new development and open spaces;
- O9 Ensure the existing streetscape character is maintained and enhanced;
- O10 Ensure development and access networks are integrated with the existing built and natural environment;
- O11 Ensure development presents an appropriate bulk and scale to public areas having regard to existing development and the topography of the site; and
- O12 Ensure the design orientation of buildings and materials used in construction utilise renewable resources.

K7.2 Specific provisions

Streetscape

- O13 To integrate new development in a manner which complements the character of the area and relates to the pedestrian environment.

Controls

C1.	Buildings are to be setback 9 metres from the Cabarita Road frontage.
C2.	Buildings facades are to be oriented towards existing public street frontages.
C3.	Buildings are not to exceed two storeys in height on the Cabarita Road frontage.
C4.	Building length on Cabarita Road is not to exceed 20 metres to give the appearance of separate buildings and provide views into the site.
C5.	Fences having frontage to public open space or public roadway are: <ul style="list-style-type: none"> • not to exceed 1 metre in height if of solid construction; and • not to exceed 1.5 metres if of 'open' type design.
C6.	Continuous fencing for more than 20 metres (average frontage of existing development) should have some visual or physical relief.
C7.	Seating areas in a landscaped setting are to be provided every 100 metres along the frontage.

Side Boundaries

O14 To minimise the impact of new development on adjoining areas.

Controls

C8.	Buildings must comply with the building height plane. (see definitions)
C9.	Wall openings should be provided at a minimum of 3 metre separation.
C10.	Fences on the southern boundary will need to comply with the Dividing Fences Act.
C11.	Fences adjoining Cabarita Park should not exceed 1.8 metres in height and be of 'open' appearance.

Foreshore Frontage

O15 To ensure the integrity of the foreshore is maintained and enhanced for public enjoyment.

Controls

C12.	Building height plane to apply from the property boundary. An average setback of 13.5 metres, having a minimum width of 9 metres, is to be provided from the high water mark to the development for public foreshore access.
C13.	Buildings are to be setback a minimum of four metres from the public foreshore accessway. The location of buildings should not result in overshadowing to the foreshore between the hours of 9am - 3pm (EST) 10am - 4 pm (Daylight saving time).
C14.	<p>The foreshore access is to be in a landscaped setting and comprise:</p> <ul style="list-style-type: none"> • a pedestrian pathway with minimum dimensions of 1.0 metre; and • a cycleway with minimum dimensions of 0.8 metres with a separation distance of 0.7 metres.

Height of Building

O16 To ensure the building envelope relates to the topography of the site, providing an appropriate bulk and scale having regard to the foreshore location, streetscape and adjoining properties.

Controls

C15.	<p>Buildings should not exceed the building height plane on all boundaries and development should be no higher than:</p> <ul style="list-style-type: none"> • 11 metres from existing ground level to the ridge lines of the building as measured from Cabarita Road.
------	--

Bulk and Scale

O17 To ensure the location, layout and design of buildings has regard to the impact of development on views from surrounding public spaces and within the development.

Controls

C16.	Buildings comply with the building height plane, floor space ratio, landscaping and tree lining of Cabarita Road.
------	---

Building Design

O18 To ensure a high quality design which is integrated into the existing environment.

Controls

C17.	All buildings are to have pitched roof forms.
C18.	Access driveways are to provide a landscaped entry.

Visual and Acoustic privacy

O19 To provide visual and acoustic privacy to adjoining properties and within the development itself.

Controls	
C19.	<p>The minimum separation distance between directly overlooking dwelling units is:</p> <ul style="list-style-type: none"> • 6m between non-habitable rooms; and • 9m between habitable and non-habitable rooms; and • 12m between habitable rooms.
C20.	<p>Where there are direct views between living areas or into adjoining private open space, fixed windows should be obscured or windows offset or screened appropriately.</p> <p>Balconies are to adhere to the following setbacks:</p> <ul style="list-style-type: none"> • 6m from walls without balconies or windows; and • 12 metres from walls with balconies or windows.
C21.	<p>Bedrooms of one dwelling do not share walls with living rooms or garages of adjacent dwellings.</p> <p>Bedroom windows are at least 3m from shared streets, driveways and parking areas of other dwellings.</p> <p>Shared walls and floors between dwellings are constructed in accordance with the noise transmission and insulation requirements of the Building Code of Australia.</p>

Views

O20 To maintain views through the site from public spaces.

Controls	
C22.	A view corridor is to be maintained from Cabarita Road, through the development to the foreshore on both sites.

Open Space Provision

O21 To provide quality open space for the enjoyment of users.

Controls	
C23.	A landscaped area of 45% of the site area.

Private Open Space

O22 To ensure adequate usable private open space to meet the needs of residents.

Controls	
C24.	<p>For above ground development, the open space may take the form of a balcony directly connected to the dwelling with the following minimum requirements:</p> <ul style="list-style-type: none"> • 1 bdr - minimum area of 6m² having a minimum dimension of 2m; • 2 bdr - minimum area of 8m² having a minimum dimension of 2m; and • 3 bdr or greater - minimum area of 12m² having a minimum dimension of 2m.
C25.	<p>For development at ground level the following minimum requirements apply:</p> <ul style="list-style-type: none"> • 1 bdr - minimum area of 10m² having a minimum dimension of 3m; • 2 bdr - minimum area of 16m² having a minimum dimension of 4m; and • 3 bdr or greater - minimum area of 35m² having a minimum dimension of 4m.

Location of Parking

Controls	
C26.	Parking is not permitted between the building and street alignment.
C27.	Parking shall be in the form of a garage, basement car park, covered carport or an equivalent open area.

Vehicular Access

Controls	
C28.	<p>Security gates are not to be installed at entry and exit points into the development from Cabarita Road.</p> <p>Vehicular access into the development is to be directly from Cabarita Road, with the exception of service vehicles to access Strathroy.</p>

Protection of Heritage Buildings and Context

O23 To protect and enhance heritage buildings on the site and in their context.

Controls	
C29.	<p>No development is to be within the Cabarita Road frontage and Correy's House. In addition, a minimum curtilage of 10 metres is to be maintained around Correy's House.</p> <p>No development is to be located between the Parramatta River and Strathroy House. In addition, a minimum curtilage of 10 metres is to be maintained around Strathroy House.</p>
C30.	The curtilage of the heritage buildings is to be landscaped, using species appropriate to the heritage context.

Use of Heritage Items

O24 To ensure the use of buildings will not impact on the heritage significance or detract from residential amenity.

Controls	
C31.	<p>Where a public or community use is proposed, the hours of operation will be dependent upon:</p> <ul style="list-style-type: none"> • the nature of use proposed; • the proximity to residences; and • the likely noise generated. <p>A Heritage Management Plan is to be prepared which includes:</p> <ul style="list-style-type: none"> • uses proposed for Correy's House and Strathroy House; • landscaping • means of access; • hours of operation; • maintenance program; and • management program.

K8 27 George Street North Strathfield



Figure K8-1 Aerial photo (source: nearmap.com)

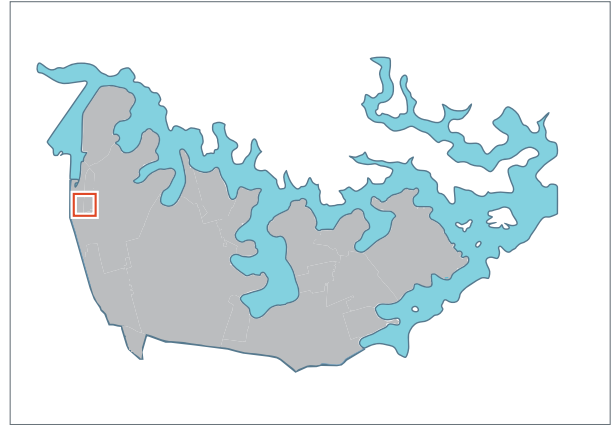


Figure K8-2 Council area map



Figure K8-3 27 George Street, North Strathfield - Location Plan



K8.1 General objectives

- O1. To encourage and facilitate development on the site which, in terms of scale, bulk, form and character reflects the physical context of the site and is sympathetic to surrounding residential development;
- O2. To minimise the impact of the development in terms of overlooking and loss of sunlight from adjoining and neighbouring properties;
- O3. To provide for the active and passive recreation needs of residents of the development and incorporate recreation facilities such as a swimming pool and tennis courts; and
- O4. To provide for safe access to and from the site.

K8.2 Specific provisions

Density, Design, Scale and Bulk

Objective

- O5. To achieve a development outcome which, in terms of its density, design, scale and bulk, responds in a sympathetic and harmonious manner to the site and surrounding residential development.

Controls

C1.	A minimum of 10% of the gross floor area of the site must be used for commercial development.
C2.	A minimum of 10% of the residential floor space must be developed for older persons and people with a disability.

Height

Controls

C3.	Buildings shall be a maximum of four (4) storeys.
-----	---

Setbacks and Building Lines

Controls

C4.	The following building lines are imposed: <ul style="list-style-type: none"> • Six metres to George Street and the eastern boundary with the rail corridor; and • Five metres to the northern, eastern and southern side boundaries.
-----	--

Design and Form

Controls

C5.	Buildings are to be articulated and are not to present long, unrelieved structures that dominate the landscape.
-----	---

Site Coverage

Controls

C6.	The total site cover of all buildings within the development shall be equal to or less than 40% of the total site area.
-----	---

Dwelling Amenity

Controls

C7.	Dwellings should be designed and orientated to take advantage of views, solar access and proximity to open space areas.
C8.	Consideration should be given to the efficiency of interior layout, room size, security and safety, opportunities for cross breezes, energy efficiency, conservation and privacy.
C9.	At least 50% of the area of communal open space should have a minimum 3 hours of solar access between 9am and 3pm at the Winter Solstice (21 June).

C10.	Shadow diagrams for the hours of 10am, 12 noon and 2pm for 21 June will be required to accompany any development application for the site.
C11.	All units should be provided with clothes drying facilities and adequate storage capacity.
C12.	Openings (windows and doors) from living areas must not be located directly opposite neighbouring windows or openings where it is likely to result in unreasonable noise problems between buildings.
C13.	Buildings shall be designed and located to take account of rail related noise and vibration from the Main Northern Rail Line in accordance with standards as set out in the Environmental Protection Authority (EPA) 'Environmental Noise Control Manual' 1994, Australian Standard 2670 Part 1 'evaluation of Human exposure to Vibration and Shock in Buildings (1 to 80Hz)' and any rail policy endorsed by the EPA or any noise and vibration publications by State Rail and Rail Infrastructure Corporation.
C14.	In designing the layout, arrangement etc. of buildings, regard shall be made to possible existing noise sources and especially the adjacent industrial premises so as to minimise the impact of noise on future residents, eliminate the likelihood of any reflection or reverberation adversely affecting existing residential properties.
C15.	All units should be provided with energy efficient clothes drying facilities, either: <ul style="list-style-type: none"> • in cross ventilated drying cupboards or other drying provisions on balconies; • in private open spaces; or • dryers with 4 NATHERS rating.

Landscaped Open Spaces

Objective

- O6. To ensure the provision of open space and landscaped areas for the amenity of residents.

Controls

C16.	To ensure adequate provision of open space, maximum permissible site coverage is 40%.
C17.	Landscaped open spaces should be provided to accommodate a range of communal and individual needs. There should be a primary open space area containing a recreation facility such as a pool/spa or similar, and this facility be easily accessible to all residents on site. Smaller, more intimate landscaped areas should be provided throughout the site and be accessible via a pathway system.
C18.	Landscaped areas should generally be dominated by vegetation and not masonry elements with areas capable of supporting deep soil planting. Hard paved areas should, where possible, be kept to a minimum in order to reduce stormwater runoff, although wheelchair access and remediation requirements must be considered.

Public and Private Open Spaces

Controls

C19.	Useable communal and open space is to be provided at a rate of 40m ² per dwelling. Driveways, pathways and parking areas are excluded from the open space calculations.
C20.	A minimum area of 20m ² of private open space with a minimum dimension of 4m is to be provided for ground floor units and accessible from the main living areas. A minimum area of 10m ² of private open space with a minimum dimension of 2m is to be provided for all above ground units, accessible from the main living areas.

Car Parking and Access

Objective

- O7. Adequate provisions should be made for on-site resident parking and visitor parking without causing any detrimental impact on the amenity of the development, streetscape and neighbourhood.

Controls

C21.	The provision of at least one (1) loading dock for each residential building is desirable.
C22.	Loading docks are to be provided for the commercial areas.
C23.	Access to the site is not to be provided by a 'gatehouse' security system, which limits public access to the site.

Pedestrian Access

Controls

C24.	Safe pedestrian access is to be maintained throughout the site.
------	---

Impact on Adjoining Properties

Objective

- O8. To provide attractive streetscapes which enhance the amenity of neighbouring development.

Streetscape

Controls

C25.	The setback of buildings from the street frontages to be appropriate to the streetscape character.
------	--

K9 186 Great North Road, Five Dock



Figure K9-1 Aerial photo (source: nearmap.com)

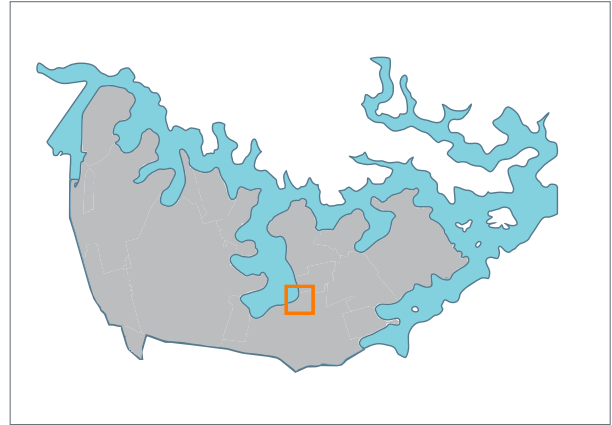


Figure K9-2 Council area map



Figure K9-3 186 Great North Road, Five Dock - Location Plan



The following objectives and controls have been prepared to ensure that the land at 186 Great North Road, Five Dock accommodates a high quality development.

K9.1 Objectives and provisions

- O1. Future development has adequate building setbacks and separation so that buildings are seen within a landscaped setting;
- O2. Provide lower building heights on the McKinnon Avenue and Great North Road frontages to provide an appropriate bulk/scale relationship with the surrounding locality;
- O3. To protect important built and natural elements both in the private and public domain; and
- O4. Ensure the use of high quality facade and design finishes.

Controls

C1.	The maximum number of storeys permitted on the site is shown in Figure K9-4 Maximum Heights, Figure K9-9 Cross Section A, Figure K9-11 Cross Section B and Figure K9-13 Cross Section C.
C2.	The minimum setbacks from boundaries are shown in Figure K9-5 Setbacks.
C3.	A minimum of 38% of the site is to comprise landscaped area. (Landscaped area means any part of the site used for growing plants, grasses and trees but does not include any building, structure or hard paved area).
C4.	A minimum of 28% of the site area is to comprise deep soil landscaping. (Deep soil area means any part of the total landscaped area that does not include buildings or other structures under - with the exception of measures for the remediation of contaminated land).

C5.	The Fig trees on Lyons Road are to be protected throughout construction and following completion of building through setbacks of the building and associated basements.
C6.	Vehicle Access from Great North Road and Lyons Road is not permitted. Vehicular access to and from the site must be from McKinnon Avenue. Refer to Figure K9-7 Vehicle Access.
C7.	The Tobruk Memorial is to be retained on the corner of Great North Road and Lyons Road.
C8.	In addition to the 8.0m from the southern boundary adjacent to Lyons Road, all buildings are to be set back an additional 1.5m from the canopy of the Fig trees.
C9.	Buildings are to be designed to face the street, and to enhance the public domain through entrances, good quality finishes and well resolved architectural design.
C10.	Fencing on the site is to be designed so that sight lines for both pedestrian and vehicles are not obscured.
C11.	Roof forms, plant and lift overruns are to be designed to be simple compact forms that are visually unobtrusive.

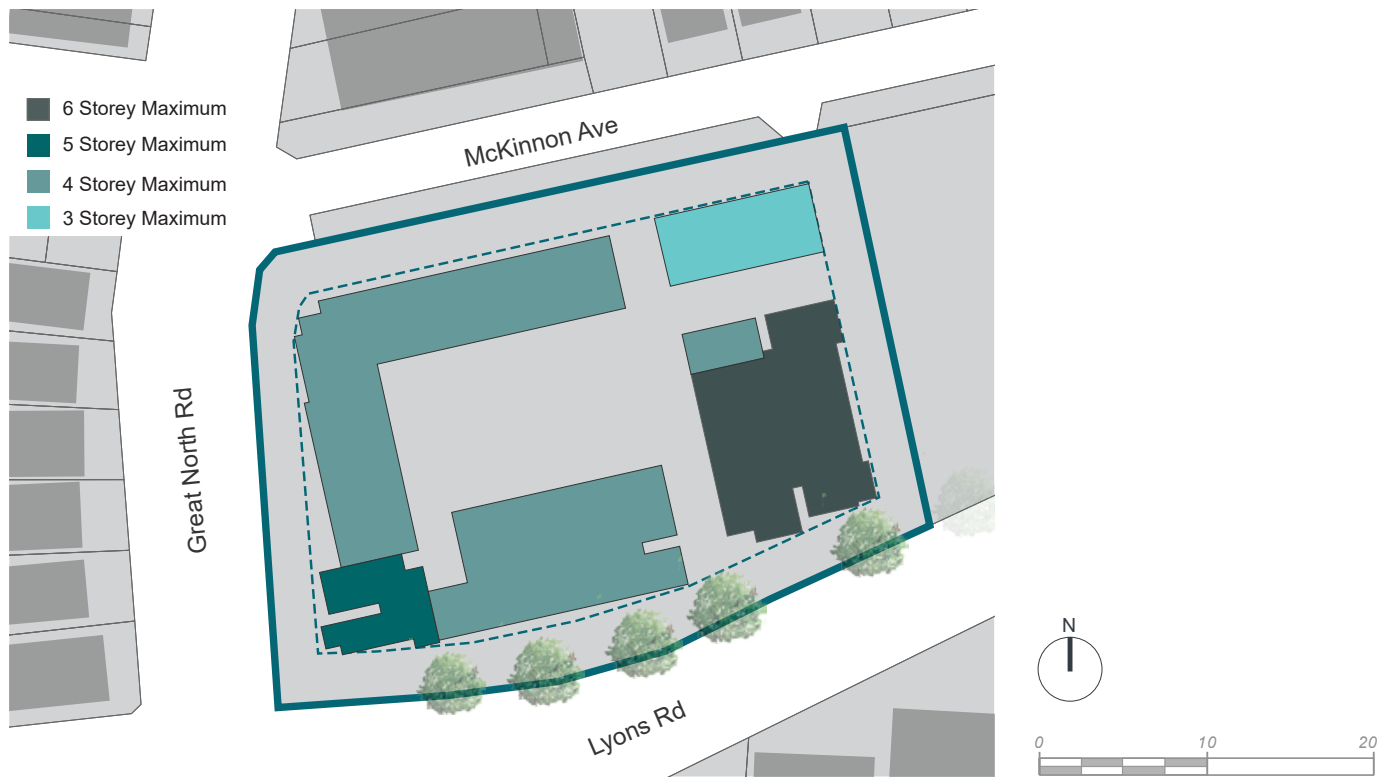


Figure K9-4 Maximum Heights



Figure K9-5 Setbacks



Figure K9-6 Landscaping



Figure K9-7 Vehicle Access

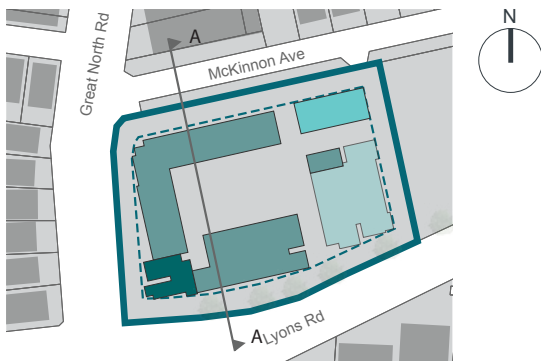


Figure K9-8 Key plan

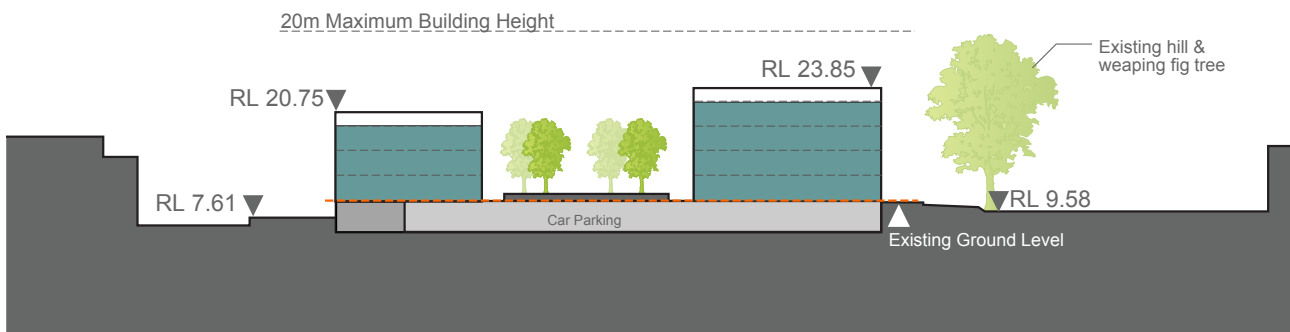


Figure K9-9 Cross Section A

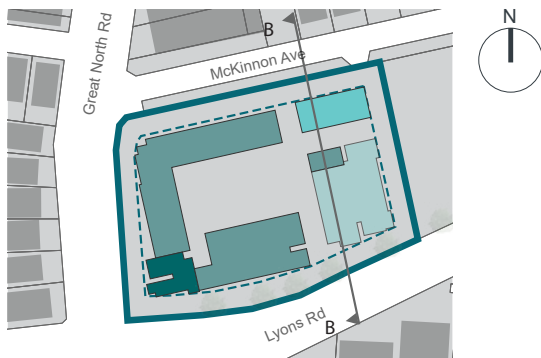


Figure K9-10 Key plan

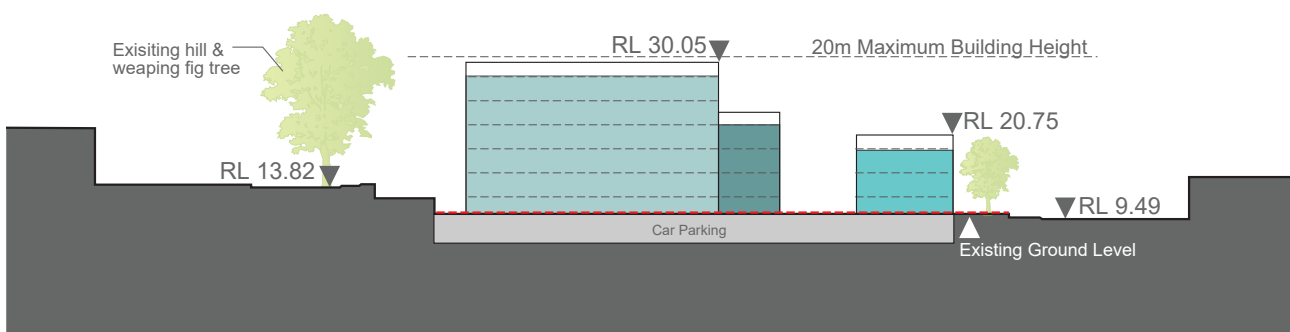


Figure K9-11 Cross Section B

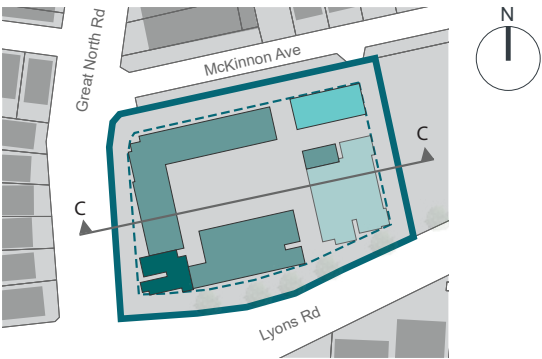


Figure K9-12 Key plan

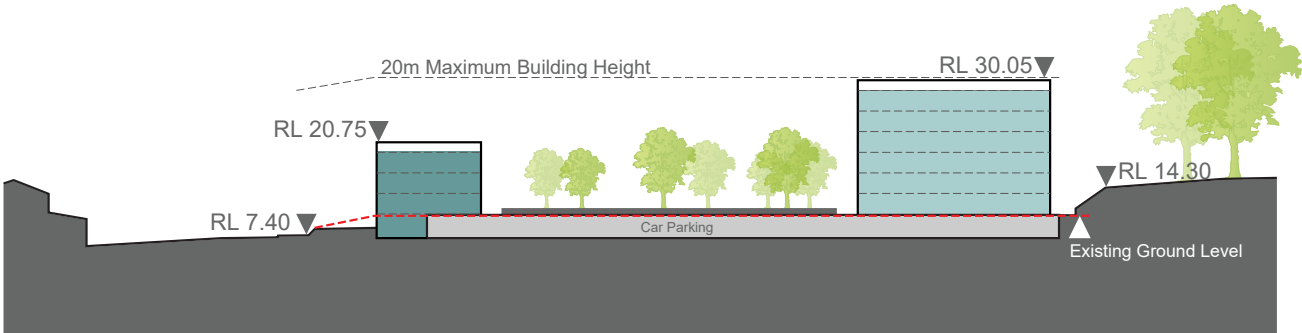


Figure K9-13 Cross Section C

K10 2A Hythe Street, Drummoyne



Figure K10-1 Aerial photo (source: nearmap.com)

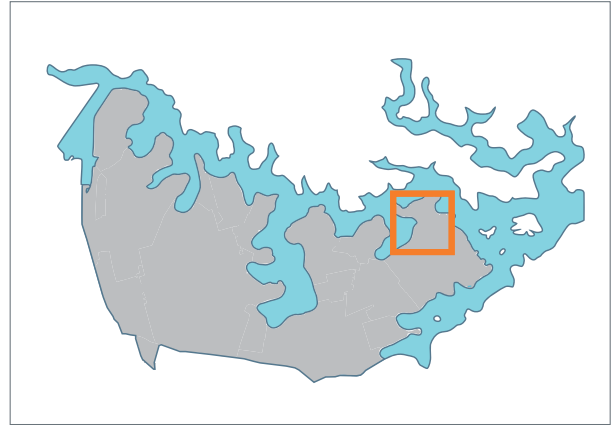


Figure K10-2 Council area map



Figure K10-3 2A Hythe Street - Location Plan



K10.1 General objectives

- O1 To achieve a coordinated urban design outcome.
- O2 To enhance the existing streetscape and ensure appropriate development scale and interface near residential areas.
- O3 To minimise solar access and privacy impacts upon surrounding properties.
- O4 To minimise the impact of any excavation on adjoining buildings and existing landscape.
- O5 The design of balconies is not to significantly increase the visual bulk of the building.

Controls

C1.	Buildings are to adhere to the following setbacks: 6m to the south-western property boundary; 6m to the western boundary; 8m to the north-western property boundary.
C2.	The maximum building height is RL 19.9 on the corner of Westbourne Street and Hythe Street. The maximum building height on the remainder of the site is 8.5 metres.
C3.	Water Sensitive Urban Design systems are to be implemented and detailed in landscape plans and stormwater solutions on the site.
C4.	No excavation is to occur within the "Nil excavation zone".
C5.	Balconies within the balcony zone are to have a light weight design character, for example a glass or metal balustrade
C6.	Preclude vehicular access and egress from Westbourne Street and Hinkler Court.



Figure K10-4 Consolidated development controls plan



Figure K10-5 Section 01 - Interface Hythe Street

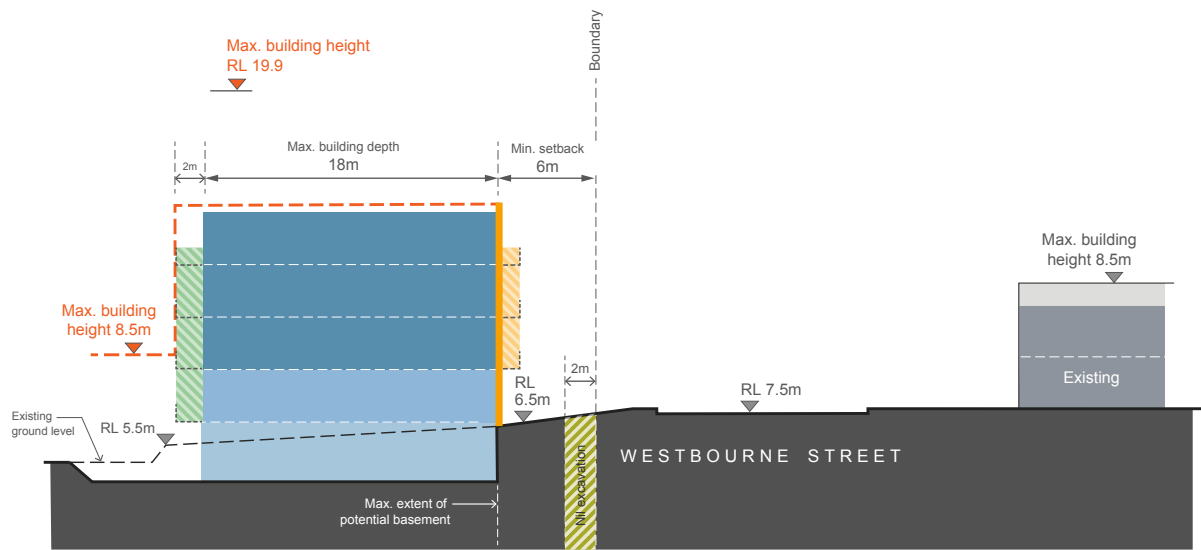


Figure K10-6 Section 02 - Interface Westbourne Street

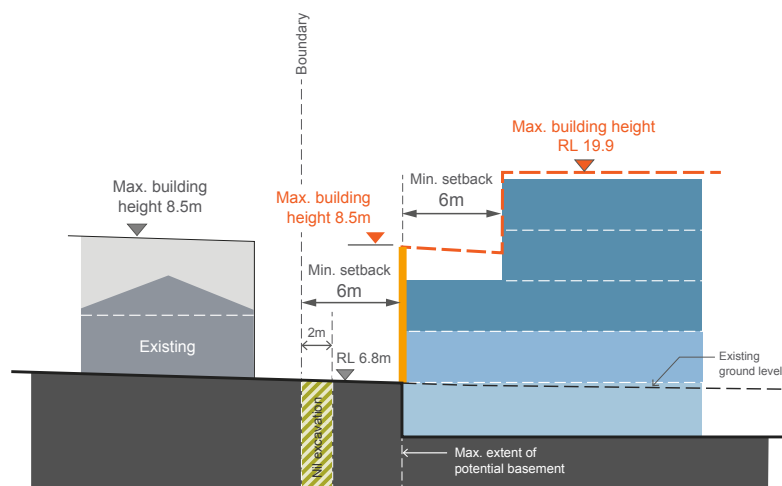


Figure K10-7 Section 03 - Interface South-Western Boundary

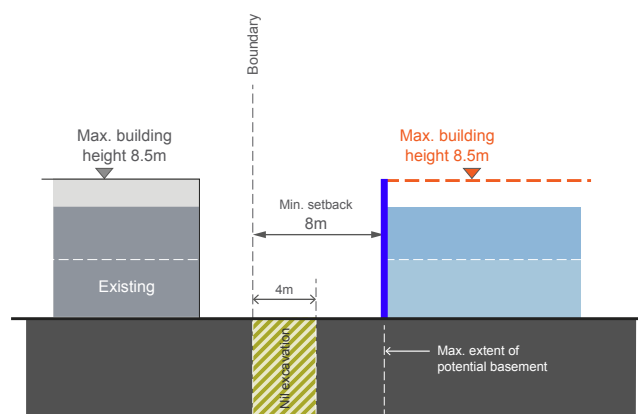


Figure K10-8 Section 04 - Interface North-Western Boundary

K11 Kings Bay (former Hycraft site), Five Dock



Figure K11-1 Aerial photo (source: nearmap.com)

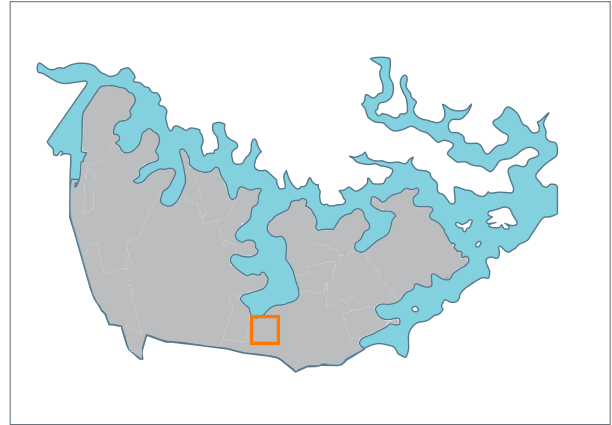


Figure K11-2 Council area map



Figure K11-3 Kings Bay (former Hycraft site), Five Dock - Location Plan



K11.1 General objectives

- O1. To create a new form of housing in this area which in terms of scale, bulk and form respects the existing pattern of the public domain and mediates between the built form of the area and earlier inner city suburbs;
- O2. To facilitate development of the site which responds to the context of the site by locating larger scale development adjacent to open space areas or non residential uses;
- O3. To minimise the impact of the new development on the site on privacy and sunlight access of neighbouring residential properties;
- O4. To provide for the recreation needs of the new residents of the site;
- O5. To identify and retain any significant trees on the site; and
- O6. To provide safe access to and from the site for cars and pedestrians.

K11.2 Specific provisions

Density, Design, Height, Scale and Bulk

Objectives

- O7. To achieve development of the site which will introduce new housing forms to this area in a way which respects the traditional urban environment; and
- O8. To ensure that the bulk and scale of the new development is sympathetic to the existing development in the area.

Height

Controls

- | | |
|-----|---|
| C1. | Subject to the maximum height of buildings, is to comply with the heights for the various sections of the site as shown in Figure K11-4 Maximum height of buildings. |
| C2. | Notwithstanding the above, the roofspace of buildings west of the central park as shown hatched on the height plan (see Figure K11-4 Maximum height of buildings) can be used as floor space. |

Site coverage

Controls

- | | |
|-----|---|
| C3. | Building footprints must not occupy more than 30% of the total site area. |
|-----|---|

Setbacks

Controls

- | | |
|-----|--|
| C4. | The wall to the below grade parking structure is to be set back a minimum of 3.5m from the boundary of William Street. |
| C5. | Buildings are to be set back a minimum of 6m from the boundary of William Street at ground level. |
| C6. | Buildings are to be set back a minimum of 5m from the boundary of Harris Road at ground level. |
| C7. | Buildings are to be set back a minimum of 7.5m from the rear property boundaries in Kings Road at ground level. |
| C8. | For the 5 & 6 storey building heights shown on Figure K11-4 Maximum height of buildings the top floor of each will be set back a further 2.5m from the floor below along William Street. |
| C9. | Houses at the eastern side of the central park are to be setback a minimum of 4.5m from lot boundary. |

Design and Built Form

Controls	
C10.	The site is to be developed as part of a comprehensive scheme where there is a strong relationship in design terms between the various elements of the development.
C11.	There is to be a variety of medium density development on the site ranging from terrace houses to residential flat buildings located around a central open space area (see Figure K11-4 Maximum height of buildings).
C12.	Higher density development should be located at the western end of the site where its apparent height and bulk can be related to open space and non residential uses or serviced apartments on neighbouring boundaries.
C13.	Where appropriate, buildings should formally present to the existing street frontages and integrate with existing streetscapes.
C14.	Roof forms should be predominantly pitched especially on the lower density development on the site.
C15.	The orientation of development should capitalise on solar access and views, and buildings should be located in relation to roads and open space to create a strong sense of place.

Open Space

Objectives

- O9. To provide open space which will form a physical focus for the development;
- O10. To meet the requirements of the residents of the site in relation to formal and informal recreation activities. These requirements are to be assessed on the basis of the likely future population of the site; and
- O11. Design and integrate landscaping into the development both as part of the open space areas and other areas of the public domain.

Location and Design

Controls	
C16.	Figure K11-4 Maximum height of buildings shows the location for the major open space areas on the site. Other smaller areas may be provided on the site for informal activities. A standard of 2.51ha per 1,000 residents of dedicated public open space has been adopted by Council. A minimum of 5,000m ² is to be provided on site.
C17.	Where possible there should be pedestrian linkages between the open space areas.
C18.	Landscaped open space areas should provide for a range of recreation needs covering both formal and informal activities.

Private Open Space

Controls	
C19.	At least 40m ² per dwelling of landscaped private open space is to be provided on the site. This does not need to adjoin each dwelling but can be provided in larger areas.
C20.	Each dwelling must have an area of open space attached to it. This may be by way of a balcony or roof terrace, or at ground level. This open space area should have a minimum area of 10m ² .



Figure K11-4 Maximum height of buildings



Figure K11-5 Access roads & parking

K12 Liberty Grove



Figure K12-1 Aerial photo (source: nearmap.com)

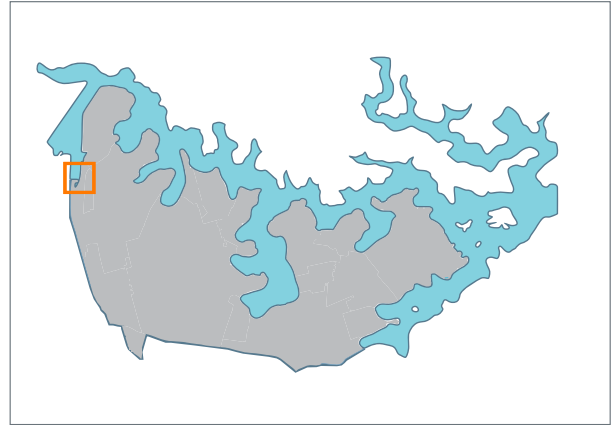


Figure K12-2 Council area map



Figure K12-3 Liberty Grove - Location Plan



K12.1 General objectives

To provide guidance for the residential development of the land which is attractive to potential and existing residents of Canada Bay, appropriate for the local environment and which takes account of the following:

- O1. Maintenance of the amenity of existing nearby residents of Canada Bay as far as possible with regard to stormwater drainage, landscape quality, privacy, solar access, traffic and noise impacts;
- O2. Maintenance of existing levels and quality of public open space facilities in Canada Bay;
- O3. Integration of the built form with the existing landscape and the locality generally; and
- O4. Public access to achieve integration into the Canada Bay community.

K12.2 Specific provisions

Development Density

Objective

- O5. To provide a maximum density control that will assist in encouraging a variety of building forms which would be appropriate within the local area by providing for development which takes into account the opportunities and constraints imposed by local infrastructure while providing for an acceptable bulk and scale of development.

Controls

C1.	The maximum permitted density based on the Gross Site Area shall be 65 dwellings per hectare. "Gross Site Area" means the area of the whole of the land shown edged orange on Figure K12-3 Liberty Grove - Location Plan.
C2.	Where possible there should be pedestrian linkages between the open space areas.
C3.	Landscaped open space areas should provide for a range of recreation needs covering both formal and informal activities.

Site coverage

Controls

C4.	The total site cover of all buildings shall not exceed 35% of the Gross Site Area. This clause applies to all buildings except those provided solely for the following purposes: <ul style="list-style-type: none"> • Public recreation, open space or amenities; and • Garbage storage areas.
-----	--

Site requirements

Objectives

- O6. To ensure siting of buildings and landscaping to meet reasonable user and neighbour requirements for privacy.
- O7. To provide flexibility in the siting of buildings and minimise adverse impact on adjacent and adjoining properties.
- O8. To achieve a coherent site layout that provides a pleasant, attractive, manageable and resource-efficient living environment.
- O9. To provide adequate space for landscaping, visual and acoustic privacy.

Setbacks

Controls

C5.	The following Building Line setbacks apply: <ul style="list-style-type: none"> • To the Gross Site property boundary - 10m provided however that this may be increased to 15m taking into account the height of any building or structure and its likely impact; and • To any internal road - 4m.
C6.	Generally at least one half of any Building Line Setback shall be comprised solely of soft landscaping.

Traffic and Access

Objective

- O10. To provide vehicular access that is efficient in layout and provides a safe and pleasant environment for residents and visitors.

Controls

- | | |
|-----|--|
| C7. | There shall be no vehicular access to or from the site via Concord Avenue or King Street and all access shall be via Homebush Bay Drive and Oulton Avenue. |
|-----|--|

Open Space

Objectives

- O11. To provide convenient open space and recreational opportunities for the residents of multi-unit housing projects;
- O12. To enhance the quality of the built environment, and the appearance and character of the site by providing for landscaping;
- O13. To meet the wider community needs for open space and recreation and assist in maintaining the levels of quality and provision of open space;
- O14. To provide for landscaping which takes into account the sensitivity of the adjoining environment of Homebush Bay and minimises the impact of stormwater discharge;
- O15. To provide for passive recreation opportunities; and
- O16. To provide for privacy and shade.

Landscaping

Controls

- | | |
|------|---|
| C8. | All areas not occupied by buildings or roads shall be landscaped predominantly with 'soft' landscaping. |
| C9. | Not more than 10% of all landscaping may be used for hard landscaping. |
| C10. | Paths and paving within landscaped areas should be kept to a minimum and within soft landscaped areas allowed only so as to provide access and for discrete passive recreation opportunities. |
| C11. | Selection and plantings of trees and shrubs should primarily reflect trees and plants of the Parramatta River valley. |
| C12. | A balance of upper, mid and lower canopy trees is required in all landscaped areas but especially in perimeter setbacks. |

General Provisions

Objective

- O17. To maintain the amenity of existing dwellings near the site and reflect the character of Concord.

Architectural Design

Controls

- | | |
|------|---|
| C13. | <p>External design of buildings should have regard to the traditional styles of Concord and especially the California Bungalow theme and especially to the principal features thereof including the following:</p> <ul style="list-style-type: none"> • gable ended pitched roofs; • pilasters and pillars supporting roofs and awnings; • verandahs; and • detailed eaves. |
|------|---|

K13 Mortlake Point



Figure K13-1 Aerial photo (source: nearmap.com)

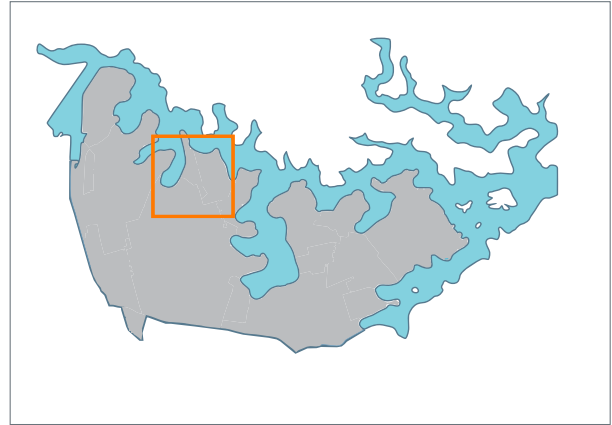


Figure K13-2 Council area map



Figure K13-3 Mortlake Point - Location Plan



K13.1 General objectives

The objectives of the Land Use Compatibility component of this DCP are outlined below. All development in Mortlake Point is to comply with these Objectives.

- O1 Ensure that all potential amenity impacts of proposed development are mitigated through appropriate design responses;
- O2 Ensure that new residential development provides an acceptable level of amenity where located adjacent to non-residential land uses, through design responses that mitigate any impact from existing non-residential land uses;
- O3 Ensure that residential development would not in any way affect the lawful consent of existing non-residential land uses;
- O4 Ensure that the impact generated by new non-residential development, such as operating hours, noise, privacy, vehicular and pedestrian traffic and other factors is controlled so as to not affect the amenity of adjacent residential development; and
- O5 Ensure that Council is provided with relevant and sufficient information that allows Council to determine the land use compatibility impacts of a proposed development.

K13.2 Specific provisions

General Compatibility Standard for All Development

Controls

- | | |
|-----|--|
| C1. | All development is to utilise a continuous buffer treatment along the interface with adjacent non-compatible land uses. In particular, this should apply to the side and rear boundaries of proposed developments. |
| C2. | While frontages must be designed so as to not create an unnecessary "solid" frontage that would be unacceptable as streetscape treatment. |

- | | |
|-----|---|
| C3. | Development is to use appropriate site layouts that use buildings, walls and other physical aspects to minimise environmental impact on adjacent land uses. |
| C4. | Adequate provision shall be made for off-street parking on all developments to ensure that no conflicts arise between residential and non-residential developments in the utilisation of on-street parking generally. |

Design Requirements for Non-Residential Developments

Controls

- | | |
|------|---|
| C5. | New non-residential development adjacent to residential development should not generate industrial airborne emissions causing noise, odour, fumes and dust to the extent to which it will affect the amenity of adjacent residential development. |
| C6. | External walls facing residential properties are to be constructed of materials with good sound insulating quality and no large openings that would transmit noise. |
| C7. | Plant equipment and machinery is to be located within the building or screened from adjacent residential uses. |
| C8. | Vehicular access must not be provided along the boundary adjacent to residential uses. |
| C9. | Loading and maneuvering areas are to be located within the building or screened from adjacent residential uses. |
| C10. | The development must be designed so that any traffic generated has a minimal impact on adjacent residential uses and on the local road system. |
| C11. | Signage must be of a character that does not detract from the visual amenity of the existing residential uses. |

C12.	Lighting systems within the development must not create light spillage onto adjacent residential uses.
C13.	Hours of operation (including waste collection) being limited to between 7am and 6pm, Monday to Friday, with limited hours on Saturday for some uses and no operation on Sunday.
C14.	New non-residential development is to use site layouts that use buildings, walls and other physical elements to provide further protection for noise-sensitive uses from off-site noise.

Compatibility Requirements for Residential Development

Controls	
C15.	External walls facing non-residential properties are to be constructed of materials with good sound insulating quality and no large openings (including windows) that would transmit noise.
C16.	The building plan; walls, windows, doors and roof are to be designed to reduce intrusive noise levels from potential sources of noise emanating from adjacent non-residential uses. Attention should be paid to re-orientating noise sensitive rooms (living, dining, bedrooms) away from potential sources of noise.
C17.	Balconies and other external building elements are to be located, designed and treated to minimise noise infiltration.
C18.	Where windows are to face non-residential development, they are to be fitted with noise-attenuating glass to minimise the impact of background noise from non-residential development.
C19.	Landscaping with appropriate setbacks is to be provided on communal and private open space to create a visual buffer between adjacent non-residential development and filter any air-borne particles generated by industry.

Building Height and Scale

Objectives

O6 To ensure that new development:

- Provides appropriate scale and compatibility with the Mortlake streetscape and the Parramatta River foreshore context;
- Ensures reasonable access of all development to significant views, vistas and landmarks within and around Mortlake Point;
- Maintains and enhances environmental amenity in the immediate context of the development, including reasonable solar access, adequate levels of privacy and an acceptable level of view sharing; and
- Achieve comfortable street environments for pedestrians in terms of daylight, scale, sense of enclosure, as well as providing a healthy environment for street vegetation.

Controls	
C20.	Maximum height of new development is not to exceed 12 metres from natural ground level to the uppermost point of the roof structures.
C21.	Building heights are to respond to the topography of Mortlake Point through building heights that ensure the sharing of views to significant land marks and encourage appropriate response to the natural topography.
C22.	Where appropriate, new development is to adopt the predominant height and shape of adjoining development and have similar bulk and mass, taking into account the size and shape of the lot, with taller buildings or elements of one building placed on the higher parts of the site.

Building Setbacks

To ensure that new development:

- a) Provides appropriate relationship to the existing streetscape, by ensuring uniform built form patterns in new development;
- b) Ensures that new development contributes to the public domain in Mortlake Point by providing front setbacks that ensure a comfortable street environment for pedestrians in terms of providing solar access, appropriate human scale and a healthy environment for street vegetation;
- c) Strengthens the relationship of new development in Mortlake Point to significant landmarks in the immediate and broader context; and
- d) Provide side and rear setbacks that provide adequate opportunity for ventilation, solar access, view sharing and privacy in residential buildings.

Controls

C23.	The front setback is 7.5 metres on all sites.
C24.	On the frontages to Northcote Street, Edwin Street, McDonald Street and Bertram Street, a minimum frontage of 7.5 metres is required to facilitate vista termination and visual access to significant views to the west.
C25.	Where Non-Residential development is directly adjacent to Residential development, development is set back at least 4.0 metres from the side and rear boundaries.
C26.	All other residential development is to be set back a minimum 3 metres from the side and rear property boundaries.

Foreshore access

Controls

C27.	Foreshore access is to be encouraged and promoted by securing public access to the foreshore areas of open space for improvement of and linkages with local and regional areas of open space.
------	---

C28.	All development on land located along the foreshore in the area to which this DCP applies is to ensure that adequate public access is provided, to a width of eight (8) metres.
C29.	The Council is to consider all opportunities to increase public access to the foreshore through acquisition, dedication or right-of-way.

Streetscape and Public Domain

Objectives

- O7 To create a high quality environment for local residents and workers in Mortlake Point;
- O8 To ensure that new development within Mortlake Point makes a positive contribution to the streetscape and public domain in the area by ensuring a safe, attractive and comfortable environment; and
- O9 Ensure that development includes aspects of landscaping that add to the habitat values of the area.

Controls

C30.	Mid-block connections are to be provided for pedestrians on large sites, in particular those sites directly abutting public foreshore areas. Links should be a minimum of 3 metres in width and where appropriate, be dedicated as public right of way.
C31.	Landscaping is to be utilised by development to encourage improved pedestrian amenity through the provision of shade-giving trees spaced at regular intervals of at least 6 metres.
C32.	Landscaping should incorporate, where possible, native vegetation to improve the habitat potential of the area.
C33.	Pedestrian access is to be clearly legible from the street.

K14 Pelican Point, Pelican Quays and Philips Landing, Concord



Figure K14-1 Aerial photo (source: nearmap.com)

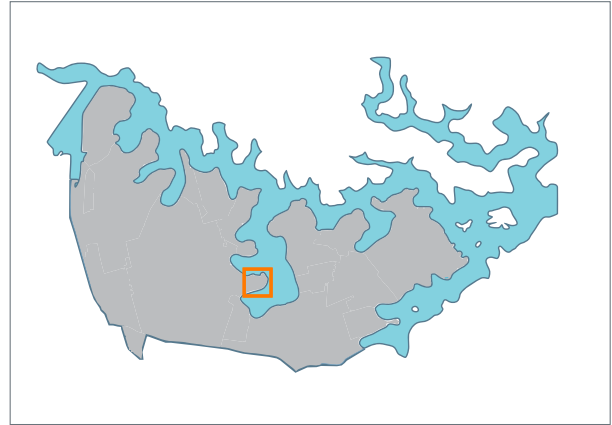


Figure K14-2 Council area map

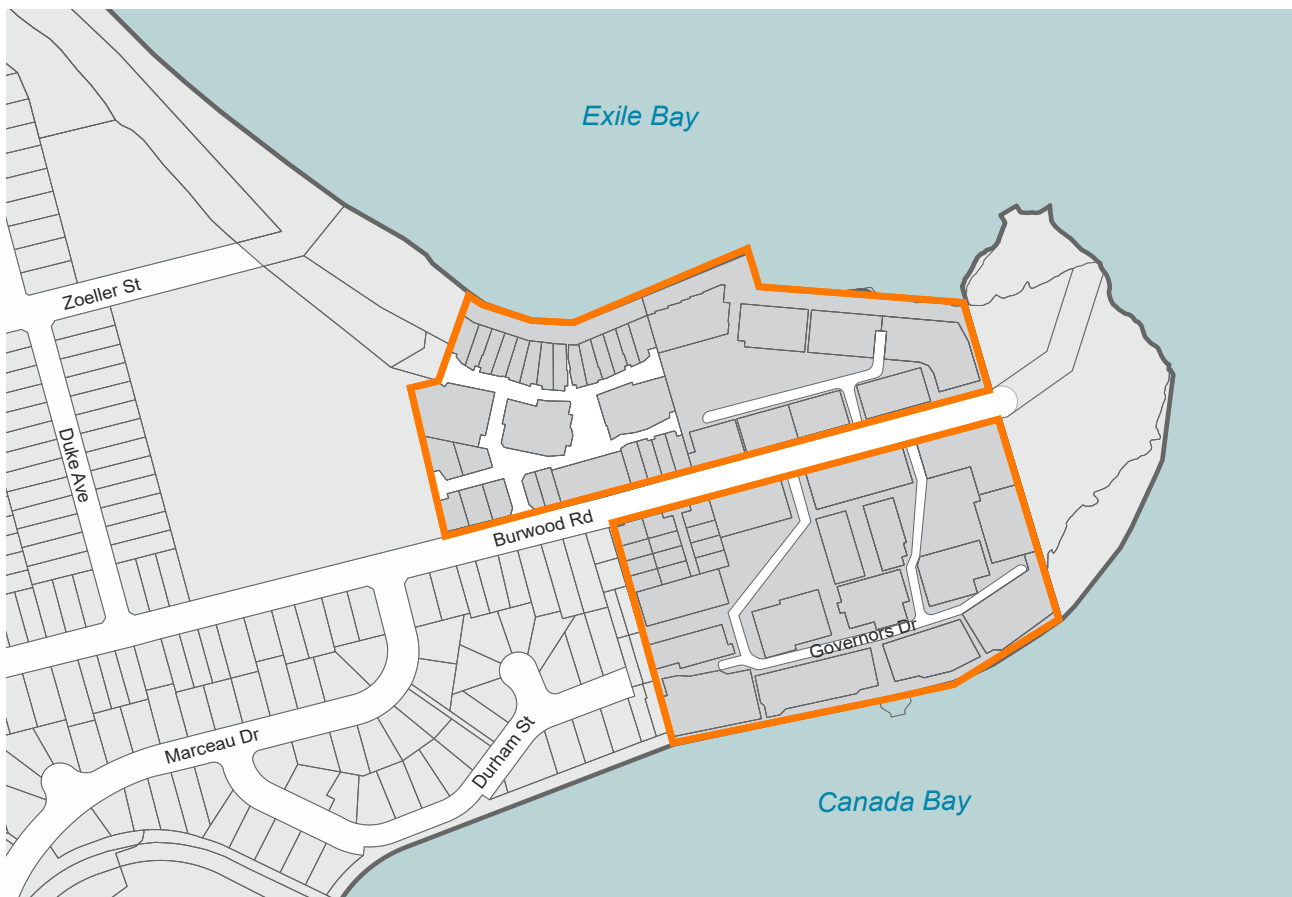


Figure K14-3 Pelican Point, Pelican Quays and Philips Landing, Concord - Location Plan



K14.1 General objectives

- O1. The development of the site shall promote public access to and along the waterfront for residents and the general public; and
- O2. To ensure that the development of the site does not cause detriment to the public enjoyment of the foreshore, by providing standards for development, including height, site cover and density, minimum standards of landscaped areas, and design standards for driveways, and materials and finishes of the buildings, etc.

K14.2 Specific provisions

Development Density

Controls

- | | |
|-----|--|
| C1. | The Council shall not consent to any residential development of the land to which this plan applies if the total dwelling density exceeds forty-five (45) dwellings per gross hectare. |
|-----|--|

Public Foreshore Access

Controls

- | | |
|-----|---|
| C2. | Provision shall be made for public access to the foreshore of the Parramatta River. The requirement in this regard is to be a corridor with a depth of thirteen point five (13.5) metres measured from the relevant property boundary or where that boundary comprises a seawall, battered embankment or the like, 13.5 metres from the top of that wall or embankment and for the full extent of any frontage to the Parramatta River. |
| C3. | The area for public access shall be landscaped and maintained to Council's satisfaction and include a pedestrian pathway with a minimum width of two (2) metres. |

Setbacks and Building Lines

Controls

- | | |
|-----|--|
| C4. | <p>The following Building Lines are imposed:</p> <ul style="list-style-type: none"> a) To the foreshore. 13.5 metres. (Note: For the purpose of this clause, the building line shall be measured from Medium High Water Mark or where existing, the top of any seawall); b) To Burwood Road, generally 9 metres, with an absolute minimum of 7.5 metres at any point; c) To Bayview Park, 9 metres; and d) To any boundary other than as in a), b) or c) 5 metres. |
| C5. | <p>Buildings which exceed two storeys in height shall be setback, on average, as follows:</p> <ul style="list-style-type: none"> • From the foreshore, 20 metres; and • From Burwood Road, 15 metres. |

Height of Buildings

Controls

- | | |
|-----|--|
| C6. | Buildings within 20 metres of the foreshore or within 15 metres of Burwood Road, shall generally not exceed a height of two (2) storeys. |
| C7. | Buildings generally shall not be in excess of three (3) storeys. |
| C8. | Buildings generally shall have a height no greater than fifteen (15) metres where the height is measured from ground level to the highest point of the roof at any place. |
| C9. | No external wall of any building shall have a vertical rise of more than two (2) storeys without some architectural feature which interrupts the vertical plane of that wall, to Council's satisfaction. |

Site cover

Controls

- | | |
|------|--|
| C10. | The total site cover of all buildings within the development shall be equal to or less than 35% of the total site area for buildings of two or more storeys. |
|------|--|

Driveways and Paved Areas

Controls

- | | |
|------|---|
| C11. | Driveways and paved areas should be of brick or cobblestone pavers or the like, selected to complement the materials and finishes and landscaping of the development. |
|------|---|

Materials and Finished of Main Buildings

Controls

- | | |
|------|---|
| C12. | The buildings shall be predominantly masonry construction with tiled roofs. External materials and finishes and the architectural style and features such as balconies, gables, etc. shall reflect the predominant style and character of existing residential development within the City of Canada Bay Council, particularly the 'California Bungalow' Federation and related influences. |
|------|---|

General

Controls

- | | |
|------|--|
| C13. | The sandstone kerbing to Burwood Road is to be maintained. |
|------|--|

K15 Rhodes Corporate Park



Figure K15-1 Aerial photo (source: nearmap.com)

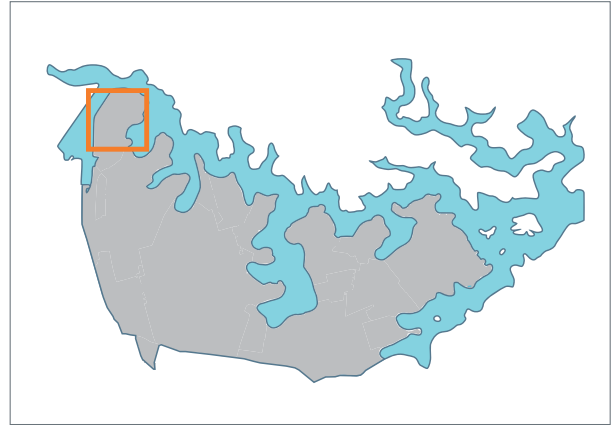


Figure K15-2 Council area map

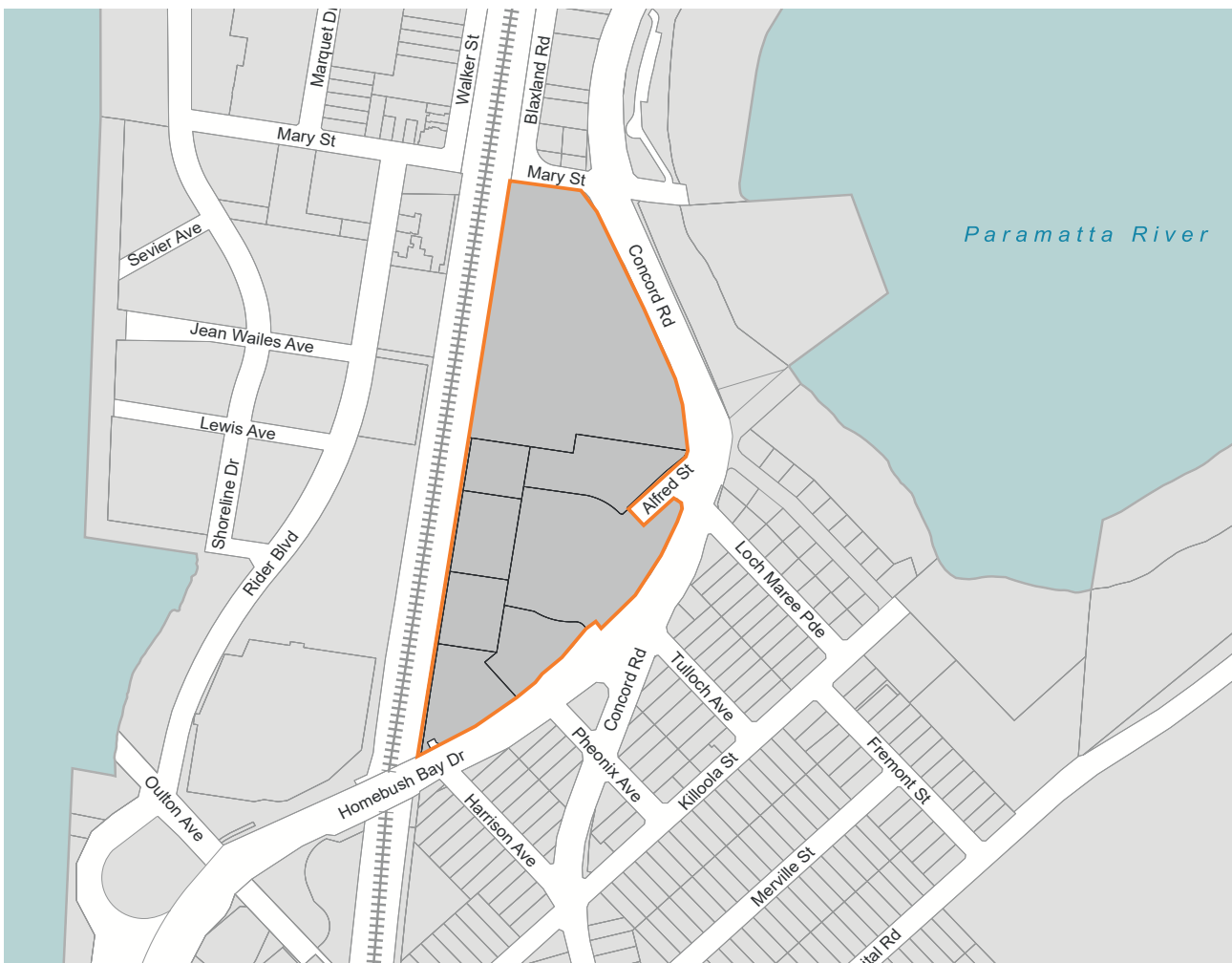


Figure K15-3 Rhodes Corporate Park - Location Plan



K15.1 General objectives

- O1 To encourage a high standard of modern business park development;
- O2 To ensure new development complements the existing "Digital" development;
- O3 To provide a range of office and light industrial uses;
- O4 To encourage employment opportunities;
- O5 To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area;
- O6 To encourage the erection of buildings suited to development requiring large floor areas, and to discourage small scale uses unless they are of an ancillary or service nature;
- O7 To provide for site planning and layout which includes landscaped set backs to major roads and residential areas and modern building forms;
- O8 To enable the grouping of activities and, where practicable, the sharing of facilities;
- O9 In the case of the land zoned B7 Business Park bounded by Concord Road, Mary Street, Homebush Bay Drive and the Main Northern Railway, Rhodes, to ensure that any new development is complementary in scale, siting, form, materials, landscaping and height with the buildings on the eastern side of the Main Northern Railway; and
- O10 To facilitate public access throughout the zone.

K15.2 Specific provisions

Building Setbacks

Controls	
C1.	Building set-backs shall be provided to present a "buildings in parkland" image consistent with the "business park" nature of the zoning, particularly in relation to Concord Road and Alfred Street.
C2.	A minimum set-back of 15m and an average set-back of 20m to Alfred Street shall be provided. The two standards are intended to provide for stepped or articulated building elevations.
C3.	Buildings should be set-back from Concord Road to achieve a compatible alignment to the Digital building.
C4.	The remnant landscaping that was retained within the Concord Road frontage shall be retained.
C5.	Within the setback to the Main North Rail Line the public access/cycleway required by the original consent to Digital linking Mary Street to Alfred Street shall be identified and timing of construction identified.

Building Height

Controls	
C6.	Building heights should generally be consistent with the existing Digital building, and should be related to building siting intended to avoid overshadowing of residential property in Alfred Street.
C7.	Buildings should not exceed a height of 6 storeys above finished ground level and should not exceed the relative levels that are established by the roof heights of the existing Digital buildings.
C8.	The Council may require parts of a building to be of a lesser height so as to avoid overshadowing on residential land.
C9.	<p>The Council may approve where it is satisfied that:</p> <ul style="list-style-type: none"> Any such part of a building is substantially separated from residential land; and The variation in height will contribute to a better form and arrangement of buildings on the site.
C10.	Building should be sited, restricted in height or include stepped facades in order to limit overshadowing of residential properties in Alfred Street. In this regard properties should not be overshadowed between the hours of 9am and 3pm on June 21st.
C11.	Council may exclude plant and lift motor rooms and any screening structure, parapet walls and roof top amenities from any consideration of building height, other than shadow effects.

Building Materials

Controls	
C12.	<p>Building materials and colours and glazing should be selected to achieve compatibility with existing development, without necessarily seeking uniformity.</p> <p>The design intent should be specified in the development application.</p>

Landscaping

Controls	
C13.	Site landscaping should be generally designed to reinforce the intended "buildings in park" image.
C14.	A unified landscaping theme should be applied to the frontages to Concord Road and Alfred Street. It will be necessary to justify any intended interruption to the established theme, either by way of fences, walls and the like or by plant materials.
C15.	Development on the southern part of the site should extend and complement the existing landscaped courtyard in the Digital complex.

Subdivision

Controls	
C16.	Proposals for subdivision will need to demonstrate that subdivision will not prejudice the reasonable development of other lands in the zone, or hinder the attainment of objectives to achieve an integrated and compatible development of the overall site.

Types of Use

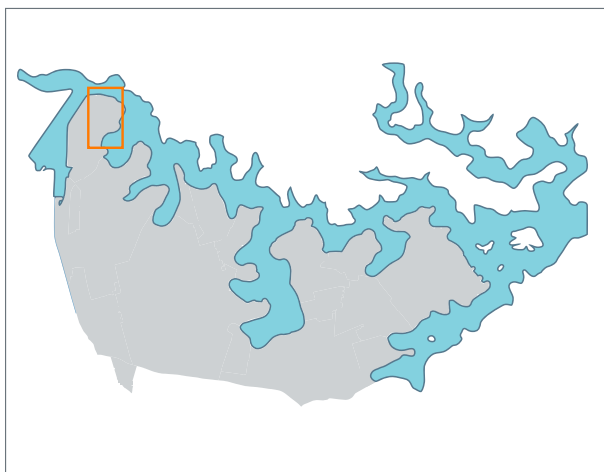
Controls	
C17.	<p>The types of use Council seeks to encourage on the site should have the following characteristics:</p> <ul style="list-style-type: none"> • A requirement for large floor areas; • A requirement for a substantial corporate presence in a modern campus style environment; • Quiet and clean operations; • No requirement for significant heavy vehicle access; and • No requirement for extensive public visits or “walk-in” trade.
C18.	<p>Small scale uses are discouraged unless they are ancillary to or provide services to the overall development.</p>
C19.	<p>In the case of a development application which involves a high proportion of office type space intended to be used for office type purposes, the Council shall take into consideration whether the proposed use would be more appropriately located in a business zone in the City of Canada Bay.</p>

Relationship with Residential Zones

Controls	
C20.	<p>As set out above, the Council will consider development applications in terms of the potential effect on residential zones, including visual impact, overshadowing, overlooking, noise, lights and traffic.</p>
C21.	<p>Hours of operation will generally be limited to between:</p> <ul style="list-style-type: none"> • 7am and 6pm Monday to Friday; and • 9am and 3pm Saturday. <p>Except for:</p> <ul style="list-style-type: none"> • Routine after hours activity (cleaning, etc); • Normal incidental out-of-hours activity, where premises are not open to the public or for deliveries, etc; • Any incidental seasonal requirement (e.g. stocktaking); and • Any requirement for extended hours for operating computer equipment, international communications or similar.
C22.	<p>Where it is intended that a use operates outside the specified hours, justification should be included in the development application. This will need to demonstrate that operation out-of-hours will have no discernible impact on any adjoining residential land.</p>

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K16 Rhodes East



K16.1 Introduction

This Development Control Plan (DCP) establishes a framework to guide development in the Rhodes East Priority Precinct (the Precinct).

Name of this DCP

This DCP is called the Rhodes East Development Control Plan. The DCP has been prepared pursuant to the provisions of the Environmental Planning and Assessment Act 1979 (the Act).

Land to which this DCP applies

This DCP applies to development indicated within the boundary of the Rhodes East Precinct as shown in **Figure K16-1**.

Purpose of this DCP

The purpose of this DCP is to guide the future development of the Precinct by:

- identifying the vision, development principles, key elements and indicative structure for the Precinct;
- communicating the planning, design and environmental objectives and controls against which the consent authority will assess development applications;
- ensuring the orderly, efficient and environmentally sensitive development of the Precinct; and
- promoting a high quality urban design outcome.

Relationship to other plans

This DCP adopts the following provisions of the City of Canada Bay Development Control Plan 2017:

- Part B - Notification and Advertising
- Part C - General Controls with the exception of C3.1 and C3.2
- Part D - Heritage
- Part E - Residential Development E2.5, E2.6 and E4.2
- Part H - Signage and Advertising
- Part I - Child Care Centres.

A provision of this DCP will have no effect to the extent that:

- it is the same or substantially the same as a provision in the Canada Bay Local Environmental Plan 2013 (CBLEP 2013) or another environmental planning instrument (EPI) applying to the same land; or
- it is inconsistent with a provision of the CBLEP 2013 or another EPI applying to the same land, or its application prevents compliance with a provision of the CBLEP 2013 or another EPI applying to the same land.

In either case the provision in the CBLEP 2013 or other EPI will prevail.

This DCP should be read in conjunction with:

- The Canada Bay Local Environmental Plan 2013
- The City of Canada Bay Engineering Specifications
- The City of Canada Bay Contaminated Land Policy
- The City of Canada Development Contribution Plans
- The City of Canada Bay Planning Agreements Policy

The onus is on any prospective applicant to confirm with Council if there are any additional or updated documents.

Apartment Design Guide compliance

The State Environmental Planning Policy No 65 - Design Quality and Residential Apartment Development applies to residential flat buildings, shop top housing and mixed use development with a residential accommodation component in the Precinct.



Consent authority

Unless otherwise authorised by the Act, City of Canada Bay Council is the consent authority for all development in the Precinct to which this DCP applies.

Application of this DCP

This Development Control Plan (DCP) is to supplement the Canada Bay Local Environmental Plan (LEP) 2013 and provide more detailed provisions to guide development.

This DCP has been made in accordance with the Environmental Planning & Assessment Act 1979 (the Act) and must be read in conjunction with the provisions of Canada Bay LEP 2013.

Compliance with the provisions of this DCP does not necessarily guarantee that consent to a Development Application (DA) will be granted. Each DA will be assessed having regard to the LEP, this DCP, other matters listed in Section 4.15 of the Act, and any other policies adopted by the consent authority.

If there are circumstances when it is not relevant to comply with the controls in this DCP, applicants must provide a written submission clearly demonstrating compliance with the objectives of this DCP, and detailing the reasons the control/s should be varied. The proposed variation must result in a better outcome and meet all objectives of this DCP. The submission must also clearly demonstrate the variation sought will not adversely impact on the local amenity.

Role of the draft Precinct Plan

The Rhodes East draft Precinct Plan at **Figure K16-3 on page K-122** shows how the overall Precinct may develop over time. It is intended as a guide to demonstrate how the vision, overarching objectives, development principles and key elements for the Precinct may be achieved.

Consistency with objectives and controls

Clauses in this DCP contain objectives and controls relating to various aspects of development. The objectives enable Council and applicants to consider whether a particular proposal will achieve the development outcomes established for the Precinct. The controls, if met, mean that development would be consistent with the objectives.



Above: Artist impressions of the desired future look and feel of Rhodes East Precinct

K16.2 Desired Future Character

Vision for Rhodes East



Rhodes East Vision Statement

"Rhodes East will be a model for sustainable, low-rise high density development, which builds upon the existing character and heritage of the area. It will provide more high quality housing choice, close to public transport and catering to a variety of household types.

It will be supported by connections to the water, and local streets will be redesigned to support walking, cycling and use of public transport. Improved amenity will encourage residents and visitors to spend time and continue to take pride in the area."

Overarching Objectives

Planning

Ensure Rhodes East can meet the challenges of the future by building sustainability and longevity into planning, design and commercial capability from the start.

Active transport

Design integrated transport services and experiences that prioritise walking, cycling and the use of public transport.

Affordable housing

Provide affordable housing options for key workers in the area, for example people working in occupations such as teaching, child care, policing or nursing.

Density with a human scale

Deliver buildings with podiums and a range of housing typologies that promote activity on the lower levels of buildings. The range of built forms will result in more open space, more sunlight into buildings, and a closer connection to the ground.

Waterfront access

Provide enhanced public access to the Parramatta River foreshore, including the provision of housing and public open space with views to the water.

Public spaces

Provide a range of high quality, pedestrian prioritised public spaces that are safe for gathering and socialising.



Design Principles

A place led approach

The redevelopment of Rhodes East has been framed around a place led approach that builds on the existing urban fabric and character to create a pedestrian friendly human scaled outcome.

Traditional city-building has created the world's most successful urban places which typically consist of a broad range of lots, blocks and buildings assembled to create livable, mixed use walkable communities. Development was incremental, with a diversity of lot sizes and building types, ranging from the very small to the very large, and also a strong public realm.

Throughout the consultation process, the local community has consistently affirmed a desire to celebrate the inherent character of Rhodes East. As a result, the existing urban structure has informed a fine grain human scale urban renewal that will provide a genuine point of difference and create a unified community that is greater than the sum of its parts.



A peninsula of choice

Rhodes East is an established urban area with an existing community. It contains a number of different places, each with its own unique identity and character, contributing to the overall experience and attraction of the Peninsula. The commitment to delivering 5% Affordable Housing combined with the definition of a housing mix within the LEP, will ensure that Rhodes East provides choice and variety to the Peninsula.

Urbanity through density

Successful urban renewal projects increase intersection density or the number of intersections in a given area. Intersection density corresponds closely to block size, so the greater the intersection density, the smaller the block. Small blocks make neighbourhoods more walkable and, in conjunction with smaller redevelopment sites, creates the pre-conditions to deliver authentic fine grain, human scale development in accordance with the Rhodes East Vision for Cavell Avenue Precinct.



Opportunities for a modal shift

A key focus is to create an urban structure that maximises opportunities for walking, cycling and public transport patronage. Improving connectivity through additional street and pedestrian connections is critical to achieving the modal shift required to support the new Rhodes East community.

An integrated high quality urban design outcome, not just density, is required to engage and stimulate the pedestrian, particularly along key desire lines, improving the pedestrian experience.

Active transport infrastructure, and reduced or low parking rates within close proximity to public transport, is part of an integrated urbanity model. Modal shift is also supported by creating the environment to support active transport including 'Context Sensitive Streets', a well connected access network, creating more compact blocks, and increasing intersection densities.

A fine-grain pedestrian friendly environment

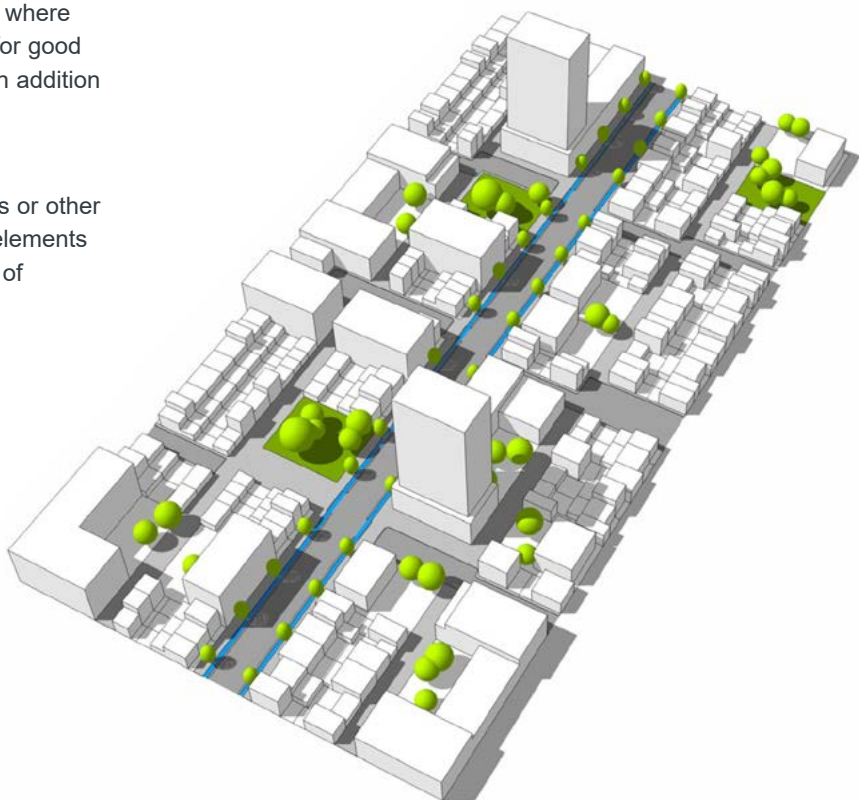
A fine-grain pedestrian friendly environment is supported by the 'high-low' built form model, where height is distributed in a manner that allows for good solar access, orientation and view corridors in addition to active facades and ground floor controls.

Desired densities can be achieved without overshadowing community open space, parks or other buildings by strategically locating the tallest elements on the south west of blocks with the balance of development being low to mid rise.

A feasible and sustainable outcome

A liveable, walkable and sustainable environment will encourage active transit and reduce reliance on private vehicle trips. This not only reduces local traffic volumes and eases congestion, but provides healthier lifestyles and activates the public realm.

Site specific floor space ratio bonuses is available to incentivise developers to deliver new streets ensuring the additional population can be sustained as the development progresses. Similarly, floor space ratio bonus is available for delivery upon higher sustainability targets set out in the LEP.



Character Areas

The following Character Areas, shown in **Figure K16-2**, have been identified for Rhodes East based upon their function, use, street pattern and built form attributes:

- *Station Gateway East Character Area* - a key transport hub located between Rhodes Station and Concord Road, with a character influenced by adjoining built form and functions.
- *Leeds Street Character Area* - a predominately light industrial area with large building structures, which is heavily transport dominated (vehicles and river traffic).
- *Cavell Avenue Character Area* - centrally located area, situated on the most elevated part of the Investigation Area, with a mix of residential and community uses.

Character Statements

Station Gateway East

This character area will proudly announce arrival at Rhodes East from the south and guide people to the Station and Mcllwaine Park. The built form will reflect its location adjacent to the Station with increased density and encourage the use of public transport as opposed to the private vehicle.

The built form will provide an active, mixed used podium and street level frontage with formal landscaping that complements the character of Mcllwaine Park.

There will be street level activation and a safe, pedestrian friendly environment will be prioritised to promote connectivity between the Station, across Concord Road, into Mcllwaine Park with a link to Parramatta River.

Leeds Street Character Area

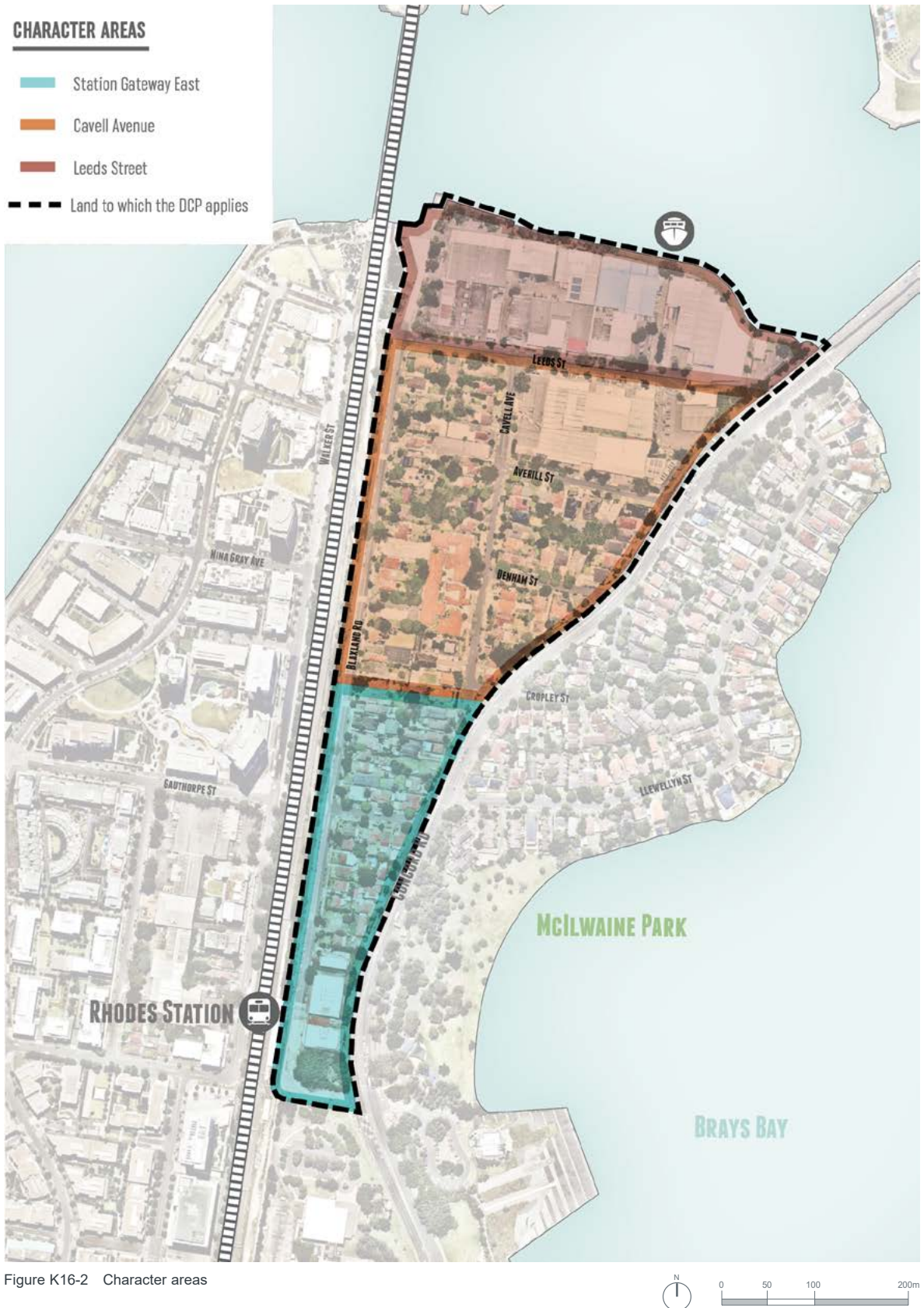
This character area will provide a multi-modal, water-based destination. The Leeds Street Character Area will introduce meaningful visual and physical connections to the water in addition to a vibrant mix of uses. The lifestyle and activities promoted within this character area will prioritise pedestrians and facilitate human interaction.

Buildings will be flexible and multi-purpose and, whilst they may have larger floor plates, an active street frontage to public areas will be created. The built form will respond to the northern aspect of the character area through the sensitive location of height combined with block permeability and building separation ensuring pedestrian level views of Parramatta River from the centre of Rhodes East.

Cavell Avenue Character Area

The Cavell Avenue Character Area will largely consist of residential and community uses through a 'density done well' approach that will deliver a diversity of heights and human scale built form focusing on a balance between increased housing, public/ private amenity and an active and safe pedestrian environment.

Future development will facilitate enhanced connectivity, between the east and west of the Peninsula and to public transport and will also create localised 'place' features along key desire lines and view axes.



Rhodes East Precinct Plan

Development is to be generally consistent with the key elements in **Table K16-1** and the Rhodes East Precinct Plan at **Figure K16-3**.

Where variations are proposed, development is to demonstrate how the vision, development principles, key elements for the Precinct and relevant specific objectives are to be achieved.

Table K16-1 Key elements of Rhodes East Precinct

Land use
<p>Residential</p> <ul style="list-style-type: none"> • 3537 new dwellings (8210 population) by 2036 comprising a mix of dwelling types • 5% affordable housing across the Precinct <p>Retail / commercial</p> <ul style="list-style-type: none"> • 400m² GFA of convenience retail • 4600 m² GFA of destination retail • 11,100m² GFA of commercial space <p>Education and community</p> <ul style="list-style-type: none"> • A new primary school for 1000 students • 300m² of publicly accessible plazas at key corners along pedestrian routes, each plaza co-located with non-residential uses on the ground floor of developments. • 1750 m² of adaptable community uses space
Movement network
<ul style="list-style-type: none"> • Pedestrian and cycle activity and public transport interchange functions are prioritised • New streets will create a more permeable movement network and increase connectivity • New pedestrian station bridge will increase connectivity and encourage active transport • Interchange upgrades, bus and rail upgrades
Open space and public domain
<ul style="list-style-type: none"> • New areas of public open space including: • Minimum 7500 m² of a new foreshore park • Continuous 15m-wide foreshore promenade providing connectivity to the precinct and future ferry wharf • Minimum 550 m² Bridge Plaza providing connection between the train station and McIlwaine Park • New parks plazas improved foreshore access and river activation
Built form
<ul style="list-style-type: none"> • The built form will be characterised by a mix of residential development supported by commercial, educational and community uses • Building heights range from 1 to 37 storeys incorporating terraces to apartment buildings in addition to a number of taller landmark buildings • Integration of existing heritage items within the development



Figure K16-3 Precinct Plan

K16.3 Key development parameters

The key development parameters for the Rhodes East Precinct identify metric limits to the size of (amalgamated) lots, their maximum and minimum frontage length, building heights and floor space ratios. An overview of these key controls is provided in **Table K16-2 on page K-127**.

Maximum lot size

The maximum lot size control applies to The Cavell Avenue Character Area. This control seeks to limit development that incorporate large floorplates and to protect the values and desired future character of the area.

Objectives

- O1 To deliver fine grain, activated and visually interesting developments and streetscapes on a variety of lot sizes.
- O2 To avoid large scale development that dominates the character of an area.
- O3 To facilitate a range of development sizes resulting in built form diversity.

Controls

- | | |
|-----|---|
| C1. | All new development is to comply with maximum lot size as per Figure K16-4 and Table K16-2 . Also refer to relevant Local Environmental Plan 2013 clauses and maps. |
|-----|---|

Maximum lot frontage length

Maximum lot frontage lengths apply to the Cavell Avenue Character Area.

Similar to the maximum lot size control, the intention is to limit large scale amalgamation and development, particularly in areas that have an existing fine grain lot pattern and narrow frontage widths.

Objectives

- O4 To integrate new development into existing fine grain streetscapes and avoid long lengths of continuous, homogeneous development.
- O5 To facilitate a fine-grain built form outcome which creates architectural variety and visual interest along streetscapes.

Controls

- | | |
|-----|--|
| C2. | All new development is to comply with maximum and minimum frontage length as per Figure K16-4 and Table K16-2 . Also refer to relevant Local Environmental Plan 2013 clauses and maps. |
|-----|--|

MAXIMUM LOT AREA & FRONTAGE

 Cavell Avenue -Maximum Lot Area (4,000sqm)

 Cavell Avenue - Maximum Lot Frontage (60m)

 Public Open Space

 Ferry Wharf (proposed)

 Land to which the DCP applies



Figure K16-4 Maximum lot size and frontage length plan



0 50 100 200m

Maximum building height

Building form and scale contribute to the physical definition of the street network and the hierarchy of public spaces. A range of building heights across Rhodes East is encouraged to deliver variety, diversity and different architectural styles whilst ensuring the creation of low-rise, high density development.

Taller buildings are to be located close to key community services and facilities, near the train station before stepping down towards Concord Road. Please refer to *Section K16.6 Built form strategy* for further information.

Objectives

- O6 To facilitate appropriate growth and housing delivery across the Precinct.
- O7 To locate higher scale residential uses close to Rhodes Station to optimise access to the station facilities and around the mixed use area at Leeds Street.
- O8 To step down heights and density towards the Parramatta River within a human scale, fine grain development pattern.

Controls

C3.	All new development is to comply with maximum building height as per Figure K16-6 and Table K16-2 .
C4.	In selected locations, an increase in permissible height may be possible, linked to the provision and delivery of new streets. Refer to <i>Section K16.3 Bonus Height and FSR</i> of this DCP. Also refer to relevant Local Environmental Plan 2013 clauses and maps.
C5.	Maximum building height are inclusive of floor space bonus achievable through application of Basix Affected Building clause in the Canada Bay LEP.

Maximum floor space ratio

The floor space ratio standards, in tandem with the maximum building heights, allow for taller built form elements to be located within each block, while the remainder of the development would be at lower scale. This minimises overshadowing impacts to adjoining development whilst achieving a high quality, pedestrian friendly public realm and encouraging the provision of a range of building typologies and housing choice.

Objectives

- O9 To minimise the visual and overshadowing impact of new development on lower scale neighbouring properties and the public domain, by limiting the bulk and scale of new development.
- O10 To protect existing and future open spaces from overshadowing impacts and ensure adequate solar amenity for these open spaces.

Controls

C6.	All new development is to comply with maximum floor space ratio as per Table K16-2 .
C7.	In selected locations, an increase in permissible FSR may be possible linked to the provision and delivery of new streets and delivery of Basix targets. Refer to <i>Section K16.3 Additional Height and FSR</i> of this DCP. Also refer to relevant Local Environmental Plan 2013 clauses and maps.

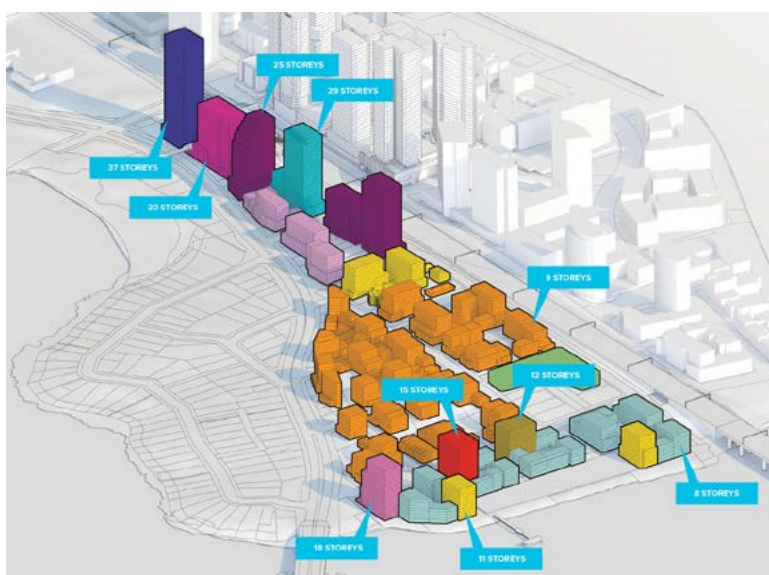


Figure K16-5 Height distribution

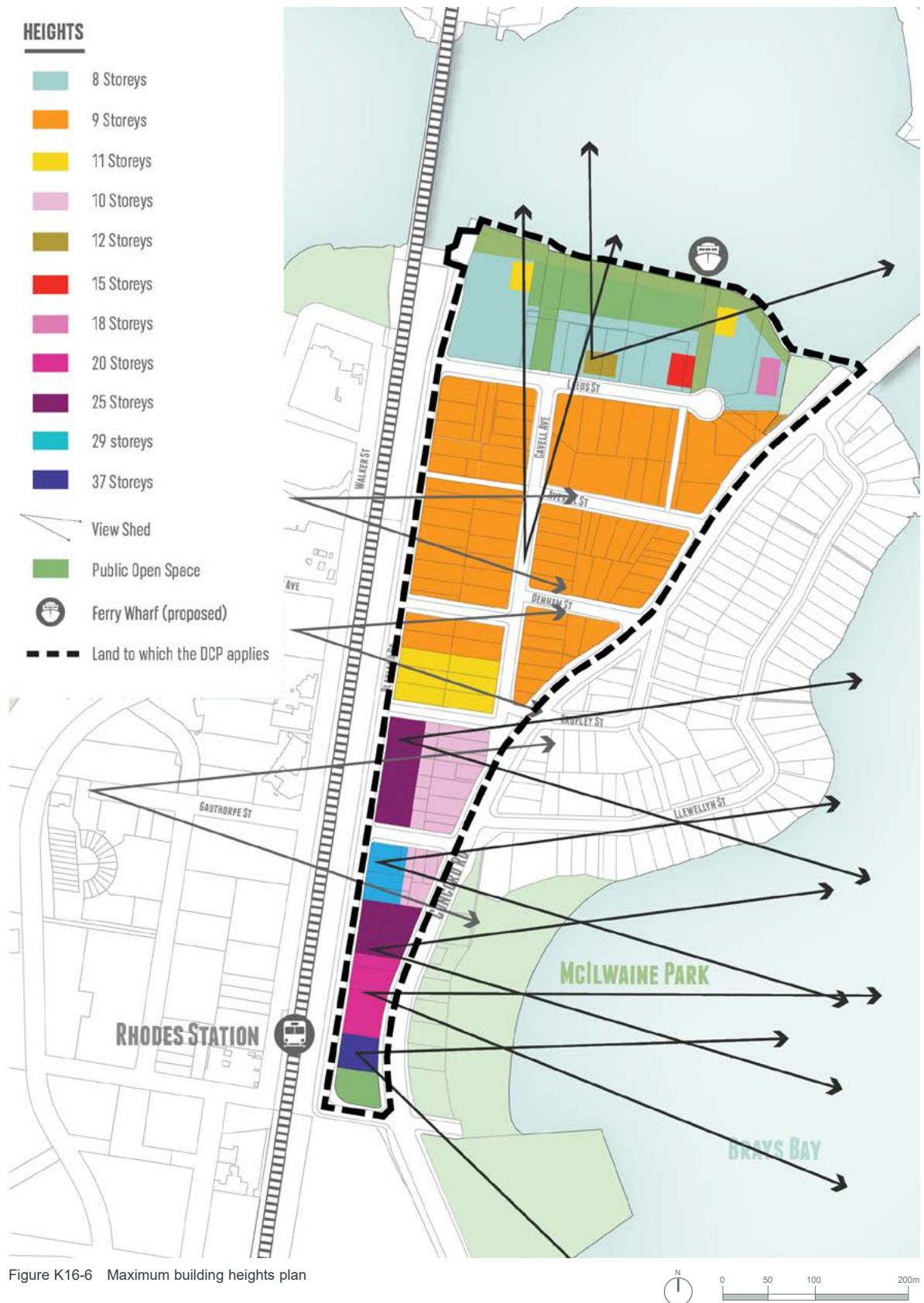


Table K16-2 Overview of key development parameters

Cavell Avenue	
Max. lot size	4,000m ²
Max. lot frontage length	60m
Max. building height	Up to 36m (11 Storeys) including Basix bonus
Max. floor space ratio	Refer to LEP

Transfer of Floorspace and FSR

The location of two new streets are identified within the Precinct Plan for Rhodes East. These new streets are fundamental to the delivery of the intersection and frontage densities necessary to support the public life envisaged and encourage a modal shift.

An increase to building height and FSR is possible for selected locations identified on **Figure K16-8** to facilitate the provision of the new streets.

Objectives

O11 To support/ deliver new streets to improve connectivity within the Precinct.

Controls

- | | |
|-----|--|
| C8. | Additional heights and FSR apply to selected locations as per Figure K16-8 and are linked to the delivery of new streets as outlined above. |
| C9. | Across the precinct, an increase in permissible FSR is possible linked to delivery of BASIX targets. |

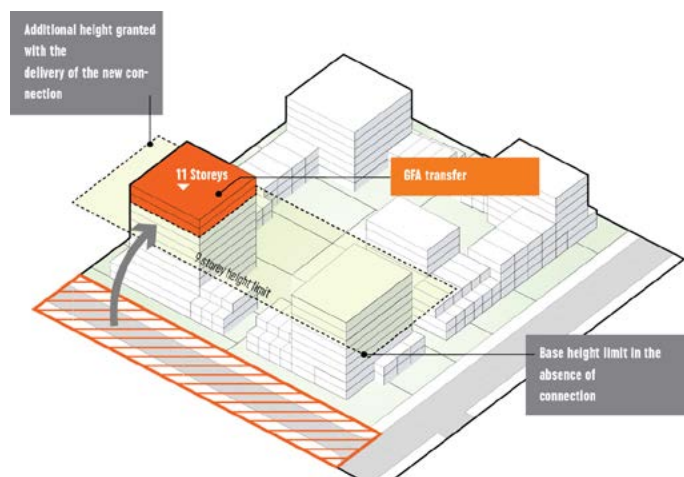


Figure K16-7 Explanatory diagram of bonus height and FSR



K16.4 Public Domain

Street network and access

Context sensitive streets

Context Sensitive Street design aims to balance the often competing objectives of traffic capacity with place amenity, or place-led character, considering both character and capacity. Streets that connect key destinations will support and prioritize pedestrians and cyclist through cycleways, wider pedestrian paths and shade trees.

The proposed street types shown in **Figure K16-9 to Figure K16-14** reflect this intent, and support the land use, density and street function of the different Character Areas.

A number of new connections are proposed to improve connectivity and promote pedestrian activity across the Precinct. Their addition encourages a finer grain of development as smaller, more compact blocks are created to provide a human scaled environment that has the ability to accommodate a range of housing types and sizes.

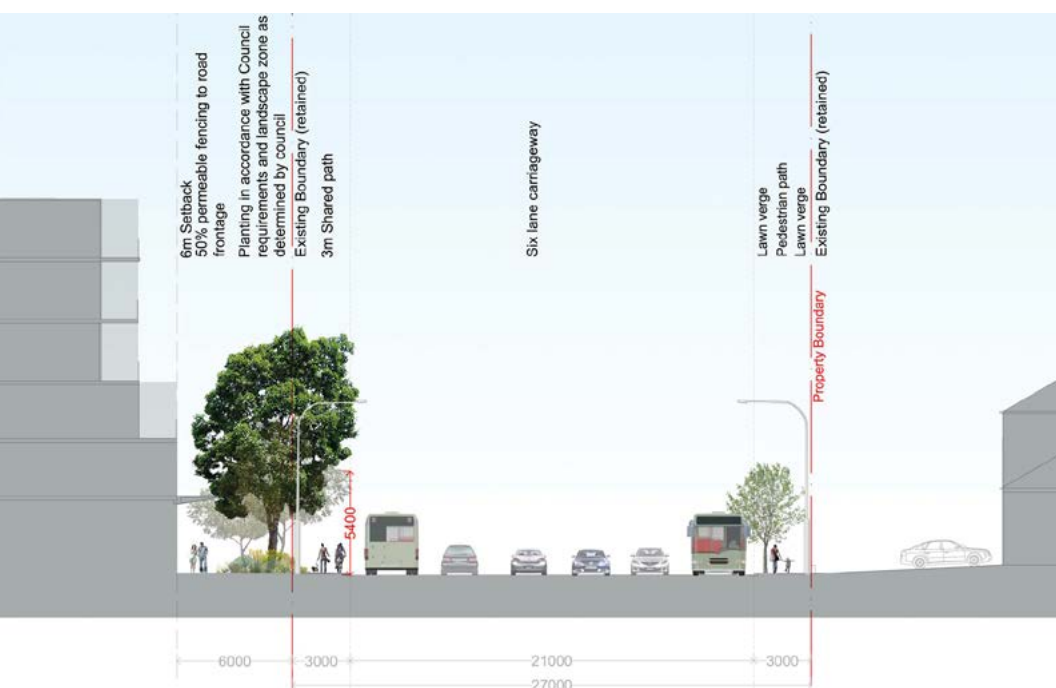
The two new streets shown in **Figure K16-10** provide east-west connections between Cavell Avenue and Blaxland Road. It is proposed that these streets will be delivered via transfer of floorspace as outlined in *Section K16.3 (Transfer of Floorspace and FSR subheading)* of this DCP.

Objectives

- O1 To create a public domain that supports and encourages pedestrian movement through activated streets and human-scale development fronting onto a defined hierarchy of streets.
- O2 To support the concept of a fine grain, vibrant streetscape experience whilst ensuring that a viable built form siting and access solution can be achieved.
- O3 To provide a clear street hierarchy and a more permeable urban structure.
- O4 To provide a safe space for walking and cycling and offer universal access, providing greater independence for children and families as well as the elderly and disabled.
- O5 To strengthen the landscape character and quality of the Precinct through the retention and enhancement of existing and planting of additional street trees and landscaping.

Controls

- | | |
|-----|---|
| C1. | The existing street pattern is to be retained and new streets are to be provided as per Figure K16-10 |
| C2. | Street design including the upgrade of existing and the delivery of new streets are as per Figure K16-9 and Figure K16-11 to Figure K16-14 . For further guidance refer to the <i>Canada Bay Rhodes East Public Domain Plan</i> . |



Greenway Boulevard (Corridor Road)

An arterial road with generous setbacks to allow for mature landscaping and wide footpaths creating a buffer between Concord Road and the adjacent development.

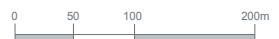
Figure K16-9 Street section - Greenway Corridor

STREET NETWORK

-  Greenway Corridor
-  Commuter Street
-  Destination Street
-  Community Spine
-  Local Street
-  Proposed New Road/Through-site Link
-  Pedestrian Link
-  Foreshore Pedestrian Path
-  Pedestrian Bridge
-  Land Bridge Site
-  Public Open Space
-  Ferry Wharf (proposed)
-  Land to which the DCP applies



Figure K16-10 Street network plan



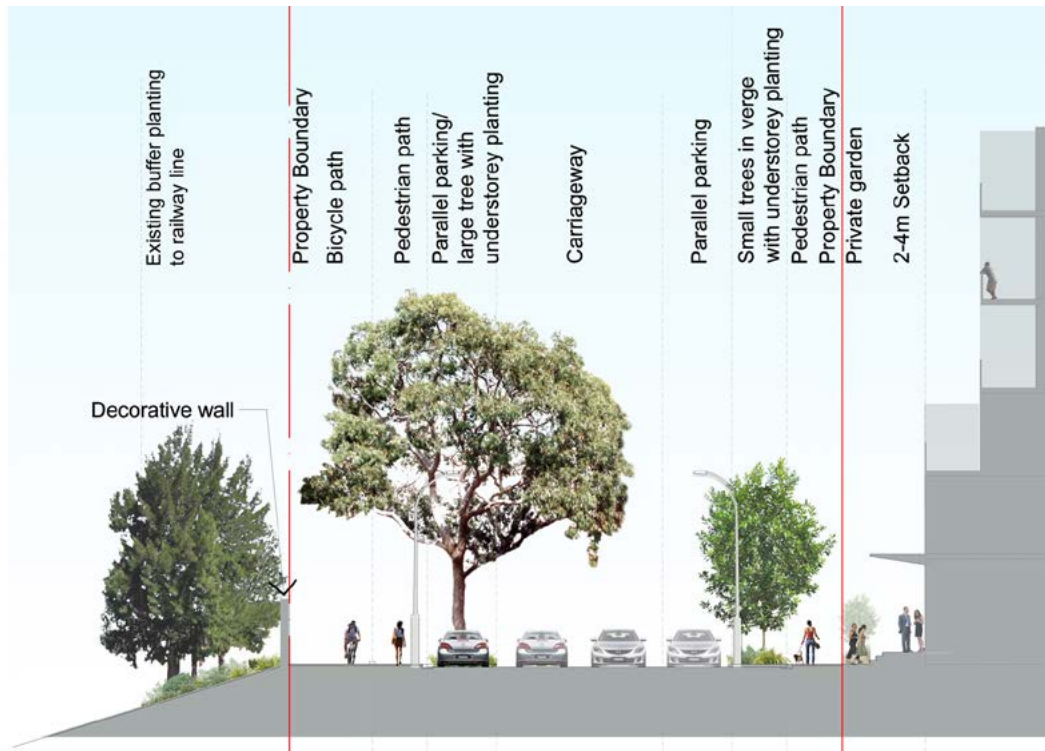


Figure K16-11 Street section - Commuter Street

Commuter Street (Blaxland Road)

An important link between the Leeds Street Foreshore Park / Ferry Wharf and the station, with a dedicated cycleway connecting commuters and residents to these key destinations. New tree planting between parking bays will provide screening of the rail infrastructure and shade for pedestrians.

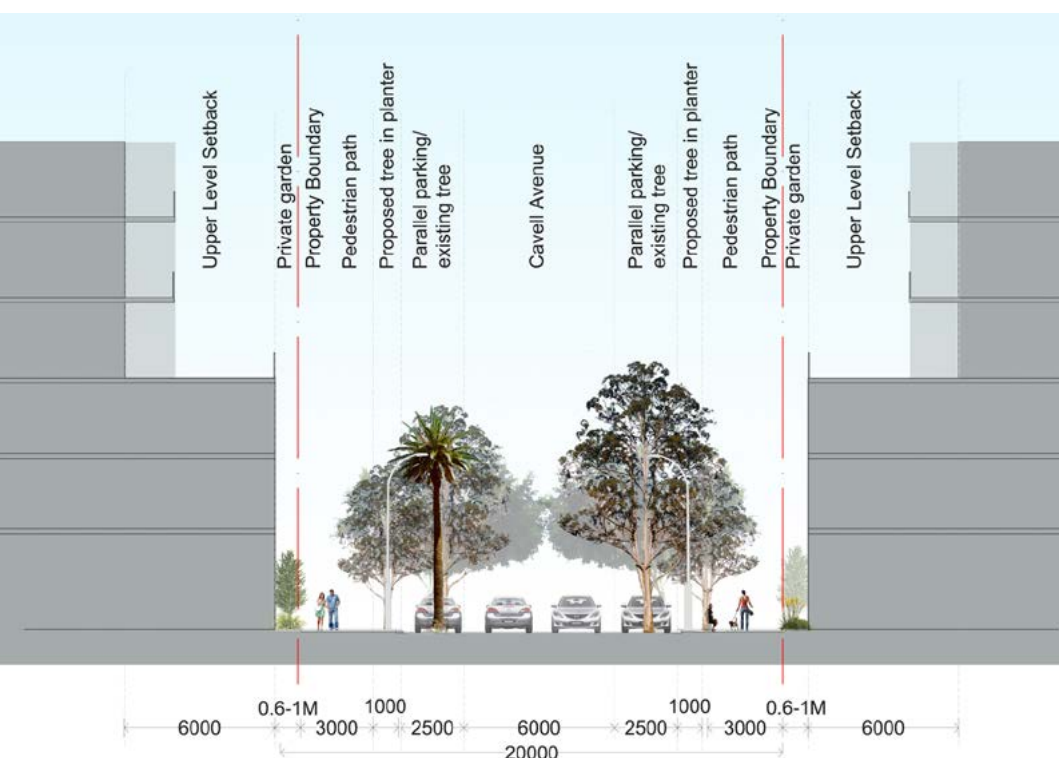


Figure K16-12 Street section - Community Spine

Community Spine (Cavell Avenue)

An important connection between Leeds Street Character Area and Station Gateway East, providing access to key existing community uses such as the Coptic Church, Community Hostel and Community Centre.

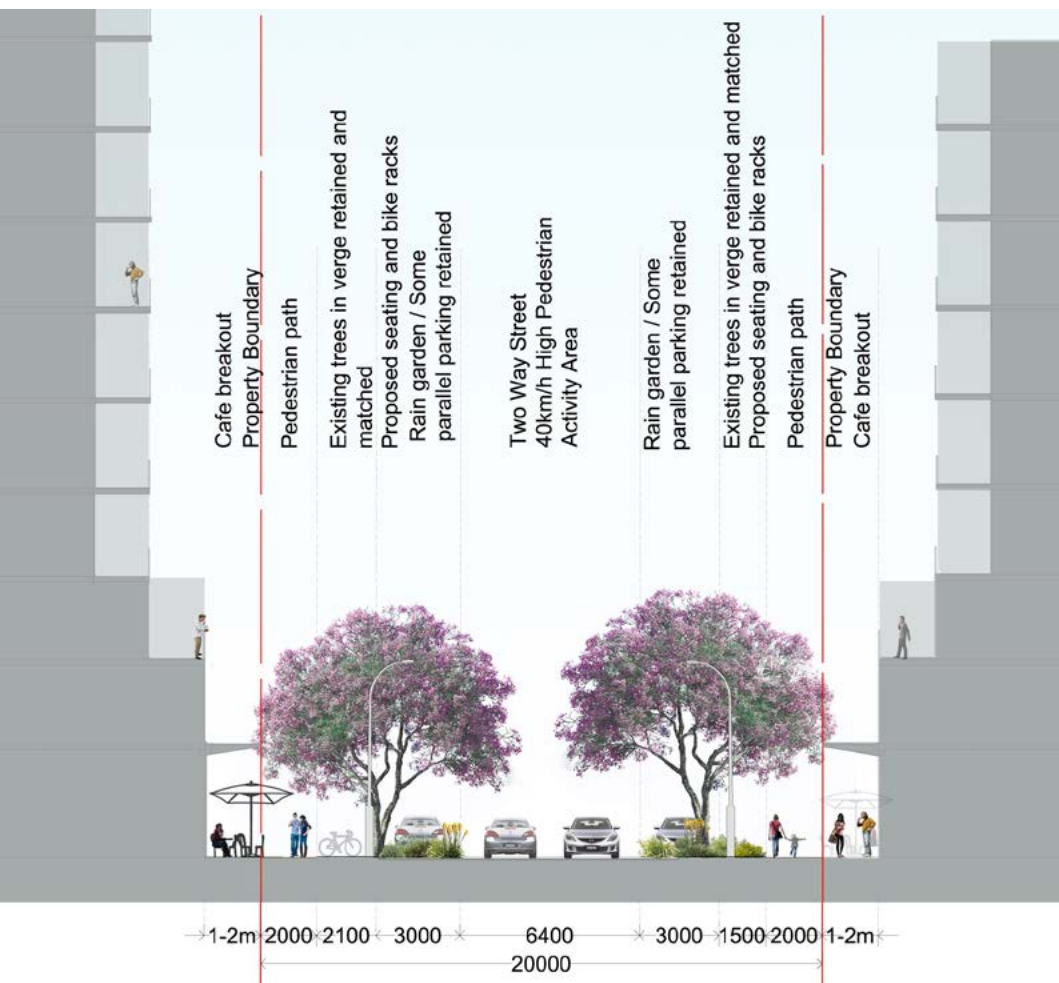
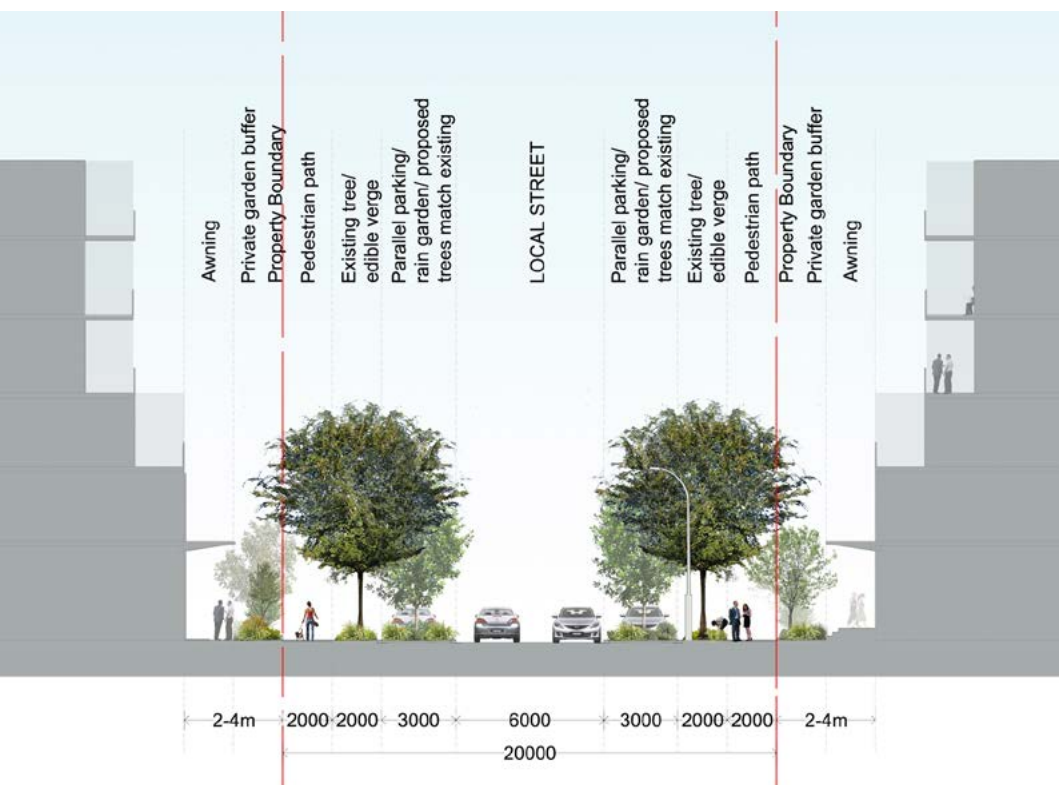


Figure K16-13 Street section - Destination Street

Destination Street (Leeds Street)

A shared street where pedestrians have priority, reflective of the intent to create an activated mixed use destination around the Leeds Street Foreshore Park.



Local Street (Averill Street, all new streets)

Fine grain diverse streets that offer pedestrian amenity with landscaping that provides seasonal variation.

Figure K16-14 Street section - Local Street

Pedestrian and cycle network

The proposed network of pedestrian and cycle paths connects to key destinations within and beyond the Rhodes Peninsula and encourages active transport that benefit the health of individuals and wider community, including less air and noise pollution from private motor vehicles.

The key improvements include:

- Linking into broader foreshore network beyond Rhodes East Precinct
- Connecting separated cycleway and pedestrian paths within the Leeds Street Character Area to the Rhodes West foreshore promenade
- Widening and upgrading pathway connections under the northern foreshore bridges
- Delivering a designated 'Commuter Cycleway' along Blaxland Road
- Delivering new pedestrian links over the railway and Concord Road to create a continuous pedestrian loop within Rhodes.

Objectives

- O6 To provide a convenient, efficient and safe network of pedestrian paths and cycle ways between key locations within and beyond the Precinct.
- O7 To encourage more physically active lifestyles and support a modal shift reducing car ownership and reliance.
- O8 To ensure development addresses the pedestrian and cycle network and enables ease of access to entry lobbies, links and bicycle facilities.

Controls

C3.	The pedestrian and cycle network is as per Figure K16-15 and designed as per the <i>Canada Bay Rhodes East Public Domain Plan</i> .
C4.	Provide spaces on private property that enable pedestrian access and use (eg. Connections within a site, lobbies and the like) that are accessible and at-grade.
C5.	Bicycle facilities, such as parking, secure storage and end-of-trip facilities are required to be easily accessible from the public domain and conveniently located near entrances and/or lifts of new development.
C6.	The location of the building entrances must be clearly visible from the public open space network to support surveillance and safety of the pedestrian and cycle network.



Open Space Network

The open space network in Rhodes East is envisaged to become a continuous network of 'Green Streets' and parks over time. New development on land adjoining this network plays an important role in supporting its quality, usability and pedestrian priority.

Objectives

- O9 To provide an integrated, continuous open space network that links existing and proposed open spaces within the Precinct and beyond.
- O10 To enhance the everyday quality of life for residents, workers and visitors by providing new quality public open spaces including pocket parks, plazas and green links.
- O11 To ensure that new development adjoining the open space network complements the landscape character and supports ease of access, public use, safety and pedestrian priority.

Controls

C7.	The open space network is as per Figure K16-16 and designed as per the <i>Canada Bay Rhodes East Public Domain Plan</i> .
C8.	Private spaces that are visible but physically inaccessible to the general public (i.e. front setbacks, communal open space and the like) are designed so that they integrate with the treatment of the open space network.
C9.	The selection of furniture, pavement and lighting for private space visible from the public domain is to demonstrate a similar style and treatment as outlined in the <i>Canada Bay Rhodes East Public Domain Plan</i> .
C10.	Public domain in Green Streets are to be configured and designed to prioritise walking and cycling along both footpaths and carriageways.

C11.	<p>Mcllwaine Park must not receive any additional overshadowing from new development between 8.30am and 12.30pm on the Winter Solstice.</p> <p>Turfed area within Mcllwaine Park (Figure K16-16) must not receive any additional overshadowing from new development between 8.00am - 2.00pm on the Winter Solstice.</p> <p>Bray's Bay must not receive any additional overshadowing from new development between 8.30am and 12.30pm on the Winter Solstice.</p> <p>King George Reserve must not receive any additional overshadowing from new development between 8.30am and 12.30pm on the Winter Solstice.</p> <p>Uhrs Reserve must not receive any additional overshadowing from new development between 8.30am and 12.30pm on the Winter Solstice.</p>
C12.	<p>Open Space of the School Site must not receive any additional overshadowing from new development between 10.00am and 2.00pm on the Winter Solstice.</p> <p>Location of school's open space is to be determined through a detailed architectural design process.</p>
C13.	<p>The Foreshore Park in Leeds Street Character Area must not receive any overshadowing from new development between 8.30am and 12.30pm in the Primary Zone on the Winter Solstice.</p> <p>The Foreshore Park must not receive more than 50% overshadowing from new development after 12.30pm on the Winter Solstice.</p>

OPEN SPACE NETWORK

-  Green Streets
-  Gateway Station Bridge
-  Mixed Use Corner
-  Existing Ecological Habitat
-  Public Open Space
-  River Activation
-  Ferry Wharf (proposed)
-  Land to which The DCP Applies

Existing Open Space Network

1. Mill Park
2. John Witton Bridge Park
3. Uhrs Reserve
4. King George V Reserve
5. McIlwaine Park
6. Brays Bay Reserve
7. Rhodes Park
8. Churchill Tucker Reserve
9. Leeds St Foreshore



Figure K16-16 Open space network plan



Landscape Treatment and Urban Elements

The design of the public domain is to adhere to plans prepared by *City of Canada Bay*. Landscape design on private land needs to integrate with the design intention and treatment outlined in this document.

This will help to integrate new development into the streetscape, enhance the appearance and amenity of the area, provide for recreation, preserve biodiversity and improve micro-climatic conditions.

Objectives

- O12 To promote high quality landscape design as an integral component of the overall design of new development.
- O13 To conserve and incorporate significant natural features, vegetation and native fauna and flora habitats.

Controls

C14.	Existing street trees and landscape features are retained wherever possible.
C15.	Landscape design complements the proposed built form and minimises the impacts of scale, mass and bulk of the development in its context.
C16.	Landscape design highlights architectural features, defines entry points, indicates direction, and frames and filters views from and into the site.
C17.	Native species must comprise at least 50% of the plant schedule, incorporating a mix of locally indigenous trees, shrubs and groundcovers appropriate to the character of the area.
C18.	<p>The selection and location of vegetation and trees should:</p> <ol style="list-style-type: none"> Provide shade in summer and sun access in winter to building facades and public and private open spaces Reduce glare from hard surfaces Channel air currents into the building Provide windbreaks where desirable Screen noise and enhance visual privacy where desirable.

C19.	Where suitable, landscape areas on the development sites are to be made publicly accessible to pedestrians unhindered by fencing or other structural barriers.
C20.	All development is to provide places for residents to meet. This is to be in the form of a community notice board or room, shared laundry spaces, picnic tables and / or covered seating areas in landscaped surroundings.
C21.	Mature tree canopies must achieve at least 25% site coverage as calculated cumulatively as private and public domain.
C22.	<p>A detailed landscape plan is to be provided as part of a Development Application to demonstrate how the street block of the subject development site will achieve 25% canopy cover at ground level, including within the development site.</p> <p>Trees on building structures do not contribute to canopy cover under this control, and where relevant may be considered as contributing to the green view index requirements.</p>
C23.	<p>On site landscape replacement must be provided as the equivalent or more of the total site area. Landscape replacement can be provided through the following:</p> <ul style="list-style-type: none"> Vertical and facade greening; Rooftop greening and greening of communal podium spaces; and Public open space, through site links within the site boundary.

C24.	<p>All development must contribute to and demonstrate a 25% Green View Index using the methodology outlined in Figure K16-17 to Figure K16-21 and described below.</p> <p>The Green View Index (GVI) is a numerical value given to the amount of green canopy and landscape perceived by an individual at street level. Tree canopies, understorey vegetation, and facade greening are the three primary contributors to the GVI.</p> <p>The GVI target for Station Gateway West (Precinct D) is 25%. To achieve this, the design of streets and new developments must include an objective assessment of the GVI value achieved, using the following method:</p> <ul style="list-style-type: none"> Where tree canopies and understorey vegetation do not achieve the GVI target, facade greening is required to the extent necessary to achieve the minimum requirement. 	C28.	<p>Circulation paths must be a minimum of 2.4m in width and extend to a minimum of 80% of the depth of the space.</p> <p>Trees planted flush-to-grade, light poles, public space signage, and litter bins are permitted within circulation paths, however, 1.8m of continuous path must remain clear of fixed furniture elements at all times.</p> <p>Circulation paths must have a cross-fall no greater than 2.5%.</p>
C25.	Compliance with the green view index and urban tree canopy cover are not interchangeable, and must be considered as separate requirements.	C29.	<p>The following elements are prohibited from the public park / plaza / building interfaces, and if located adjacent to the public park / plaza, should be screened or concealed from view: Garage entrances, driveways, parking spaces, loading berths, exhaust vents, mechanical equipment, and building bin storage facilities.</p> <p>Vents and mechanical equipment are prohibited on any adjacent building walls within 5m of the level of the public park / plaza. Air intake vents and intake shafts, such as those to serve underground facilities, are permitted within the public domain if they are incorporated into design features and do not impair view lines.</p>
C26.	All public space design must adhere to the Australian Standard Design for Access and Mobility (AS1428).	C30.	Quality paving is required for all public domain areas.
C27.	<p>Public domain step risers must be no less than 100mm, and no greater than 150mm (exception can be made for vanishing steps).</p> <p>Seating steps shall be in the range of 150mm-500mm</p>		

C31.	<p>Seating requirements:</p> <p>At least 1 lineal metre of seating must be provided for every 30m² of public domain space along the foreshore and within parks and plazas.</p> <p>Movable seating for cafes may constitute up to 50% of the seating requirement, and may be stored outside of trading hours.</p> <p>Up to 50% of seating may be informal (e.g. low walls/seating steps).</p> <p>50% of formal seating is required to have backs and armrests.</p> <p>There are six types of seating that may be used to satisfy the seating requirements: moveable seating, fixed individual seats, fixed benches, seat walls, planter ledges, and seating steps.</p>	C34.	<p>Light levels should be uniform and be maintained at adequate levels for the use of the park. Lighting should be provided to all public open spaces and through site links in accordance with the principles of CPTED, Australian Standards, and Council requirements.</p> <p>Lighting should be considered in a hierarchy. Any pedestrian movement zone or area of circulation should be adequately illuminated to identify 'safe routes' for users. Areas not intended for night activity should not be lit with the same level of illumination as those that are.</p> <p>All lighting within the public domain must be shielded to avoid impacts on nearby residential units.</p> <p>Street lighting will be evenly spaced wherever possible. Distance from existing and new trees will be maximised to minimise conflict with canopies. Additional outreach of fittings and/or providing secondary luminaries for the pedestrian path may be appropriate to achieve both the required light levels and canopy cover.</p>
C32.	<p>Seating must be minimum 450mm depth, and in the height range of 400mm to 500mm.</p> <p>Seating provided on planter ledges are required to be at least 550mm deep.</p> <p>Seating steps can provide flexible seating – from simple perches to generous, amphitheater-style seating --and are permitted to range between 150mm and 500mm in height.</p>	C35.	<p>Requirements for event power supply are to be as directed by council.</p> <p>All power supply points are to be thoughtfully located for convenience and to minimize visual clutter. Power supply must be located in lockable in-ground power boxes wherever possible.</p>
C33.	<p>Deterrents to seating, such as spikes, rails, or deliberately uncomfortable materials or shapes, placed on any surfaces that would otherwise be suitable for seating are prohibited within public plazas.</p> <p>Devices incorporated into seating that are intended to prevent damage caused by skateboards are permitted. Such deterrents are required to be spaced at least 1.5m apart from one another, be constructed of high-quality materials that are integrated with the seating design, and must not inhibit seating.</p>	C36.	<p>Public drinking fountains / water refill stations must be provided as directed by Council.</p> <p>The product selection and location must consider accessibility for all, including children and pets. The design must consider proximity to key areas such as the play space, amenities building, and ferry wharf.</p>

C37.	<p>Bollards should only be included where it is necessary to discourage vehicle movement. They must not be perceived as a pedestrian barrier. They should only be used as an element of access control. Bollards are recommended where trafficable areas adjoin flush with public spaces (e.g. plazas, through site links).</p> <p>In alignment with best practice, a variety of bollards can be used. This includes bollards that contain planting, removable bollards, fixed bollards and bollards as seating elements.</p>
C38.	<p>Requirements for general waste and recycling bins are to be as directed by Council.</p> <p>All waste facilities are to be located within 15m of seating and gathering spaces. Visual appearance and impacts of smell should be carefully considered when locating waste facilities.</p>
C39.	<p>All signage in public space must be visible and legible. Signage design (i.e. font, colour and shape) should be aligned with the greater public domain elements palette.</p> <p>Where appropriate, wayfinding and signage should integrate digital technologies, as outlined in the City of Canada Bay's Operational Plan 2019-2020.</p>
C40.	<p>Public bicycle parking is required in accordance with the City of Canada Bay's standards, as outlined in the Development Control Plan (DCP).</p>

C41.	<p>To ensure a vibrant and visually appealing public space, consideration must be given to the treatment of adjoining walls and facades.</p> <p>Any building entry must be clear and legible. The entries must be unobstructed within 5m of entry.</p> <p>Walls required for planters or to mitigate changes in grade must not be visually or spatially intrusive on the space, and must be designed to a comfortable seating height wherever possible.</p> <p>Blank building walls or facades facing onto public space must be treated with public art or screened with vertical planting to a minimum height of 5m above the ground.</p>
C42.	<p>Public art must be delivered in accordance with City of Canada Bay's Public Art Plan 2014.</p> <p>Public art gives people reason to stop and engage with the public domain. It can also celebrate cultural and environmental diversity and instill a sense of belonging.</p> <p>A site specific Public Arts Plan is to be prepared by an arts and cultural planner and will be required to address the following:</p> <p>Identify opportunities for the integration of public art in the proposed development;</p> <p>Identify themes for public art;</p> <p>Durability, robustness and longevity of the public art;</p> <p>Demonstrate how public art is incorporated in the site and built form design;</p> <p>Demonstrate that the scale of the public art is appropriate and proportionate to the development and thoughtfully sited & integrated with the building to create a point of interest and define the location of area; and</p> <p>Provide a program for installation and integration with the construction program for the development.</p>



Figure K16-17 GVI: Small Tree Typical Option

- Small full canopy trees spaced at 5m centres
- Understorey planting at base of tree (understorey planting at 0.6m high)
- Extensive facade greening



Figure K16-21 GVI: Medium Tree Typical Option

- Medium trees spaced at 8m centres
- Understorey planting at base of tree (understorey planting at 0.6m high)
- Medium facade greening



Figure K16-18 GVI: Large Tree Typical Option

- Large Tree spaced at 10m centres
- Understorey planting at base of tree (understorey planting at 0.6m high)



Figure K16-19 GVI: Double Row Trees Typical View

- Medium foreground trees spaced at 8m centres
- Understorey planting at base of tree (understorey planting at 0.6m high)
- Possible where there is widened verge or open space to the streetscape

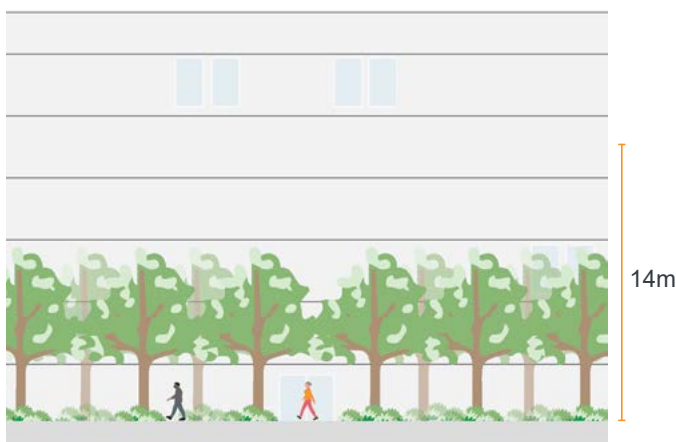


Figure K16-20 GVI: Medium Tree Typical Option for Plazas and Parks

- Medium foreground trees spaced at 3-5 m centres for plazas and parks.

Heritage landscape

Most heritage landscape elements in the Rhodes East Precinct are located on public land, however, new development can impact on their heritage value.

Objectives

- O14 To ensure that new development does not impact on the heritage value or threaten the retention of the landscape elements, i.e. provision of vehicular access, methods of construction, future runoff or overshadowing impacts.
- O15 To ensure that contributory landscape elements are retained and conserved to the greatest extent possible.

Controls

C43.	New development must not threaten the retention and impact on the heritage value of the following items: <ul style="list-style-type: none"> i) heritage listed reserves of Uhls Reserve, King George Park and McIlwaine Park ii) indigenous planting in McIlwaine Park iii) heritage listed street trees on Cavell Avenue iv) remnant trees at the northern part of 4A Cavell Avenue (incorporated into future development).
C44.	Where trees are missing from the established planting rhythm or are in poor health, they should be replanted to create a substantial streetscape character and public benefit in keeping with the existing character.
C45.	Other significant landscape elements which are not heritage listed should be individually assessed for their contributory value if threatened.

Integration of art

Permanent public art and art on private land visible from the public domain is to be integrated throughout the Precinct and may include sculptural art, lighting, typography, facade treatments and interactive art.

Objectives

- O16 To provide opportunities to celebrate local history and culture and foster community dialogue.
- O17 To enhance a sense of place and support the values of the Character Areas and the Rhodes East Precinct as a whole.

Controls

C46.	New artwork should be integrated throughout the Precinct and on both public and private land, e.g. corner plazas, parks, reserves, the foreshore, built form facades, and within setbacks and foyers.
C47.	New artwork reflects the principles, themes and opportunities as outlined in the <i>City of Canada Bay Rhodes Peninsula Art Plan</i> .
C48.	New development above 4 storeys are to allocate 0.5% of the capital cost of development towards artwork. This art can either be provided/ integrated on the site of the development or paid as contribution to Council's public art fund. Art integrated on site must be visible from the public domain and be permanent with a lifespan of 30+ years.

K16.5 Public-private interface

Street and upper level setbacks

The proposed front setbacks have been identified to provide appropriate outcomes for the designated function, land use and intended character of the street. Upper level setbacks seek to lessen the visual impact of taller development and create a unified, human-scale streetscape environment.

Objectives

- O1 To respect and enhance the existing streetscape presence and character of the Precinct.
- O2 To facilitate a sensitive transition from existing built form to future development.
- O3 To enhance development and its relationship with adjoining sites and the public domain, particularly access to sunlight, outlook, view sharing, ventilation and privacy.
- O4 To provide a sense of enclosure to the street and contribute to the Precinct's desired human-scale character.

Controls

- | | |
|-----|--|
| C1. | Street setbacks and upper level setbacks are as per Figure K16-22 and Figure K16-23 with the exception of development of or within the vicinity of heritage items. Refer to <i>Section K16.6 (Heritage items subheading)</i> of this DCP. |
| C2. | The setback between the property boundary and the building line is to be landscaped, with a minimum 50% of the setback area to be deep soil. |
| C3. | Fencing is a maximum of 1.2m in height and at least 50% transparent. |
| C4. | Ground floors with 'vibrant' uses such as retail, commercial or cafes/ restaurants address the public space, are occupied by uses that contribute to pedestrian activity and are easily accessible at grade. Refer to <i>Section K16.5 (Façade design subheading)</i> of this DCP. |

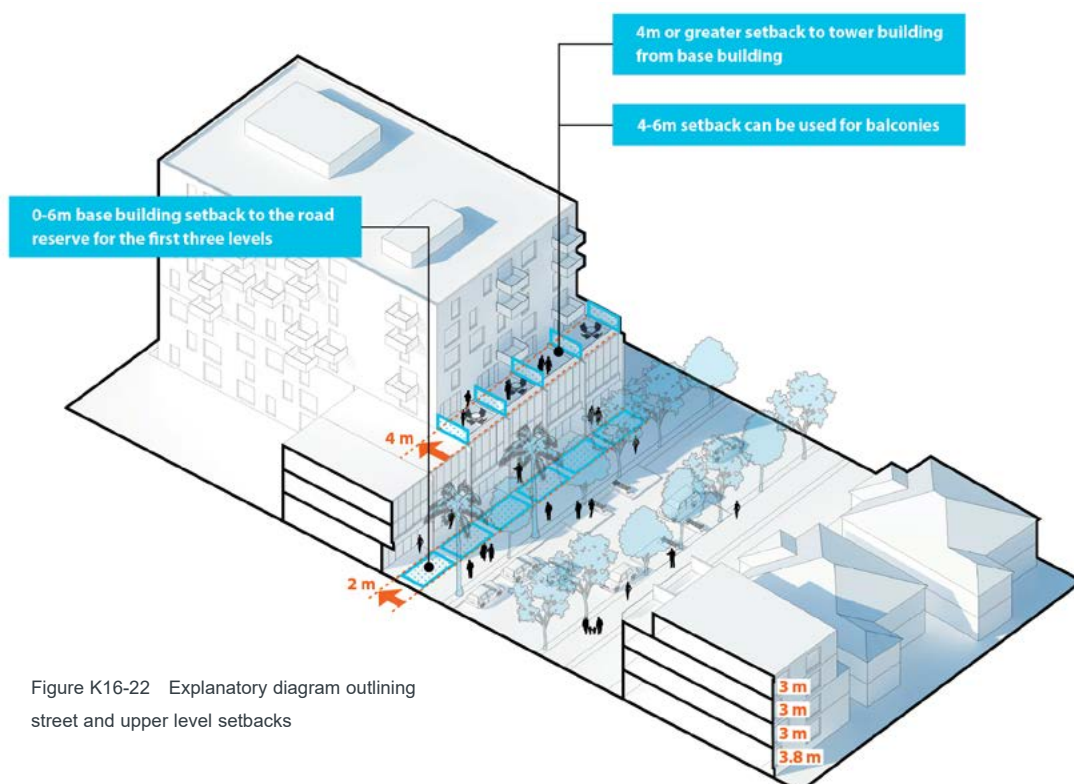


Figure K16-22 Explanatory diagram outlining street and upper level setbacks

SETBACKS**Ground Setbacks
From Site Boundary**

- 0 metres
- 0.6-1 metres
- 1 metres
- 1-2 metres
- 3 metres
- 2-4 metres
- 6 metres

**Upper Level Setbacks
From Building Line**

- 4 metres
- Public Open Space



Ferry Wharf (proposed)



Land to which the DCP applies



Figure K16-23 Street and upper level setbacks plan



0 50 100 200m

Primary and secondary streets

Primary Streets are important pedestrian connections and should be the principal address for any new development with particular emphasis on a high quality interface to the public domain and appropriate built form scale.

A significant portion of Primary Street frontages is envisaged to consist of terraces and multi-unit terrace apartments to achieve a safe and animated streetscape environment, while Secondary Streets will allow for vehicle access points and shared residential lobby entries.

Objectives

- O5 To create a public domain that supports and encourages pedestrian movement through activated streets and human-scale development fronting onto a defined hierarchy of streets.
- O6 To support the concept of a fine grain, vibrant streetscape experience whilst ensuring that a viable built form siting and access solution can be achieved.
- O7 To promote streetscape legibility along key pedestrian desire lines.

- O8 To facilitate street tree planting and landscaping along priority pedestrian streets (uninterrupted by driveway crossovers) to provide shade and amenity.
- O9 To promote passive surveillance on primary and secondary streets whilst balancing the practical requirement for access and servicing on secondary streets.

Controls

C5.	Primary and Secondary Streets are to be delivered as per Figure K16-25 .
C6.	Multi-dwelling housing (terraces and multi-unit terrace apartments) that address the street is required along 85% of any Primary Street frontage and along 60% of any Secondary Street frontage. (Buildings north of Leeds Street and within the Station Gateway East Character Area are exempt from this control in order to enable large floorplate non-residential uses).
C7.	Vehicular access points are not permitted along Primary Streets unless a development has no Secondary Street frontage.
C8.	'Undesirable' elements along Primary Streets such as vents, electric substations, or plant and equipment spaces should not be located within the setback area.

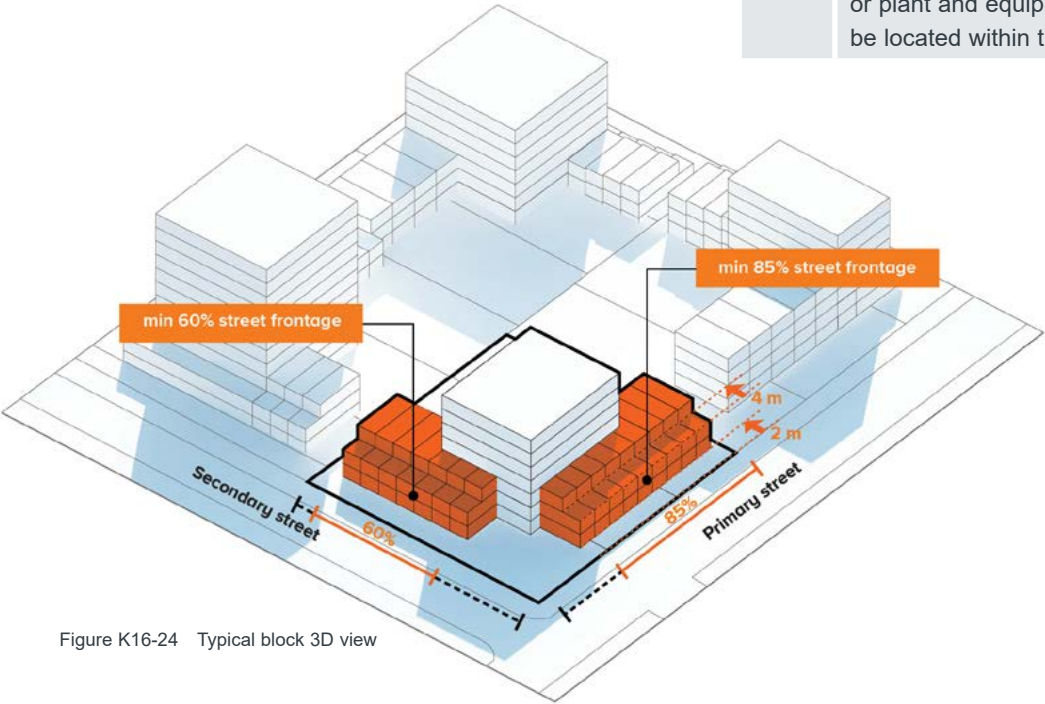


Figure K16-24 Typical block 3D view



Facade design

New development can fall into one of the three facade categories identified: 'Vibrant' facades, 'Friendly' facades or 'Mixed' facades. These categories are based on the intended function and pedestrian priority of the public space they address. For example, Vibrant facades are located along key desire lines and provisions for this category are more detailed than those that apply to the other two categories.

Objectives

- O10 To support pedestrian activity by ensuring a high level of interest and facade design quality addressing the public domain.
- O11 To maximise the number of building entries that clearly address the street.



Example of a 'vibrant' facade



Example of a 'friendly' facade



Example of a 'mixed' facade

Controls

C9.	Facade categories that apply to new development are as per Figure K16-26 .
C10.	The maximum length of a straight wall, without articulation such as a balcony or return, is 8m.
C11.	<p>'Vibrant' facades are to deliver:</p> <ul style="list-style-type: none"> • Small (narrow) units with a minimum of 15 front doors per 100m facade length • Ability to cater for a wide variety of uses such as shops, cafes, restaurants, bars, fruit/ vegetable markets, community uses and live-work units • A high degree of visual richness in facade details and architectural expression with a focus on vertical facade articulation, 'ins and outs' (recesses and projections to create shadows) • Vehicle access and servicing zones are not permitted • Signage is integrated into the overall architectural design.
C12.	<p>'Friendly' facades are to deliver:</p> <ul style="list-style-type: none"> • Relatively small (narrow) units with a minimum of 10 front doors per 100m facade length • Ability to cater for some variety of uses such as shops and live-work units, including residential lobbies • Some degree of visual richness in facade details and architectural expression • Limited vehicle access and servicing via tight, recessed openings is permitted • Signage is integrated into the overall architectural design.
C13.	<p>'Mixed' facades are to deliver:</p> <ul style="list-style-type: none"> • A minimum of 6 front doors per 100m facade length • Blank facades over 10% of facade or 10m² are required to be of visual interest, i.e. by architectural treatment, detailing, art or greenery/ green walls • Signage is integrated into the overall architectural design.



K16.6 Built form, diversity and use

Built form strategy in the Cavell Avenue Character Area

The built form strategy in the Cavell Avenue Character Area seeks to deliver quality density and is based on a 'high-low' model, where taller buildings and towers are mixed with low to mid rise development such as terraces, terrace-style apartments and/ or walk-up apartments (typically 2-3 storeys). This desired built form outcome achieves a number of benefits, including:

- the mix and transition of height limits the impact on the amenity of existing lower scale residential areas, including overshadowing or loss of views;
- the mix of housing form creates a stimulating interface to the street and a human-scale environment, which supports pedestrian activity.

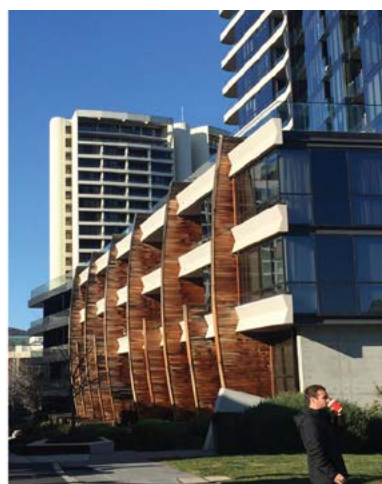
The maximum heights identified on the Local Environmental Plan map '*Height of Building*' illustrates the maximum height achievable on a site.

A requirement included in the Local Environmental Plan is for multi-dwelling typologies to be provided as part of all development which addresses primary and secondary street frontages (see *Section K16.5 - Primary and secondary streets subheading*). It is therefore not possible for the maximum height to be achieved across the entirety of any site.

The preferred outcome for development sites is a '*high plus low*' built form outcome, which is achieved when the height limit is only fully realised on part of the site in order to comply with the maximum FSR constraints.

This typically occurs when a development comprises a single taller element to optimise views and/ or minimise solar impact on communal open space and key public open spaces. The developer benefits from a height limit that allows a strategically located taller element, whilst the public domain is protected from the impact of a more consistent bulk and mass.

The alternate option is a '*low to medium*' built form outcome which maximises the FSR with none of the buildings reaching the maximum height. The FSR is evenly spread across the development site to form a consistent height envelope.



Examples of the desired 'high-low' built form outcome

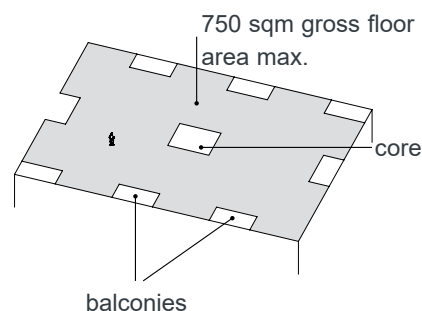
Tower and Podium Design

The Rhodes Planned Precinct builds on the ADG to provide a location-specific recommendation that gives equal priority to the public realm and experience as to that of the private open spaces and residences.

Therefore, additional floorplate controls, building separation and a height transition strategy are implemented (in excess of ADG at certain heights).

Objectives

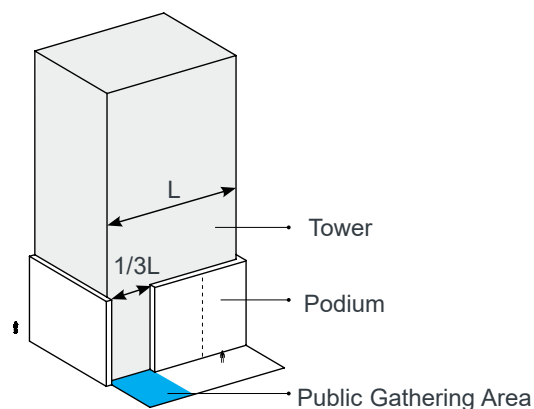
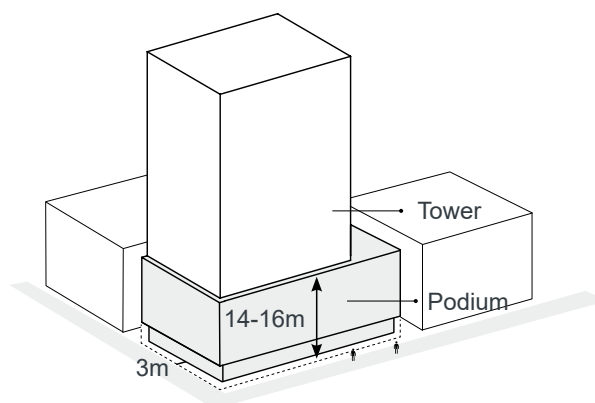
- O1 To minimise overshadowing and wind impacts to co-located open spaces and public domain
- O2 To minimise loss of sky views and enable equitable view sharing
- O3 To allow for the passage of natural light and reduce "wall of buildings" from key public spaces.



(Above) Maximum gross floor area of 750 square metres

Controls

C1.	Consistent with the Objectives and supplementing SEPP 65, building-to-building setbacks within the Precinct are to achieve the following separation controls: 15 - 20 storeys - 24m Above 20 storeys - 40m
C2.	Residential towers above podium level shall have a maximum gross floor area of 750 square metres.
C3.	Towers above 20 storeys are to provide a 5 storey differential in building height from all adjacent towers.
C4.	A minimum podium height of approximately 14-16m building height is required.
C5.	<p>A tower and podium building typology is required, subject to the following outcomes:</p> <ul style="list-style-type: none"> a) A ground floor setback of 3m is to be provided. b) A Podium to Tower setback of 4m is to be provided. c) Maximum 1/3 of a tower frontage along a street or public space can be extended down to the ground. <p>Public gathering areas must be associated with the 2/3 of the façade that is grounded by a podium.</p>





Examples of the desired built form outcome incorporating tower design controls

Floor to ceiling heights

Floor to ceiling heights are directly linked to the potential use of a building, and the level of natural ventilation and daylight access. The ground floor levels of all new development in Rhodes East should have increased ceiling heights to ensure good internal amenity and long term adaptability.

Objectives

- O4 To create resilient urban places by ensuring buildings, in particular at ground floor, are flexible and adaptable over time to a wide range of uses and changing demands.

Controls

C6.	Development is to be consistent with the following minimum floor to ceiling heights:										
	<table><tr><th>Use</th><th>Min. height (m)</th></tr><tr><td>Retail/ commercial</td><td>3.6m</td></tr><tr><td>Community</td><td>3.3m</td></tr><tr><td>Residential/ terraces</td><td>3.1m</td></tr><tr><td>Above ground parking</td><td>not permitted</td></tr></table>	Use	Min. height (m)	Retail/ commercial	3.6m	Community	3.3m	Residential/ terraces	3.1m	Above ground parking	not permitted
Use	Min. height (m)										
Retail/ commercial	3.6m										
Community	3.3m										
Residential/ terraces	3.1m										
Above ground parking	not permitted										
C7.	The minimum floor to ceiling height of all ground floors is to comply with the category of "Retail/ commercial" in the above table.										
C8.	The finished floor level of the ground floor above the footpath level is to be no greater than 1.0 metres for residential uses and 0.4 metres for retail and commercial uses.										

Residential uses not covered by the Apartment Design Guide

The NSW Apartment Design Guide (ADG) applies buildings that are three or more storeys high and that comprise at least four dwellings. For other residential development types, such as 2-3 storey terraces, low rise up-over or walk-up apartments, multiplexes, urban courtyard houses and the like, the following controls apply.

Objectives

- O5 To ensure design quality, performance of and amenity created by new residential development is of a high standard and consistent across the Precinct.

Controls

C9.	The maximum building depth is 18 metres unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. through the use of a courtyard design.
C10.	The minimum private open space of a ground floor dwelling is calculated by the number of bedrooms x 4m ² .
C11.	Single aspect dwellings, if unavoidable, are only permitted if they have a northerly or easterly aspect.
C12.	Parking is not permitted to be visible from streets and open spaces. Access to parking via a driveway, lane or basement carpark entry is permitted if one access point services a minimum of 5 dwellings. Front garages, carports and individual driveways are strictly not permitted.
C13.	At least 70% of living rooms and private open spaces of a dwelling receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter.
C14.	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² .
C15.	Building separation is as per the <i>Apartment Design Guide, Section 3F Visual Privacy</i> .

Affordable housing

Affordable housing means rented housing occupied by households on very low, low or moderate incomes. For Rhodes East, there is a requirement to provide a proportion of affordable dwellings as specified in the Canada Bay Affordable Housing Contribution Scheme.

Objectives

- O6 To ensure that low to moderate income households can afford to live in Rhodes East by increasing the stock of appropriate affordable housing.

Controls

C16.	A minimum of 5% total gross floor area is dedicated as affordable housing in the areas identified in Figure K16-27 .
C17.	Dwellings dedicated to affordable housing are to be of equivalent design quality, diversity and mix as all other dwellings.
C18.	Affordable housing is to be consistent with the requirements of the <i>Canada Bay Affordable Housing Contribution Scheme</i> .



Materials, finishes and colours

The selection and choice of materials, finishes and colours should have regard to robustness, durability, energy performance and compatibility to the surrounds.

Objectives

- O7 To ensure building exteriors positively contribute to the desired future character of the area and streetscape.

Controls	
C19.	The composition of facades balances solid and void elements and does not display large areas of a single material, including reflective glass.
C20.	External walls are constructed of high quality and durable materials and finishes with low maintenance attributes such as face brickwork, rendered brickwork, stone, concrete and/or glass.
C21.	Sidewalls are designed as an architecturally finished surface that complements the main building facade.
C22.	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality.
C23.	Roof plant, lift overruns, utilities, vents and other service related elements are to be integrated into the built form design and complementary to the architecture of the building.
C24.	Facades reinforce the vertical proportions and support a vertical rhythm along the street.
C25.	Adjoining buildings are considered in terms of setbacks, awnings, parapets, cornice lines, selection of materials and finishes, and facade proportions.
C26.	Design to be approved by the City of Canada Bay Design Review Panel.

Heritage items

A number of local heritage items are situated within the Precinct, shown in **Figure K16-28** and listed in the LEP. This section outlines provisions for adaptive reuse of and development in the vicinity of selected heritage items in addition to the provisions contained in the Heritage controls in the *Canada Bay DCP*.

Objectives

- O8 To protect buildings, spaces and streetscapes of heritage significance within and in the vicinity of the Precinct.
- O9 To ensure that new development responds sensitively to the heritage significance of each listed item and does not physically overwhelm or dominate a heritage item or impact on its setting.

Controls	
C27.	All development of and in the vicinity of a heritage item is to address the requirements of the Heritage controls in the <i>Canada Bay DCP</i> .
C28.	New development provides appropriate transitions to existing buildings, structures and streetscapes of heritage value.
C29.	New development uses sympathetic materials, colours and finishes that reflect and harmonise with original materials to maintain the character of heritage items and contributory buildings.
C30.	Whilst not formally heritage listed, the Coptic Church on Cavell Avenue has a strong historical association with the Community. If it is to be retained in situ then the setting and orientation of the building is to be respected.
C31.	The Canada Bay Local Environmental Plan sets out building setback controls for sites adjacent to Heritage Items.

HERITAGE

- Heritage Item
- Non Listed Community Item*
- Ferry Wharf (proposed)
- Land to which the DCP applies

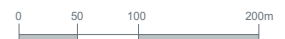
Listed Heritage Items

1. 59 Blaxland Road - Individual House
2. 63 Blaxland Road - Former School Building
3. 4A Cavell Avenue - Concord Community Hostel - grounds only
4. 14 Cavell Avenue - Warehouse
5. 35 Cavell Avenue - Individual House
6. Cavell Avenue Street Trees
7. McIlwaine Park
8. Uhrs Point Reserve
9. Rhodes Station



Figure K16-28 Heritage items plan

*The Coptic Church has a strong historical association with the community and is to be retained in situ.



There are a number of heritage items within the Rhodes East Precinct for which specific development controls apply as follows:

59 Blaxland Road

Controls	
C32.	The existing Federation period house to remain in situ and be retained as residential or incorporate a complimentary change of use.
C33.	The two palm trees in the front garden are to be either retained or relocated within the current site.
C34.	The paved court at the rear can be redeveloped with a low scale building.
C35.	The existing front lawn presentation to the north of the house is to be retained.
C36.	Adjacent development to the south is to be set back by a minimum of two metres from the common boundary for the first two storeys before a further setback of four metres from three to eight storeys.
C37.	Street setbacks of adjacent development are to match the prevailing front setbacks.

63 Blaxland Road

Controls	
C38.	The former school building is to be retained in-situ for community use or compatible change of use.
C39.	Existing trees, particularly those to the north, are to be retained.
C40.	The paved areas can be re-used or landscaped for pedestrian amenity.
C41.	The historic core of the school building is to be conserved and revealed by the demolition of the later enclosure.
C42.	No vertical additions will be permitted to the retained school building.

4a Cavell Avenue

Controls	
C43.	The existing heritage listed trees are to be retained and incorporated into any redevelopment of the northern part of the site.
C44.	The land to the south of the listed trees can be redeveloped subject to the relevant controls.

14 Cavell Avenue

Controls	
C45.	Existing face brick to be retained and incorporated into any new development at the rear or on adjoining sites.
C46.	New development at the rear can abut the existing brick building, with the first saw tooth roofed portion retained at the same height as the brick building.
C47.	Adjoining sites may be redeveloped with zero lot boundary separations but must apply a front setback consistent with the heritage building.

35 Cavell Avenue

Controls	
C48.	The existing Federation period house is to remain in situ and be retained as residential or incorporate a complimentary change of use.
C49.	Adjacent development is to be set back by a minimum of two metres from the common boundary for the first two storeys before a further setback of six metres from the boundary for three to eight storeys.
C50.	Street setbacks of adjacent development are to match the prevailing front setbacks.



Above: Artist impressions of the desired future look and feel of Rhodes East Precinct

K16.7 Access and parking

Bicycle parking and facilities

The provision of bicycle facilities and parking is required in all new developments.

Objectives

- O1 To encourage cycling as a highly convenient transport mode by providing easily accessible and secure parking and end-of-trip facilities.
- O2 To reduce car-usage and reliance, promote sustainability and a more active, healthy lifestyle.

Controls

C1.	Secure, conveniently located bicycle parking is to be incorporated in all new development at the rates specified in Table K16-3 .
C2.	End of trip facilities (showers, lockers) are provided for all new development with more than 5 employees.
C3.	Secure bike parking facilities are to be provided in accordance with the following: <ul style="list-style-type: none"> a) Class 1 bike lockers for occupants of residential buildings; b) Class 2 bike facilities for staff/employees of any land use; and c) Class 3 bike rails for visitors of any land use
C4.	Where bike parking for residents is provided in a basement, it is to be located: <ul style="list-style-type: none"> a) on the uppermost level of the basement; b) close to entry/exit points; and c) subject to security camera surveillance where such security systems exist.
C5.	A safe path of travel from bike parking areas to entry/exit points is to be marked.
C6.	Bike parking for visitors is to be provided in an accessible on-grade location near a major public entrance to the development and is to be signposted.

Table K16-3 Minimum bicycle parking provision

Land Use	Resident/ staff	Visitor
Residential	2 per dwelling within 400m of the station	2 per 10 dwellings
Commercial	2 per 150m ² GFA	2 per 400m ² GFA
Retail	2per 250m ² GFA	4 per unit +2 per 100m ² GFA
Industrial	2 per 10 employees	4 per unit +2 per 100m ² GFA

Car parking design

Car parking needs to be accessible and convenient. It should also be designed so that it does not detract from the amenity of the streetscape.

This DCP prescribes maximum car parking rates (as opposed to minimum requirements) for all new development. These rates are based on the proximity of the development to the train station and supplemented by car share car parking provision and increased minimum bicycle parking rates.

Objectives

- O3 To ensure off street car parking has a minimum impact on the quality of the streetscape.
- O4 To future-proof development in anticipation of reduced private vehicle reliance.
- O5 To strengthen pedestrian safety by minimising conflict points and ensuring good sight-lines.
- O6 To maximise retail, community and residential street frontage uses.
- O7 To encourage the use of alternative types of transport, including active transport (walking, cycling), the use of public transport and car sharing schemes.
- O8 To assist with housing affordability and flexibility of ownership by decoupling car parking from the dwelling.

Controls

C7.	Car parking is to be located at the rear of buildings or within a basement car parking structure.
C8.	The outer perimeter of the basement is to be behind the setback.
C9.	Garages and parking structures are not to project forward of the building line and are to be screened from the public domain by active uses.
C10.	Vehicular access ways are designed to be integrated with the building and preferably with single entry/ exit lane. The width and number of vehicle access points should be limited to the minimum
C11.	All residential car parking is to be decoupled through separate titles. The transfer of car space ownership is encouraged within the precinct.
C12.	Car parking spaces are to be provided at the rates specified in Table K16-4 and shown in Figure K16-24 .
C13.	Where car parking spaces are provided for car share schemes, these are to be provided in lieu of the maximum car parking rates in accordance with the figures in Table K16-5 .
C14.	Electric vehicle charging stations are to be provided as per Table K16-6 .
C15.	For any use not specified in Table K16-6 rates in the <i>City of Canada Bay Development Control Plan</i> apply.
C16.	Parking is to comply with the requirements of E3.9 of the <i>City of Canada Bay Development Control Plan</i> except for an inconsistency with this Section.
C17.	Motorcycle parking is to be provided as set out in Table K16-7 .

Car share**Controls**

C18.	Car share spaces are encouraged within all new developments. Car share spaces are to be for the exclusive use of car share scheme vehicles and provided as per the standings in Table K16-5 .
C19.	Car share parking spaces are to be: <ul style="list-style-type: none"> • Provided as set out in Table K16-5 • Exclusive of visitor car parking • Retained as common property of the Owners Corporation of the site and not sold or leased to an individual owner/ occupier at any time • Made available for use by operators of car share schemes • Grouped together in the most convenient locations relative to car parking entrances and pedestrian lifts or access points • Located in well-lit places that allow for casual surveillance • Signposted for use only by car share vehicles; and made known to building occupants and car share members through appropriate signage which indicate the availability of the scheme and promotes its use as an alternative mode of transport.
C20.	Development Applications are to demonstrate how the car share parking space(s) is to be accessed, including where access is through a security gate. A covenant is to be registered with the strata plan advising of any car share parking space. The covenant is to include provisions that the car share parking space(s) cannot be revoked or modified without prior approval of Council.

Table K16-4 Maximum car parking rates

Land Use	
Residential	<p>0.1 spaces per studio dwelling, and</p> <p>0.3 spaces per dwelling with 1 bedroom,</p> <p>0.7 spaces per dwelling with 2 bedrooms, and</p> <p>1 space per dwelling with 3 or more bedrooms, and</p> <p>1 visitor car parking space per 20 dwellings.</p> <p>If the total number of car parking spaces under this clause is not a whole number, the total is to be rounded down to the next whole number.</p>
Commercial	1 space per 150m ² GFA
Retail	1 space per 100m ² GFA
Cafes and restaurants	1 space for 150m ² GFA

Table K16-5 Car share rates

Land Use	Within 400m of station	Outside 400m of station
Residential	1 per 20 dwellings	1 per 40 dwellings
Car share rate to reduce car parking provision	N/A	1 car share space in lieu of 3 private car parking spaces

Table K16-6 Minimum electric vehicle charging stations

Type of charging facility	Minimum number of charging facilities/stations
Level 1 <ul style="list-style-type: none"> Regular 240V wall socket (10 amps) No specialist installation required 16-20 hours to fully charge average vehicle 	1 per parking space 1 per five bicycle parking spaces (a dedicated space and charging point for electric bicycles and mobility scooters to be charged must be provided for every five bicycle parking spaces)
Level 2 AC <ul style="list-style-type: none"> Directly wired into a dedicated circuit (16 amp - 40 amp) Level 2 provides between 18 km to 110 km of charge per hour Total charge time of between 4 - 12 hours depending on the vehicle 	1 shared facility for developments with 5 - 10 dwellings And 1 additional shared facility for every additional 10 dwellings or part thereof To be provided in common or visitor parking areas

Table K16-7 Motorcycle rates

Land Use	
Residential	2 per 10 dwellings

K16.8 Environmental resilience

Sustainable Utility Infrastructure

The provisions in this part apply to all developments that require new or upgraded utility connections. The aim is to improve the environmental performance and future resilience of the Rhodes East area through the use of district infrastructure that supplies low carbon and/or renewable electricity and water recycling.

All developments to which this part applies shall make provisions for:

- Private Wire Network connection
- On-site Solar Photovoltaic installation
- Recycled Water Network connection
- Private Sewer Network connection
- Green Roofs

Private Wire Network

Objective: The objective of the Private Wire Network is to futureproof the Precinct, enable renewable energy installation and reduce the operating costs of the Precinct.

A Private Wire Network permits the distribution of electricity between individual dwellings or buildings and is intended to facilitate and distribute onsite renewable electricity installations as well as potential future battery storage.

The Private Wire Network is intended to supplement and/or replace the conventional electrical networks. It is intended that a nominated operator will be granted an easement within council owned lands and streets for the purposes of operating the Private Network.

Controls

C1.	All developments requiring new or upgraded electricity connections shall grant an easement in favour of the council or its nominated operator from the site street boundary to the roof of the building for the purposes of electricity transmission. Council or its nominated operator shall be granted access to this easement.
C2.	All easements in ground shall be dedicated for the sole purpose of electricity transmission and not shared with other utilities. In ground easements shall be no less than 1m wide.
C3.	Any easements within buildings shall be in the form of an accessible conduit or riser sized sufficiently to carry no less than the peak load of the building and/or any on site generation or storage.
C4.	All switchboards, metering and circuits shall be designed for not less than 400V 3 phase connection in accordance with the greater of a. applicable Australian Standards or b. Supplier of last resort standards.
C5.	All developments shall make an Application for Connection Requirements with respect to the private wire network to the council or its nominated operator prior to submitting a development application.

On-site Solar Photovoltaic

Objective: To reduce the overall carbon footprint of Rhodes East, increase resilience and reduce operating costs of the Rhodes East Precinct.

Controls	
C6.	All developments which require new or upgraded utility connection shall grant an easement in favour of council or its nominate solar provider for the installation of Solar Photovoltaic panels not less than 50% of the area of roof area.
C7.	Any easement granted shall not be overshadowed by buildings or trees within the same property.
C8.	The easement shall permit access to the roof by council or its nominated solar provider for the purposes of installation, maintenance or operation.
C9.	All roof structure subject to the easement shall be designed to structurally accept photovoltaic panels.
C10.	An internal dedicated space shall be provided within 10m of the solar easement. The space shall be not less than 2.5m by 2.5m and 2.8m in height.

Precinct Private Wire Network

Objective: Each development shall be capable of connecting to the Precinct Private Wire Network. The Precinct Private Wire Network will enable the distribution and metering of electrical production from the Solar Photovoltaic systems and conventional electrical distribution to developments.

Controls	
C11.	The Precinct Private Wire Network is to be operated by the council or its nominated operator.
C12.	The Precinct Private Wire Network shall be operational prior to the connection of the first development.
C13.	The Precinct Private Wire Network will have a gate metering system at the connection point to the public electrical system.
C14.	A nominal 1 m wide continuous easement will be established by council in the public domain, for the purposes of reticulation within the Precinct Private Wire Network.
C15.	Precinct Private Wire Network infrastructure easements located within the public domain shall be designed in accordance with Ausgrid standards. Variations in the easement to accommodate the standards in public domain will be coordinated by council as required.

Recycled Water Network

Objective: To provide recycled water to all buildings and the public domain and ensure sufficient demand and scale to support efficient and economic recycled water plant. The recycled water network will reduce potable water demand within the Precinct, reduce upstream and downstream infrastructure impacts and increase resilience and drought-proofing.

Controls

C16.	All new buildings shall be provided with a suitably sized purple pipe recycled water reticulation to all non-potable fittings and fixtures including as a minimum all irrigation locations and toilets.
C17.	All new buildings shall provide a connection point and meter location at the site boundary for recycled water.
C18.	All developments shall make an Application for Connection Requirements with respect to the recycled water network and private sewer network to the council or its nominated operator prior to submitting a development application.

Private Sewer Network

Objective: To provide a source for recycled water production to enable provision of recycled water to all buildings, the public domain within Rhodes East as well as buildings and parks in surrounding precincts.

Controls

C19.	All developments shall make an Application for Connection Requirements with respect to the recycled water network and private sewer network to the council or its nominated operator prior to submitting a development application.
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Precinct Recycled Water and Private Sewer

Objective: Each development shall be capable of connecting to the Precinct Recycled Water and Private Sewer Networks. The Precinct Private Sewer Network will provide feedstock to the Recycled Water plant for Recycled Water production.

Controls	
C20.	The Recycled Water plant shall be operated by the council or its nominated operator.
C21.	The Recycled water plant and associated reticulation must be operational prior to the connection of the first development.
C22.	The Recycled water plant shall be located in the basement area a new development within either the Station Gateway East Character Area or the Leeds Street Character Area Character Area.
C23.	An easement for an 1,800 m x 5 m (digestion tanks borne below slab grade) Recycled Water plant shall be constructed at the lowest area of the Precinct.
C24.	A nominal 1 m wide continuous easement will be established by council in the public domain, for the purposes of reticulation within the Recycled Water and Private Sewer networks.
C25.	Precinct Recycled Water and Private Sewer network infrastructures easements located within the public domain shall be designed in accordance with the Water Industry Competition Act 2006. Variations in the easement to accommodate the standards in public domain will be coordinated by council as required.

Green Roofs

Objective: to maximise the opportunity to provide rooftop space as passive and active open space.

Controls	
C26.	Communal roof tops are to be provided on all buildings for passive and active open space, such as fenced ball-courts, BBQ area and low maintenance gardens.
C27.	Roof tops are be structurally sound and have the capacity of supporting deep soil planting on at least 30% of the rooftop space.
C28.	Rooftop spaces are to be shared with solar photovoltaic panels connected to the precinct solar network wire grid.
C29.	Rooftops are to incorporate wind shielding design to provide user comfort.



K16.9 Special projects

Key special projects have been identified within the Precinct that require specific controls. These special projects include the following and are identified on **Figure K16-30**:

Figure K16-30:

- Station Gateway East – mixed use area, land bridge and primary school
- Leeds Street Character Area
- Mixed use corners.

Station Gateway East

Mixed Use Area

The Station Gateway East Character Area has been identified as a key gateway into the Precinct which builds upon its proximity to important rail and road connections.

Rhodes Station lies immediately adjacent to the Character Area, therefore providing an opportunity to develop into a mixed use area that provides a focus for convenience based retail, community uses and services, around a transit oriented centre (see **Figure K16-31**).

Objectives

- O1 To establish the Character Area as a transit orientated, convenience retail and mixed use centre for Rhodes East.
- O2 To ensure that this Character Area contributes to the overall legibility of Rhodes East and create a gateway landmark mixed use centre in the Precinct.
- O3 To establish a safe, active, vibrant, mixed use environment to support the Station and attract investment, quality development and people.
- O4 To future-proof Rhodes East for public transport improvements.
- O5 To facilitate connectivity to and from the Station, across Concord Road and into Mcllwaine Park.
- O6 To promote and protect views from the Station to the water.
- O7 To encourage built form that enables view sharing within and across the Precinct and maximises solar access.

- O8 To ensure that Blaxland Road street level activation is not negatively impacted through the introduction of the station bridge.
- O9 To recreate attractive and cohesive streetscapes.
- O10 To ensure that buildings are compatible with the desired further character of the area in terms of building bulk and scale.
- O11 To ensure that development provides appropriate and sensitive transitions to existing and planned development.

Controls

C1.	Station Gateway East - Commercial Space: 11,000 m ² Aged Care is an encouraged use within Station Gateway East commercial space and is a permissible use within the residential floorspace allocation.
C2.	The built form must achieve a high quality of architectural design, maximise solar access to the public domain and demonstrate the achievement of view sharing within and across the Precinct.
C3.	Proponents are required to contribute to and provide spatial provisions as set out by the NSW government towards a station bridge for pedestrians and cyclists, that connects the Station Concourse across Blaxland Road through the Character Area, across Concord Road to Mcllwaine Park and the foreshore to the east.
C4.	Where the bridge travels through the Character Area it shall be a minimum of 16m wide and form a Station Bridge Plaza. The plaza must have active, retail frontage. Refer to the station bridge and bridge plaza controls in the next section.
C5.	A visual impact assessment shall be undertaken at the Development Assessment stage illustrating any impact on views from the Station and Mcllwaine Park.

C6.	Design along Concord Road must respond to, and prioritise the provision of, future public transport improvements and provide high quality infrastructure for customers incorporated into the built form and public domain design.
C7.	Provision of a convenience supermarket on site must provide residential above.
C8.	<p>Areas identified for specialty retail must:</p> <ul style="list-style-type: none"> • Adhere to the requirements of the 'Vibrant Facade' – see <i>Section K16.5 (Façade design subheading)</i>. • Not exceed a 10m individual shop frontage. • Utilise either the Retail Shopfront and Awning or Posted Veranda frontage type. • Provide adequate pedestrian scale lighting, integrated into bollards and street furniture, wherever possible.
C9.	Street level development fronting Concord Road that comprises a large floorplate use with minimal windows and address such as a supermarket and or carpark must utilise the frontage types provided for 'Mixed Facades' with podium – see <i>Section K16.5 (Façade design subheading)</i> .
C10.	<p>Upper level retail address:</p> <ul style="list-style-type: none"> • Is in addition to the requirement of ground floor active frontage required in the LEP plan. • Is required in accordance with the detail plan and cross section. • Where not related to ground level location, the 'Vibrant Facade' requirements shall be applied – see <i>Section K16.5 (Façade design subheading)</i>. • Outdoor verandas, dining or public activity space is required.

C11.	<p>Bridge Plaza frontage:</p> <ul style="list-style-type: none"> • Is in addition to the requirement of ground floor active frontage required in the LEP plan. • Is required in accordance with the detail plan and cross section. • Must adhere to the requirements of the 'Friendly Facade' – see <i>Section K16.5 (Façade design subheading)</i>.
C12.	The proposed development must comply with 3m ground floor setback and minimum 4m upper podium setback facing Concord Rd
C13.	A minimum podium height of approximately 14-16m building height is required facing Concord Rd.

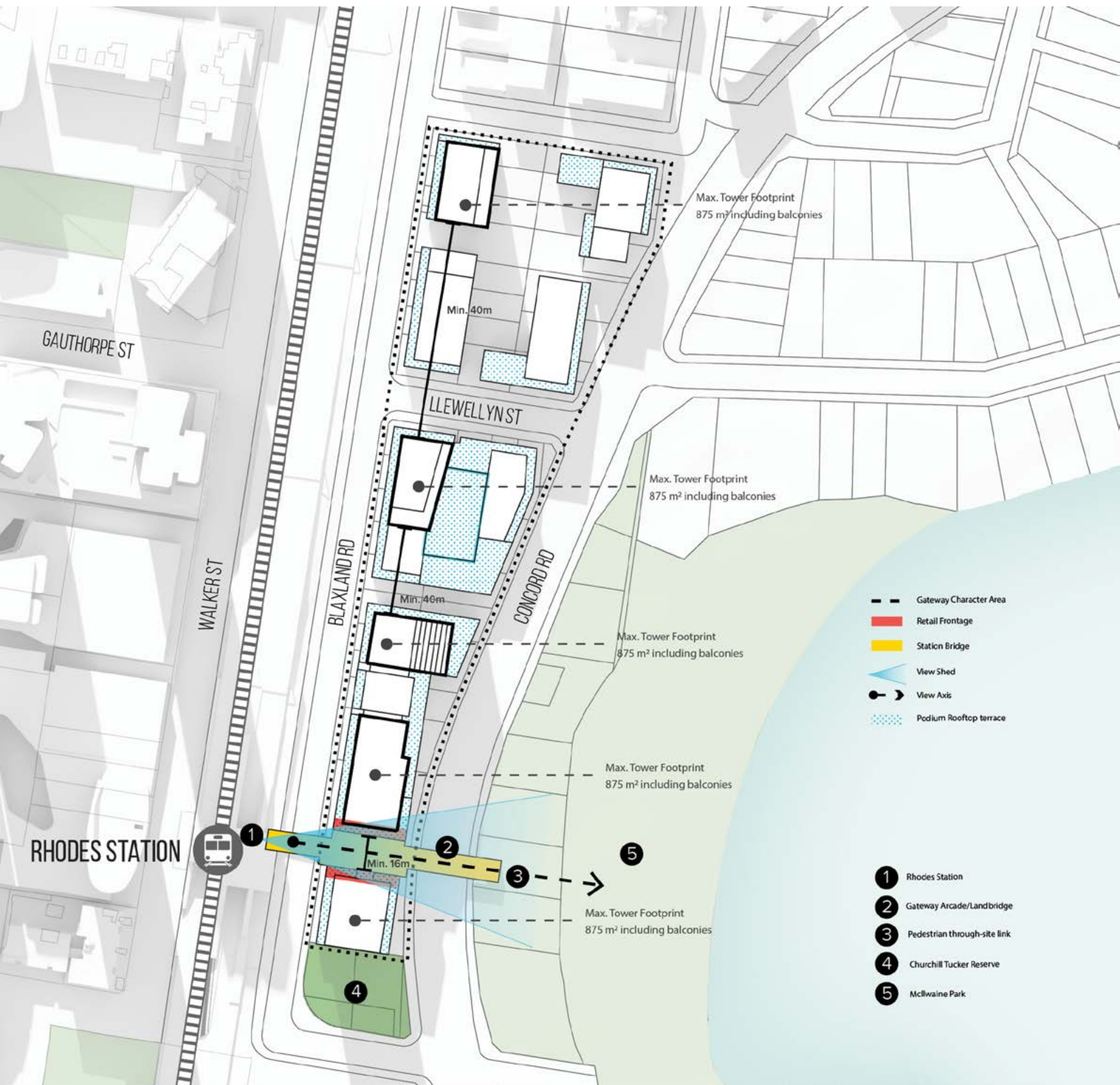


Figure K16-30 Station Gateway East Character Area Regulating Plan

Station Bridge and Station Bridge Plaza

As part of Station Gateway East, a new station bridge is proposed which will provide a safe and convenient pedestrian connection between the station (and Rhodes West), the new community, and retail hub, and Mcllwaine Park (including the potential river pool), crossing both Blaxland Road and Concord Road.

Station bridge connections have the potential to transform disconnected urban neighbourhoods into thriving precincts. The bridge not only connects people, but also the landscape to the civic heart of Rhodes. The proposed higher density development at Station Gateway East creates an opportunity for this key public infrastructure to be funded as part of a major private development.

The station bridge will be developed with adherence to the key design parameters outlined by the NSW "Pedestrian Bridge Design Standards for Built up Areas", in particular the minimum clearance height of 5.5m. It is proposed that ramped walkways be provided (as well as steps) to provide inclusive access to Mcllwaine Park.

Objectives

- O12 To create a gateway landmark mixed use centre for Rhodes East.
- O13 To future- proof Rhodes East for public transport improvements.
- O14 To ensure that this Character Area contributes to the overall legibility of Rhodes East.
- O15 To facilitate connectivity to and from the Station, across Concord Road and into the enhanced open space network.
- O16 To promote and protect views from the Station to the water.
- O17 To establish this Character Area as the transit oriented, convenience retail and mixed use centre for Rhodes East.
- O18 To create a safe and active pedestrian bridge link.
- O19 To ensure that Blaxland Road street level activation is not negatively impacted through the introduction of the pedestrian bridge.

O20 To create attractive and cohesive streetscapes.

O21 To ensure that buildings are compatible with the desired future character of the area in terms of building bulk and scale.

O22 To ensure that development provides appropriate and sensitive transitions to existing and planned development.

Controls

C14.	A pedestrian bridge is to be provided that connects the Station Concourse to the rooftop Bridge Plaza, across Concord Road and to Mcllwaine Park.
C15.	<p>A Station Bridge Plaza must be:</p> <ul style="list-style-type: none"> • An integrated development solution between land owners and IfNSW • Connecting to the Active Travel (Station and Mcllwaine Park) • A minimum width of 16m for the entire private development length, and accommodate a two-way pedestrian path and a separated two-way bicycle path including landscaping to the northern and southern edges. • A minimum of 550 sqm in area • 80% vibrant retail frontage and 15/ 20 doors/ 100 meters • Developed with adherence to the key design parameters outlined by the NSW "Pedestrian Bridge Design Standards for Built up Areas", in particular the minimum clearance height of 5.5m. • The stubs must be at least 8m wide
C16.	Where the land bridge travels through the Gateway Precinct it shall be a minimum of 16m wide and be fronted by active, retail uses.
C17.	The station bridge's eastern landing must be access compliant and integrate with public domain improvements at Mcllwaine Park.

C18.	The station bridge is to be designed and constructed to have sufficient architectural integrity to support deep soil planting and landscaping, integrating stormwater management, native planting and irrigation. The deep soil planting is to be a minimum of 2m width and span the entire lengths of the northern and southern edges of the bridge across Concord Road.
C19.	A visual impact assessment shall be undertaken at the DA stage illustrating view impact from the Station and from McIlwaine Park.
C20.	Advertising structures are not permitted to be attached or placed on the land bridge.

C21.	The Bridge Plaza should incorporate tree planters to provide amenity, shade and contribute to quality urban space. The planters are should be offset a minimum of 3m from the retail frontages to retain circulation. The raised planters feature single large specimen trees of a variety of species (both evergreen and deciduous) to provide a balance of year-round seasonal variation, solar access and shade.
C22.	The pedestrian bridges must be designed in accordance with TfNSW requirements. It is vital that the design aesthetic of these bridges is exemplary. Guidance on achieving best practice outcomes for pedestrian bridges in NSW is provided by NSW Government's Centre for Urban Design document "Bridge Aesthetics: Design guideline to improve the appearance of bridges in NSW", Feb 2019.





Examples of the desired use of tree planters on the bridge plaza



Examples of the desired vegetation on the bridge plaza



Examples of the bridge design



Artist impression of the indicative desired character of the Bridge Plaza

Urban Primary School

There is the potential for an urban primary school to be delivered using SIC funding potentially collocated with multi-purpose community space. The central location of the Station Gateway East on the Rhodes Peninsula, in addition to the proximity to the public transport network.

Objectives

To provide a primary school suitable to accommodate up to 1000 students.

O23 To be supportive of the SINSW general educational principles.

O24 To provide amenity for the new school and the shared use of school facilities.

Controls

C23.	Any application for a school is to demonstrate how shared public facilities will be accommodated, through: <ul style="list-style-type: none"> • Community and/or administrative facilities that are accessible to the public • Open space that is accessible to the public outside of school hours and on the weekends
C24.	Open Space of the School Site must not receive any additional overshadowing from new development between 10.00am and 2.00pm on the Winter Solstice.

Leeds Street Character Area

An active destination and experience-based retail offering at Leeds Street, is consistent with the Character Area intent. It will be a unique destination and could successfully operate with limited and / or no parking requirements. It will be the northern bookend and ultimately linked by the continuous foreshore boardwalk to the Station.

The proposed ferry wharf location has been identified north of the Leeds Street providing a unique opportunity to provide a water- based transit focal point.

The large, light industrial landholdings in this area make amalgamation less challenging, increasing the likelihood of early redevelopment.

The topography, foreshore location and existing land use make the Precinct an ideal location for a density that could support a public domain contribution in the form of foreshore plaza space or similar. Increased density in this location was supported by the community.

Objectives

- O25 To create an active, destination / experience - based retail offering adjacent to the water.
- O26 To establish a safe, active, vibrant, mixed use environment to support and promote use of the Ferry and that will attract investment, quality development and people.
- O27 To ensure the Character Area is not dominated by a single supermarket use.
- O28 To provide inclusive public access to the foreshore.
- O29 To give pedestrians priority at Leeds Street.
- O30 To facilitate connectivity along the River and Foreshore Promenade including to and from the future Ferry Stop.
- O31 To provide a variety of public open space at the waterfront that is usable for all ages and abilities.
- O32 To protect and enhance views to the water.

Controls - Uses

C25.	Potential specialty destination uses may include: micro-brewery, wine, cheese, olives, wine bars, cafés, small gourmet supermarket.
C26.	Areas identified for specialty retail must: <ul style="list-style-type: none"> • Adhere to the requirements of the 'Vibrant Facade'. • Not exceed a 10m shop frontage. • Utilise either the Retail Shopfront and Awning or Posted Veranda frontage type. • Provide adequate pedestrian scale lighting and integrated into bollards and street furniture wherever possible.
C27.	Where retail uses, such as tables and chairs, spill out into the plaza, these activities must ensure public access is unhindered by fencing or other structural barriers.

Controls - Design

C28.	Development along frontages identified as 'Promenade Frontages' must utilise the frontage types provided for 'Vibrant Facades' – see <i>Section K16.5 (Façade design subheading)</i> of this DCP.
C29.	Ground floor residential units must have individual unit access.
C30.	Pedestrian links must be activated on all sides for a minimum of two storeys with vibrant retail at ground floor and residential surveillance and balconies above unless upper level retail is specified on the plan opposite.
C31.	Residential towers above podium level shall have a maximum total floor area of 875sqm .
C32.	A minimum podium height of approximately 14-16m building height is required.

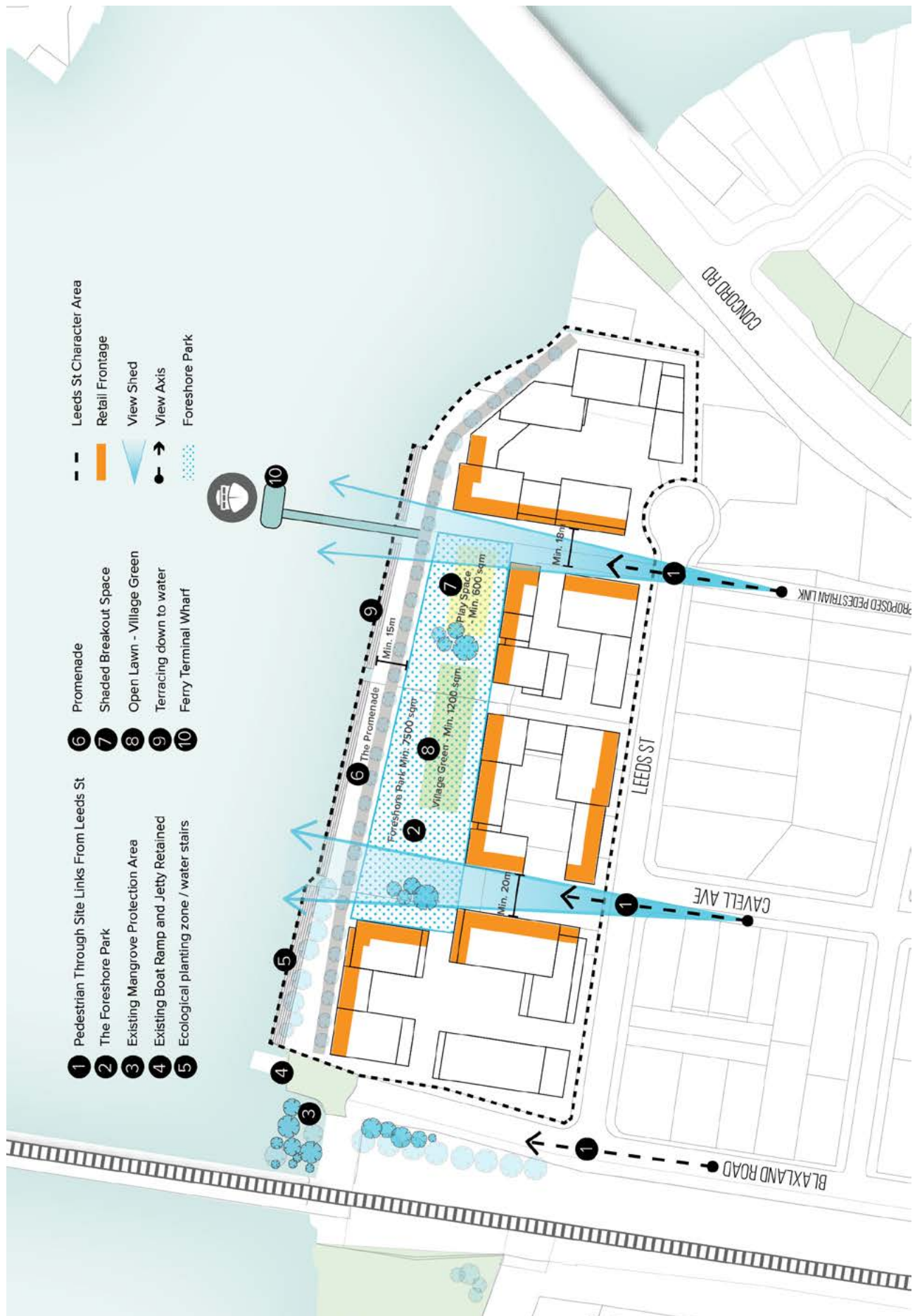


Figure K16-31 Leeds Street Character Area Regulating Plan

Controls - Open Space

C33.	<p>A variety of open spaces should be provided within the Character Area, including;</p> <ul style="list-style-type: none"> • Foreshore Promenade • Foreshore Park • Multi use paved space for sports and events • Pedestrian connection to the new Ferry Wharf • Access to the existing boat ramp and jetty • Terracing to the water edge. 	C38.	The Foreshore Interface with the park is required to have a minimum 50% of its area free of obstructions. The remaining 50% may contain obstructions such as fixed and moveable seating, plantings and trees, light poles, public space signage, litter bins or other design elements that are permitted within public parks.
C34.	The Foreshore Promenade must be 15m wide and should be designed in accordance with Figure K16-33 .	C39.	A minimum clear zone of 3m offset from the façade interfacing with The Foreshore Park is required. The remaining 5m of Built Form Interface with the park is required to have a minimum 50% of its area free of obstructions. The remaining 50% may contain obstructions such as fixed and moveable seating, plantings and trees, light poles, public space signage, litter bins or other design elements that are permitted within public parks.
C35.	<p>The promenade must provide a continuous path of travel along the foreshore edge, minimum 5m in width, consistent with the existing Rhodes West foreshore, and with alignments that connect seamlessly with the existing and future promenade to the west and east, respectively.</p> <p>Large trees with a minimum mature canopy diameter of 10m should be incorporated into the Foreshore Promenade, and spaced to achieve a continuous canopy in maturity. Utilising deep soil available, these trees will grow to provide shade and amenity to the promenade walk and active water edge, and make a significant contribution the sense of place.</p>	C40.	A large level open lawn space must be provided in the park, with minimum dimensions of 20 x 60m, and grades in all directions of 1-2.5%. This space must be framed with seating and shade amenity.
C36.	<p>A minimum 50% of foreshore edge must step down into the river, and minimum of one equal access location provided to mean high tide level. The remainder of edge may consist of elevated terraces (with appropriate fall protection) or 'natural' edges (such as rip rap walling, mangrove planting, etc.).</p> <p>Open views to the water at eye level must be retained for at least 50% of the park interface</p>	C41.	An inclusive play space should be incorporated into the park. The play space must be minimum 600m ² . The range of play elements must cater for all abilities and ages, including young children, adults, and the elderly. The play experience must include bespoke elements that connect with the natural landscape and local context, contributing to a unique sense of place and creating an iconic destination.
C37.	The Foreshore Park should be designed in accordance with Figure K16-32 and comprise a total of 7,500m ² .	C42.	An amenities building must provided within the park, with accessible toilet/s and change facilities (babies, children, adults). Its location shall prioritise convenience from the ferry wharf and play space. The building shall be integrated into the park's design aesthetic and minimise disruption of water views from the park.
		C43.	The Blaxland Road terminus area (northern end) will be resurfaced, provide a multi use paved space for sports, recreation facilities and events. Landscape treatment must include new planting and on-site rain water detention / retention facilities.

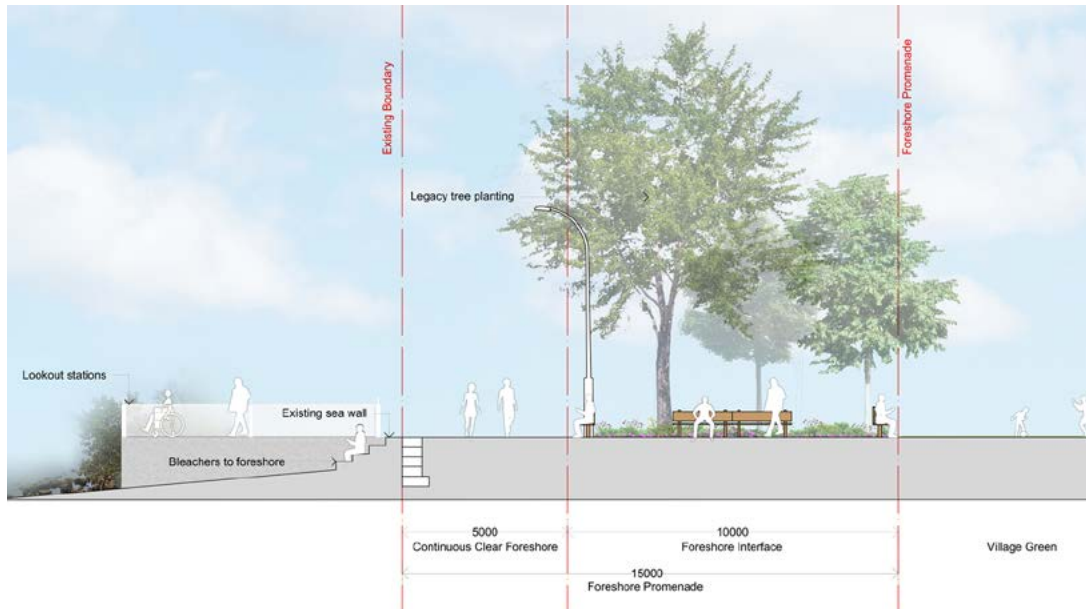


Figure K16-32 Foreshore / Park Interface (nts)

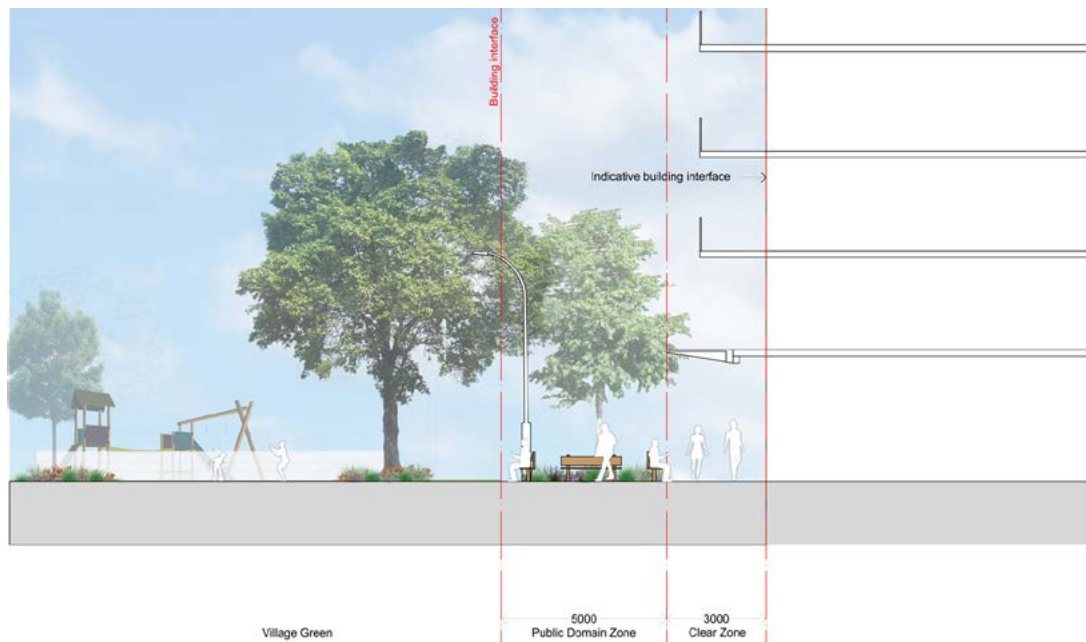


Figure K16-33 Built form / Park Interface (nts)

C44.	<p>All areas of open space, including the Foreshore Promenade and Foreshore Plaza, must;</p> <ul style="list-style-type: none"> • Be publicly accessible 24 hours a day, 7 days a week. • Be designed as an extension to the public domain. • Not be privatised through walls, fencing or the like. • Allow unobstructed pedestrian access at all times (with the exception of approved events and activities).
C45.	<p>Uhrs Point Reserve will be upgraded with new planting, on-site rain water detention/ retention facilities and the provision of a launch ramp. (Note: any upgrades to the existing building facilities is the responsibility of the Sea Scouts and Crown Lands).</p>
C46.	<p>The Foreshore Park must not receive any overshadowing from new development between 8.30 and 12.30pm in the Primary Zone on the Winter Solstice.</p> <p>The Foreshore Park must not receive more than 50% overshadowing from new development after 12.30pm on the Winter Solstice.</p>
C47.	<p>King George Reserve must not receive any additional overshadowing from new development between 8.30am and 12.30pm on the Winter Solstice.</p> <p>Uhrs Reserve must not receive any additional overshadowing from new development between 8.30am and 12.30pm on the Winter Solstice.</p>
C48.	<p>The proposed development within Leeds Street Character Area must not overshadow the open space of the school site between 10.00am and 2.00pm on the Winter Solstice.</p> <p>Location of school's open space is to be determined through detailed architectural design process.</p>
C49.	<p>Development must demonstrate a response to areas identified as a Sculpture / Landscape / Public Art Feature.</p>

C50.	<p>View sheds and visual axis must be protected and terminated by Architecture / Landscape / Public Art Feature.</p>
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Controls - Access

C51.	<p>Primary vehicular access and servicing is to be provided via Blaxland Road.</p>
C52.	<p>Pedestrian links and facilities for non-car modes of transport must be provided.</p>
C53.	<p>The pedestrian links from Leeds Street to the northern foreshore are to be as follows:</p> <ul style="list-style-type: none"> • Ferry Wharf pedestrian link 18m minimum width. • Cavell Avenue extension pedestrian link to be 20m minimum width. • Fronted by active, retail uses. • Open to the sky and unroofed.
C54.	<p>Leeds Street Precinct basement carpark access/ servicing is to be:</p> <ul style="list-style-type: none"> • Shared amongst all developments irrespective of land ownership and/ or land use in a superbasement or shared basement configuration in order to maximize deep soil potential underneath the Leeds Street Foreshore Park.
C55.	<p>Access to the new Ferry Wharf must be designed in accordance with the appropriate Transport for NSW standards and requirements. This could include disabled parking, vehicle turning heads, kiss-n-ride facilities and bus interchange opportunities.</p>
C56.	<p>A wind impact assessment is required as part of any Development Applications relating to the Leeds Street Character Area. The assessment must demonstrate the mitigation of any wind impact through the design and architectural treatment of new buildings, without relying on the enclosure of laneways and through site links.</p>



Figure K16-34 Section Location Plan

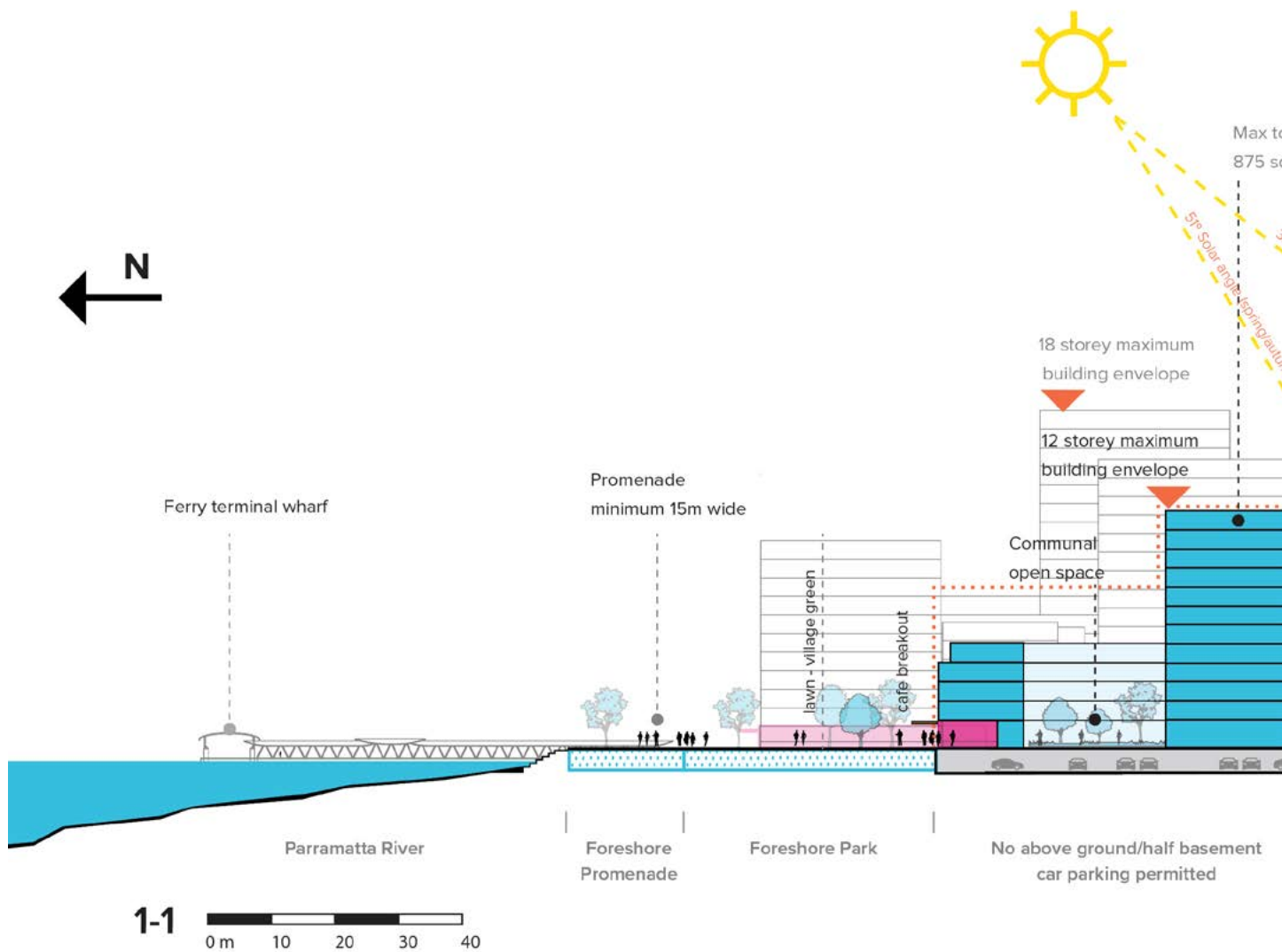
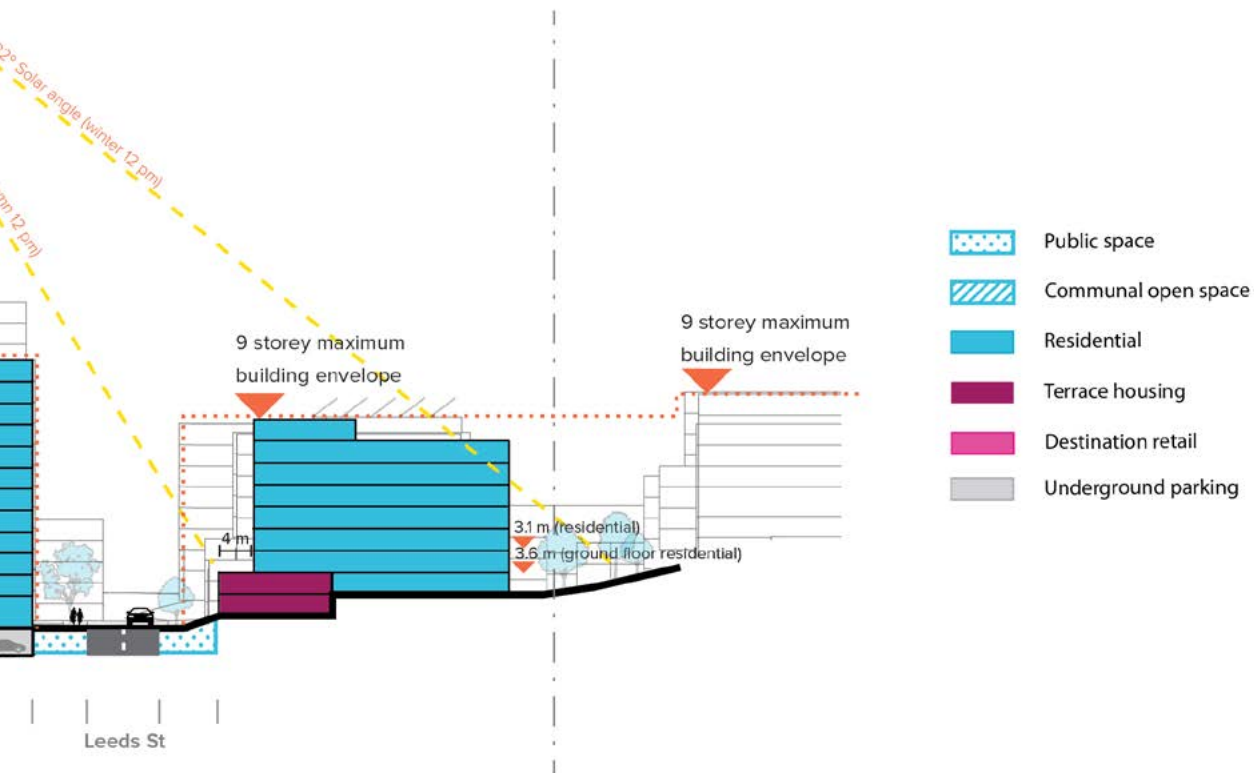


Figure K16-35 Section 1-1

lower footprint
sqm including balconies



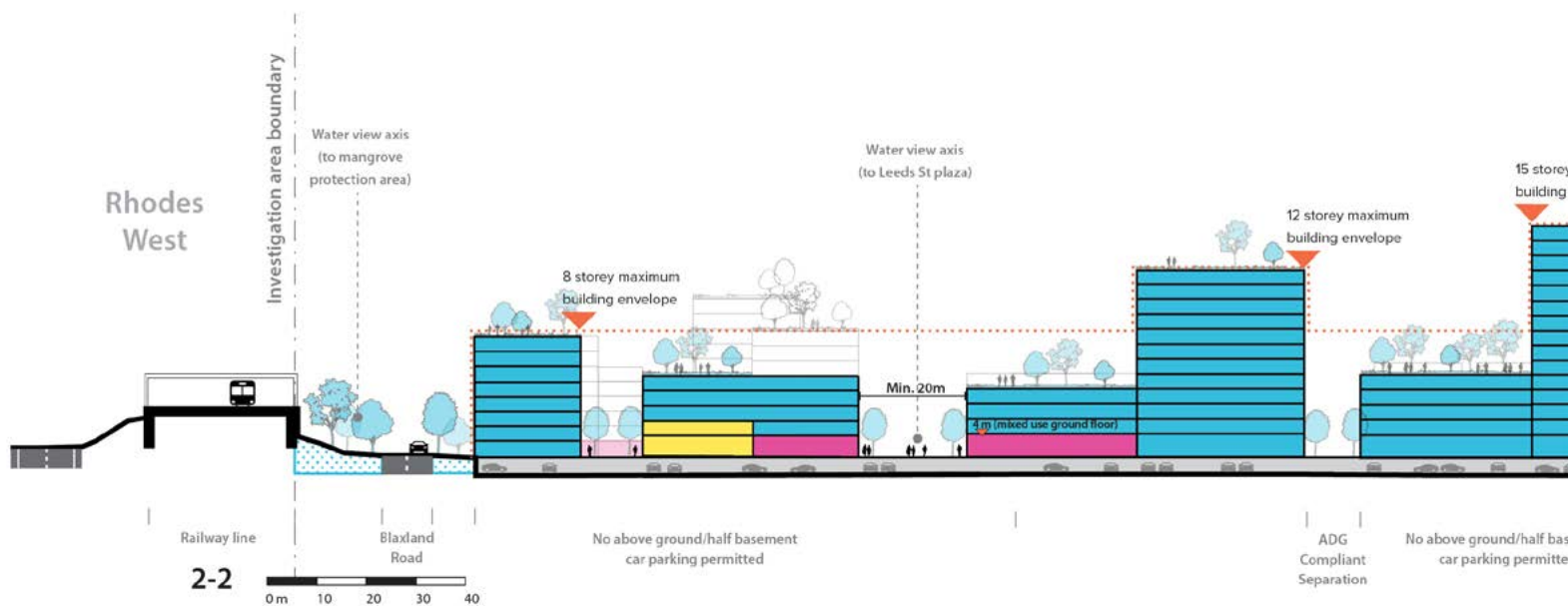
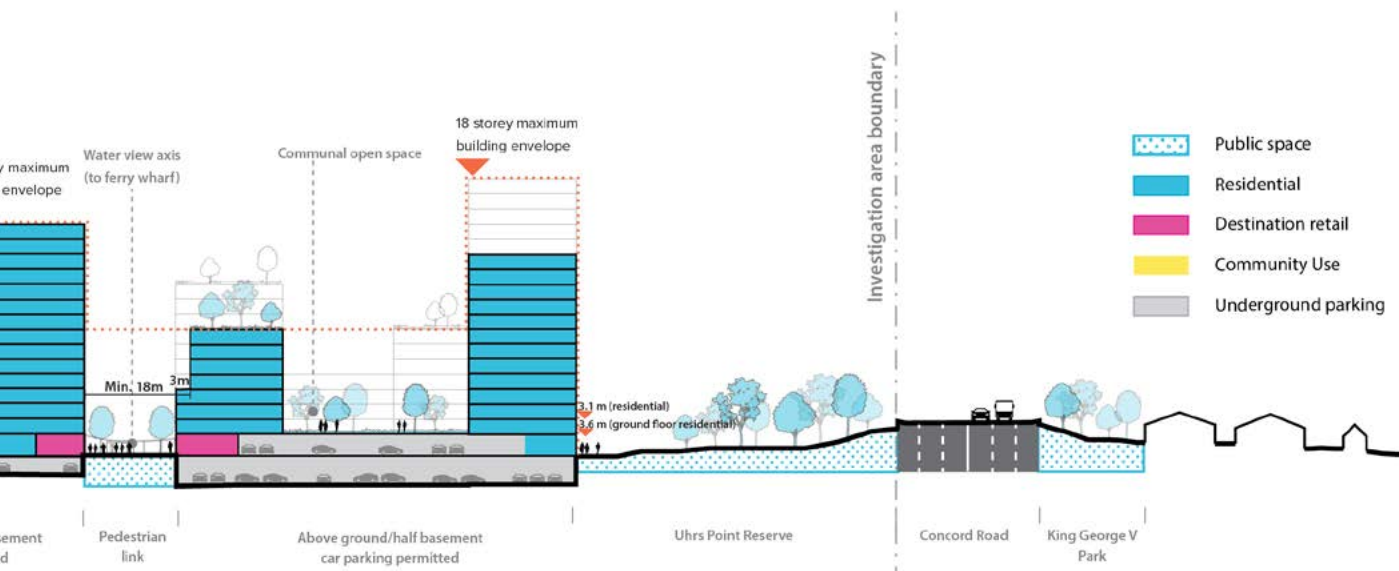


Figure K16-36 Section 2-2



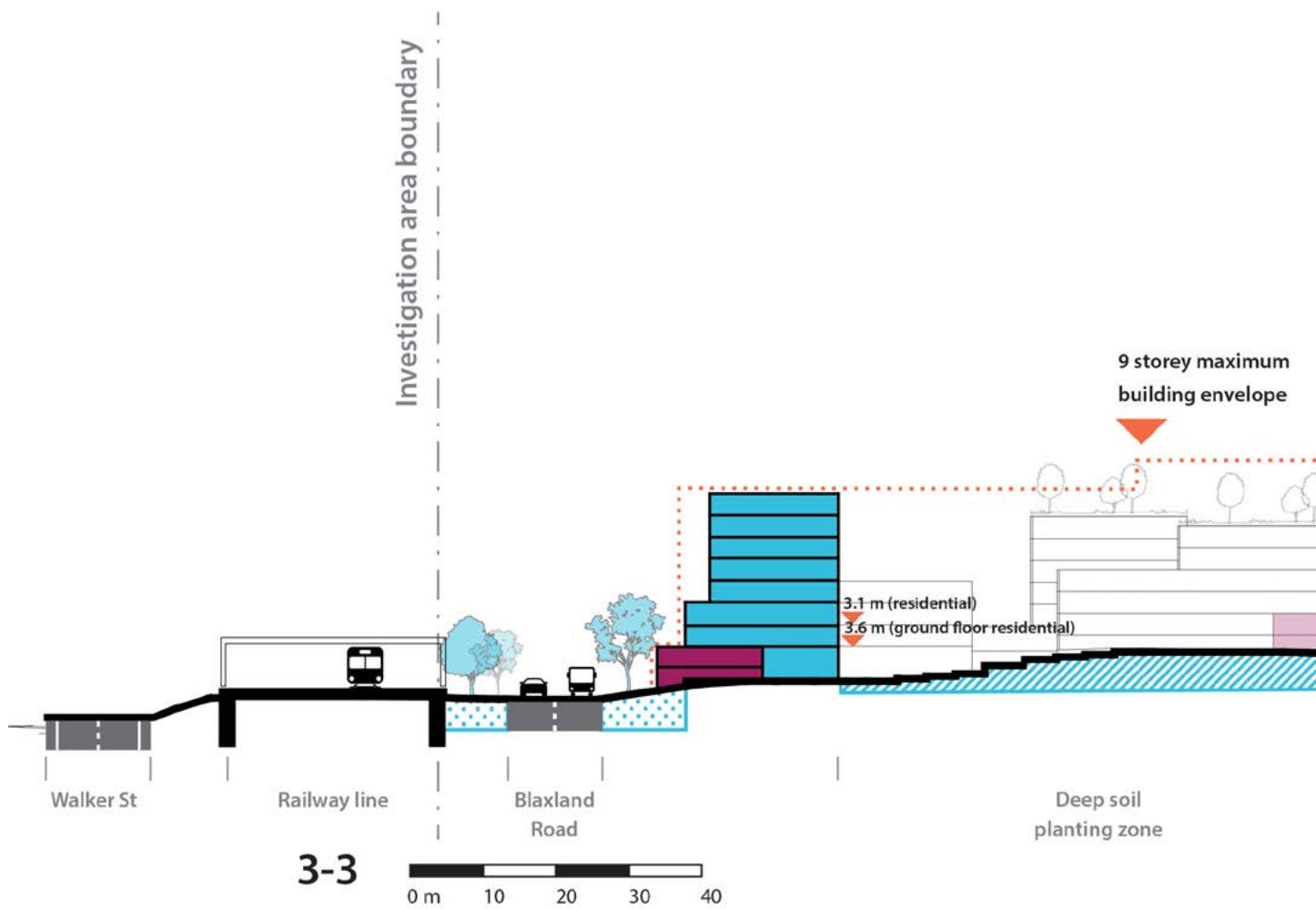
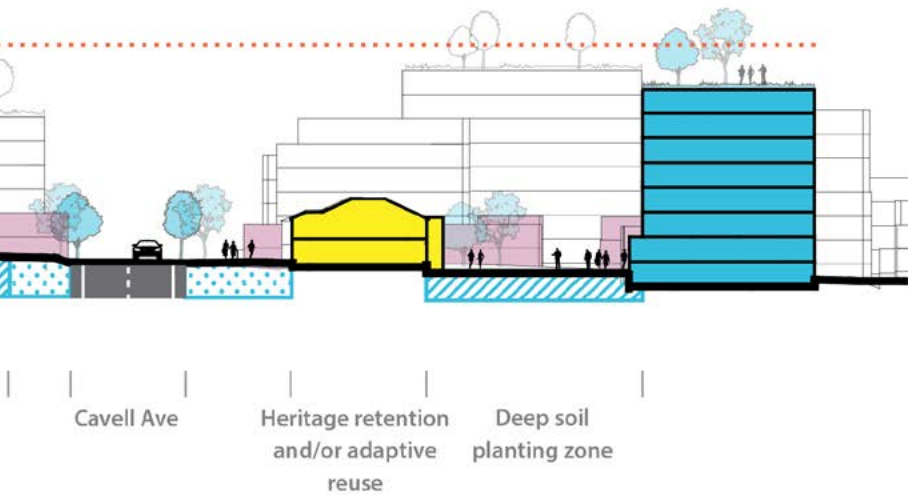


Figure K16-37 Section 3-3

- Heritage Item
- Public space
- Communal open space
- Residential
- Terrace housing



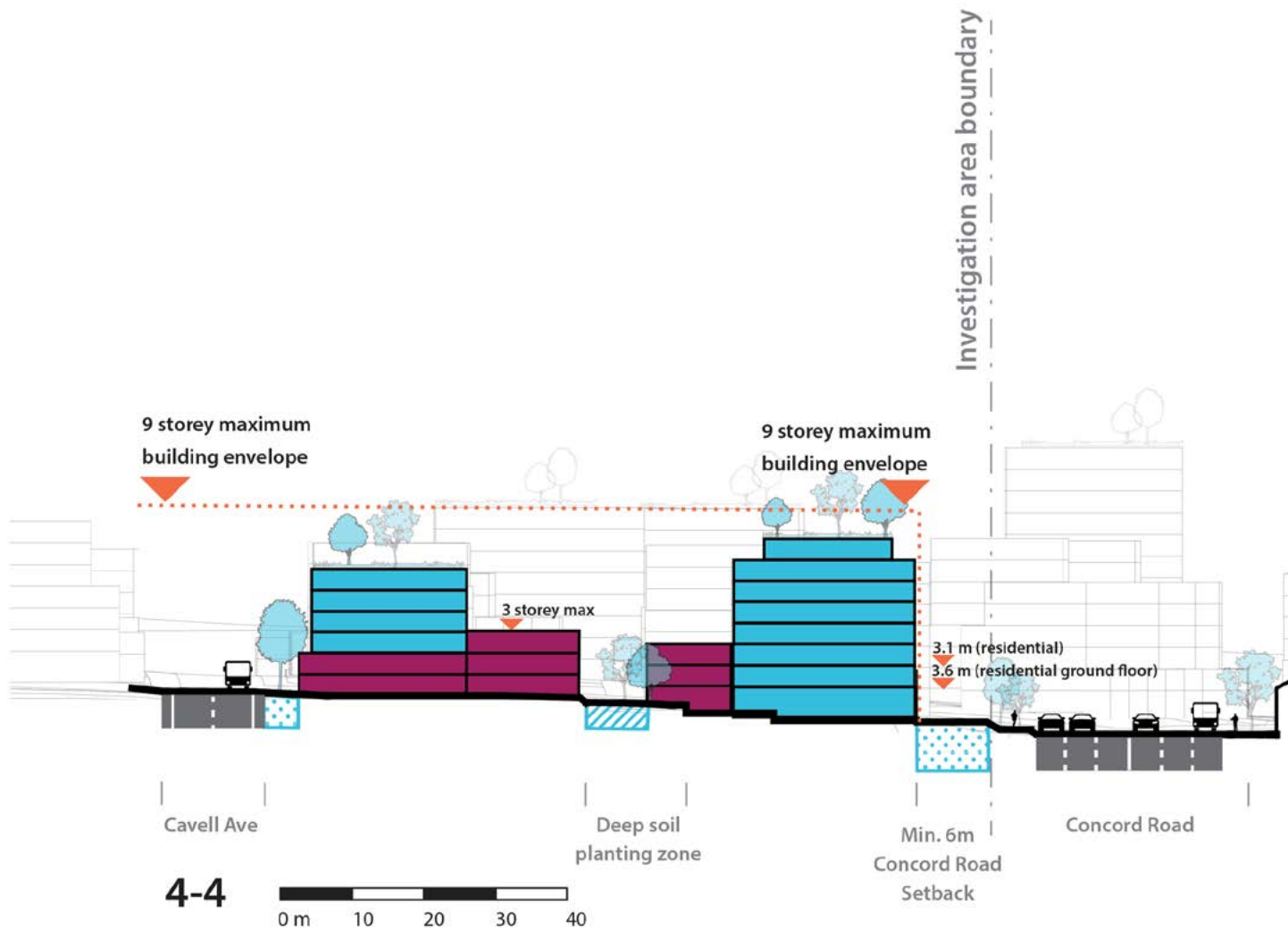
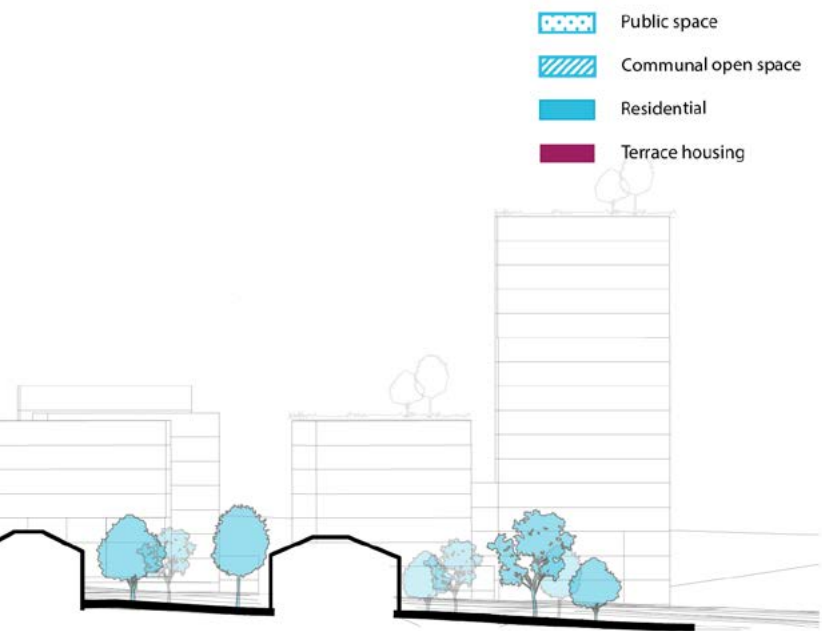


Figure K16-38 Section 4-4



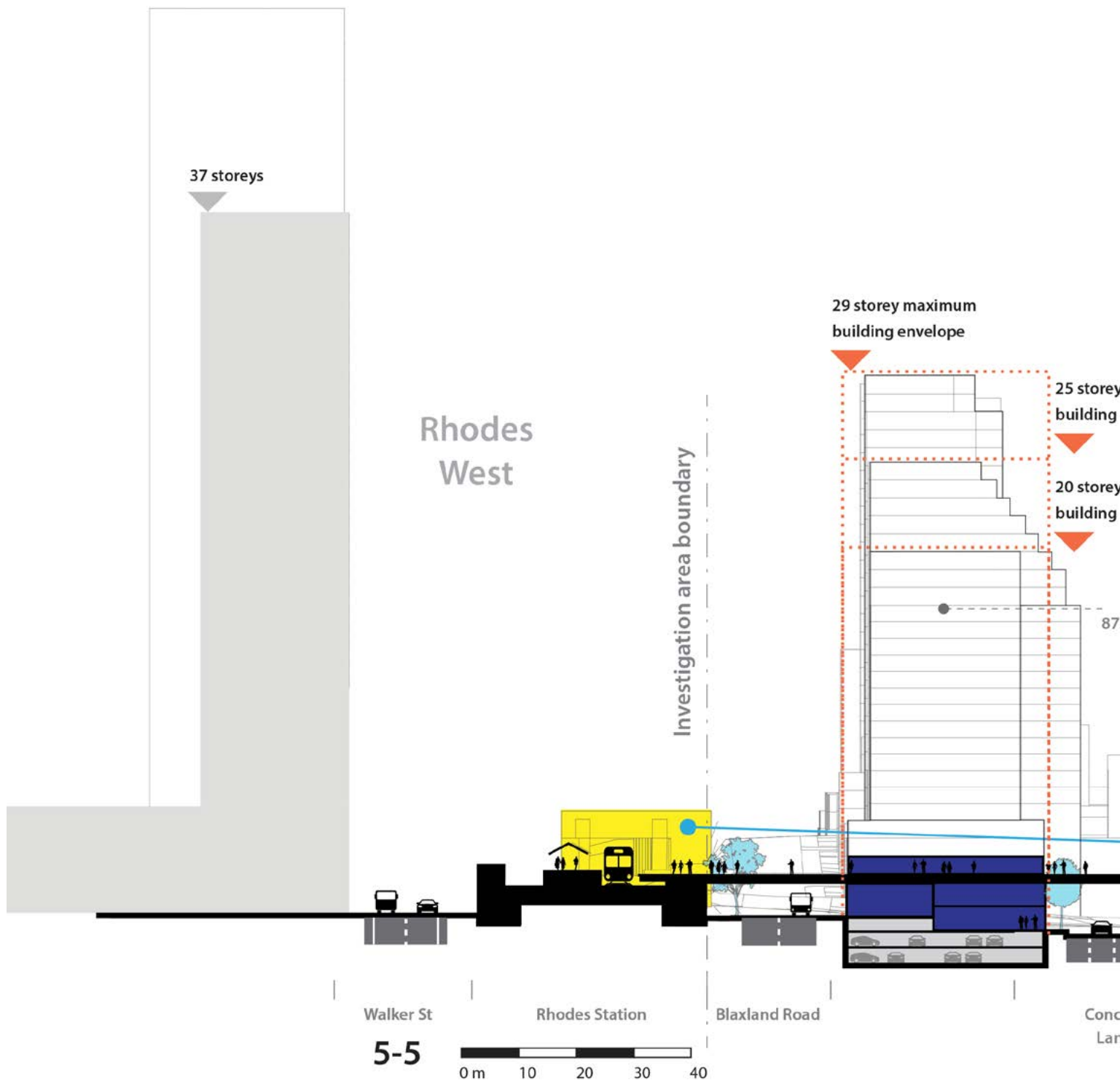
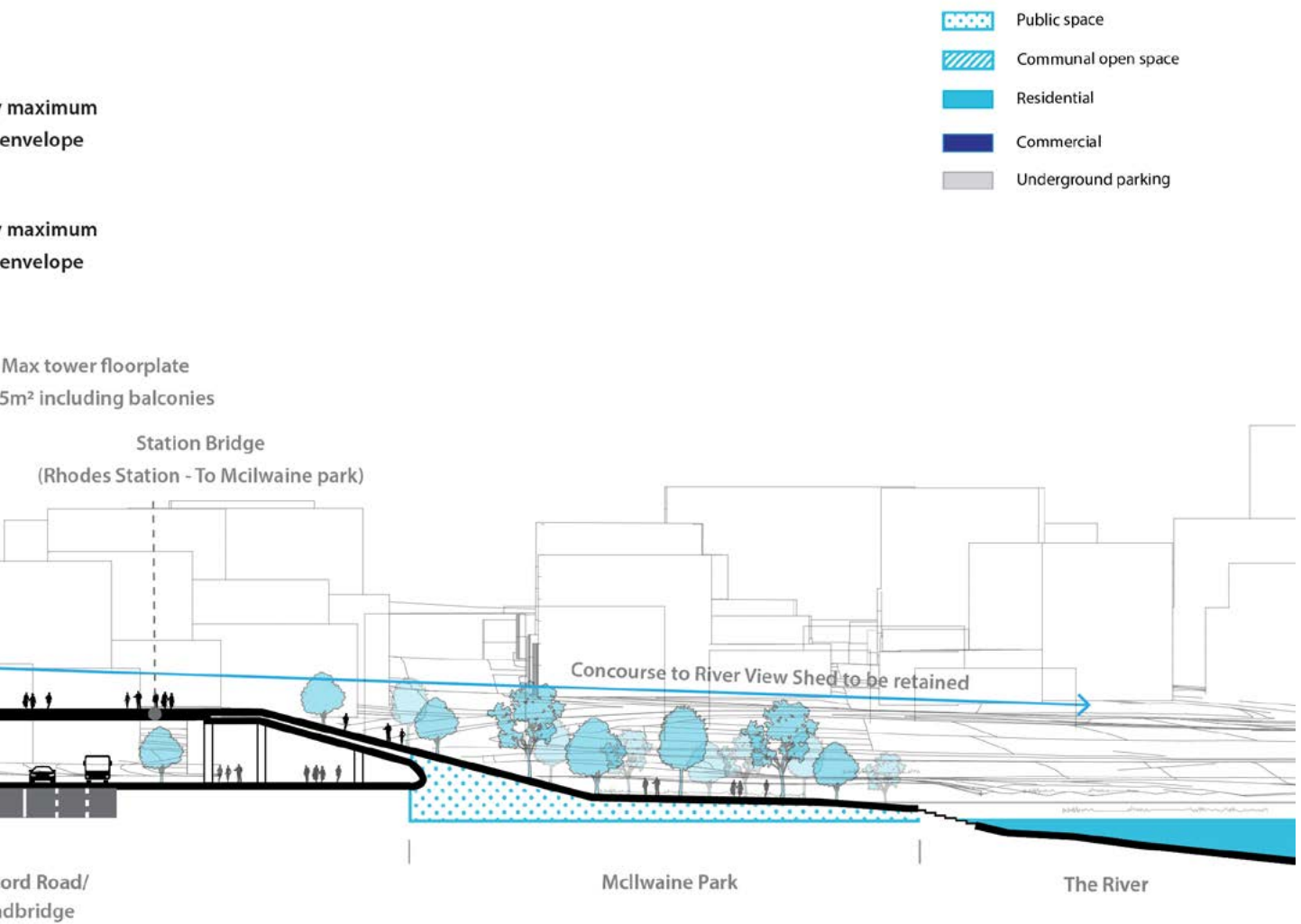


Figure K16-39 Section 5-5



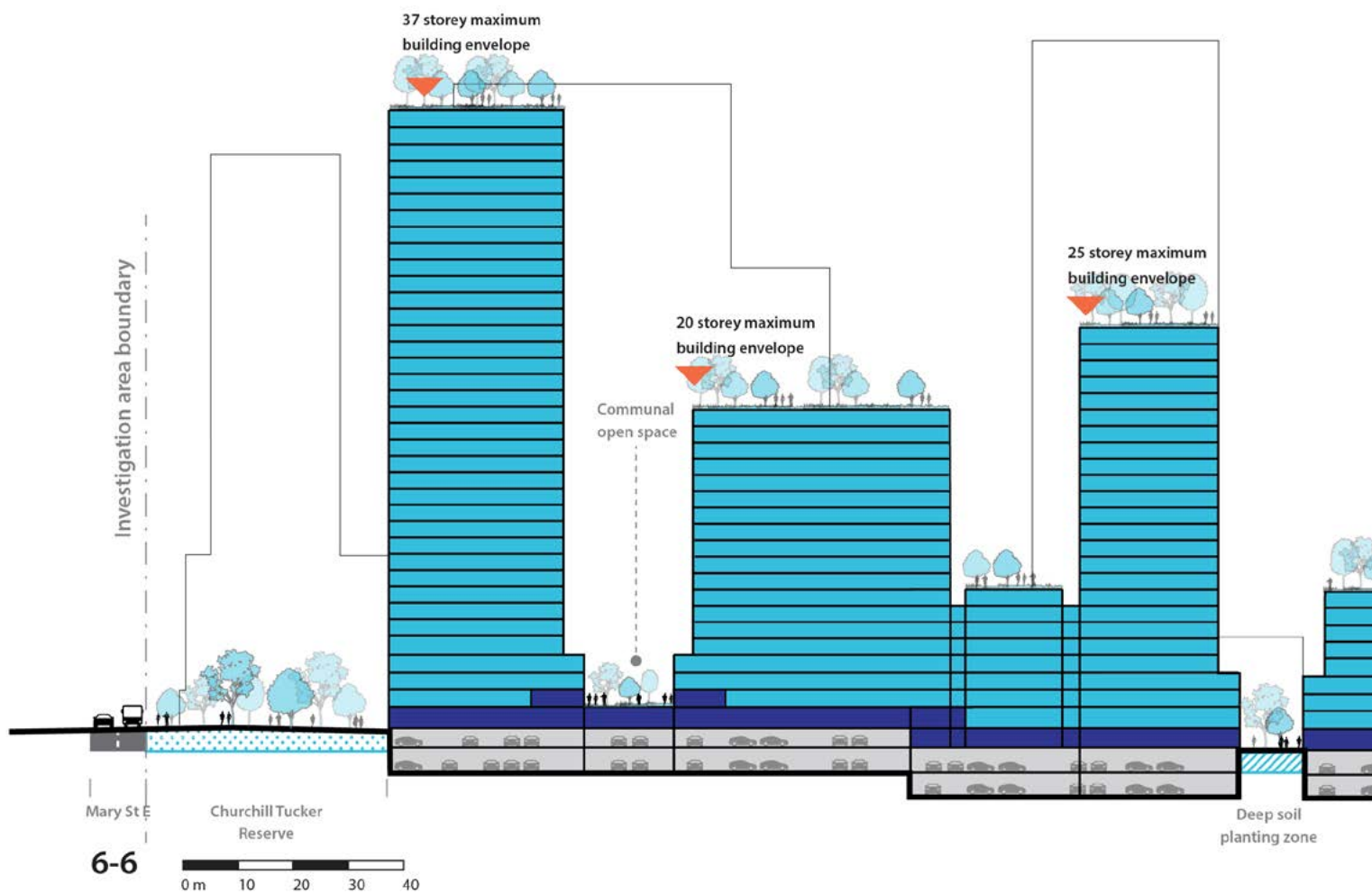
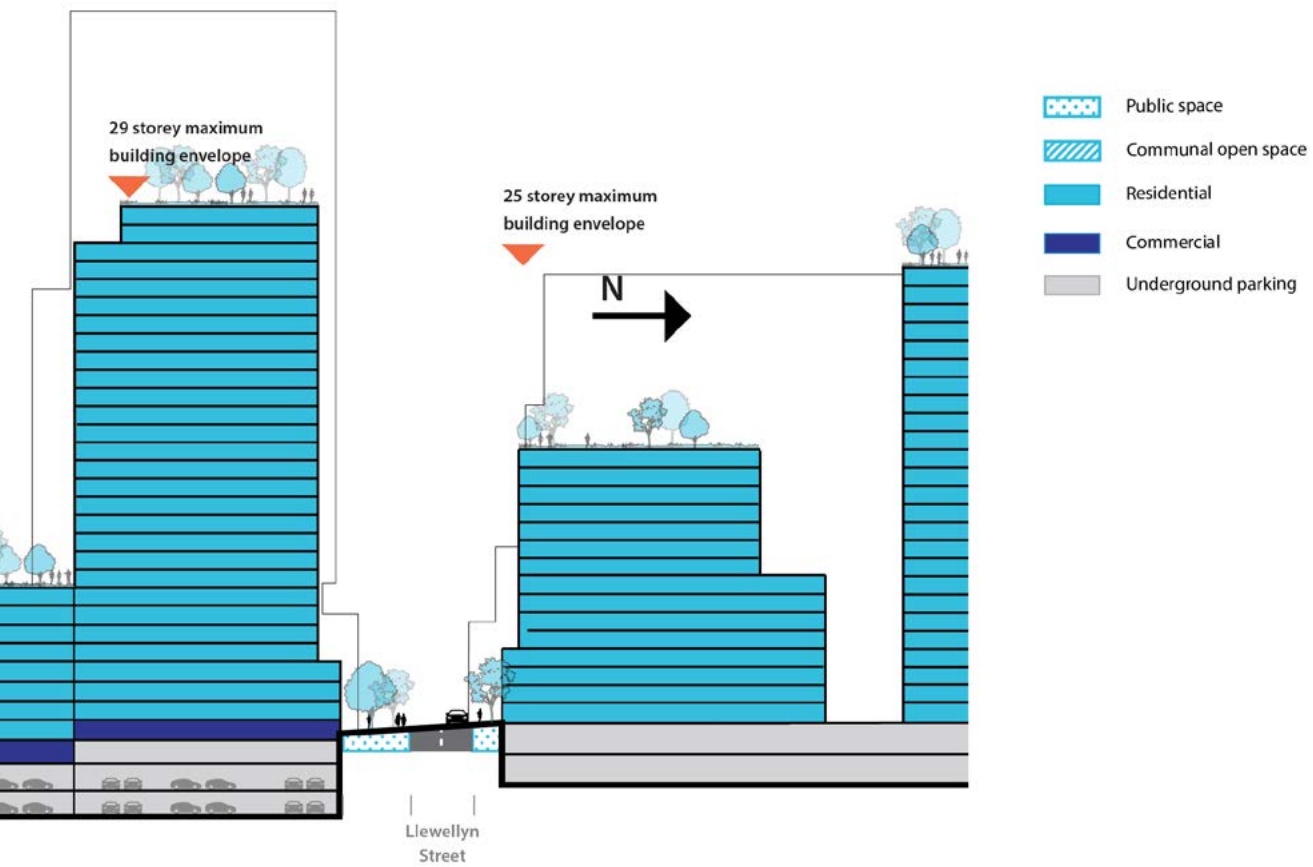


Figure K16-40 Section 6-6



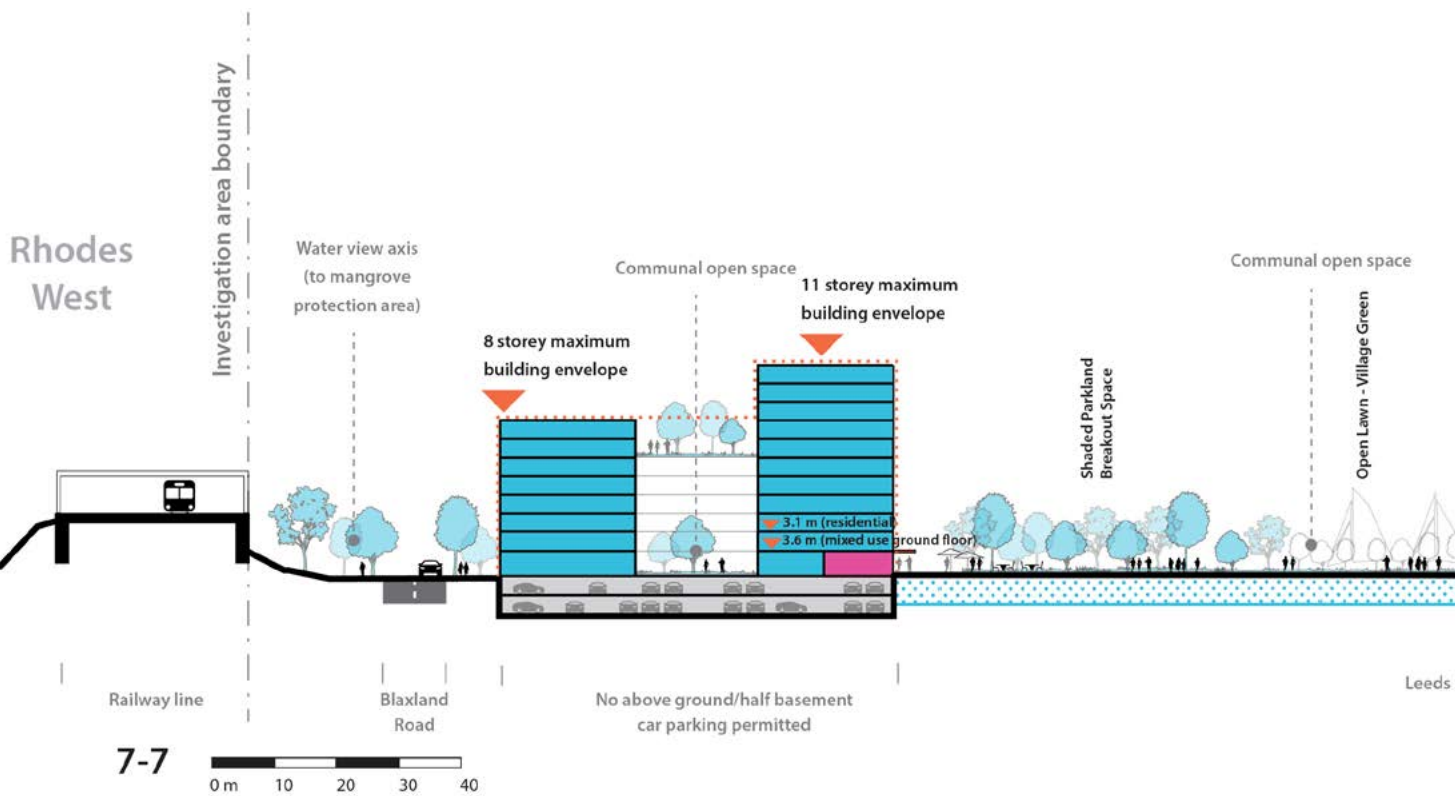
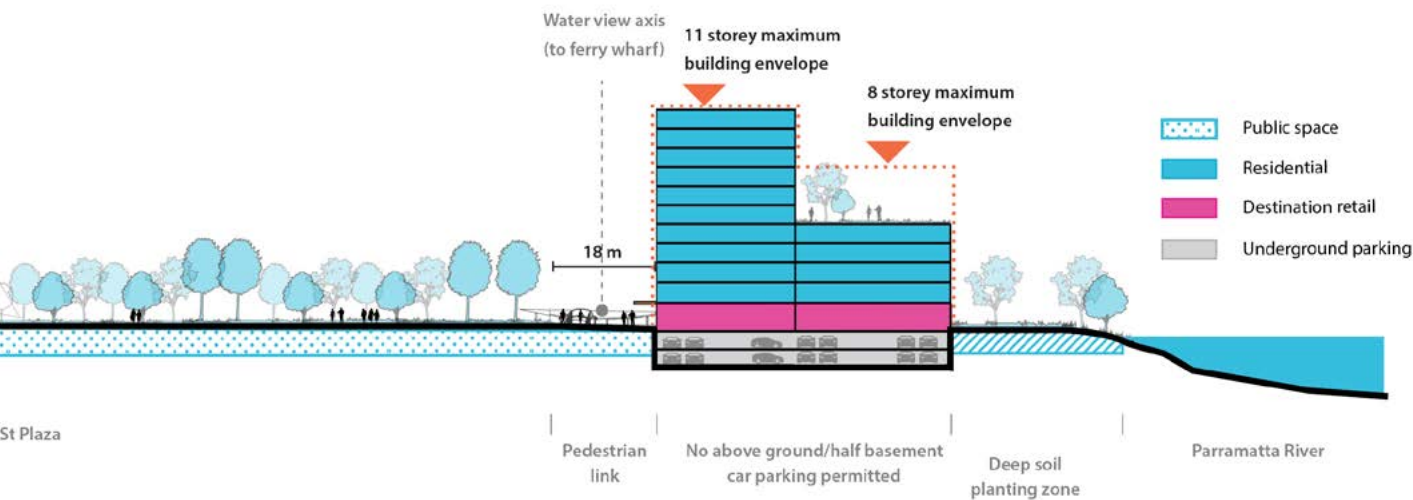


Figure K16-41 Section 7-7



Mixed use corners

Three small mixed use corners with associated corner plazas have been strategically located along important desire lines within the Rhodes East Precinct.

Objectives

- O33 To create intimate, localized spaces and gathering points for the community reflective of the Character Areas, co-located with small pockets of open space.
- O34 To provide frequent points of interest in between destinations, enabling better way-finding.
- O35 To embed opportunities for non-residential uses such as shops, cafes, start-ups and other small-scale commercial or community uses.

Controls

C57.	Mixed use corners are to be located as identified in Figure K16-42 .
C58.	<p>The open space plaza associated with each mixed use corner must be:</p> <ul style="list-style-type: none"> • a minimum of 100m² • Be publicly accessible 24 hours a day, 7 days a week. • Be designed as an extension to the public domain. • Not be privatised through walls, fencing or the like. • Allow unobstructed pedestrian access at all times (with the exception of approved events and activities).
C59.	A minimum of 25m ² ground floor GFA is to be used for the purpose of mixed, non-residential use addressing the open space/ plaza and be accessible at grade.
C60.	Mixed use facades are at least 80% transparent and address the open space.
C61.	The mixed use component may occupy the open space in the form of outdoor seating and/ or a raised platform.
C62.	<p>Upper level residential:</p> <ul style="list-style-type: none"> • must not have blank walls addressing the open space / plaza. • must not use the mixed use corner as a residential lobby.

MIXED USE CORNERS & CORNER PLAZAS

-  Mixed Use Corner
-  Corner Plaza
-  Public Open Space
-  Pedestrian Links
-  Ferry Wharf (proposed)
-  Land to which the DCP applies



Figure K16-42 Mixed use corners plan

Mixed Use Corner A (Concord Road):**Controls**

- C63. New development in this location:
- should reinforce its function as a key feature along Concord Road.
 - is to be in accordance with **Figure K16-43**.
 - is to provide a high degree of building and facade articulation to both street frontages with particular attention given to the view of the corner from the northeast.
 - is to provide landscape treatment is encouraged to attenuate noise associated with traffic on Concord Road.

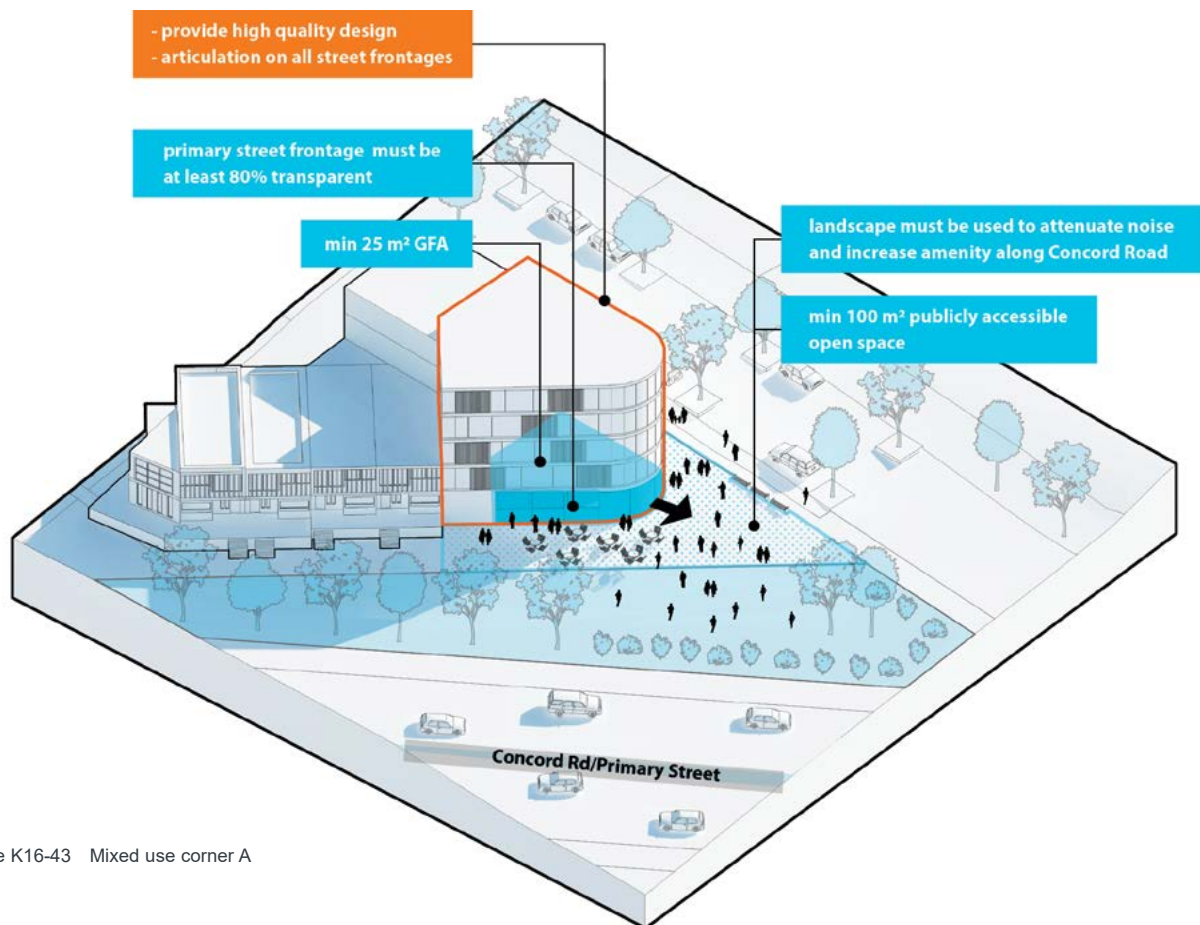


Figure K16-43 Mixed use corner A

Mixed Use Corner B (heritage trees):**Controls**

- C64. New development in this location:
- is to be in accordance with **Figure K16-44**.
 - is to be in accordance with the remnant tree heritage controls for 4A Cavell Avenue. Refer to *Section K16.6 (Heritage items subheading)* of this DCP.

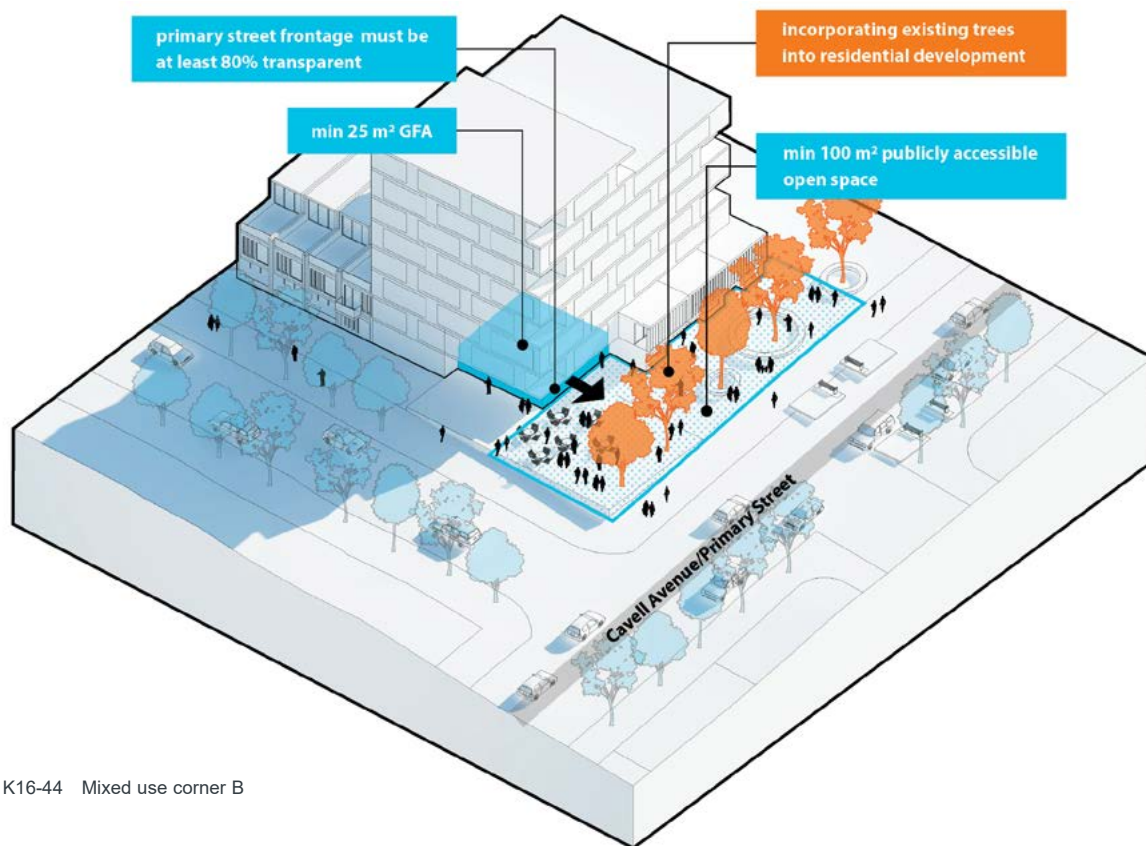


Figure K16-44 Mixed use corner B

Mixed Use Corner C (Concord Road):**Controls**

- C65. New development in this location:
- should reinforce its function as a key feature along Concord Road.
 - is to be in accordance with **Figure K16-45**.
 - is to provide a high degree of building and facade articulation to both street frontages with particular attention given to the view of the corner from the northeast.
 - is to provide landscape treatment is encouraged to attenuate noise associated with traffic on Concord Road.

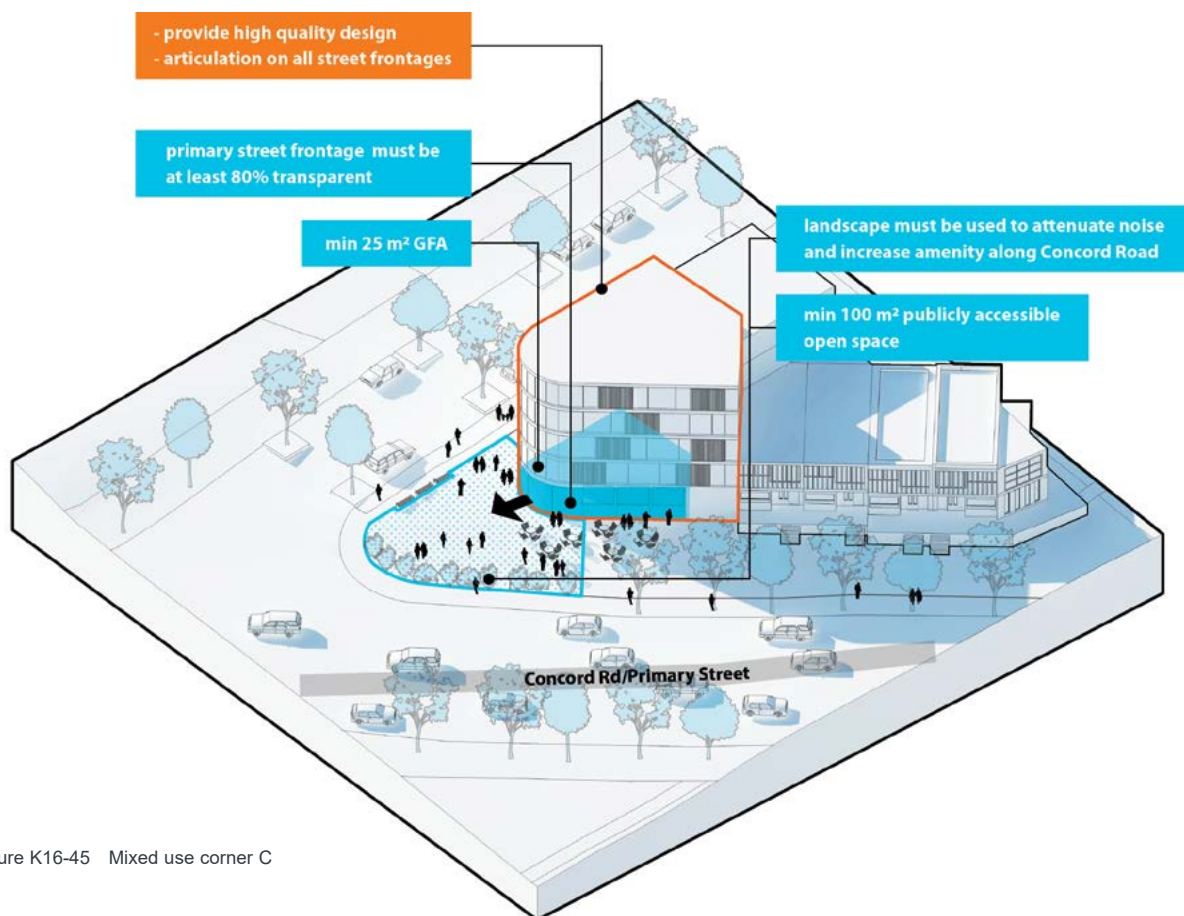


Figure K16-45 Mixed use corner C

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K17 Rhodes West

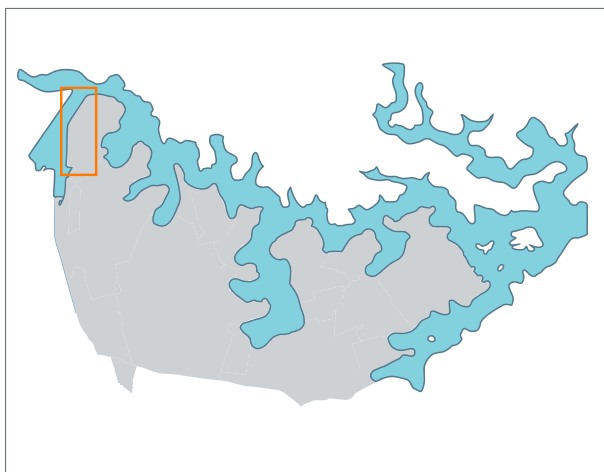


Figure K17-1 LGA map

K17.1 Introduction

Preliminary

Rhodes West is a Specialised Centre in Canada Bay Local Government Area (LGA) located on the eastern shore of Homebush Bay, Sydney Harbour's western most bay. Rhodes West has progressively developed under a planning framework established in 1999 under the Sydney Regional Environmental Plan 29: Rhodes Peninsula (SREP 29) (Now repealed) and the Renewing Rhodes Development Control Plan 2000 (RRDCP 2000) (now superseded).

The City of Canada Bay Council was delegated the role of consent authority from the Minister for Planning in 2009. Since that time, Council has investigated the potential opportunities to enhance the community's facilities and public open space and to build on the existing urban design and planning framework to incorporate sound place making principles in the development of the remaining development sites.

The Rhodes West DCP 2010 formed an important part of the previous implementation of Council's vision for Rhodes West. This site and precinct specific DCP, Rhodes West DCP 2015, will continue and strengthen this vision to create a sustainable, liveable and well connected place on the peninsula.

This DCP includes:

- A Framework Plan to set the urban design structure for development sites; and
- Development controls for the public and private domain.

Vision

The 'vision' for Rhodes West is to:

1. Create a diverse and visually interesting commercial centre supported by a high density residential community;
2. Integrate the new community of Rhodes West with the existing community east of the Northern Railway line, Wentworth Point and Sydney Olympic Park through bus, pedestrian and cycle connections and the provision of new community facilities, which are accessible to all;
3. Engender a meaningful 'sense of place' and community with a network of activity areas that combine neighbourhood shops, recreation opportunities, and public open space with residential dwellings;
4. Create a range of high quality public open spaces and community facilities;
5. Ensure high quality architectural design that contributes positively to the role of Rhodes as a Specialised Centre in Sydney; and
6. Demonstrate leadership in ESD initiatives.

Aims and objectives

The intention of the Rhodes West Development Control Plan is to set the detailed development objectives and controls that support the Canada Bay Local Environment Plan 2013 (as amended).

Aims

The following Aims seek to implement Council's vision for a precinct of high quality urban design that is well connected, liveable and environmentally, economically and socially sustainable.

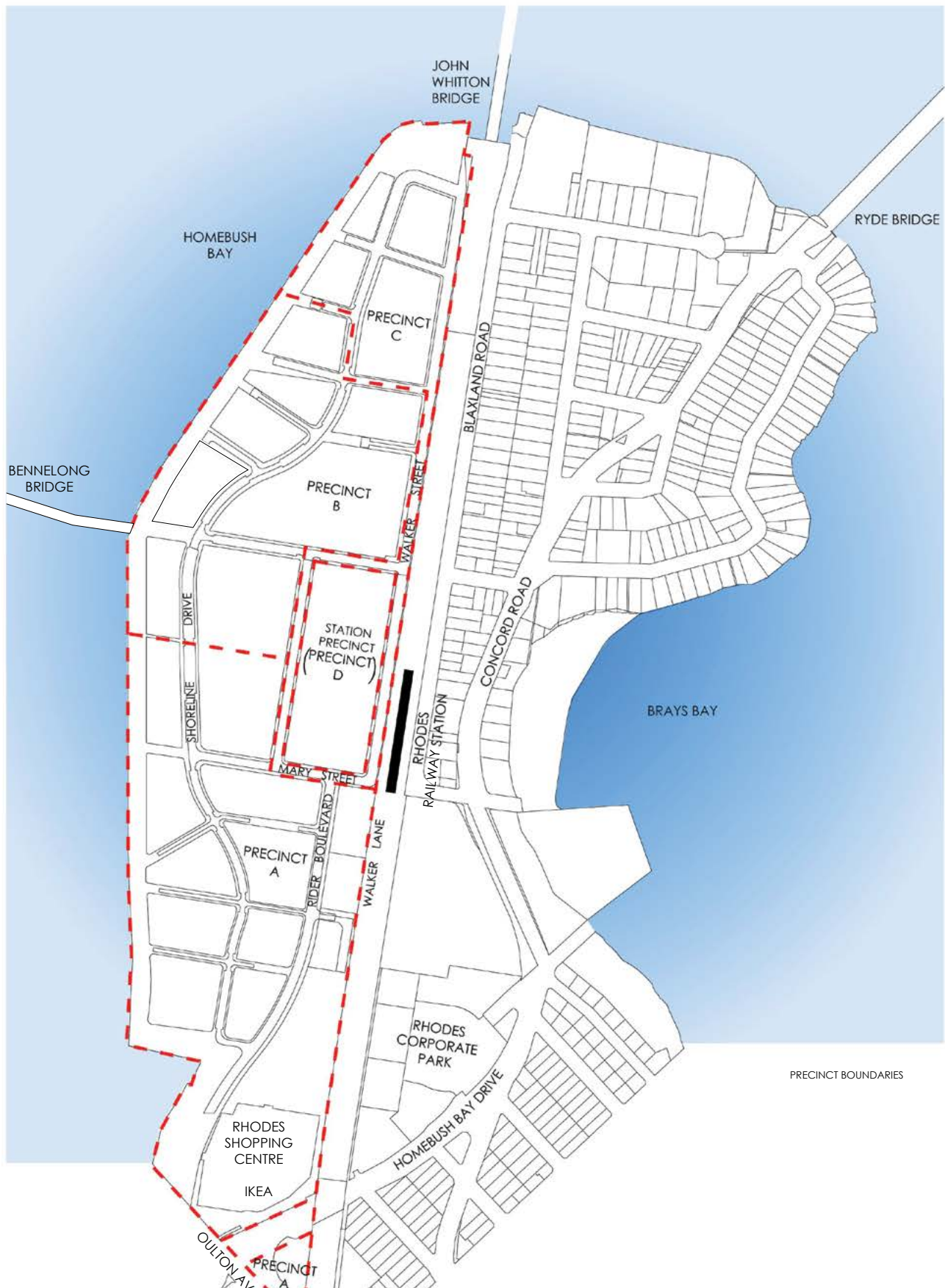


Figure K17-2 Rhodes West Precinct Plan

High quality design

- A1 High quality public domain design to create memorable places that the community use and enjoy.
- A2 Pleasant streetscapes with active street frontages.
- A3 High quality architectural design that creates a visually interesting skyline as well as pleasant streetscapes.

Well connected

Connectivity achieved by:

- A4 Supporting an integrated, well connected and accessible area to it's local and regional context.
- A5 Providing pathways and cycleways that link public spaces and activity areas through and between residential and mixed use areas and that link with adjacent residential areas.
- A6 Enhancing existing connections and creating new connections between Rhodes West and Rhodes East, Wentworth Point and Sydney Olympic Park which supports the proposed construction of the Homebush Bay Bridge between Rhodes West and Wentworth Point.
- A7 Promoting and providing a well connected network of public, private and communal areas which offer a range of recreational needs including places with high amenity for workers, local residents and other visitors to enjoy.

Liveable

Liveability achieved by:

- A8 Establishing an urban design framework that optimises views, sunlight access and natural air movement and that minimises environmental impacts within Rhodes West and adjacent residential areas.
- A9 Providing safe and secure public spaces, pedestrian pathways and cycleways.
- A10 Providing well designed public open spaces through the use of high quality materials, street furniture and public art.
- A11 Promoting high levels of internal residential amenity in the design of communal areas and internal layout of dwellings having regard to visual and acoustic privacy, thermal comfort, natural airflow and ventilation, sunlight access, adequacy of storage areas, views and aspect.

Sustainable

Environmental sustainability achieved by:

- A12 Promoting sustainable transport, reduce car use and increase use of public transport, walking and cycling.
- A13 Providing high quality open spaces and a range of recreational facilities.
- A14 Conserving the environmental heritage of Canada Bay.
- A15 Promoting ecologically sustainable development.
- A16 Supporting foreshore areas for parkland open space that balances the need for ecological restoration with functional open space required for public foreshore access.
- A17 Promoting a high level of building sustainability performance through energy and water efficiency.
- A18 Promoting waste minimisation in building construction and operation.
- A19 Promoting pedestrian and cycling network through integrated circulation and wayfinding which will provide safe and enjoyable access to facilities and open space.

Economic sustainability achieved by:

- A20 Promoting an appropriate mix of uses that will enhance the role of Rhodes as a Specialised Centre for employment growth.
- A21 Promoting a dwelling mix that supports demand for housing that is affordable whilst providing housing choice for a range of household types.

Social sustainability achieved by:

- A22 Providing community facilities of an appropriate use and size to cater to the demands of a growing population.
- A23 Providing an adequate amount of public open spaces designed to suit the needs of the growing population for a variety of passive and active recreational needs.

Objectives

The DCP is based on the following objectives in support of Canada Bay Local Environment Plan 2013 (as amended).

Create a specific identity for Rhodes Peninsula

- O1 Optimise the waterfront location by providing continuous public access to the foreshore that links adjoining parks.
- O2 Substantially retain the alignment of existing seawalls.
- O3 Design public open spaces that create a special amenity and passive and active recreation opportunities, which are safe and promote ease of pedestrian movement.
- O4 Retain and enhance opportunities for views from the public domain, including views to the water from along the ridge, to Homebush Bay and Brays Bay looking east and west along Mary Street, west along Parramatta River from the point, and to the Millennium Markers and Olympic Park.
- O5 Preserve the cultural heritage value of the place by retaining wherever practical existing streets, established stands of trees, site benching, prereclamation shoreline and the flat terrain of the reclaimed area.
- O6 Reflect and emphasise the topography with lower buildings at the foreshore and greater height to the east of Shoreline Drive.
- O7 Create a visible identity to Rhodes West through the design of high quality tower buildings of slender design.
- O11 Create pedestrian and cycle connections from Bicentennial Park and Millennium Parklands in the south to the Leeds Street boat ramp in the north via streets and the foreshore reserve;
- O12 Improve pedestrian connections to the north by providing stairs from Mill Park to John Whitton Bridge and at the ferry wharf at Meadowbank;
- O13 Locate streets to enhance views to Homebush Bay, Parramatta River and associated open spaces, and ensure a view to water, open space or sky at the end of every street, to the maximum extent possible.
- O14 Establish a continuous network for vehicles, pedestrians and throughout the peninsula, close to the Railway Station, and minimise public dead end streets;
- O15 Create pedestrian permeability by providing through block pedestrian access;
- O16 Establish a hierarchy of streets that distinguishes between major streets for through traffic and public transport, and local streets to assist orientation and improve legibility;
- O17 Create a safe and vibrant public domain by designing streets as social spaces that incorporate a mix of transport modes, including pedestrians, cyclists, moving and parked vehicles;
- O18 Give pedestrians and cyclists priority in residential areas by means such as pedestrian through block connections, footpaths, kerb ramps, street trees, minimising vehicle crossings of footpaths, and designing minor carriageways for slow vehicle speeds to deter through traffic.

Provide a street layout that maximises connections to all surrounding areas and creates a high quality public domain that is permeable and safe

- O8 Integrate the east and west parts of the Rhodes Peninsula and improve pedestrian and cycle links to Concord West.
- O9 Build the Homebush Bay Bridge to provide connectivity for pedestrians and public transport between Rhodes Peninsula and Wentworth Point.
- O10 Provide for future flexibility by maximising connections to adjoining areas from Mill Park in the north, across the rail line in the east, and to Oulton Avenue in the south.

Create a range of public open spaces that complement and supplement the existing local and regional park network, and that maximise connections to all surrounding areas

- O19 Contribute to the regional network by providing continuous public open space along the foreshore that is publicly accessible, connecting to Bicentennial Park and the Blaxland Road Boat Ramp and pedestrian/cycleway connections on John Whitton Bridge.
- O20 Contribute to the regional network by constructing the proposed Homebush Bay Bridge between Rhodes Peninsula and Wentworth Point creating the Homebush Bay Loop.

- O21 Provide a point park that extends the typology of point parks in the harbour and along the Parramatta River foreshores creating the Parramatta River Loop.
- O22 Provide an active Foreshore Park as the major public activity point along the foreshore, between Mary and Gauthorpe Streets.
- O23 Provide a conservation park which conserves the existing mangroves along the foreshore to the south.
- O24 Provide a linear reserve for local recreation including the three major foreshore parks, incorporating planting to extend habitat, enhancing the view of development from the reserve and Homebush Bay, and providing privacy to park front development.
- O25 Provide neighbourhood open space as a gathering point in the mixed use zone close to the railway station, near the junction of the major pedestrian routes to the foreshore and retail complex.
- O26 Provide local parks along Shoreline Drive to enhance the amenity of this primary through street, which have quality landscaping, trees for shade and areas for supervised children's play.
- O27 Provide strategically positioned local parks and squares in the B4 - Mixed Use and R4 - Residential Zones to provide places for people to meet, gather, sit, actively use or relax.
- O28 Maximise public pedestrian and cycle access to all public open spaces.
- O29 Create high quality landscaped parks that include deep soil landscape areas, that allow planting of large trees.

Integrate best practice ESD principles in the design and management of the public and private domain

- O30 Minimise energy consumption by creating low maintenance environments and encouraging green supply electricity.
- O31 Minimise resource depletion by selecting environmentally sustainable building materials in the public and private domain.
- O32 Control the quality of water entering Homebush Bay by integrating stormwater management strategies.
- O33 Conserve water by maximising opportunities for infiltration of runoff, reducing irrigation

requirements through the planting of locally indigenous species, and using water saving devices in public amenities.

- O34 Control the potential impact on air quality by minimising car dependency, promoting pedestrian and cyclist movement throughout the site and encouraging the use of public transport.
- O35 Reduce energy consumption by encouraging non-motorised forms of transport.

Optimise the use of public transport and reduce travel demand

- O36 Provide a mix of residential, community, employment, local and district retail activities within the Rhodes Peninsula.
- O37 Concentrate public accessible facilities, commercial development and the entrance to retail facilities with direct and convenient access to Rhodes Station, within 500m of the station entrance.
- O38 Maximise access to Rhodes Station by creating a permeable layout of streets, pedestrian arcades and walkways, and create an appropriate setting in terms of pedestrian access, facilities and modal change.
- O39 Create a primary retail/commercial street linking Mary Street and a retail centre adjacent to Homebush Bay Drive.
- O40 Enable local shops and home based business in residential areas, along Walker Street, within and adjacent the Foreshore Park to complement community facilities, and fronting onto local parks.
- O41 Minimise public and private car parking in all developments.
- O42 Accommodate a bus route through Rhodes West in the design of streets and connecting bus routes to Wentworth Point over the Homebush Bay Bridge.
- O43 Promote cycling as a sustainable alternative to the automobile for commuting as well as for local travel through the provision of an integrated on-road and off-road cycleway network and the provision of bicycle parking within private developments as well as at key activity places in the public domain including Rhodes Railway Station.
- O44 Minimise car dependence by encouraging car sharing by providing dedicated on-street spaces for car share companies to use.

Enliven the public domain and encourage walking by distributing active uses, including retail and communal facilities, at street level, particularly along major streets in the mixed use zone

- O45 Consolidate mixed uses including publicly accessible facilities, local retail and commercial adjoining Rhodes Railway Station.
- O46 Encourage active ground floor uses on primary streets, in particular along the major spine connecting Rhodes Station and the retail centre adjacent to Homebush Bay Drive.
- O47 Encourage activities in, and surveillance of, all public areas.
- O48 Provide publicly accessible facilities and small scale retailing adjoining and opposite parks and squares, including facilities that accommodate or are ancillary to recreational opportunities relating to the use of the public domain.

Embody ESD principles into the design of buildings and external spaces

- O49 Create street blocks that facilitate subdivision and building orientation to the north, east and west, provide excellent address to Homebush Bay, the foreshore parks and local parks and that follow the design guidelines within SEPP65.
- O50 Encourage the design of long life buildings that are durable and designed to accommodate adaptation to future uses, and buildings that innovatively combine ecological, social, cultural and economic objectives.
- O51 Conserve energy by maximising the use of natural lighting and ventilation, passive heating and cooling, energy efficient hot water heating and low energy lighting and appliances.
- O52 Minimise resource depletion by the selection of environmentally sustainable building materials.
- O53 Providing on site facilities for composting, recycling and bulky goods.
- O54 Conserve water by matching water quality with its intended use and using water saving devices.
- O55 Conserve water by connecting Rhodes West to the water conservation infrastructure known as WRAMS at Sydney Olympic Park, if available.

- O56 Maximise water quality by implementing soil erosion and sedimentation control measures during remediation and construction phases, maximising opportunities for infiltration of stormwater, and minimising nutrients and pollution in urban runoff.
- O57 Control the potential impact on air quality by minimising reliance on cars, provision of bicycle parking within the basement and providing information to respective residents about the transportation alternatives to private motor vehicles, requiring car share arrangements to integrate into developments and the public domain and the continuance of the reduced on-site parking requirements for private development.
- O58 Reduce landfill by:
 - » Minimising the generation of waste;
 - » Recycling 80% of weight of construction waste.

Create a model suburb characterised by high quality architecture, landscape architecture, and urban and environmental design which enhances the locality

- O59 Promote a high quality of architectural and landscape design, to create a strong identity for all new development.
- O60 Encourage design excellence in architectural and landscape design and follow the design guidelines within SEPP65.
- O61 Create an architectural character specific to urban location, public domain interface and landscape setting.
- O62 Encourage built form that creates a positive urban edge to streets and public open spaces and the foreshore of Homebush Bay.
- O63 Encourage built form that optimises sun access to new and existing streets and public open spaces.
- O64 Minimise the bulk of tower and tall buildings to protect amenity of adjoining residential areas and parklands.
- O65 Encourage built form that has articulated facades to create visually interesting building forms and to assist in breaking up building bulk.
- O66 Create private internal and external environments that achieve a high level of amenity to building occupants and neighbours and that create pleasant streetscapes.

Provide workplace and housing choice through a variety of building types to cater for a diverse community

- O67 Provide a variety of building types, and encourage flexible living and working accommodation.
- O68 Accommodate the needs of people with mobility impairment, including young children in prams and the elderly by providing accessible housing.
- O69 Ensure that non-residential activities do not detract from residential amenity.

Provide well connected private external spaces that are well integrated with the buildings

- O70 Design communal landscape spaces to be useable and easily accessible from adjoining buildings, and that provide a pleasant and comfortable environment;
- O71 Provide residential front gardens to dwellings that are set back from the street edge.

Land covered by this DCP

This plan applies to the precinct known as Rhodes West, being the precinct generally bounded by the main Northern Rail Line, Outlon Avenue (near Homebush Bay Drive), Homebush Bay and Parramatta River as identified in Figure K17-2 Rhodes West Precinct Plan.

Structure of the DCP

The DCP comprises four main sections:

- Section K17.1 Introduction
- Section K17.2 Framework Plan – sets out the urban design structure and principles of the DCP
- Section K17.3 General controls - provides the controls for public and private domain that apply to all development at Rhodes West
- Section K17.4 Site-specific controls – provides the specific controls that apply to the remaining development sites within each of the Precincts

K17.2 Framework Plan

Urban design and place making principles

The Framework Plan at Figure K17-3 Rhodes West Framework Plan illustrates the overall urban design framework for Rhodes West. This DCP has been prepared making regard to the following urban design and place making principles:

(a) Provide a stronger identity for Rhodes West to enable it to achieve its wider metropolitan potential as a Specialised Centre, particularly for employment generating activities by:

- Establishing a visually interesting and appealing skyline of tower buildings that display high architectural design quality in their slender form as well as detailed articulation and design.
- Designing high quality public open spaces that encourage people to gather, mingle, and traverse. Achieved in the alignment and form of squares and parks that recognise pedestrian desire lines, the framing of public spaces with appropriately scaled built form and in the achievement of excellence in urban design and landscape architecture. Refer to Figure K17-4 Rhodes West Open Space Plan.
- Creating interesting places that people want to visit and that have an appropriate mix of uses that activate and give address to streets and open spaces.

(b) Create focal points with different levels of activity that build on the activity areas that currently exist. Particularly at the Shopping Centre along Rider Boulevard and at the corner of Mary Street and Rider Boulevard adjacent the Rhodes Station. Active recreation spaces include the following:

- Town Square and commercial and retail uses close to the Rhodes Station
- Central Park
- Waterfront activity incorporating community facility, cafes and restaurants
- Shoreline Drive North Park
- Permanent and flexible uses around a mid-block oval plaza and laneways in Station Gateway West (Precinct D)
- New developed Recreation Centre along Gauthorpe Street between Marquet Street and Walker Street
- Community facility at the foreshore

(c) Promote visual connectivity along streets and through development sites to key public domain areas within Rhodes West, and to more distant water views through the following:

- Vehicle, pedestrian, and cyclist connections to align with key views and vistas
- Enhance east west view corridors along streets through greater building setbacks
- Pedestrian connections through Precinct B are to align with a diagonal vista from the elevated location of Walker Street to the extension of Marquet Street (west of Shoreline Drive)
- Terminate north and south views along Shoreline Drive with a tower building

(d) Create attractive streets for people to use through the following means:

- Provide non-residential uses including shops, commercial offices, cafes and restaurants, at activity nodes that activate street frontages where there are higher levels of pedestrian activity
- Planting street trees to provide shade and to soften the built form of adjoining developments
- Introducing building setbacks to provide for ground level front gardens of residential buildings
- Introduce a change in level between the public domain and a residential dwelling and front fencing to provide privacy and to allow surveillance of the public domain
- Create laneways through key peninsula blocks to introduce pedestrian dedicated outdoor areas to create connections and to provide variety in the public domain

(e) Demonstrate high quality architectural design of buildings through the following:

- Design building forms to address and define the public domain
- Reiterate the curved shape of Shoreline Drive in the associated built form to create a visually interesting street
- Cluster tower buildings between Shoreline Drive and Walker Street and close to the railway station. Tower buildings are to be setback from Walker Street and Shoreline Drive with some intervening development to maintain the effect of a street wall, however, without a continuous wall effect
- Stagger buildings to avoid a row of buildings along the ridgeline and vary the height of buildings from foreshore to the ridgeline
- Buildings that are slender and slimline in form and that are highly articulated in their built form and facade treatments are sought
- Tower buildings are to define key street frontages and urban corners

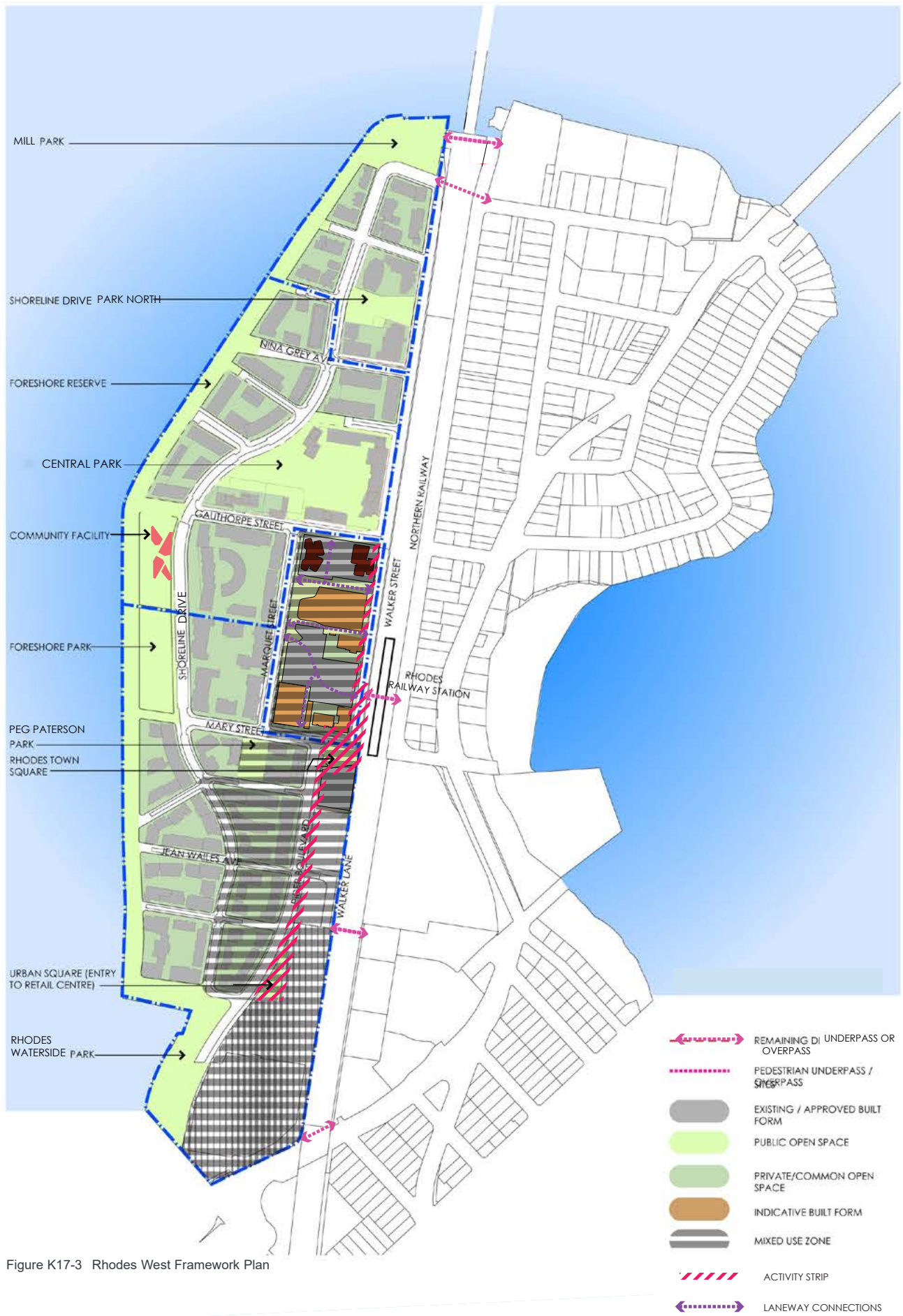


Figure K17-3 Rhodes West Framework Plan

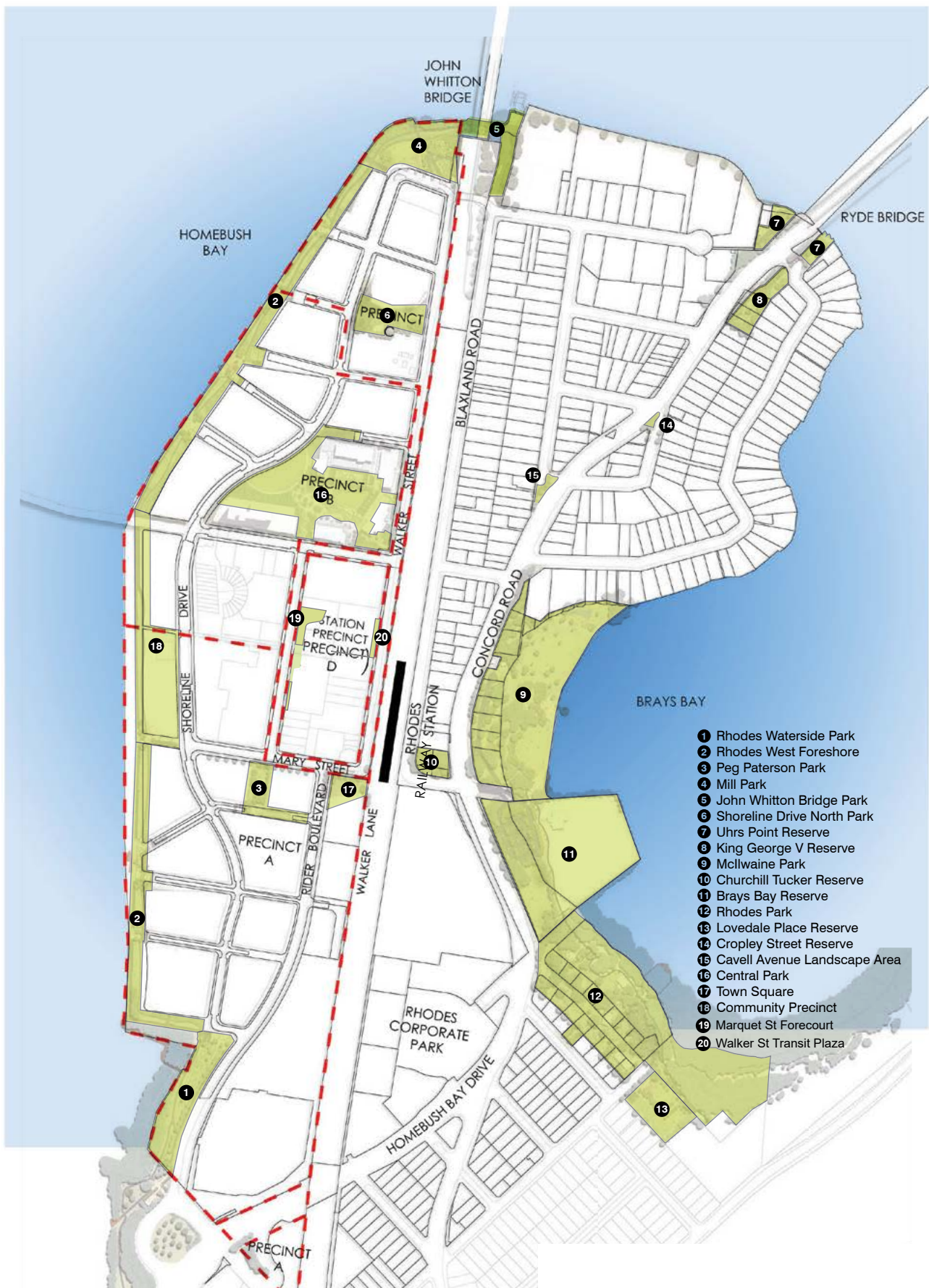


Figure K17-4 Rhodes West Open Space Plan

Source: Rhodes Peninsula 'Frontdoor2Foreshore, Open Space Masterplan

K17.3 General controls

Introduction

This Section sets out the general planning objectives and controls that apply to Rhodes West. These controls are to be read and applied in conjunction with the precinct specific controls in *Section K17.4 Site-specific controls*.

Development Controls are provided for the:

- Public domain
- Private domain

A short description of the intent of the controls is provided and where relevant controls are illustrated with diagrams and images of built projects demonstrating good practice.

A. Public domain

A.1 Pedestrian network and amenity

Continuity - Promoting pedestrian access is central to creating a high quality public domain. Encouraging pedestrian access reduces car dependency, promotes equal access and increases opportunities for social exchange and community life. Continuous comfortable and safe pedestrian access should be provided throughout Rhodes West and should link all streets, parks, residences, shops, offices, public transport stops and major pedestrian routes in adjoining areas. Refer to Figure K17-5 Rhodes West Public Domain Plan.

Comfort, convenience and appearance - Pedestrian routes need to be as direct as possible and comfortable. Allowing appropriate levels of sunlight, and capturing breezes. Correct orientation and appropriate adjoining building height improves their quality, as does the provision of shade and weather protection. Pavement treatments that clearly define pedestrian areas and level of priority should be used, especially where pedestrian routes and vehicle routes crossover at driveways and pedestrian crossings. Well designed and well constructed pedestrian areas encourage their use. It is essential that all pedestrian areas are clearly identified as public areas.

Security - An integrated approach can improve actual and perceived personal security in pedestrian areas. Pedestrian routes should be continuous and without dead ends.

Preferably, pedestrian routes should be part of the general street system, with vehicular traffic providing a level of passive surveillance. They should be overlooked from adjoining buildings, have clear lines of sight and be without obstacles like shrubs and bulky street furniture that can provide hiding places. Pedestrian routes with high night time use should be well lit and directed along more trafficked streets that have busy adjoining uses.

Access - Pedestrian routes should be designed to be accessible to everyone, including people with mobility impairments. They should offer a continuous path of unimpeded travel where possible, or include areas without steps and steep grades.

Continuity

Controls

C1.	Provide a continuous pedestrian network through the streets, parks and public rights of way as set out in the Framework Plan.
C2.	Connect to the regional pedestrian network by linking to the Bicentennial Park path system at the southern end of the peninsula, and to Blaxland Road to the north.
C3.	Supplement connections to the street system of the east side of Rhodes Peninsula, through links at Walker Street rail underpass, the retail area and Oulton Avenue.
C4.	Extend pedestrian access to the south of Walker Street to improve connections to Homebush Bay Drive, Liberty Grove, Concord West and residential areas to the east.
C5.	Provide links to Meadowbank Park and the ferry wharf via the pedestrian link across John Whitton Bridge.
C6.	Allow for the pedestrian/cycleway bridge to Homebush Bay West (Wentworth Point) that lands along the alignment of Gauthorpe Street at the Foreshore Park.
C7.	Provide pedestrian amenity lighting to meet Australian Standard.
C8.	Implement CCTV surveillance to promote security and safety.

Comfort

Controls	
C9.	Intersection and crossing design should favour pedestrian convenience and safety. Local pedestrian crossings should link major destinations and areas of intense pedestrian activity.
C10.	Provide a paved footpath to both sides of every street.
C11.	Separate pedestrian and vehicular traffic through use of a formed vertical kerb between the footpath and the carriageway.
C12.	Pavement width should allow for comfortable walking, unimpeded by obstacles. The placement of trees, street furniture and signage should provide for amenity without causing clutter.
C13.	Circulating pedestrian pathways is to be 3.0m wide.
C14.	Street furniture, trees and light poles are allowed within the zone provided minimum unobstructed width of 2.4m is maintained for pedestrian.

Appearance

Controls	
C15.	Avoid ambiguity in the design of public spaces and secondary streets, particularly at parks, entrances and areas with a strong built edge and residential presence.
C16.	Access to the foreshore must be open and unambiguous, particularly via the secondary streets and at the entrance / exit points to the foreshore linear park. Avoid the use of walls and gates at these entrances.

Security

Controls	
C17.	Minimise pedestrian areas with limited surveillance due to visual or physical access or distance from buildings and / or passing traffic.
C18.	Provide quality of lighting in areas of concentrated car parking, pedestrian/ vehicle laneways, and at the interface between buildings and streets in commercial and retail areas.
C19.	Identify safe night time pathways through good lighting, maximum casual surveillance and minimal concealment opportunities.
C20.	Front fences and walls along street frontages should use visually permeable materials and treatments. Where solid walls or fences are proposed, these should be limited to 1m in height.
C21.	Provide safety provision in accordance with CPTED - 'Safer by Design' principles. The safety requirements include provisions in relation to: <ul style="list-style-type: none"> • Lighting, CCTV, laneway vehicular access management, letterbox security, overbridge design, visual openness, basement car park planning, emergency service access and directional signage.

Equal Access

Controls	
C22.	Integrate design for equal access into the design of streets and open spaces. Design of the public domain should comply with the Commonwealth Disability Discrimination Act. It should incorporate requirements set out in AS 1428, as set out in the City of Canada Bay Council Development Control Plan 2013 – Appendix A: Access and the Canada Bay Standard Conditions of Consent.
C23.	Provide kerb ramps at all intersections, with pedestrian refuges at wide or busy streets.

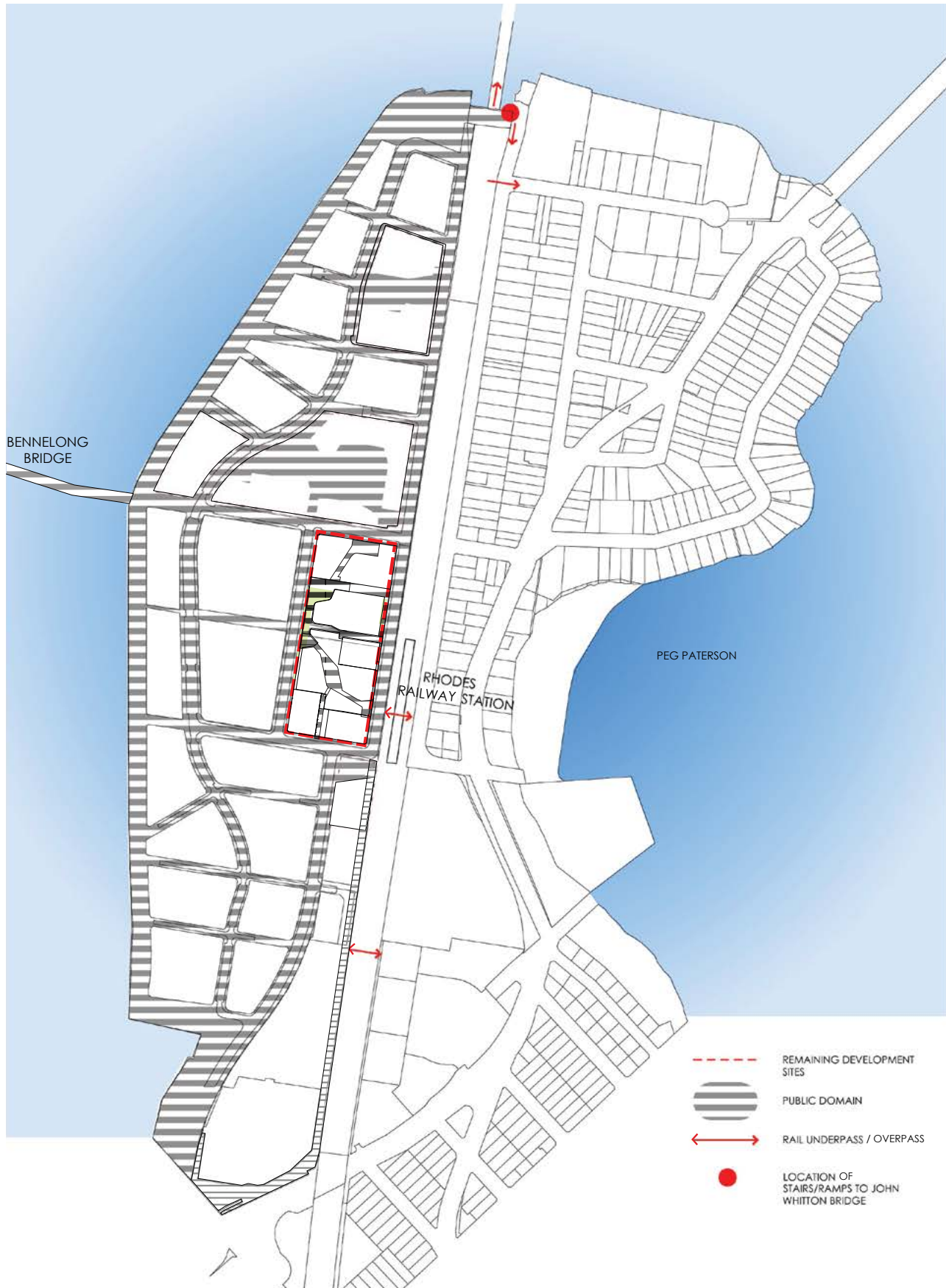


Figure K17-5 Rhodes West Public Domain Plan

A.2 Cycle strategy

A well designed cycle network provides recreational opportunities and reduces car dependency by providing alternative means of transport. All public streets and public rights of way should be designed to encourage cycle use. Dedicated cycle lanes are to be provided in two areas – where additional safety is required in the more heavily trafficked Walker Street, and as a predominantly recreational route along Foreshore Reserve. Both these routes provide connections to regional cycleways, and to major public recreation areas.

Safe and convenient cycle access is also dependent on provision of intersections and crossings that favour cyclists along the dedicated cycle routes, and the provision of cycle lockup facilities at common destinations such as stations, schools, retail areas, residences and work places.

Cycle routes that are illustrated in Figure K17-6 Rhodes West Cycle Strategy should be overlooked from adjoining buildings, have clear lines of sight and uninterrupted path of travel, be well lit, sign posted and protected from high winds. Recreational cycleways should be attractive and made interesting through appropriate location and detailed design.

Controls

C1.	Provide a cycle network through the public streets and the foreshore park as set out in the Framework Plan.
C2.	Connect to the regional cycleway, and improve access to the pedestrian / cycleway at John Whitton Bridge and the new Homebush Bay Bridge.
C3.	Provide commuter cycle lanes along Walker Street, from Mary Street to the underpass at the northern end of the peninsula, at a minimum width of 1.4m.
C4.	Provide a recreational cycle path through the Foreshore Reserve, which also connects to the regional cycleway at both ends. The recreational cycleway continues under John Whitton Bridge to the stairs and ramps on the eastern side of the bridge. Refer to the Public Domain Technical Manual for standards.

C5.	Design intersections and crossings along dedicated cycle routes to favour cyclist's safety and convenience.
C6.	Provide lockable bicycle storage at Rhodes Station, the retail centre, and in publicly accessible facilities. Refer Photo K17-1.
C7.	Separate cycle and pedestrian routes through the Foreshore Reserve.
C8.	Design cycle paths, cycle parking and end of trip facilities at least to the minimum design standards set out by Austroads. Refer Photo K17-2.
C9.	Bicycle parking is to be provided at the station.



Photo K17-1 Rhodes Railway Station



Photo K17-2 Cycle Parking Facility



Figure K17-6 Rhodes West Cycle Strategy

A.3 Sustainable transport infrastructure

Rhodes Station provides the opportunity to design an integrated neighbourhood that promotes public transport use. Access to public transport decreases car dependency and provides a means of travel for people without car availability. A convenient and safe pedestrian network is central to encouraging public transport use. Access for less able people, provision of commuter parking for cycles and vehicles, and good interchange between modes and also promotes higher levels of uptake. The rail and bus routes are illustrated in Figure K17-7 Rhodes West Public Transport Plan.

Controls	
C1.	Provide convenient pedestrian and cycle connections to Rhodes Station, bus stops on Concord Road, and Meadowbank Ferry Wharf.
C2.	Encourage interchange between public transport modes.
C3.	Promote ease of access to the station through a permeable street network.
C4.	Locate bus stops at activity nodes including the retail centre, and also close to publicly accessible facilities.
C5.	Bus stops and taxi ranks are to be provided with good lighting, shelters / seating and route / schedule information.
C6.	Public bicycle parking facilities are to be located at public open spaces, with convenient access to commuter and recreational cycleways throughout Rhodes West.

A.4 Vehicle circulation and parking

Vehicular routes should provide convenient access to and between peninsula developments. Vehicular access should be designed with consideration of road functional hierarchy, pedestrian activity patterns and safety. On-street parking is to be provided generally throughout, to add life to the streets. Parking controls should reflect the requirements of land uses fronting streets.

Controls	
C1.	Promote permeability for vehicles, pedestrians and cyclists and a spread of traffic throughout the peninsula by adopting the street layout shown in the Framework Plan.
C2.	Access to private vehicle parking in developments is restricted in the locations shown in Figure K17-12 Rhodes West Vehicle Access Restrictions.
C3.	To promote the shared use of private vehicles, to reduce parking demand and to minimise traffic generation, developments exceeding 200 dwellings are to allocate one car space in a convenient location on the street frontage for use by a car share company. One additional car share space is to be allocated for each additional 300 dwellings.
C4.	Applicants are to provide adequate signage on behalf of the car share company to clearly advertise the provision.
C5.	Liaison with TfNSW regarding the integration of bus services within the streetscape.
C6.	Bollards used as vehicle barriers shall meet relevant Australian standard to withstand the impact.



Figure K17-7 Rhodes West Public Transport Plan

A.5 Landscape

Landscape treatment can provide amenity, improve the legibility of the urban environment, reinforce the structure of the public domain, enhance a 'sense of place' and define different landscape characters. Tree planting in particular will affect the visual quality and amenity of the public domain, and create a sense of green 'fingers of landscape' extending from the river into the site.

A broad framework for the landscaping of streets and parks is proposed below. This will contribute to a consistency of character at Rhodes West. The strategy responds to:

- The strong tradition of street planting in the Canada Bay Local Government Area;
- Pre-existing indigenous landscapes, both ridge and riparian, to emphasise the relationship of the public domain framework to landform and landscape;
- Retention of existing trees wherever possible and where they provide particular amenity, or reinforce existing street patterns; and
- Provision of appropriate amenity, including sun and shade, along streets.

Controls

C1.	Street tree selection for Rhodes West is to follow the current approvals for civil infrastructure works.
C2.	Retain, wherever possible, existing trees in the following areas: <ul style="list-style-type: none"> • Mary Street and the extension of Mary Street to the foreshore. • East west stand of trees near the mangroves. • Along the eastern edge of Walker Street and the extension of Walker Street to the south.
C3.	Ensure that appropriate species are selected to suit streetscape conditions including, street width, building height and setback, orientation and views.

C4.	Create conditions favourable to the planting and long term health of trees in the design and construction of streets.
C5.	Species and spacing should be consistent within blocks.
C6.	Establish a riparian zone along the foreshore, with appropriate tree, shrub and groundcover species.
C7.	Provide visual openness in accordance with CPTED - 'Safer by Design' principles considering the placement of landscaping.

A.6 Street furniture, paving and lighting

The design and construction of the public domain can reinforce important site characteristics and contribute to the Rhodes West identity. A number of public domain conditions will be established by the development requiring particular treatments. Each part of the public domain has an individual character and function that should be emphasised through design, however continuity throughout the entire area is paramount.

Controls

C1.	Design and build the streets in accordance with the Canada Bay Engineering Requirements for Development.
C2.	Use the range of standards for furniture, lighting and signage set out in the Canada Bay Engineering Requirements for Development.
C3.	Provide safety provision in accordance with CPTED - 'Safer by Design' principles considering all implemented street furniture, paving and lighting.

Lighting

Controls	
C4.	Establish a hierarchy of lighting levels based on the civic significance of the street and the perceived threat of crime. Walker Street as a 'spine' created by the railway line should have the highest level of illumination, along with the civic and urban streets that link Walker Street with the retail centre and the foreshore.
C5.	Provide a level of lighting for streets and parks that enhances security and legibility, while minimising impact on residential dwellings.
C6.	Coordinate and standardise street lighting throughout the development.
C7.	In riparian and conservation areas additional care should be taken to ensure that light does not interfere with animal habitats.

Materials

Controls	
C8.	For parks establish a simple palette of materials that: <ul style="list-style-type: none"> • Reflects the streetscape palette in the Canada Bay Engineering Requirements for Development; • Unifies the range of spaces within the public domain; • Reinforces hierarchies and details within the spaces; and • Can be used in a variety of ways to allow for variation to suit local conditions.

Paving

Controls	
C9.	Generally paving is to provide a simple and subdued ground plane, that creates a background to buildings and streetscape elements. Accent paving should only be used on retail and commercial streets, in key public places and in parks.

Street Furniture

Controls	
C10.	Utilise simple, robust elements that are durable and fit for their purpose. The range of elements should be coordinated for streets and for parks, and relate to the character and function of these spaces.
C11.	Placement of furniture should provide an acceptable level of amenity, without creating clutter or obstruction.

Signage

Controls	
C12.	Locate street name signs at intersections, wall mounted on buildings where possible to reduce clutter.
C13.	Consolidate traffic signs as far as possible, to reduce clutter.
C14.	No private identification sign is permitted within the public right of way.
C15.	Public access rights are to be clearly indicated for public space and, where relevant, over publicly accessible private land.
C16.	Include signage from the Parramatta River Foreshore Signage Manual, as outlined in the Rhodes Peninsula Domain Manual.

A.7 Infrastructure and water management

A carefully planned system of services, integrated with streetscape design, can reduce maintenance time, damage and repair costs and contribute positively to the quality of the public domain. Measures for controlling and improving the quality of stormwater entering the Parramatta River should be integrated into the design of streets and parks, through engineering structures, and using best practice techniques.

Controls

C1.	<p>Integrate services design with the design of all new streets and parks with consideration of the following:</p> <ul style="list-style-type: none"> • Retaining existing mature trees; • Creating optimum conditions for new planting; and • Allowing ease of access to service corridors. • Streetscaping /landscaping and furnishings should not obstruct driver sightlines to other road users, regulatory signposting, traffic signals etc. Particular care should be taken to ensure appropriate selection and placement of landscaping/furnishings adjacent to intersections, driveways and pedestrian crossing facilities.
C2.	<p>Locate all new services underground, within a consolidated strip adjacent to the kerb line. Where possible, new services should occupy a single services corridor, accessible through a single access cover.</p>
C3.	<p>Power supply is to be installed in underground format. Street lights must be installed in the precinct to ensure that the precinct is adequately lit to the following standards;</p> <ul style="list-style-type: none"> • Walker Street – P1 • Marquet street, Mary street and Gauthope street – P2 • Through site link – PX2
C4.	<p>Multi-Function Poles shall be provided with optic fibre connections to facilitate future CCTV, WiFi and LiFi installations for the community where required.</p>

C5.	Service access covers should relate to the geometry and materiality of paving design.
C6.	Utilise water sensitive urban design strategies and integrate stormwater design in the design of streets and parks.
C7.	Integrate systems to capture and filter low flow stormwater, to improve the quality of discharge to Homebush Bay and Parramatta River.
C8.	Provide litter and sediment traps for stormwater outlets. Engineering structures should be integrated into the design of parks, without the need for extensive screening.

A.8 Public art

Public art is an important cultural activity. It aids legibility of place, enlivens the public domain and can define and reveal a specific identity for Rhodes Peninsula. Public art ranges from the monumental to the temporal. Potential expressions of public art include:

- Free standing objects;
- Artist's involvement in the siting and layout of public spaces such as parks, squares and forecourts;
- Artist's involvement in creating site elements such as paving, street furniture, fountains and building modulation; and
- Festivals and other cultural events.

Themes relevant to the regional and local context of Rhodes include:

- Local geography, flora and fauna;
- Aboriginal heritage;
- Early European history;
- Harbour location; and
- Urban revitalisation.

Public art is encouraged throughout Rhodes West. It is especially appropriate for the parks, public squares and places that are to have layout, design and details that directly respond to location, function and site conditions. Refer Photo K17-3, Photo K17-4 and Photo K17-5.

Controls

C1.	All public art should be relevant to Rhodes West, be of a scale appropriate to the public realm, and be specific to time and place.
C2.	Development proposals are to include a public art strategy that describes how proposed public art has been selected to suit the historic, environmental and social contexts of Rhodes West and contributes to a unique 'sense of place'.
C3.	Public art is required in Shoreline Park North, Shoreline Park South and Rhodes Town Square.
C4.	Public art is encouraged in other publicly accessible locations such as main entrances, lobbies, street frontages, gardens, walls and rooftops.
C5.	Consult with Council and community groups in the design and execution of public artworks.
C6.	Consider artworks that serve a dual role, as play equipment for children, or informal seating for example.



Photo K17-3 Veil of Trees - Janet Laurence, Sculpture Walk, Art Gallery Road, The Domain, Sydney



Photo K17-4 Tied to Tide - Jennifer Turpin, Pyrmont Point Park, Sydney



Photo K17-5 Public art reflecting industrial heritage, Jacksons Landing waterfront park, Sydney

B. Private domain

This section of the DCP contains general controls for built form within the private domain and generally adopts the controls from the Renewing Rhodes DCP 2000. Additional controls have been included in this DCP where refinements have been made to the Framework Plan.

B.1 Land use

Mixed use zone

Mixed use development can make a significant contribution to the local character, and provide street surveillance and after hours activity.

Controls

C1.	<p>Design for a mix of uses within buildings by encouraging:</p> <ul style="list-style-type: none"> • Developments with retail and/ or commercial frontage at street level and commercial premises and / or housing at upper levels; • Flexible design of ground floor apartments to facilitate future change of use, incorporating individual street address, appropriate layout, and adequate floor to floor height; and, • Home based businesses with flexible layouts for business and residential use.
C2.	<p>Create a commercial centre which links to the existing centre on the eastern side of Rhodes Station and to the Rhodes Waterside Shopping Centre by concentrating street level retail / commercial frontage in the following areas:</p> <ul style="list-style-type: none"> • An activity strip along Walker Street; • Between the station entrance and Mary Street; and • Along the eastern side of Rider Boulevard.

C3.	To activate the residential zone, the preferred location for non-residential uses is nominated in key street frontages and corners, whilst managing environmental impacts on surrounding residents. Refer to Figure K17-8 Rhodes West Mixed Use Zone.
C4.	<p>To achieve high quality living environments:</p> <ul style="list-style-type: none"> • Ground floor level residential apartments are not permitted in the activity strip, although entrance lobbies to residential development above are encouraged. • Ground floor apartments opposite the activity strip should incorporate sills and balustrades located a minimum 0.5m above finished footpath level for privacy. • Residential development within 50m of Homebush Bay Drive is not permitted, unless measures to ameliorate adverse impacts of noise, pollution and loss of privacy are incorporated. Refer to SEPP (Infrastructure) 2007.

*Mixed Use in Station Gateway West (Precinct D)***Controls**

C5.

To ensure development in Precinct D optimises its location close to Rhodes Station and is integrated with development of Rhodes West as a whole, it should incorporate the following provisions:

- A 6-8m wide public pedestrian walkway connecting Walker Street, Marquet Street and Shoreline Drive must be created to provide direct access to the foreshore park. For detail refer to B.5-C4.
- A honeycomb of publicly accessible through block connections especially to Marquet Street and Rider Boulevard is encouraged, to increase choice of routes, particularly to Rhodes Station and enrich the pedestrian environment. Through block connections include internal and external arcades, and double fronted commercial lobbies and shops. Through block connections achieve surveillance and provide public domain character, supplemented by outdoor areas such as courtyards. Their use should be optimised by providing a legally registered public right of way on the title of the land between the hours of 7am and 7pm daily, excluding public holidays, as a minimum.
- Deep soil garden areas and permeable paving should be provided to courtyards within the block, to create a distinctive leafy character and optimise natural infiltration of stormwater.
- An active pedestrian oriented environment with high pedestrian amenity should be created around Rhodes Station and surrounding streets.
- New public squares and a network of through-site links that enhance access between the foreshore and Rhodes Station.

- Mixed use buildings that provide high residential amenity complying with the building separation requirements of the LEP.
- Active street frontages with non-residential uses including community uses, commercial, retail and cafes / restaurants.

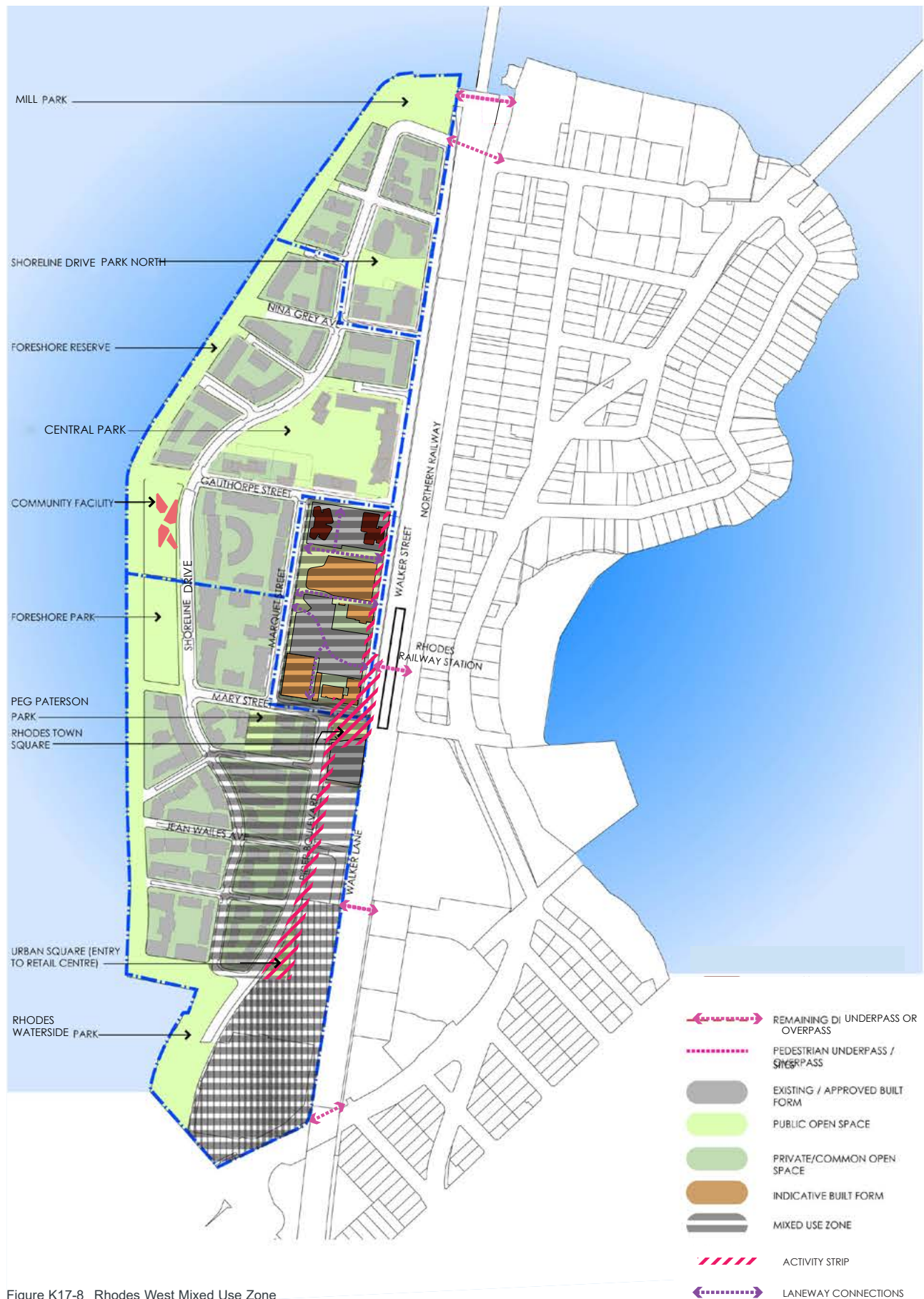


Figure K17-8 Rhodes West Mixed Use Zone

B.2 Built form

The height distribution for buildings at Rhodes West generally follows the topography, ranging from lower buildings at the foreshore to taller buildings east of Shoreline Drive. This distribution maximises opportunities for view sharing, protects the amenity of the foreshore park and controls the impact of new development on the harbour.

The site-specific controls in *Section K17.4* provides detailed guidance on building height, massing and scale for the remaining development parcels at Rhodes West.

Controls

C1.	The maximum height of development should comply with the Height Map contained in the Canada Bay Local Environment Plan 2013 (as amended) and the maximum heights shown in the site-specific controls of this DCP.
C2.	The maximum Floor Space Ratio (FSR) of development is to be consistent with the FSR map contained in the Canada Bay Local Environment Plan 2013 (as amended).
C3.	Developments are to be consistent with the maximum building envelope plans contained in the site-specific controls in this DCP.



Photo K17-6 Roof forms that are incorporated into the overall building design can add visual interest to the Rhodes West skyline

Internal floor levels

Controls

C4.	<p>To achieve quality living environments, maximise direct sunlight and allow future adaptability of uses, provide the following minimum heights:</p> <ul style="list-style-type: none"> • Provide minimum ceiling heights for apartment and mixed use buildings: <ul style="list-style-type: none"> » Habitable rooms: 2.7m » Non-habitable room: 2.4m » 2 storey apartments: 2.7m for main living area floor and 2.4m for second floor, where its area does not exceed 50% of the apartment area » Attic spaces: 1.8m at edge of room, with a 300 minimum ceiling slope • In mixed use areas: Provide minimum 3.3m height for ground and first floor to promote future flexibility of use.
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Architectural roof features

Controls

C5.	<p>To provide a visually interesting skyline, architectural roof features, as defined in the Canada Bay Local Environment Plan 2013 (as amended), may extend above the maximum building height limit provided they are of high architectural design quality integrated into the overall building design, and do not adversely impact on neighbouring properties in terms of overshadowing and loss of views.</p> <p>Architectural roof features may extend above the maximum height limit of the Height of Buildings Map within the Canada Bay Local Environment Plan 2013 (as amended). Refer Photo K17-6,</p>
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Thresholds heights between streets and private domain

Controls	
C6.	To optimise accessibility, provide floor levels to entrances of ground floor retail and commercial uses, that are contiguous with the adjoining footpath level, to the maximum extent practical.
C7.	To protect privacy, elevate ground floor level apartments above adjacent footpath levels – 500mm is suggested as a minimum and 1500mm is suggested as a maximum. This requirement needs to be balanced against the provision of access and adaptability for commercial and retail uses at ground level.

Maximum number of storeys/ height for buildings within parkland open space

Controls	
C8.	To minimise visual impact and optimise views from the private domain, the Community Facility building sited within the Foreshore Park in Precinct B must not be higher than 12m.



Photo K17-7 Variety in building types is required on large sites

B.3 Building bulk

Allow for a mix of building types from low-rise to mid-rise and tower buildings within the development cross section (Refer Photo K17-7). Improve the amenity of living and working environments, and directly promote sustainable practices by:

- Enabling habitable and service rooms to be naturally lit and ventilated;
- Reducing site cover, resulting in increased landscaped areas;
- Permitting views between buildings from the public domain;
- Permitting sunlight between buildings to public spaces;
- Minimising the impact of building bulk on adjoining areas; and
- Creating a silhouette of slender and slimline tower buildings against the sky which is visually consistent with the role of Rhodes as a Specialised Centre.

Retail/ commercial uses

Controls	
C1.	To avoid bulky towers the floor plate of commercial buildings above 4 storeys should not exceed 1,400m ² including the core.
C2.	For retail and commercial uses in the mixed use zone only, deeper building footprints are permitted up to 4 storeys in height.
C3.	To optimise natural light to work spaces, no point on an office floor above 4 storeys should be more than 12m from a window, excluding the core.
C4.	To allow natural lighting and ventilation at ground and first floor level of deep buildings, courtyards and atria which are open to the sky, are encouraged. For buildings greater than 6 storeys, courtyards and atria should have a minimum width of 8m.

*Residential use***Controls**

C5.	To achieve good cross ventilation and access to natural light, the depth of residential buildings up to 9 storeys in height should not exceed 18m from window face to window face.
C6.	The depth of residential buildings greater than 9 storeys should not exceed 18m from window face to window face, and 26m overall including balconies, terraces and the like.
C7.	Should a building exceed the maximum building depths from window face to window face, it needs to be demonstrated that the apartments can achieve acceptable access to natural light and cross ventilation.
C8.	To achieve natural ventilation and daylight, a minimum 60% of all residential apartments within a building should have openings in two or more external walls of different orientation. Single orientation apartments should predominantly face north, east or west.
C9.	A maximum of 15% of apartments in a building may have a single southern aspect (SW-SE).
C10.	<p>To avoid long internal corridors, the number of apartments served by a common lobby should be no more than 8 per floor. Where this cannot be achieved, no more than 12 apartments should be provided off a circulation core on a single level.</p> <p>For buildings of 10 storeys or over, the maximum number of apartments sharing a single lift is 40.</p>
C11.	To achieve high quality living environments, double loaded access corridors are to have outlook, access to sunlight and natural day lighting and preferably be naturally ventilated.



Photo K17-8 Well articulated facades including refinement in window and balcony design

B.4 Setbacks

Street setbacks establish the building line. They are needed to create:

- A territorial threshold between the public street and the private dwelling.
- A buffer to street activity.
- Security, where properly designed to avoid ambiguous public accessible small spaces.
- A landscaped setting for buildings.
- Privacy from the street.
- Environmental amenity to buildings such as access to sunlight and daylight.

Consistent ground level setbacks are needed to provide:

- Increased pedestrian amenity.
- Desirable view corridors and vistas.
- Strong street definition where they are continuous.

Controls

C1.	Street setbacks should comply with <i>Section K17.4 Site-specific controls</i>
C2.	To create an urban character, provide strong street definition, enhance retail activity, and define prominent corners, build to the street edge along and opposite the activity strip in the mixed use zone, and on important corners as nominated in Figure K17-9 Rhodes West Setbacks Plan and as illustrated in Photo K17-9 and Photo K17-14. Non-compliance with these figures will be assessed on a case-by-case basis.
C3.	To create a residential character, comply with 3m street setbacks along north south streets, as nominated in Figure K17-9 Rhodes West Setbacks Plan.
C4.	To achieve adequate separation between buildings for solar access, and to create wide view corridors to the water, that can be landscaped as 'green fingers', a consistent 5m street setback is preferred along east west streets, as nominated in Figure K17-9 Rhodes West Setbacks Plan.

C5.	To minimise the impact of tower buildings on the public domain in terms of wind and to create a human scale at street level buildings greater than 9 storeys in height are to be setback a minimum 10m from the primary street boundaries, except within Station Gateway West (Precinct D), where a minimum of 3m setback is permitted.
C6.	A 2 to 4 storey street wall fronting Rider Boulevard is required to create urban character, to provide strong street definition, and achieve a built form that allows direct sun to streets and reduces the apparent scale of taller buildings. Development above the street wall level should be set back 5m from the street edge.
C7.	Buildings fronting the foreshore with a façade length of up to 18m are to achieve a minimum 3m setback along the reserve.
C8.	To achieve a varied built edge, buildings with a façade length of more than 18m fronting the Foreshore Reserve are to comply with the following controls: <ul style="list-style-type: none"> • The ends of buildings fronting the Foreshore Reserve (adjacent to east/west streets) are to have a building setback (including balconies) of not less than 10m from the Foreshore Reserve • The bays of the building extending forward of the 10m setback line may extend to no less than 7m from the Foreshore Reserve (not including balconies) • Balconies in the bays of the building extending up to 7m from the Foreshore Reserve shall not extend along the full length of the façade of each bay • The setback of the building fronting the Foreshore Reserve in between the setback described in dot point two above, may extend to no less than 8.8m from the Foreshore inclusive of balconies
C9.	Projecting balconies are permitted forward of the minimum building setback line for a maximum of 50% of the length of the building.

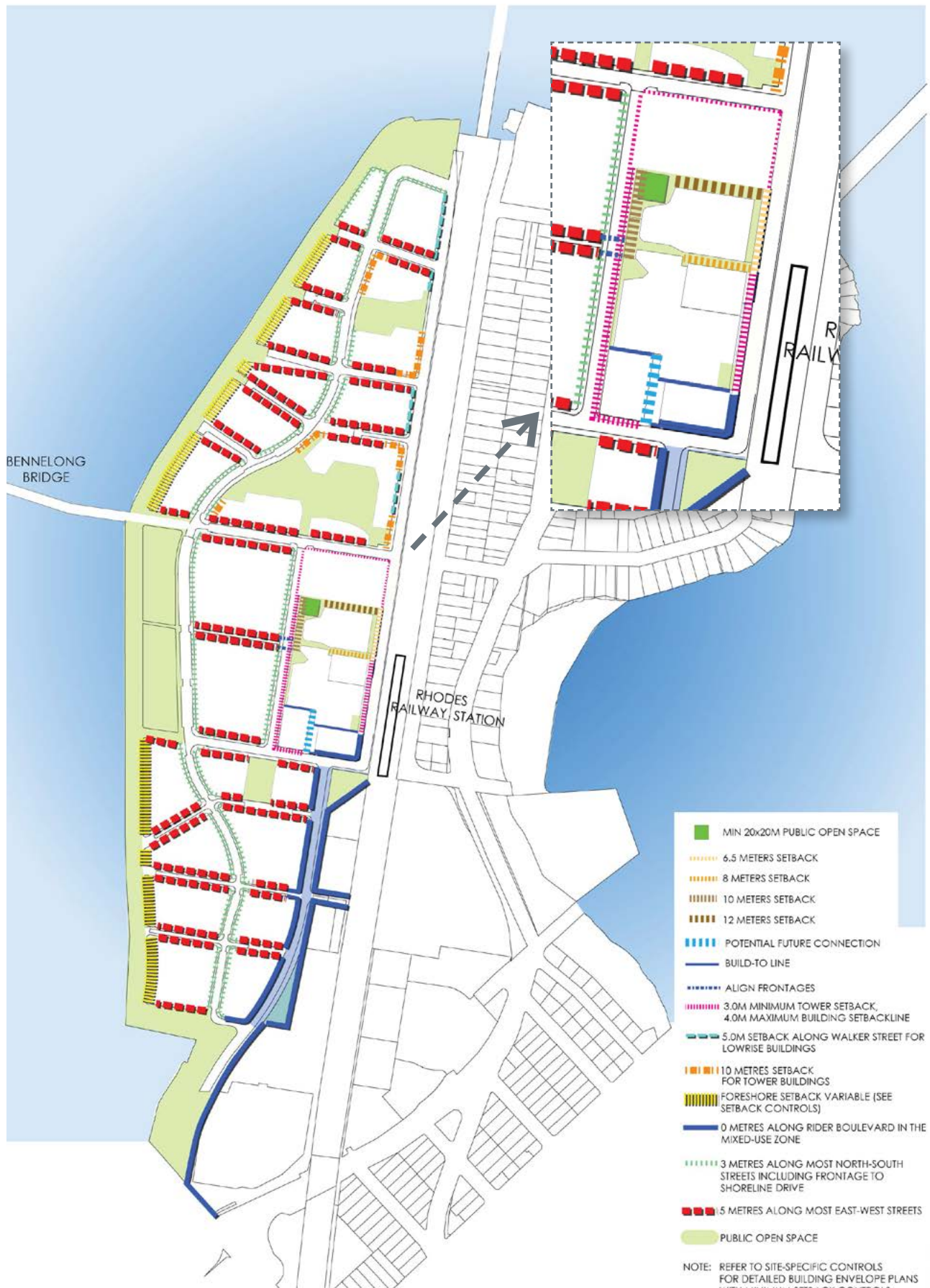


Figure K17-9 Rhodes West Setbacks Plan

B.5 Definition of streets and open spaces

The definition and character of streets is significantly influenced by:

- The proximity of a building to the street, or street setback;
- Consistency of the street setback;
- Continuity of the building frontage;
- Resultant landscape potential; and
- Building height.

The strategy promotes an urban design response specific to each street condition, while creating a coherent identity for the peninsula and also identifying where special amenity can be achieved through variable building setbacks. The definition of streets and open spaces should be read in conjunction with Figure K17-9 Rhodes West Setbacks Plan and *Section K17.4 Site-specific controls*.

Controls

C1.	To allow buildings to address streets, lots resulting from the subdivision of large blocks, should have at least one frontage to a primary or secondary street.
C2.	To contribute to the hierarchy of different street types and functions, development is required to build to identified street and park setback lines as shown in Figure K17-9 Rhodes West Setbacks Plan.
C3.	To encourage surveillance of the street and communal gardens, orientate primary openings in living areas to the street and rear gardens.

C4.

To provide a public pedestrian walkway connecting Walker Street, Marquet Street and Shoreline Drive with a width of 6-8m subject to performance requirements to accommodate:

- Sufficient space to accommodate sufficient clear width, swept path and height for emergency vehicle access as required by the NSW Fire Brigade and NSW Ambulances and other day-to-service vehicles required to maintain the central oval plaza and laneway public domain and as necessary to service businesses.
- Planting of mature trees in the laneways and central oval plaza as illustrated in the Public Domain Concept Plan (Context Landscape Design 2014).
- Provision of outdoor dining zones associated with cafe, bar and restaurant tenancies.
- Projecting shop or other signage.
- Laneway vehicular access management in liaison with NSW Police to restrict vehicular access.



Photo K17-9 Example of a building that strongly defines the street corner and street edge

B.6 Building articulation and address

Building articulation refers to the three dimensional modelling of a façade. Refer Photo K17-8, Photo K17-10, Photo K17-12 and Photo K17-13.

Building articulation establishes the:

- Relationship between the building and the street, through the use of entry porches, loggias, balconies, bay windows and the like;
- Environmental amenity, through the use of sun shading devices, noise barriers, privacy screens; and
- Degree of continuity between the interior rooms and outdoor spaces, through the location of balconies, terraces and verandahs.



Photo K17-10 Well articulated facade

Controls

C1.	Comply with the building envelopes controls in <i>Section K17.4 Site-specific controls</i> including building articulation zones. The intention of the building articulation zone is to promote stepping in the general line of the building facades including the line of windows, and balconies to create visually interesting buildings.
C2.	Residential tower buildings greater than 9 storeys in height are to demonstrate a slender and slimline appearance to create a visually interesting skyline. The buildings in Photo K17-11 have a slender and slimline quality.
C3.	Residential tower buildings are to articulate the vertical proportions in their external appearance. Extensive horizontal articulation through the use of solid balustrades is to be avoided as this design strategy tends to result in overly bulky buildings which are neither slender nor slimline.
C4.	Tower buildings greater than 9 storeys, should demonstrate vertical proportions in the articulation of building facades. Photo K17-11 illustrates how vertical elements appropriately accentuate the vertical proportions of a tower building.
C5.	Provide a high degree of articulation. Do not rely on the excessive use of a single type of sun shading to articulate building facades. Louvre type sun shading can add excessively to building bulk when used over large facades areas.



Photo K17-11 Residential tower buildings that have a slender and slimline quality with elements that accentuate vertical proportions



Photo K17-12 Mix of horizontal and vertical elements provides articulation



Photo K17-13 Roof form adds to building articulation



Photo K17-14 Principle of curved street geometry reflected in building form suitable for Shoreline Drive

B.7 Diversity of apartment types

A mix of apartment types and sizes is promoted to cater to a variety of socio-economic, age, ethnic and other circumstances. A range of dwelling sizes and types creates a housing mix that will cater to a diverse population and enrich the local character.

This DCP encourages a component of individual duplex, pair and row housing, but recognises that the apartment type is likely to be the predominant housing form on the Rhodes Peninsula.

Apartment typologies can be based on circulation and building section characteristics, which have a significant impact on the quality of air, light, solar access, privacy and outlook to dwellings.

Controls

C1.	To achieve a mix of dwelling sizes, all residential and mixed-use development should provide a range of dwelling sizes in accordance with the requirements of the Canada Bay Local Environmental Plan.d
C2.	To achieve environmental amenity, all access corridors should have a component of daylight, either at the point of vertical circulation or at the ends of corridors and preferably be naturally ventilated.
C3.	To achieve high quality living environments, cross ventilated apartments are encouraged, including dual aspect apartments.
C4.	To achieve solar access in high density areas where it may be difficult to ensure direct sunlight to the ground floor in midwinter, two-storey apartments are encouraged at ground floor level. This control is not intended to conflict with the provision of accessible housing. Refer Photo K17-15.
C5.	To innovatively combine different apartment types, 'hybrid' buildings are encouraged.

C6.	To optimise liveability for all dwellings, internal and external living areas should be integrated. Noise attenuation for buildings facing the rail line and busy roads
C7.	<p>A noise attenuation zone should be created between habitable rooms facing the noise source, particularly bedrooms, by;</p> <ul style="list-style-type: none"> • Locating service areas such as circulation, kitchens, laundries, storage and bathrooms to create a noise buffer; • Locating screened balconies or wintergardens to create a noise buffer, and; • Selecting sound isolating materials, including acoustic glazing.
C8.	To protect local residential amenity, building articulation should be designed to minimise external noise reflectivity.
C9.	Buildings adjacent the Northern Railway Line are to consider the provisions of State Environmental Planning Policy (Infrastructure) 2007 and related guideline documents and seek appropriately qualified acoustic engineering advice in relation to the mitigation of rail-related impacts on development.



Photo K17-15 Two level maisonette apartments

B.8 Flexibility

Flexible building design is sensitive to the access requirements of people of all ages and abilities, and provides for a degree of future adjustment to accommodate:

- Changing access needs, such as for occupants with impaired mobility, including young children in prams and the elderly.
- Households of varying sizes, age groups and privacy needs.
- Housing that is easily modified for occupation and visitation by people with disabilities and progressive frailties.
- Home occupation.
- Future changes of use.

Flexible buildings are more functional in the long term because they are suitable for a wider range of inhabitants and can accommodate changing requirements.

Flexible building design improves the quality of the built environment and achieves sustainable practice, by encouraging development designed for durability, flexibility and low energy consumption.

Controls

C1.	To cater for a wider range of occupants and avoid disability discrimination, the accessibility and adaptability of all buildings should be maximised in all residential and mixed use developments.
C2.	Adaptable housing units are to be designed and constructed to meet the performance requirements and provide the essential features required by AS4299 Adaptable Housing at the minimum rate of 15% of total dwellings. Where the total number of adaptable housing units to be provided is not a whole number, the number is to be rounded up to the next whole number. One accessible parking space is to be provided for each adaptable unit.
C3.	Housing design that provides for a degree of future adjustment of its configuration is encouraged. Consider accommodating: <ul style="list-style-type: none"> • Variable wall locations • Variable number of bedrooms • Home occupation • Multiple entry points • Adaptable housing • Liveable housing
C4.	To optimise flexibility for future changing uses, windows or skylights should be provided to all habitable rooms and to the maximum number of non-habitable rooms possible.
C5.	The design of commercial space that provides for a degree of future adjustment of its configuration is encouraged. Consider accommodating: <ul style="list-style-type: none"> • Variable lettable areas; • Multiple service cores; and • Residential uses including home-based business dwellings.

B.9 Visual privacy and building separation

Thoughtful design can ensure that views and outlook are maximised from all dwellings without compromising the visual privacy of the residents or their neighbours.

Privacy between dwellings and the public domain and non residential uses should also be fully considered.

Controls

C1.	To achieve privacy to private internal and external spaces, consider: <ul style="list-style-type: none"> • Building separation distance • Appropriate internal room layout • Location and design of windows and balconies • Design of appropriate screening devices and landscaping. Refer Photo K17-26.
C2.	The use of tinted glazing as the sole means of achieving privacy is not permitted.
C3.	To achieve privacy to ground floor level apartments, without compromising surveillance of any adjoining public domain, generally elevate the ground level by a minimum of 0.5m and maximum 1.5m above the adjoining footpath level and provide suitable front walls or fences to front gardens.
C4.	<p>To achieve privacy as well as to provide well spaced buildings for sunlight access and natural ventilation, the following minimum separation between openings of habitable and non-habitable rooms within dwellings must be provided for all buildings up to 20 storeys, in accordance with SEPP 65, Apartment Design Guide:</p> <p><i>Up to four storeys/12m</i></p> <ul style="list-style-type: none"> • 12m between habitable rooms / balconies • 9m between habitable and non-habitable rooms • 6m between non-habitable rooms

C5. Development consent must not be granted to development that results in a building being separated from another building by less than:

- for a building higher than 14 storeys but not higher than 20 storeys—24 metres, and
- for a building higher than 20 storeys—40 metres.

This increased separation has been determined through the Master Planning process in order to exceed conventional standards and deliver best practice for a highly visible, high density site consistent with the Vision.

Refer additionally to SEPP 65, Apartment Design Guide:

- Section 2F Building separation, and
- Section 3F Visual privacy.

B.10 Acoustic privacy

The potential for unwanted noise sources increases in more densely developed areas where there are more people living more closely together. To achieve an appropriate acoustic environment, design consideration must be given to the following:

- Siting of building
- Building planning
- Internal room layout
- Location of private open space
- Location of windows
- Building materials

Controls

C1.	To reduce the transmission of noise internally, sound insulation requirements between separating floors, ceilings and walls of adjoining dwellings should exceed the Building Code of Australia minimums.
C2.	The siting and design of buildings should minimise the transmission of noise externally, through careful consideration of the layout of internal rooms and external living spaces, design of openings, screens, blade walls, and the like, and choice of materials.
C3.	Design restaurants and cafes to minimise the impact of noise associated with late night operation on nearby residents by using measures such as double glazing, and providing outdoor eating areas under awnings to help contain noise to street level.
C4.	To enable occupants to control internal living environments, at least 25% of double glazed windows to dwellings should be openable.

Refer additionally to SEPP 65, Apartment Design Guide:

- Section 4H Acoustic privacy, and
- Section 4J Noise and pollution

B.11 Solar access and daylight

Solar access to internal and external areas is a major determinant of environmental comfort. Good passive solar design offers financial benefits, by reducing the need for artificial heating and cooling. Glass allows heat in the form of sunlight to enter buildings, yet is a poor insulator of heat. The design of windows and other glazed areas need to consider the environmental impact of heat gain, heat loss and glare, as well as issues of streetscape, privacy, architectural resolution and views.

To the public domain

Controls

C1.	To create a useable open space network that can be enjoyed by local residents and workers, new development should retain solar access to a minimum of 50% of the area of neighbourhood parks and green spaces during lunchtime hours (noon to 2:00pm) during mid winter (22 June).
C2.	To protect the comfort and safety of pedestrians and motorists, new buildings and facades should minimise glare. Mirror glass is not to be used. A maximum of 20% reflectivity index is permitted for all external glazed elements. A Reflectivity Report that analyses the potential glare of any proposed new development, where building facades contain high proportion of glazing, is required to be submitted with the Development Application.

*To the private domain***Controls**

C3. To achieve high quality living environments, a minimum of 2 hours direct sunlight between 9:00am and 3:00pm should be provided to principal living rooms and private open spaces in at least 70% of dwellings within a residential development, on 22 June (Winter Solstice). A maximum of 15% of apartments in a building may receive no direct sunlight between 9am to 3pm in mid-winter (21 June).

C4. To assist plant growth, maximise direct sunlight to communal open space as much possible within residential developments on 22 June.

C5. To facilitate solar access to principal living rooms and private open spaces at first floor level, two storey and mezzanine ground floor apartments are encouraged.

C6. To achieve high quality internal environments, appropriate sun protection should be provided to glazed areas facing north, west and east in residential and commercial developments. Refer Photo K17-16 and Photo K17-17.

Avoid extensive areas of glazing unprotected from solar access during summer. Shading devices including eaves, awnings, colonnades, balconies, pergolas, external louvres and planting to control the penetration of sun, should be used to maximise solar access in winter, and minimise solar access in summer.

On east and west facing facades subject to direct sunlight, external shading should be integrated into the design, or the area of glazing minimised.

Avoid the excessive use of louvres of a single style, which can reduce building articulation and add to the bulk and scale of buildings. Refer to Photo K17-18.

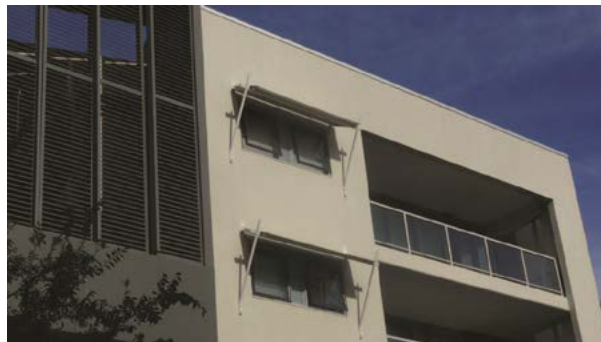


Photo K17-16 Horizontal sun shading over west facing windows protects from undesirable heat gain



Photo K17-17 Deep balconies and adjustable screens shade windows from undesirable heat gain

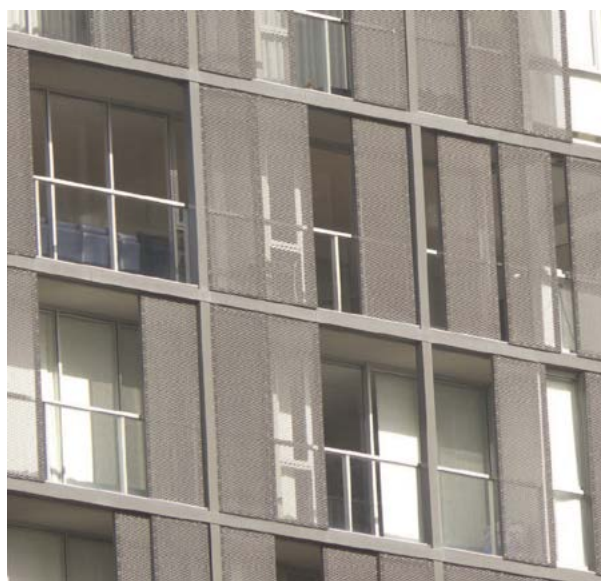


Photo K17-18 Using one type of sun shade over large areas can add to building bulk

B.12 Natural ventilation

Living, retail and work environments are to maximise natural lighting. Living and working environments which are not reliant on artificial cooling and daytime lighting during the daylight hours, will have reduced energy inputs over the long term. The provision of good natural ventilation and daylight facilitates builds-in future flexibility.

Controls

C1.	To reduce energy inputs over the long term, buildings should be designed so that living and working environments are substantially naturally lit and ventilated, using ventilation by means such as thin cross section buildings.
C2.	To avoid reliance on mechanical ventilation or air conditioning and minimise use of artificial lighting, windows should be provided to all living and working environments. Do not rely on skylights to provide the sole source of daylight and ventilation to habitable rooms.
C3.	To achieve high quality living environments residential buildings up to a height of 9 storeys are to have a maximum depth of 18m window line to window line. Buildings greater than 9 storeys in height are to have a maximum depth of 23m.
C4.	A minimum of 60% of residential apartments should be naturally cross ventilated.
C5.	Developments which seek to vary from the maximum building depth and minimum percentage of naturally cross ventilated apartments must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms.

C6.	To achieve natural ventilation, doors and openable windows should be located in two walls facing different or preferably opposite directions. The placement of small low windows on the predominantly windward side of the building, and larger higher windows on the leeward side, can encourage cross ventilation. The use of passive climate control in commercial buildings, through stack effect ventilation and the building's mass to ameliorate extreme temperature variations is encouraged.
C7.	To allow daylight into ground and first floor levels, buildings should be articulated using atria and courtyards.

Refer additionally to SEPP 65, Apartment Design Guide Part 4B Natural ventilation.

B.13 Building materials, finishes and colours

Building materials, finishes and colours used on external facades create a finer texture to streetscapes and city skylines and can contribute to the identity and 'sense of place' at Rhodes West.

Building materials can cause environmental impacts before they reach the building site, during their life in the building and in their eventual disposal. This DCP encourages building materials selected to suit each particular application and which provide the required performance with the least overall environmental impact.

Controls

C1.	To optimise thermal comfort and minimise energy consumption, insulation must be provided in wall, ceiling and roof systems.
C2.	To minimise resource depletion, plantation timbers, Australian regrowth timbers and recycled timbers should be used. The use of Australian native rainforest timbers, imported rainforest timbers and timbers from old growth forest is not permitted.
C3.	To minimise environmental impacts, materials with the following characteristics are to be selected: <ul style="list-style-type: none"> • With low embodied energy; • That are durable; • That are recycled or able to be recycled; • That are sourced from renewable resources and materials; • That are non-polluting in manufacture, use and in disposal; and, • That are non toxic, do not "outgas".
C4.	Use colour to provide visual interest in building facades. Colour can be used to articulate vertical proportions of tower buildings, such as in Photo K17-11 or primary building entries such as in Photo K17-19.

C5.	Development Applications are required to include an assessment of the environmental sustainability of selected building materials. Selected materials are to display energy efficiency in production and their contribution to sustainable building design and construction.
C6.	A best practice sustainable approach to building materials and finishes should be taken, including: <ul style="list-style-type: none"> • Use of precast concrete walls; • Use of re-usable formwork for internal floors and core walls on site; • Reinforcing steel with a high recycled steel content; • Low VOC paints for all internal flat and low sheen areas; • Water based paints for all internal gloss and semigloss areas; and • No use of unsustainable rainforest timbers, specification of sustainably sourced timber and minimal use of MDF.

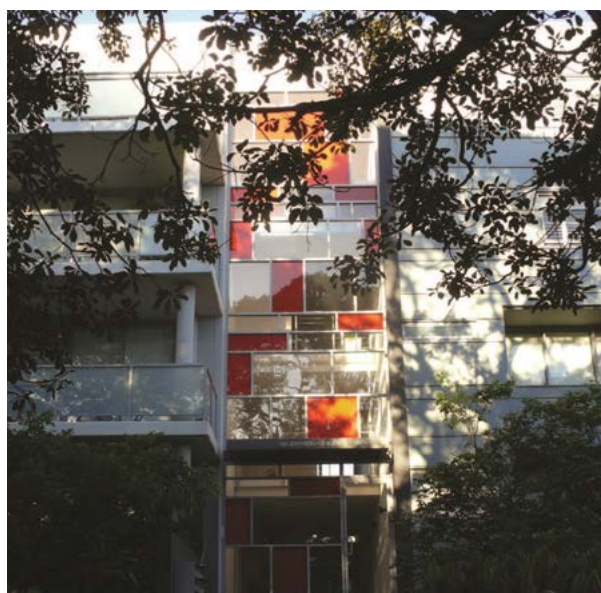


Photo K17-19 Building entries can be distinguished through the use of colour, as well as awnings that extend into the public domain

B.14 Public domain interface

Active street frontage

Active street frontages support a lively, interesting and safer public domain. Busy pedestrian areas and nonresidential uses such as shops, studios, offices, cafes, recreational and civic uses promote the most active frontages. Active frontages at ground level should be established along major pedestrian routes. Refer to Photo K17-20 and Photo K17-21.

In residential areas the interaction between the public and private domain can be strengthened by maximising the number of entrances and locating more public functions on the street side of the building. In mixed use areas, ground level retail and commercial frontage provides the benefit of public safety, commercial activity and street life. Active frontages should extend above street level with uses which provide transparency and visual contact with the street.

Due to the temperate climate, favourable orientation, and views to Olympic Park and Homebush Bay from the public domain, Rhodes West is a desirable location for outdoor dining. Outdoor dining has the potential to contribute to the liveliness of the streets and public open spaces.



Photo K17-20 Built form that frames public open space with pedestrian link to surrounding street

Controls

C1.	<p>An active frontage is defined as one, or a combination of the following:</p> <ul style="list-style-type: none"> • Shopfronts, if predominantly glazed and accompanied by an entry • Community use if accompanied by an entry • Commercial lobby if accompanied by an entry • Entrance to residential/ commercial use • Café or restaurant if accompanied by an entry and/ or outdoor seating • Any other use that in the opinion of the consent authority is consistent with the strategy
C2.	<p>Minimise the number and width of vehicle footpath and cyclepath crossings, to optimise pedestrian and cyclist safety.</p>



Photo K17-21 Active street with restaurants and cafés with outdoor dining

B4 - Mixed use zone

C3.	To create a lively centre, active frontages must be established along the activity strip identified in Figure K17-9 Rhodes West Setbacks Plan, with ground level retail and commercial uses, and entrances to residential or commercial development above. Active ground floor frontage should also be maximised to all other streets, laneways and plazas in the mixed use zone, especially at street corners. Refer to Photo K17-23 and Photo K17-24.
C4.	To create an interesting pedestrian environment, predominantly clear glazing should be provided to the street frontage of retail and commercial windows at ground floor level.
C5.	To create a friendly pedestrian environment, roller shutters to ground floor retail street frontages are prohibited.
C6.	To create a lively centre, street level retail frontage for individual tenancies is limited to 20m, except on street corners where 30m frontages are permitted, and along Rider Boulevard and Oulton Avenue where bulky retailing may be accommodated.
C7.	To create a safe and lively retail complex, active frontages must be provided to the pedestrian spine of the retail centre. Ground level shops with frontage to both a public street and a pedestrian spine, should have public entrances on both frontages.
C8.	To enliven the street, laneways and plazas, outdoor eating areas should be located at ground floor and first floor level along street frontages and adjacent to parks, with minimal disturbance to pedestrian circulation and residential amenity.
C9.	To enliven the street, provide surveillance, accommodate home occupation, and facilitate potential future adaptation for mixed or commercial use, design every ground floor apartment fronting a primary street in the mixed use zone to incorporate a direct street entrance.

C10.	Complete existing connections and establish new pedestrian connections through the block, to create a fine-grained network of interconnected laneways and open spaces.
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R4 - Residential zone

C11.	To achieve street surveillance, maximise the number of pedestrian entrances to residential buildings. Refer to building articulation and address controls.
C12.	To achieve amenity in local neighbourhoods, permissible non-residential uses such as publicly accessible facilities, local shops and cafes are preferred where they will be most accessible and visible, such as at street level, in the following locations: <ul style="list-style-type: none"> • Along Walker Street; • At the Gauthorpe Street extension in the Foreshore Park; and • Fronting parks at locations identified in Figure K17-9 Rhodes West Setbacks Plan.

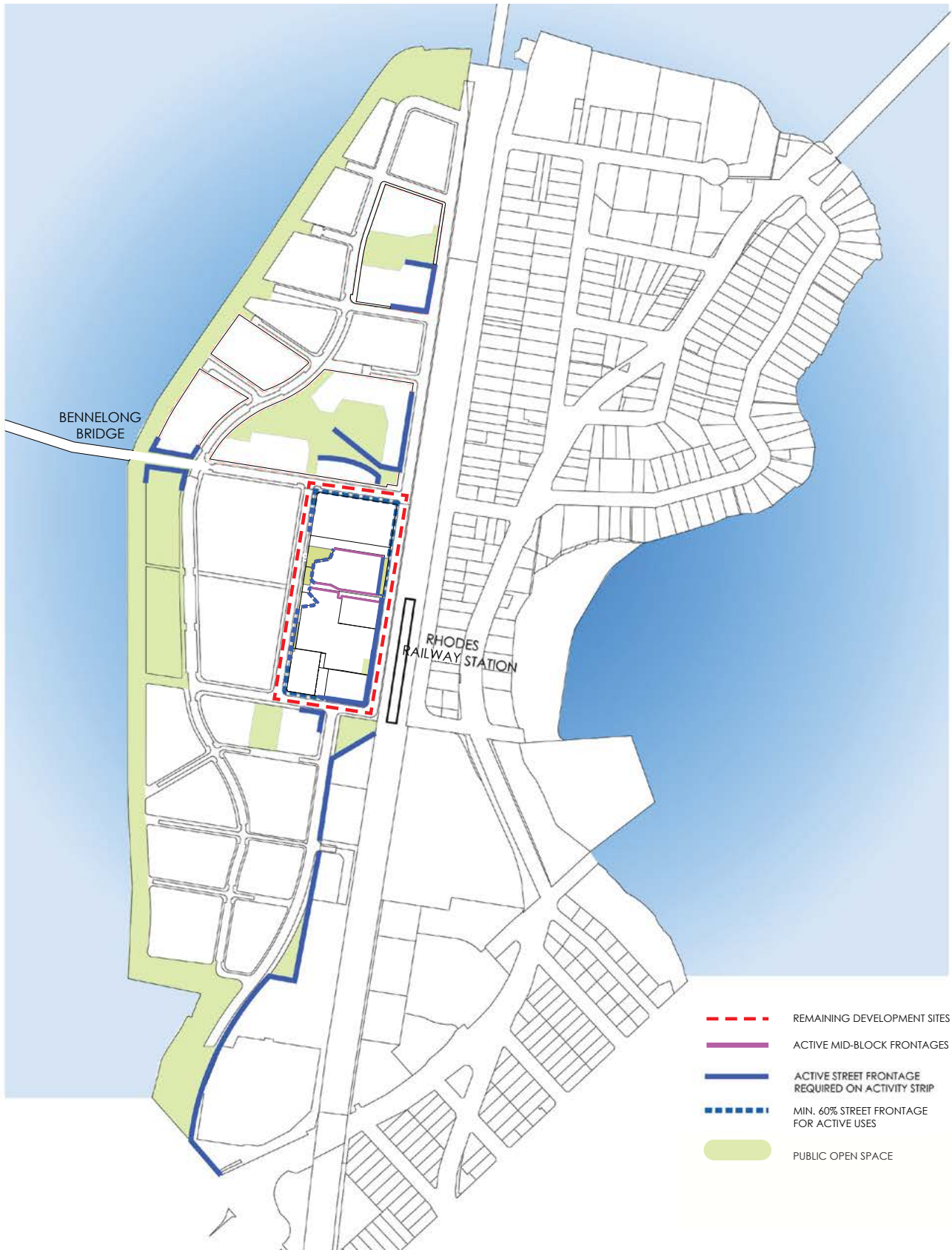


Figure K17-10 Rhodes West Active Street Frontages

B.15 Awnings and entrance canopies

In retail and mixed use streets awnings increase pedestrian amenity by providing wet weather protection and shade. Refer to Photo K17-22. For public and commercial buildings in residential streets discontinuous awnings and entrance canopies create a protected transition area between internal and external spaces at building entrances. Refer to Photo K17-25 and Figure K17-10 Rhodes West Active Street Frontages.

Awnings

Controls	
C1.	To achieve weather protection in the major pedestrian areas, continuous awnings must be provided to the activity strip and discontinuous awnings in transition areas opposite and adjoining the activity strip.
C2.	To provide adequate weather protection awning height is to be minimum 3.2m and maximum 4.5m and integrate with adjoining properties. The awning face should be horizontal. Steps for design articulation or to accommodate sloping streets are to be maximum of 0.75m. Awning width is to be a minimum 2m, setback 0.8m from the face of the kerb and to suit adjoining awnings. Where street trees are required the entire length of the awning is to be set back from the inside edge of the tree hole. Cut out segments are not acceptable. Awnings wider than 3.66m require approval from the Director General of Local Government.
C3.	To achieve protection from the sun, awnings should have no more than 50% of their area transparent.
C4.	To create a safe pedestrian environment at night and avoid visual clutter, under awning lighting should be provided and recessed into the soffit of the awning or wall mounted on the building.
C5.	To promote a safe and weather protected pedestrian connection, a continuous awning from Rhodes Station to the bus interchange should be provided.

C6.	To accommodate a design for any awning or overbridges on ground level and facing the roadway with an underpass of 4.3 meter clearance.
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Canvas awnings

C7.	To assist sun shading generally, retractable or fixed canvas awnings or shade cloths are permitted.
C8.	To provide sun shading to east and west facades, vertical canvas blinds may be used along the outer edge of awnings. These blinds should not carry advertising or signage.

Entrance canopies

C9.	To provide weather protection canopies are required at the pedestrian entries of all buildings. Entrance canopies are permitted within building setbacks. Where there is no building setback, entrance canopies can extend 2m beyond the property line over the footpath or further to align with the width of any adjoining discontinuous awning.
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Photo K17-22 Awning to active street frontage

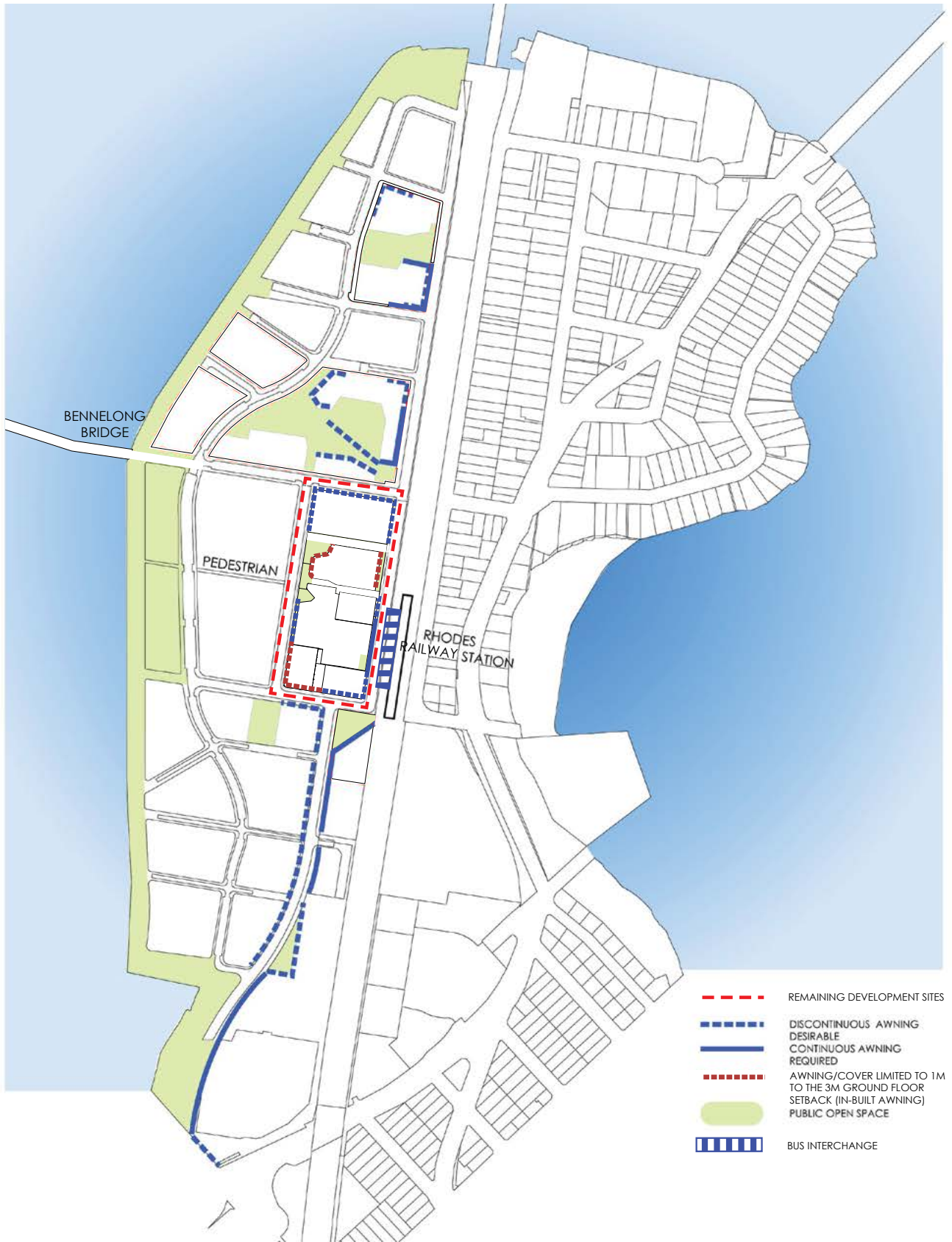


Figure K17-11 Rhodes West Location of Awnings



Photo K17-23 An example of a mid-block activated open space that is lively and attractive and that can accommodate different activities



Photo K17-24 Laneways can accommodate seating, planting and other street furniture to enhance amenity



Photo K17-25 Awning to residential entry



Photo K17-26 Side gardens achieve privacy with landscaping

B.16 Signage and advertising

Signage and advertising should communicate effectively and contribute in a positive way to the public domain. Signage and advertising structures should be unobtrusive, informative and compatible with an attractive shopping environment. Important factors to be considered are:

- Avoiding physical and visual clutter of the public domain;
- Avoiding conflict between advertising signs and nearby safety; public directions or traffic signs; and
- Protecting residential amenity

Controls

C1.	Signage must be designed to avoid confusion with directional and traffic signs.
C2.	Signage should be designed to add character to the street and complement the architecture.
C3.	To minimise visual clutter, signage should be integrated with awnings. Suspended signage should be a minimum of 2.7m clear above finished footpath level.
C4.	Building identification is the only signage permitted above first floor level.
C5.	A single retail centre and major tenant pylon is permitted along Homebush Bay Drive.
C6.	To achieve durability, signage and advertising should be constructed of non-combustible materials and be resistant to vandalism.
C7.	To protect residential amenity, advertising signage is not permitted facing private residential streets, or on side walls abutting residential properties.
C8.	To minimise visual clutter, the source of light to illuminated signage should be concealed or integral with the sign. Electrical conduits to illuminated signs including neon signs should be concealed. The ability to adjust the light intensity is required. A curfew on illumination may be imposed to protect the residential amenity of nearby residential development.

B.17 Private and communal open space

Garden spaces

Dwellings should have access to private or communal garden spaces that are useable and comfortable. Internal landscape spaces should contribute to the character and environmental quality of the landscape of the peninsula. These spaces should have a balance of podium, or terrace space, and deep soil, planted garden spaces. Design of podium landscapes should create optimum conditions for establishment and long term viability of planted gardens. Refer to Photo K17-27.

Controls

C1.	The area of communal open space required should be at least 25% of the site. Developments must achieve at least 50% direct sunlight to the principal useable part of the open space for a minimum of 2 hours between 9am to 3pm on 21 June (mid-winter).
C2.	Where communal open space cannot be totally provided at ground level, it should be provided on a podium or roof, communal roof or private open space. Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/ or in a contribution to public open space.
C3.	To optimise natural infiltration and encourage substantial planting, deep soil landscape space should be provided wherever possible, and maximised.
C4.	Development sites in the residential zone are to contain landscaped areas in the form of private, common and public open space. Refer to <i>Section K17.4 Site-specific controls</i> .
C5.	To achieve a garden quality, half the area of communal open space should be unpaved and provide soft landscaping.

C6.	To achieve a leafy residential quality, a minimum of one large tree, with a spreading canopy, and mature height of 12m minimum, should be planted in soft landscaping zones for every 100m ² of landscape space. Locally indigenous species are preferred.
C7.	Each apartment at ground level or on podiums or car parks, must have minimum private courtyard open space of 15m ² , with minimum depth for planting of 3m.
C8.	To assist stormwater management, landscape areas should provide some capacity for storage and infiltration of stormwater falling within the total landscape space.
C9.	To create optimum conditions for the establishment and long term viability of planted areas. Plantings are to achieve the following guidelines in deep soil zones: <ul style="list-style-type: none"> • Large trees (13-18m high with 16m diameter canopy at maturity) with: <ul style="list-style-type: none"> » Minimum soil volume: 80m³ » Minimum soil depth: 1.3m » Minimum soil area: 8m x 8m or equivalent • Medium trees (9-12m high with 8m diameter canopy at maturity) with: <ul style="list-style-type: none"> » Minimum soil volume: 35m³ » Minimum soil depth: 1m » Minimum soil area: 6m x 6m or equivalent • Small trees (6-8m high with 4m diameter canopy at maturity) with: <ul style="list-style-type: none"> » Minimum soil volume: 15m³ » Minimum soil depth: 800mm » Minimum soil area: 4.5m x 4.5m or equivalent

C10.	<p>Deep soil zone are to be at least 7% of the site area and to meet the following minimum requirements: (ADG – Part 3E: Deep soil zones)</p> <ul style="list-style-type: none"> • Site area: <ul style="list-style-type: none"> » 650-1,500m²: 3m » Greater than 1,500m²: 6m » Greater than 1,500m² with significant tree cover: 6m
C11.	<p>For planting on top of built structures such as basement car parks, podiums or roofs, ensure that the minimum soil standards for the following plant types and sizes are complied with:</p> <ul style="list-style-type: none"> • Large trees (12-18m high with up to 16m diameter canopy at maturity): <ul style="list-style-type: none"> » Minimum soil volume: 150m³ » Minimum soil depth: 1,200mm » Minimum soil area: 10m x 10m or equivalent • Medium trees (8-12m high with up to 8m diameter canopy at maturity): <ul style="list-style-type: none"> » Minimum soil volume: 35m³ » Minimum soil depth: 1,000mm » Minimum soil area: 6m x 6m or equivalent • Small trees (6-8m high with up to 4m diameter canopy at maturity): <ul style="list-style-type: none"> » Minimum soil volume: 9m³ » Minimum soil depth: 800mm » Minimum soil area: 3.5m x 3.5m or equivalent • Shrubs: <ul style="list-style-type: none"> » Minimum soil depth: 500-600mm • Ground cover: <ul style="list-style-type: none"> » Minimum soil depth: 300-450mm • Turf: <ul style="list-style-type: none"> » Minimum soil depth: 200mm

C12.	Variations may be considered to the above guidelines supported by advice from a qualified arborist.
C13.	Drainage and irrigation must be provided to all planters over structure.
C14.	All planters on podium levels must be accessible for maintenance.



Photo K17-27 Pedestrian connections between buildings to internal common open space

B.18 Front gardens

Well designed front gardens can retain existing landscape elements and supplement the stock of vegetation, particularly trees, in the public domain. Front gardens contribute to street character and amenity, enhance definition of the public and private domains, and can provide a positive setting for the building.

Front gardens

Controls	
C1.	Garden structures such as gazebos, play equipment, swimming pools and spa baths are not permitted in front gardens.
C2.	To minimise the visibility of car parking, garages and parking structures are not permitted forward of the building alignment to public streets;
C3.	To minimise the impact of driveways in front gardens, appropriate design, materials selection and screen planting is encouraged.
C4.	To minimise impact on the root zone of street trees, driveways, kerb crossings, parking, paved areas and external structures should be located appropriately.
C5.	Front gardens should generally be wide enough to be useable, and should have adequate continuous access to allow maintenance.
C6.	To achieve safety, lighting at both pedestrian and vehicular street entry points should be provided to each residential building.
C7.	To provide a pleasant streetscape and privacy of ground level private gardens a minimum of 1 small tree in front gardens of ground floor dwellings is required.

Front fences

C8.	The maximum height of front fences is 1.2m from the finished footpath level of the adjoining street. Front fences may be sloping or stepped along sloping streets.
C9.	Fences should be integrated with the building and landscape design through the use of common materials and detailing and be part of a suite of fences in the street. Refer Photo K17-28.
C10.	Fences should highlight building entrances, to allow for outlook and street surveillance
C11.	Fences must be partially transparent. Solid fencing or fencing with frosted or obscure glazing is not permitted



Photo K17-28 Front fences have some transparent quality to allow for surveillance of the adjoining public domain, we well as privacy for occupants

B.19 Above ground open space

Every dwelling should have access to private open space to extend the liveable area and take advantage of the temperate climate.

Private open space should be designed to allow privacy, security and solar access. Where private gardens are not possible, well designed balconies and terraces have the potential to improve amenity and lifestyle of apartment residents. Some useable communal open space at ground level should also be provided where there is no access to private gardens.

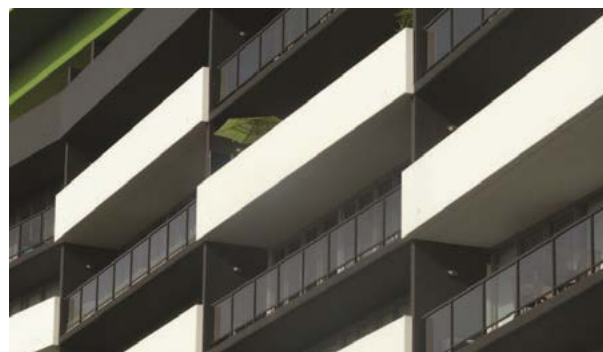


Photo K17-29 Building articulation in balustrade design

Controls

C1.	To achieve residential amenity, at least one balcony, terrace, verandah, loggia, or deck must be provided to each dwelling where direct access to ground level private open space is not available. Refer Photo K17-29.	» Exposure to significant levels of aircraft noise. In these situations, the use of other forms of balconies (e.g. wintergardens, bay windows or juliet balconies) are appropriate, with natural ventilation demonstrated.
C2.	<p>All apartments are required to have primary balconies as follows:</p> <ul style="list-style-type: none"> • Studio apartments: <ul style="list-style-type: none"> » Minimum area: 4m² » Minimum depth of balcony: no requirement • 1 bedroom apartments: <ul style="list-style-type: none"> » Minimum area: 8m² » Minimum depth of balcony: 2m • 2 bedroom apartments: <ul style="list-style-type: none"> » Minimum area: 10m² » Minimum depth of balcony: 2m • 3+ bedroom apartments: <ul style="list-style-type: none"> » Minimum area: 12m² » Minimum depth of balcony: 2.4m • For apartment balconies with the following circumstances: <ul style="list-style-type: none"> » At 10 storeys or above, subject to consistently high wind speeds; » In close proximity to road, rail or other noise sources; and 	<p>C3. To achieve high quality living environments, smaller secondary above ground open space elements are also encouraged, such as balconies adjacent bedrooms, screened external clothes drying balconies adjacent laundries and bathrooms. Such spaces may have screens to a height of 1.4m. The preferred depth of secondary open space is 1.2m and the minimum permissible depth is 0.9m.</p> <p>C4. Above ground open space must be designed to provide security and protect the privacy of neighbours.</p> <p>C5. Lightweight pergolas, sunscreens, privacy screens and planters are permitted on roof terraces, provided they do not increase the bulk of the building. These elements should not significantly affect the views available from adjoining properties, the immediate vicinity or from the nearby ridges.</p> <p>C6. To optimise useability, the primary above ground space element should include a potable water tap and barbeque gas outlet where possible.</p>

Refer additionally to SEPP65, Apartment Design Guide Part 4E Private open space and balconies.

B.20 Services

Low energy services

The consumption of electricity generated by the burning of fossil fuels contributes to CO₂ production, the 'greenhouse effect' and global warming. The construction and use of buildings, accounts for a high proportion of overall energy consumption and consequently presents opportunities for energy savings and reductions in CO₂ emissions. Applicants are required to satisfy the requirements of SEPP (BASIX).

Controls

C1.	Install energy efficient building services, including but not limited to, low energy heating and cooling systems and timer switches. The use of green power and solar cells is encouraged.
C2.	Passive solar design principles should be provided in building design to avoid the need for additional heating and cooling.
C3.	Building designs should be energy efficient by isolating and selecting spaces to be heated or provide individual room controls if using a centralised system; select low energy lighting such as compact fluorescent light fittings, and low energy appliances (minimum 3-star rating).
C4.	To minimise energy consumption incorporate clothes lines that are screened from public view, in preference to dryers. Locate clothes lines for sun and breeze wherever possible.
C5.	To maximise safety and minimise visual clutter all new services should be located underground. Building services such as drainage and sewerage pipe work should not be exposed.

C6.	Appliances with a low energy rating are to be used when provided as part of a development.
C7.	<p>Minimum energy requirements, include:</p> <ul style="list-style-type: none"> • Building Management Tools like motion sensors, time based controllers, irrigation control systems and air quality control systems for carparks to minimise water and energy use • An average thermal comfort star rating of 5 or better (BERSPro, AcuuRate or FirstRate5) • Double Glazed, low-e glass to all apartment windows achieving summer/ winter (glass only) U-values of 1.7 or less • R2.5 insulation to all non-glazed external walls • R3.0 plus foil insulation to the underside of all roofs and roof terraces over apartments • Energy efficient variable speed fans for mechanical exhaust system • Energy efficient light fittings • Energy efficient VVVF lifts

B.21 Water conservation

Water conservation is an important element of an integrated ESD strategy. Measures can be implemented to match water quality with its intended use, to reduce water demand and use water more efficiently.

Applicants are required to satisfy the requirements of SEPP (BASIX) and Water Sensitive Urban Design Strategies.

Controls

C1.	Water saving devices such as dual flush toilets, tap aerators, low water use dishwashers and washing machines must be provided to all new developments.
C2.	Spring return taps must be used for all public amenities.
C3.	Appliances and plumbing hardware should have a “AAA” Australian Standards Conservation Rating.
C4.	Implement fit for purpose substitution by matching water quality with its intended use. Roofwater should be retained on site for use externally, such as garden watering, cleaning and irrigation. The collection and storage of rainwater for toilet flushing should be considered. The recycling of grey water for toilet flushing or external use should also be considered.
C5.	The installation of insinkerators is not permitted.
C6.	Water conserving landscape practices, such as use of mulch, irrigation zoning, limited turf areas and flow regulators on hoses should be incorporated into design and management arrangements.
C7.	Minimum water requirements, include: <ul style="list-style-type: none"> • Drip irrigation to all planters/ on slab landscaping, except turf areas • Water efficient taps • Non-potable (recycle) water reticulation to all apartment WC's and laundries (washing machine supply), the irrigation of gardens and the supply of carwash bays • Recycling of water from the fire pump testing system

B.24 Site facilities

Site facilities include loading areas, waste areas, mail boxes, external stores, end of cycle trip facilities laundries and clothes drying areas. Development should provide appropriate site facilities for retail, commercial and residential uses, and locate and design them to minimise their impact on the streetscape.

Controls

C1.	Loading facilities must be provided via a rear lane or side street where such access is available.
C2.	Adequate waste and recycling areas must be provided to all developments. These areas are to be visually integrated to minimise their visibility from the street. Such facilities must be located away from openable windows to habitable rooms to avoid amenity problems associated with smell and noise.
C3.	To achieve amenity, provide either communal or individual laundry facilities to every dwelling, and at least one external clothes drying area. The public visibility of this area should be minimised. Clothes drying is only permitted on balconies that are permanently screened from public view.
C4.	To avoid visual clutter, all apartments are to have a balcony that has portion of the balustrade which has a minimum height of 1.4 metres and minimum width of 1.5 metres wide to screen drying clothes.
C5.	To optimise convenience, lockable mail boxes should be provided close to the street, integrated with front fences or building entries. Safety requirements need to be assessed in accordance with NSW Police regulations set-out in CPTED 'Safer by Design' principles.
C6.	To minimise the negative impact of smells on occupants on upper levels ducted vents must be provided to commercial kitchens.

C7.	To facilitate the maintenance of communal open space, garden maintenance storage including connections to water and drainage should be provided.
C8.	<p>In addition to storage in kitchens, bathrooms and bedrooms, provide the following storage to each apartment:</p> <ul style="list-style-type: none"> • Studio: 4m³ • 1 bedroom: 6m³ • 2 bedroom: 8m³ • 3 + bedrooms: 10m³ <p>With:</p> <ul style="list-style-type: none"> • At least 50% of the required storage to be located within the apartment; and • Storage is to be accessible from circulation spaces, living areas or laundry.
C9.	To encourage sustainable transport options provide change rooms, showers and lockers for people walking, running or cycling to work on all employment generating development. Locate these facilities close to secure bicycle parking.
C10.	To provide a safe public environment CCTV surveillance is to be provided in liaison with NSW Police.

Refer additionally to SEPP 65, Apartment Design Guide Part 4G Storage

B.25 Pedestrian access, parking and servicing

Pedestrian access and mobility

Most people experience some form of mobility impairment at some stage during their lives which may be caused by a variety of factors including ageing as well as injury and disease. It is important that access to the facilities of the Rhodes Peninsula is made easy for a wide variety of people.

The creation of a barrier free environment in all public spaces, premises and associated spaces will ensure that all people who live, work, or visit Rhodes Peninsula are able to access and use all spaces, services and facilities, and participate in community life at Rhodes.

Controls

C1.	To cater for mobility impairment, provide at least one main entry with convenient, barrier-free access in all buildings. Access should be direct and without unnecessary barriers. Obstructions which cause difficulties should be avoided. These include: <ul style="list-style-type: none"> • Uneven and slippery surfaces • Steep stairs and ramps • Narrow doorways, paths and corridors • Devices such as door handles which require two hands to operate, or revolving doors
C2.	To cater for mobility impairment, appropriately designed and convenient seating and ablutions should be provided.
C3.	To cater for drivers with mobility impairment, adequate parking should be provided for people with mobility disabilities, and safe, easy and convenient access to the building.
C4.	To cater for visitors with mobility impairment, the proportion of visitable dwellings should be maximised.
C5.	An assessment of the accessibility of developments is to accompany all development applications for new buildings and substantial alterations to existing buildings involving changes to pedestrian access.

B.26 Vehicular access

Vehicle access to developments should minimise conflicts between pedestrians and vehicles, visual intrusion, and disruption of streetscape continuity. The location and design of vehicle entrances needs to be carefully considered to avoid disrupting pedestrian and cycle movement and promote pedestrian and cycle safety. Minimising the size and quantity of vehicle crossings will retain streetscape continuity and reinforce a high quality public domain.

Controls

C1.	Provide access to parking from rear or side lanes or secondary streets wherever possible. Where practical, buildings are to share vehicle access points, and internal on-site signal equipment is to be used if necessary. Vehicular access is to be avoided in locations identified in Figure K17-11 Rhodes West Location of Awnings.
C2.	To optimise pedestrian safety, pedestrian and vehicle access should be clearly differentiated.
C3.	Provide a minimum 6m distance between a vehicle and pedestrian entries to avoid conflicts and maintain safety.
C4.	To optimise pedestrian amenity, driveways should be consolidated within blocks, particularly those in single body corporate ownership.
C5.	Vehicle access and pathway layouts should be designed to satisfy Australian Standards.
C6.	To optimise pedestrian access and safety, vehicular access ramps parallel to the street frontage are not permitted.
C7.	Where a port cochere is proposed, it is to be located so as not to interrupted pedestrian access to a building or along a street frontage. Pedestrian access is to be maintained along street footpaths.

C8.	The maximum permitted width of driveway crossings to detached, row and pair housing is 2.5m. The maximum permitted width of driveway crossings to all other lots is 6m generally, and 12m for the entrance to the retail centre near Homebush Bay. Dependent on the number of vehicles, 3m is the preferred width of driveway crossings, and car park and service entries.
C9.	In commercial, retail and light industrial developments, minimise the width of driveway crossings by consolidating car access, docks and servicing, and waste disposal. Avoid conflicts with pedestrian access and the impact of any such access on residential amenity.
C10.	Visual intrusion of vehicle access points must be minimised in accordance with NSW Police regulations set-out in CPTED 'Safer by Design' principles.

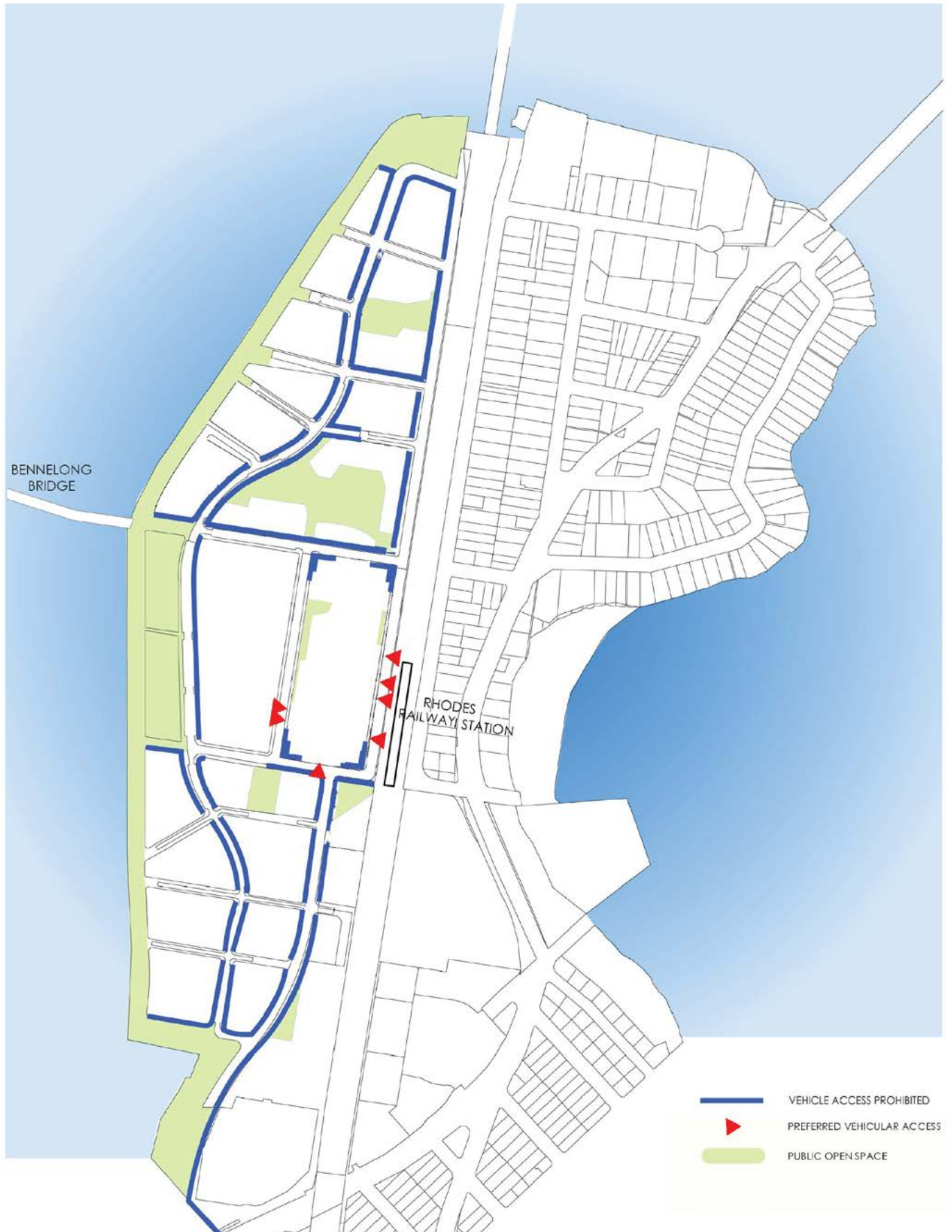


Figure K17-12 Rhodes West Vehicle Access Restrictions

B.27 On-site parking

The higher residential density and mixed use envisaged for the Rhodes Peninsula will enhance public transport use and viability, and reduce travel demand. This DCP promotes public transport use by minimising car parking requirements whilst providing for on-site service vehicle parking. Underground and semi-underground parking minimises the visual impact of car parks and is an efficient use of the site creating an opportunity for increased private, common and private open space.

Provision

Controls

C1.	Parking provision shall be in accordance with Table K17-1 Private vehicle parking rates.
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General

C2.	Stack parking is not permitted for residential development except where two spaces are provided for one apartment.
C3.	Car share, electric vehicle charging station and motorcycle parking rates are to be as per Table K17-3
C4.	One accessible parking space is to be provided for each adaptable unit.
C5.	Parking and service areas are to satisfy AS2890.1 and AS2890.2.

Basement and semi-basement car parking

C6.	To maximise the area for soft landscaping consolidated parking areas should be concentrated under building footprints wherever possible.
C7.	To accommodate a relatively safe environment in accordance with CPTED 'Safer by Design' principles.

At grade car parking

C8.	To achieve a high quality public domain, at grade car parking is only permitted to the rear of shops, restaurants and the like, and to detached, pair and row housing. It must be located behind the building line and screened from the public domain unless accessed via a lane or private street.
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Above ground car parking

C9.	To achieve a high quality public domain, internal car parking which protrudes more than 1.2m above ground level of the adjacent public domain must be located behind the building alignment and be screened from the public domain in a manner that is an integral part of the external design of the building.
C10.	Parking structures should be designed to minimise reliance on artificial ventilation of car exhaust.

Bicycle parking

C11.	To encourage cycling provide the following bicycle parking in accordance with Table K17-2 Bicycle parking rates.
C12.	To encourage cycling, ensure resident and employee bicycle parking is secure.
C13.	To encourage cycling, provide end of cycle trip facilities in retail/ commercial developments.
C14.	Secure bike parking facilities are to be provided in accordance with the following: <ul style="list-style-type: none"> a) Class 1 bike lockers for occupants of residential buildings; b) Class 2 bike facilities for staff/employees of any land use; and c) Class 3 bike rails for visitors of any land use
C15.	Where bike parking for residents is provided in a basement, it is to be located: <ul style="list-style-type: none"> a) on the uppermost level of the basement; b) close to entry/exit points; and c) subject to security camera surveillance where such security systems exist.
C16.	A safe path of travel from bike parking areas to entry/exit points is to be marked.
C17.	Bike parking for visitors is to be provided in an accessible on-grade location near a major public entrance to the development and is to be signposted.

Table K17-1 Private vehicle parking rates

Residential	All dwelling types	<p>Per dwelling Car Parking Rates for all apartments, multi dwellings and mixed use development:</p> <ul style="list-style-type: none"> • studio dwelling—0.1 car spaces • 1 bedroom dwelling—0.3 car spaces • 2 bedroom dwelling—0.7 car spaces • 3 or more bedroom dwelling—1 car space <p>Car Share schemes, carpark decoupling and the like should be utilised wherever possible to reduce the amount of on-site carparking.</p>
	Visitors	max 1 space per 20 apartments
	Service vehicles	max 1 space per 50 apartments for first 200 apartments plus 1
Commercial	Commercial offices	max 1 space per 40m ² Gross Floor Area
	Service vehicles	1 space per 4,000m ² GFA for first 20,000m ² GFA and a space per 8,000m ² GFA thereafter
	Retail	1 space per 40m ² Gross Floor Area
	Service vehicles	1 space per 500m ² for first 2,000m ² and 1 space per 1,000m ² thereafter (50% of spaces for trucks)

Table K17-2 Bicycle parking rates

Residential	Residential	<ul style="list-style-type: none"> • 2 per dwelling (resident) • 2 per 10 dwellings (visitor)
	Visitors	min 1 space per 12 apartments
Commercial	Employees	<ul style="list-style-type: none"> • 2 per 150m² GFA (employee) • 2 per 400m² GFA (visitor)
	Visitor	min 1 space per 750m ² GFA
Retail	Retail complex/ shops	<ul style="list-style-type: none"> • 2 per 250m² GFA (resident) • 4+2 per 100m² GFA (visitor)
	Cafes	<p>min 1 space per 25m² public area for employees</p> <p>min 2 spaces for clientele</p>

Table K17-3 Car share rates, electric vehicle charging stations and motorcycle rates

Land Use	Rates
Residential, Commercial, Retail	<ul style="list-style-type: none"> • Refer to Canada Bay DCP General Controls

K17.4 Site-specific controls

Introduction

Design controls and objectives have been prepared for each development site to ensure that the urban design and built form objectives and principals of the Canada Bay Local Environment Plan 2013 (as amended) and this Development Control Plan are achieved.

Considerable input from Council's Urban Design Consultant has guided the preferred framework for each site with urban design and place making principles. This input has guided the delivery of high quality living and working environments that are well designed and set a high standard for Rhodes as a recognisable Specialised Centre in Sydney.

These controls provide certainty to the community, Council and landowners as to the general position of the buildings on each site having regard to street setbacks, maximum building depths, building separation distances, and building heights in metres and maximum relative levels (RLs), as well as the size and general configuration of public open spaces. The building envelope controls also nominate the preferred location for non-residential uses to activate the public domain.

The design controls have been prepared on a precinct by precinct basis, however, do not undertake a detailed design of individual buildings. This flexibility in the development control allows the potential for a creative Architectural approach within set parameters, and is subject to refinement as detailed design proceeds. The building envelopes are not intended to prescribe the exact location of buildings footprints or the final location for vehicle and pedestrian access points.

Car parking is generally provided below the buildings and in certain locations extends beyond the building envelope under roads and public open spaces. These arrangements will be subject to detailed discussions at the DA stage for the various buildings and open spaces.

Building envelopes

Under the Canada Bay Local Environment Plan 2013 (as amended) Height of Building and Floor Space Ratio development standards have been established for all remaining development lots at Rhodes West.

The building envelopes described in this section allow some flexibility on the design of buildings, however the envelopes have been carefully developed in consultation with Council's Urban Design Consultant to maximise public benefit.

The envelopes have been tailored to each site, taking into consideration its particular characteristics and place making potential. These characteristics are described for each of the remaining sites in each precinct in terms of the following:

- The relationship of the building to the public domain, including street and public open space frontages;
- The desired character of parks and streets;
- The optimum development potential; and
- The environmental impact.

Building envelopes describe the building setbacks and separation distances, maximum building depths, minimum dimensions of public spaces around buildings and maximum building height.

The Urban Design Framework defines the physical outcome for the remaining development sites, whilst encouraging architectural innovation within the building envelopes indicated. The site-specific building envelope controls should be read in conjunction with the general controls for the private and public domain in *Section K17.3* of this DCP.

The building envelope controls illustrated in this section allow some latitude for the detailed architectural design of buildings. This development control is intended to promote highly articulated buildings with generous balconies, recesses and steps in facades to ameliorate a sense of excessive bulk.

Figure K17-32 Indicative Development Concept of this DCP shows the indicative development concept for all development sites combined, based on developments which comply with the development standards of the Canada Bay Local Environment Plan 2013 (as amended) and this DCP.

The Precincts

The Precincts, as defined in the Canada Bay Local Environment Plan 2013 (as amended) and the remaining development sites have been adopted from the previous planning framework (SREP 29: Rhodes Peninsula) and are as follows:

- Precinct A – Site A
- Precinct B – Site 2A, 3A, 3B, 3C and 3D
- Precinct C – Site A
- Precinct D – Station Gateway West

Figure K17-13 Rhodes West Precincts, Sites and Lots identifies the precincts, sites and lots, the subject to the site-specific design provisions of this DCP.

For each of the sites, an urban design framework is provided to illustrate the following controls:

- Building Envelope Plan and Sections
- Minimum building setbacks
- Maximum building depth
- Maximum building height
- Building articulation zone
- Location of public and private open space
- Preferred location for vehicle and pedestrian access

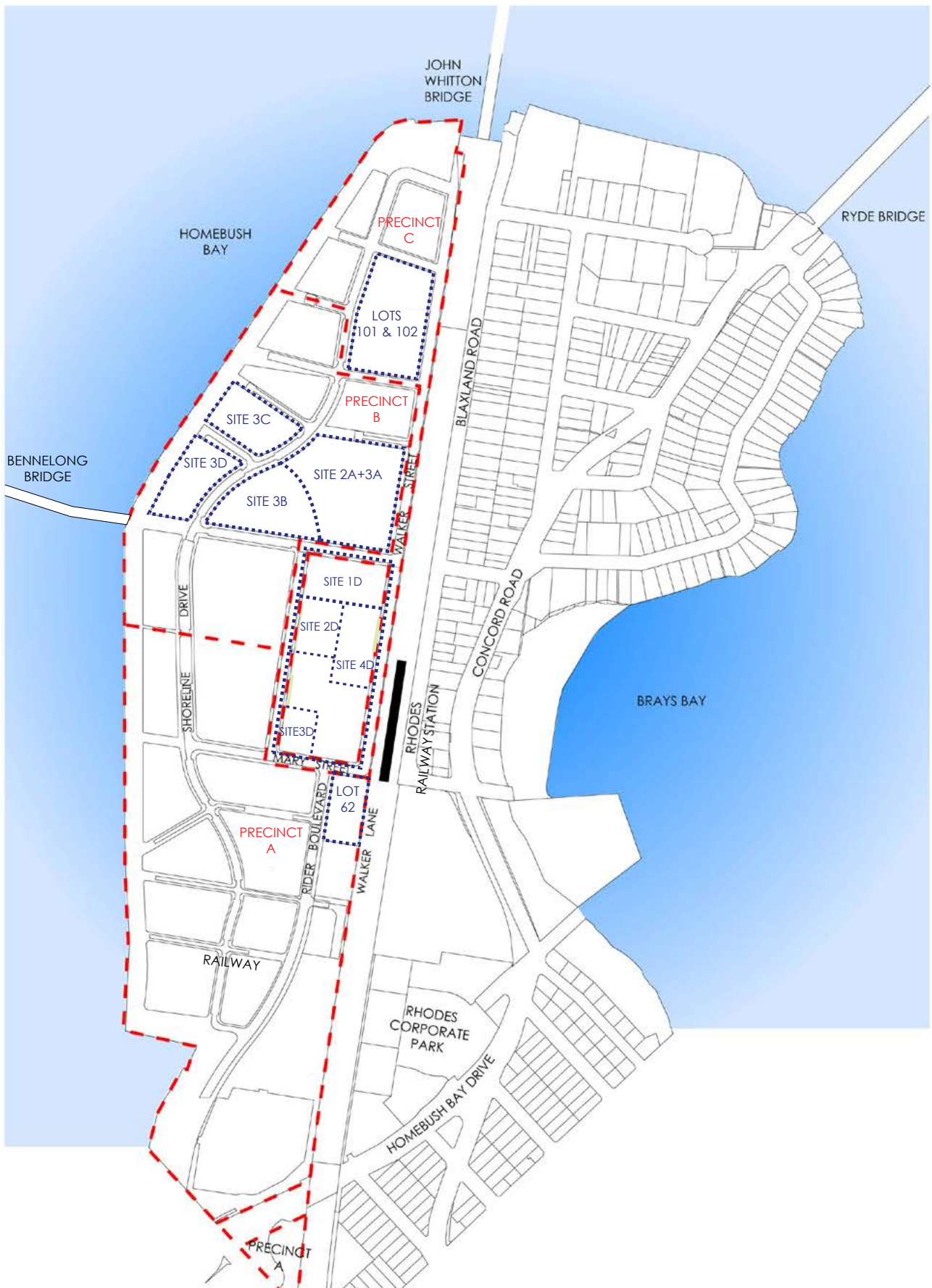


Figure K17-13 Rhodes West Precincts, Sites and Lots

Precinct A (Site A)

Located at the southern end of Rhodes, Precinct A has a mix of retail, commercial and residential uses. Retail uses are contained in the Rhodes Shopping Centre and at the ground floor level of some of the commercial and residential buildings fronting Rider Boulevard.

The key development controls illustrated in Figure K17-14 Precinct A Building Envelope Plan, Figure K17-15 Precinct A Building Envelope Section A-A and Figure K17-16 Precinct A Building Envelope Section B-B are as follows:

Controls	
C1.	Maximum building height ranging up to 25 storeys including a 4 storey podium.
C2.	Maximum FSR of 2.4:1 (Refer to Canada Bay Local Environment Plan 2013 (as amended)).
C3.	An area of 1,375m ² of public open space as a town square located at the northern side of the site.
C4.	Vehicle access located off laneway between commercial building to the south and proposed building on Site A.
C5.	Preferred location for non-residential uses at ground floor to activate Rider Boulevard and new public open space.
C6.	Preferred separate entries for residential and nonresidential uses.
C7.	The edge building is to be designed to address the Town Square. The façade of the edge building must be a minimum of three storeys in height and not exceed 4 storeys before setbacks.
C8.	A minimum building setback for the tower building of 5m to Rider Boulevard and 5m from the podium alignment to the Rhodes Town Square.

C9.	The edge building should incorporate a continuous colonnade along its length and along the Rider Boulevard frontage to accommodate the significant diagonal pedestrian flows traversing the site generated by Rhodes Station.
C10.	Consideration should also be given to incorporating an arcade linking the Town Square to the footpath cycleway.
C11.	The ground floor of the edge building fronting the Town Square must have active uses such as retail, cafes and taverns.
C12.	The tower building form and design is to reinforce and not detract from the civic quality of the Town Square. Generally, this is to be achieved by observing a 5m minimum setback above the 3-4 storey street wall.
C13.	Vistas into the site from Walker Street and Servier Avenue must be acknowledged in the overall design of the project and given architectural recognition in the composition of the building façade. The vista from Mary Street, Walker Street and Rider Boulevard into the Town Square also require consideration.

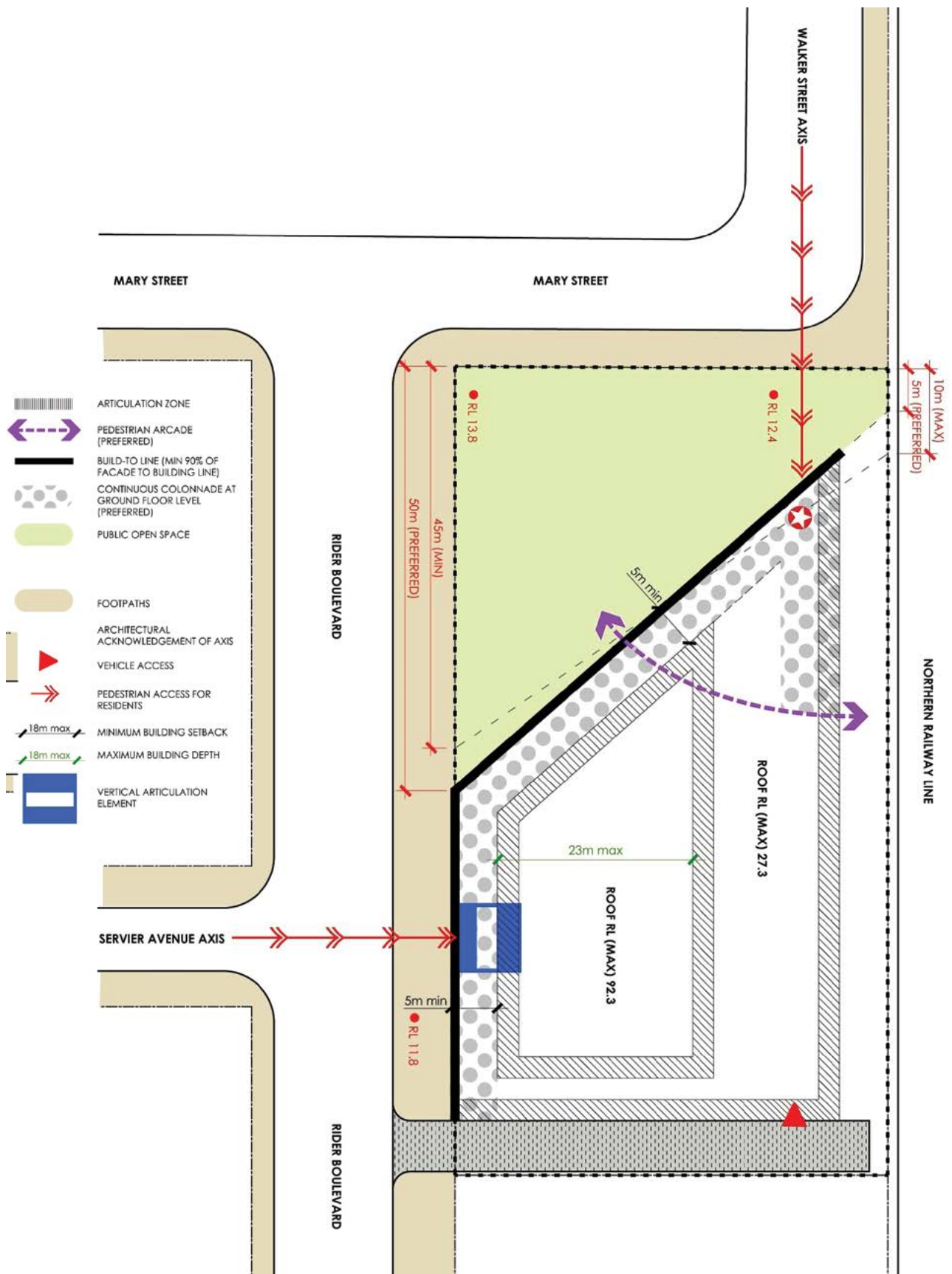


Figure K17-14 Precinct A Building Envelope Plan

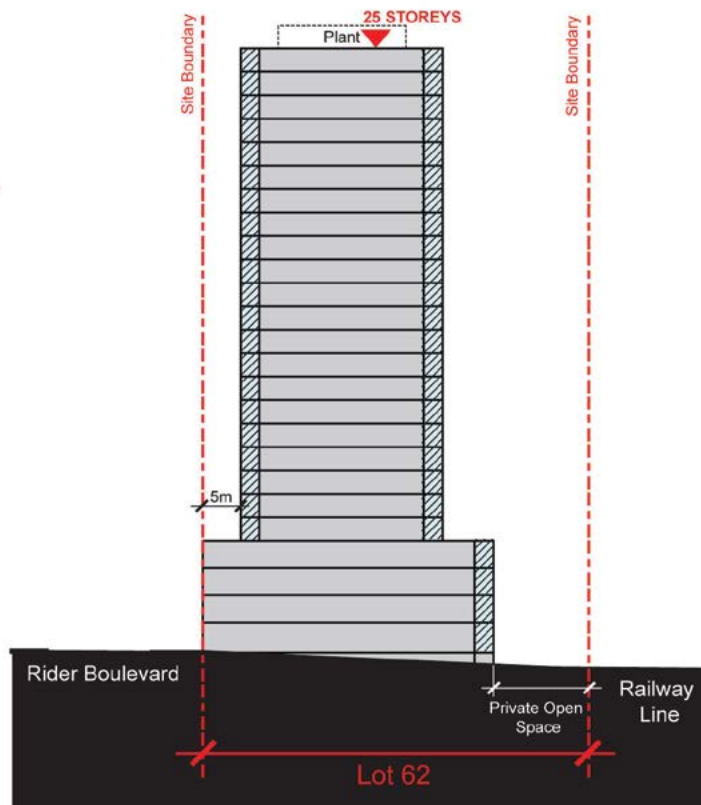
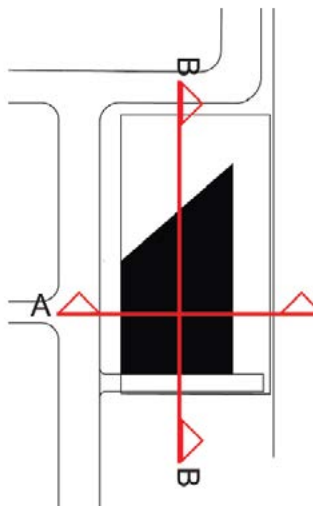


Figure K17-15 Precinct A Building Envelope Section A-A

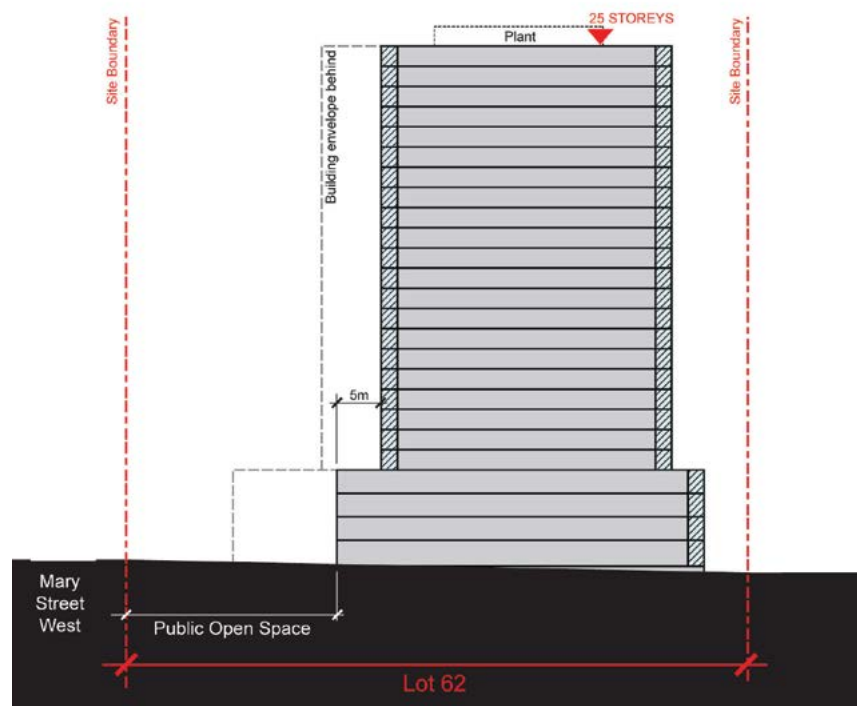


Figure K17-16 Precinct A Building Envelope Section B-B

Precinct B

Precinct B is centrally located within Rhodes West. The Precinct is 10.16 hectares in area and is planned as predominantly residential with local non-residential uses such as neighbourhood shops and cafes.

There are five remaining development sites and surrounding public domain to be developed following site remediation processes. The remaining development parcels are known as Sites 2A, 3A, 3B, 3C and 3D.

Precinct B comprises a large new local park which straddles these two land ownerships. As such the overall precinct has been considered as one Precinct Plan as illustrated in Figure K17-17 to Figure K17-20. For the purpose of describing the development controls, the separate landownership have been used.

Sites 2A + 3A

Sites 2A and 3A have a frontage to Walker Street of approximately 140m. The sites are located between Timbrol Avenue, a no-through road for vehicles and Gauthorpe Street, which provide public access from Walker Street directly to the foreshore and the planned community facilities. With the consolidation of these lots with the secondary road known as Peake Street, the provision of publicly accessible open space between tower and podium buildings is achieved.

Controls

C1.	Building heights ranging from low-rise buildings of 4-5 storeys which frame the public open space to tower buildings in the north east corner (25 storeys), south east corner (25 storeys) and north west corner (20 storeys).
C2.	The maximum Floor Space Ratio is 2.8:1.
C3.	Car park entry is from Timbrol Avenue.
C4.	Combined with Site 3B a minimum of 16,000m ² of public open space is required.
C5.	One level of basement car parking and one level of partially above ground car parking.

C6.	Above ground parking screened behind the street front building line to all streets and open spaces.
C7.	Preferred location for non-residential uses fronting Walker Street and the through site link open space.
C8.	Minimum building setbacks as illustrated in Figure K17-17 Precinct B Building Envelope Plan.
C9.	Separate pedestrian entries and lobbies for residential and non-residential uses.
C10.	The preferred location for non-residential uses including retail and commercial uses is along the Walker Street frontage and fronting onto the diagonal pedestrian plaza from the south east corner of the site.
C11.	The indicative alignment of non-residential frontages on the northern and southern sides of the pedestrian plaza are indicated on the building envelope plan. To avoid a 'gun-barrel' effect it is recommended that the alignment is to be staggered with stepping and recesses to provide pedestrian interest.
C12.	To maintain a view corridor along the diagonal alignment of Marquet Street by providing an undercroft space with a minimum height of 15m beneath the tower building in the south west corner of the site. Exposed columns are to have a high architectural design quality with a slender form and quality materials and integrated into the overall architectural design of the building.
C13.	To enhance the forecourt space at the Timbrol Avenue / Walker Street provide an undercroft space over two levels of the tower building.

Sites 3B, 3C and 3D

Sites 3B is located on the eastern side of Shoreline Drive and forms part of the new Central Park in Precinct B. This site has long frontages to both Shoreline Drive to the west and Gauthorpe Street to the south.

The new park front is to the north of Site 3B. Built form is to be located in the southern part of the site with the contribution to the new park forming the northern part of the site. Sites 3C and 3D are located on the western side of Shoreline Drive and also have a frontage to the Foreshore Reserve. These sites are divided by Peake Street, a secondary street, which provides vehicle access to basement parking on both sites. The key development controls for each of the three remaining development parcels are summarised below:

Site 3B

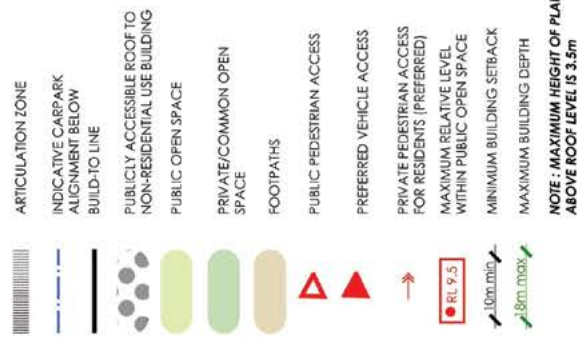
Controls	
C14.	A maximum height of 18 storeys above a single level podium stepping down to 15 storeys above a two level podium fronting Shoreline Drive is required.
C15.	Break up the bulk and length of the building; provide a recess in the façade of a minimum 4m in depth and length, in the location where the step in height occurs, as illustrated in the building envelope plan. Design the building as two linked buildings.
C16.	The car park entry is to be from Gauthorpe Street.
C17.	Combined with Sites 2A + 3A provide a minimum of 16,000m ² of public open space.
C18.	One level of basement car parking and one level of above ground car parking.
C19.	Above ground parking screened behind the street front building line to all streets and open spaces.
C20.	The preferred location for the primary pedestrian entry is from Gauthorpe Street.

Site 3C

C21.	Building height ranging from 4 storeys fronting the Foreshore Reserve up to 9 storeys fronting Shoreline Drive.
C22.	Maximum floor space ratio of 2.2:1.
C23.	Car park entry from Peake Street.
C24.	Two levels of basement car parking.
C25.	All buildings with an address to a street frontage.
C26.	The design of the building fronting Shoreline Drive is to accentuate the curvilinear alignment of the street through building setbacks, façade articulation, and balcony and balustrade forms.

Site 3D

C27.	Building height ranging from 3 storeys fronting the Foreshore Reserve up to 9 storeys fronting Shoreline Drive.
C28.	A maximum floor space ratio of 2.3:1.
C29.	Car park entry from Peake Street.
C30.	Two levels of basement car parking.
C31.	Preferred location for non-residential uses fronting the community facility lot to the south.
C32.	The building on the southern boundary is to align with the Gauthorpe Street view corridor.
C33.	The building on the northern boundary is to align with the Peake Street view corridor.
C34.	Separate pedestrian entries and lobbies for residential and non-residential uses are required.
C35.	The design of the building fronting Shoreline Drive is to accentuate the curvilinear alignment of Shoreline Drive through building setbacks, façade articulation, and balcony and balustrade forms.
C36.	The central private courtyard is to provide the main pedestrian access to the parallel building fronting the Foreshore Reserve.



REFER TO
SETBACK
CONTROLS

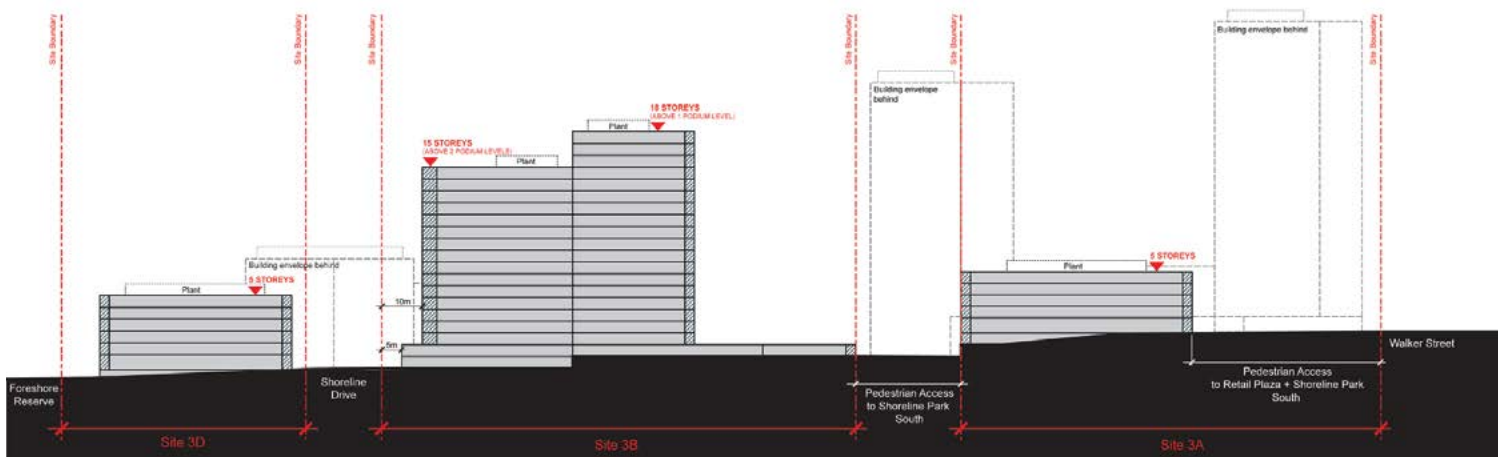


Figure K17-18 Precinct B Building Envelope Section A-A

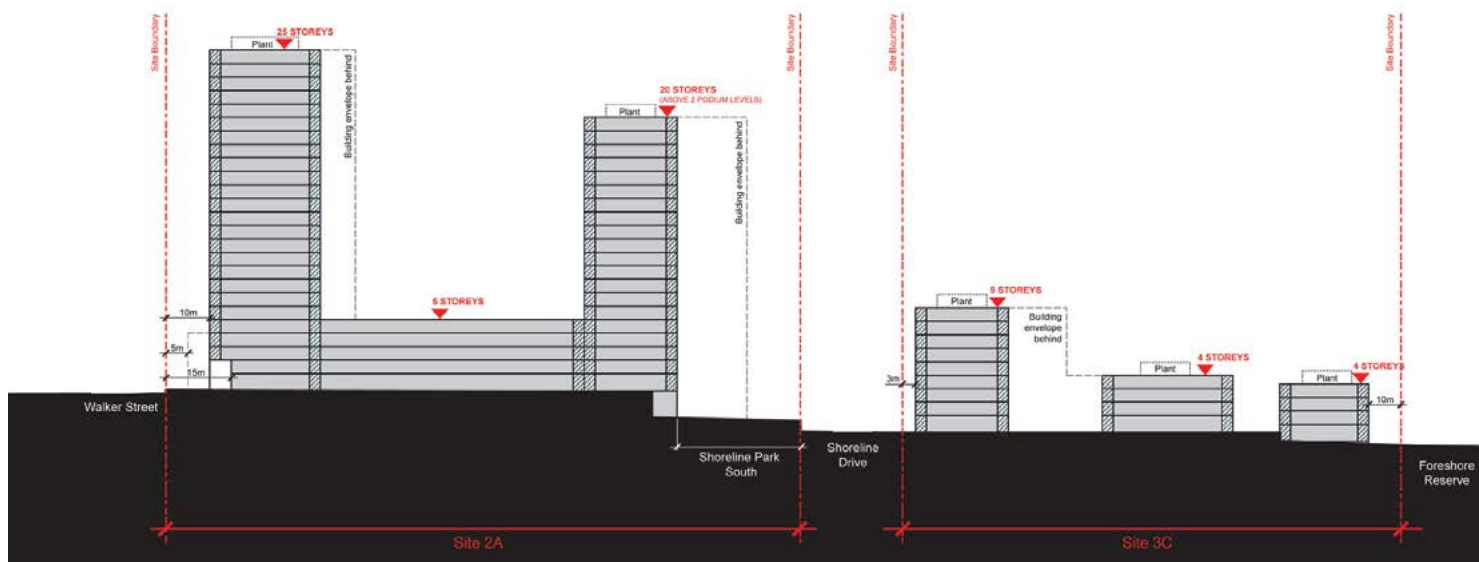


Figure K17-19 Precinct B Building Envelope Section B-B

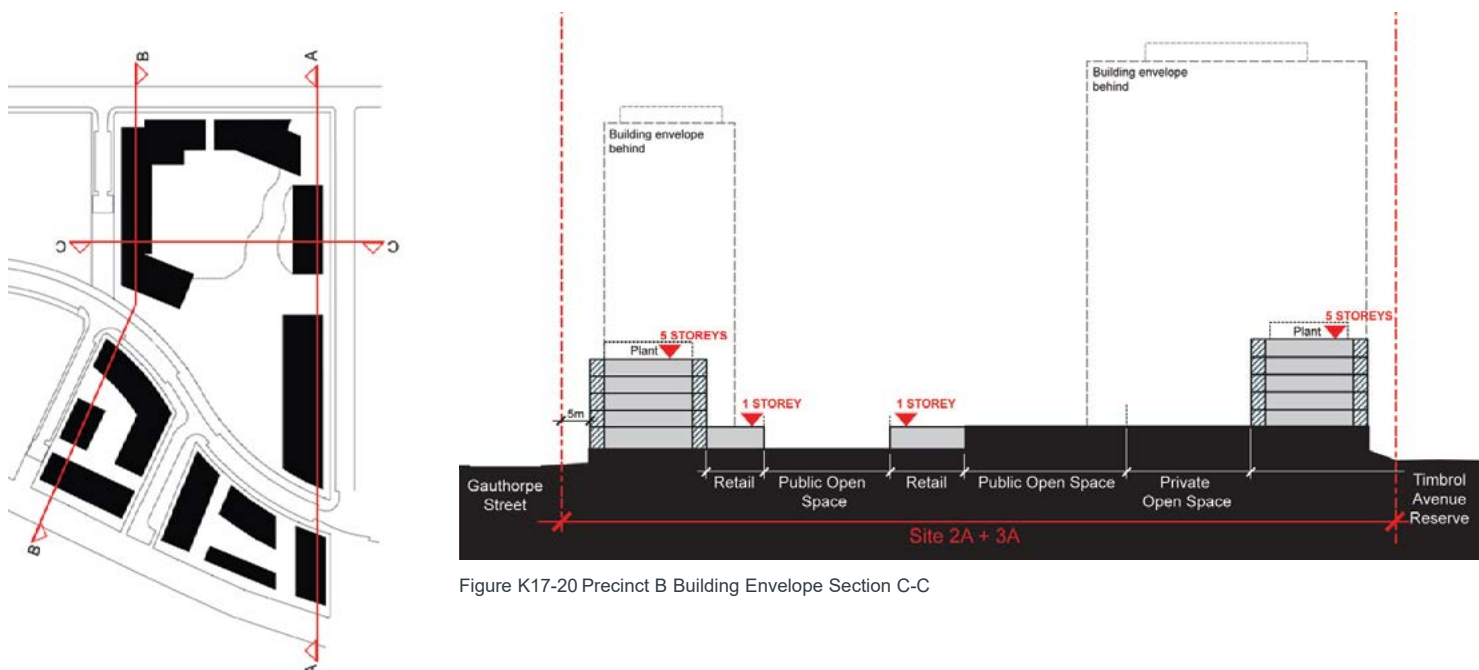


Figure K17-20 Precinct B Building Envelope Section C-C

Precinct C (Site A)

Precinct C is located at the northern end of Rhodes West. The area is predominantly a residential precinct. Two development parcels remain which are known as Site A.

The development provides an opportunity to create additional publicly accessible open space by amalgamating the lots. The open space is to be centrally located with a wide pedestrian accessible link between Walker Street and Shoreline Drive.

The development controls for the parcels are summarised below:

Controls	
C1.	Tower building in the south west corner of Site A of 25 storeys.
C2.	Tower building in the north western corner of Site A of 25 storeys.
C3.	Lower-rise buildings of 6 and 7 storeys fronting Shoreline Drive and Walker Street.
C4.	Single storey building on the corner of Walker Street and Nina Grey Avenue as a podium to the tower building above.
C5.	<p>Building setback controls as illustrated in Figure K17-21 Precinct C Building Envelope Plan, Figure K17-22 Precinct C Building Envelope Section A-A and Figure K17-23 Precinct C Building Envelope Section B-B including:</p> <ul style="list-style-type: none"> • Tower buildings are setback 10m from Walker Street and Shoreline Drive street frontages • Lower rise buildings are to align with the street frontages with a minimum of 5m setback to provide adequate space for ground level garden courtyards fronting the street
C6.	Vehicle access is to be provided from Nina Grey Avenue.
C7.	A minimum of 4,600m ² of public open space to be provided in a linear alignment between Walker Street and Shoreline Drive.
C8.	The preferred location for non-residential uses including local shops to be provided fronting onto the public open space with a northern aspect with good sunlight access, close to Walker Street.

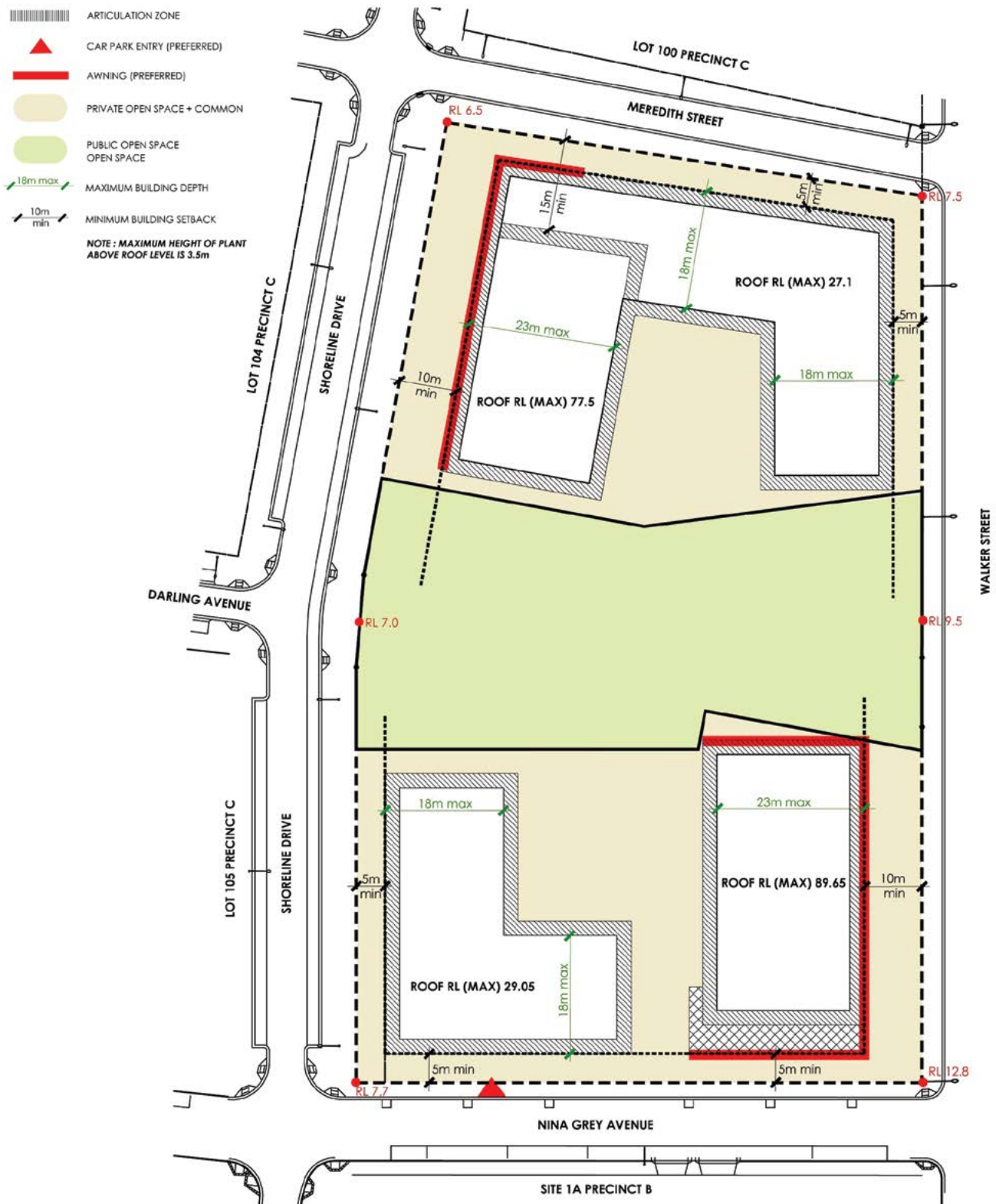


Figure K17-21 Precinct C Building Envelope Plan

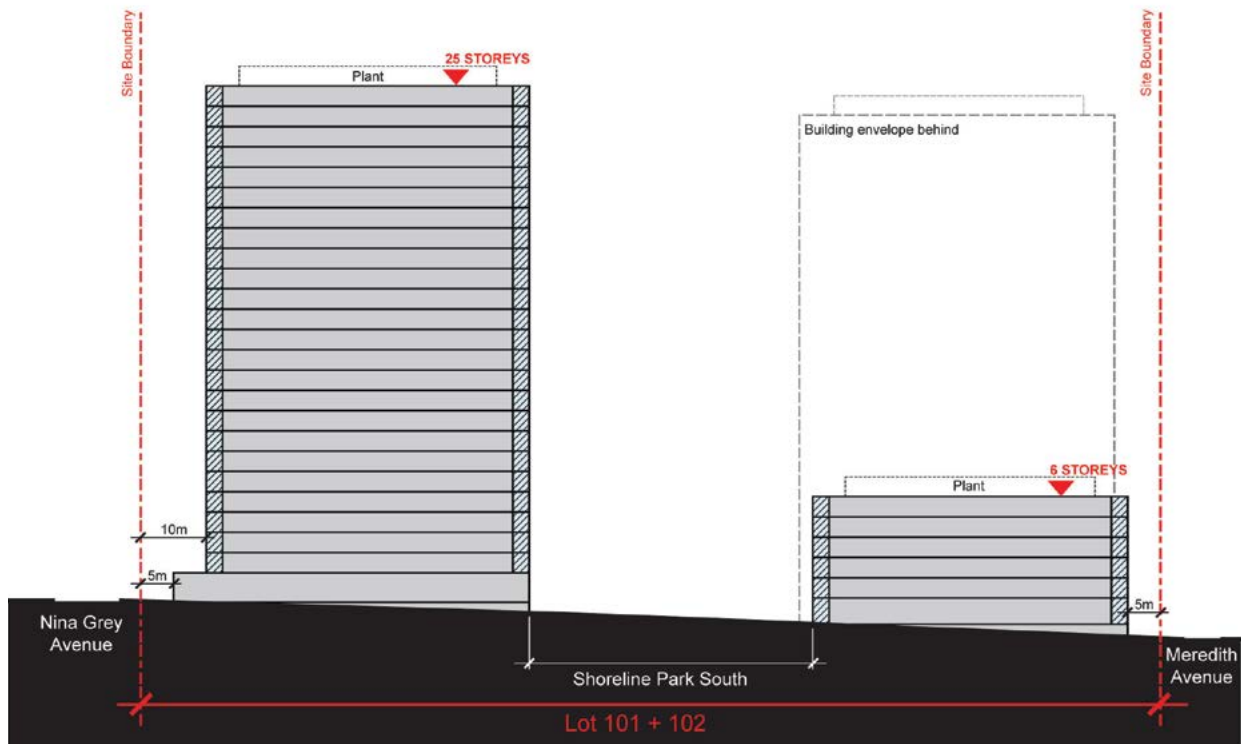


Figure K17-22 Precinct C Building Envelope Section A-A

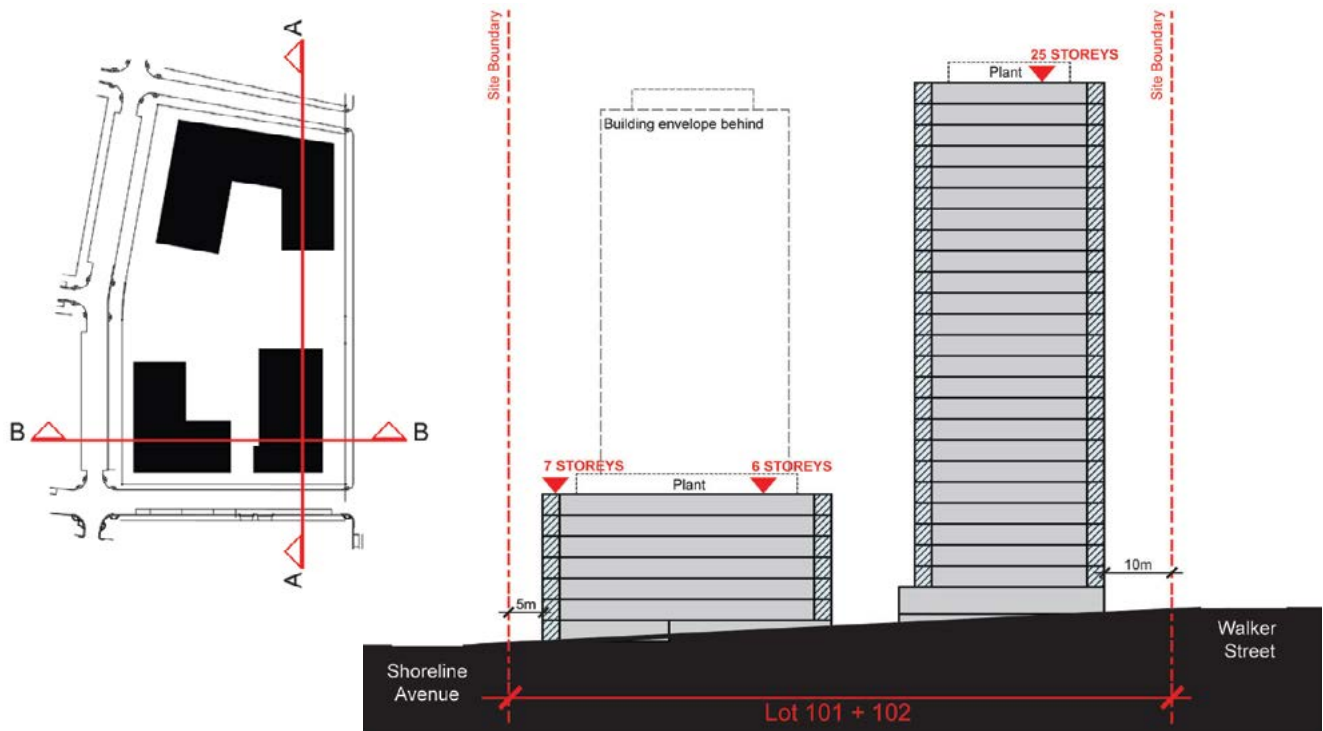


Figure K17-23 Precinct C Building Envelope Section B-B

Precinct D (Station Gateway West)

The Station Gateway West Masterplan (CM+, November 2014) was prepared to inform the planning framework for the Station Precinct and is supported, and superseded in some cases, by the Station Gateway West Master Plan (Hatch Roberts Day, August 2021). Precinct D, known as Station Gateway West, is located next to Rhodes Station, and is bounded by Walker Street, Marquet Street, Mary Street West and Gauthorpe Street. Refer "Figure K17-25-28".

Rhodes West has the potential to grow as a true Transit Oriented Development, adjacent to the waterfront, connected to surrounding communities and metropolitan Sydney. A mixed use precinct that includes residential, commercial and social places.

Station Gateway West will be completed as a place- led urban destination, reflective of and, building upon the original Master Plan intent. The delivery of additional public benefit and amenity to support the urban context and transit importance of the Precinct has driven the design process. The development capacity, height and form of development at Station Gateway West respects the ground plane amenity and demonstrates realisation of the best practice criteria.

Fine grain podium and tower building typologies will activate a connected public space network of forecourts, transit plazas and pedestrian laneways. The podiums will contribute to pedestrian comfort, provide greening opportunities and define a legible ground plane guiding residents and visitors to and from key destinations.

The shape, variety and siting of buildings will contribute to the gateway character of Station Gateway West whilst providing a visually interesting skyline with visible sky from important vistas across the Peninsula.

Critically, the Station Gateway West Master Plan future-proofs:

- the site itself for optimum connectivity, urban open space and residential amenity, and
- the surrounding area, with a particular focus on not compromising existing public spaces and facilitating embellishment and improvement of the public realm and infrastructure.

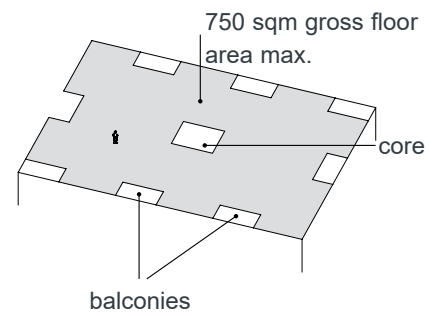
The architectural expression, is envisaged to be contemporary, exhibiting a sophistication, lightness and

transparency in detailing. The public domain paving, lighting, furniture, signage, materials and finishes, and landscaping will be a seamless continuation of the public domain of the surrounding streets and squares. A highlight of the public domain will be the incorporation of engaging, relevant and place specific public artwork and installations, drawing themes from the history of the place, and from cultural cues, as well as looking to the future.

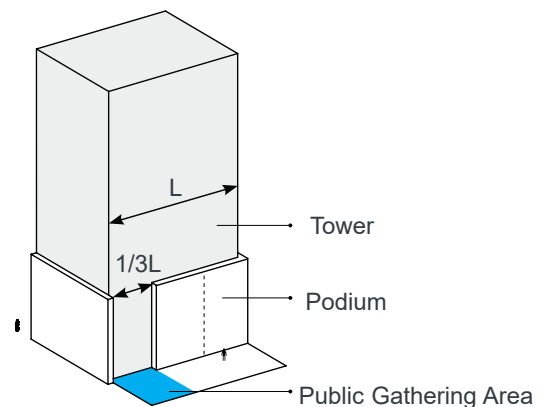
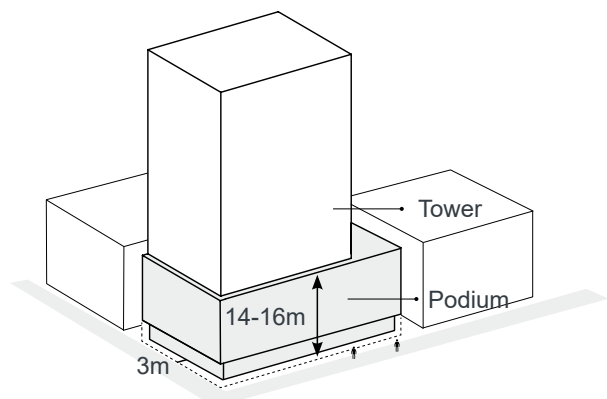
Controls

C1.	The maximum permissible building height on the subject sites are defined in the Canada Bay Local Environment Plan. Building height reaches 159 metres (equivalent to 45 storeys) adjacent to Rhodes Station and steps down to the west and south. Refer to Figure K17-25 Precinct D (Station Gateway West) Master Plan and the building envelope sections in Figures Figure K17-26 to Figure K17-31.
C2.	The maximum Floor Space Ratio (FSR) is defined in the Canada Bay Local Environment Plan 2013.
C3.	The mid-block is to provide a fine grained network of plaza's and laneways, creating a permeable city block.
C4.	Pedestrian connections, through a series of new urban places and plazas between Rhodes Station, to Marquet Street, Mary Street and Annie Leggett Promenade to the waterfront are required. Additional north-south retail laneway connections between Town Square and the new Recreation Centre are also required. Refer to Figure K17-25 Precinct D (Station Gateway West) Master Plan.

C5.	Consistent with the Objectives and supplementing SEPP 65, building-to-building setbacks within the Precinct are to achieve the following separation controls: 15 - 20 storeys - 24m Above 20 storeys - 40m
C6.	Towers above 20 storeys are to provide a 4 storey differential in building height.
C7.	Residential towers above podium level shall have a maximum gross floor area of 750 square metres as per diagram opposite. The two towers at 34 Walker Street can be developed following the existing/approved floor plate, subject to demonstration design quality in accordance with the requirements of the Apartment Design Guide and this DCP.
C8.	A minimum podium height of approximately 14-16m building height is required.
C9.	A tower and podium building typology is required, subject to the following outcomes: a) A ground floor setback of 3m is to be provided. b) A Podium to Tower setback of 4m is to be provided. c) Maximum 1/3 of a tower frontage along a street or public space can be extended down to the ground. Public gathering areas must be associated with the 2/3 of the façade that is grounded by a podium.



(Above) Maximum gross floor area of 750 square metres



C10.	The street wall has a maximum continuous frontage of 45m. Facades longer than 45m are to have a recess of a minimum of 3 x 3 meter and provide other means in the visual composition to break up overly bulky buildings. The composition and detailing of a facade is important to the appearance of the building and influences its perceived scale. Well designed facades reflect the use, internal layout and structure of an apartment building.	C14.	Through site links and laneways are to have clear line-of-sight from Precinct D to Annie Leggett Promenade, with buildings setback to the same distance as buildings fronting Annie Leggett Promenade.
C11.	A minimum of 60% street frontage is dedicated to active retail uses. All building fronting a street will have 15-20 doorways per 100m of a façade.	C15.	Union Square must not receive any additional overshadowing from new development between 9.00am and 2.00pm on the Winter Solstice. Peg Patterson Park must not receive any additional overshadowing from new development between 12.00pm and 2.00pm on the Winter Solstice. McIlwaine Park must not receive any additional overshadowing from new development between 8.30pm and 12.30pm on the Winter Solstice. Turfed area within McIlwaine Park must not receive any additional overshadowing from new development between 8.00am - 2.00pm on the Winter Solstice.
C12.	A tower Setback Line applies to all new property frontages and is a minimum of 4m.	C16.	Provide a taxi rank, kiss-and-ride drop-off and pickup bay and disabled parking spaces in proximity of the Rhodes Station on Walker Street.
C13.	A Build-to-line with a zero setback is required for the mid-block laneways and plaza. Laneway width is 8-12m and minimum plaza width is 20m. Laneway width is subject to performance requirements to accommodate: <ul style="list-style-type: none"> • Sufficient space to accommodate sufficient clear width, swept path and height for emergency vehicle access as required by the NSW Fire Brigade and NSW Ambulances and other day-to-day service vehicles required to maintain the central oval plaza and laneway public domain and as necessary to service businesses • Planting of mature trees in the laneways and central oval plaza as illustrated in the Public Domain Concept Plan (Context Landscape Design 2014) • Provision of outdoor dining zones associated with cafe, bar and restaurant tenancies • Projecting shop or other signage 	C17.	Bus bays relocated and expanded along eastern and western edges of Walker Street to accommodate the projected increase in patronage.
		C18.	Maximise pedestrian amenity by providing bus shelters and building awnings for weather protection from Rhodes Station to the bus interchange.

C19.	<p>Buildings are designed to minimise wind impacts to new areas of open space without the need for roofs or canopy structures.</p> <p>Any proposed development must demonstrate that a sufficient level of 'Wind Comfort Standard for Sitting in Parks' (in accordance with Lawson Wind Comfort Criteria) is achievable without the need for any open space cover or mitigation measures other than the design of the building itself.</p> <p>Maximum awnings coverage consistent with the Station Gateway West Master Plan (Hatch Roberts Day, August 2021) and Figure K17-11.</p>	C22.	Restrict vehicular and servicing access to the midblock to ensure for a safe, pedestrian prioritised network of mid-block laneways and plazas to thrive.
C20.	<p>A single overhead connection from the development to the Station Concourse with a pedestrian bridge over Walker Street is permitted subject to a high level of urban design and architectural quality being achieved. A pedestrian bridge should appear light and slender in design and maximise Walker Street openness and vistas. The proposed pedestrian bridge over Walker Street is to meet the following requirements:</p> <ul style="list-style-type: none"> • TfNSW and Sydney Trains specifications for access to a station (including design for growth and 24/7 access for the public) • Disability Standards for Accessible Public Transport 2002 • Vertical transport and commuter access to buses on both sides of the roads and station • In accordance to safety regulations set by NSW Police and their CPTED 'Safer by Design' principles 	C23.	Major truck and service vehicle access to Station Gateway West basements is preferably from Walker Street and Marquet Street at the preferred locations identified in Figure K17-12.
C21.	Proponents are to address the provision of cycle routes, crossings and parking facilities in relation to Station Gateway West, including at Rhodes Station and at key precinct destinations. Refer to section A.2 Cycle Strategy and to Figure K17-6 Rhodes West Cycle Strategy.	C24.	Consolidate wherever possible, vehicular entry points to Station Gateway West development and ensure good sight lines at pedestrian cross-overs.
		C25.	Maintain fire and emergency vehicle access via one or more laneways, as required by emergency service authorities.
		C26.	<p>A minimum of 4,000 sqm of publicly accessible open space to be provided within the Precinct.</p> <p>The open space allocation shall be distributed as per Figure K17-4.</p> <p>New publicly accessible open spaces on Marquet St and Walker St must achieve 2h of solar access on 50% of its area between 9.00am and 3.00pm on the Winter Solstice.</p>
		C27.	Public plazas are required to be open to the sky and unobstructed, except for certain permitted obstructions such as planting, seating, and other plaza amenities.
		C28.	<p>The street interface of a public plaza is required to have a minimum 50% of its area free of obstructions.</p> <p>Plazas that front on a street intersection are required to maintain a clear area within 5m of the intersection. The remaining 50% of the sidewalk frontage may contain obstructions such as fixed and movable seating, plantings and trees, light poles, public space signage, litter bins or other design elements that are permitted within public plazas.</p>

C29. Marquet Street Forecourt must be designed to have:

- A minimum width of 10m for the entire street frontage,
- An average length of 20m,
- A minimum clear usable space of 20 x 20m (the major portion)
- 2hrs of sun over 50% of the space (9am-3pm)
- Awning/ cover limited to 1m in addition to the 3m ground floor setback (establishing an in-built awning) on new building podiums.
- The main portion of the space is termed the “major portion” of the public space and must account for at least 75% of the public area. The smaller areas are then considered to be “minor portions” and are limited to no more than 25% of the public area.

Refer to Figure K17-25 for spatial explanation.

C30. Walker Street Transit Plaza must be designed to have:

- A minimum width of 6.5m for the entire street frontage,
- Clear and direct link to the Gateway West Pedestrian Laneways
- 2hrs of sun over 50% of the space (9am-3pm)
- No additional awning/ cover to that of the 3m ground floor setback (establishing an in-built awning) on new building podiums

Refer to Figure K17-25 for spatial explanation.

C31. On site landscape replacement must be provided as the equivalent or more of the total site area. Landscape replacement can be provided through the following:

- Vertical and facade greening.
- Rooftop greening and greening of communal podium spaces.
- Public open space, through site links within the site boundary.

C32.	<p>All development must contribute to and demonstrate a 25% Green View Index using the methodology outlined in Figure K17-24 and described below.</p> <p>The Green View Index (GVI) is a numerical value given to the amount of green canopy and landscape perceived by an individual at street level. Tree canopies, understorey vegetation, and facade greening are the three primary contributors to the GVI.</p> <p>The GVI target for Station Gateway West (Precinct D) is 25%. To achieve this, the design of streets and new developments must include an objective assessment of the GVI value achieved, using the following method:</p> <ul style="list-style-type: none">• Where tree canopies and understorey vegetation do not achieve the GVI target, facade greening is required to the extent necessary to achieve the minimum requirement.
C33.	<ul style="list-style-type: none">• NOTE: for the purposes for the purposes of calculation GVI at street level, a standard height of 14m above ground level has been set, consistent with the podium height.• A mix of small (<7m canopy), medium (7-15m canopy), and large (15m + canopy) trees is required, appropriate to the scale of spaces and building interfaces.



- Small full canopy trees, spaced at 5m centres
- Understorey planting at base of tree (understorey planting at 0.6m high)
- Extensive facade greening



- Medium trees spaced at 8m centres
- Understorey planting at base of tree (understorey planting at 0.6m high)
- Medium facade greening



- Large Tree spaced at 10m centres
- Understorey planting at base of tree (understorey planting at 0.6m high)



- Medium foreground trees spaced at 8m centres.
- Understorey planting at base of tree (understorey planting at 0.6m high)
- Possible where there is widened verge or open space to the streetscape



- Medium foreground trees spaced at 3-5 m centres for plazas and parks.

Figure K17-24 Tree Canopy Strategy

Public domain

The urban and landscape design of Station Gateway West is guided by the following Public Domain Principles:

C34.	<p>Provide a raised threshold pedestrian crossing to Rhodes Station, across Walker Street, that:</p> <ul style="list-style-type: none"> • Encompasses and connects the future bus interchanges on either side of Walker Street, • Has the same materiality and treatment as the future Walker Street Transit Plaza and is flush (no kerbs), • Integrates a cycleway along the eastern side of Walker Street connecting north and to the Station. <p>Provide a raised threshold pedestrian mid-point, across Marquet Street, to Annie Leggett Promenade.</p>
C35.	Provide generous through-site pedestrian links (as shown in Figure K17-25 Precinct D (Station Gateway West) Master Plan) with tree planting arranged to maximise views into the mid-block, and taking into account of access and safety considerations.
C36.	Wherever possible provide active edges along all pedestrian passageways and around the proposed plaza.
C37.	Central Oval Plaza – this is an opportunity for a flexible, simple and uncluttered space, with minimal and carefully chosen landscape, furniture, lighting and artwork. The plaza and laneways are a focus for cafes, small daytime events, community activities and temporary markets.
C38.	There is an opportunity to integrate a water feature within the Station Gateway West plaza.
C39.	Provide new street trees in surrounding streets – Gauthorpe, Marquet, Mary and Walker Streets.

C40.	Celebrate the Walker Street and Marquet Street entry plazas to the precinct with groves of distinctive palm trees.
C41.	Integrate Walker Street public domain generally in accordance with Council's Public Domain Concept Plan.
C42.	Integrate public art and feature lighting into the public domain – opportunities include embedded artwork in the paving or sculptural installations, as a focus in the entry plazas, and in the central oval plaza – to entice pedestrians to the 'heart' of the precinct.
C43.	Integrate sustainability and WSUD initiatives in the designated public domain.
C44.	Integrate the Station Gateway West paving, furniture, lighting and materials and finishes, seamlessly with the adjoining Rhodes Peninsula public domain.
C45.	<p>Through-site links are crucial to creating a continuous pedestrian and green network within Gateway Rhodes West. The proposed through-site links must:</p> <ul style="list-style-type: none"> • Provide uninterrupted views through the links between Marquet and Walker Street. • Allow for continuous 3m wide (minimum) pedestrian through zone within the minimum laneway width established within the Master Plan and this DCP. • Outside of the 3m pedestrian zone, provide trees along the length of link, spaced to achieve a continuous canopy of shade when mature. • Provide public furniture integrated into the space, co-located with building entries and key nodes where appropriate.

C46.	<p>Assure CPTED principles are implemented to ensure reduced opportunities for crime. Public spaces:</p> <ul style="list-style-type: none"> • should be designed to support natural surveillance <p>Through-site links:</p> <ul style="list-style-type: none"> • Must have uninterrupted views between Marquet St and Walker Street • Must provide direct visual connection to Annie Leggett Promenade • Must be provided as part of the public domain • Must provide visible, unobstructed and easily distinguished entries to buildings 	<ul style="list-style-type: none"> • Garage entrances, driveways, parking spaces, loading berths, exhaust vents, mechanical equipment, and building bin storage facilities are prohibited within all public plazas • Any such elements located adjacent to a public plaza are required to be screened or concealed from view. Vents and mechanical equipment are prohibited on any adjacent building walls within 5m of the level of the public plaza. Air intake vents and intake shafts, are permitted within public plazas if they are incorporated into plaza design features and do not impair visibility within the plaza
C47.	<p>All public space design must adhere to the Australian Standard Design for Access and Mobility (AS1428).</p> <ul style="list-style-type: none"> • Public plazas should generally be located at the same level of adjoining public domain. Minor changes in elevation, not to exceed 0.6m above the level of the adjacent area, are permitted • Plazas should generally not be sunken below street level • Step risers must be no less than 100mm, and no greater than 150mm (exception can be made for vanishing steps) • Seating steps shall be in the range of 150mm-500mm 	<p>C49. Union Square must not receive any additional overshadowing from new development between 9.00am and 2.00pm on the Winter Solstice.</p> <p>Peg Patterson Park must not receive any additional overshadowing from new development between 12.00pm and 2.00pm on the Winter Solstice.</p>
C48.	<p>Circulation paths must be designed to ensure ease of access to and within public space. For optimal outcomes:</p> <ul style="list-style-type: none"> • Circulation paths must be a minimum of 2.4m in width and extend to a minimum of 80% of the depth of the space • Trees planted flush-to-grade, light poles, public space signage, and litter bins are permitted within circulation paths, However, 1.8m of continuous path must remain clear of fixed furniture elements at all times • Circulation paths must have a cross-fall no greater than 2.5% 	

C50.	<p>The configuration, location and diversity of seating available should be considered to ensure social interactions can be undertaken in a safe and comfortable manner.</p> <p>Seating requirements:</p> <ul style="list-style-type: none"> • At least 1 linear metre of seating must be provided for every 30m² of plaza space. • Movable seating for cafes may constitute up to 50% of the seating requirement, and may be stored outside of trading hours • Up to 50% of seating may be informal (e.g. low walls/bleacher steps). <p>To create an active street edge a portion of the required seating must be provided within 5m of the street boundary. A minimum 1 lineal meter of seating for every 2 lineal meters of street frontage is required. To ensure that this seating is comfortable and engages the public by being oriented toward the street, 50% of such seating is required to have backs, and 50% of the seats with backs are required to face the street.</p> <p>To provide variety, the public plazas are required to provide at least 3 different seating types, with moveable seating one of the three required seating types.</p> <p>A substantial proportion of seats in a plaza should have backs to facilitate comfort and usability by people of all ages and abilities. To ensure sufficient variety in seating types in the public plaza, seating steps and walls are limited to no more than 15% of the total required seating in the public plaza.</p> <p>Seating must be minimum 450mm depth, and in the height range of 400mm to 500mm. To allow for generous plantings, seating provided on planter ledges are required to be at least 550mm deep.</p>
C51.	<p>Spikes, rails, or deliberately uncomfortable materials or shapes, placed on any surfaces that would otherwise be suitable for seating are prohibited within public plazas.</p> <p>Devices incorporated into seating that are intended to prevent damage caused by skateboards are generally permitted. Such deterrents are required to be spaced at least 1.5m apart from one another, be constructed of high-quality materials that are integrated with the seating design, and should not inhibit seating.</p>
C52.	<p>Bollards should only be included where it is necessary to discourage vehicle movement. They must not be perceived as a pedestrian barrier. They should only be used as an element of access control. Bollards are recommended where trafficable areas adjoin flush with public spaces (e.g. plazas).</p> <p>In alignment with best practice, a variety of bollards can be used. This includes bollards that contain planting, removable bollards, fixed bollards and bollards as seating elements.</p>
C53.	<p>Requirements for general waste and recycling bins are to be as directed by Council.</p> <p>All waste facilities are to be located within 15m of seating and gathering spaces. Visual appearance and impacts of smell should be carefully considered when locating waste facilities.</p>
C54.	<p>All signage in public space must be visible and legible. Signage design (i.e. font, colour and shape) should be aligned with the greater public domain elements palette.</p> <p>Where required by Council, wayfinding and signage are to integrate digital technologies.</p>

C55.	<p>Public art can serve an important role turning spaces into places, giving people reason to stop and engage with the public domain. It can also celebrate cultural and environmental diversity and instill a sense of belonging.</p> <p>A site specific Public Arts Plan is to be prepared by an arts and cultural planner and will be required to address the following:</p> <ul style="list-style-type: none"> • Identify opportunities for the integration of public art in the proposed development • Identify themes for public art • Durability, robustness and longevity of the public art • Demonstrate how public art is incorporated in the site and built form design • Demonstrating that the scale of the public art is appropriate and proportionate to the development and thoughtfully sited & integrated with the building to create a point of interest and define the location of area • The proposal should also provide a program for installation and integration with the construction program for the development <p>Public art must be delivered in accordance with City of Canada Bay's Public Art Plan.</p>	<p>C57. Large plazas can are to accommodate a more varied palette of design features. Potential additional amenities include water features, such as fountains or reflecting pools; children's play areas; game tables; and food service, such as open air cafés, kiosks, or food service in adjacent retail spaces.</p> <p>The design must consider incorporating at least 2 of these elements at a scale and location appropriate to each plaza space. Any proposals must take into consideration existing amenities in the surrounding area.</p>
		<p>C58. To encourage greater landscaping variety and to prevent plazas from being excessively hard-surfaced, public plazas are required to be comprised of at least 20% planted areas, in the form of planting beds, ground cover or accessible lawns.</p> <p>To ensure visibility throughout the space, bounding walls for planters or planting beds cannot exceed 450mm in height.</p>
		<p>C59. At least 50% of required trees should be planted either flush-to-grade or within at-grade planting beds.</p> <p>When planted flush-to-grade, the trees must be surrounded by a porous surface at least 1.5m in width that allows water to penetrate to the tree roots while at the same time accommodating pedestrian circulation. Trees provided in planting beds are required to have a minimum of 1.5m square of porous area, such as mulch or planted area to allow for water penetration.</p> <p>Trees must be located in deep soil areas wherever possible. If on structure, trees must be provided soil depth and volumes in accordance with the NSW Department of Planning Apartment Design Guide.</p> <p>Designs should consider the use of deciduous trees where appropriate for solar access in the cooler months.</p>
C56.	<p>To ensure a vibrant and visually appealing public space consideration must be given to the treatment of adjoining walls and facades.</p> <ul style="list-style-type: none"> • Any building entry must be clear and legible. The entries must be unobstructed within 5m of entry • Walls required for planters or to mitigate changes in grade must not be visually or spatially intrusive on the space, and must be designed to a comfortable seating height wherever possible • Blank building walls or facades facing onto public space must be treated with public art or screened with vertical planting to a minimum height of 5m above the ground 	<p>C60. All public open spaces should seek to integrate Water Sensitive Urban Design (WSUD) and other sustainability initiatives.</p>

Additional Referral Requirement

- | | |
|------|--|
| C61. | <p>Requirement for a Development Approval is subject to a Sydney Airport 'Operate Equipment' Approval. Information required by Sydney Airport prior to any approval is to include:</p> <ul style="list-style-type: none">• The location of any temporary structure or equipment, i.e. construction cranes, planned to be used during construction relative to Mapping Grid of Australia 1994 (MGA94);• The swing circle of any temporary structure/ equipment used during construction;• The maximum height, relative to Australian Height Datum (AHD), of any temporary structure or equipment i.e. construction cranes, intended to be used in the erection of the proposed structure/ activity; and• The period of the proposed operation (i.e. construction cranes) and desired operating hours for any temporary structures. |
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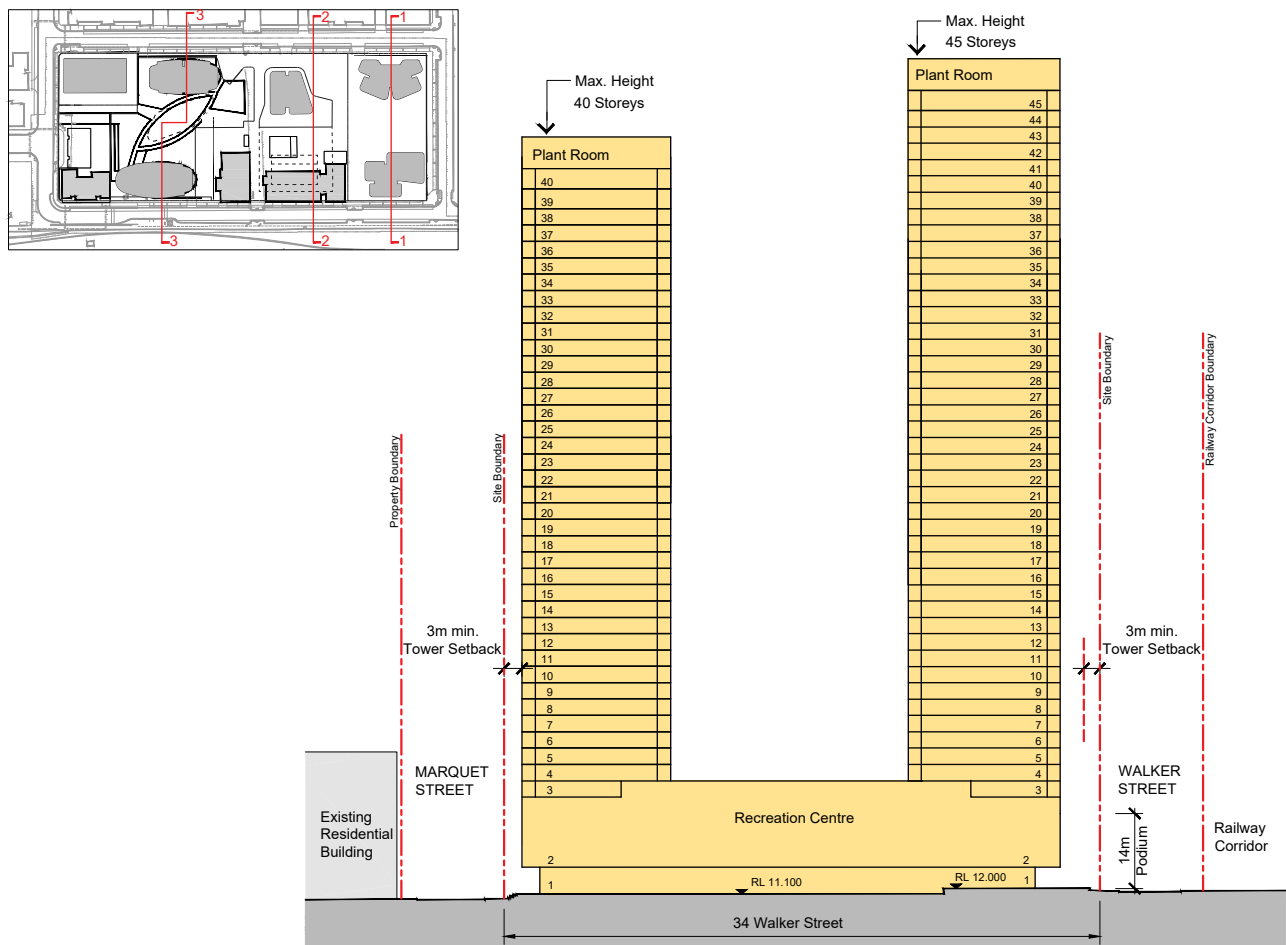


Figure K17-26 Precinct D - Section 1-1

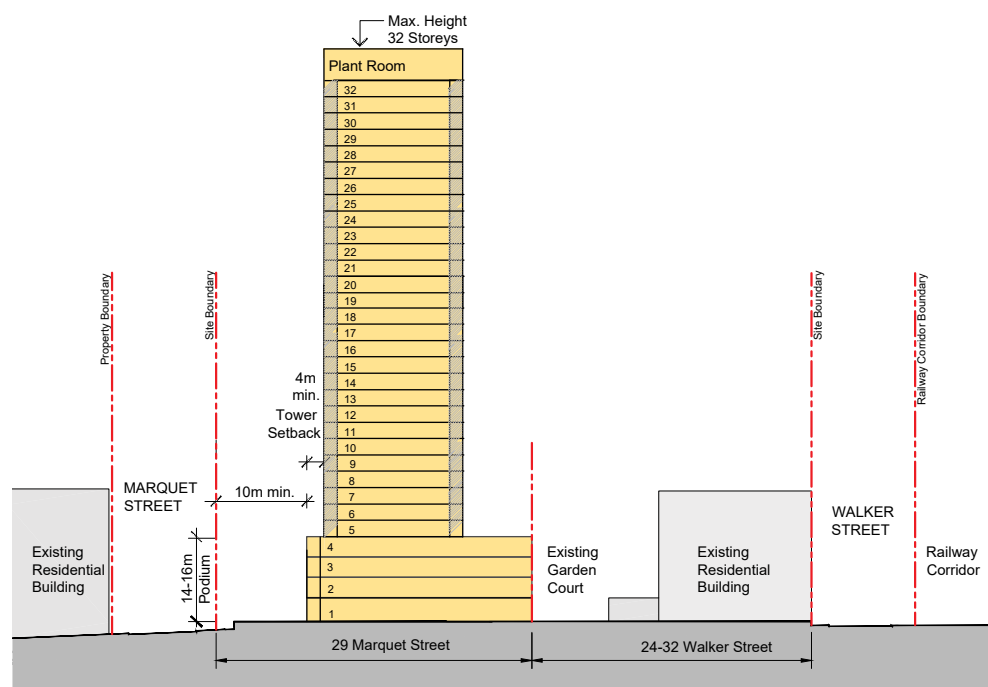


Figure K17-27 Precinct D - Section 2-2

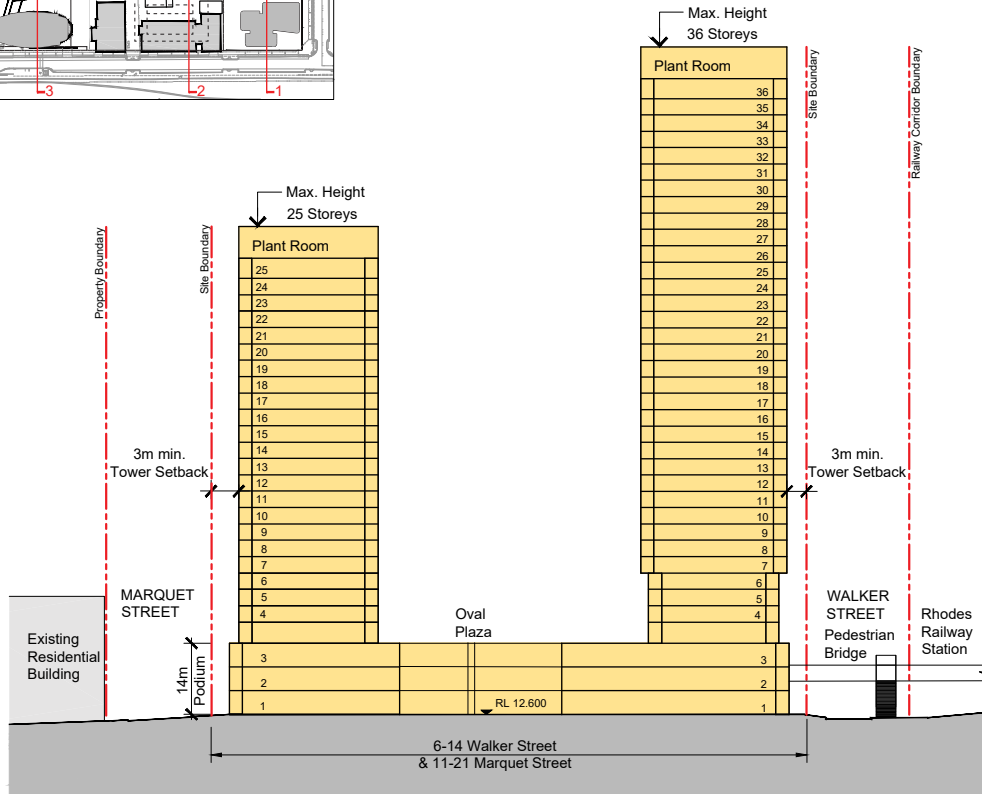
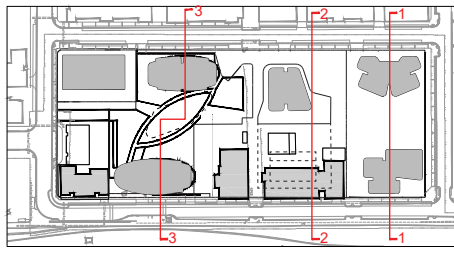


Figure K17-28 Precinct D - Section 3-3

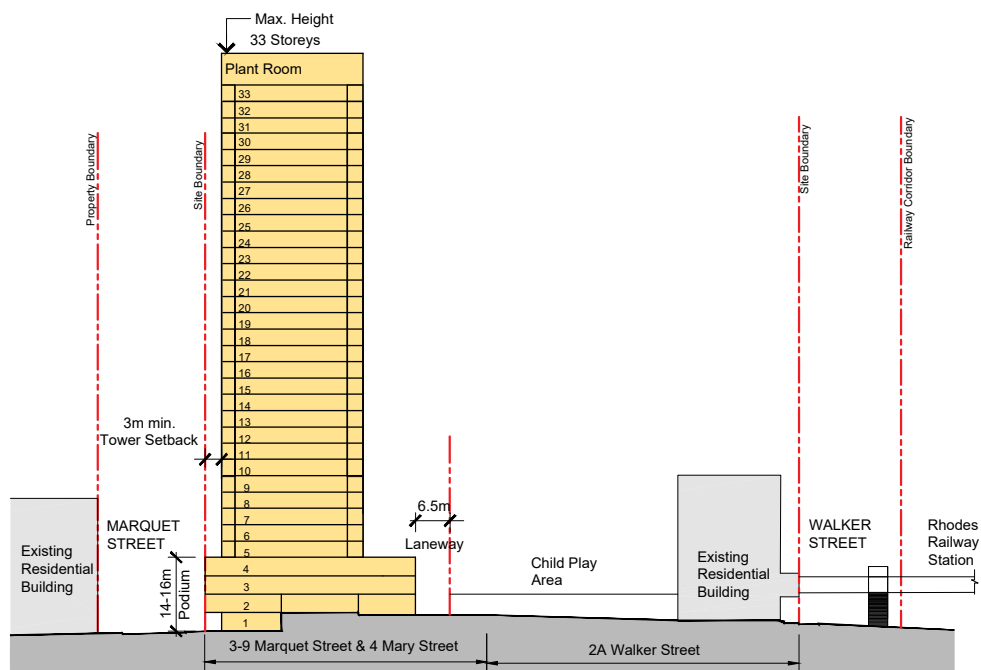


Figure K17-29 Precinct D - Section 4-4

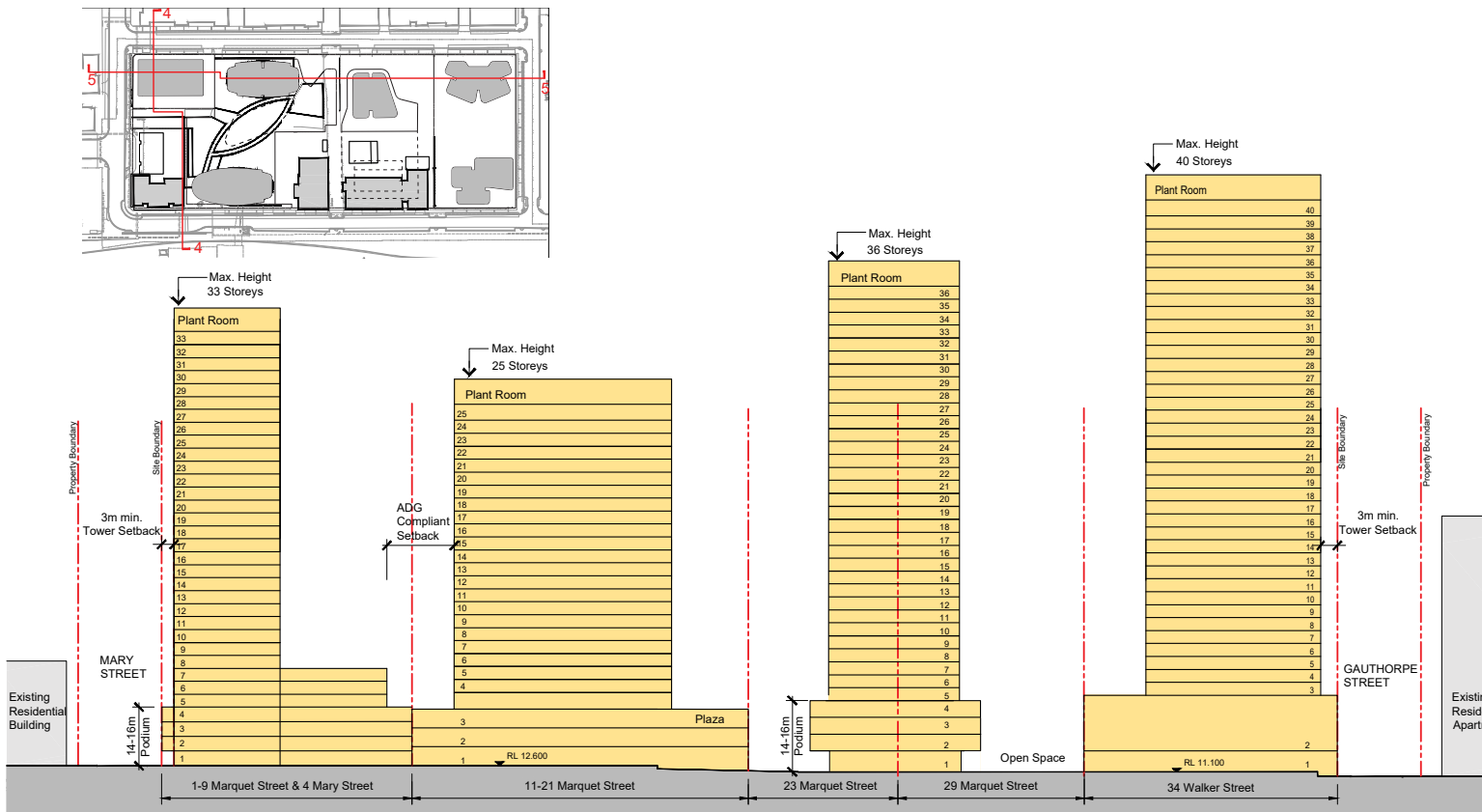


Figure K17-30 Precinct D - Section 5-5

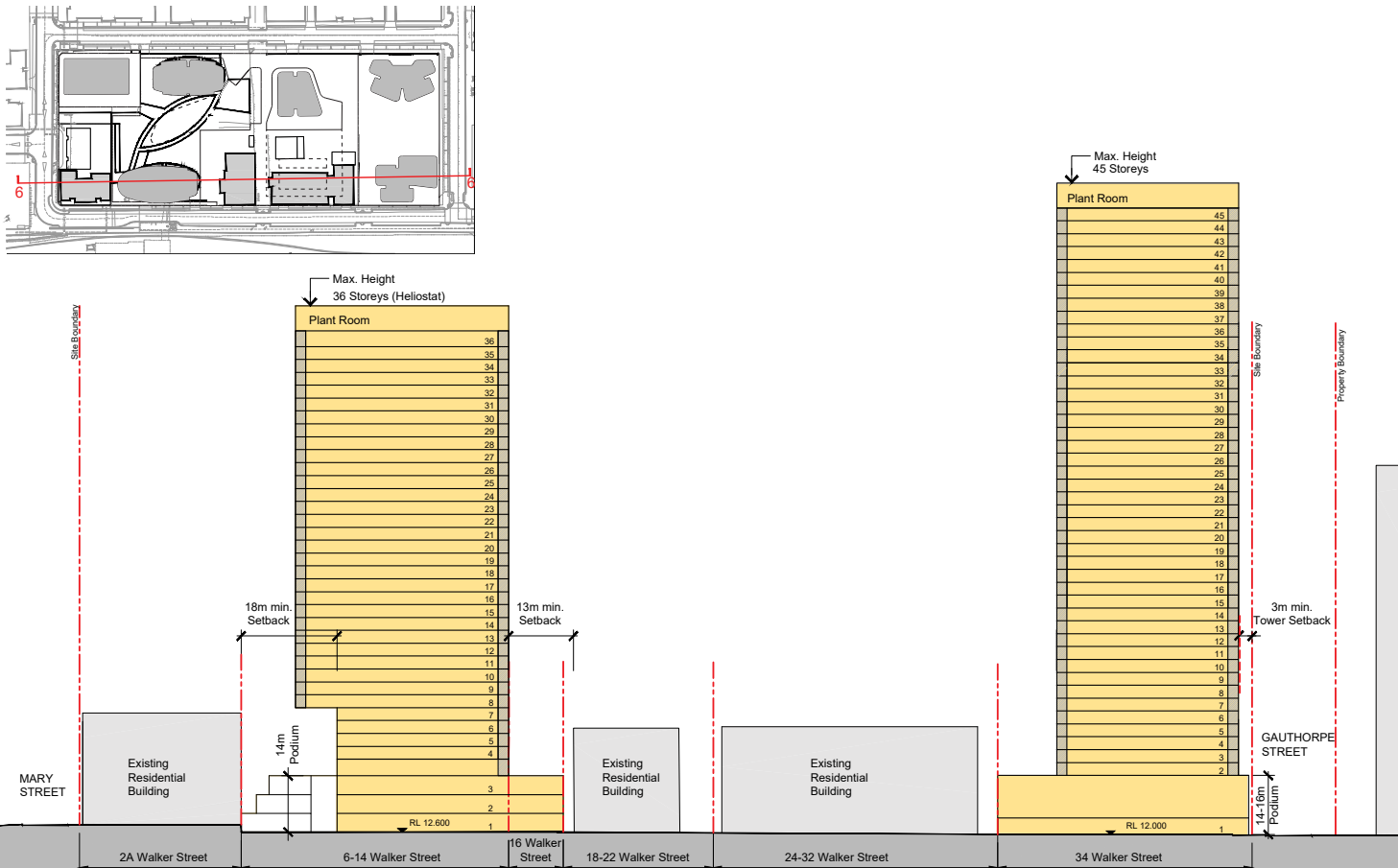


Figure K17-31 Precinct D - Section 6-6

Indicative development concept

This Indicative Development Concept reflects the principles embodied in this DCP and illustrates building footprints that can be achieved by developments that comply with the Station Gateway West Masterplan and the development controls of this DCP. Illustrated is the desired future character of development which complies with this DCP.

It is not the intention of the Indicative Development Concept plan to identify the exact form and design of future development proposals, however, it does illustrate the desired character of the built form and public open spaces. Developments must generally comply with the building envelope controls provided earlier in this section of the DCP.



Figure K17-32 Indicative Development Concept

Not to scale. The diagram illustrates the indicative concepts for built form and public domain



K18 Sydney Wire Mill site, Chiswick



Figure K18-1 Aerial photo (source: nearmap.com)



Figure K18-2 Council area map



Figure K18-3 Sydney Wire Mill, Chiswick - Location Plan



K18.1 General objectives

- O1. To encourage and facilitate development on the site which, in terms of scale, bulk, form and character, reflects the physical context of the site, is sympathetic to surrounding development, particularly residential development, and does not dominate the landscape;
- O2. To retain and incorporate, where possible, significant buildings, trees, natural and man made landforms and any other site features identified as having heritage values, to create a sense of place which respects and enhances those values;
- O3. To minimise the impact of development in terms of overlooking, loss of view and loss of sunlight on adjoining and neighbouring properties;
- O4. To provide unrestricted public access to the foreshore of Abbotsford Bay, linked to adjoining foreshore access systems and to existing parks;
- O5. To provide for the active and passive recreational needs of the residents of the development; and
- O6. To provide a publicly accessible street and pedestrian network as an extension of the existing street network.

K18.2 Specific provisions

Design Scale and Bulk

Objectives

- O7. To ensure the scale and bulk of proposed buildings responds in a sympathetic and harmonious manner to the site and its context, including the waterway and the surrounding residential neighbourhood; and
- O8. To provide a high standard of amenity and environmental quality for future residents.

Controls

C1.	A four storey maximum height limit applies to most of the site with a two storey height limit on land located opposite existing residential development. The height of buildings, including any car parking levels, must not exceed the height limits specified for the precincts illustrated in Figure K18-5 Maximum Heights and Setbacks.
C2.	Buildings shall not occupy more than 30% of the total site area.
C3.	A 4.5m building line applies to that part of the site fronting Blackwall Point Road which faces existing residential development (see Figure K18-5 Maximum Heights and Setbacks).
C4.	Buildings adjacent to the central spine of public open space and Melrose Crescent shall be set back from this public open space or road reserve boundary as shown on the building envelope control included as Figure K18-4 Indicative 45° Building Envelope Control based on 2.7m wall height.
C5.	Buildings adjacent to the public foreshore open space boundary shall be setback from this public open space as shown on the building envelope control included as Figure K18-5 Maximum Heights and Setbacks.

C6.	Buildings elsewhere on the site should be setback progressively as wall heights increase to reduce bulk and overshadowing.
C7.	Visually the impact of the development of the site should make a positive contribution to 'the landscape and special scenic qualities of the Parramatta River'.
C8.	A gradation of building heights is desirable (see Figure K18-4 Indicative 45° Building Envelope Control based on 2.7m wall height).
C9.	Buildings are to be articulated and are not to present long unrelieved structures that dominate the landscape;
C10.	Buildings shall not be located so as to directly abut any public open space and must be setback as shown on Figure K18-4 Indicative 45° Building Envelope Control based on 2.7m wall height and Figure K18-5 Maximum Heights and Setbacks.
C11.	Buildings shall have a formal presentation to their street frontages, and where appropriate, to Abbotsford Bay and the waterway generally.
C12.	Development shall recognise the contours and natural and man-made landforms of the site and compliment surrounding areas.
C13.	Architectural elements, materials and colour schemes should blend with existing landscape forms and colours.
C14.	The preferable roof form for the bulk of development on the site should be pitched, providing the opportunity for innovative uses of roof spaces.

Open Space

Objectives

- O9. To provide public and private open space that meets the needs of residents and the local community having regard for existing land forms, including historic modifications, and visual and functional links with adjoining open space.
- O10. To produce a low maintenance landscaped outcome and a management plan for its future maintenance requirements.

Controls

C15.	In addition to areas zoned RE1 Public Recreation, smaller, more intimate public, community and private landscaped open spaces shall be provided throughout the site, linked by and forming part of the pedestrian and cycle movement system.
C16.	Landscaped areas should generally be designed in plan to be dominated by vegetation rather than by masonry elements. Hard paved areas should be kept to a minimum, consistent with meeting standards for parking, disabled access and site drainage.
C17.	Private open space for each dwelling at ground level must have: a minimum dimension of 3m; direct access from a living area; a maximum gradient of 1 in 10; and screening where necessary to ensure privacy.
C18.	Private open space for each dwelling above ground in the form of a balcony or roof terrace should have: convenient access from the main living area; a minimum area of 10m ² ; and a minimum dimension of 2m.

Impacts on adjoining and nearby residential properties

Objective

O11. To provide safe, attractive streetscapes which link with and enhance the amenity of neighbouring development.

Controls

C19.	The street reserves together with the buildings and landscaping defining them should be designed to create an attractive streetscape and establish a clear identity or 'sense of place' to the street, place or precinct.
C20.	Setbacks of buildings from their street frontage should be appropriate to the desired streetscape character and respond to features of the site in terms of views, vistas and existing natural features, including vegetation.

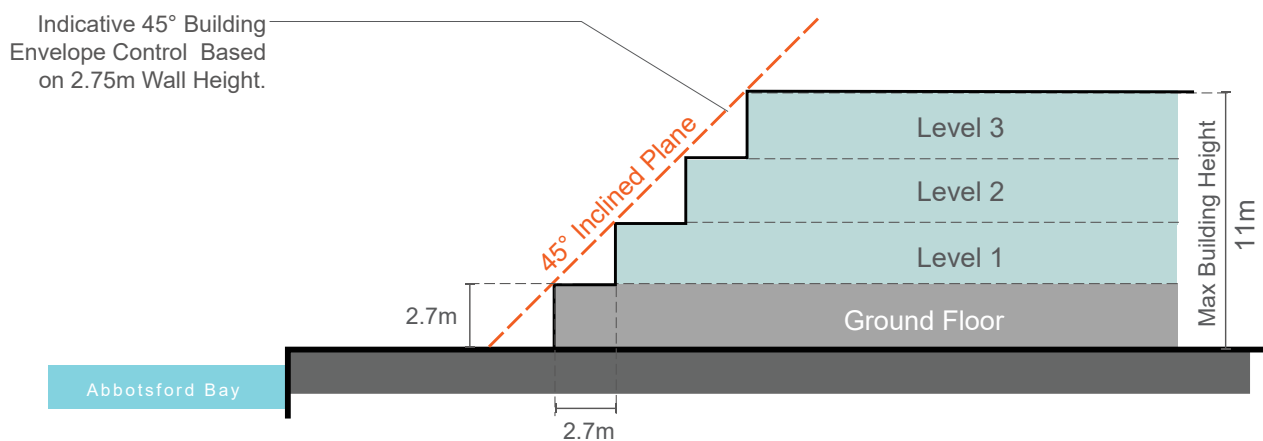


Figure K18-4 Indicative 45° Building Envelope Control based on 2.7m wall height



Figure K18-5 Maximum Heights and Setbacks



Figure K18-6 Indicative Access Plan



K19 Tuscany Court



Figure K19-1 Aerial photo (source: nearmap.com)

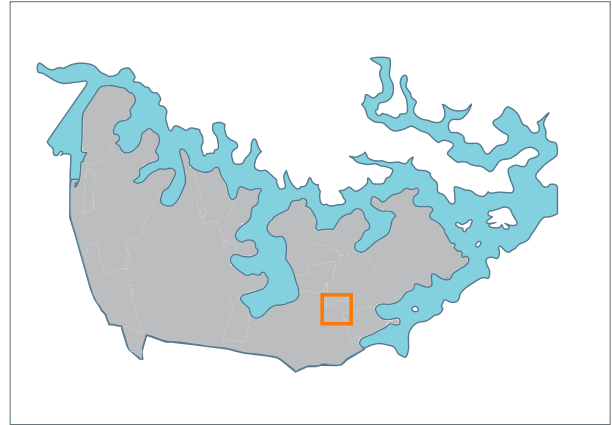


Figure K19-2 Council area map



Figure K19-3 Tuscany Court - Location Plan



K19.1 General objectives

- O1 To encourage and facilitate development on the site which, in terms of scale, bulk, form and character reflects the physical context of the site and is sympathetic to surrounding residential development;
- O2 To minimise the impact of the development in terms of overlooking and loss of sunlight from adjoining and neighbouring properties;
- O3 To provide for the active and passive recreation needs of residents of the development and incorporate recreation facilities such as a swimming pool and tennis courts;
- O4 To identify and retain any significant trees on the site; and
- O5 To provide for safe access to and from the site.

K19.2 Specific provisions

Density, Design, Scale and Bulk

Objective

- O6 To achieve a development outcome which, in terms of its density, design, scale and bulk, responds in a sympathetic and harmonious manner to the site and surrounding residential development.

Height

Controls	
C1.	The height of buildings, including any car parking, should comply with the height limits for the three precincts specified in Figure K19-4 Maximum Height.
C2.	Buildings should be sited within the building envelope from the eastern and western boundaries of the site as illustrated in Figure K19-6 Indicative 45° Building Envelope Control. This includes a minimum setback of 10m from the eastern and western boundaries with the upper two levels to be setback within a 45° plane to minimise overshadowing and overlooking of adjoining properties.

Setbacks

Controls	
C3.	Buildings located on the eastern and western boundaries of the site and the northern boundary adjoining 355 Lyons Road are to be located no closer than 10 metres at any point, from these boundaries (see Figure K19-4 Maximum Height and Figure K19-6 Indicative 45° Building Envelope Control).
C4.	The location of any building near a tree nominated in Figure K19-5 Significant Trees must take account of the drip lines and root systems of the tree.

Design and Form

Controls	
C5.	Buildings are to be articulated and are not to present long, unrelieved structures that dominate the landscape.
C6.	A diversity of accommodation is to be provided, including townhouses and small, medium and large units.
C7.	A pitched roof form is preferable for all development on the site as it provides the opportunity for innovative use of roof space.

Site coverage

Controls	
C8.	Buildings, excluding any community facilities should occupy less than 40% of the site area.

Landscaped and Open Space

Objective

- O7 To provide for private open space that meets resident requirements for recreational and social activities and for landscaping;
- O8 To ensure all significant trees are retained or relocated on the site; and
- O9 To assist on-site drainage by the provision of at ground landscaped open space.

Controls

C9.	To ensure adequate provision of open space the maximum permissible site coverage is 40%.
C10.	Landscaped open spaces should be provided to accommodate a range of communal and individual needs. There should be a primary open space area containing a recreation facility such as a pool/spa or similar, and this facility is to be easily accessible to all residents on site. Smaller, more intimate landscaped areas should be provided throughout the site and be accessible via a pathway system.
C11.	Landscaping on the eastern and western boundaries is to ensure the privacy of adjoining residential development.
C12.	In accordance with Figure K19-5 Significant Trees trees identified as “must be retained” should be retained on the site. Other trees nominated should be retained or relocated on-site where practicable. Buildings in the vicinity of these nominated trees must be setback from the drip line and root systems of these trees.
C13.	Landscaped areas should generally be dominated by vegetation and not masonry elements. Hard paved areas should, where possible, be kept to a minimum in order to reduce stormwater runoff, although wheelchair access and remediation requirements must be considered.

Access

Objective

- O10 Adequate provisions should be made for access to and from the site.

Vehicular Access

Controls

C14.	Access to the site is not to be provided by a ‘gatehouse’ security system which limits public access to the site.
C15.	Vehicular access is to be maintained to 347 Lyons Road.
C16.	The primary two-way access is to be from Barnstaple Road.
C17.	A secondary access is to be provided from Lyons Road with an island on Lyons Road installed to prohibit entry to the site from the west and exit from the site to the east.

Pedestrian Access

Controls

C18.	Pedestrian access is to be maintained from Lyons Rd to Dalmeny Ave.
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Streetscape

Objective

- O11 To provide attractive streetscapes which enhance the amenity of neighbouring development.

Controls

C19.	The street reserve together with the dwelling fronts and gardens are to create an attractive streetscape and establish a clear character and identity for the street or precinct.
C20.	The setback of buildings from the street frontages to be appropriate to the streetscape character.



Figure K19-4 Maximum Height



Figure K19-5 Significant Trees

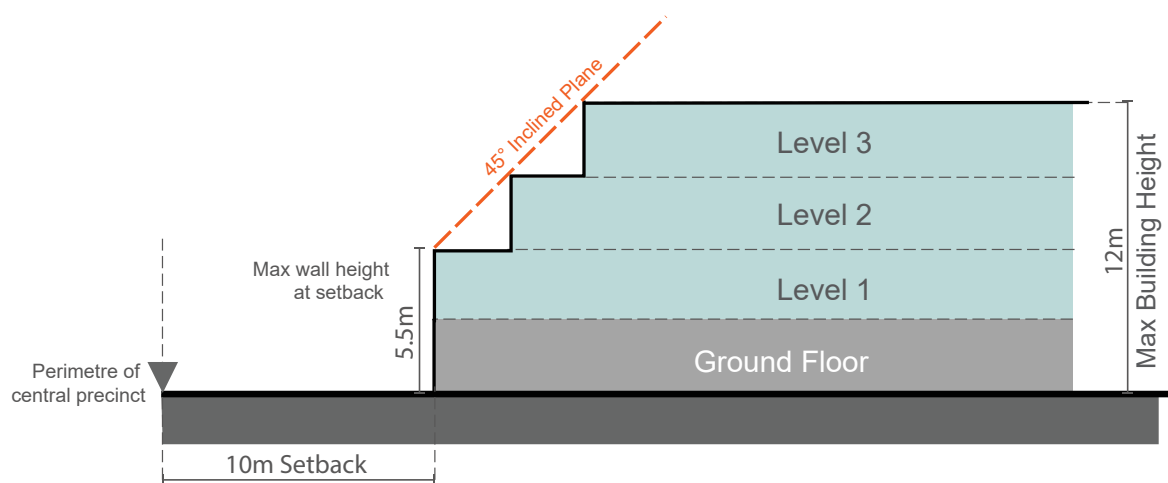


Figure K19-6 Indicative 45° Building Envelope Control

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K20 Kings Bay (PRCUTS)



Figure K20-1 PRCUTS Parramatta Road Corridor (Source: PRCUTS, 2016)

Kings Bay Precinct

The Kings Bay Precinct is located between the established centres of Burwood and Five Dock. The part of this precinct that is controlled by this DCP is located between Parramatta Road and Queens Road and includes parts of Kings Road and stretches from the eastern side of Walker Street to both sides of Harris Street to the east.

A masterplan for Kings Bay was developed to consolidate information presented in the PRCUTS and other studies and plans to guide the future built form and urban environment and to inform amendments to the Canada Bay LEP 2013, DCP and contributions plan.

K20.1 Parramatta Road Corridor Urban Transformation Strategy (PRCUTS)

This DCP has been prepared to support the implementation of the NSW Government Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) published in November 2016.

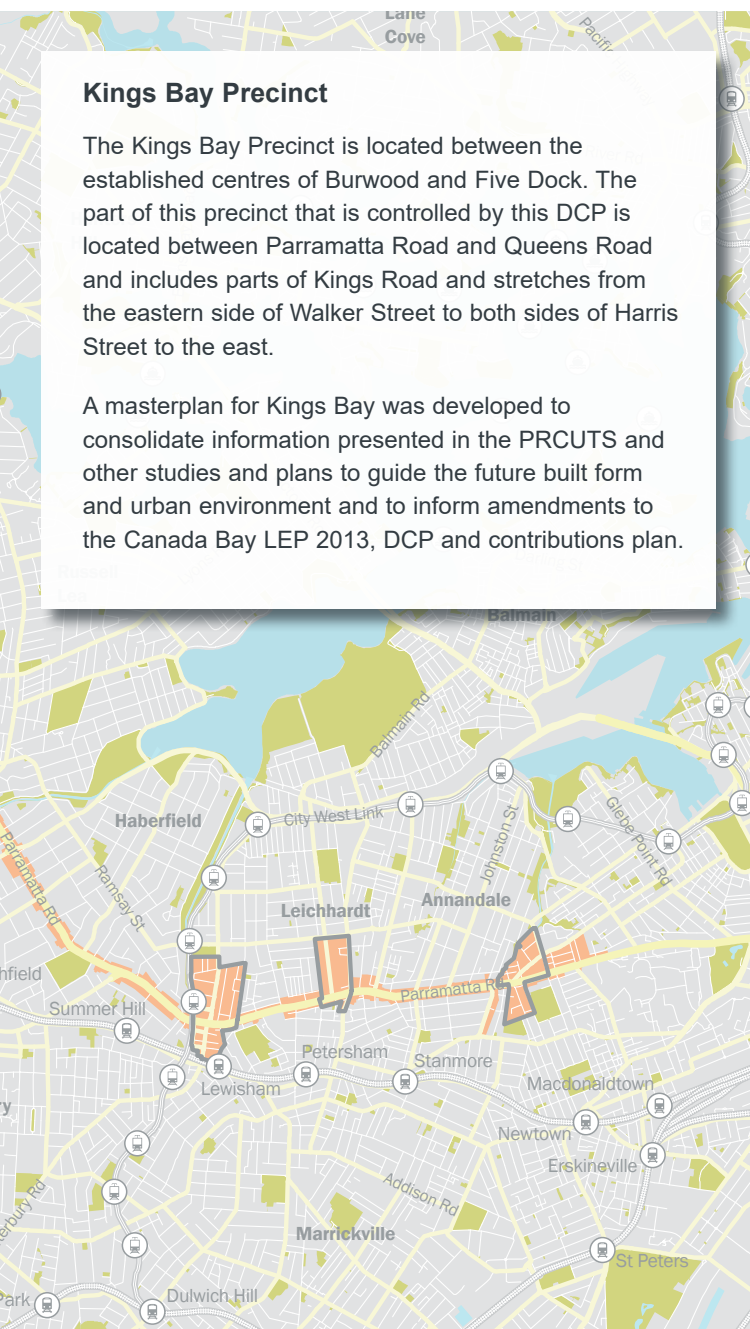
The DCP has been prepared to deliver the desired future character envisaged in PRCUTS, with refinements to achieve better urban design and community outcomes.

Two development pathways are available:

- 1) Land is developed to the standards identified on the Floor Space Ratio and Height of Building maps.
- 2) Where development achieves the minimum lot size and/or identified community infrastructure is delivered, the land may be developed to the standards identified on the Community Infrastructure Floor Space Ratio and Height of Building Maps.

The provisions in this DCP describe the planning controls permitted under Option 2.

PRCUTS aims to renew Parramatta Road and adjacent communities through investments in homes, jobs, transport, open spaces and public amenity. It presents significant urban renewal opportunities for land within defined development precincts.



K20 Kings Bay (PRCUTS)



Figure K20-4 Aerial photo (source: nearmap.com)

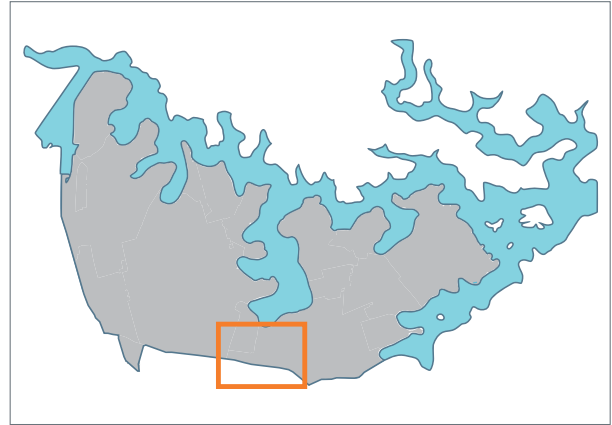


Figure K20-2 Location within LGA



K20.2 Existing Character

The Kings Bay Precinct currently consists of a mix of smaller fine grain lots and larger landholdings occupied by light industrial service industries such as small manufacturers, car sales and servicing centres, panel beaters, upholsterers, and other urban support services. Wholesalers occupy large format, low density warehouse spaces.

Key community infrastructures include Rosebank College, Lucas Gardens School, Five Dock Leisure Centre and a childcare centre. Medium density residential development is located on Kings Road. Public open space is limited and the street network is characterised by small front setbacks, narrow or no footpaths and few street trees.

Strengths and opportunities

- large land holdings, generally unfragmented land and limited strata titled properties;
- a grid-like pattern of streets;
- potential reduction in traffic volumes with the opening of WestConnex;
- proximity to high amenity open space, recreation facilities and the Parramatta River foreshore;
- potential to enhance existing recreational opportunities and linkages for active transport and extend the existing green corridor from Hen and Chicken Bay to Parramatta Road;
- potential to facilitate the relocation of the Concord Community Centre and/or Concord Library, if the circumstances are appropriate; and
- access to future metro West rail stations and Burwood North (Concord) and Five Dock.

Challenges and constraints

- existing high traffic volumes on surrounding streets;
- limited north-south connections across Parramatta Road, particularly for pedestrians and cyclists;
- a current lack of reliable public transport;
- heritage items and sensitive uses which require appropriate setbacks and transitions; and
- limited, poor quality public domain.

K20.3 Desired Future Character

"Kings Bay will be a new residential and mixed use urban village on Parramatta Road, with an active main street and strong links to the open space network along Sydney Harbour."

As industry moves west, the precinct's traditional industrial area is changing and transforming into more light industrial and urban support services that can capitalise on the rapid transit connections to Sydney CBD, Burwood Town Centre and many large areas of open space.

Spencer Street will form the main street of local shops and services. A new fine grain will be introduced along Spencer Street to reinforce the local nature of the centre, and provide a pedestrian focus with high amenity and low traffic. A new north-south park and pedestrian link will connect Spencer Street to Queens Road and the recreational facilities and foreshore just north of the precinct.

Kings Bay offers the opportunity to be a new address for medium and high density residential development. Taller residential buildings will mark the centre of the precinct at the corner of Parramatta Road, William Street and Spencer Street. Buildings will transition in height and density towards adjacent residential areas, Rosebank College and Lucas Garden School.

A new green link along William Street will connect to open space and the foreshore. The new regional cycleway will link Concord Road, Gipps Street, Patterson Street and Queens Road and will connect to the M4 Motorway in the west and Iron Cove and the Bay Run in the east. Parramatta Road will have significant tree planting and wider public domain to improve the amenity and environment.

K20 Kings Bay (PRCUTS)

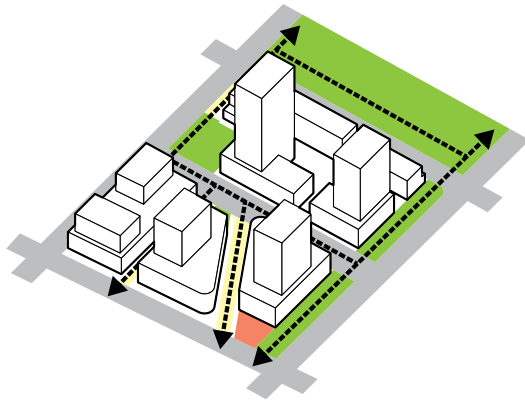


Figure K20-5 Artist impression of indicative future character along Spencer Street, Kings Bay



K20 Kings Bay (PRCUTS)

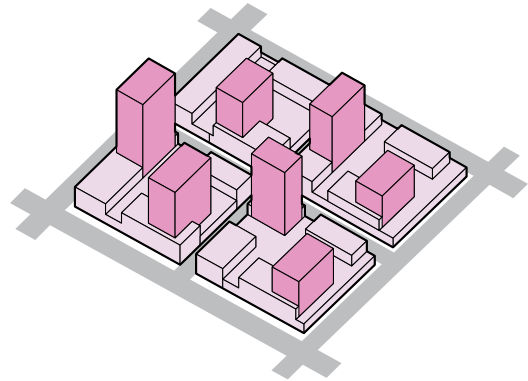
K20.4 Urban Design Principles



Create an active and permeable public realm

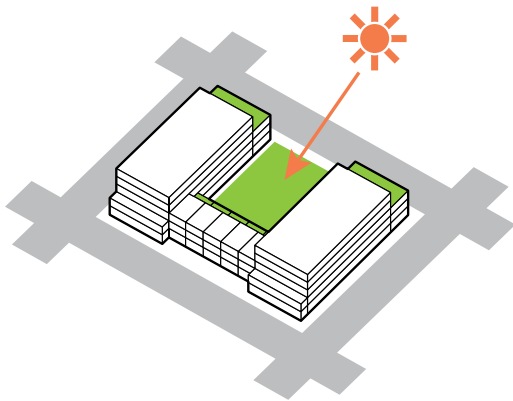
Expand open space network and provide easy access and connection throughout the public realm.

Promote active transport such as walking and cycling.



Define a building height strategy

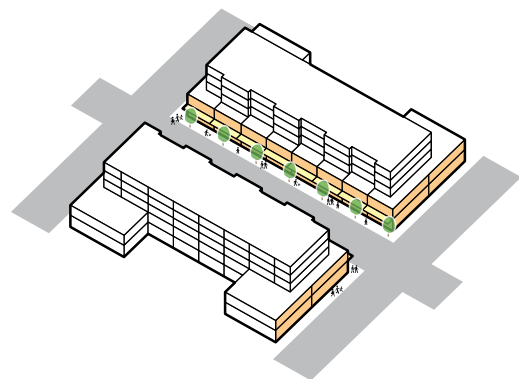
Create a dynamic skyline by spreading higher built form.



Maximise solar access and amenity

Ensure all public open spaces have adequate solar access.

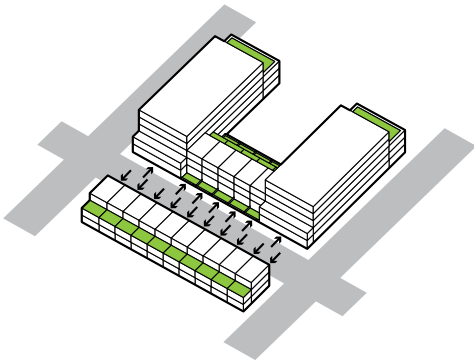
Putting heights towards the southern boundaries to ensure solar access penetrates the site and minimise overshadowing.



Promote fine grain and active frontages

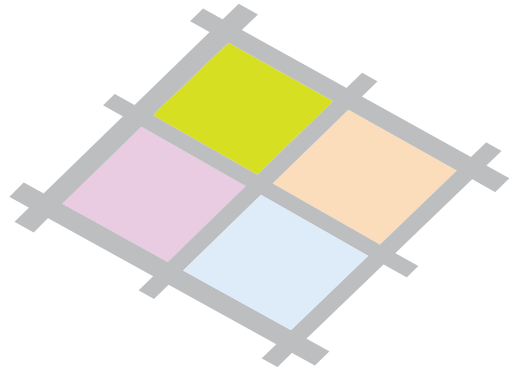
Reinvent Spencer Street and its eastern extension as a Place for People that responds to the vision set out in PRCUTS;

‘streets with high demand for activities and lower levels of vehicle movement. They create places people enjoy, attract visitors, and are places communities value’.



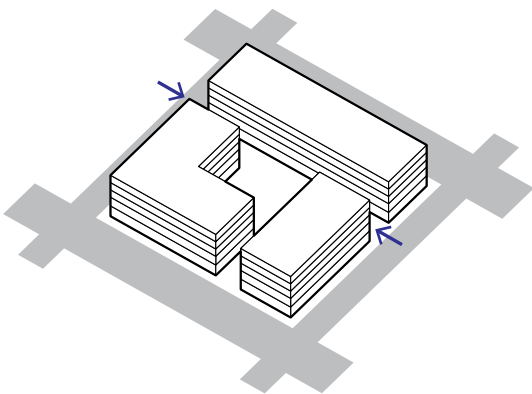
Interactive frontages

Promote direct ground floor access from the street in residential areas to enhance passive surveillance.



Create character precincts celebrate the industrial character of Kings Bay

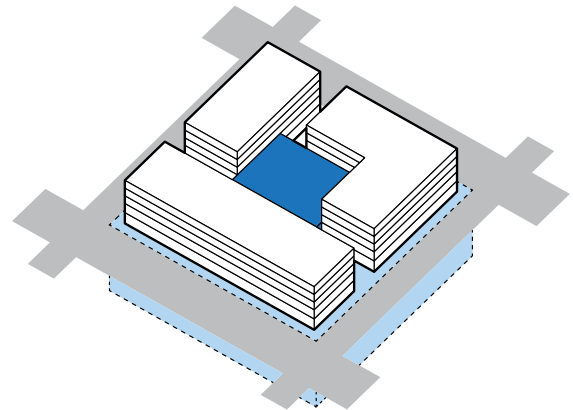
Utilise the current industrial context and history of each block as a driver for place making, facade expression and block character.



Integrated servicing and access

Avoid putting service access on traffic-heavy and pedestrian-oriented streets.

Minimise the impact on public domain by integrating services within the building.



Minimise the impacts of parking

Parking should be put underground as a priority. Where an underground option is not possible, parking should be sleeved with active uses or considerable facade treatment to avoid exposing the structure directly to the street.

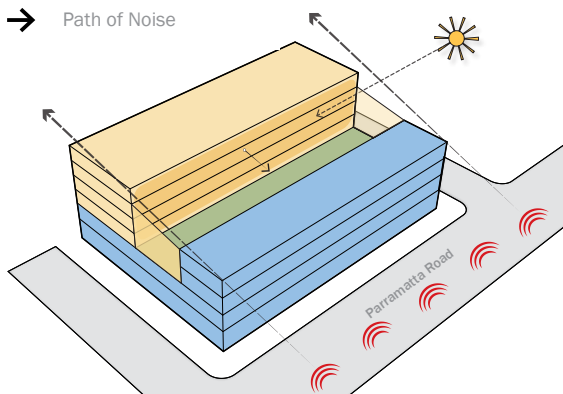
K20 Kings Bay (PRCUTS)

K20.5 Design Approach

- Residential
- Primary Orientation
- Non residential
- Communal open Space

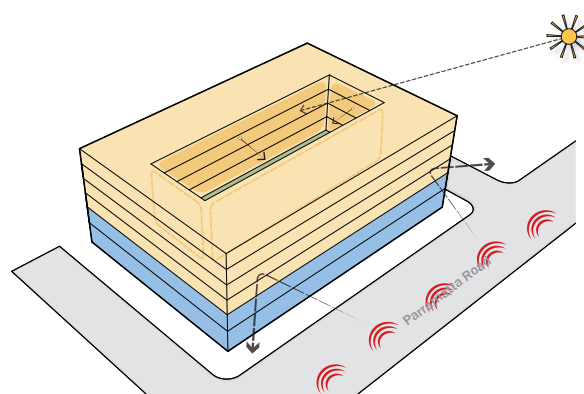
⦿ Source of Noise

➔ Path of Noise



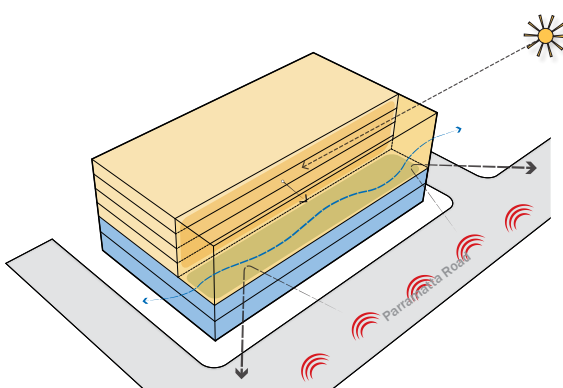
Design Approach 1: Shield

Conventional residential building to the rear of the site away from noise; non-residential building to road edge at a height to create acoustic shadow for residential; fixed solid glazed element encloses courtyard.



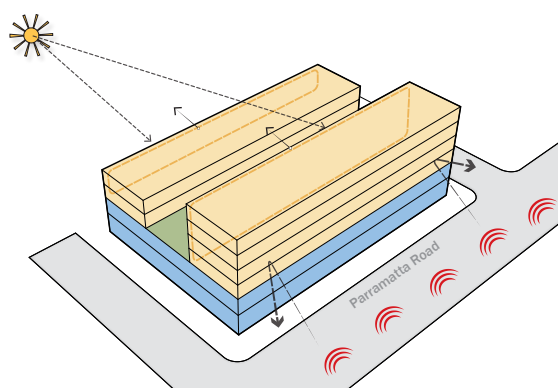
Design Approach 2: Barrier (Courtyard)

All openings required for ventilation open from a protected courtyard; courtyard dimension defined by separation requirements as outlined in the Apartment Design Guide.



Design Approach 3: Barrier (Screen)

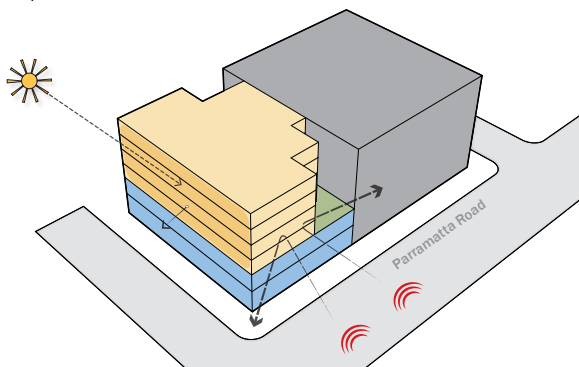
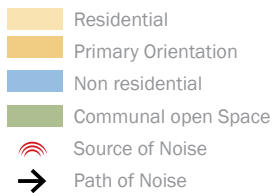
A fixed solid glazed edge to provide a protected courtyard space for ventilation; the glazed courtyard is open to the sky to allow for natural ventilation.



Design Approach 4: Facing away

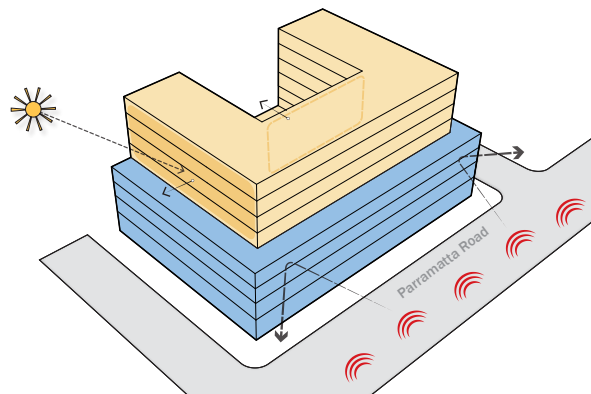
Habitable rooms to be orientated away from the source of noise; locate secondary uses such as cores and walkways facing the source of noise.

Figure K20-6 Design approaches to minimise noise and air quality impacts (Source: PRCUTS Guidelines 2016)



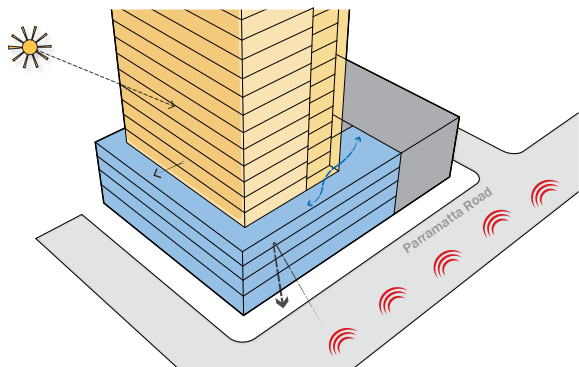
Design Approach 5: Corner

Turning away primary orientation of living space from noise source; articulate facade to create an acoustic shadow away from the source of the noise, orientate openings within the acoustic shadow.



Design Approach 6: Upper Level Setbacks

All openings required for ventilation open from a protected courtyard; turning away from noise source.



Design Approach 7: Above Podium Towers

Turning away habitable spaces from the noise source; utilised fixed solid glazed edge to provide an enclosed space for ventilation.

K20 Kings Bay (PRCUTS)

K20.6 Block Configuration

The scale, height, arrangement and orientation of new built form defines the proportion and level of enclosure of streets and public spaces. Good site planning and block configuration maximises the level of sun access and visual and acoustic privacy for all, including neighbouring properties.

Together with primary and upper level setbacks (see *Section K20.10 Street Wall Heights and Setbacks*), the following controls set the basic building footprints and envelopes for new development in the Kings Bay Precinct.

Objectives

- O1 To arrange building forms including heights and massing that reinforce the future desired character of the area and protect valued character attributes.
- O2 To facilitate daylight access and ventilation to streets, public places and neighbouring properties.
- O3 To maximise visual and acoustic privacy.
- O4 To consider future development opportunities on adjoining sites and avoid isolated sites.
- O5 To maximise permeable ground surfaces to allow rainwater to penetrate the soil.

Controls

C1.	<p>New development is to consider future development on adjoining sites by providing sufficient separation and setbacks, and avoid creating isolated sites.</p> <p>New development is to follow the desired Site Amalgamation Plan (see Figure K20-7).</p>
C2.	<p>The delivery of identified amalgamation and community infrastructure is a prerequisite for the heights and densities identified in the LEP. If this is achieved new development is to conform to the maximum number of storeys as shown in Figure K20-12 and Figure K20-13. Further controls regarding the permissible building envelope are contained in <i>Section K20.10 Street Wall Heights and Setbacks</i> and <i>Section K20.13 Massing and Articulation</i>.</p>

C3.	The maximum length of any building above 5 storeys is 60m.										
C4.	Residential towers above podium level shall have a maximum enclosed area of 750sqm (including circulation and excluding balconies) and a maximum total floor area of 875sqm (including and assuming 15% for balconies).										
C5.	For commercial uses on all floors above the ground level, any wall with windows must be set back from the side and rear boundary by 3m. Any wall without windows is not required to be setback.										
C6.	Built form is to be positioned for optimal access to daylight and direct sunlight for internal and external spaces, and for adjoining public and private land.										
C7.	<p>Buildings are adaptable to a variety of uses over time. The following minimum floor to floor heights apply:</p> <table border="1"> <thead> <tr> <th>Use</th><th>Minimum height</th></tr> </thead> <tbody> <tr> <td>Retail</td><td>4.4m</td></tr> <tr> <td>Commercial</td><td>3.7m</td></tr> <tr> <td>Adaptable</td><td>3.7m</td></tr> <tr> <td>Residential</td><td>3.1m</td></tr> </tbody> </table>	Use	Minimum height	Retail	4.4m	Commercial	3.7m	Adaptable	3.7m	Residential	3.1m
Use	Minimum height										
Retail	4.4m										
Commercial	3.7m										
Adaptable	3.7m										
Residential	3.1m										
C8.	<p>The ground floor of all lots fronting Parramatta Road is to be a minimum of 4.4m in height to facilitate a wide variety of uses.</p> <p>Development on the ground floor fronting Parramatta Road is to prioritise urban services and light industrial uses, consistent with Active Frontages.</p> <p>The second floor of development fronting Parramatta Road in the B4 Mixed Use zone is also to have retail and/or commercial uses.</p>										



Figure K20-7 Site Amalgamation Plan



- Amalgamation boundary
- A1 Lot identification number
- Proposed public domain/ road corridor
- Proposed future open space
- Existing open space
- Required through-site link
- Desired through-site link
- Cadastre
- Precinct boundary

K20 Kings Bay (PRCUTS)

K20.7 Access Network

A permeable urban structure is key to successful places. The provision of new links and open spaces is encouraged to build upon the existing access network and support the uptake of active and public transport and linking key destinations within and beyond the precinct.

Objectives

- O1 To provide a finer grain access network to more effectively link the precinct to Parramatta Road, open spaces and public transport stops.
- O2 To encourage travel behaviour change by discouraging car usage and supporting sustainable travel choices such as public and active transport.
- O3 To improve network permeability, in particular for pedestrians, by breaking up long blocks with new streets and quality pedestrian prioritised links.
- O4 To meet access requirements for future development and enable increased density in selected locations.



A more permeable urban structure and a focus on a high quality pedestrian environment will support walking and cycling.



Slow speed, shared spaces provide links that encourage pedestrian access across the precinct.

Controls

- | | |
|-----|---|
| C1. | The existing access network is retained and new streets, through-site links and cycle routes are provided as identified in Figure K20-8 and Figure K20-9 . |
| C2. | New public open spaces are located as identified in Figure K20-8 and Figure K20-9 . See <i>Section K20.8 Public Domain Experience</i> for more detail. |
| C3. | Wherever possible, long blocks are broken up with new high quality pedestrian prioritised links, particularly where new connections would facilitate access to public transport, open spaces and community facilities. |
| C4. | Size and location of footpaths, laneways, cycleways, planting and parks are to be provided according to Council's PRCUTS Public Domain Plan and PRCUTS Masterplan. |
| C5. | New roads, public domain widenings, parks and cycleways are required to be in public ownership where identified in the LEP. New roads and parks that are identified in the LEP to be publicly accessible but not in public ownership, may be delivered as a public access easement over private land. Future pedestrian links may be delivered as a public access easement over private land. Provision is to be in accordance with the LEP, PRCUTS Infrastructure Strategy and Council's specifications. |
| C6. | Future pedestrian/ cycle links are to be naturally lit and ventilated, appropriately lit after hours, publicly accessible 24/7, and have clear sightlines from end to end. |
| C7. | All new pedestrian/ cycle links are to be defined by built form and quality edge treatments such as low semi-transparent fences and landscaping. |
| C8. | Bicycle facilities, such as parking, secure storage and end-of-trip facilities are to be easily accessible from the public domain and conveniently located near entrances and/or lifts of new development. |

K20.8 Public Domain Experience

Private development has a large influence on the local character and the support of the existing or future functioning of the public realm, for example by clearly addressing a new pedestrian link and providing good levels of surveillance. The scale of built form, its appearance and the design of private-public interfaces has a significant impact on how people experience a streetscape and the safety of the neighbourhood.

Key elements apart from the built form that need to be considered include front setbacks, boundary treatments, vegetation and landscape design, vehicular access, visible activity at street level, and surveillance provided by doors, windows and balconies.

Objectives

- O1 To protect and improve the quality, accessibility and safety of the public domain across the precinct.
- O2 To support walking and cycling to key destinations such as the Five Dock Leisure Centre and local schools.
- O3 To improve the interface to Parramatta Road and support increased activity levels, safety and comfort.
- O4 To increase tree canopy cover and provide for more greenery associated with the public domain.

Controls

- | | |
|-----|---|
| C1. | <p>New development that fronts onto streets identified as active frontages, including vibrant, friendly and mixed facades (see Figure K20-10) must:</p> <ul style="list-style-type: none"> a) minimise the number and width of vehicular driveways across the footpath; b) ensure building entries are clearly visible and pedestrian access to entries and lobbies is direct; c) pay particular attention to the 'human-scale' of lower levels and display a high degree of detailed design and articulation; d) maximise the number of doors and windows on upper levels overlooking the street; and e) provide vehicular access off a rear laneway; driveways off Parramatta Road are strictly prohibited. |
|-----|---|

- | | |
|-----|---|
| C2. | <p>New development that fronts onto Parramatta Road is to:</p> <ul style="list-style-type: none"> a) set back as per Figure K20-8 and Figure K20-9. b) apply coordinated urban and landscape design features that unify the linear green edge; and c) prioritise urban services uses. |
| C3. | <p>Development is to support the experience and safety of future public open spaces as identified in Figure K20-8 and Figure K20-9. Development that faces open space must:</p> <ul style="list-style-type: none"> a) maximise the number of doors and windows overlooking the open space; b) pay particular attention to quality architectural detail at the lower levels; c) ensure that at least 50% of each open space receives a minimum of 3h direct solar access in mid-winter (21 June) between 9am and 3pm; and d) where an active frontage is required by the LEP, encourage active uses on the ground floor with a preference for community facilities and cafes/restaurants with outdoor seating. The minimum floor to floor height of the first two levels is to be as per the 'Adaptable' category in <i>Section K20.6 Block Configuration</i>. |
| C4. | <p>Development fronting Queens Road is to maximise entry doors and windows overlooking the street, minimise vehicular entry points and pay particular attention to quality landscape and architectural detail along lower levels. For more controls see <i>Section K20.11 Transitions and Interfaces</i>.</p> |
| C5. | <p>Any development on a corner site including corners of the new open spaces must pay particular attention to overall design quality due to the location's high visibility and impact on the local character, i.e. well proportioned facades and quality material, finishes and plant species selection.</p> |

K20 Kings Bay (PRCUTS)



Figure K20-8 Public Domain Plan - western part

- | | |
|-----------------------------------|--|
| — Active frontage (various) | — Required through-site links |
| — 3m landscaped setback | — Desired through-site links |
| — 4.5m landscaped setback | — Proposed future open space |
| — Deep soil zone (various widths) | — Proposed future open space (privately owned publicly accessible) |
| — 1 storey street wall | — Potential open space (other) |
| — 2 storey street wall | — Existing open space |
| — 3 storey street wall | — Proposed future public domain |
| — 4 storey street wall | — Variable TfNSW road widening |
| — 5 storey street wall | — Proposed future road corridor |
| | — Cadastre |
| | — Precinct boundary |



Figure K20-9 Public Domain Plan - eastern part

- | | |
|-----------------------------------|--|
| — Active frontage (various) | — Required through-site links |
| — 3m landscaped setback | — Desired through-site links |
| — 4.5m landscaped setback | — Proposed future open space |
| — Deep soil zone (various widths) | — Proposed future open space (privately owned publicly accessible) |
| — 1 storey street wall | — Potential open space (other) |
| — 2 storey street wall | — Existing open space |
| — 3 storey street wall | — Proposed future public domain |
| — 4 storey street wall | — Variable TfNSW road widening |
| — 5 storey street wall | — Proposed future road corridor |
| | — Cadastre |
| | — Precinct boundary |

0 25m 50m 100m



K20 Kings Bay (PRCUTS)

K20.9 Active Frontages

The quality and attractiveness of buildings at the streetscape level plays an important role in the attractiveness and vibrancy of the street. Active streetscapes have frequent doors, many windows with transparent glass and narrow frontages providing a vertical rhythm along the street with few blank walls.

Successful buildings make a positive contribution to the streets and public spaces around them. They visually activate the street and encourage people to use the street.

It is important to focus on active frontages in commercial and mixed use zones as these are areas where activity and vibrancy is critical to the success of the centre. Ensuring streets and open spaces are overlooked can increase the sense of safety, especially at night.

Objectives

- O1 To create lively and attractive streetscapes that are safe and attractive.
- O2 To support walking in the precinct along streets and within public open spaces.
- O3 To provide attractive streets and public spaces that encourage activity and provide opportunities for passive surveillance.
- O4 To ensure that the ground level of buildings in mixed use areas are well designed and able to attract a variety of uses that will activate the streetscapes.

Controls

- | | |
|-----|---|
| C1. | Active frontages are to be provided as identified in Figure K20-10 . For more controls see <i>Section K20.15 Safety and Accessibility</i> .

Three different types of active frontage have been identified. The type of active frontage desired is dependent on the location and the intended character of the street. |
| C2. | A maximum of 70% of the ground floor facade is to be glazing and balanced with solid vertical elements creating a rhythm along the street. |

C3.

Vibrant Facades

- a) Maximise the number of units along the street. Provide small (narrow) units with a minimum of 15 front doors per 100m of facade length.
- b) Cater for a wide variety of uses such as shops, cafes, restaurants, bars, fruit/ vegetable markets, community uses and live-work units.
- c) Provide a high degree of visual richness in facade details and architectural expression with a focus on vertical facade articulation. Provide 'ins and outs' (recesses and projections) to create shadows and interest.
- d) Vehicle access and servicing zones are not permitted along a Vibrant Façade.
- e) Blank facades are not permissible. Passive facades are strongly discouraged and are only permissible where alternatives are not available.
- f) Tenancies are to be a minimum of 10m deep.

C4.

Friendly Facades

- a) Maximise the number of units along the street. Provide relatively small (narrow) units with a minimum of 10 front doors per 100m facade length
- b) Cater for some variety of uses such as shops and live-work units including residential lobbies.
- c) Blank facades and passive facades are strongly discouraged
- d) Provide a degree of visual richness in facade details and architectural expression.
- e) Minimise the number and width of vehicular driveways across the footpath with limited vehicle access and servicing permitted. Openings, when permitted are to be narrow and recessed.
- f) Tenancies are to be a minimum of 10m deep.



C5.

Mixed Facades

- Maximise the number of units along the street. Where possible provide small (narrow) units with a minimum of 6 front doors per 100m facade length
- Blank facades and passive facades are discouraged. Any blank façade that is more than 10% of the façade or more than 10sqm (at street level) is to have visual interest i.e. architectural treatment, detailing, art or greenery/ green walls
- Provide a degree of visual richness in facade details and architectural expression.
- Minimise the number and width of vehicular driveways across the footpath.
- Buildings fronting Parramatta Road are to have vehicle access and servicing via shared underground areas accessed from side streets where possible.
- Tenancies are to be a minimum of 10m deep.



Breaking the facade into smaller elements at the street level helps create variation and interest

K20 Kings Bay (PRCUTS)

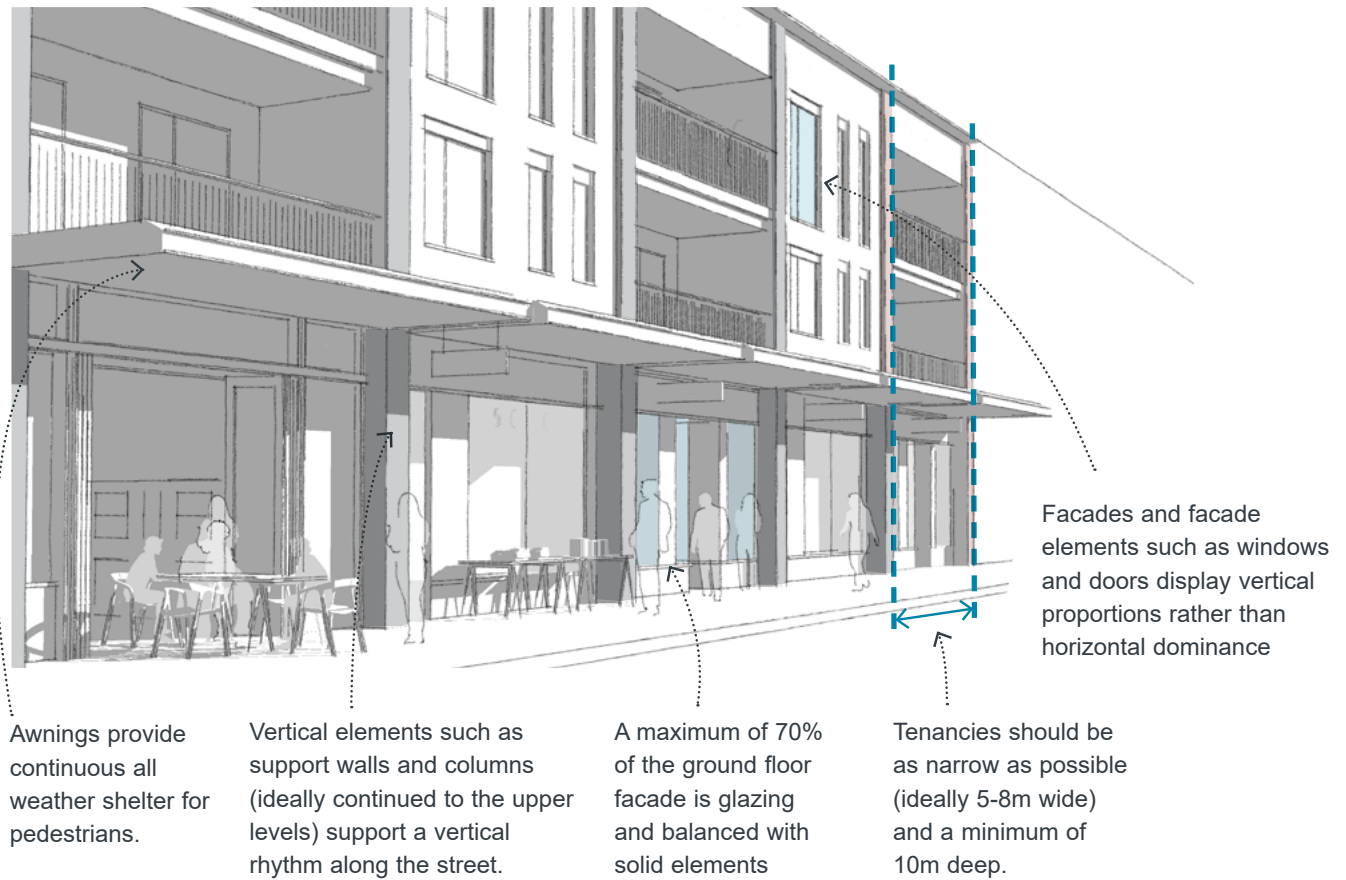


Figure K20-11 Active Frontage Design Guidance



Stall risers, richness of material choices and operable glazing contribute to high quality street interfaces

K20.10 Street Wall Heights and Setbacks

Street setback areas are an integral part of the streetscape and their treatment is fundamental to the amenity and character of a place. Combined with building height and road reserve width, they define the proportion, scale and visual enclosure of the street. Street setbacks not only establish the alignment of buildings along the street, they also provide for landscaping and deep soil areas, building entries and a transition between public and private space.

Street wall heights and upper level setbacks further define the proportion, scale and visual enclosure of the public domain and provide a level of consistency across the precinct. Upper level setbacks lessen the visual impact of taller development and help create a more unified, human-scale streetscape environment.

Objectives

- O1 To ensure setbacks contribute positively to the pedestrian environment at street level.
- O2 To provide a sense of enclosure to the street and contribute to a consistent built form scale across the precinct over time.
- O3 To enhance development and its relationship with adjoining sites and the public domain, particularly in regard to access to sunlight, outlook, view sharing, ventilation and privacy.



A lower street wall height helps to integrate taller development with lower residential scales

Controls

- C1. All development is to comply with the setbacks shown on **Figure K20-8** and **Figure K20-9**.
- C2. Where applicable, a portion of the setback area is to provide deep soil zones and tree planting. Refer to *Section K20.18 Landscape Design* for more detailed controls.
- C3. 'Undesirable' elements such as vents, electrical substations, or plant and equipment spaces are not permissible within the setback area and should be accommodated within the building.

Service cabinets are to be co-located internally, accessible from loading, waste or parking areas where possible to avoid impact on the public realm.
- C4. Upper level setbacks are required towards all public domain interfaces and have been identified on **Figure K20-12** and **Figure K20-13**.
- C5. The following street wall heights apply:

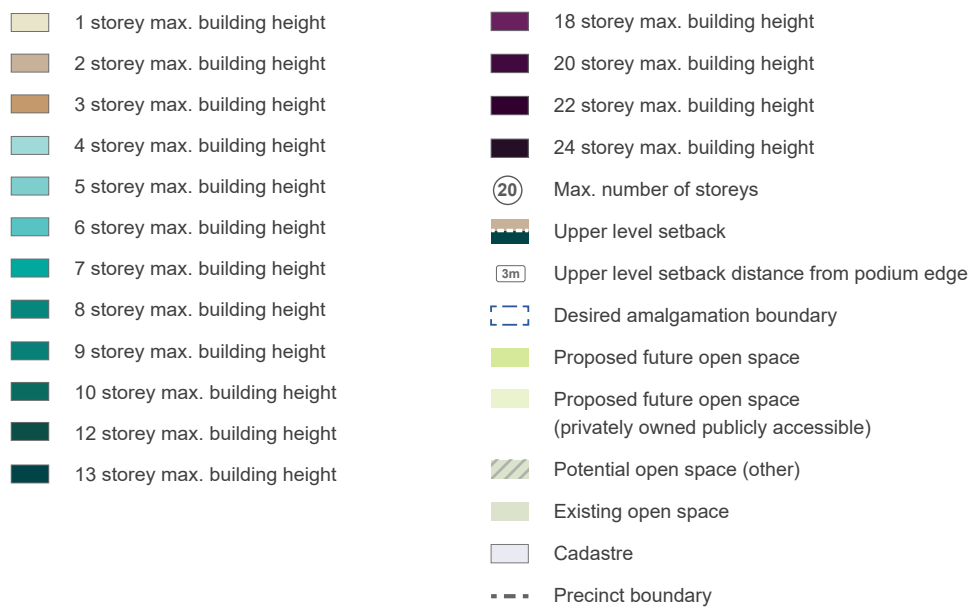
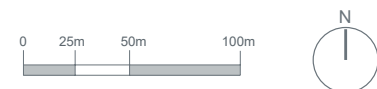
Location	Maximum street wall height
Parramatta Road	2, 4 & 5 storeys
Queens Road	1 & 2 storeys
Kings Road	2 & 3 storeys
Laneways and through-site links	nil

Refer **Figure K20-8** and **Figure K20-9**.

K20 Kings Bay (PRCUTS)



Figure K20-12 Building Envelopes Plan - western part





K20 Kings Bay (PRCUTS)

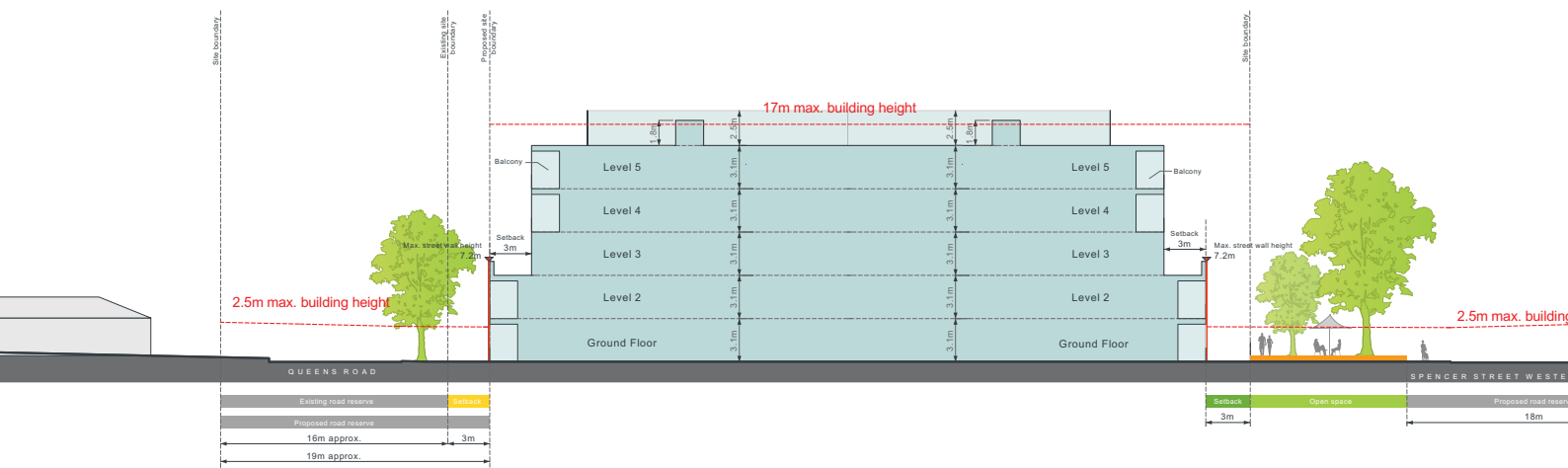


Figure K20-14 Built Form Envelope - Section A



Section Key Plan

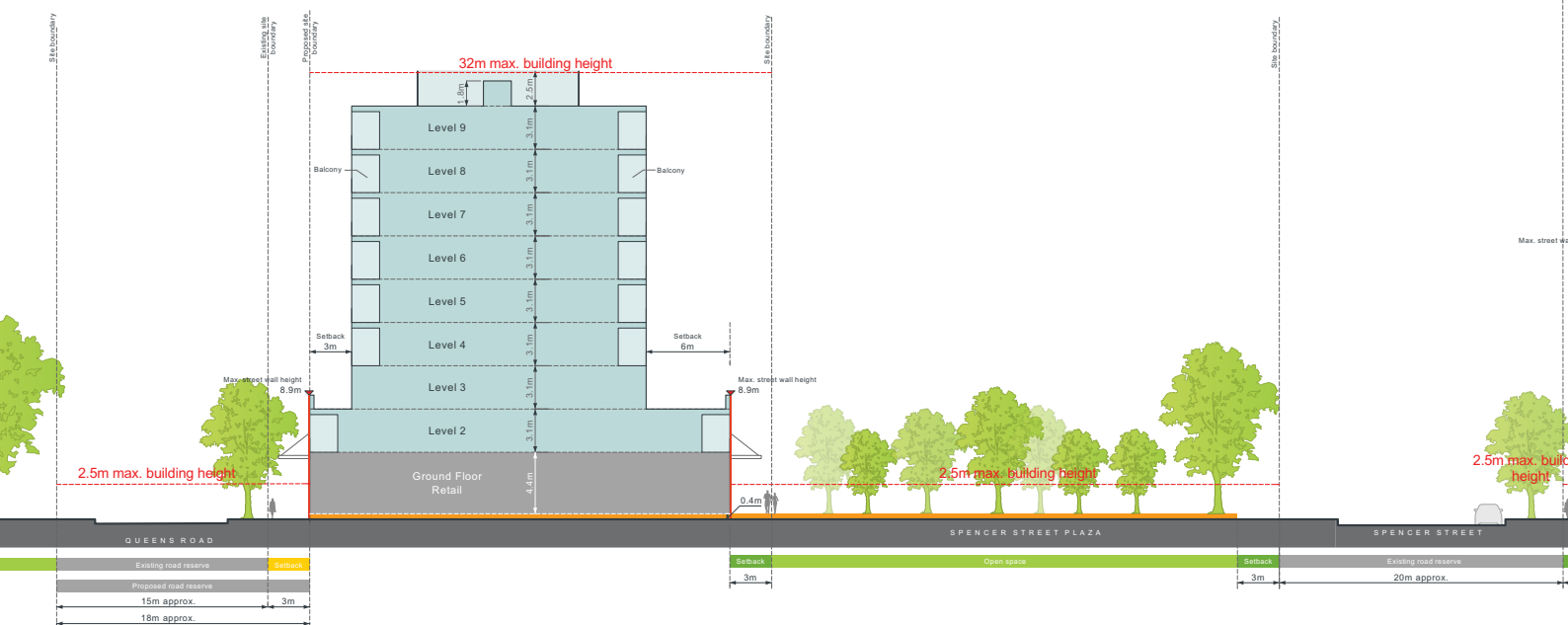
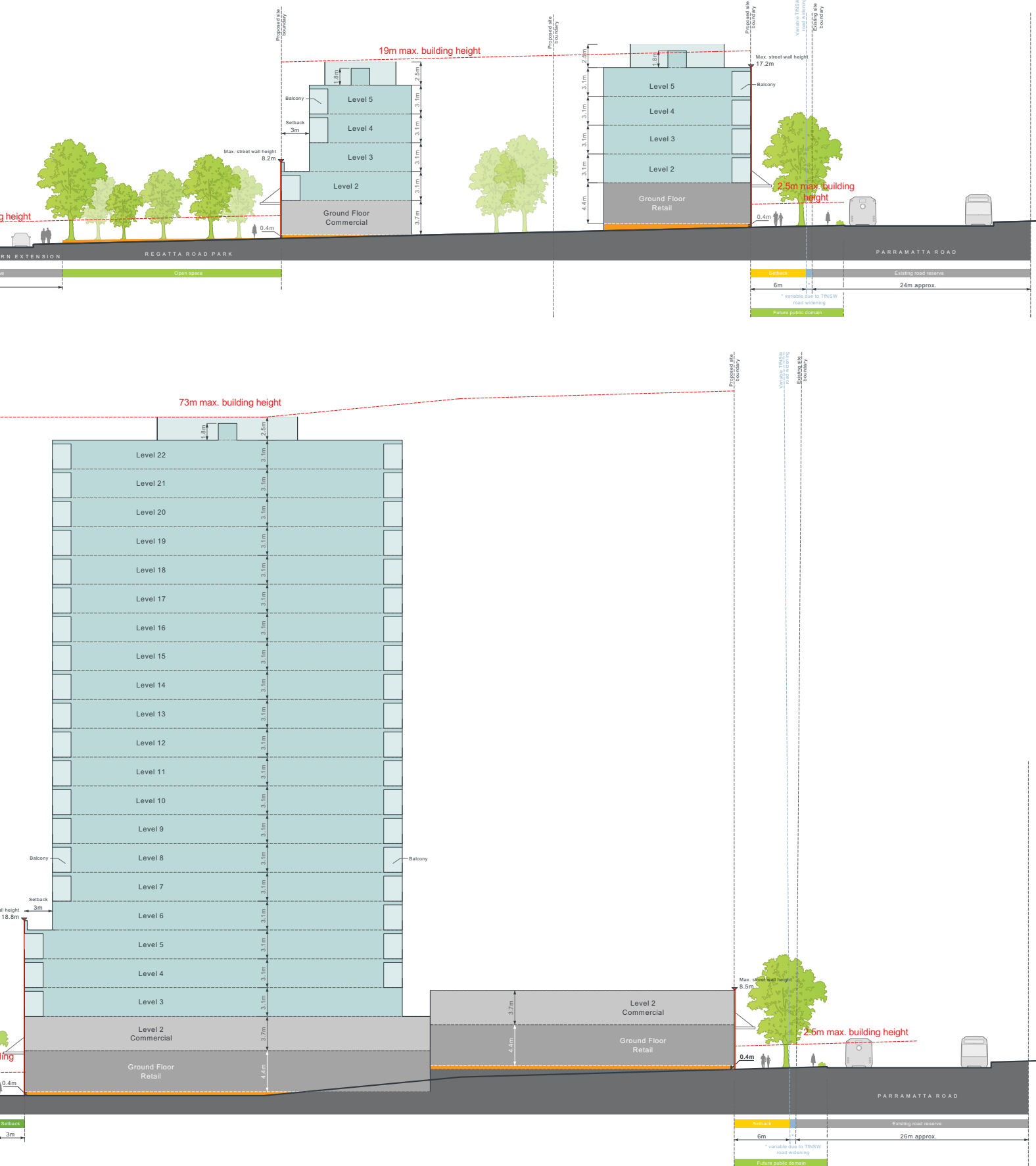


Figure K20-15 Built Form Envelope - Section B



K20 Kings Bay (PRCUTS)

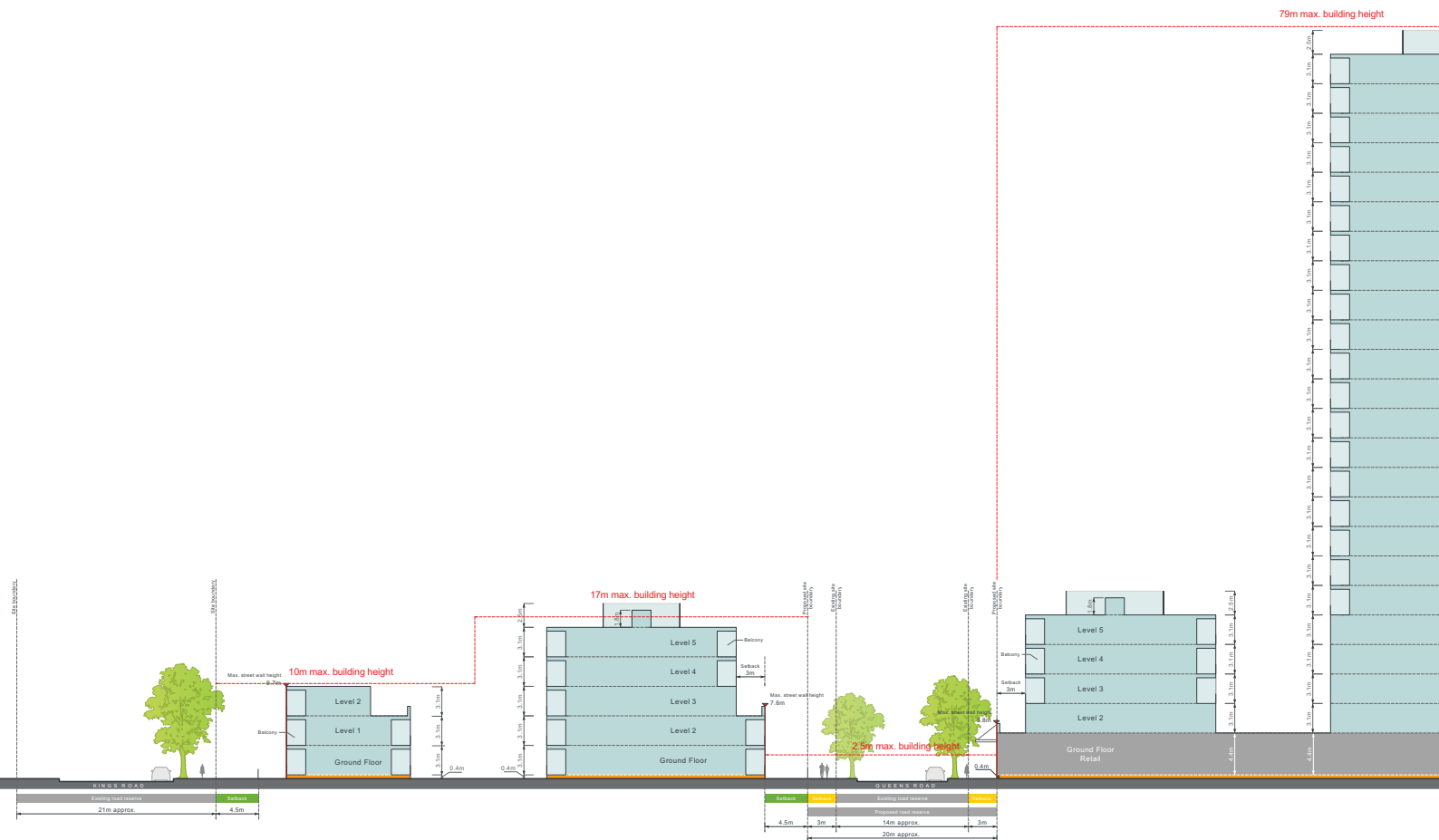


Figure K20-16 Built Form Envelope - Section C

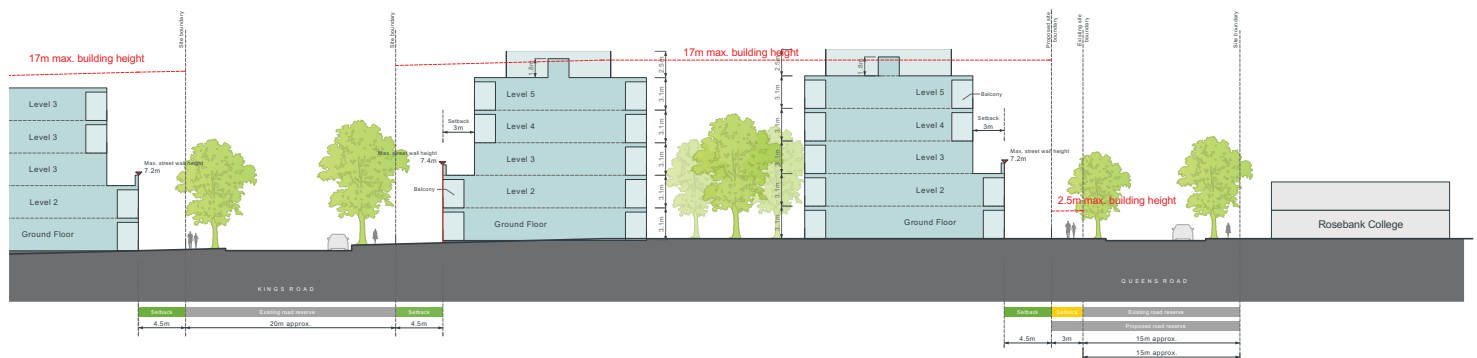
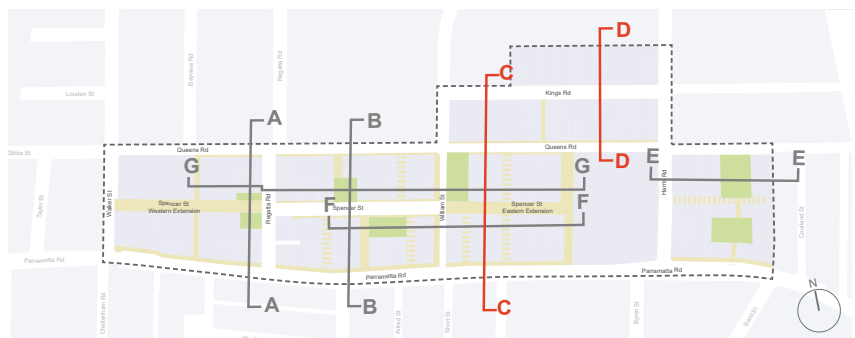
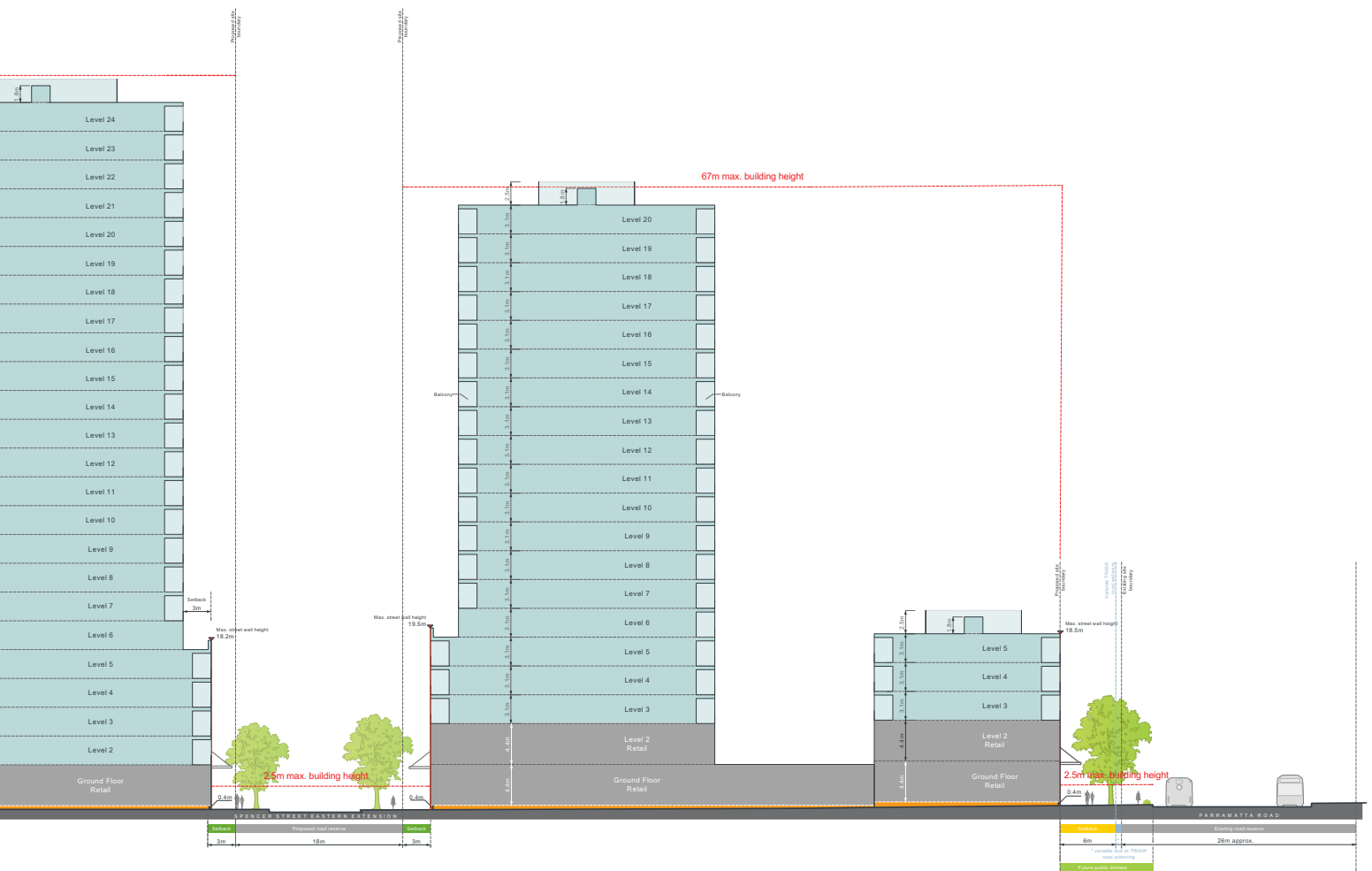


Figure K20-17 Built Form Envelope - Section D



Section Key Plan

K20 Kings Bay (PRCUTS)

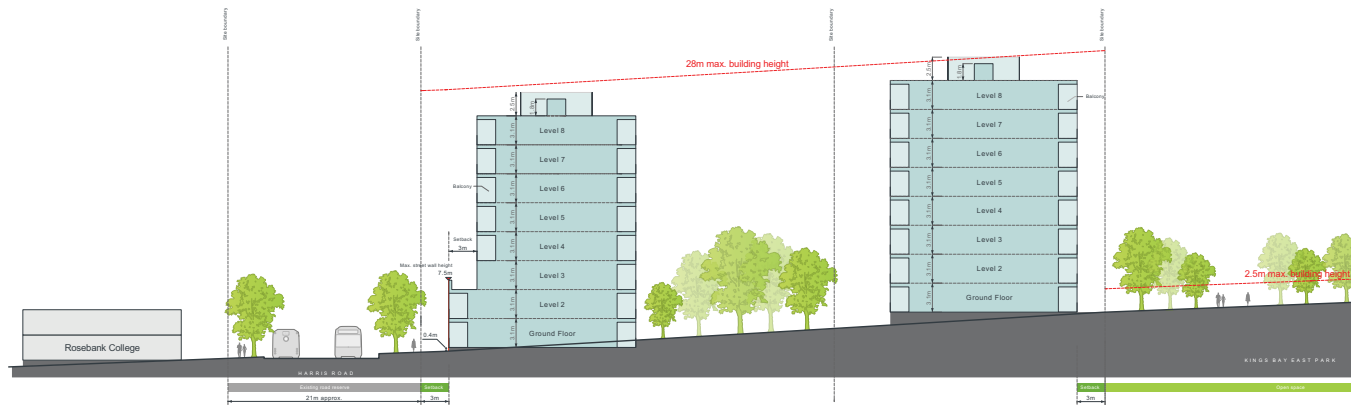


Figure K20-18 Built Form Envelope - Section E

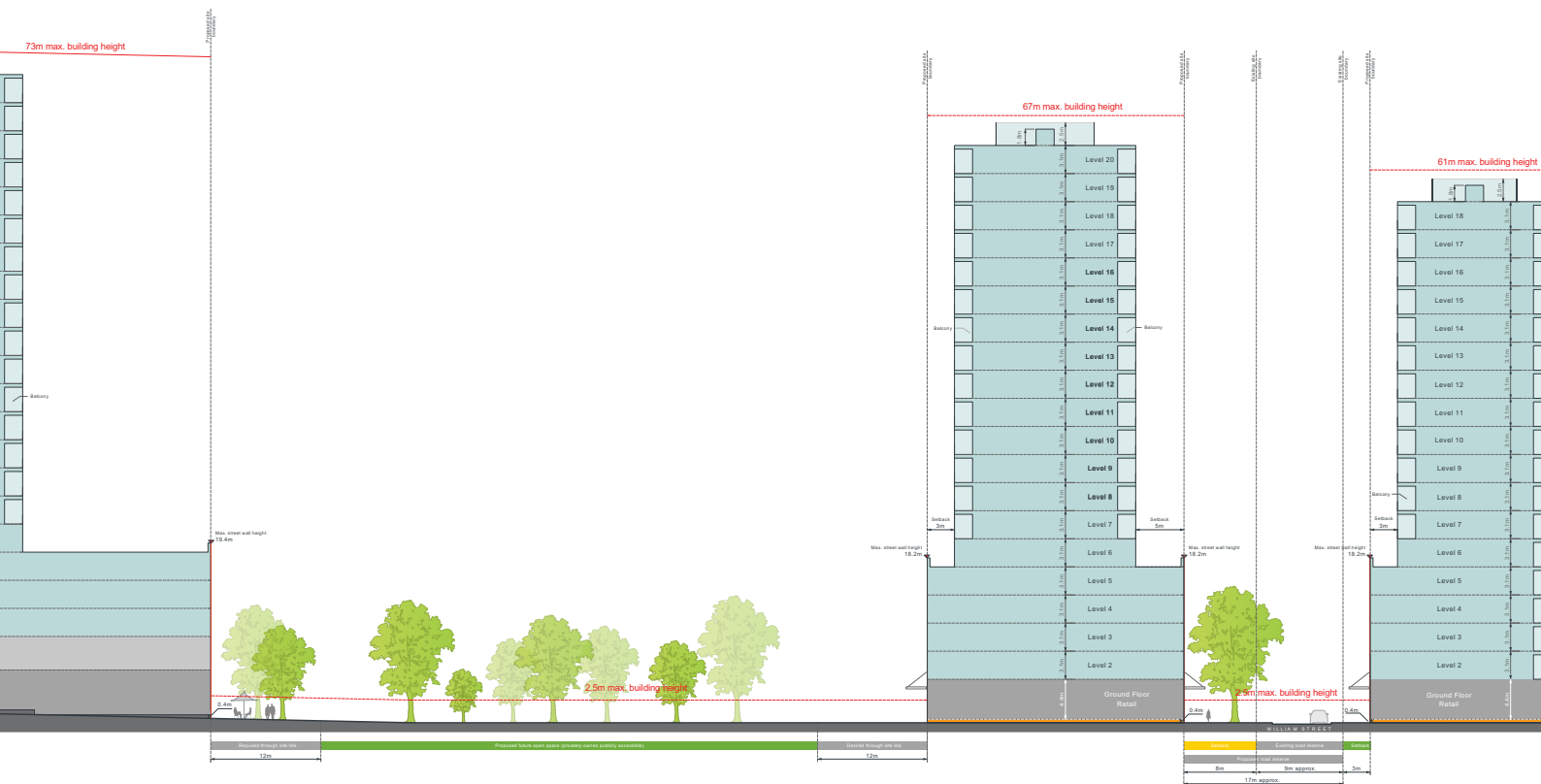
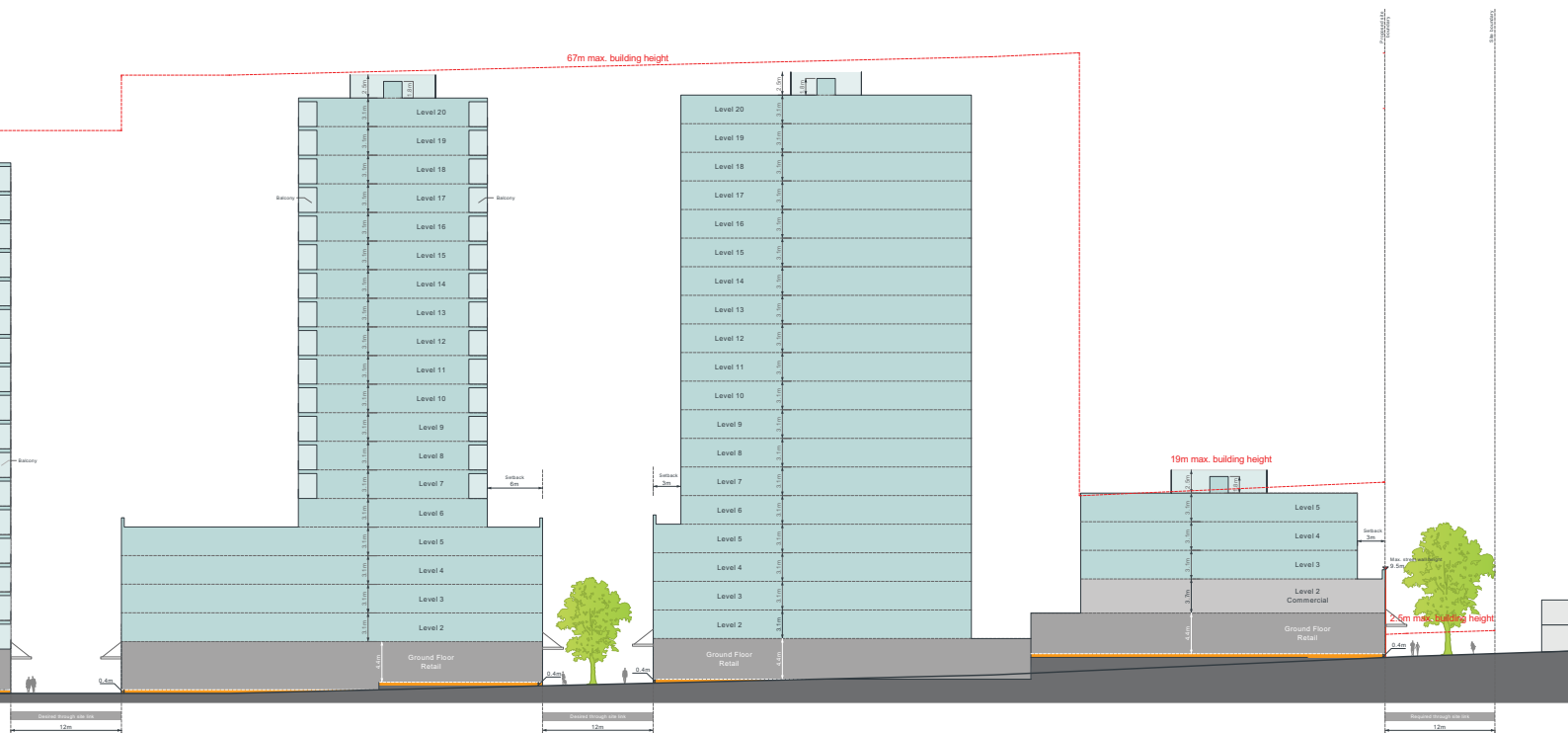


Figure K20-19 Built Form Envelope - Section F



K20 Kings Bay (PRCUTS)

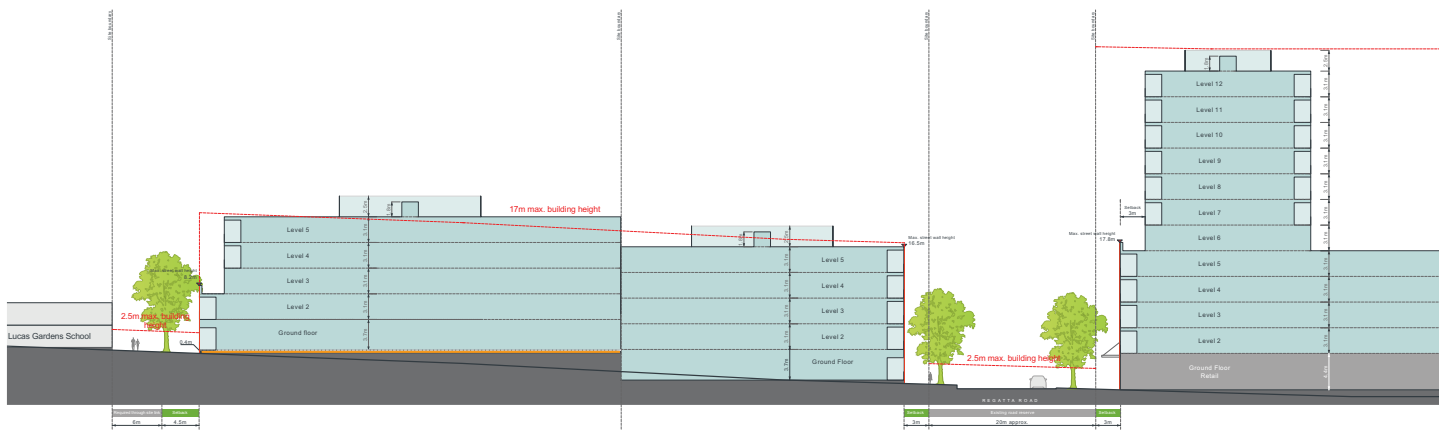


Figure K20-20 Built Form Envelope - Section G (west)

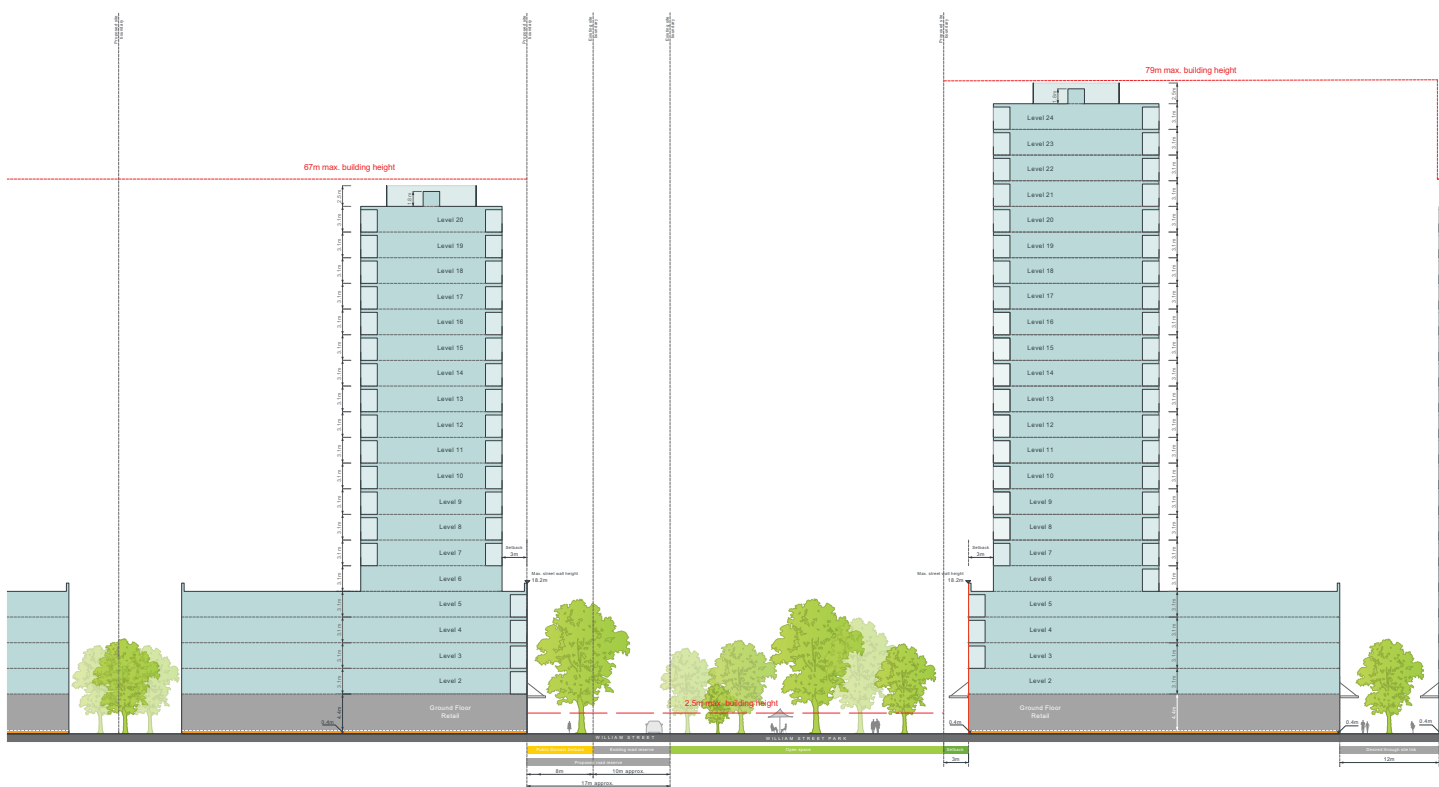


Figure K20-21 Built Form Envelope - Section G (east)

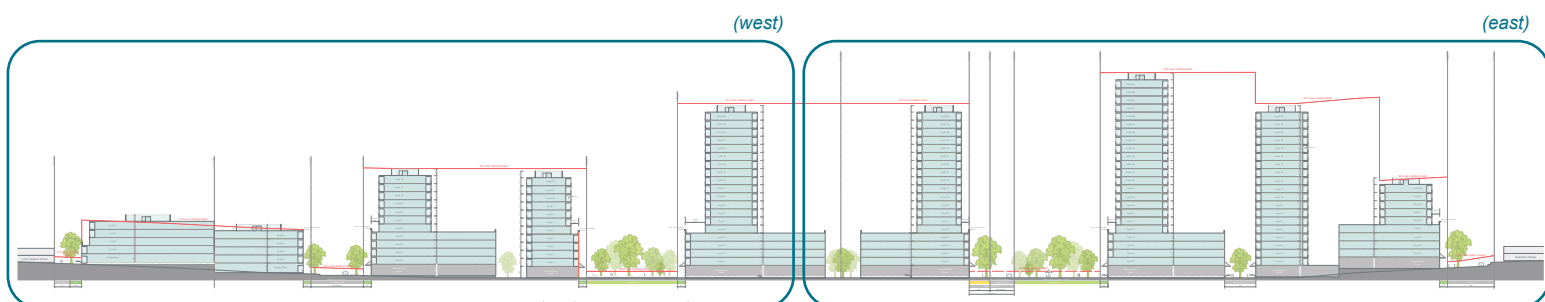
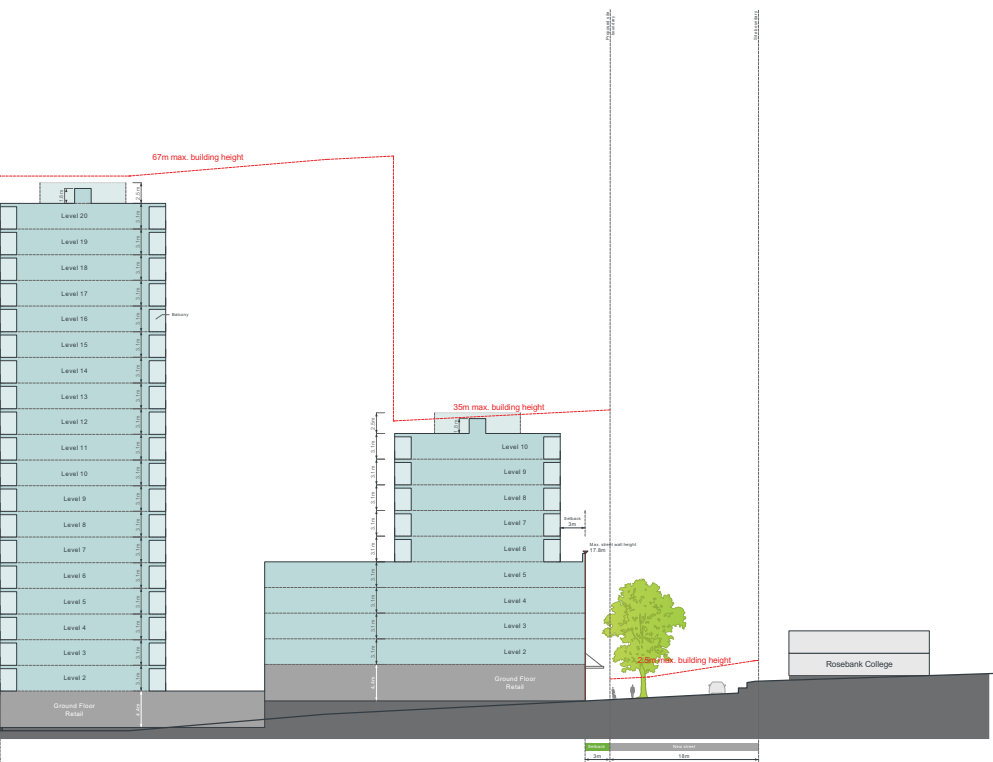
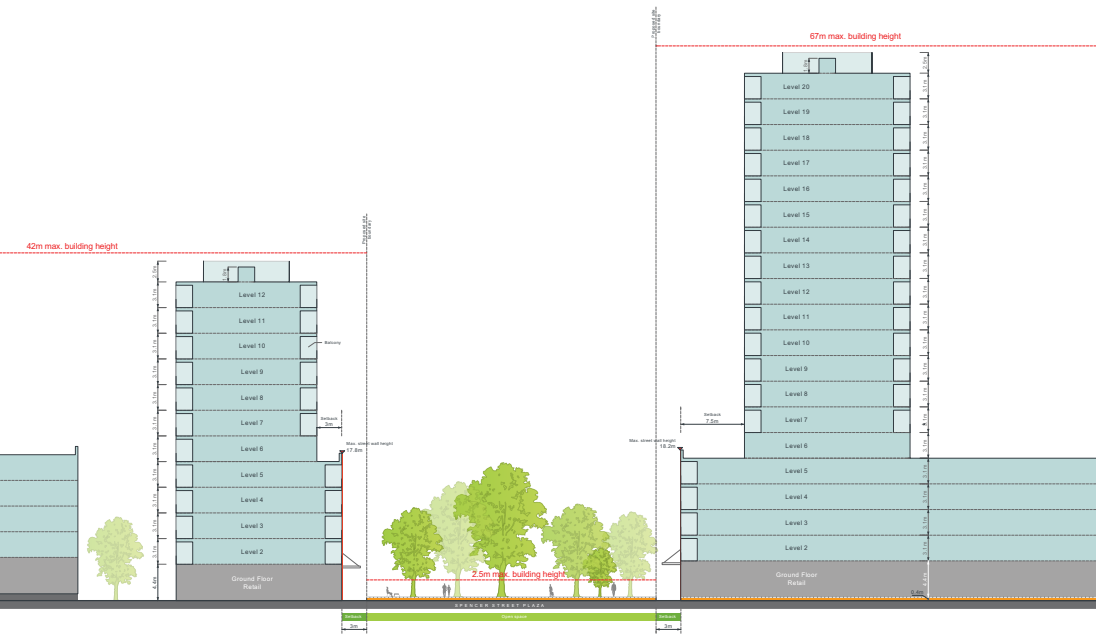


Figure K20-22 Built Form Envelope - Section G Key Section



Section Key Plan

K20 Kings Bay (PRCUTS)

K20.11 Transitions and Interfaces

Changes in height and scale will require transitions to sensitive interfaces such as existing low scale residential areas, heritage items and open spaces. New development will be required to respond to the overall scale and form of existing elements to preserve visual scale and to minimise loss of outlook, and privacy and maximise sun access of adjoining properties.

Objectives

- O1 To encourage new development that is sensitive and complementary in scale and site location to surrounding properties.
- O2 To minimise the impact on the visual curtilage and setting of existing heritage items.
- O3 To protect residential amenity at the interface to existing low rise development.
- O4 To ensure streets and open spaces receive adequate sunlight and ventilation.

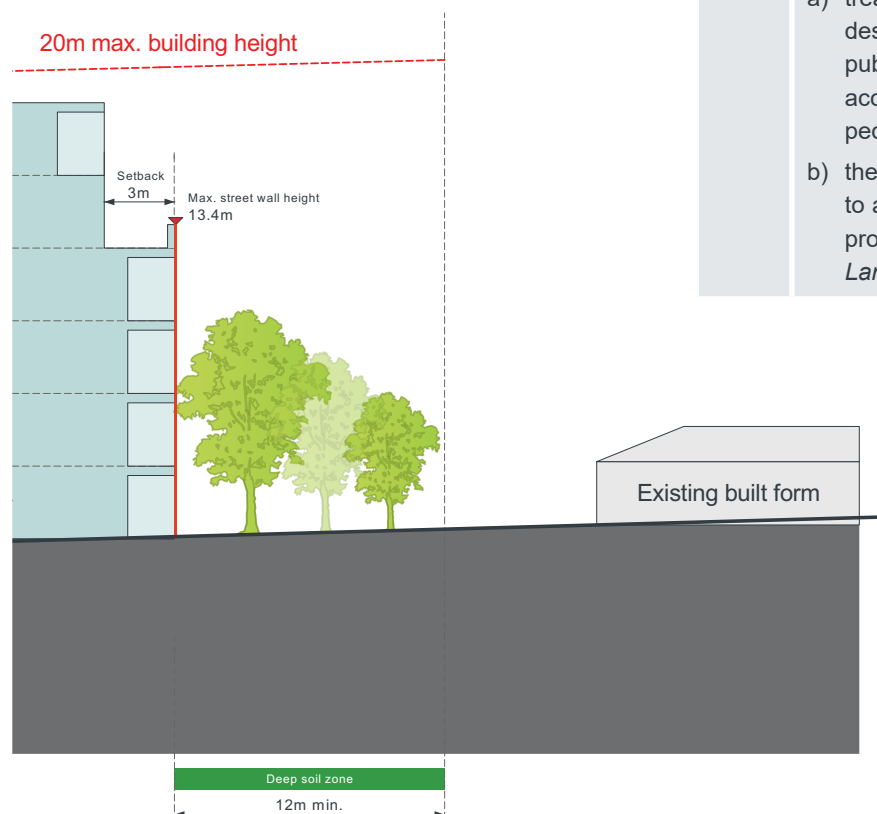


Figure K20-23 Interface to adjacent heritage and/or low rise residential

Controls

- | | |
|-----|--|
| C1. | Where adjacent to low density residential interfaces and heritage items, new development should gradually step away in height and provide appropriate setbacks as identified in Figure K20-23 and Figure K20-24 . |
| C2. | Development along 'sensitive interfaces' (opposite lower residential uses and/or heritage) pays particular attention to quality landscape and architectural detail along lower levels, and complies with the maximum building envelope identified in Figure K20-12 , Figure K20-13 , Figure K20-23 and Figure K20-24 . |
| C3. | Along all streets where future public domain is required to be delivered (such as the 'linear green edge' interface to Parramatta Road), development must comply with the primary and upper level setbacks shown in Figure K20-8 , Figure K20-9 , Figure K20-12 , Figure K20-13 and Figure K20-25 . The following applies: <ul style="list-style-type: none"> a) treatment of the setback area is designed to be an extension of the public footpath area, is publicly accessible 24/7 and focuses on pedestrian amenity; and b) the setback area maximises deep soil to allow for mature vegetation with trees provided as outlined in <i>Section K20.18 Landscape Design</i>. |

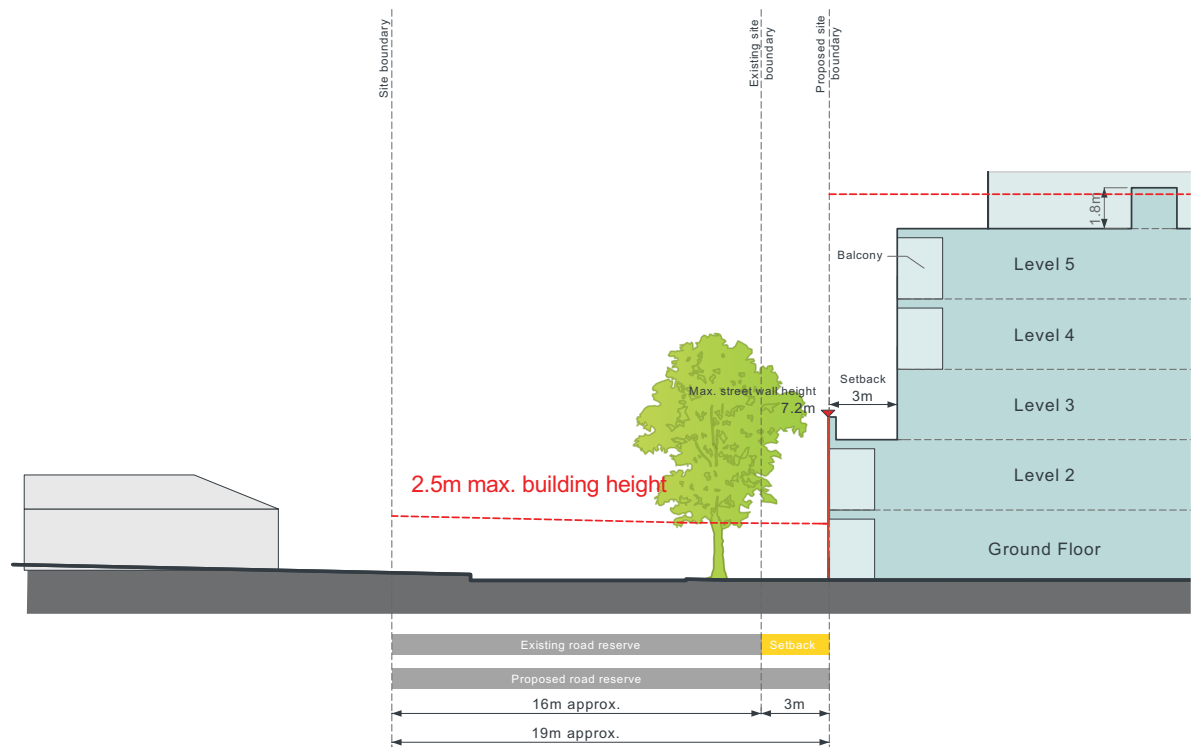


Figure K20-24 Interface to heritage and/or low rise residential across local street

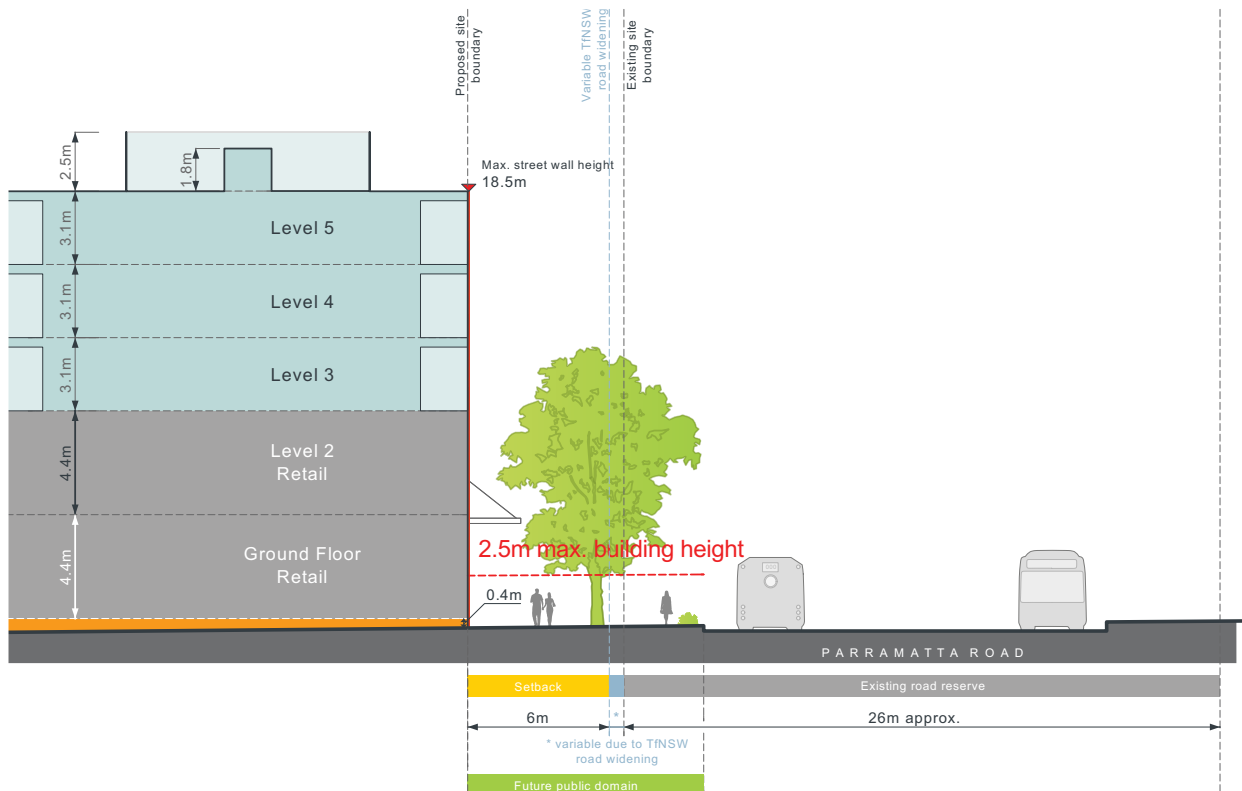


Figure K20-25 'Green edge' interface to Parramatta Road

K20 Kings Bay (PRCUTS)

K20.12 Interactive Frontages

Within residential zones the design of the development plays an important role in encouraging pedestrian activity and enhancing public safety and security. Developments which allow passive surveillance, where people within buildings are able to overlook the street and where passersby are aware of 'signs of life', promote streetscape activity and local interactions. Multiple entries to residential dwellings which allow residents to physically access homes directly off the street also provide visual interest and encourage streetscape activity.

Objectives

- O1 To encourage new development that promotes activity on the street and enhances public safety and security.
- O2 To encourage new development that provides a high level of passive surveillance.
- O3 To ensure development provides a high quality visual experience and creates interest when experienced from a walking pace.
- O4 To ensure private spaces and entries facing the street are safe, attractive and comfortable to use.



Front semi-transparent fences and landscaped setbacks with tree planting contribute to the amenity of the streetscape and support a positive pedestrian experience.

Controls

- | | |
|-----|--|
| C1. | Developments are to maximise the number of front doors and private spaces which are visible from the street. At a minimum there is to be a pedestrian entries and/or primary private open space overlooking the street every 15m. |
| C2. | Developments are to provide openable windows and balconies at upper levels that encourage views of the street. |
| C3. | Entries and private open spaces are encouraged within the 3m or 4.5m landscaped setbacks including a 1.5m wide strip of landscaping (see Figure K20-26 and Figure K20-27) and other controls including those identified in <i>Section K20.18 Landscape Design</i> are also to be met. |
| C4. | Deeper front setbacks (greater than 5m) are discouraged and landscaping and fences or structures higher than 0.9m within the front setback are not permitted. |
| C5. | All landscaping within the front setback is to maintain clear views from the footpath to the development. |
| C6. | Front fences are to be a maximum of 1.2m high and at least 50% is to be at least 50% transparent and enable a high level of passive surveillance. |
| C7. | Front terraces and entry areas are to be elevated by between 0.6m and 1.0m above the level of the street to improve privacy and increase opportunities for passive surveillance. |
| C8. | Development is to minimise services (i.e. substations, fire services and water services) located within the front setback, along the site frontage or on building facades. |

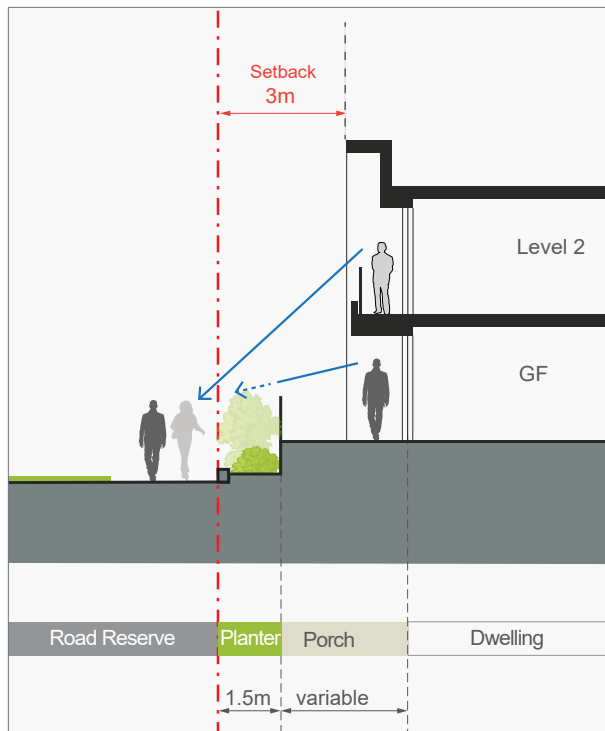


Figure K20-26 Indicative 3m front setback for residential ground floors



Landscaped setbacks with integrated entries and tree planting contribute to the residential streetscape.

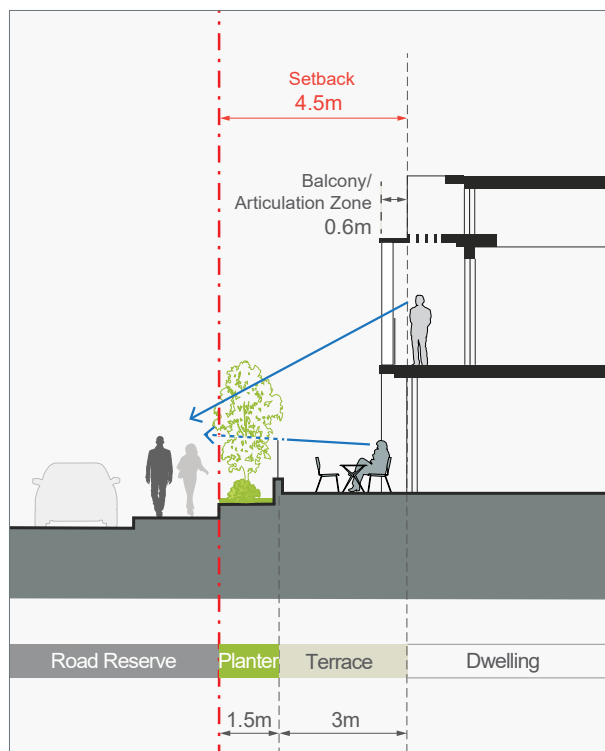


Figure K20-27 Indicative 4.5m front setback for residential ground floors



A low stone wall and visually permeable fencing provides privacy for ground floor units and passive surveillance of the street.

K20 Kings Bay (PRCUTS)

K20.13 Massing and Articulation

Detailed articulation and appropriate scale of built form defines and reinforces the identity and desired character of a place. The following architectural treatments are encouraged to create variety and interest in the streetscape while contributing to a sense of continuity and overall visual quality.

Objectives

- O1 To ensure buildings and their individual elements are appropriately scaled to define and respond to the surrounding character.
- O2 To add visual quality and interest to new buildings with a focus on breaking up massing of higher density forms when viewed from public places and neighbouring properties.

Controls

C1.	Buildings that are 3 storeys or more are to be designed so that they clearly articulate a base, middle and top.
C2.	Facades are articulated using techniques such as projections, recesses, eave overhangs and deep window reveals. Where development is set back at least 3m from the site boundary, elements can protrude up to 0.3m into the front setback (articulation zone).
C3.	The maximum length of straight wall on any storey above ground floor level, without articulation such as a balcony or return, is 15m.
C4.	New development is to place particular focus on creating a 'human scale' at the lower levels through the use of detailed design, insets and projections that create interest and, where relevant, the appearance of finer grain buildings.
C5.	Where frontages are more than 20m wide, building massing is also to be vertically articulated.
C6.	Vertical elements such as support walls and columns at the street level are ideally to be continued to the upper levels to support a vertical rhythm along the street.

C7.	For built form that is 3 storeys or more, the upper-most level is set back and visually unobtrusive. Ways to achieve this include the use of lightweight construction techniques, darker colours, solid balustrades and roof overhangs that create deep shadows.
C8.	Adjoining buildings are considered in terms of setbacks, awnings, parapets, cornice lines and facade proportions.
C9.	Roof plant, lift overruns, vents, carpark entries and other service related elements are integrated into the built form and complement the architecture of the building.
C10.	Buildings on corners address both streets and architectural elements are composed so that they 'turn the corner'.



Example of a building that is vertically articulated into two components and differentiates between base, middle and top

K20.14 Heritage and Fine Grain

A 'fine grain' of narrow lots provides a significant contribution to the character of the precinct and often includes traditional shop fronts, roofs with parapets, corner buildings and upper level verandahs. This historic pattern of elements creates a streetscape of character and, together with listed heritage items, should be retained and protected wherever possible.

Objectives

- O1 To ensure that development in the vicinity of heritage items is designed and sited to protect its heritage significance.
- O2 To avoid new development physically dominating and overwhelming heritage items.
- O3 To enable the consolidation of small individual lots into larger lots whilst ensuring the original subdivision pattern is represented.

Controls

C1.	<p>Development in the vicinity of a heritage item is to minimise the impact on the setting of the item by:</p> <ul style="list-style-type: none"> a) providing an adequate area around the building to allow interpretation of the heritage item; b) retaining original or significant landscaping (including plantings with direct links or association with the heritage item); c) protecting, where possible and allowing the interpretation of archaeological features; and d) retaining and respecting significant views to and from the heritage item.
C2.	All development of and in the vicinity of a heritage item is to address the requirements of <i>Part C Heritage of the City of Canada Bay DCP</i> .

C3.	Alterations and additions to buildings and structures and new development of sites in the vicinity of a heritage item are to be designed to respect and complement the heritage item in terms of the building envelope, proportions, materials, colours and finishes, and building and street alignment.
C4.	Where additional storeys are proposed above a heritage building, the new front wall should be set back from the existing front building line by a minimum of 8m.
C5.	Where a finer grain existing subdivision is present and lot consolidation is proposed, the subdivision pattern and fine grain is to be interpreted in the architectural treatment of the facades, e.g. through building layout, composition, modulation and vertical articulation.
C6.	All development of, or in the vicinity of, heritage items must submit a heritage impact assessment as part of the DA. It should be noted that the assessment may lead to setbacks, building heights and built form modulation that may differ (are less than) the minimum provisions outlined in this DCP.

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K20.15 Safety and Accessibility

The way in which buildings address streets, links and open space creates an important transition between public and private land. The careful design of this interface zone contributes to the liveliness, interest, comfort and safety of the public domain. Good accessibility to and from new development increases activity levels further and contributes to the visible activity in a neighbourhood.

Objectives

- O1 To ensure new development supports the wider neighbourhood and community safety and maximises opportunities for passive surveillance.
- O2 To encourage ground floor activities to spill out into the public domain and create a vibrant streetscape (active frontages).
- O3 To incorporate a high degree of accessibility into the design of new buildings and the public domain that considers the various mobility levels of future users, i.e. disabled and elderly.
- O4 To achieve good design and equitable access in flood planning areas.
- O5 To minimise hazards and property damage from flooding.
- O6 To create activated frontages on sites that also need to consider flooding impacts.

Controls

C1.	Development is to consider and comply with Crime Prevention Through Environmental Design (CPTED)'s Safer by Design Guidelines.
C2.	New development addresses and defines the public domain through entrances, lobbies, windows and balconies that overlook public spaces, maximising opportunities for passive surveillance.
C3.	The location and width of vehicle entries is to minimise impacts on the pedestrian network.
C4.	<p>All building entries are clearly visible from the public domain.</p> <p>Access is to be provided according to:</p> <ul style="list-style-type: none"> a) Active Frontages: at ground level unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only. b) Interactive frontages for residential development in the R3 Medium Density zone: at ground level and set in a landscaped front setback that is to be raised above natural ground level to between 0.6m and 1.0m.

C5.	To avoid blank walls and create visual interest, the maximum length of any wall at the ground floor level, without articulation such as a door or window is 5m.
C6.	Residential uses on the ground floor can be raised to a maximum of 1.0m above the footpath level to improve internal privacy. Direct access from the footpath to individual dwellings is required wherever possible.
C7.	Front setback treatments incorporate safety considerations such as lighting after hours. For more controls see <i>Section K20.18 Landscape Design</i> .
C8.	Front fencing for residential uses on the ground floor are to display an appropriate balance of visibility and outlook, informal surveillance of the street and privacy for residents and building users. Fences are to be a maximum height of 1.2m and at least 25% transparent. Solid walls are only acceptable to a maximum height of 0.6m.
C9.	Common areas for building users/ residents are encouraged within the front setback with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.

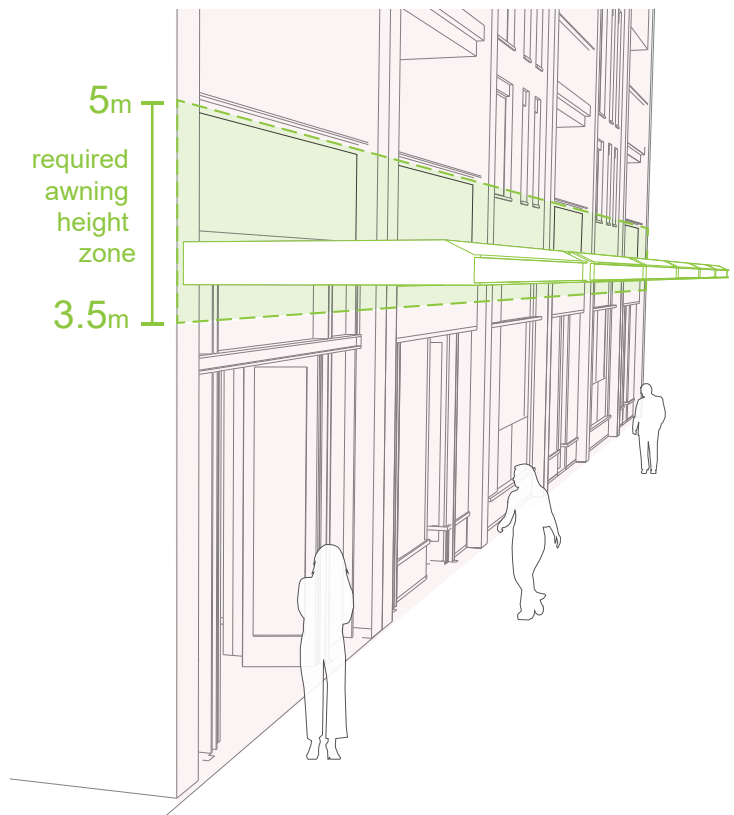


Figure K20-28 Awnings are to be between 3.5m and 5m above ground level along active frontages



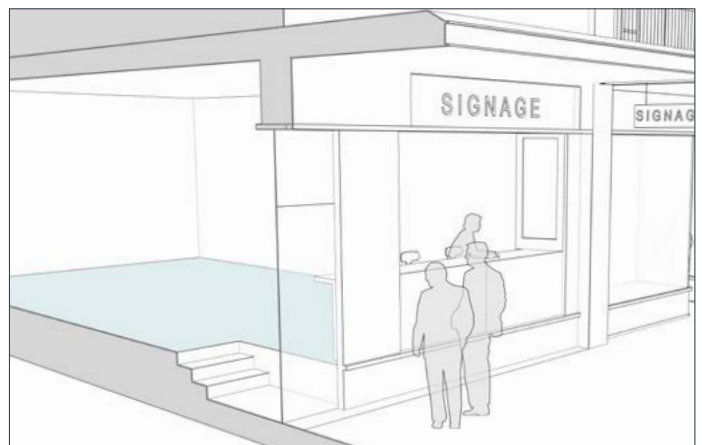
Figure K20-29 Awnings should be designed to allow for street tree planting

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C10.	Active frontages are provided as identified in Figure K20-10 .
C11.	<p>Along active frontages:</p> <ul style="list-style-type: none"> a) the finished ground floor level is to match the footpath level; where this is not possible due to topography, the ground floor level is to be a maximum of 0.4m above the footpath, unless the building is located within an area vulnerable to flooding; b) in flood prone areas where the ground floor is elevated above the footpath or adjoining public open space, street activation is to be created by locating entries at footpath level, and with internal steps. Any elevated areas outside are to form an activated continuation of the interior and are not to create a visual barrier to the interior (see Figure K20-30). c) continuous awnings must be provided to shelter pedestrians from weather conditions; d) awnings should be designed to allow for street tree planting; e) awnings are to be between 3.5m and 5m above ground level (see Figure K20-28; f) consistent paving, street furniture, signage, planting and lighting is desirable; and g) design guidance in Figure K20-11 is applied where possible with long expanses of floor to ceiling glass prohibited.
C12.	Land which is shown as 'Flood Planning Area' in Figure K20-31 and any other land at or below the flood planning level is to refer to CCB General DCP Controls - B8 Flooding Control.



Building entry at street with internal steps/ ramp/ retractable stair/ lift system to elevated floor above flood level



Elevated active areas against the street boundary



Elevated active areas against the street boundary with integrated seating

Figure K20-30 Strategies to achieve street level activation in flood prone areas



Figure K20-32 Flood Planning Area

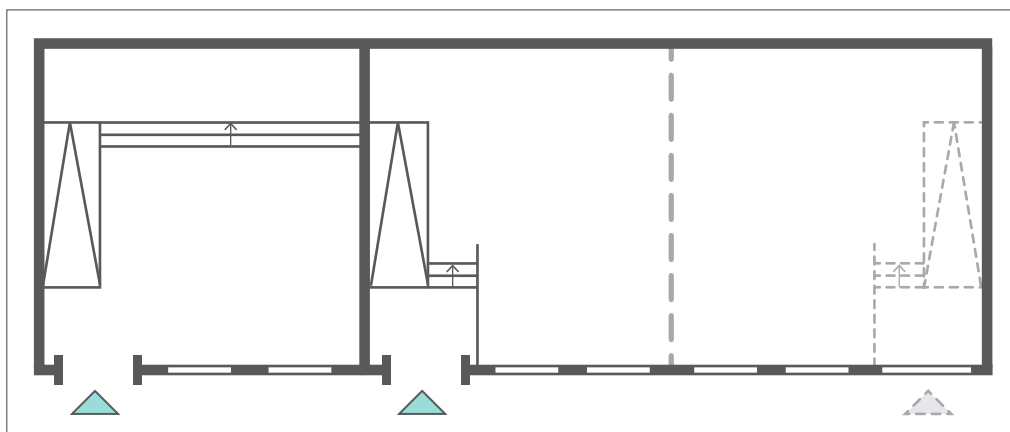
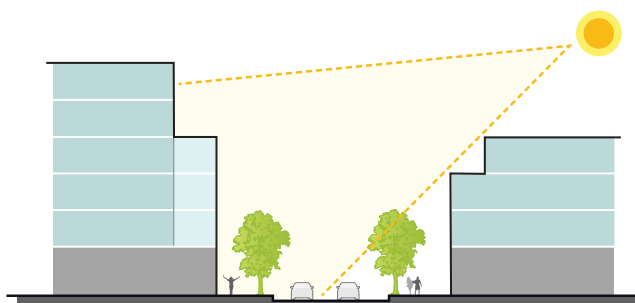


Figure K20-31 Example of design options that provide street activation and flexibility for future changes in a flood zone. The right-hand tenancy has been designed to allow future subdivision, including a new doorway and internal transition area.

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K20.16 Amenity



New housing and employment uses need to provide a high level of amenity for future residents and building users. At the same time, development is required to protect and where possible enhance the quality of the public domain and adjoining private properties. The following controls seek to help maximise privacy, solar access and outlook for all. This section also identifies design treatments to mitigate air quality and noise impacts for development along Parramatta Road.

Objectives

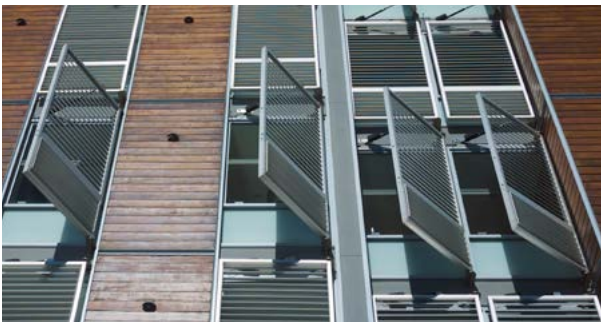
- C1. To minimise the impact of new development on the outlook, privacy and sun access of adjoining properties.
- C2. To minimise overshadowing of streets, links and public open spaces.
- C3. To protect building users from negative impacts (noise, air quality, vibration) from Parramatta Road.

Controls

- | | |
|-----|--|
| C1. | Siting and built form configuration optimises solar access within the development and minimises overshadowing of adjoining properties. |
| C2. | Taller elements of built form are oriented north-south where possible. The height and modulation of east-west buildings allows solar access to courtyard spaces (where courtyards are appropriate). |
| C3. | Louvres, shading devices and windows are able to be operated by buildings users where possible, to allow building occupants to regulate climatic conditions rather than rely solely on mechanical systems. |
| C4. | Development along Parramatta Road is to consider the provisions of the <i>State Environmental Planning Policy (Infrastructure) 2007</i> and <i>Development Near Rail Corridors and Busy Roads Interim Guidelines</i> and the design approaches illustrated in Figure K20-33 . |
| C5. | For residential components of new development, noise sensitive areas (living rooms, bedrooms) are located away from Parramatta Road where possible. |
| C6. | Windows located towards Parramatta Road are double-glazed (or use laminated glazing) and have acoustic seals. |
| C7. | Habitable rooms (excluding balconies) are to be designed to achieve internal noise levels of no greater than 50dBA. |



Example of a public square with good solar access, seating facilities and active frontages.



All building users should have the opportunity to open windows and operate privacy screens and sun shading devices.

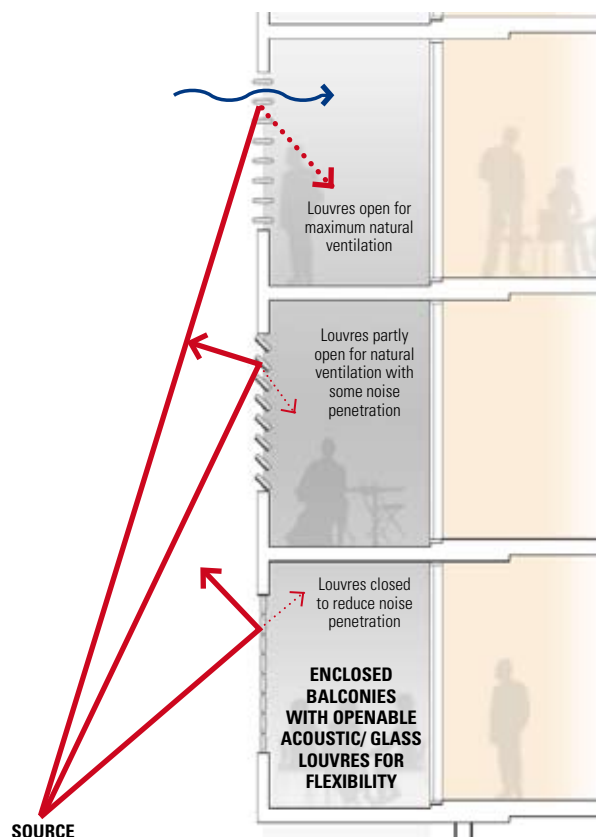
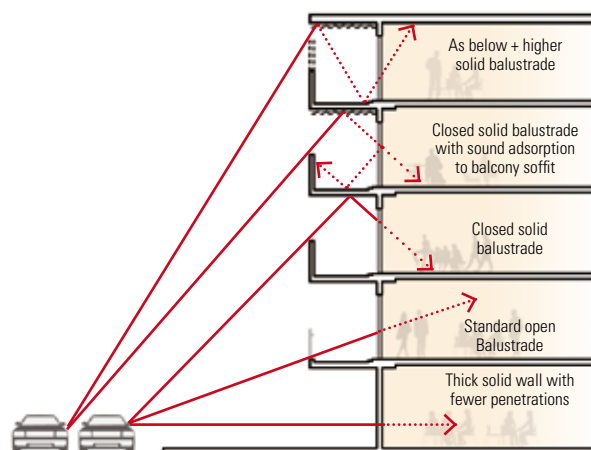


Figure K20-33 Noise mitigating facade treatments

(Source: Development Near Rail Corridors And Busy Roads Interim Guideline, NSW)

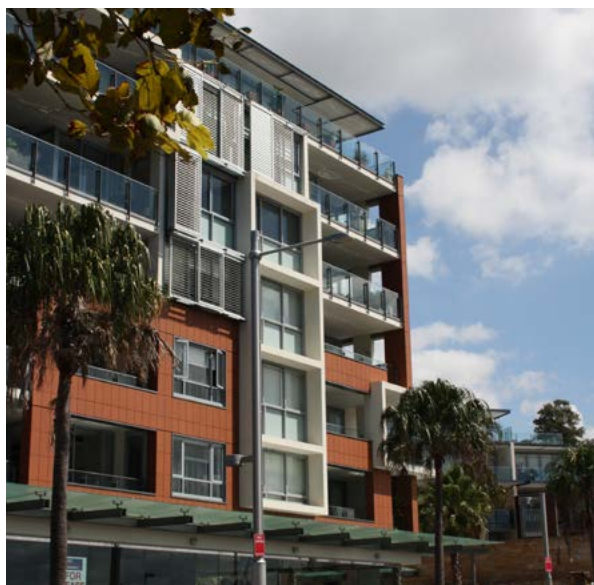
K20 Kings Bay (PRCUTS)

K20.17 Appearance

The design of buildings contributes to the streetscape character and adds visual richness, complexity and interest. In addition, the selection of signage, materials, finishes and colours should have regard to compatibility to the surrounds and consider robustness, durability and ease of maintenance.

Objectives

- O1 To ensure building exteriors positively contribute to the desired future character of the area and streetscape.
- O2 To respect and reflect the area's history as an industrial precinct with building finishes, fixtures and detailing that are compatible with Kings Bay's industrial character.
- O3 To ensure that signage is integrated and not detrimental to the local character by limiting its cumulative impact with other signage.



Example of balconies with a balance of solid and void in the facade composition and treatment.

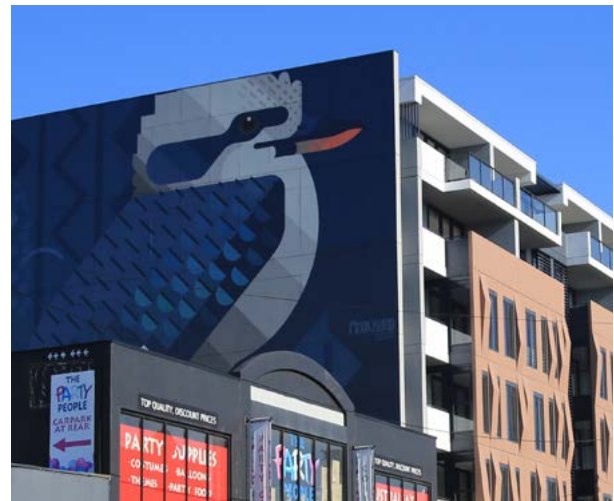
Facade design

Controls

- | | |
|-----|---|
| C1. | The composition of facades balances solid and void elements and does not display large areas of a single material, including reflective glass. |
| C2. | External walls are constructed of high quality and durable materials and finishes with low maintenance attributes ('self-cleaning') such as face brickwork, rendered brickwork, stone, concrete and glass. |
| C3. | Any blank sidewalls (including temporary walls that may be covered in the future) that are visible from the public domain are designed as an architecturally finished surface that complements the main facade. |
| C4. | Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality. |
| C5. | Roof plant, lift overruns, utilities, vents and other service related elements are to be integrated into the built form design and complementary to the architecture of the building. |
| C6. | Materials and finishes are to be consistent with late 19th century and early 20th century industrial and warehouse buildings, which typically included: <ul style="list-style-type: none"> • Internal walls of exposed face brickwork, rendered or painted brickwork, or sandstone. • Floors typically of timber or concrete. • Windows were either timber or steel-framed. • Street frontages and window surrounds were typically of exposed face brickwork, rendered or painted brickwork, or sandstone. • High ceilings, with exposed structural elements and utilities (pipes, ducts and vents), that reflect the original functions that required clearance or storage space. |

Signage and advertising

Controls	
C7.	Signage is to comply with the requirements of State Environmental Planning Policy No 64-Advertising and Signage. Also refer to requirements in the <i>City of Canada Bay DCP Part I Signage and Advertising</i> .
C8.	Signage is to be integrated into the overall architectural design. Advertising signs should complement the design of buildings and the overall character of the precinct. Signage must relate to an approved use on the site.
C9.	The main facades of buildings from the first floor to the rooftop or parapet are to be uncluttered and generally free of signage.
C10.	Freestanding signs are not to be located on the top of buildings and should not impact on the skyline when viewed from the street. Signs painted on or applied to the roof of a building are not permitted.

*Contemporary use of face brickwork**Blank sidewall temporarily covered with public art*

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K20.18 Landscape Design

Landscape design plays an important role in the successful integration of new development into the surrounding streetscape and context. It enhances the appearance and amenity of the area, provides for recreation, preserves biodiversity and improves micro-climatic conditions.

Landscape and built form need to be designed together and landscaped areas should not be generated by 'left-over spaces' resulting from building siting. A portion of the landscaped area is required to be deep soil suitable for the growth of mature trees and vegetation.

Objectives

- O1 To promote high quality landscape design as an integral component of the overall design of new development, softening the appearance of buildings.
- O2 To improve the local micro-climate, native fauna and flora habitats and control climatic impacts on buildings and outdoor spaces.
- O3 To allow adequate provision on site for infiltration of stormwater, deep soil tree planting, landscaping and areas of communal outdoor recreation.

Precinct Wide

Controls

C1.	Existing street trees and landscape features are to be retained wherever possible. All 'significant trees' that are identified as either High Significance or Medium Significance in the PRCUTS Public Domain Plan are to be retained and assessed by a suitably qualified Arborist. Refer also to CCB DCP Part B General Controls, <i>B6.10 Urban Tree Canopy</i> and <i>Australian Standards - AS 4970-2009 Protection of Trees on Development Sites</i> .
C2.	The layout and key design features of all parks and plazas are to be as per the PRCUTS Public Domain Plan
C3.	Landscape design complements the proposed built form and minimises the impacts of scale, mass and bulk of the development in its context.

C4.	Landscape design highlights architectural features, defines entry points, indicates direction, and frames and filters views from and into the site.
C5.	For development along Parramatta Road, a minimum of 1 canopy tree per 10m of length of frontage is to be planted in the 'green edge' setback area, capable of reaching a mature height of at least 10m.
C6.	For development along all other streets (excluding active frontages) a minimum of 1 canopy tree per 12m of frontage is to be planted. New trees are to be capable of a mature height of at least 6m.
C7.	Where surfaces on rooftops or podiums are used for community open space, the development must demonstrate at least 50% of the accessible roof area is shaded by a shade-structure or covered with vegetation, including tree canopy.
C8.	Where surfaces on rooftops or podiums are not used for community open space, for example solar PV or heat rejection, the development must demonstrate at least 75% of the remaining roof area or podium is covered in vegetation, including tree canopy.
C9.	A minimum of 40% projected tree canopy coverage on publicly accessible streets and laneways, unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only.
C10.	A minimum of 75% projected tree canopy coverage shall be achieved for all parks.
C11.	Adequate soil volume is to be provided for the tree species. In areas where deep soil is restricted, opportunities for structural soil or under paving vault systems should be included to meet these requirements. Where the building setback is 1.5m or less, additional uncompacted soil volumes are to be provided under pavements to provide the soil volumes suitable for the tree species.

C12.	Tree planting is to be prioritised in the planning and design of all public domain areas and, where possible, utilities to be bundled, undergrounded and located away from tree planting areas.
C13.	Tree species are to be selected for their respective micro-climatic suitability and need to provide a high level of urban amenity, noting that the duration and density of overshadowing from buildings will impact the growth and species suitability.
C14.	<p>A landscape architect to be engaged to ensure that:</p> <ul style="list-style-type: none"> the architectural planning, building footprint and basement engineering result in adequate deep soil zones and podium planter boxes. the deep soil zones are located in areas where canopy and landscape outcomes will best serve the future users and general architectural amenity. species selection considers site suitability, shade requirements of any communal open space and solar access into internal building spaces.

Mixed Use Zone

Controls	
C15.	A minimum of 15% projected tree canopy coverage shall be achieved for all private land (i.e. non-public) developments. This shall be measured as the projected square metre canopy of the trees using reasonable estimates of the mature size of the chosen trees.
C16.	Trees are to be planted in sufficient deep soil to support them to maturity (refer to PRCUTS Public Domain Plan for soil volumes). A tree shall be as defined by City of Canada Bay's LEP.
C17.	Tree coverage may include trees planted at ground level as well as any trees planted in upper levels of buildings, such as podiums and roofs. It may also include any canopy overhanging from an adjoining public domain area.

Residential Zones

Controls	
C18.	Development consent must not be granted unless the development achieves at least 25% canopy cover across the site, identified on the landscape plan and measured by the extent of canopy at maturity.
C19.	Native species must comprise at least 75% of the plant schedule, incorporating a mix of locally indigenous trees, shrubs and groundcovers appropriate to the character of the area (see CCB DCP Part B General Controls B6.3 <i>City of Canada Bay tree species Table B-N</i> and <i>Table B-O</i> for further details).
C20.	<p>A minimum of 30% of the total site area is to be provided as landscaped area.</p> <p><i>Note: landscaped areas are used for growing plants, grasses and trees, but do not include any building, structure, basement or hard paved areas such as paths and driveways.</i></p>
C21.	50% of the required landscaped area is to be deep soil with deep soil planting (trees and shrubs) and a preference for native species.
C22.	Calculation of landscaped and deep soil areas is not to include any land that has a length or a width of less than 1.5m.
C23.	<p>Trees and vegetation provide a high degree of amenity and environmental benefit. Their selection and location should:</p> <ol style="list-style-type: none"> Provide shade in summer and sun access in winter to building facades and public and private open spaces; Reduce glare from hard surfaces; Channel air currents into built form; and Provide windbreaks, screen noise and enhance visual privacy where desirable.
C24.	For residential development in the R3 Medium Density zone, at least 50% of the front setback area is required to be deep soil.

K20 Kings Bay (PRCUTS)

K20.19 Sustainability and Resilience

To create sustainable, resilient and affordable communities along the Corridor, the PRCUTS identifies that the following three key areas of intervention should be pursued:

- 1) High performance buildings;
- 2) Reduced and decoupled strategic parking; and
- 3) Urban resilience and infrastructure delivery.

Further details are provided in the Parramatta Road Corridor Sustainability Implementation Plan and should be considered when assessing proposals.

Objectives

- O1 To deliver world leading urban transformation of the precinct by exceeding current sustainability requirements.
- O2 To mitigate the impacts of climate change on key infrastructure and assets.

Controls

C1.	A residential flat building or a mixed use development (that contains dwellings) which complies with Table K20-1 is eligible for an amount of additional residential floor space (above that already permitted elsewhere under this Plan) equivalent to that which exceeds the floor space ratio as shown on the Floor Space Ratio Map or Incentive Floor Ratio Map (as applicable to that development) by up to 5%, subject to the consent authority being satisfied that this additional residential floor space does not adversely impact on neighbouring and adjoining land in terms of visual bulk and overshadowing.
C2.	Future development should demonstrate consistency with the smart parking strategies and design principles outlined in <i>Section K20.20 Access and Parking</i> .

C3.	Public domain and buildings shall be designed to reduce localised heat created by the urban heat island affect by: <ol style="list-style-type: none"> a) maximising canopy cover along all streets, particularly along Parramatta Road, Queens Road, Spencer Street and Spencer Street extension; b) developments within the R3 zone are to provide at least 25% canopy cover across the site, identified on the landscape plan and measured by the extent of canopy at maturity; c) maximising the use of vegetation on buildings, including above ground parking facilities; d) encouraging vegetation, green roofs, green walls and materials with a high solar reflectance index on at least 50% of the surfaces of all buildings with western and northern building facades; and e) complying with landscape DCP guidelines within <i>Section K20.18 Landscape Design</i>.
C4.	Flow rates from the site should not be more than pre-development site discharge.
C5.	Stormwater run-off quality should seek to reduce annual loads of: <ol style="list-style-type: none"> a) total Nitrogen by 45%; b) total Phosphorus by 65%; and c) total suspended solids by 85%.
C6.	All new streets should implement water sensitive urban design treatments at the point source across all catchment areas.
C7.	Development consent must not be granted unless the building, or part of a building, contains both potable water pipes and recycled water pipes for the purposes of all available internal and external water uses.

Table K20-1 Energy and Water Targets by Use

Use	Energy Target	Water Target
Residential		
<14 storeys	BASIX Energy 50	BASIX Water 50
15 - 29 storeys	BASIX Energy 40	
30 - 39 storeys	BASIX Energy 35	
40+ storeys	BASIX Energy 30	
Commercial and Retail Development < 10,000m² GFA*		
Smaller scale non-residential development is governed by the National Construction Code, and should demonstrate consistency with relevant requirements of the Code.		
Commercial Development ≥ 10,000m² GFA*		
Base building and/or individual tenancies	NABERS 5-star	NABERS Water 4-star NABERS Water 5-star should be pursued where recycled water is available
Shopping Centre Development*		
Base building only	NABERS 5-star	NABERS Water 4-star NABERS Water 5-star should be pursued where recycled water is available

*Source: PRCUTS Planning and Design Guidelines, Urban Growth, Nov 2016



Maximising canopy cover significantly improves the micro-climate and supports active transport choices.



All new streets and pedestrian/ cycle links should implement water sensitive urban design treatments (WSUD).

K20 Kings Bay (PRCUTS)

K20.20 Access and Parking

The location of car parking has a significant impact on pedestrian safety and the quality of the public domain. Vehicle access points need to be integrated carefully to avoid potential conflicts with pedestrian movement and the desired streetscape character.

Objectives

- O1 To transition to lower car ownership and support the uptake of walking, cycling and public transport use.
- O2 To minimise the visual impact of car parking areas and vehicle access points.
- O3 To minimise conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian desire lines such as Spencer Street.

Parking and access design

Controls

C1.	Vehicular access points minimise visual intrusion and disruption of the streetscape, emphasise the pedestrian experience and maximise pedestrian safety.
C2.	The width and height of vehicular entries is kept to a minimum. Roller doors or gates should be integrated with the architectural design of the development. Vehicular entry/exit points are to be recessed by at least 0.5m behind the building line.
C3.	The public footpath treatment is to be continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.
C4.	Vehicle access points are not permitted along active street frontages that are identified as Vibrant and are to be minimized on Friendly and Mixed Facades. Where rear or side access is not possible, development without parking will be considered.

C5.	At grade parking is not permissible within any of the setback zones and, only if unavoidable due to proximity to the Metro tunnel, is to be sleeved with active uses to shield the car parking from the street.
C6.	Parking is to be designed to be 'adaptable' and able to be converted to other uses in the future. Underground car parking and basement spaces are to have a minimum floor to floor height of 3.7m to be able to be converted to commercial uses. At ground level parking areas are to have a minimum floor to floor height of 4.4m to be able to be converted to retail uses. Above ground parking areas are to have a minimum floor to floor height of 3.7m (second floor level) to be able to be converted to commercial uses, or 3.1m-3.7m (above second floor level) to be able to be converted to commercial or residential uses.
C7.	Where unavoidable due to topography, basement parking can only protrude above natural ground level by a maximum of 0.4m in R4 zone and 1.0m in R3 zone. Car parking cannot protrude into the front setback area within an R3 zone.
C8.	Parking is not permitted to be visible from streets and open spaces. Access to parking via a driveway, lane or basement carpark entry is permitted if one access point services a minimum of 5 dwellings. Front garages, carports and individual driveways are not permitted.
C9.	Development sites are encouraged to provide below-ground car parking that is interconnected to and shared with, or is able to be interconnected in the future to, the below-ground car parking on adjoining sites and developments. In order to facilitate rationalisation of vehicle entry points and to increase future planning flexibility.

Car parking

Controls	
C10.	Off street parking is to be provided in accordance with the maximum rates identified in (residential uses) and (non-residential uses).
C11.	On-street parking to be integrated to the streetscape and parallel to the kerb.
C12.	Parking is to be listed on a separate title (unbundled) from the development.

Shared parking

Controls	
C13.	Shared parking rates should be provided in accordance with the occupancy rates provided in Table K20-2 . Shared parking is parking shared by more than one user, which allows parking facilities to be used more efficiently.
C14.	Parking requirements for non-residential uses may be shared and potentially reduced where it can be determined that the peak parking requirements occur at different times (either daily or seasonally). Parking rates for shared parking shall be calculated by applying the occupancy rates in Table K20-2 to the maximum parking requirements for a proposed use.

Table K20-2 Shared Car Parking Rates

Building Use	Mon - Fri 8am - 5pm	Mon - Fri 6pm - 12am	Mon - Fri 12am - 6am	Weekend 8am - 5pm	Weekend 6pm - 12am	Weekend 12am - 6am
Industrial	100%	20%	5%	5%	5%	5%
Commercial	90%	80%	5%	100%	70%	5%
Hotel	70%	100%	100%	70%	100%	100%
Restaurant	70%	100%	10%	70%	100%	20%
Theatre	40%	80%	10%	80%	100%	10%
Entertainment	40%	100%	10%	80%	100%	50%
Conference	100%	100%	5%	100%	100%	5%
Institutional	100%	20%	5%	10%	10%	5%
Church	10%	5%	5%	100%	50%	5%

Source: PRCUTS Planning and Design Guidelines p45, Urban Growth, Nov 2016

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Car share and ride share

Controls	
C15.	On-site parking can be reduced at a rate of 5 parking spaces per 1 car share space where an active car-sharing program is made available to residents and/ or employees and where ride share or other organised car pooling initiatives are available on site.
C16.	Additional car share should be provided at a rate of 1 space per 20 dwellings without parking and 1 space per 100 dwellings with parking.
C17.	Car share will be located in publicly accessible sites, either on-street, in public parking stations or, if provided within a building it should be accessible to all car share members.
C18.	The following car share targets have been established for the precinct: <ul style="list-style-type: none"> • 10% - 15% of residents by 2031 • 15% of residents by 2050.

Parking rates

Controls	
C19.	For parking rates, refer to clause 8.11 of the Canada Bay LEP 2013 and Part B of this DCP.

Bicycle parking

Controls	
C20.	For bicycle parking controls, Refer to <i>DCP Part B - General Controls, B3.6 Bicycle parking and storage facilities</i> ; and <i>B3.7 End of trip facilities</i> .

Electric vehicles

Controls	
C21.	Refer to <i>DCP Part B - General Controls, B3.8 Electric Vehicles</i>

Common loading docks and service vehicle parking

Controls	
C22.	Refer to <i>DCP Part B - General Controls, B3.9 Common loading docks and service vehicle parking</i> .

Freight and service access

Controls	
C23.	Freight and service vehicle rates should be provided in accordance with Table K20-3 .
C24.	Vehicle access including for freight and service vehicles is not permissible off Parramatta Road

C25.	Commercial and medium/ high density residential developments are to have common loading docks and facilities for freight and service vehicles, including trades, home deliveries etc.
C26.	Loading docks for freight and service vehicles are to be located off-street and underground.
C27.	Loading docks and facilities are to be located and designed to minimise the impact of freight and service vehicle movements on the area.

Table K20-3 Freight and service vehicle rates

Land Use	Space required
Residential development	1 space per 50 apartments for first 200 apartments plus 1 space per 100 apartments thereafter
Commercial offices	1 space per 4,000m ² GFA for first 20,000m ² GFA and a space per 8,000m ² GFA thereafter
Retail	1 space per 500m ² for first 2,000m ² and 1 space per 1,000m ² thereafter (50% of spaces for trucks)

K20 Kings Bay (PRCUTS)

K20.21 Housing Diversity

A mix of dwelling types in the precinct will provide greater housing choice and support equitable housing access by offering a diversity of dwelling types, amount of floor space, number of bedrooms and level of accessibility and affordability.

Objectives

- O1 To provide a diverse range of dwelling types and sizes to cater for the needs of the existing and future residents over time, and encourage social diversity.
- O2 To ensure that low to moderate income households can afford to live in the precinct by increasing the stock of appropriate affordable housing.

Controls

C1.	For mix of residential flat buildings and residential components of mixed use developments, refer to LEP clause - 6.11 <i>Mix of dwelling sizes in residential flat buildings and mixed use development</i>
C2.	Regarding the amount of adaptable (accessible) housing to be provided refer to requirements in <i>City of Canada Bay DCP Part B1.1 Adaptable Housing</i> .
C3.	Contributions towards Affordable Housing is to be provided according to Council's Affordable Housing Contributions Scheme.
C4.	Affordable housing is to be consistent with the requirements of the <i>City of Canada Bay Affordable Housing Program and Policy</i> .

K20.22 Residential Uses not covered by the Apartment Design Guide

The NSW Apartment Design Guide (ADG) applies to buildings that are three or more storeys high and that comprise at least four dwellings. For other residential development types, such as 2-3 storey terraces, low rise up-over or walk-up apartments, multiplexes, urban courtyard houses and the like, the following controls apply.

Objective

- O1 To ensure design quality, performance of and amenity created by new residential development is of a high standard and consistent across the precinct.

Controls

C1.	The maximum building depth is 18m unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. through the use of a courtyard design.
C2.	The minimum private open space of a ground floor dwelling is calculated by the number of bedrooms x 4m ² .
C3.	Single aspect dwellings, if unavoidable, are only permitted if they have a northerly or easterly aspect.
C4.	Living rooms and private open spaces of at least 70% of apartments receive a minimum of 2 hours direct sunlight between 9 am and 3 pm in mid winter (21 June).
C5.	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² .
C6.	Building separation is as per the <i>Apartment Design Guide, Section 3F Visual Privacy</i> .

C7.

Private open space (POS) is designed to maximise useability, privacy, outlook and solar access.

For dwellings on the ground floor including townhouses and terraces, the minimum private open space is as follows:

Dwelling type	Min. POS
Studio/ 1 bedroom	20m ²
2 bedroom	28m ²
3+ bedroom	35m ²

The minimum dimension is 4.0m x 4.0m.

For dwellings on upper levels, the minimum private open space (such as decks and balconies) is as follows:

Dwelling type	Min. POS
Studio/ 1 bedroom	10m ²
2 bedroom	14m ²
3+ bedroom	18m ²

The minimum dimension is 2.0m x 3.0m.

K21 Burwood Concord (PRCUTS)

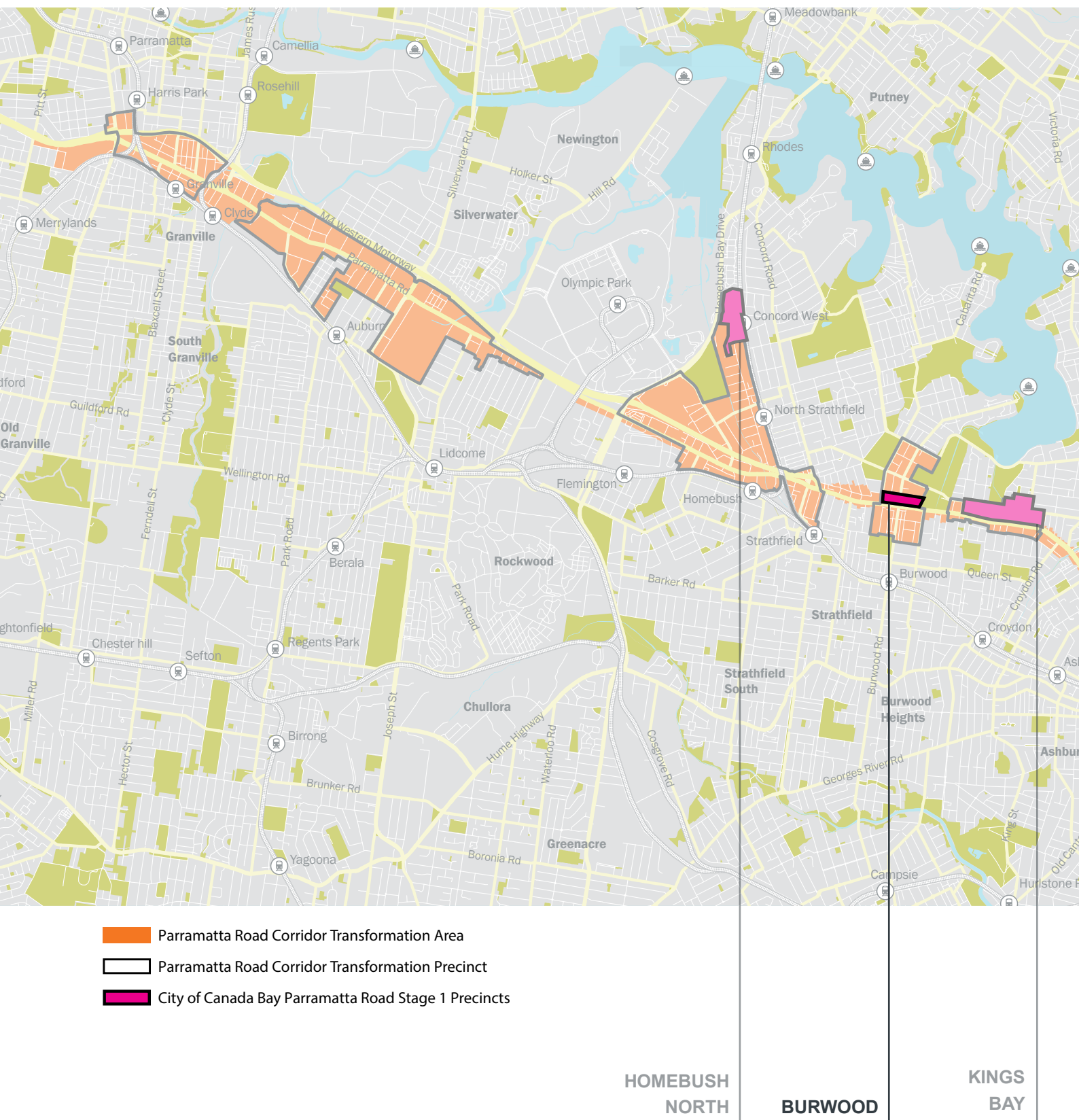


Figure K21-1 PRCUTS Parramatta Road Corridor (Source: PRCUTS, 2016)

Burwood Precinct

The Burwood Precinct is located to the north of the Burwood Strategic Centre. The part of this precinct controlled by this DCP is located between Parramatta Road and Burton Street and stretches from Broughton Street to the west to Loftus Street to the east. The site of the proposed Burwood North Metro Station is located within this precinct, on the eastern side of Burwood Road.

A masterplan for the precinct was developed to consolidate information presented in the PRCUTS and other studies and plans to guide the future built form and urban environment and to inform amendments to the Canada Bay LEP 2013, DCP and contributions plan.

K21.1 Parramatta Road Corridor Urban Transformation Strategy (PRCUTS)

This DCP has been prepared to support the implementation of the NSW Government Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) published in November 2016.

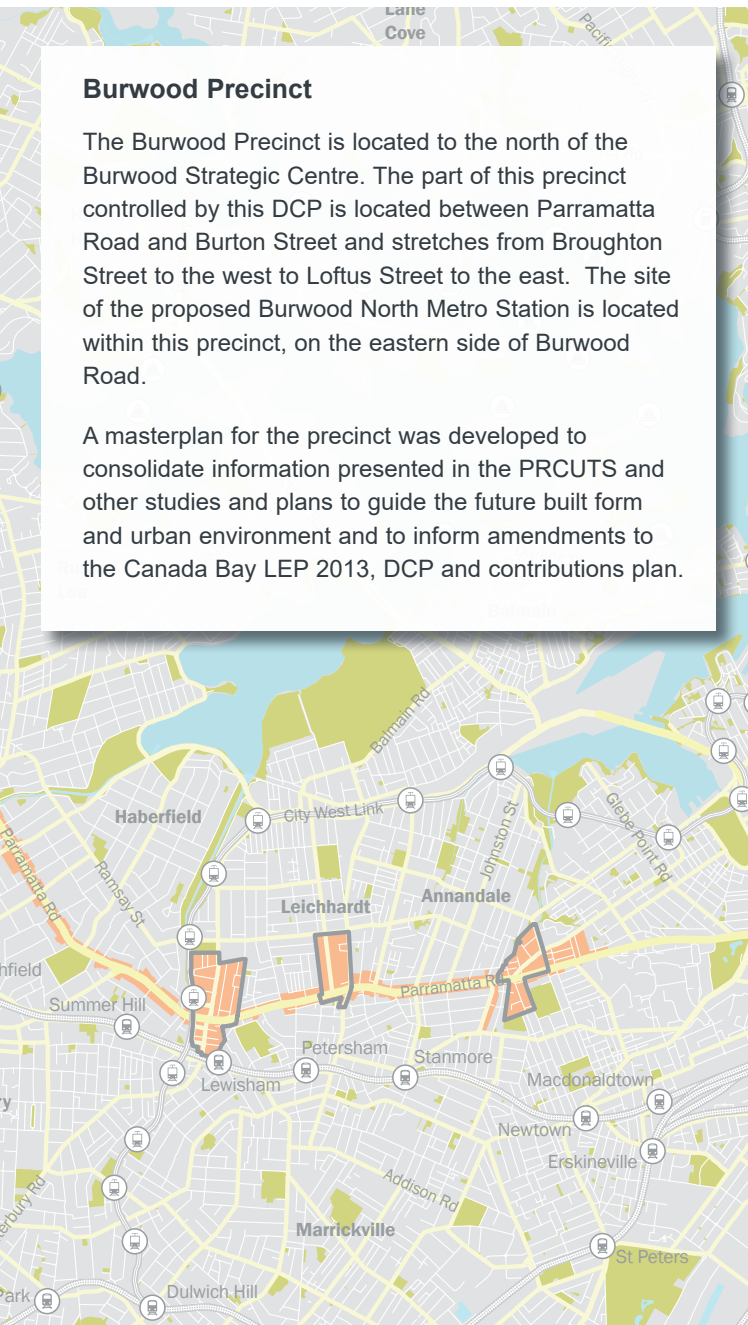
PRCUTS aims to renew Parramatta Road and adjacent communities through investments in homes, jobs, transport, open spaces and public amenity. It presents significant urban renewal opportunities for land within defined development precincts.

The DCP has been prepared to deliver the desired future character envisaged in PRCUTS, with refinements to achieve better urban design and community outcomes.

Two development pathways are available:

- 1) Land is developed to the standards identified on the Floor Space Ratio and Height of Building maps.
- 2) Where development achieves the minimum lot size and/or identified community infrastructure is delivered, the land may be developed to the standards identified on the Community Infrastructure Floor Space Ratio and Height of Building Maps.

The provisions in this DCP describe the planning controls permitted under Option 2.



K21 Burwood Concord (PRCUTS)



Figure K21-4 Aerial photo (source: nearmap.com)

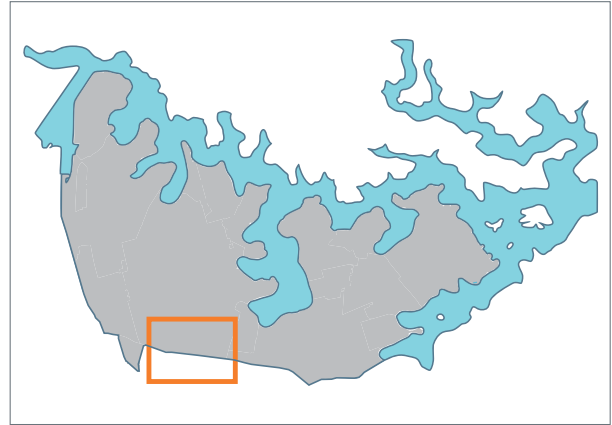


Figure K21-2 Location within LGA



Figure K21-3 Land to which this DCP applies

K21.2 Existing Character

The Burwood Precinct has distinct character zones located around the central spine of Burwood Road. Along Burwood Road, a mix of lot sizes, building styles and heights accommodate a range of residential and commercial uses. New developments along Burwood Road north currently have a poor interface with the public domain. Parramatta Road is dominated by large floor-plate buildings with generous setbacks that accommodate car sales and service centres with a few taller apartment buildings. Around the precinct residential development is either low density detached houses or low rise apartments. There is little to transition between the two, creating a strong dichotomy.

A number of existing heritage items can be found around the precinct although only one (a dwelling) is located within the precinct. There are a few schools and large open green spaces in close proximity to the precinct. There is little diversity in the public domain, which is dominated by footpaths of varying quality and widths. There are few places to linger. Burton Street is wide with small street trees. Parramatta Road, Burwood Road and Broughton Street generally lack street trees. A series of laneways within the precinct are underutilised, but provide a framework for increased connectivity.

Strengths and opportunities

- large blocks in a grid like street pattern which are generally unfragmented and limited strata titled properties along Parramatta Road;
- excellent access to the proposed Metro station on Burwood Road near Parramatta Road
- leveraging off potential traffic calming along Parramatta Road following the completion of WestConnex;
- close proximity to high amenity open space and recreation facilities and opportunity to create smaller local squares and open spaces;
- potential to improve linkages for active transport;
- creating a series of new laneways and mid block links within the existing road network to increase permeability and accessibility of sites in long blocks;
- improving active transport connections to regional recreation and open space facilities; and
- reducing car dependency by lowering parking rates.

Challenges and constraints

- limited north-south connections across Parramatta Road, particularly for pedestrians and cyclists;
- adjoining low density neighbourhoods, heritage items and sensitive uses which require appropriate setbacks and transitions;
- limited community facilities;
- reliance on a small number of key roads to accommodate interchange and all modes of transport; and
- regional open space that is difficult to access.

K21.3 Desired Future Character

"Burwood Precinct will be a commercial gateway to Burwood Town Centre based around the enlivened spine of Burwood Road building upon existing amenity for new residents."

A focus lies on an improved Burwood Road as an important north-south spine connecting to Burwood Town Centre to the south of the precinct. Both Burwood and Parramatta Roads will be marked by taller residential and mixed use buildings and active frontages with shops and commercial uses. Public transport options along Parramatta Road will improve connections for people working and living to the north of the precinct.

Beyond these roads residential development will be sensitive to existing heritage, lower-scaled housing, existing and new open space areas and schools such as St. Marys to the west of the precinct. Trees will be planted along the 'green edge' interface of Parramatta Road. An improved network of footpaths, cycle routes and through-site links will make it easier to reach destinations by active transport. New public open spaces along Burton Street support the successful transformation of the precinct.

K21 Burwood Concord (PRCUTS)

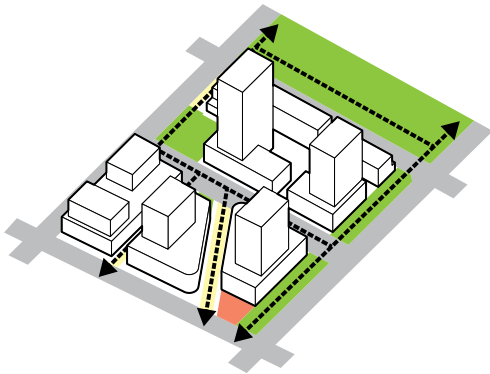


Figure K21-5 Artist impression of indicative future character along Burton Street, Burwood



K21 Burwood Concord (PRCUTS)

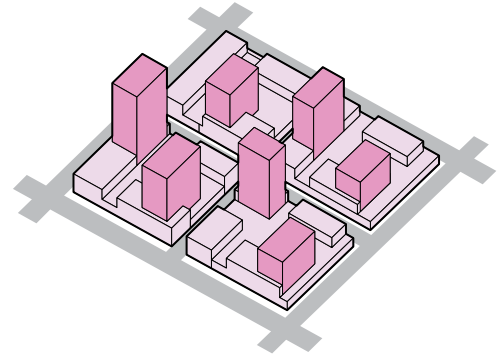
K21.4 Urban Design Principles



Create an active and permeable public realm

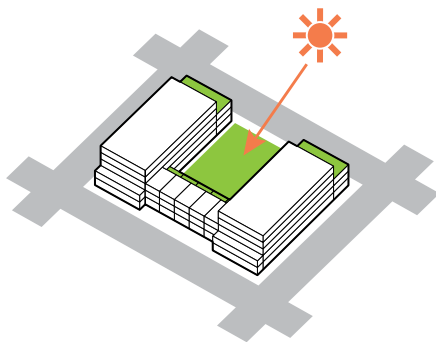
Expand open space network and provide easy access and connection throughout the public realm.

Promote active transport such as walking and cycling.



Define a building height strategy

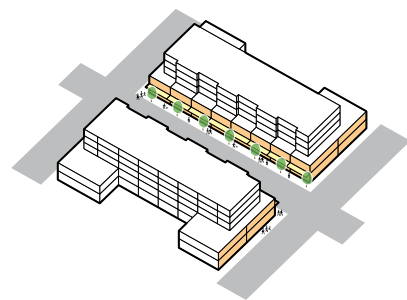
Create a dynamic skyline by spreading higher built form.



Maximise solar access and amenity

Ensure all public open spaces have adequate solar access.

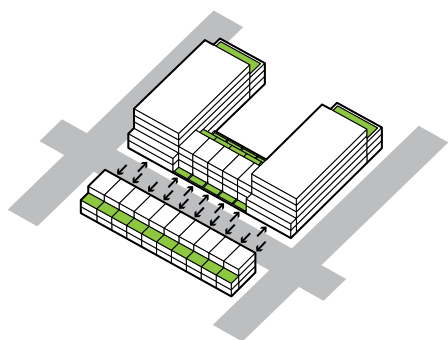
Putting height towards the southern boundaries to ensure solar access penetrates the site and minimises overshadowing.



Promote fine grain and active frontages

Reinforce Burwood Road as a Place for People by appropriate frontage treatment, including fine grain facade and activation.

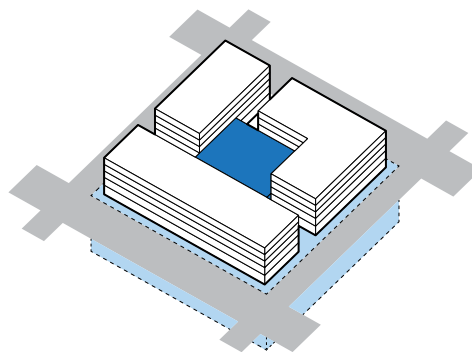
PRCUTS definition: Places for People are “streets with high demand for activities and lower levels of vehicle movement. They create places people enjoy, attract visitors, and are places communities value”.



Promote passive surveillance through ground floor modulation

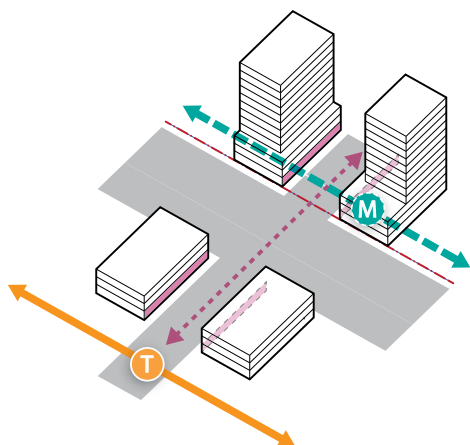
Enhance passive surveillance along residential streets by providing:

- entrances to ground floor units that are accessible from the street
- planted landscape buffers & low-height fencing that are designed to maximise visual connectivity to living areas.



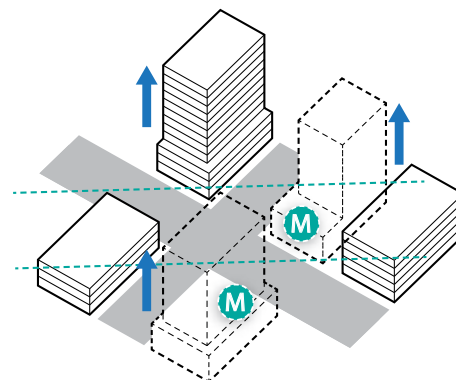
Minimise the impacts of parking

Parking should be put underground as a priority. Where underground option is not possible, due to proximity to the Metro West rail tunnel and limitations on excavation, parking will not be required. If parking is required to be provided above ground, parking should be sleeved with active uses or considerable facade treatment to avoid exposing the structure directly to the street.



Enhance retail connection to the train station on Burwood Road

Enhance the north-south retail link on Burwood Road and form the Northern gateway to Burwood Town Centre.



Integrate future Metro station

Metro West is a catalyst for renewal. Development is likely to occur around and above the new stations, including new commercial development along Parramatta Road and residential towers to the north and throughout the precinct.

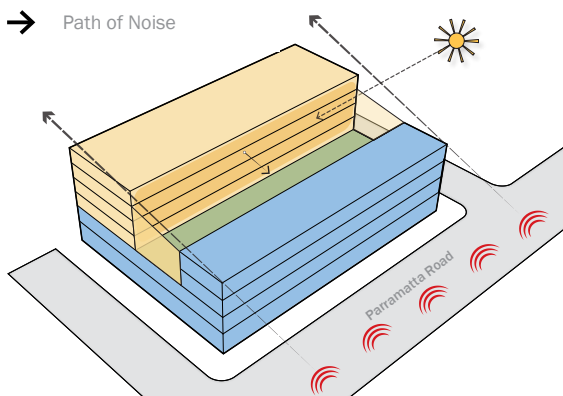
New development will take into consideration the metro tunnel going underground and potential entry plaza that will be provided within the precinct.

K21 Burwood Concord (PRCUTS)

K21.5 Design Approach

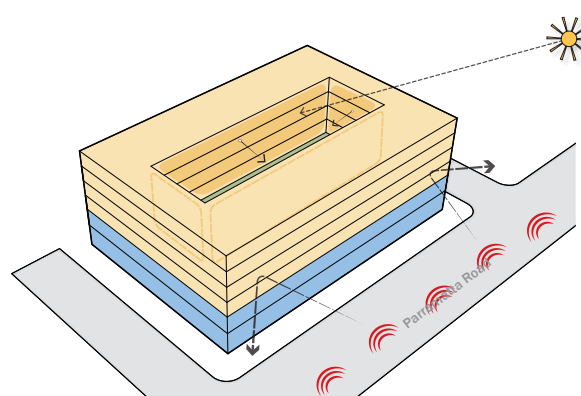
- Residential
- Primary Orientation
- Non residential
- Communal open Space

- Source of Noise
- Path of Noise



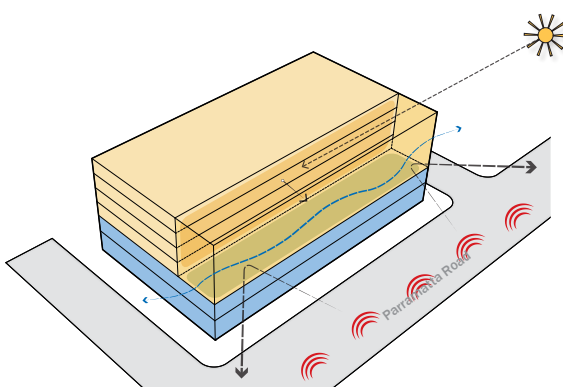
Design Approach 1: Shield

Conventional residential building to the rear of the site away from noise; non-residential building to road edge at a height to create acoustic shadow for residential; fixed solid glazed element encloses courtyard.



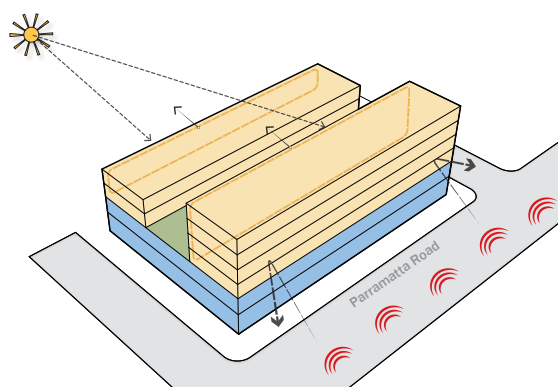
Design Approach 2: Barrier (Courtyard)

All openings required for ventilation open from a protected courtyard; courtyard dimension defined by separation requirements as outlined in the Apartment Design Guide.



Design Approach 3: Barrier (Screen)

A fixed solid glazed edge to provide a protected courtyard space for ventilation; the glazed courtyard is open to the sky to allow for natural ventilation.

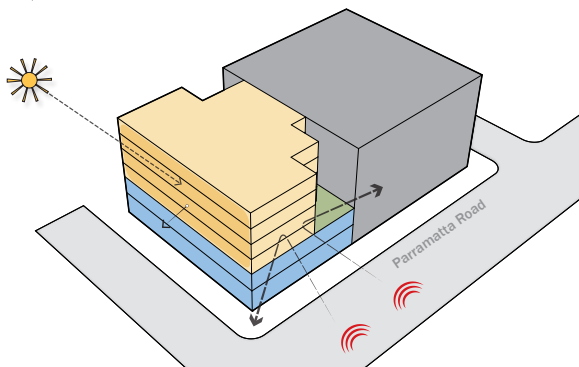


Design Approach 4: Facing away

Habitable rooms to be orientated away from the source of noise; locate secondary uses such as cores and walkways facing the source of noise.

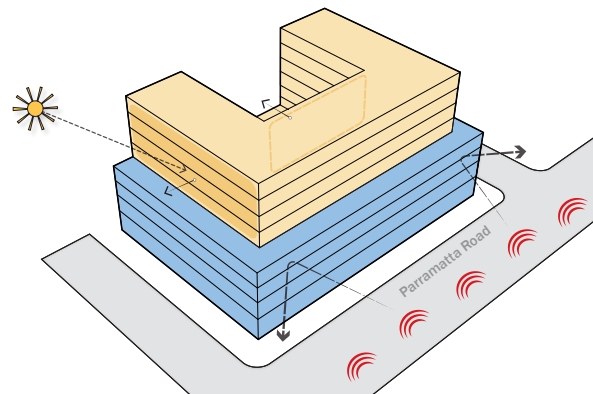
Figure K21-6 Design approaches to minimise noise and air quality impacts (Source: PRCUTS Guidelines 2016)

- Residential
- Primary Orientation
- Non residential
- Communal open Space
- Source of Noise
- Path of Noise



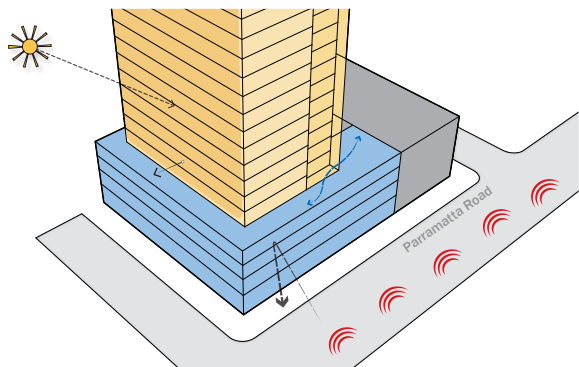
Design Approach 5: Corner

Turning away primary orientation of living space from noise source; articulate facade to create an acoustic shadow away from the source of the noise, orientate openings within the acoustic shadow.



Design Approach 6: Upper Level Setbacks

All openings required for ventilation open from a protected courtyard; turning away from noise source.



Design Approach 7: Above Podium Towers

Turning away habitable spaces from the noise source; utilised fixed solid glazed edge to provide an enclosed space for ventilation.

K21 Burwood Concord (PRCUTS)

K21.6 Block Configuration

The scale, height, arrangement and orientation of new built form defines the proportion and level of enclosure of streets and public spaces. Good site planning and block configuration maximises the level of sun access and visual and acoustic privacy for all, including neighbouring properties.

Together with primary and upper level setbacks (see *Section K21.9 Street Wall Heights and Setbacks*), the following controls set the basic building footprints and envelopes for new development in the Burwood Parramatta Road Precinct.

Objectives

- O1 To arrange building forms including heights and massing that reinforce the future desired character of the area and protect valued character attributes.
- O2 To facilitate daylight access and ventilation to streets, public places and neighbouring properties, including properties on the south side of Parramatta Road.
- O3 To maximise visual and acoustic privacy.
- O4 To consider future development opportunities on adjoining sites and avoid isolated sites.
- O5 To maximise permeable ground surfaces to allow rainwater to penetrate the soil.

Controls

- | | |
|-----|--|
| C1. | New development is to consider future development on adjoining sites by providing sufficient separation and setbacks, and avoid creating isolated sites.

New development is to follow the desired Site Amalgamation Plan (Figure K21-7). |
| C2. | The delivery of identified amalgamation and community infrastructure is a prerequisite for the heights and densities identified in the LEP. If this is achieved new development is to conform to the maximum number of storeys as shown in Figure K21-11 . Further controls regarding the permissible building envelope are contained in <i>Section K21.9 Street Wall Heights and Setbacks</i> and <i>Section K21.13 Massing and Articulation</i> . |

- | C3. | The maximum length of any building above 5 storeys is 60m. | | | | | | | | | | |
|-------------|---|-----|----------------|--------|------|------------|------|-----------|------|-------------|------|
| C4. | Residential towers above podium level shall have a maximum enclosed area of 750sqm (including circulation and excluding balconies) and a maximum total floor area of 875sqm (including and assuming 15% for balconies). | | | | | | | | | | |
| C5. | For commercial uses on all floors above the ground level, any wall with windows must be set back from the side and rear boundary by 3m. Any wall without windows is not required to be setback. | | | | | | | | | | |
| C6. | Built form is to be positioned for optimal access to daylight and direct sunlight for internal and external spaces, and for adjoining public and private land. | | | | | | | | | | |
| C7. | Buildings are adaptable to a variety of uses over time. The following minimum floor to floor heights apply: <table border="1"> <thead> <tr> <th>Use</th> <th>Minimum height</th> </tr> </thead> <tbody> <tr> <td>Retail</td> <td>4.4m</td> </tr> <tr> <td>Commercial</td> <td>3.7m</td> </tr> <tr> <td>Adaptable</td> <td>3.7m</td> </tr> <tr> <td>Residential</td> <td>3.1m</td> </tr> </tbody> </table> | Use | Minimum height | Retail | 4.4m | Commercial | 3.7m | Adaptable | 3.7m | Residential | 3.1m |
| Use | Minimum height | | | | | | | | | | |
| Retail | 4.4m | | | | | | | | | | |
| Commercial | 3.7m | | | | | | | | | | |
| Adaptable | 3.7m | | | | | | | | | | |
| Residential | 3.1m | | | | | | | | | | |
| C8. | The ground floor of all lots fronting Parramatta Road is to be a minimum of 4.4m in height to facilitate a wide variety of uses.

Development on the ground floor fronting Parramatta Road is to prioritise urban services and light industrial uses, consistent with Active Frontages.

The second floor of development fronting Parramatta Road in the B4 Mixed Use zone is also to have retail and/or commercial uses. | | | | | | | | | | |

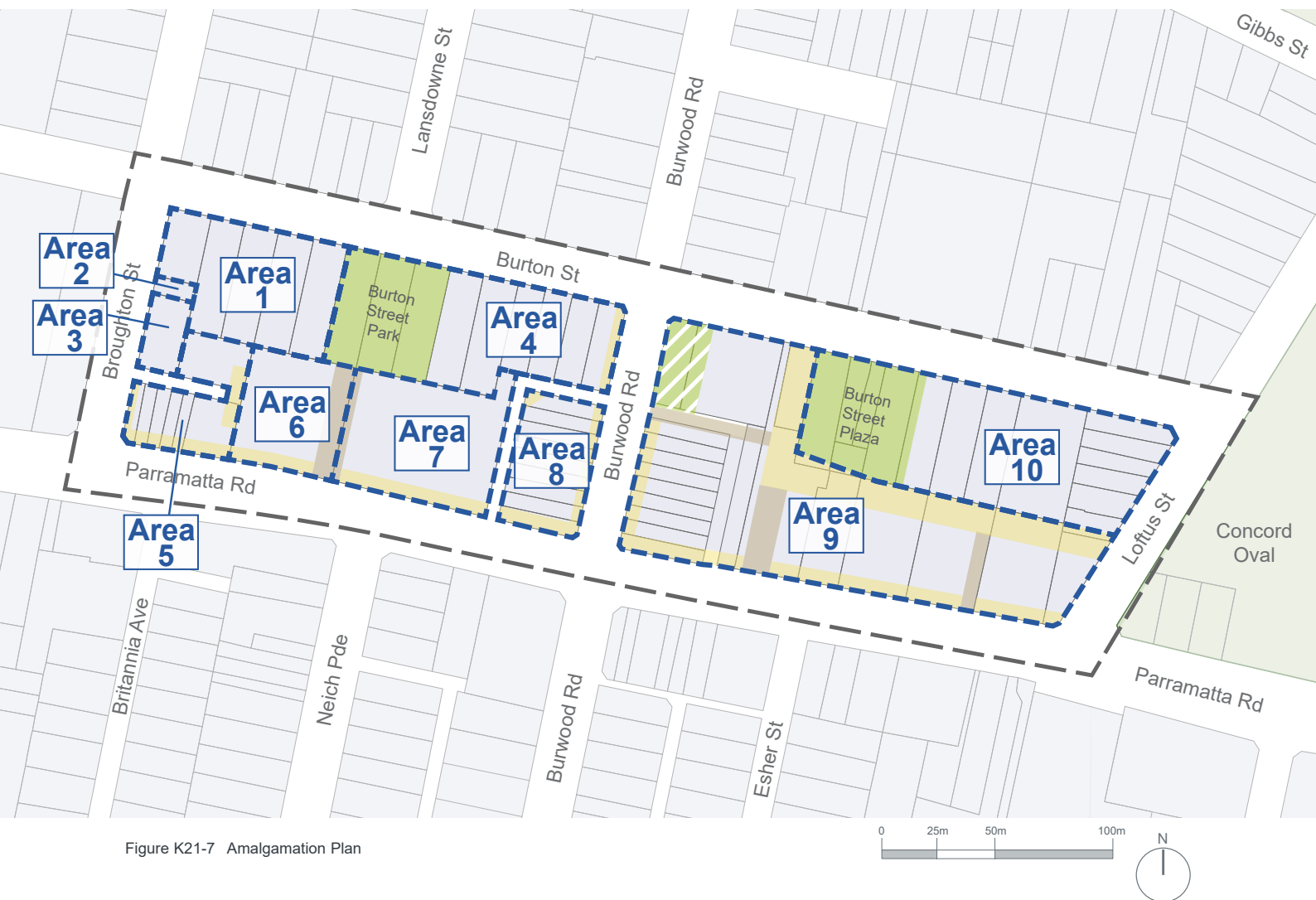


Figure K21-7 Amalgamation Plan

- Amalgamation boundary
- A1 Lot identification number
- Proposed public domain/ road corridor
- Proposed future open space
- Publicly accessible open space
- Existing open space
- Required through-site link
- Cadastre
- Precinct boundary

K21 Burwood Concord (PRCUTS)

K21.7 Access Network

A permeable urban structure is key to successful places. The provision of new links and open spaces is encouraged to build upon the existing access network and support the uptake of active and public transport and linking key destinations within and beyond the precinct.

Objectives

- O1 To build upon and further improve the fine grain access network to more effectively link to open spaces, public transport stops and Burwood Town Centre to the south.
- O2 To encourage travel behaviour change by discouraging car usage and supporting sustainable travel choices such as public and active transport.
- O3 To improve network permeability, in particular for pedestrians, by breaking up long blocks with new streets and quality pedestrian prioritised links.
- O4 To meet access requirements for future development and enable increased density in selected locations.



A more permeable urban structure and a focus on a high quality pedestrian environment will support walking and cycling.



Slow speed, shared spaces provide links that encourage pedestrian access across the precinct.

Controls

- | | |
|-----|---|
| C1. | The existing movement network is retained and new public open spaces and new north-south and east-west pedestrian links are provided as a minimum as identified in Figure K21-8 . See <i>Section K21.8 Public Domain Experience</i> for more detail. |
| C2. | New public open spaces are located as identified in Figure K21-8 . See <i>Section K21.8 Public Domain Experience</i> for more detail. |
| C3. | Wherever possible, long blocks are broken up with new high quality pedestrian prioritised links, particularly where new connections would facilitate access to public transport, open spaces and community facilities. |
| C4. | Size and location of footpaths, laneways, cycleways, planting and parks are to be provided according to Council's PRCUTS Public Domain Plan and PRCUTS Masterplan. |
| C5. | New roads, public domain widenings, parks and cycleways are required to be in public ownership where identified in the LEP. New roads and parks that are identified in the LEP to be publicly accessible but not in public ownership, may be delivered as a public access easement over private land. Future pedestrian links may be delivered as a public access easement over private land. Provision is to be in accordance with the LEP, PRCUTS Infrastructure Strategy and Council's specifications. |
| C6. | Pedestrian/ cycle links are to be naturally lit and ventilated, appropriately lit after hours, publicly accessible 24/7, and have clear sightlines from end to end. |
| C7. | All new pedestrian/ cycle links are to be defined by built form and quality edge treatments such as low semi-transparent fences and landscaping. |
| C8. | Bicycle facilities, such as parking, secure storage and end-of-trip facilities are to be easily accessible from the public domain and conveniently located near entrances and/or lifts of new development. |

K21.8 Public Domain Experience

Private development has a large influence on the local character and the support of the existing or future functioning of the public realm, for example by clearly addressing popular walking routes and providing good levels of surveillance. The scale of built form, its appearance and the design of private-public interfaces has a significant impact on how people experience a streetscape and the safety of a place.

Key elements apart from the built form that need to be considered include front setbacks, boundary treatments, vegetation and landscape design, vehicular access, visible activity at street level, and surveillance provided by doors, windows and balconies.

Objectives

- O1 To protect and improve the quality, accessibility and safety of the public domain across the precinct.
- O2 To support walking and cycling to key destinations and local schools.
- O3 To improve the interface to Parramatta Road and support increased activity levels, safety and comfort.
- O4 To increase tree canopy cover and provide for more greenery associated with the public domain.

Controls

- | | |
|-----|--|
| C1. | <p>New development that fronts onto streets identified as active frontages, including vibrant, friendly and mixed facades (see Figure K21-9) must:</p> <ul style="list-style-type: none"> a) minimise the number and width of vehicular driveways across the footpath; b) ensure building entries are clearly visible and pedestrian access to entries and lobbies is direct; c) pay particular attention to the 'human-scale' of lower levels and display a high degree of detailed design and articulation d) maximise the number of doors and windows on upper levels overlooking the street; and e) provide vehicular access off a rear laneway; driveways off Burwood Road and Parramatta Road are strictly prohibited. |
|-----|--|

- | | |
|-----|--|
| C2. | <p>New development that fronts onto Parramatta Road supports the upgraded strategic walking link ('green edge') along Parramatta Road between Broughton and Loftus Streets. Development is to:</p> <ul style="list-style-type: none"> a) set back as per Figure K21-8; b) apply coordinated urban and landscape design features that unify the linear green edge along Parramatta Road; and. c) prioritise urban services uses. |
| C3. | <p>Development fronting Burton Street is to maximise entry doors and windows overlooking the street, minimise vehicular entry points and pay particular attention to quality landscape and architectural detail along lower levels. For more controls see <i>Section K21.11 Transitions and Interfaces</i>.</p> |
| C4. | <p>Development on a corner site including corners of the two new open spaces along Burton Street must pay particular attention to overall design quality due to the location's high visibility and impact on the local character, i.e. well proportioned facades and quality material, finishes and plant species selection.</p> |
| C5. | <p>Development is to support the experience and safety of the two new public open spaces along Burton Street as identified in Figure K21-8. Development that faces the open space must:</p> <ul style="list-style-type: none"> a) maximise the number of doors and windows overlooking the open space to maximise surveillance and activation of the open space; b) pay particular attention to quality architectural detail at the lower levels; and c) ensure that at least 50% of each open space receives a minimum of 3h direct solar access in mid-winter (21 June) between 9am and 3pm. |
| C6. | <p>The maximum number of storeys may be exceeded where additional building height is permissible under the LEP, the minimum floor to floor heights can be achieved, and where it is demonstrated that the solar access requirements of the Apartment Design Guide will be satisfied for buildings on the southern side of Parramatta Road.</p> |
| C7. | <p>Any built structures within the area identified as 'Publicly accessible open space' at the corner of Burwood Road and Burton Street are to be a maximum of two storeys and should maintain sight-lines to the station entry.</p> |

K21 Burwood Concord (PRCUTS)



Figure K21-8 Public Domain Plan

- | | |
|--|----------------------------------|
| — Active frontage (various) | — Required through site link |
| — 1m landscaped setback | — Proposed future open space |
| — 3m landscaped setback | — Publicly accessible open space |
| — 4.5m landscaped setback | — Desired future open space |
| — 6m landscaped setback | — Existing open space |
| — 6m landscaped setback to heritage item | — Proposed future public domain |
| — 1 storey street wall | — Variable TfNSW road widening |
| — 2 storey street wall | — Proposed future road corridor |
| — 3 storey street wall | — Heritage item |
| — 6 storey street wall * | — Cadastre |
| | — Precinct boundary |

* a six storey street wall height is required even if additional building height, permissible under the LEP, can be achieved. Additional storeys must be setback a minimum of 3m from the street wall/ podium.

K21.9 Street Wall Heights and Setbacks

Street setback areas are an integral part of the streetscape and their treatment is fundamental to the amenity and character of a place. Combined with building height and road reserve width, they define the proportion, scale and visual enclosure of the street. Street setbacks not only establish the alignment of buildings along the street, they also provide for landscaping and deep soil areas, building entries and a transition between public and private space.

Street wall heights and upper level setbacks further define the proportion, scale and visual enclosure of the public domain and provide a level of consistency across the precinct. Upper level setbacks lessen the visual impact of taller development and help create a more unified, human-scale streetscape environment.

Objectives

- O1 To ensure setbacks contribute positively to the pedestrian environment at street level.
- O2 To provide a sense of enclosure to the street and contribute to a consistent built form scale across the precinct over time.
- O3 To enhance development and its relationship with adjoining sites and the public domain, particularly in regard to access to sunlight, outlook, view sharing, ventilation and privacy.



A lower street wall height helps to integrate taller development with lower residential scales

Controls

- C1. All development is to comply with the setbacks shown on **Figure K21-8**.
- C2. Where applicable, a portion of the setback area is to provide deep soil zones and tree planting. Refer to *Section K21.18 Landscape Design* for more detailed controls.
- C3. 'Undesirable' elements such as vents, electrical substations, or plant and equipment spaces are not permissible within the setback area and should be accommodated within the building.

Service cabinets are to be co-located internally, accessible from loading, waste or parking areas where possible to avoid impact on the public realm.
- C4. Upper level setbacks are required towards all public domain interfaces as identified in **Figure K21-11**.
- C5. The following street wall heights apply:

Location	Maximum street wall height
Parramatta Road	1, 3 & 6 storeys
Burwood Road	1, 2 & 6 storeys
Burton Street	2 storeys
Loftus Street	2 & 6 storeys
Broughton Street	2 & 3 storeys
Laneways	nil

See **Figure K21-8**.

K21 Burwood Concord (PRCUTS)

K21.10 Active Frontages

The quality and attractiveness of buildings at the streetscape level plays an important role in the attractiveness and vibrancy of the street. Active streetscapes have frequent doors, many windows with transparent glass and narrow frontages providing a vertical rhythm along the street with few blank walls.

Successful buildings make a positive contribution to the streets and public spaces around them. They visually activate the street and encourage people to use the street.

It is important to focus on active frontages in commercial and mixed use zones as these are areas where activity and vibrancy is critical to the success of the centre. Ensuring streets and open spaces are overlooked can increase the sense of safety, especially at night.

Objectives

- O1 To create lively and attractive streetscapes that are safe and attractive.
- O2 To support walking in the precinct along streets and within public open spaces.
- O3 To provide attractive streets and public spaces that encourage activity and provide opportunities for passive surveillance.
- O4 To ensure that the ground level of buildings in mixed use areas are well designed and able to attract a variety of uses that will activate the streetscapes.

Controls

- | | |
|-----|--|
| C1. | Active frontages are to be provided as identified in Figure K21-9 . For more controls see <i>Section K21.15 Safety and Accessibility</i> .

Three different types of active frontage have been identified. The type of active frontage desired is dependent on the location and the intended character of the street. |
| C2. | A maximum of 70% of the ground floor facade is to be glazing and balanced with solid vertical elements creating a rhythm along the street. |

C3.

Vibrant Facades

- a) Maximise the number of units along the street. Provide small (narrow) units with a minimum of 15 front doors per 100m of facade length.
- b) Cater for a wide variety of uses such as shops, cafes, restaurants, bars, fruit/ vegetable markets, community uses and live-work units.
- c) Provide a high degree of visual richness in facade details and architectural expression with a focus on vertical facade articulation. Provide 'ins and outs' (recesses and projections) to create shadows and interest.
- d) Vehicle access and servicing zones are not permitted along a Vibrant Façade.
- e) Blank facades are not permissible. Passive facades are strongly discouraged and are only permissible where alternatives are not available.
- f) Tenancies are to be a minimum of 10m deep.

C4.

Friendly Facades

- a) Maximise the number of units along the street. Provide relatively small (narrow) units with a minimum of 10 front doors per 100m facade length
- b) Cater for some variety of uses such as shops and live-work units including residential lobbies.
- c) Blank facades and passive facades are strongly discouraged
- d) Provide a degree of visual richness in facade details and architectural expression.
- e) Minimise the number and width of vehicular driveways across the footpath with limited vehicle access and servicing permitted. Openings, when permitted are to be narrow and recessed.
- f) Tenancies are to be a minimum of 10m deep.



Figure K21-9 Future Active Frontages

C5.

Mixed Facades

- Maximise the number of units along the street. Where possible provide small (narrow) units with a minimum of 6 front doors per 100m facade length
- Blank facades and passive facades are discouraged. Any blank façade that is more than 10% of the façade or more than 10sqm (at street level) is to have visual interest i.e. architectural treatment, detailing, art or greenery/ green walls
- Provide a degree of visual richness in facade details and architectural expression.
- Minimise the number and width of vehicular driveways across the footpath.
- Buildings fronting Parramatta Road are to have vehicle access and servicing via shared underground areas accessed from side streets where possible.
- Tenancies are to be a minimum of 10m deep.



Breaking the facade into smaller elements helps create variation and interest

K21 Burwood Concord (PRCUTS)

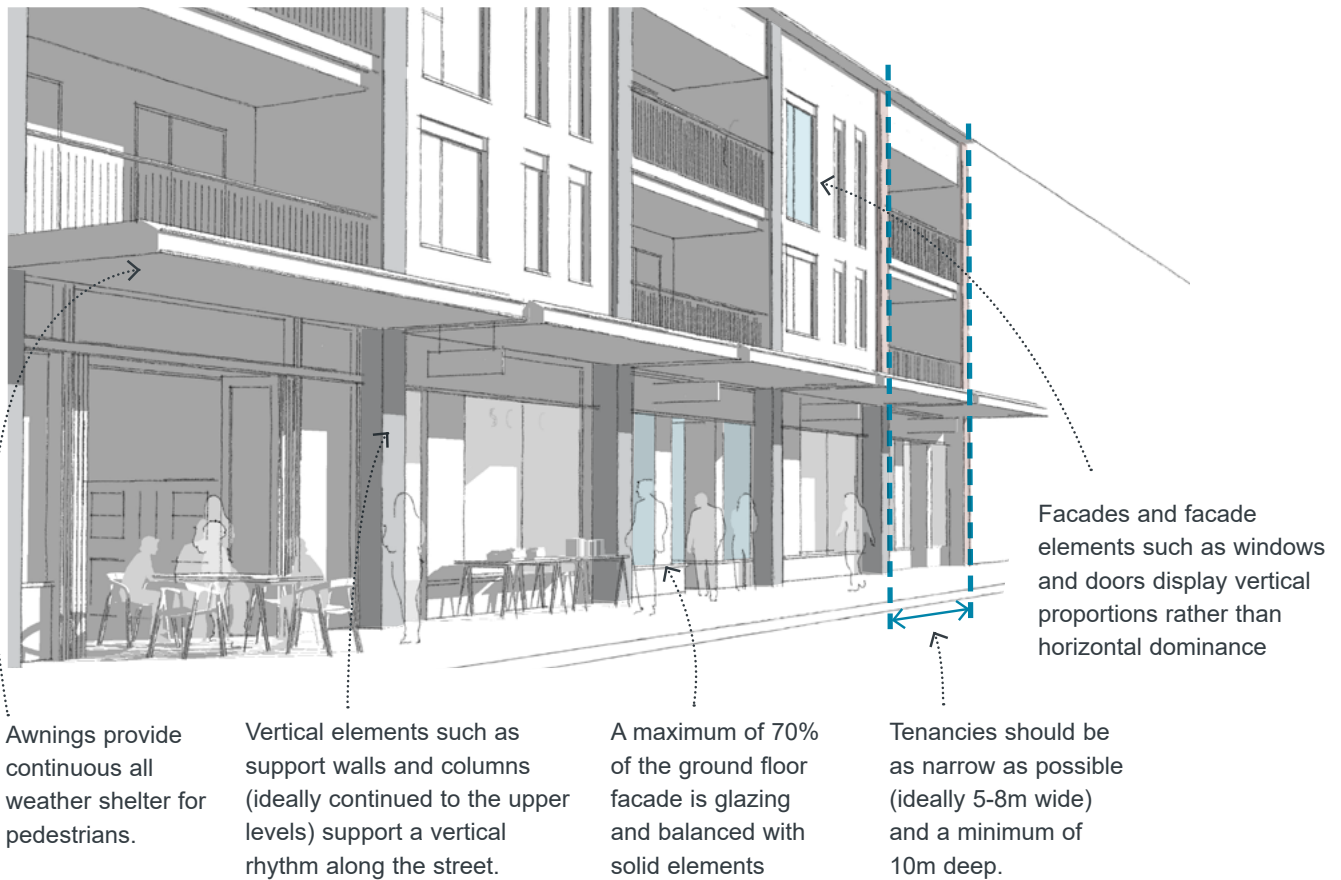


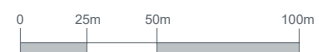
Figure K21-10 Active Frontage Design Guidance



Stall risers, richness of material choices and operable glazing contribute to high quality street interfaces



Figure K21-11 Building Envelopes Plan



- 1 storey max. building height
- 2 storey max. building height
- 3 storey max. building height
- 4 storey max. building height
- 5 storey max. building height
- 6 storey max. building height *
- 10 storey max. building height
- 11 storey max. building height
- 12 storey max. building height
- 13 storey max. building height
- 16 storeys max. building height
- 17 storey max. building height
- 20 storey max. building height
- 24 storey max. building height

- 24 Max. number of storeys
- Upper level setback
- Upper level setback distance from podium edge
- Desired amalgamation boundary
- Proposed future open space
- Publicly accessible open space
- Existing open space
- Heritage item
- Cadastre
- Precinct boundary

* the maximum number of storeys may be exceeded where additional building height is permissible under the LEP, the minimum floor to floor heights can be achieved, and where it is demonstrated that the solar access requirements of the Apartment Design Guide will be achieved.

K21 Burwood Concord (PRCUTS)

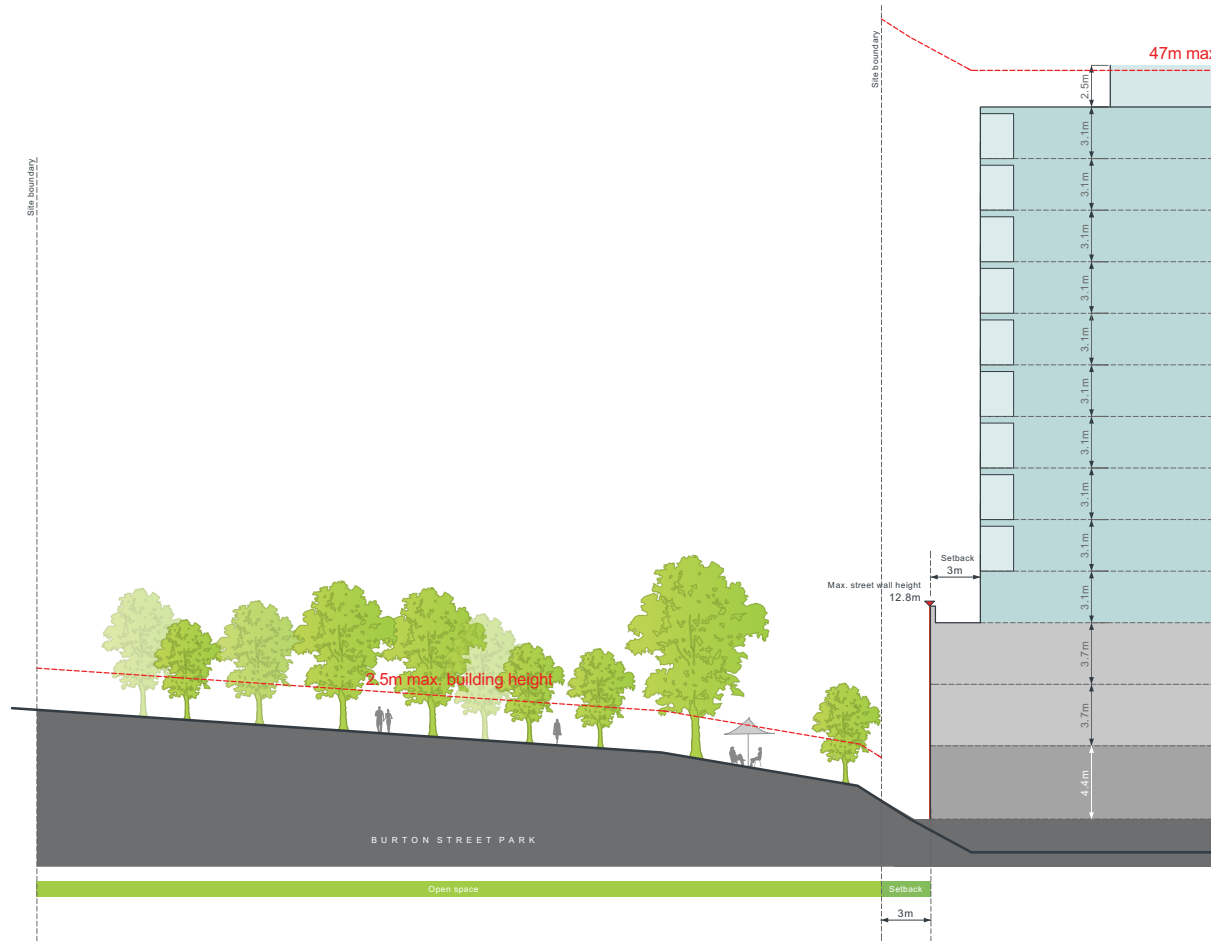
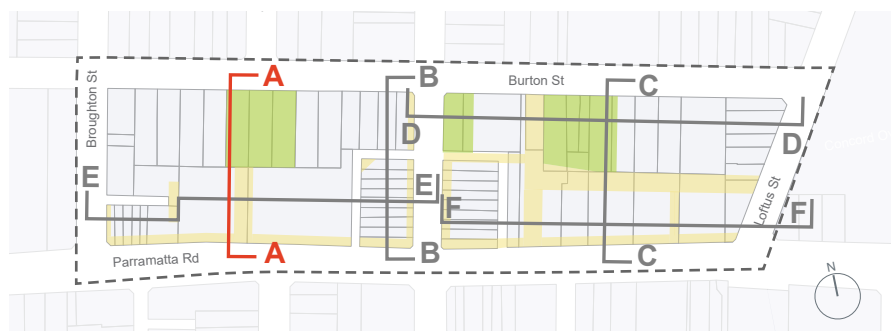
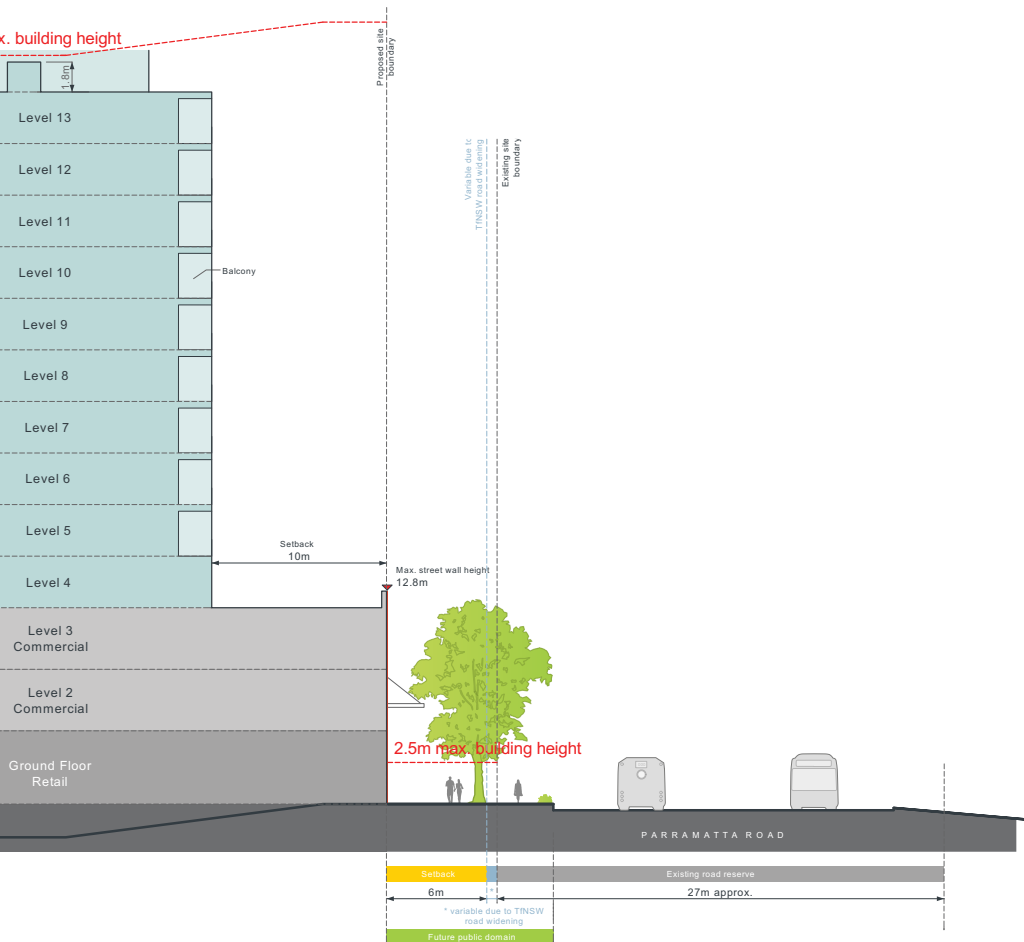


Figure K21-12 Built Form Envelope - Section A



Section Key Plan

K21 Burwood Concord (PRCUTS)

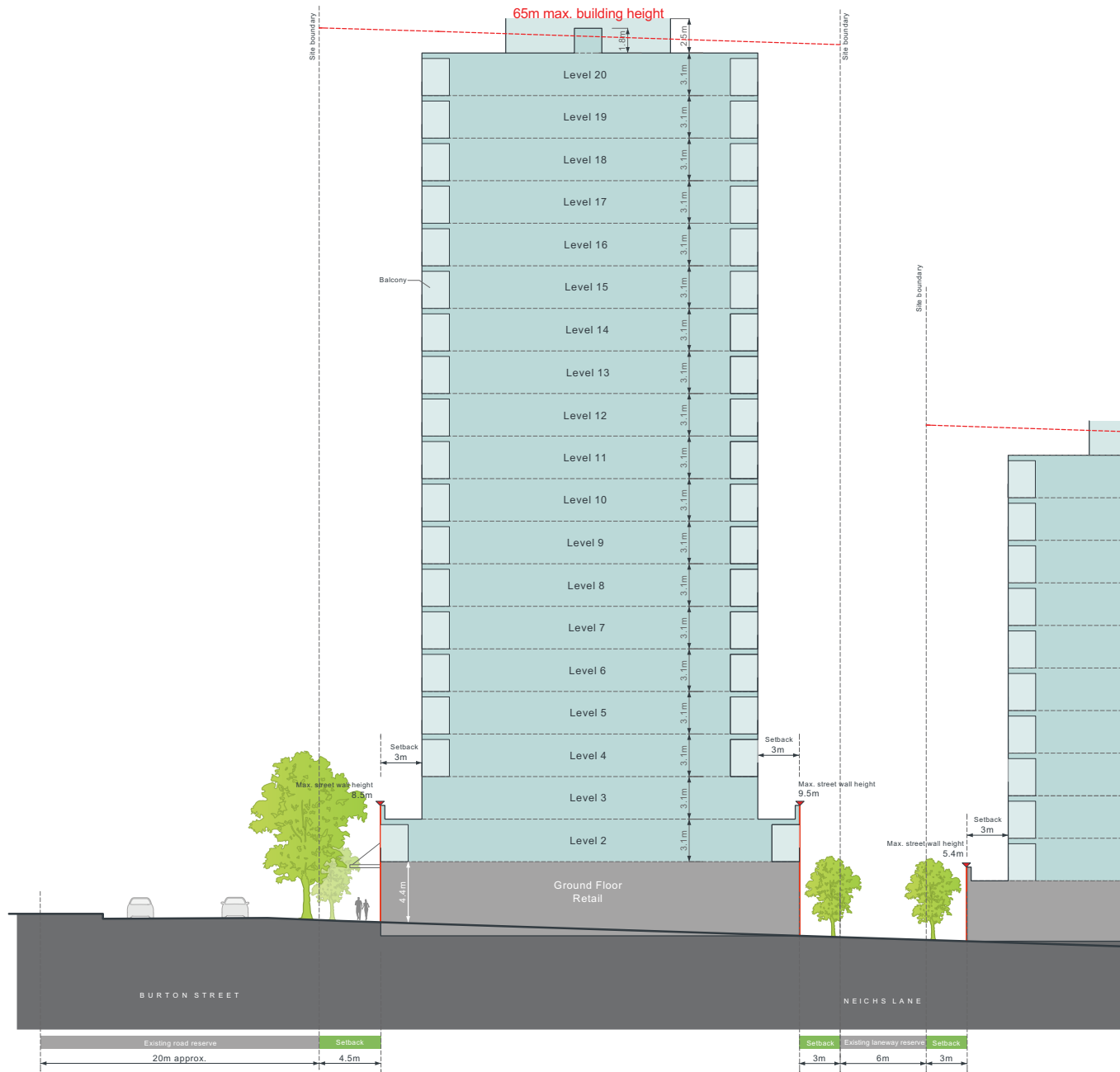
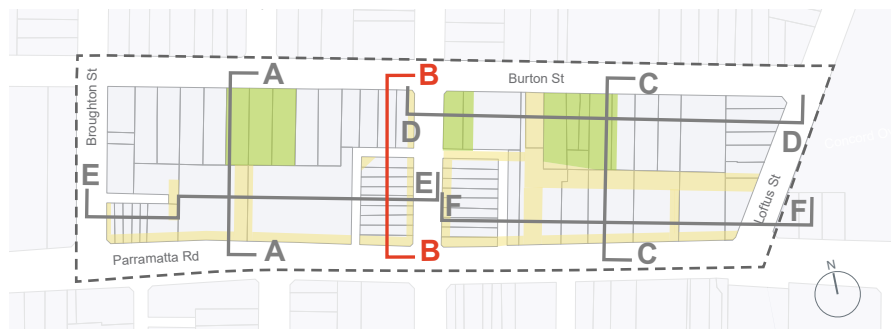
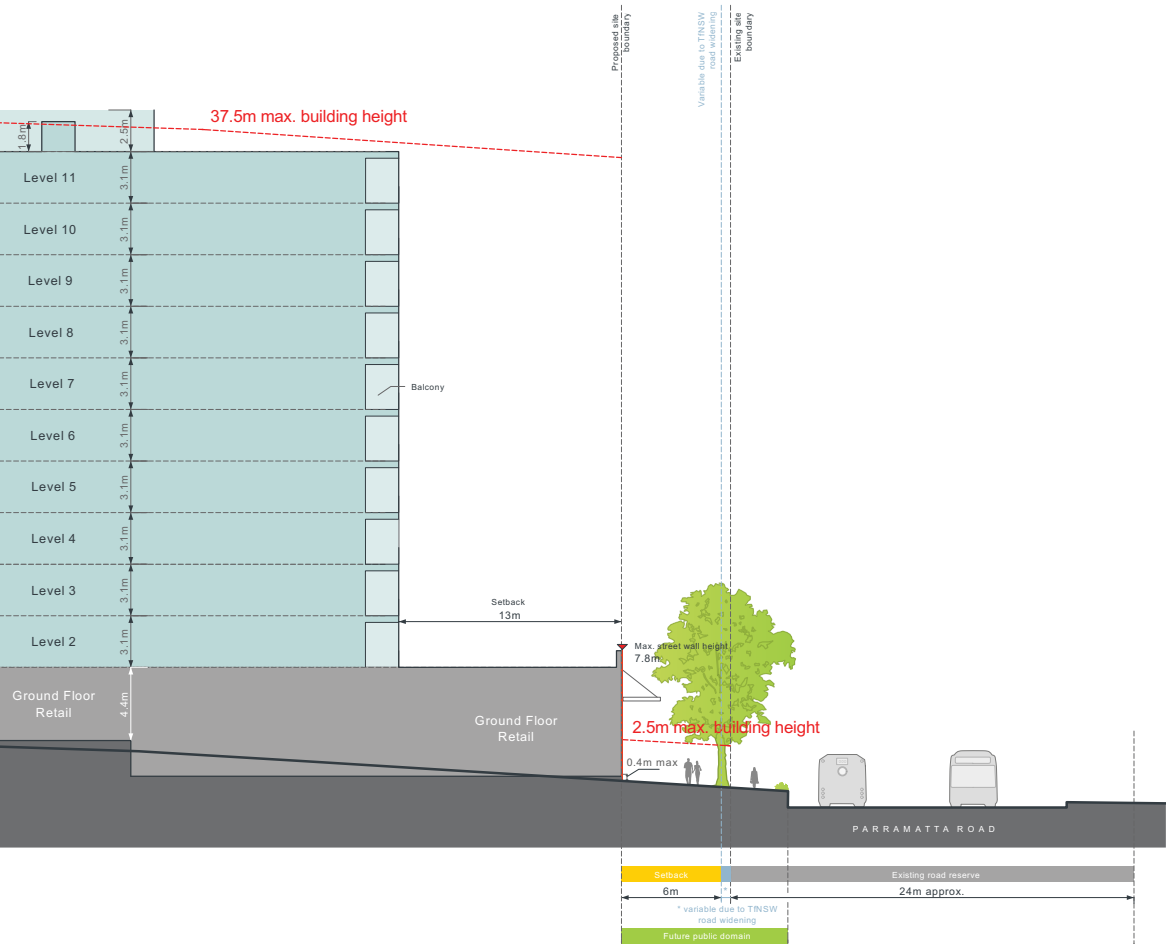


Figure K21-13 Built Form Envelope - Section B



Section Key Plan

K21 Burwood Concord (PRCUTS)

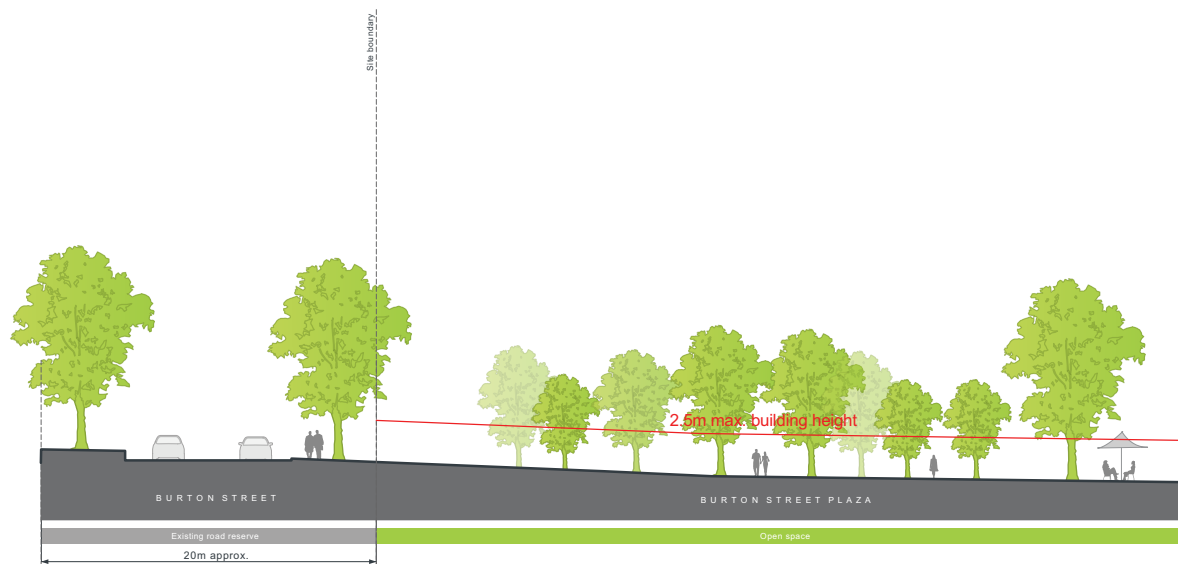
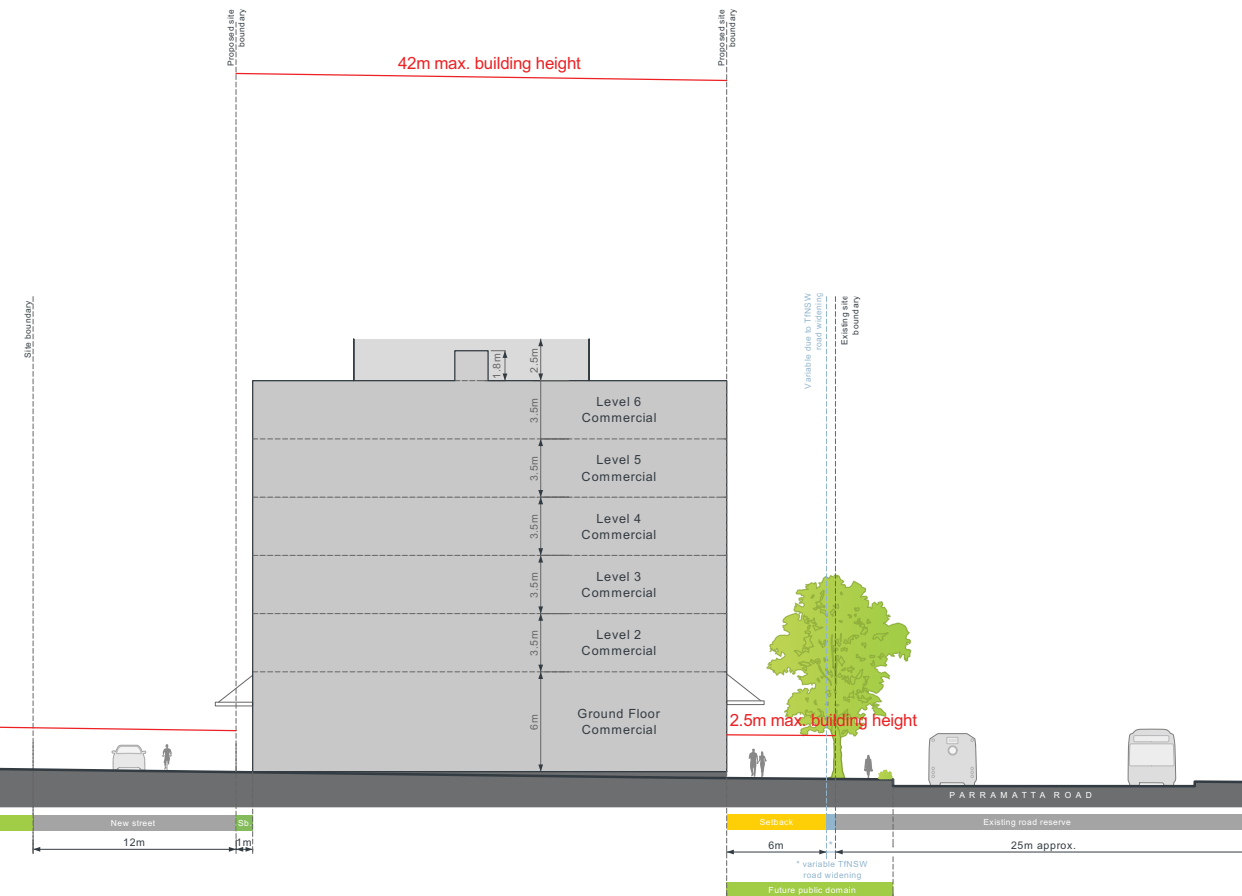
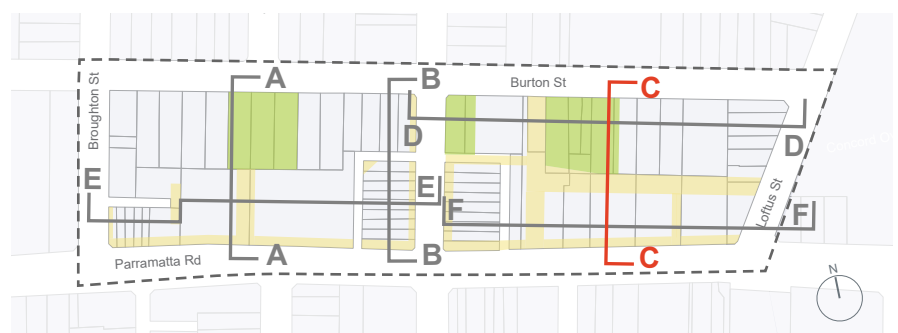


Figure K21-14 Built Form Envelope - Section C



Note: the maximum number of storeys may be exceeded where additional building height is permissible under the LEP, the minimum floor to floor heights can be achieved, and where it is demonstrated that the solar access requirements of the Apartment Design Guide will be satisfied for buildings on the southern side of Parramatta Road.

Refer to Clause K21.8 C6



Section Key Plan

K21 Burwood Concord (PRCUTS)

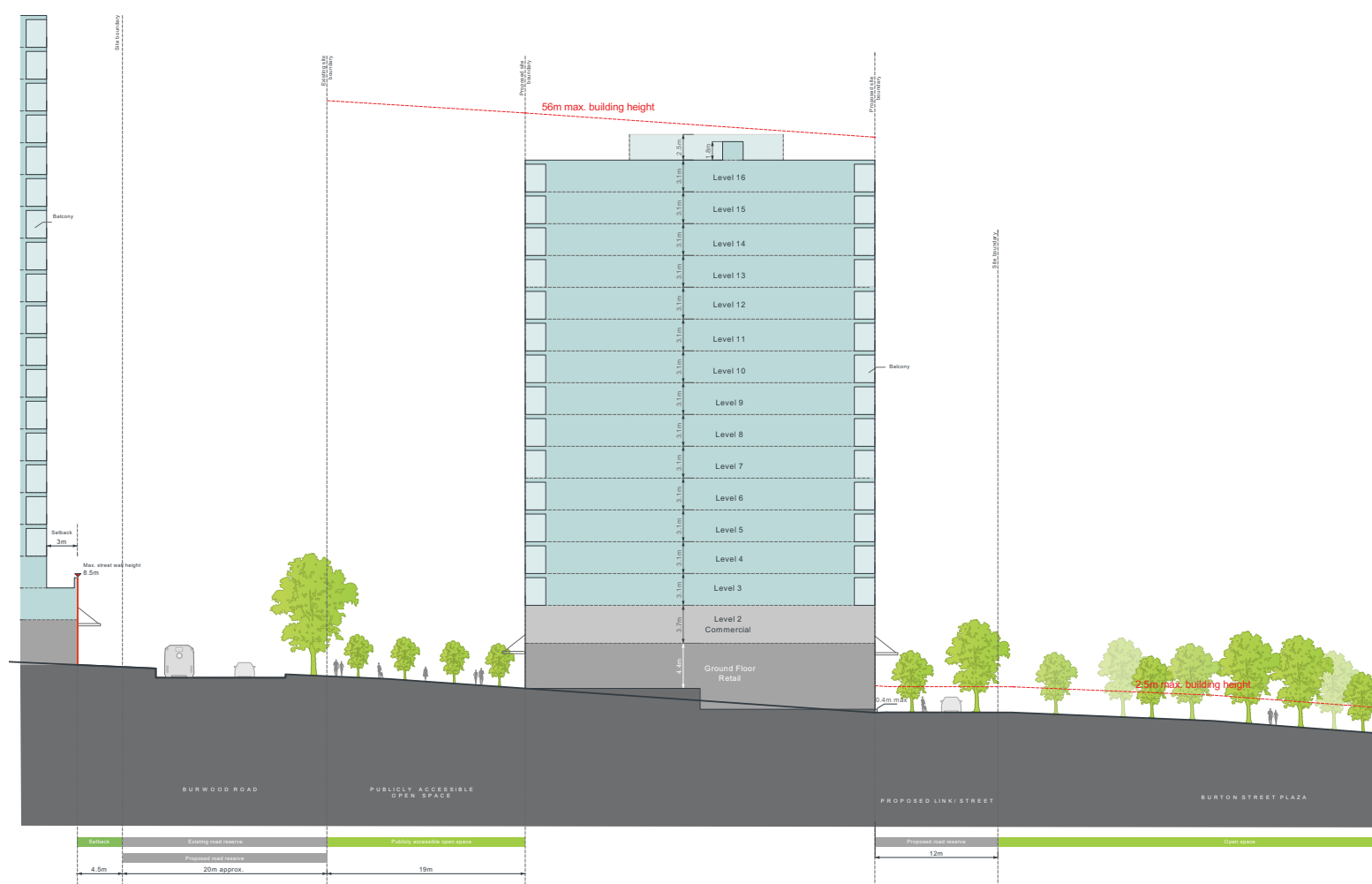
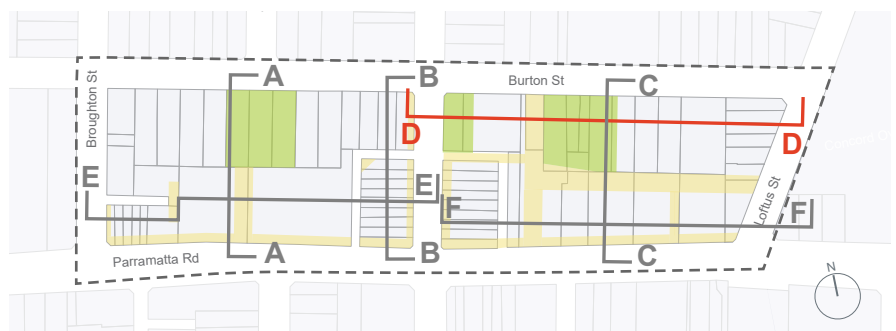
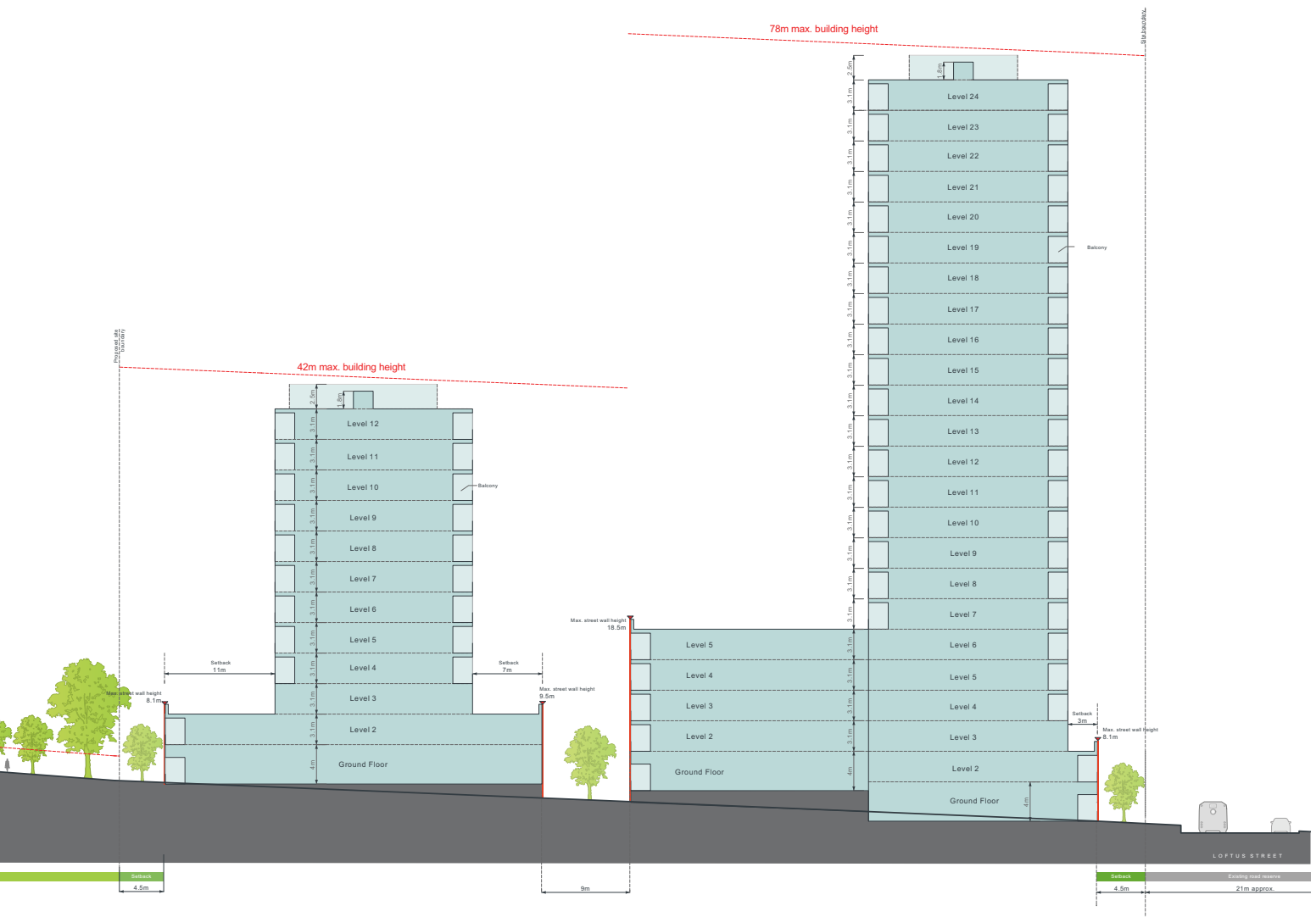


Figure K21-15 Built Form Envelope - Section D



Section Key Plan

K21 Burwood Concord (PRCUTS)

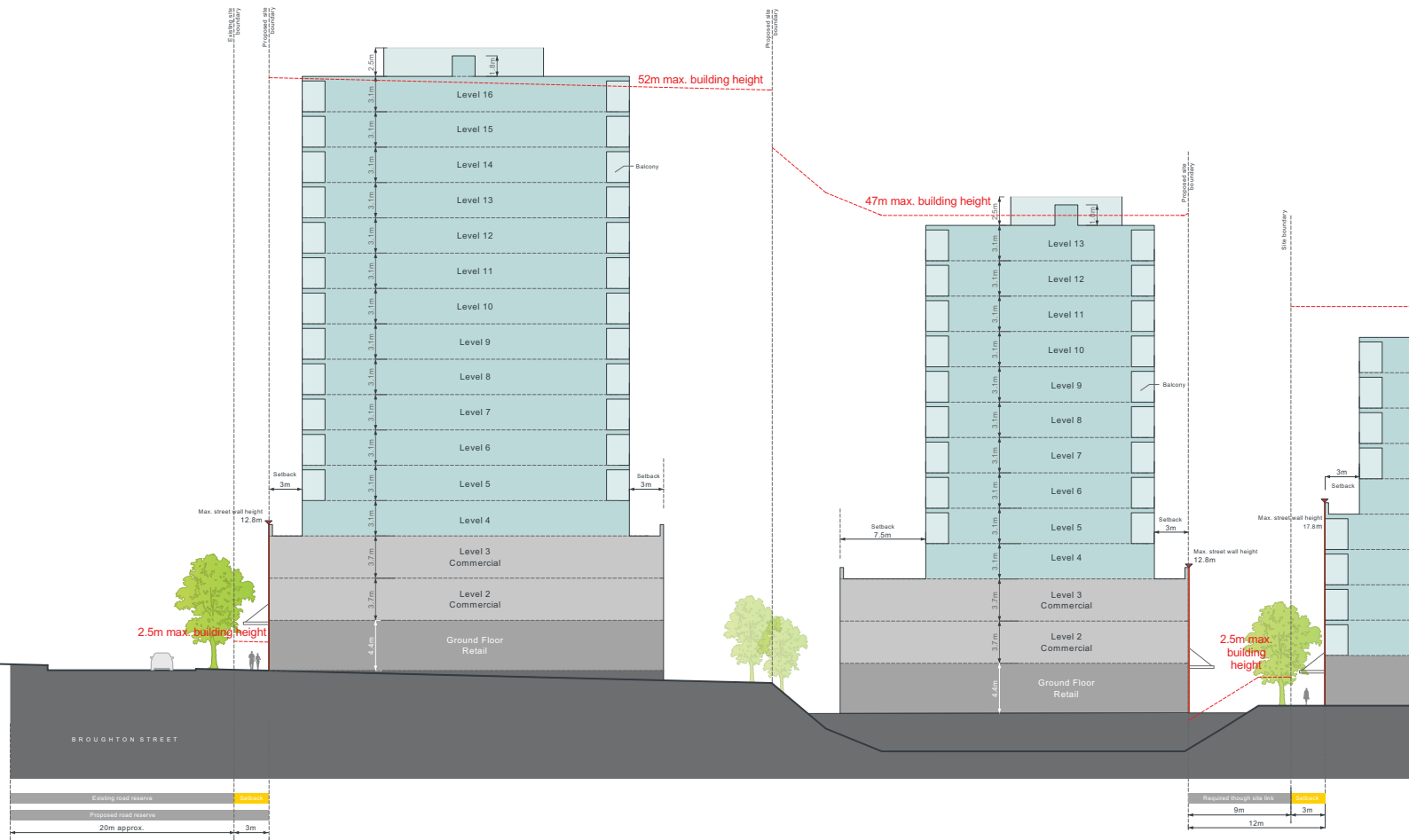
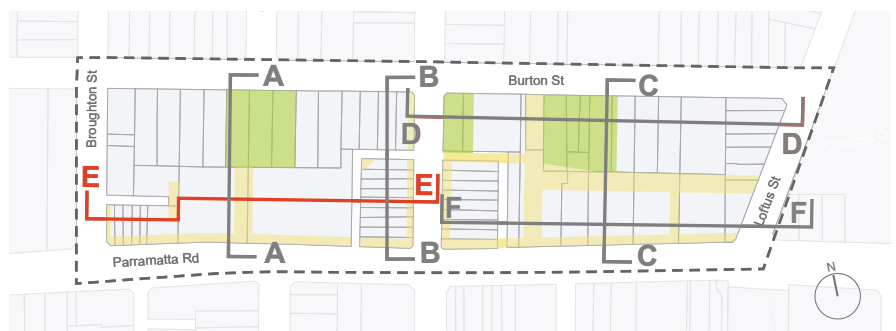
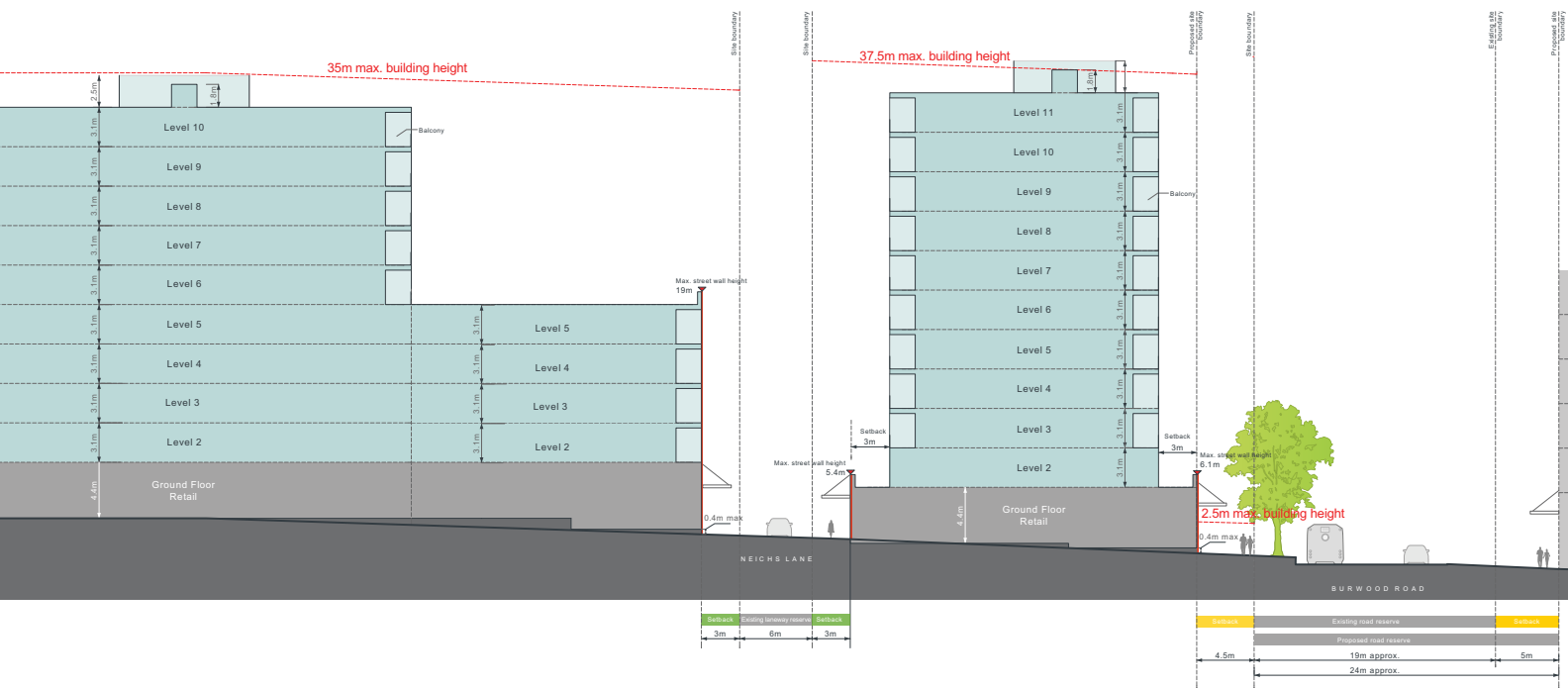
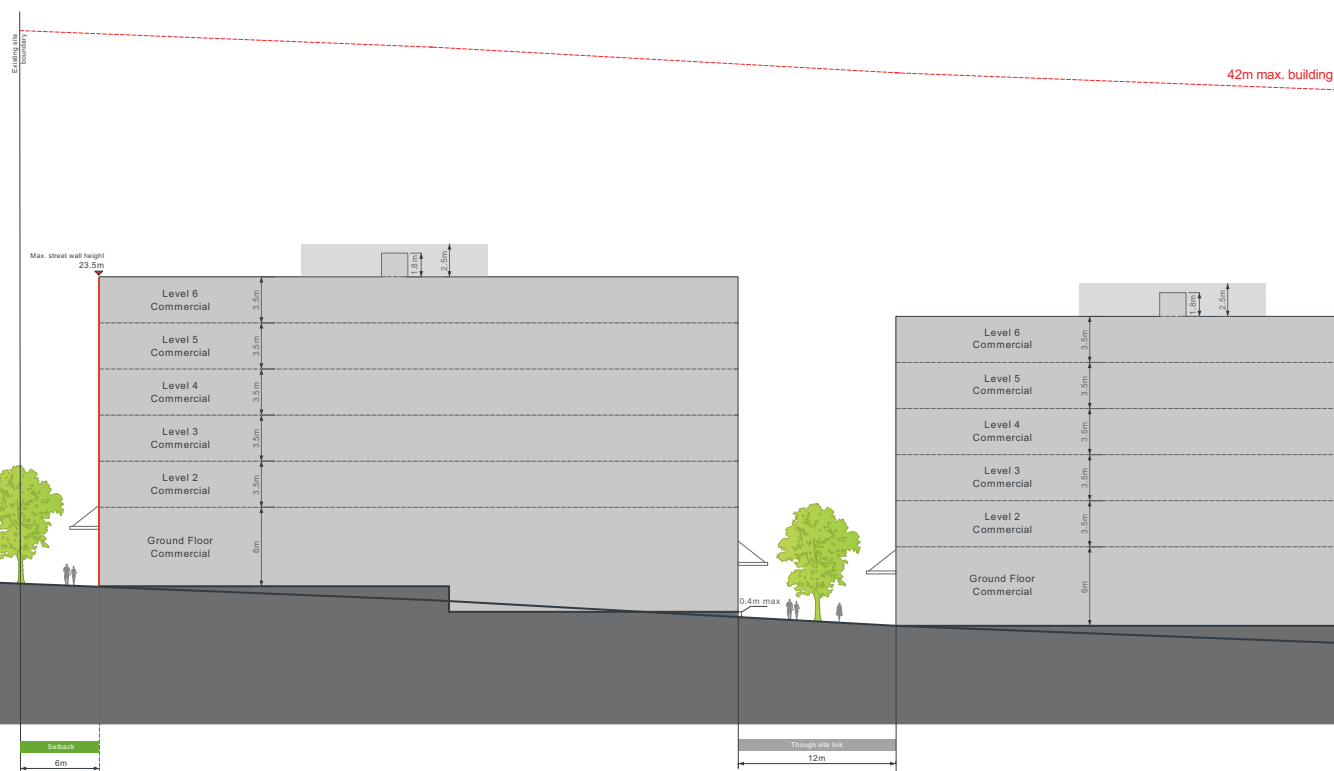


Figure K21-16 Built Form Envelope - Section E



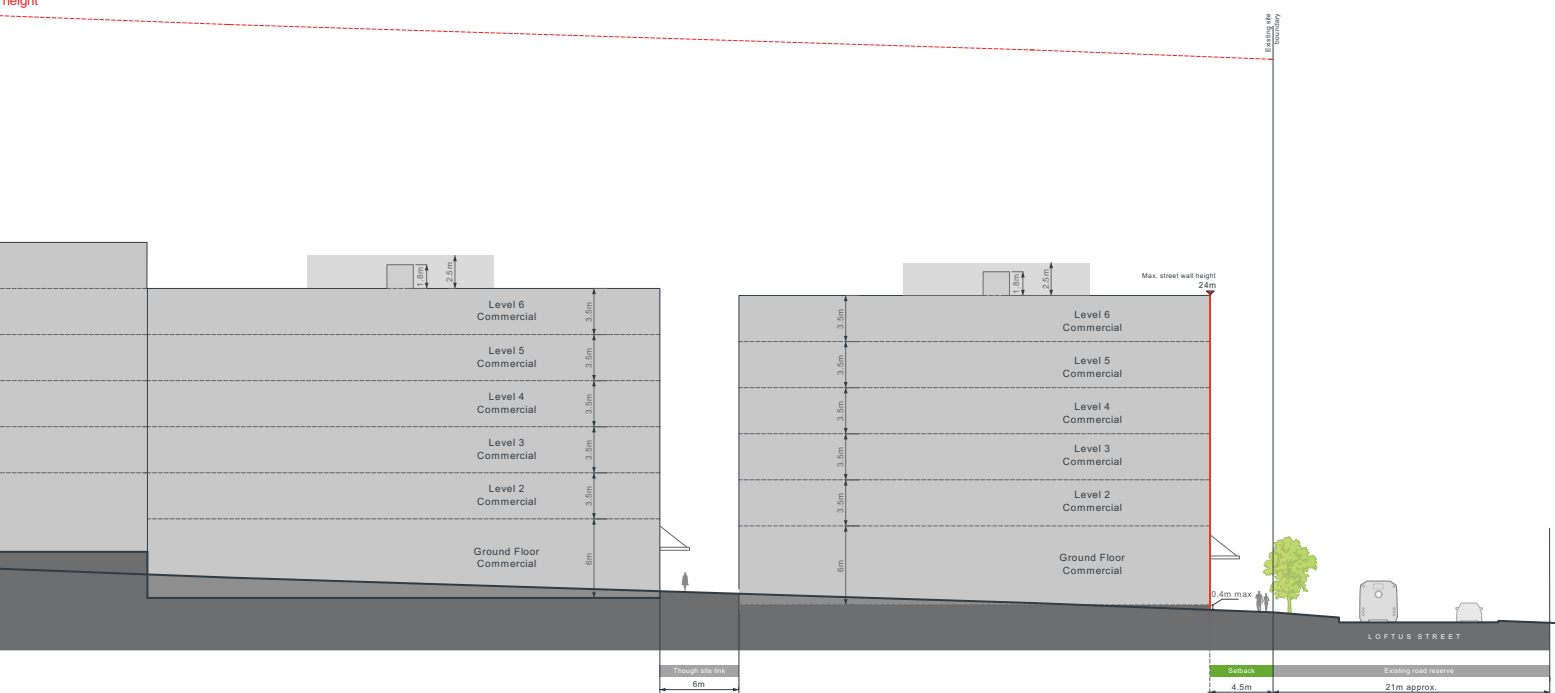
Section Key Plan



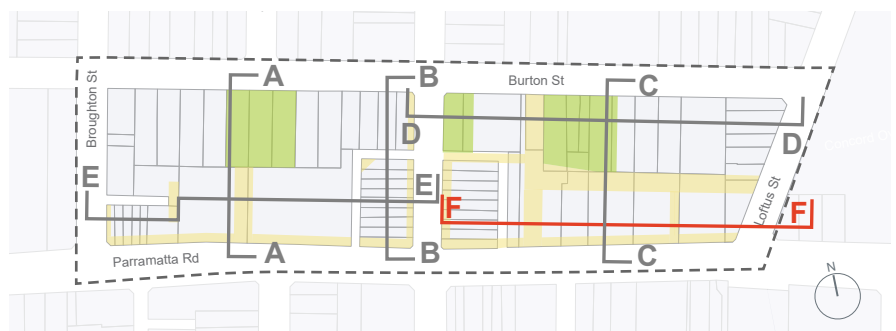
Note: the maximum number of storeys may be exceeded where additional building height is permissible under the LEP, the minimum floor to floor heights can be achieved, and where it is demonstrated that the solar access requirements of the Apartment Design Guide will be achieved.

Figure K21-17 Built Form Envelope - Section F

height



Note: the maximum number of storeys may be exceeded where additional building height is permissible under the LEP, the minimum floor to floor heights can be achieved, and where it is demonstrated that the solar access requirements of the Apartment Design Guide will be achieved.



Section Key Plan

K21 Burwood Concord (PRCUTS)

K21.11 Transitions and Interfaces

Changes in height and scale will require transitions to sensitive interfaces such as existing low scale residential areas, heritage items and open spaces. New development will be required to respond to the overall scale and form of existing elements to preserve visual scale and to minimise loss of outlook, and privacy and maximise sun access of adjoining properties.

Objectives

- O1 To encourage new development that is sensitive and complementary in scale and site location to surrounding properties.
- O2 To minimise the impact on the visual curtilage and setting of existing heritage items.
- O3 To protect residential amenity at the interface to existing low rise development.
- O4 To ensure streets and open spaces receive adequate sunlight and ventilation.

Controls

- | | |
|-----|---|
| C1. | Where adjacent to low density residential interfaces and heritage items, new development should gradually step away in height and provide appropriate setbacks as identified in Figure K21-18 . |
| C2. | Development along Burton, Loftus and Broughton Streets: <ul style="list-style-type: none"> a) sets back as identified in Figure K21-8 and Figure K21-11 with the setback area to be landscaped and at least 50% deep soil; and b) maximises windows and balconies of the upper levels that provide effective passive surveillance of the streetscape. |
| C3. | Along all streets where future public domain is required to be delivered (such as the 'linear green edge' interface to Parramatta Road), development must comply with the primary and upper level setbacks shown in Figure K21-8 , Figure K21-11 and Figure K21-19 . The following applies: <ul style="list-style-type: none"> a) treatment of the setback area is designed to be an extension of the public footpath area, is publicly accessible 24/7 and focuses on pedestrian amenity; and b) 50% of the setback is deep soil to allow for mature vegetation in order to create a linear park with trees provided as outlined in <i>Section K21.18 Landscape Design</i>. |

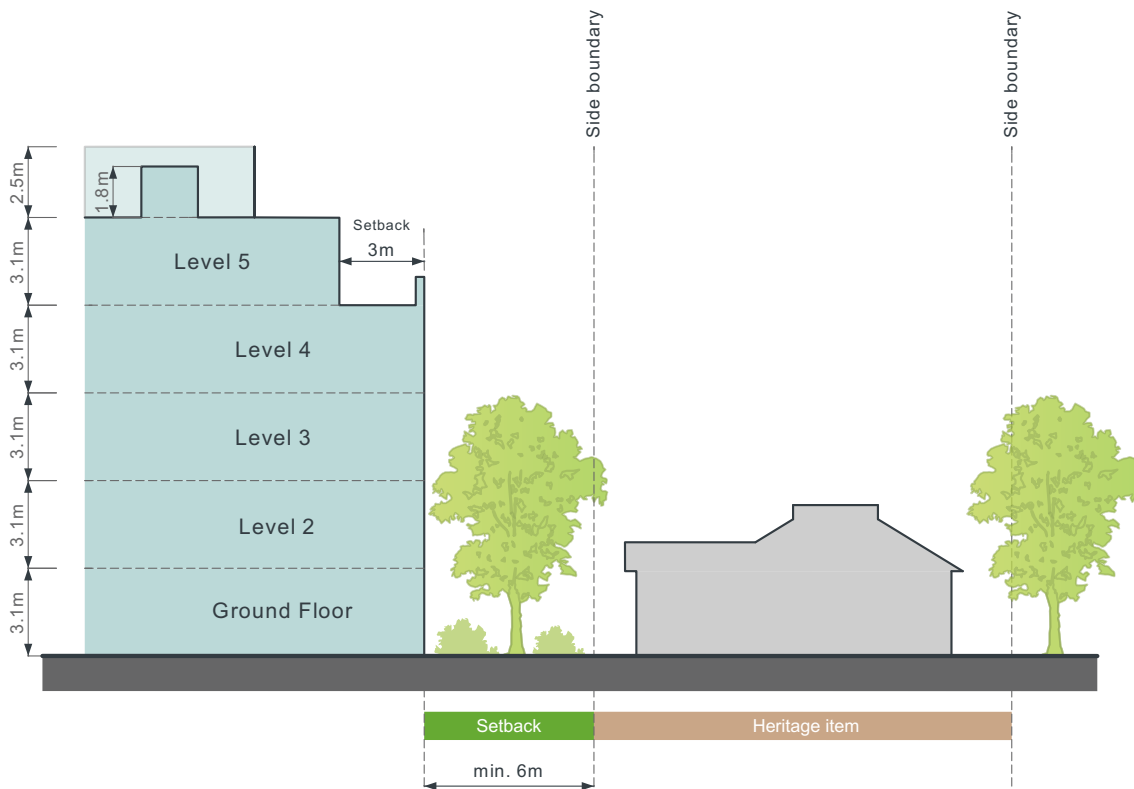


Figure K21-18 Interface to adjacent heritage and/or low rise residential

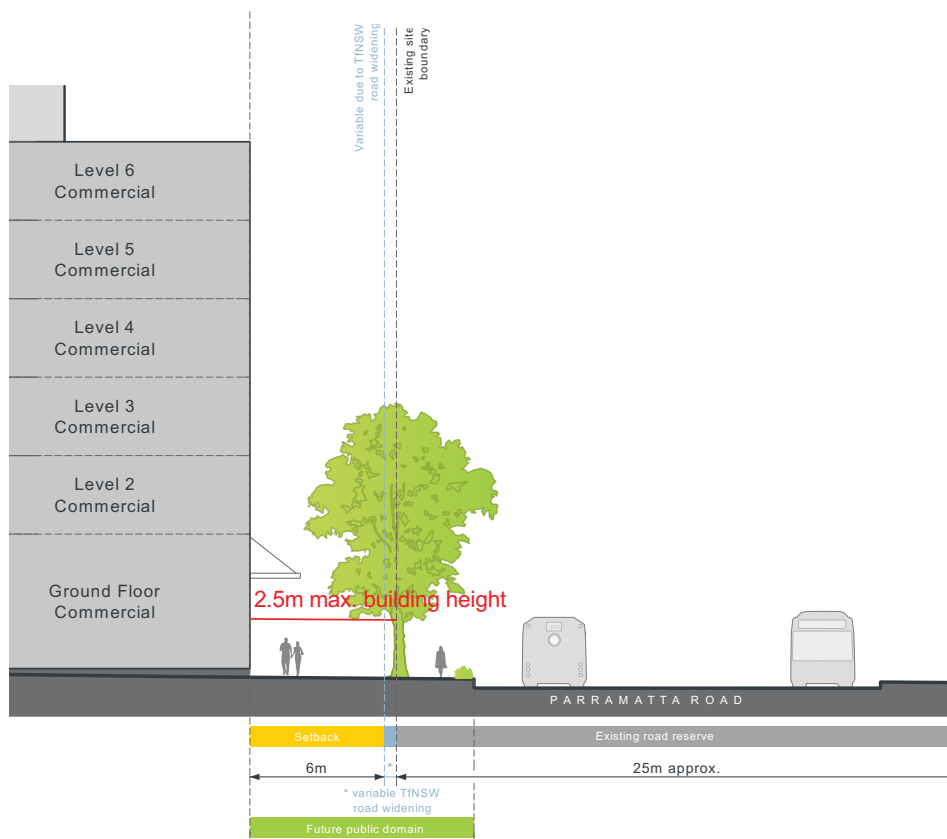


Figure K21-19 'Green edge' interface to Parramatta Road

K21 Burwood Concord (PRCUTS)

K21.12 Interactive Frontages

Within residential zones the design of the development plays an important role in encouraging pedestrian activity and enhancing public safety and security. Developments which allow passive surveillance, where people within buildings are able to overlook the street and where passersby are aware of 'signs of life', promote streetscape activity and local interactions. Multiple entries to residential dwellings which allow residents to physically access homes directly off the street also provide visual interest and encourage streetscape activity.

Objectives

- O1 To encourage new development that promotes activity on the street and enhances public safety and security.
- O2 To encourage new development that provides a high level of passive surveillance.
- O3 To ensure development provides a high quality visual experience and creates interest when experienced from a walking pace.
- O4 To ensure private spaces and entries facing the street are safe, attractive and comfortable to use.



Front semi-transparent fences and landscaped setbacks with tree planting contribute to the amenity of the streetscape and support a positive pedestrian experience.

Controls

- | | |
|-----|--|
| C1. | Developments are to maximise the number of front doors and private spaces which are visible from the street. At a minimum there is to be a pedestrian entries and/or primary private open space overlooking the street every 15m. |
| C2. | Developments are to provide openable windows and balconies at upper levels that encourage views of the street. |
| C3. | Entries and private open spaces are encouraged within the 3m or 4.5m landscaped setbacks including a 1.5m wide strip of landscaping (see Figure K21-20 and Figure K21-21) and other controls including those identified in <i>Section K21.18 Landscape Design</i> are also to be met. |
| C4. | Deeper front setbacks (greater than 5m) are discouraged and landscaping and fences or structures higher than 0.9m within the front setback are not permitted. |
| C5. | All landscaping within the front setback is to maintain clear views from the footpath to the development. |
| C6. | Front fences are to be a maximum of 1.2m high and at least 50% is to be at least 50% transparent and enable a high level of passive surveillance. |
| C7. | Front terraces and entry areas are to be elevated by between 0.6m and 1.0m above the level of the street to improve privacy and increase opportunities for passive surveillance. |
| C8. | Development is to minimise services (i.e. substations, fire services and water services) located within the front setback, along the site frontage or on building facades. |

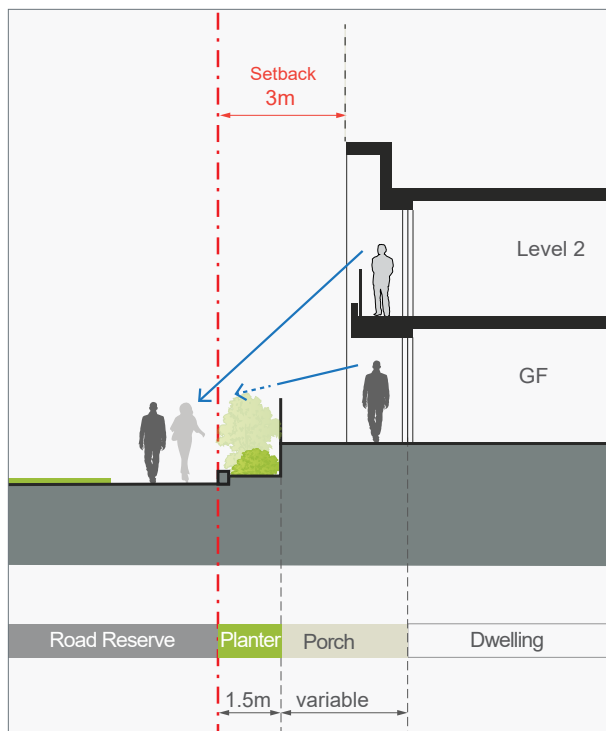


Figure K21-20 Indicative 3m front setback for residential ground floors



Landscaped setbacks with integrated entries and tree planting contribute to the residential streetscape.

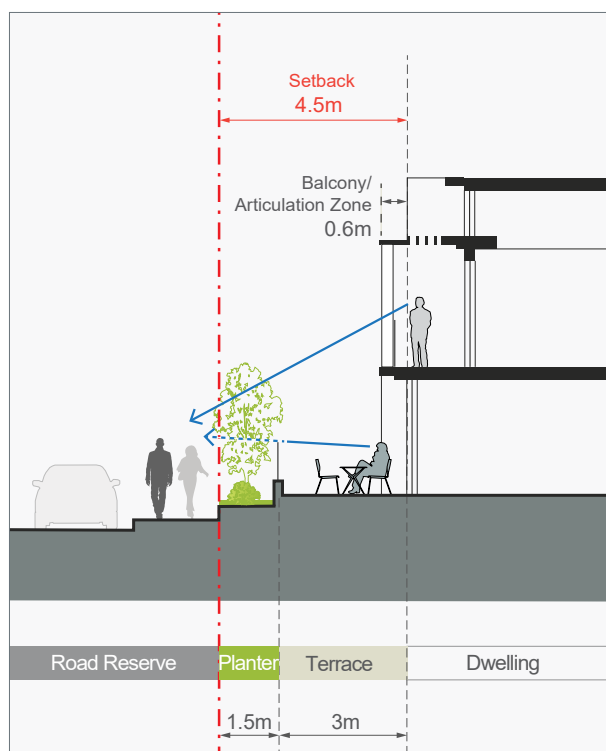


Figure K21-21 Indicative 4.5m front setback for residential ground floors



A low stone wall and visually permeable fencing provides privacy for ground floor units and passive surveillance of the street.

K21 Burwood Concord (PRCUTS)

K21.13 Massing and Articulation

Detailed articulation and appropriate scale of built form defines and reinforces the identity and desired character of a place. The following architectural treatments are encouraged to create variety and interest in the streetscape while contributing to a sense of continuity and overall visual quality.

Objectives

- O1 To ensure buildings and their individual elements are appropriately scaled to define and respond to the surrounding character.
- O2 To add visual quality and interest to new buildings with a focus on breaking up massing of higher density forms when viewed from public places and neighbouring properties.

Controls

C1.	Buildings that are 3 storeys or more are to be designed so that they clearly articulate a base, middle and top.
C2.	Facades are articulated using techniques such as projections, recesses, eave overhangs and deep window reveals. Where development is set back at least 3m from the site boundary, elements can protrude up to 0.3m into the front setback (articulation zone).
C3.	The maximum length of straight wall on any storey above ground floor level, without articulation such as a balcony or return, is 15m.
C4.	New development is to place particular focus on creating a 'human scale' at the lower levels through the use of detailed design, insets and projections that create interest and, where relevant, the appearance of finer grain buildings.
C5.	Where frontages are more than 20m wide, building massing is also to be vertically articulated.

C6.	For built form that is 3 storeys or more, the upper-most level is set back and visually unobtrusive. Ways to achieve this include the use of lightweight construction techniques, darker colours, solid balustrades and roof overhangs that create deep shadows.
C7.	Adjoining buildings are considered in terms of setbacks, awnings, parapets, cornice lines and facade proportions.
C8.	Roof plant, lift overruns, vents, carpark entries and other service related elements are integrated into the built form and complement the architecture of the building.
C9.	Buildings on corners address both streets and architectural elements are composed so that they 'turn the corner'.



Example of an building that is vertically articulated into two components and differentiates between base, middle and top

K21.14 Heritage and Fine Grain

A 'fine grain' of narrow lots provides a significant contribution to the character of the precinct and often includes traditional shop fronts, roofs with parapets, corner buildings and upper level verandahs. This historic pattern of elements creates a streetscape of character and, together with listed heritage items, should be retained and protected wherever possible.

Objectives

- O1 To ensure that development in the vicinity of heritage items is designed and sited to protect its heritage significance.
- O2 To avoid new development physically dominating and overwhelming heritage items.
- O3 To enable the consolidation of small individual lots into larger lots whilst ensuring the original subdivision pattern is represented.

Controls

C1.	<p>Development in the vicinity of a heritage item is to minimise the impact on the setting of the item by:</p> <ul style="list-style-type: none"> a) providing an adequate area around the building to allow interpretation of the heritage item; b) retaining original or significant landscaping (including plantings with direct links or association with the heritage item); c) protecting, where possible and allowing the interpretation of archaeological features; and d) retaining and respecting significant views to and from the heritage item.
C2.	All development of and in the vicinity of a heritage item is to address the requirements of <i>Part C Heritage of the City of Canada Bay DCP</i> .

C3.	Alterations and additions to buildings and structures and new development of sites in the vicinity of a heritage item are to be designed to respect and complement the heritage item in terms of the building envelope, proportions, materials, colours and finishes, and building and street alignment.
C4.	Where additional storeys are proposed above a heritage building, the new front wall should be set back from the existing front building line by a minimum of 8m.
C5.	Where the finer grain existing pattern is present and lot consolidation is proposed, the subdivision pattern and fine grain is to be interpreted in the architectural treatment of the facades, e.g. through building layout, composition, modulation and vertical articulation.
C6.	All development of, or in the vicinity of, heritage items must submit a heritage impact assessment as part of the DA. It should be noted that the assessment may lead to setbacks, building heights, and built form modulation that may differ (are less than) the minimum provisions outlined in this DCP.

K21 Burwood Concord (PRCUTS)

K21.15 Safety and Accessibility

The way in which buildings address streets, links and open space creates an important transition between public and private land. The careful design of this interface zone contributes to the liveliness, interest, comfort and safety of the public domain. Good accessibility to and from new development increases activity levels further and contributes to the visible activity in a neighbourhood.

Objectives

- O1 To ensure new development supports the wider neighbourhood and community safety and maximises opportunities for passive surveillance.
- O2 To encourage ground floor activities to spill out into the public domain and create a vibrant streetscape (active frontages).
- O3 To incorporate a high degree of accessibility into the design of new buildings and the public domain that considers the various mobility levels of future users, i.e. disabled and elderly.

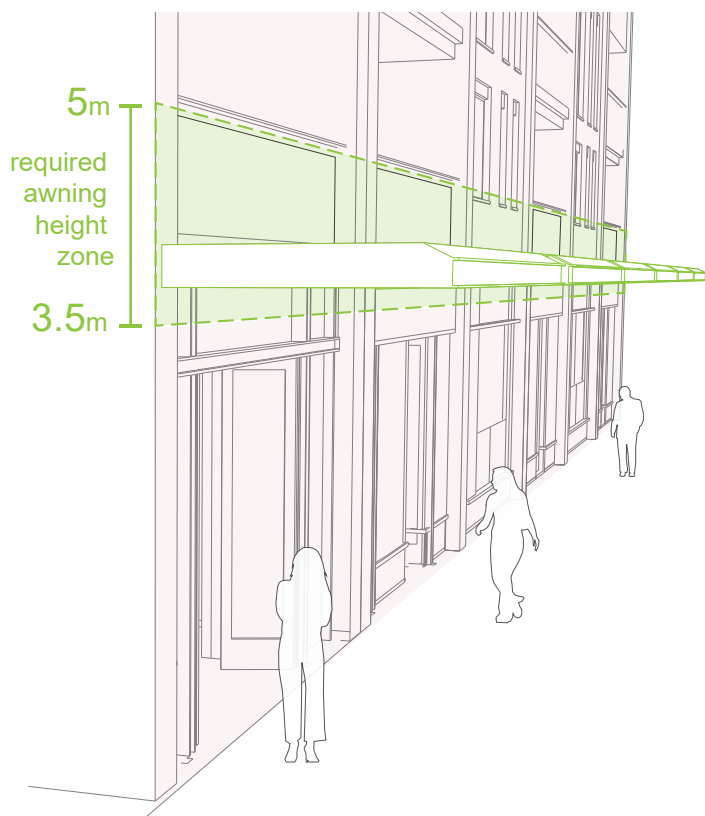


Figure K21-22 Awnings are to be between 3.5m and 5m above ground level along active frontages

Controls

- | | |
|-----|--|
| C1. | Development is to consider and comply with Crime Prevention Through Environmental Design (CPTED)'s Safer by Design Guidelines. |
| C2. | New development addresses and defines the public domain through entrances, lobbies, windows and balconies that overlook public spaces, maximising opportunities for passive surveillance. |
| C3. | The location and width of vehicle entries is to minimise impacts on the pedestrian network. |
| C4. | <p>All building entries are clearly visible from the public domain.</p> <p>Access is to be provided according to:</p> <ul style="list-style-type: none"> a) Active Frontages: at ground level unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only. b) Interactive frontages for residential development in the R3 Medium Density zone: at ground level and set in a landscaped front setback that is to be raised above natural ground level to between 0.6m and 1.0m. |
| C5. | To avoid blank walls and create visual interest, the maximum length of any wall at the ground floor level, without articulation such as a door or window is 5m. |



Figure K21-23 Awnings should be designed to allow for street tree planting

C6.	Active frontages are provided as identified in Figure K21-9 .
C7.	<p>Along active frontages:</p> <ul style="list-style-type: none"> a) the finished ground floor level is to match the footpath level; where this is not possible due to topography, the ground floor level is to be a maximum of 0.4m above the footpath. Where ground floor level is elevated above the footpath, the elevated area is to form an activated continuation of the interior, and not to create a visual barrier to the interior; b) continuous awnings must be provided to shelter pedestrians from weather conditions; c) awnings should be designed to allow for street tree planting; d) awnings are to be between 3.5m and 5m above ground level (see Figure K21-22); e) consistent paving, street furniture, signage, planting and lighting is desirable; and f) design guidance in Figure K21-10 is applied where possible with long expanses of floor to ceiling glass prohibited.
C8.	Residential uses on the ground floor can be raised to a maximum of 1.0m above the footpath level to improve internal privacy. Direct access from the footpath to individual dwellings is required wherever possible.
C9.	Front setback treatments incorporate safety considerations such as lighting after hours. For more controls see <i>Section K21.18 Landscape Design</i> .

C10. Front fencing for residential uses on the ground floor are to display an appropriate balance of visibility and outlook, informal surveillance of the street and privacy for residents and building users. Fences are to be a maximum height of 1.2m and at least 25% transparent. Solid walls are only acceptable to a maximum height of 0.6m.

C11. Common areas for building users/ residents are encouraged within the front setback with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.



Operable glazing with street level activation and dining



Elevated seating area integrated with street frontage and operable glazing

Figure K21-24 Strategies to achieve street level activation

K21 Burwood Concord (PRCUTS)

K21.16 Amenity

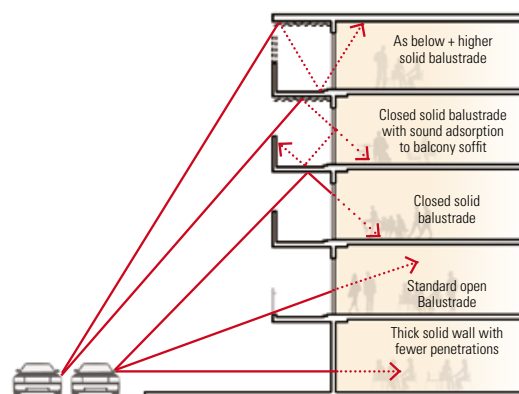
New housing and employment uses need to provide a high level of amenity for future residents and building users. At the same time, development is required to protect and where possible enhance the quality of the public domain and adjoining private properties. The following controls seek to help maximise privacy, solar access and outlook for all. This section also identifies design treatments to mitigate air quality and noise impacts for development along Parramatta Road.

Objectives

- O1 To minimise the impact of new development on the outlook, privacy and sun access of adjoining properties.
- O2 To minimise overshadowing of streets, links and public open spaces.
- O3 To protect building users from negative impacts (noise, air quality, vibration) from Parramatta Road.

Controls

- | | |
|-----|---|
| C1. | Siting and built form configuration optimises solar access within the development and minimises overshadowing of adjoining properties. |
| C2. | Taller elements of built form are oriented north-south where possible. The height and modulation of east-west buildings allows solar access to courtyard spaces (where courtyards are appropriate). |



- | | |
|-----|--|
| C3. | Louvres, shading devices and windows are able to be operated by buildings users where possible, to allow building occupants to regulate climatic conditions rather than rely solely on mechanical systems. |
| C4. | Development along Parramatta Road is to consider the provisions of the <i>State Environmental Planning Policy (Infrastructure) 2007</i> and <i>Development Near Rail Corridors and Busy Roads Interim Guidelines</i> and the design approaches illustrated in Figure K21-25 . |
| C5. | For residential components of new development, noise sensitive areas (living rooms, bedrooms) are located away from Parramatta Road where possible. |
| C6. | Windows located towards Parramatta Road are double-glazed (or use laminated glazing) and have acoustic seals. |
| C7. | Habitable rooms (excluding balconies) are to be designed to achieve internal noise levels of no greater than 50dBA. |

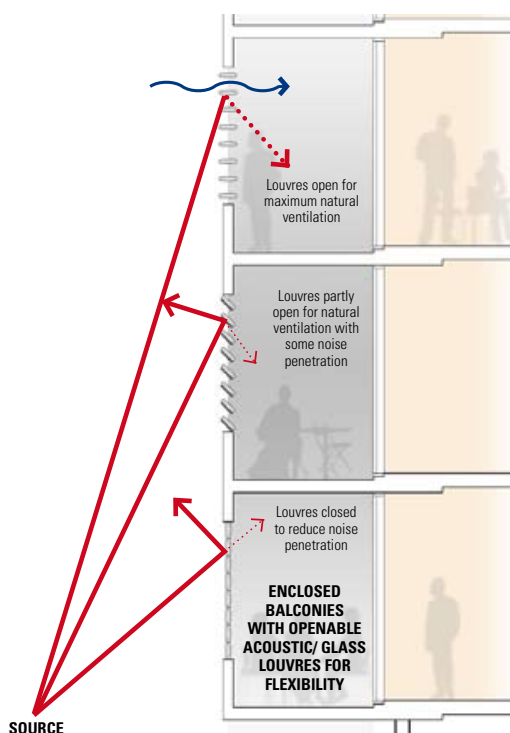


Figure K21-25 Noise mitigating facade treatments

(Source: *Development Near Rail Corridors And Busy Roads Interim Guideline, NSW*)

K21.17 Appearance

The design of buildings contributes to the streetscape character and adds visual richness, complexity and interest. In addition, the selection of signage, materials, finishes and colours should have regard to compatibility to the surrounds and consider robustness, durability and ease of maintenance.

Objectives

- O1 To ensure building exteriors positively contribute to the desired future character of the area and streetscape.
- O2 To ensure that signage is integrated and not detrimental to the local character by limiting its cumulative impact with other signage.

Facade design

Controls	
C1.	The composition of facades balances solid and void elements and does not display large areas of a single material, including reflective glass.
C2.	External walls are constructed of high quality and durable materials and finishes with low maintenance attributes ('self-cleaning') such as face brickwork, rendered brickwork, stone, concrete and glass.
C3.	Any blank sidewalls (including temporary walls that may be covered in the future) that are visible from the public domain are designed as an architecturally finished surface that complements the main facade.
C4.	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality.
C5.	Roof plant, lift overruns, utilities, vents and other service related elements are to be integrated into the built form design and complementary to the architecture of the building.



Example of balconies with a balance of solid and void in the facade composition and treatment.

Signage and advertising

Controls	
C6.	Signage is to comply with the requirements of State Environmental Planning Policy No 64-Advertising and Signage. Also refer to requirements in the <i>City of Canada Bay DCP Part I Signage and Advertising</i> .
C7.	Signage is to be integrated into the overall architectural design. Advertising signs should complement the design of buildings and the overall character of the precinct. Signage must relate to an approved use on the site.
C8.	The main facades of buildings from the first floor to the rooftop or parapet are to be uncluttered and generally free of signage.
C9.	Freestanding signs are not to be located on the top of buildings and should not impact on the skyline when viewed from the street. Signs painted on or applied to the roof of a building are not permitted.

K21 Burwood Concord (PRCUTS)

K21.18 Landscape Design

Landscape design plays an important role in the successful integration of new development into the surrounding streetscape and context. It enhances the appearance and amenity of the area, provides for recreation, preserves biodiversity and improves micro-climatic conditions.

Landscape and built form need to be designed together and landscaped areas should not be generated by 'left-over spaces' resulting from building siting. A portion of the landscaped area is required to be deep soil suitable for the growth of mature trees and vegetation.

Objectives

- O1 To promote high quality landscape design as an integral component of the overall design of new development, softening the appearance of buildings.
- O2 To improve the local micro-climate, native fauna and flora habitats and control climatic impacts on buildings and outdoor spaces.
- O3 To allow adequate provision on site for infiltration of stormwater, deep soil tree planting, landscaping and areas of communal outdoor recreation.

Precinct Wide

Controls		
C1.	Existing street trees and landscape features are to be retained wherever possible. All 'significant trees' that are identified as either High Significance or Medium Significance in the PRCUTS Public Domain Plan are to be retained and assessed by a suitably qualified Arborist.	C4.
	Refer also to CCB DCP Part B General Controls, <i>B6.10 Urban Tree Canopy</i> and <i>Australian Standards - AS 4970-2009 Protection of Trees on Development Sites</i> .	
C2.	The layout and key design features of all parks and plazas are to be as per the PRCUTS Public Domain Plan.	C5.
C3.	Landscape design complements the proposed built form and minimises the impacts of scale, mass and bulk of the development in its context.	
		C6.
		C7.
		C8.
		C9.
		C10.
		C11.

C12.	Tree planting is to be prioritised in the planning and design of all public domain areas and, where possible, utilities to be bundled, undergrounded and located away from tree planting areas.
C13.	Tree species are to be selected for their respective micro-climatic suitability and need to provide a high level of urban amenity, noting that the duration and density of overshadowing from buildings will impact the growth and species suitability.
C14.	<p>A landscape architect to be engaged to ensure that:</p> <ul style="list-style-type: none"> the architectural planning, building footprint and basement engineering result in adequate deep soil zones and podium planter boxes. the deep soil zones are located in areas where canopy and landscape outcomes will best serve the future users and general architectural amenity. species selection considers site suitability, shade requirements of any communal open space and solar access into internal building spaces.

Mixed Use Zone

Controls	
C15.	A minimum of 15% projected tree canopy coverage shall be achieved for all private land (i.e. non-public) developments. This shall be measured as the projected square metre canopy of the trees using reasonable estimates of the mature size of the chosen trees.
C16.	Trees are to be planted in sufficient deep soil to support them to maturity (refer to PRCUTS Public Domain Plan for soil volumes). A tree shall be as defined by City of Canada Bay's LEP.
C17.	Tree coverage may include trees planted at ground level as well as any trees planted in upper levels of buildings, such as podiums and roofs. It may also include any canopy overhanging from an adjoining public domain area.

Residential Zones

Controls	
C18.	Development consent must not be granted unless the development achieves at least 25% canopy cover across the site, identified on the landscape plan and measured by the extent of canopy at maturity.
C19.	Native species must comprise at least 75% of the plant schedule, incorporating a mix of locally indigenous trees, shrubs and groundcovers appropriate to the character of the area (see CCB DCP Part B General Controls B6.3 <i>City of Canada Bay tree species Table B-N</i> and <i>Table B-O</i> for further details).
C20.	<p>A minimum of 30% of the total site area is to be provided as landscaped area.</p> <p><i>Note: landscaped areas are used for growing plants, grasses and trees, but do not include any building, structure, basement or hard paved areas such as paths and driveways.</i></p>
C21.	50% of the required landscaped area is to be deep soil with deep soil planting (trees and shrubs) and a preference for native species.
C22.	Calculation of landscaped and deep soil areas is not to include any land that has a length or a width of less than 1.5m.
C23.	<p>Trees and vegetation provide a high degree of amenity and environmental benefit. Their selection and location should:</p> <ol style="list-style-type: none"> Provide shade in summer and sun access in winter to building facades and public and private open spaces; Reduce glare from hard surfaces; Channel air currents into built form; and Provide windbreaks, screen noise and enhance visual privacy where desirable.
C24.	For residential development in the R3 Medium Density zone, at least 50% of the front setback area is required to be deep soil.

K21 Burwood Concord (PRCUTS)

K21.19 Sustainability and Resilience

To create sustainable, resilient and affordable communities along the Corridor, the PRCUTS identifies that the following three key areas of intervention should be pursued:

- 1) High performance buildings;
- 2) Reduced and decoupled strategic parking; and
- 3) Urban resilience and infrastructure delivery.

Further details are provided in the Parramatta Road Corridor Sustainability Implementation Plan and should be considered when assessing proposals.

Objectives

- O1 To deliver world leading urban transformation of the precinct by exceeding current sustainability requirements.
- O2 To mitigate the impacts of climate change on key infrastructure and assets.

Controls

C1.	A residential flat building or a mixed use development (that contains dwellings) which complies with Table K21-1 is eligible for an amount of additional residential floor space (above that already permitted elsewhere under this Plan) equivalent to that which exceeds the floor space ratio as shown on the Floor Space Ratio Map or Incentive Floor Ratio Map (as applicable to that development) by up to 5%, subject to the consent authority being satisfied that this additional residential floor space does not adversely impact on neighbouring and adjoining land in terms of visual bulk and overshadowing.
C2.	Future development should demonstrate consistency with the smart parking strategies and design principles outlined in <i>Section K21.20 Access and Parking</i> .

C3.	Public domain and buildings shall be designed to reduce localised heat created by the urban heat island affect by: <ol style="list-style-type: none"> a) maximising canopy cover along all streets, particularly along Parramatta Road and Burwood Street; b) developments within the R3 zone are to provide at least 25% canopy cover across the site, identified on the landscape plan and measured by the extent of canopy at maturity; c) maximising the use of vegetation on buildings, including above ground parking facilities; d) encouraging vegetation, green roofs, green walls and materials with a high solar reflectance index on at least 50% of the surfaces of all buildings with western and northern building facades; and e) complying with landscape DCP guidelines within <i>Section K21.18 Landscape Design</i>.
C4.	Flow rates from the site should not be more than pre-development site discharge.
C5.	All new streets should implement water sensitive urban design treatments at the point source across all catchment areas.
C6.	Stormwater run-off quality should seek to reduce annual loads of: <ol style="list-style-type: none"> a) total Nitrogen by 45%; b) total Phosphorus by 65%; and c) total suspended solids by 85%.
C7.	Development consent must not be granted unless the building, or part of a building, contains both potable water pipes and recycled water pipes for the purposes of all available internal and external water uses.

Table K21-1 Energy and Water Targets by Use

Use	Energy Target	Water Target
Residential		
<14 storeys	BASIX Energy 50	BASIX Water 50
15 - 29 storeys	BASIX Energy 40	
30 - 39 storeys	BASIX Energy 35	
40+ storeys	BASIX Energy 30	
Commercial and Retail Development < 10,000m² GFA*		
Smaller scale non-residential development is governed by the National Construction Code, and should demonstrate consistency with relevant requirements of the Code.		
Commercial Development ≥ 10,000m² GFA*		
Base building and/or individual tenancies	NABERS 5-star	NABERS Water 4-star NABERS Water 5-star should be pursued where recycled water is available
Shopping Centre Development*		
Base building only	NABERS 5-star	NABERS Water 4-star NABERS Water 5-star should be pursued where recycled water is available

*Source: PRCUTS Planning and Design Guidelines, Urban Growth, Nov 2016



Maximising canopy cover significantly improves the micro-climate and supports active transport choices.



All new streets and pedestrian/ cycle links should implement water sensitive urban design treatments (WSUD).

K21 Burwood Concord (PRCUTS)

K21.20 Access and Parking

The location of car parking has a significant impact on pedestrian safety and the quality of the public domain. Vehicle access points need to be integrated carefully to avoid potential conflicts with pedestrian movement and the desired streetscape character.

Objectives

- O1 To transition to lower car ownership and support the uptake of walking, cycling and public transport use.
- O2 To minimise the visual impact of car parking areas and vehicle access points.
- O3 To minimise conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian desire lines such as Burton Street.

Parking and access design

Controls	
C1.	Vehicular access points minimise visual intrusion and disruption of the streetscape, emphasise the pedestrian experience and maximise pedestrian safety.
C2.	The width and height of vehicular entries is kept to a minimum. Roller doors or gates should be integrated with the architectural design of the development. Vehicular entry/exit points are to be recessed by at least 0.5m behind the building line.
C3.	The public footpath treatment is to be continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.
C4.	Vehicle access points are not permitted along active street frontages that are identified as Vibrant and are to be minimized on Friendly and Mixed Facades. Where rear or side access is not possible, development without parking will be considered.

C5.	Vehicular access points off Burton Street are only permitted if a development has no other street or laneway frontage.
C6.	At grade parking is not permissible within any of the setback zones and, only if unavoidable due to proximity to the Metro tunnel, is to be sleeved with active uses to shield the car parking from the street.
C7.	Parking is to be designed to be 'adaptable' and able to be converted to other uses in the future. Underground car parking and basement spaces are to have a minimum floor to floor height of 3.7m to be able to be converted to commercial uses. At ground level parking areas are to have a minimum floor to floor height of 4.4m to be able to be converted to retail uses. Above ground parking areas are to have a minimum floor to floor height of 3.7m (second floor level) to be able to be converted to commercial uses, or 3.1m-3.7m (above second floor level) to be able to be converted to commercial or residential uses.
C8.	Where unavoidable due to topography, basement parking can only protrude above natural ground level by a maximum of 0.4m in R4 zone and 1.0m in R3 zone. Car parking cannot protrude into the front setback area within an R3 zone.
C9.	Parking is not permitted to be visible from streets and open spaces. Access to parking via a driveway, lane or basement carpark entry is permitted if one access point services a minimum of 5 dwellings. Front garages, carports and individual driveways are not permitted.
C10.	Development sites are encouraged to provide below-ground car parking that is interconnected to and shared with, or is able to be interconnected in the future to, the below-ground car parking on adjoining sites and developments. In order to facilitate rationalisation of vehicle entry points and to increase future planning flexibility.

Car parking

Controls	
C11.	On-street parking to be integrated to the streetscape and parallel to the kerb.
C12.	Parking is to be listed on a separate title (unbundled) from the development.

Shared parking

Controls	
C13.	<p>Shared parking rates should be provided in accordance with the occupancy rates provided in Table K21-2.</p> <p>Shared parking is parking shared by more than one user, which allows parking facilities to be used more efficiently.</p>
C14.	<p>Parking requirements for non-residential uses may be shared and potentially reduced where it can be determined that the peak parking requirements occur at different times (either daily or seasonally). Parking rates for shared parking shall be calculated by applying the occupancy rates in Table K21-2 to the maximum parking requirements for a proposed use.</p>

Table K21-2 Shared Car Parking Rates

Building Use	Mon - Fri 8am - 5pm	Mon - Fri 6pm - 12am	Mon - Fri 12am - 6am	Weekend 8am - 5pm	Weekend 6pm - 12am	Weekend 12am - 6am
Industrial	100%	20%	5%	5%	5%	5%
Commercial	90%	80%	5%	100%	70%	5%
Hotel	70%	100%	100%	70%	100%	100%
Restaurant	70%	100%	10%	70%	100%	20%
Theatre	40%	80%	10%	80%	100%	10%
Entertainment	40%	100%	10%	80%	100%	50%
Conference	100%	100%	5%	100%	100%	5%
Institutional	100%	20%	5%	10%	10%	5%
Church	10%	5%	5%	100%	50%	5%

Source: PRCUTS Planning and Design Guidelines p45, Urban Growth, Nov 2016

K21 Burwood Concord (PRCUTS)

Car share and ride share

Controls	
C15.	On-site parking can be reduced at a rate of 5 parking spaces per 1 car share space where an active car-sharing program is made available to residents and/ or employees and where ride share or other organised car pooling initiatives are available on site.
C16.	Additional car share should be provided at a rate of 1 space per 20 dwellings without parking and 1 space per 100 dwellings with parking.
C17.	Car share will be located in publicly accessible sites, either on-street, in public parking stations or, if provided within a building it should be accessible to all car share members.
C18.	The following car share targets have been established for the precinct: <ul style="list-style-type: none"> • 10% - 15% of residents by 2031 • 15% of residents by 2050.

Parking rates

Controls	
C19.	For parking rates, refer to clause 8.11 of the Canada Bay LEP 2013 and Part B of this DCP

Bicycle parking

Controls	
C20.	For bicycle parking controls, Refer to <i>DCP Part B - General Controls, B3.6 Bicycle parking and storage facilities</i> ; and <i>B3.7 End of trip facilities</i> .

Electric vehicles

Controls	
C21.	Refer to <i>DCP Part B - General Controls, B3.8 Electric Vehicles</i>

Common loading docks and service vehicle parking

Controls	
C22.	Refer to <i>DCP Part B - General Controls, B3.9 Common loading docks and service vehicle parking</i> .

Freight and service access

Controls	
C23.	Freight and service vehicle rates should be provided in accordance with Table K21-3 .
C24.	Vehicle access including for freight and service vehicles is not permissible off Parramatta Road.
C25.	Commercial and medium/ high density residential developments are to have common loading docks and facilities for freight and service vehicles, including trades, home deliveries etc.

C26.	Loading docks for freight and service vehicles are to be located off-street and underground.
C27.	Loading docks and facilities are to be located and designed to minimise the impact of freight and service vehicle movements on the area.

Table K21-3 Freight and service vehicle rates

Land Use	Space required
Residential development	1 space per 50 apartments for first 200 apartments plus 1 space per 100 apartments thereafter
Commercial offices	1 space per 4,000m ² GFA for first 20,000m ² GFA and a space per 8,000m ² GFA thereafter
Retail	1 space per 500m ² for first 2,000m ² and 1 space per 1,000m ² thereafter (50% of spaces for trucks)

K21 Burwood Concord (PRCUTS)

K21.21 Housing Diversity

A mix of dwelling types in the precinct will provide greater housing choice and support equitable housing access by offering a diversity of dwelling types, amount of floor space, number of bedrooms and level of accessibility and affordability.

Objectives

- O1 To provide a diverse range of dwelling types and sizes to cater for the needs of the existing and future residents over time, and encourage social diversity.
- O2 To ensure that low to moderate income households can afford to live in the precinct by increasing the stock of appropriate affordable housing.

Controls

C1.	For mix of residential flat buildings and residential components of mixed use developments, refer to LEP clause - 6.11 <i>Mix of dwelling sizes in residential flat buildings and mixed use development</i>
C2.	Regarding the amount of adaptable (accessible) housing to be provided refer to requirements in <i>City of Canada Bay DCP Part B1.1 Adaptable Housing</i> .
C3.	Contributions towards Affordable Housing is to be provided according to Council's Affordable Housing Contributions Scheme.
C4.	Affordable housing is to be consistent with the requirements of the <i>City of Canada Bay Affordable Housing Program and Policy</i> .

K21.22 Residential Uses not covered by the Apartment Design Guide

The NSW Apartment Design Guide (ADG) applies to buildings that are three or more storeys high and that comprise at least four dwellings. For other residential development types, such as 2-3 storey terraces, low rise up-over or walk-up apartments, multiplexes, urban courtyard houses and the like, the following controls apply.

Objective

- O1 To ensure design quality, performance of and amenity created by new residential development is of a high standard and consistent across the precinct.

Controls

C1.	The maximum building depth is 18m unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. through the use of a courtyard design.
C2.	The minimum private open space of a ground floor dwelling is calculated by the number of bedrooms x 4m ² .
C3.	Single aspect dwellings, if unavoidable, are only permitted if they have a northerly or easterly aspect.
C4.	Living rooms and private open spaces of at least 70% of apartments receive a minimum of 2 hours direct sunlight between 9 am and 3 pm in mid winter (21 June).
C5.	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² .
C6.	Building separation is as per the <i>Apartment Design Guide, Section 3F Visual Privacy</i> .

C7.

Private open space (POS) is designed to maximise useability, privacy, outlook and solar access.

For dwellings on the ground floor including townhouses and terraces, the minimum private open space is as follows:

Dwelling type	Min. POS
Studio/ 1 bedroom	20m ²
2 bedroom	28m ²
3+ bedroom	35m ²

The minimum dimension is 4.0m x 4.0m.

For dwellings on upper levels, the minimum private open space (such as decks and balconies) is as follows:

Dwelling type	Min. POS
Studio/ 1 bedroom	10m ²
2 bedroom	14m ²
3+ bedroom	18m ²

The minimum dimension is 2.0m x 3.0m.

K22 Homebush North (PRCUTS)

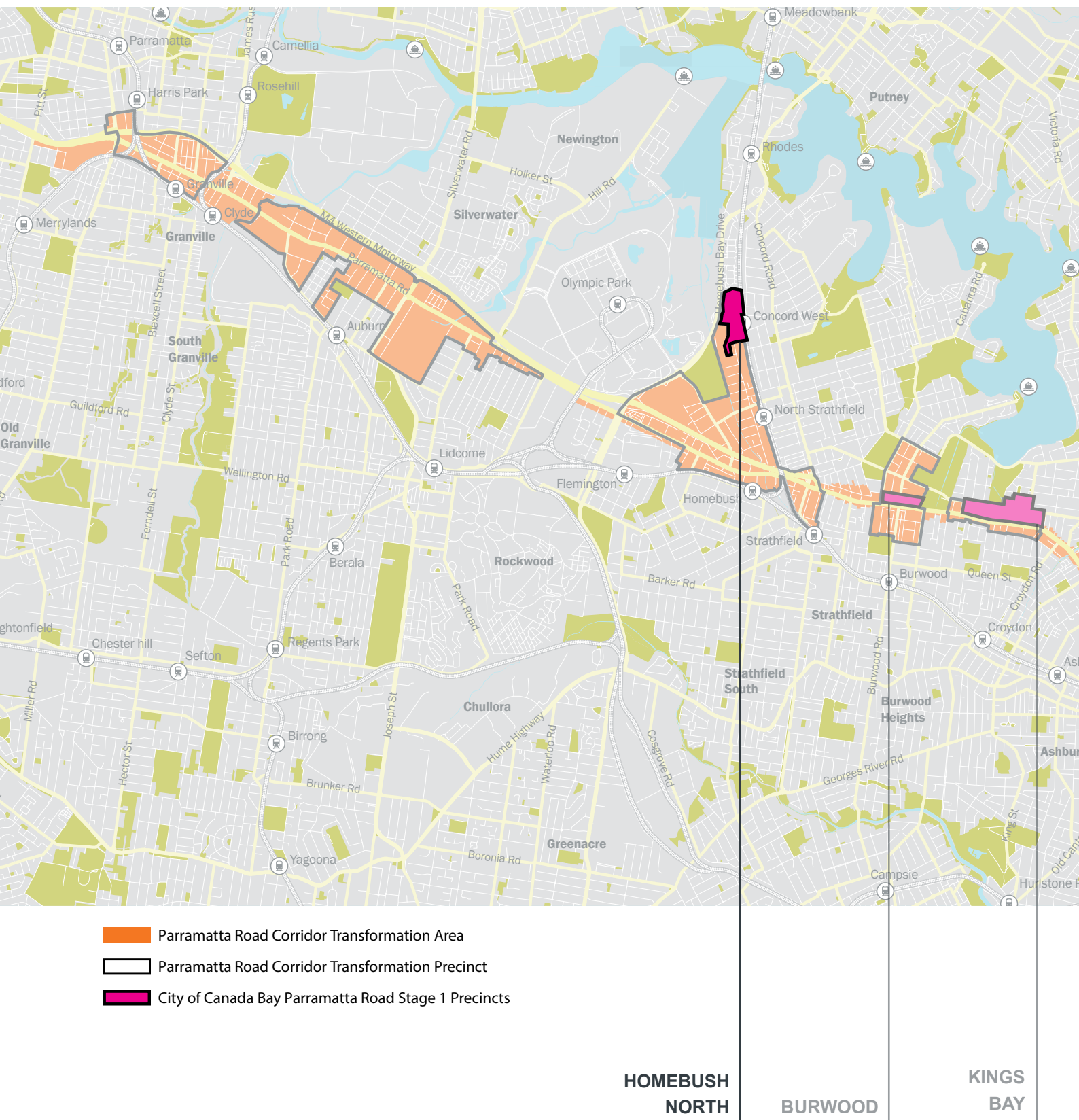


Figure K22-1 PRCUTS Parramatta Road Corridor (Source: PRCUTS, 2016)

Homebush North Precinct

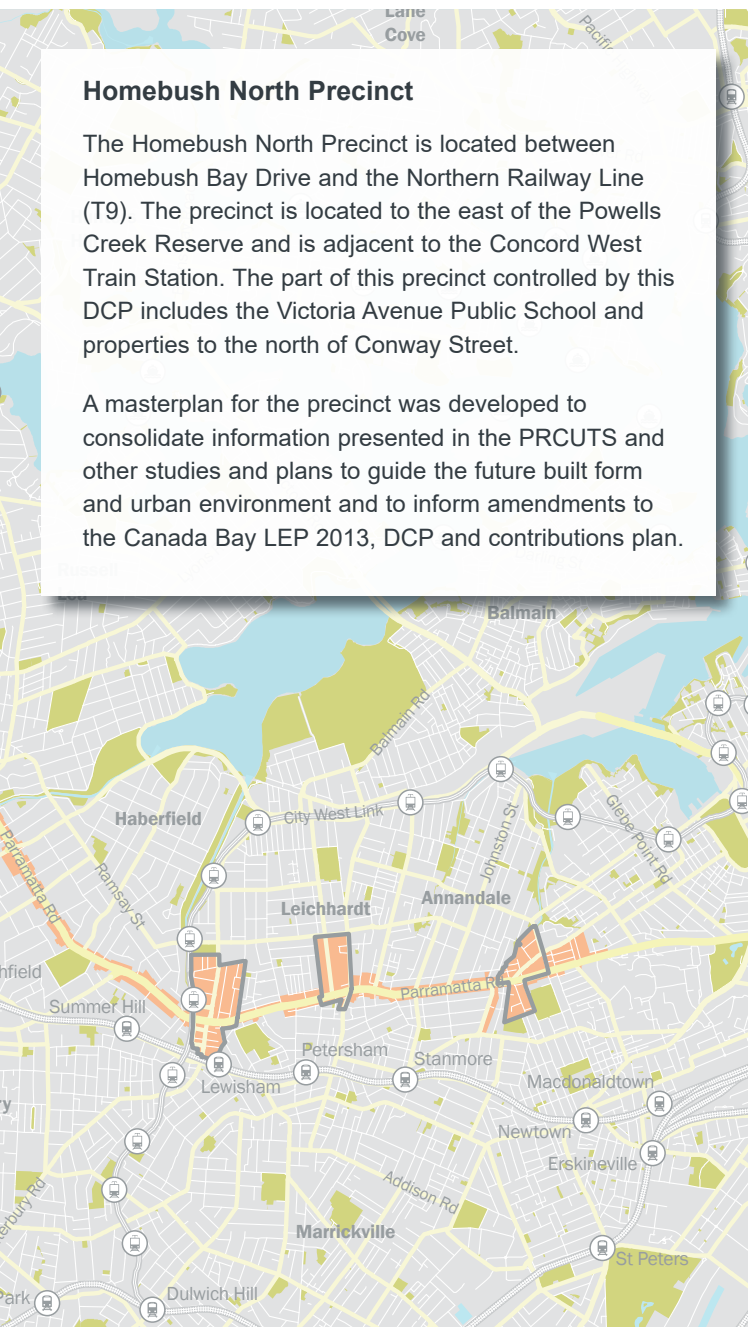
The Homebush North Precinct is located between Homebush Bay Drive and the Northern Railway Line (T9). The precinct is located to the east of the Powells Creek Reserve and is adjacent to the Concord West Train Station. The part of this precinct controlled by this DCP includes the Victoria Avenue Public School and properties to the north of Conway Street.

A masterplan for the precinct was developed to consolidate information presented in the PRCUTS and other studies and plans to guide the future built form and urban environment and to inform amendments to the Canada Bay LEP 2013, DCP and contributions plan.

K22.1 Parramatta Road Corridor Urban Transformation Strategy (PRCUTS)

This DCP has been prepared to support the implementation of the NSW Government Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) published in November 2016.

Previous studies have identified a number of industrial sites within the precinct that are currently underutilised and are suitable for residential purposes, featuring good access to public transport and local amenities. PRCUTS aims to renew Parramatta Road and adjacent communities through investments in homes, jobs, transport, open spaces and public amenity. It presents significant urban renewal opportunities for land within defined development precincts.



K22 Homebush North (PRCUTS)

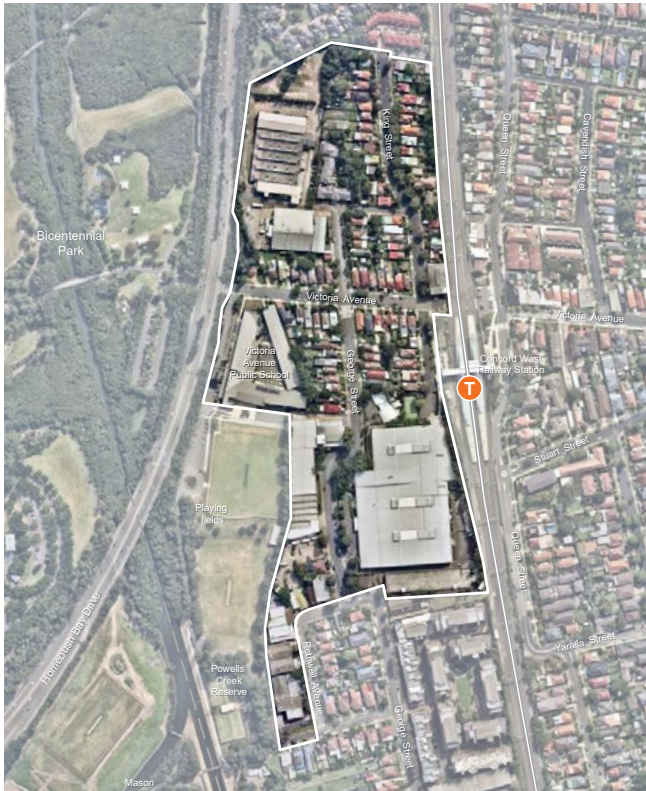


Figure K22-3 Aerial photo (source: nearmap.com)

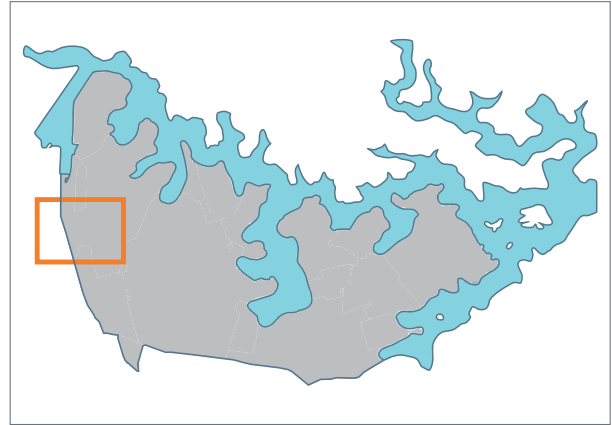


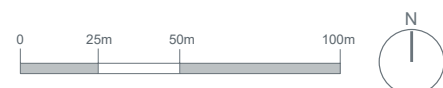
Figure K22-2 Location within LGA



Figure K22-4 Artist impression of indicative future character within Homebush North Precinct (Source: PRCUTS, Urban Growth, Nov 2016)



Figure K22-5 Land to which this DCP applies



K22 Homebush North (PRCUTS)

K22.2 Existing Character

Homebush North Precinct is characterised by a variety of built form and uses, including a mix of dwelling houses, town houses, apartment buildings, education and industrial uses. In terms of vehicle movement, the precinct is effectively self-contained, with George Street forming the only vehicular access point to the surrounding road network at the southern end of the precinct.

Strengths and opportunities

- proximity to high amenity open space, recreation facilities and Sydney Olympic Park;
- enhanced connections to rail transport, including future Metro stations, to increase accessibility to employment, recreation and cultural opportunities;
- some large, unfragmented land holdings and limited number of strata titled properties;
- potential to enhance existing recreational opportunities and linkages for active transport such as better pedestrian connectivity and safety across the railway line and Homebush Bay Drive;
- improved active transport access to regional recreation and open space facilities with a focus on connecting to the existing recreational routes around Olympic Park; and
- reduced car dependency by lowering parking rates in areas with good access to public transport.

Challenges and constraints

- Existing high traffic volumes on Homebush Bay Drive;
- Barriers to access for all modes of transport, created by major roads and rail lines;
- Low pedestrian connectivity and permeability; and
- High parking demand and levels of on-street parking.

K22.3 Desired Future Character

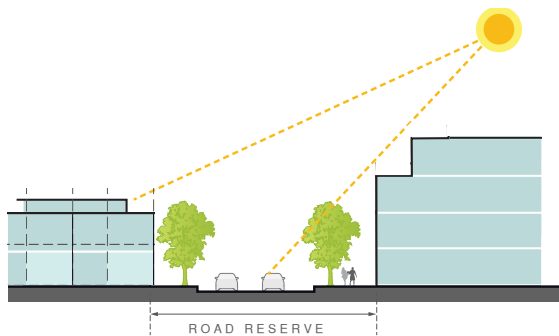
"Homebush Precinct will become a new, mixed use precinct housing a new community of residents attracted to the area for its high amenity and access to employment at Parramatta CBD and Sydney Olympic Park. The precinct will provide a long term supply of housing stock to meet increasing demand as Sydney Olympic Park grows into a new city."

Sitting between Sydney's two main CBDs, the wider area of Homebush will be transformed into an active and varied hub, blending higher density housing and a mix of different uses, supported by a network of green links and open spaces with walking access to Concord West train station. Future development will support the delivery of high quality open space and improvements to the area around the station.

The desired future character of the precinct is a transit oriented community which features higher densities that maximise site renewal opportunities. Development proposals in the precinct are to achieve the following desired future characteristics:

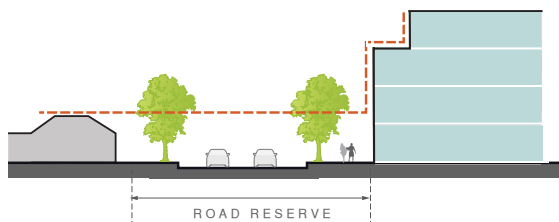
- **Well Integrated Built Form:** Development will provide a built form that steps down in height toward adjoining lower-rise residential areas. The siting, bulk and scale of development will ensure there are no significant adverse impacts to sunlight access and privacy within the precinct.
- **Mixed Use:** Development adjoining the station square will provide a focal point for the neighbourhood by providing active uses such as shops, cafes and restaurants.
- **Accessibility:** Development will better connect the precinct as a whole by creating a street network with emphasis on active transport. Connections will strengthen existing or promote new routes to the station and open space.

K22.4 Built Form Principles



◀ Solar access

Taller development is located, designed and modulated in height so that impacts such as overshadowing on neighbouring properties and public spaces is minimised.



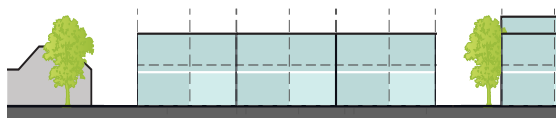
◀ Sensitive interfaces

Development that is of a larger scale than that of the surrounding area is required to set back and step down, in particular along sensitive interfaces to heritage items and adjoining low rise residential uses.



◀ Street character

Consistent proportions and a human scale along streetscapes are established through front setbacks, landscape treatments, street wall heights and building articulation.



◀ Bulk and scale

Larger development is integrated into the context through vertical articulation that breaks the facade into smaller elements, changes in material and colour, and a recessed roof form.

K22 Homebush North (PRCUTS)

K22.5 Block Configuration

The scale, height, arrangement and orientation of new built form defines the proportion and level of enclosure of streets and public spaces. Good site planning and block configuration maximises the level of sun access and visual and acoustic privacy for all, including neighbouring properties.

Together with building setbacks (see *Section K22.8 Street Setbacks*), the following controls set the basic building footprints and envelopes for new development in the Homebush North Precinct.

Objectives

- O1 To arrange building forms including heights and massing that reinforce the future desired character of the area and protect valued character attributes.
- O2 To facilitate daylight access and ventilation to streets, public places and neighbouring properties.
- O3 To maximise visual and acoustic privacy.
- O4 To consider future development opportunities on adjoining sites and avoid isolated sites.
- O5 To maximise permeable ground surfaces to allow rainwater to penetrate the soil.

Controls

- | | |
|-----|---|
| C1. | <p>New development is to consider future development on adjoining sites by providing sufficient separation and setbacks, and avoid creating isolated sites.</p> <p>New development is to follow the desired Site Amalgamation Plan (Figure K22-6).</p> |
|-----|---|

- | | |
|-----|---|
| C2. | <p>New development is to conform to the maximum number of storeys as shown in Figure K22-8. Further controls regarding the permissible building envelope are contained in <i>Section K22.8 Street Setbacks</i> and <i>Section K22.10 Massing and Articulation</i>.</p> |
|-----|---|

If a multi dwelling (terrace) development is proposed the maximum height for that development will be 8.5m.

However, if the development complies with the following requirements then it may have a maximum height of 9.0m if:

- a) The development follows a 45 degree height plane, measured at the front and rear building line, springing from 7m above the natural ground level, and
- b) Only bedrooms and non-habitable spaces are located in the third storey.

- | | |
|-----|---|
| C3. | The maximum length of any building more than three storeys high is 60m. |
|-----|---|

- | | |
|-----|---|
| C4. | For commercial uses on all floors above the ground level, any wall with windows must be set back from the side and rear boundary by 3m. Any wall without windows is not required to be setback. |
|-----|---|

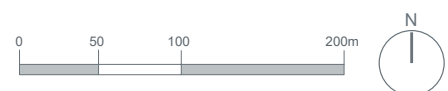
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| C5. | Built form is to be positioned for optimal access to daylight and direct sunlight for internal and external spaces, and for adjoining public and private land. |
|-----|--|

- | | |
|-----|---|
| C6. | Buildings are adaptable to a variety of uses over time. The following minimum floor to floor heights apply: |
|-----|---|

Use	Minimum height
Retail	4.4m
Commercial	3.7m
Adaptable	3.7m
Residential	3.1m



Figure K22-6 Amalgamation Plan



K22 Homebush North (PRCUTS)

K22.6 Access Network

A permeable urban structure is key to successful places. The provision of new links and open spaces is encouraged to improve the area's currently disconnected street network, with a particular focus on supporting the uptake of active and public transport and linking key destinations within and beyond the precinct.

Objectives

- O1 To provide a better and more robust access network that links residential, local schools, employment and retail uses to Concord West Station and open spaces such as the playing fields, Powell's Creek Reserve and Sydney Olympic Park.
- O2 To encourage travel behaviour change by discouraging car usage and supporting sustainable travel choices such as public and active transport.
- O3 To improve network permeability, in particular for pedestrians, by breaking up long blocks with new streets and quality pedestrian prioritised links.
- O4 To meet access requirements for future development and enable increased density in selected locations.

Controls

C1.	The existing movement network is retained and new streets, shareways and links are provided as identified in Figure K22-7 .
C2.	Wherever possible, long blocks are broken up with new high quality pedestrian prioritised links, particularly where new connections would facilitate access to public transport, open spaces and community facilities.
C3.	Potential rear lanes have been identified in Figure K22-7 to mitigate the impact of vehicular access and loss of car parking along Victoria Avenue, George Street and King Street. Provision of these lanes would require negotiations between landowners and/or amalgamated sites.

	Shared Zones have been shown on Figure K22-7 . The intended shared use of the road will be indicated by pedestrianised laneway treatments including flush kerbs, landscaping and a paved road surface.
C4.	Size and location of footpaths, laneways, cycleways, planting and parks are to be provided according to Council's PRCUTS Public Domain Plan and PRCUTS Masterplan.
C5.	All future vehicular links including shareways are required to be in public ownership. It is desirable that all future pedestrian/ cycle links also become public land, however, as an alternative an access easement over private land may be able to be negotiated with Council.
C6.	Future pedestrian/ cycle links are to be naturally lit and ventilated, appropriately lit after hours, publicly accessible 24/7, and have clear sightlines from end to end.
C7.	Bicycle facilities, such as parking, secure storage and end-of-trip facilities are easily accessible from the public domain and conveniently located near entrances and/or lifts of new development.
C8.	A new 'Station Square' is located at the eastern end of Victoria Avenue as identified in Figure K22-7 .
C9.	The entry and exit of existing underpasses to the east of Station Avenue underneath the rail line and to the west of Victoria Avenue underneath Homebush Bay Drive are addressed and overlooked by private development where possible.
C10.	For more controls see <i>Section K22.17 Access and Parking</i> .

K22.7 Public Domain Experience

Private development has a large influence on the local character and the support of the existing or future functioning of the public realm, for example by clearly addressing a new pedestrian link and providing good levels of surveillance. The scale of built form, its appearance and the design of private-public interfaces has a significant impact on how people experience a streetscape and the safety of the neighbourhood.

Key elements apart from the built form that need to be considered include front setbacks, boundary treatments, vegetation and landscape design, vehicular access, visible activity at street level, and surveillance provided by doors, windows and balconies.

Objectives

- O1 To protect and improve the quality, accessibility and safety of the public domain across the precinct.
- O2 To support walking and cycling along new and upgraded walking routes to key destinations such as Concord West Station and Sydney Olympic Park.
- O3 To improve the immediate surrounds of Concord West Station including the new Station Square and support increased activity levels, safety and comfort.
- O4 To increase tree canopy cover and provide for more greenery associated with the public domain.

Controls

- | | |
|-----|---|
| C1. | Active frontages and Interactive frontages are to be provided as identified in Figure K22-8 . |
| C2. | <p>Development is to support the experience and safety of the new Station Square adjacent to Concord West Station as identified in Figure K22-7. Development directly to the north of the square must:</p> <ul style="list-style-type: none"> a) maximise the number of doors and windows facing the square; b) ensure that at least 50% of the square receives a minimum of 3h direct solar access in mid-winter (21 June) between 9am and 3pm, unless it can be clearly demonstrated that it is unreasonable to meet this requirement due to urban design considerations and only in specific circumstances where the development complies with all other relevant development standards and development controls; c) locate active uses on the ground floor with a preference for convenience retail and cafes/ restaurants with outdoor chairs and tables; and d) provide continuous awnings or colonnades to the square and wrapping around the corner along King Street. |
| C3. | All new pedestrian/ cycle links are to be defined by built form and quality edge treatments such as semi-transparent fences or low walls with landscaping. See <i>Section K22.12 Safety and Accessibility</i> for more detail. |
| C4. | Any development on a corner site and at the end of terminating views must pay particular attention to overall design quality due to the location's high visibility and impact on the local character, i.e. well proportioned facades and quality material, finishes and plant species selection. Driveways or vehicle entry/ exit points at the end of terminating views are prohibited. |

K22 Homebush North (PRCUTS)

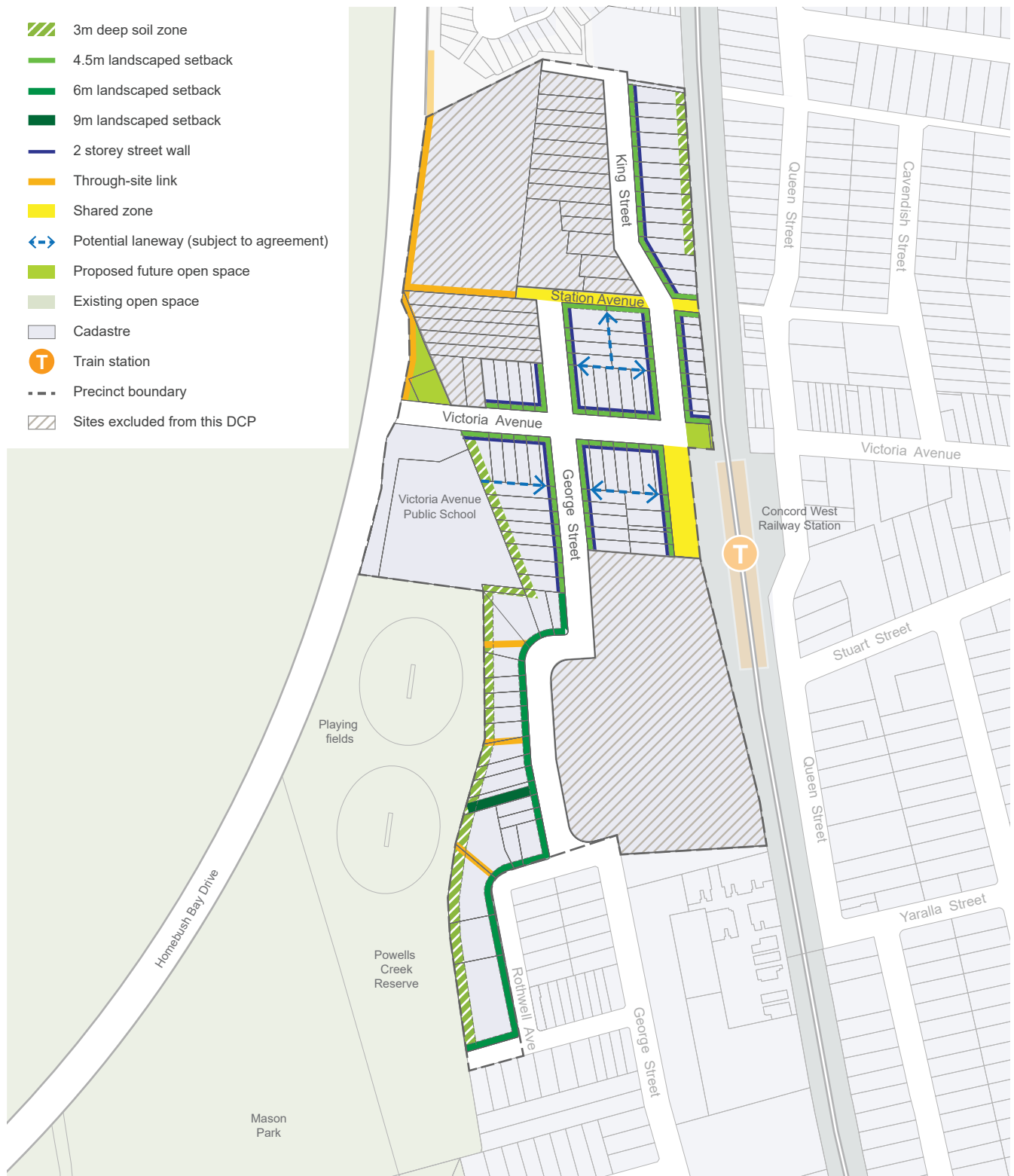
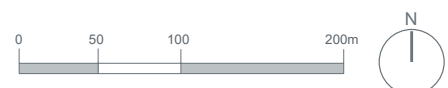


Figure K22-7 Public Domain Plan



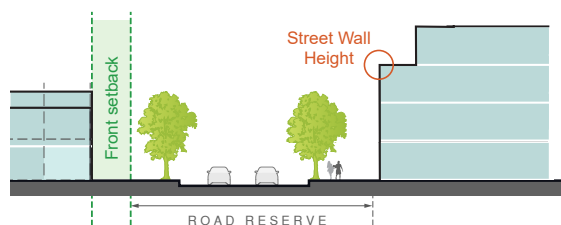
K22.8 Street Setbacks

Street setback areas are an integral part of the streetscape and their treatment is fundamental to the amenity and character of a neighbourhood. Combined with building height and road reserve width, they define the proportion, scale and visual enclosure of the street. Street setbacks not only establish the alignment of buildings along the street, they also provide for landscaping and deep soil areas, building entries and a transition between public and private space.

Street wall heights and upper level setbacks (where relevant) further define the proportion, scale and visual enclosure of the public domain and provide a level of consistency across the precinct. Upper level setbacks lessen the visual impact of taller development and help create a more unified, human-scale streetscape environment.

Objectives

- O1 To ensure new development reinforces the desired streetscape character and where appropriate retains the character of established residential areas.
- O2 To ensure setbacks contribute positively to the pedestrian environment at street level.
- O3 To provide a sense of enclosure to the street and contribute to a consistent built form scale across the precinct over time.
- O4 To enhance development and its relationship with adjoining sites and the public domain, particularly in regard to access to sunlight, outlook, view sharing, ventilation and privacy.



Together with overall building height limits, street setbacks and wall heights define the spatial proportion and visual enclosure of the public domain.

Controls

- | | |
|-----|---|
| C1. | All development is to comply with the setbacks shown on Figure K22-7 . |
| C2. | Where applicable, a portion of the setback area is to provide deep soil zones and tree planting. Refer to <i>Section K22.15 Landscape Design</i> for more detailed controls. |
| C3. | <p>'Undesirable' elements such as vents, electrical substations, or plant and equipment spaces are not permissible within the setback area and should be accommodated within the building.</p> <p>Service cabinets are to be co-located internally, accessible from loading, waste or parking areas where possible to avoid impact on the public realm.</p> |

K22 Homebush North (PRCUTS)

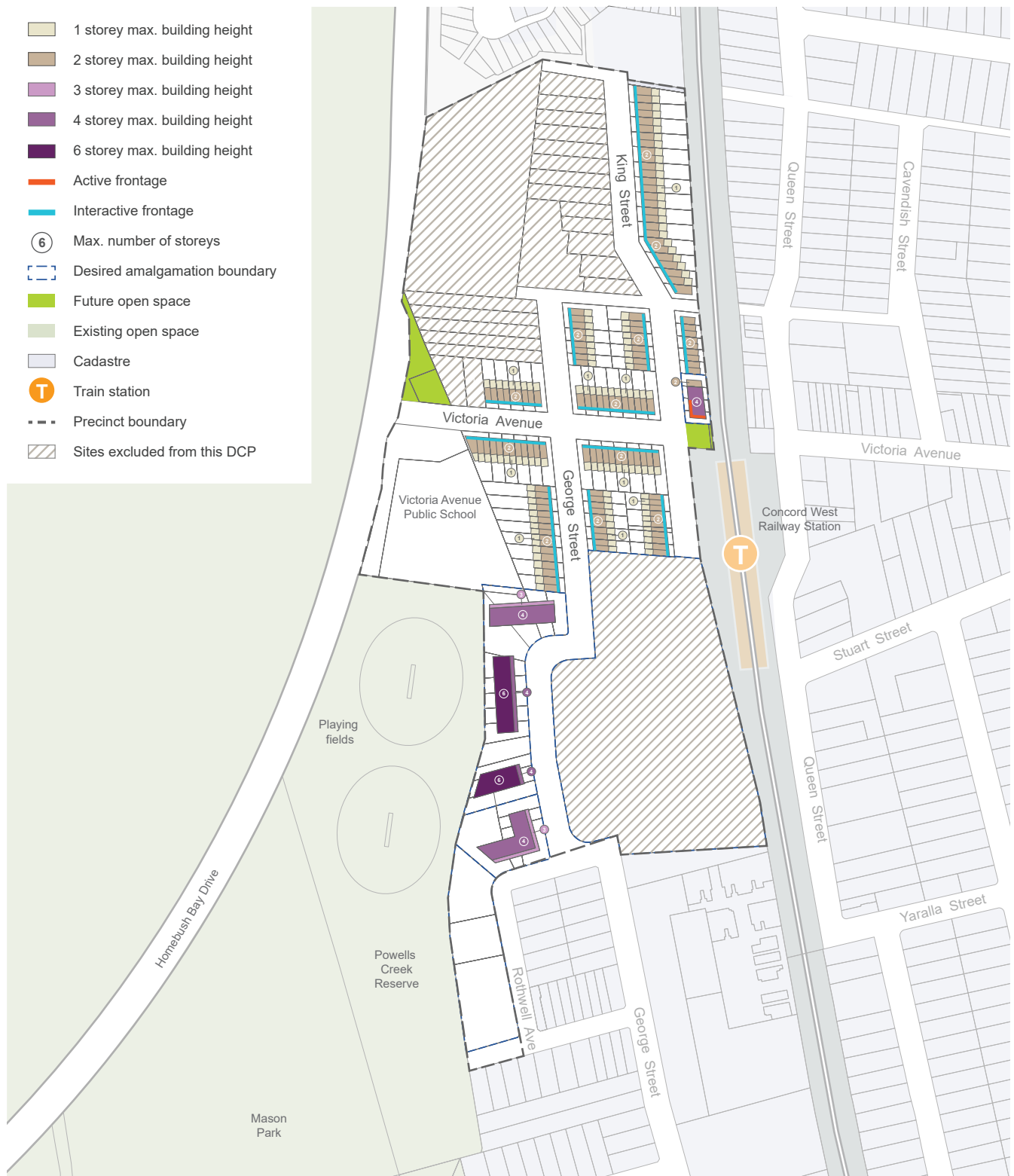
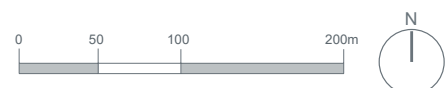


Figure K22-8 Building Envelopes Plan



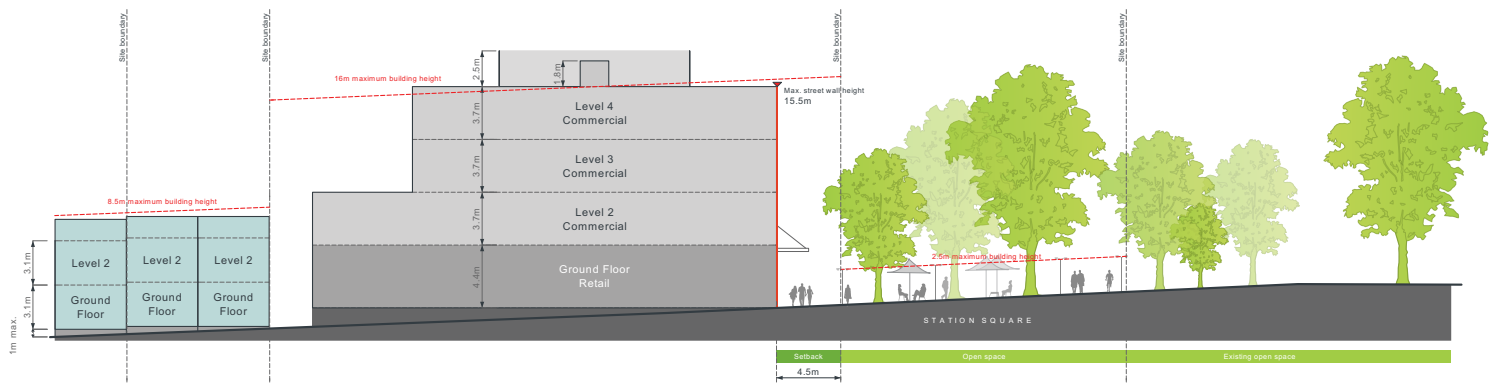


Figure K22-9 Built Form Envelope - Section A

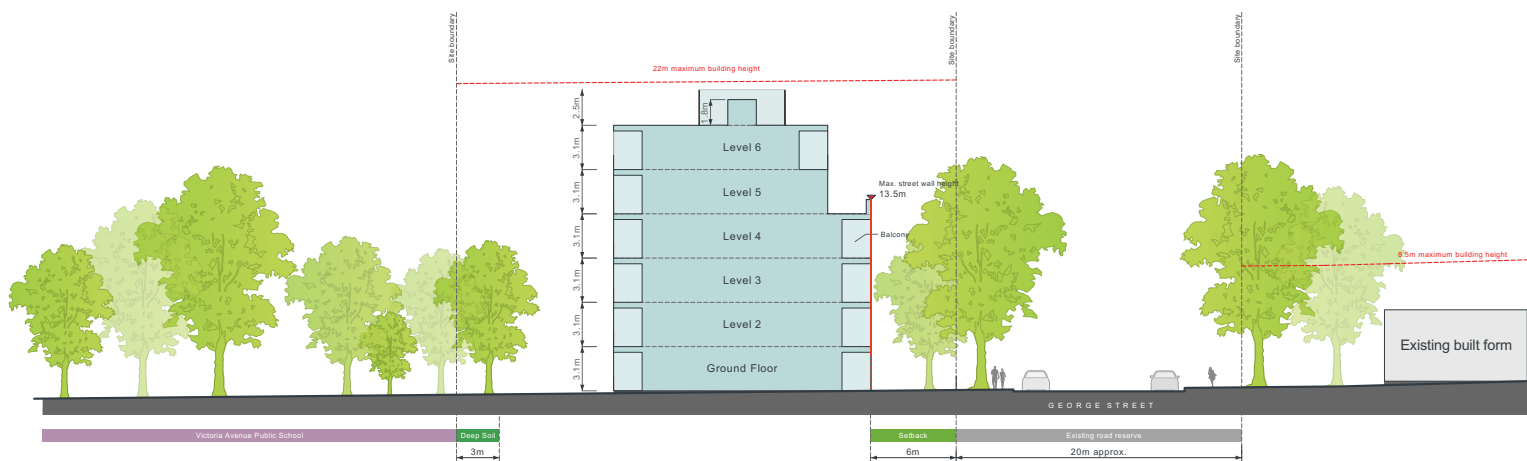


Figure K22-10 Built Form Envelope - Section B



Section Key Plan

K22 Homebush North (PRCUTS)

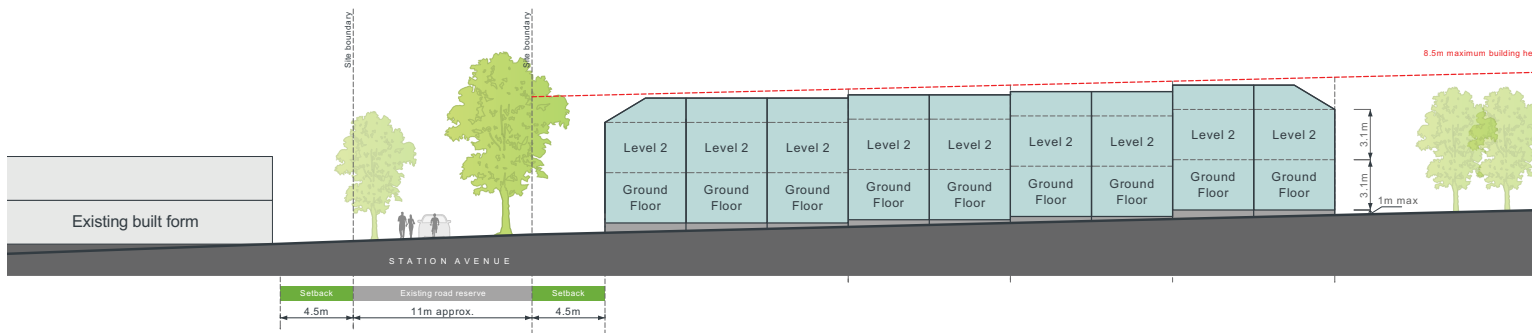


Figure K22-11 Built Form Envelope - Section C

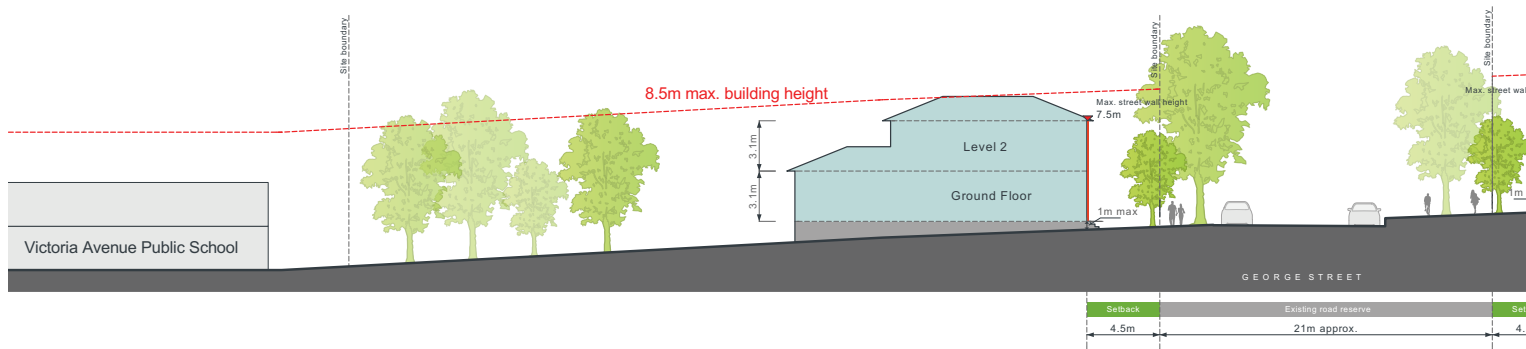
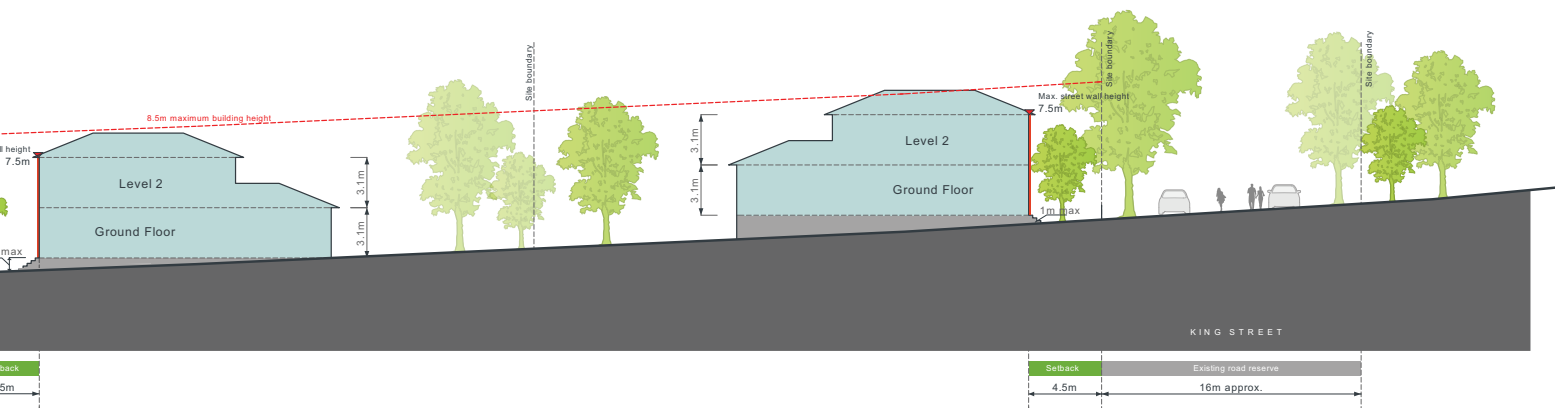
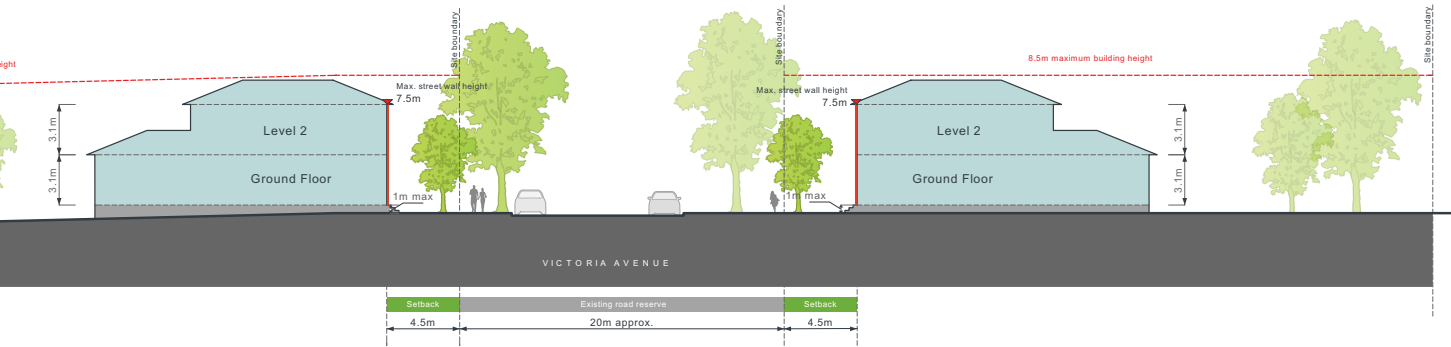


Figure K22-12 Built Form Envelope - Section D



Section Key Plan

K22 Homebush North (PRCUTS)

K22.9 Transitions and Interfaces

Changes in height and scale will require transitions to sensitive interfaces such as existing low scale residential areas and open spaces. New development will be required to respond to the overall scale and form of existing elements to preserve visual scale and to minimise loss of outlook and privacy and maximise sun access of adjoining properties.

Interface treatments for development adjacent to the rail line and/or Homebush Bay Drive need to support the protection of future residents and building users from negative impacts such as noise, vibration and air pollution.

Objectives

- O1 To encourage new development that is sensitive and complementary in scale and site location to surrounding properties.
- O2 To protect residential amenity at the interface to existing low rise development.
- O3 To ensure streets and open spaces receive adequate sunlight and ventilation.
- O4 To protect future residents and building users from negative impacts generated by the rail line and Homebush Bay Drive.

Controls

- | | |
|-----|---|
| C1. | Where adjacent to low density residential interfaces, new development should gradually step away in height and provide appropriate setbacks. |
| C2. | Development to the east of the playing fields along the open space interface: <ul style="list-style-type: none"> a) sets back as identified in Figure K22-7 with the setback area to be landscaped and deep soil; and b) addresses the open space and maximises windows and balconies of the upper levels that maximise passive surveillance. |
| C3. | Development along the interface to the rail line, the Victoria Avenue Public School and/or Homebush Bay Drive complies with the setbacks shown in Figure K22-7 . The following applies: <ul style="list-style-type: none"> a) The setback is to be deep soil to allow for mature vegetation in order to create a buffer; and b) Fences and walls can be as high as 2.0m and should be constructed to effectively shield noise. |

K22.10 Massing and Articulation

Detailed articulation and appropriate scale of built form defines and reinforces the identity and desired character of a place. The following architectural treatments are encouraged to create variety and interest in the streetscape while contributing to a sense of continuity and overall visual quality.

Objectives

- O1 To ensure buildings and their individual elements are appropriately scaled to define and respond to the surrounding character.
- O2 To add visual quality and interest to new buildings with a focus on breaking up massing of higher density forms when viewed from public places and neighbouring properties.

Controls

C1.	Buildings that are 3 storeys or more are to be designed so that they clearly articulate a base, middle and top.
C2.	Facades are articulated using techniques such as projections, recesses, eave overhangs and deep window reveals. Where development is set back at least 3m from the site boundary, elements can protrude up to 0.3m into the front setback (articulation zone). Where development is set back at least 4.5m from the site boundary, elements can protrude up to 0.6m into the front setback (articulation zone).
C3.	The maximum length of straight wall on any storey above ground floor level, without articulation such as a balcony or return, is 15m.
C4.	New development is to place particular focus on creating a 'human scale' at the lower levels through the use of detailed design, insets and projections that create interest and, where relevant, the appearance of finer grain buildings.
C5.	Building massing is also to be vertically articulated.

C6.	New development in established residential areas within the 8.5m height limit zone display roof forms that integrate with neighbouring sites. Pitched roofs are preferable over flat roof forms.
C7.	For built form that is 3 storeys or more, the upper-most level is set back and visually unobtrusive. Ways to achieve this include the use of lightweight construction techniques, darker colours, solid balustrades and roof overhangs that create deep shadows.
C8.	Adjoining buildings are considered in terms of setbacks, awnings, parapets, cornice lines and facade proportions.
C9.	Roof plant, lift overruns, vents, carpark entries and other service related elements are integrated into the built form and complement the architecture of the building.
C10.	Buildings on corners address both streets and architectural elements are composed so that they 'turn the corner'.



Example of an building that is vertically articulated and differentiates between base, middle and top

K22 Homebush North (PRCUTS)

K22.11 Interactive Frontages

Within residential zones the design of the development plays an important role in encouraging pedestrian activity and enhancing public safety and security. Developments which allow passive surveillance, where people within buildings are able to overlook the street and where passersby are aware of 'signs of life', promote streetscape activity and local interactions. Multiple entries to residential dwellings which allow residents to physically access homes directly off the street also provide visual interest and encourage streetscape activity.

Objectives

- O1 To encourage new development that promotes activity on the street and enhances public safety and security.
- O2 To encourage new development that provides a high level of passive surveillance.
- O3 To ensure development provides a high quality visual experience and creates interest when experienced from a walking pace.
- O4 To ensure private spaces and entries facing the street are safe, attractive and comfortable to use.



Front semi-transparent fences and landscaped setbacks with tree planting contribute to the amenity of the streetscape and support a positive pedestrian experience.

Controls

C1.	Development that fronts onto streets identified as 'interactive frontage' (see Figure K22-8) must comply with following controls:
C2.	Developments are to maximise the number of front doors and private spaces which are visible from the street. At a minimum there is to be a pedestrian entries and/or primary private open space overlooking the street every 15m.
C3.	Developments are to provide openable windows and balconies at upper levels that encourage views of the street.
C4.	Entries and private open spaces are encouraged within the 3m or 4.5m landscaped setbacks including a 1.5m wide strip of landscaping (see Figure K22-13 and Figure K22-14) and other controls including those identified in <i>Section K22.15 Landscape Design</i> are also to be met.
C5.	Deeper front setbacks (greater than 5m) are discouraged and landscaping and fences or structures higher than 0.9m within the front setback are not permitted.
C6.	All landscaping within the front setback is to maintain clear views from the footpath to the development.
C7.	Front fences are to be a maximum of 1.2m high and at least 50% is to be at least 50% transparent and enable a high level of passive surveillance.
C8.	Front terraces and entry areas are to be elevated by between 0.6m and 1.0m above the level of the street to improve privacy and increase opportunities for passive surveillance.
C9.	Development is to minimise services (i.e. substations, fire services and water services) located within the front setback, along the site frontage or on building facades.

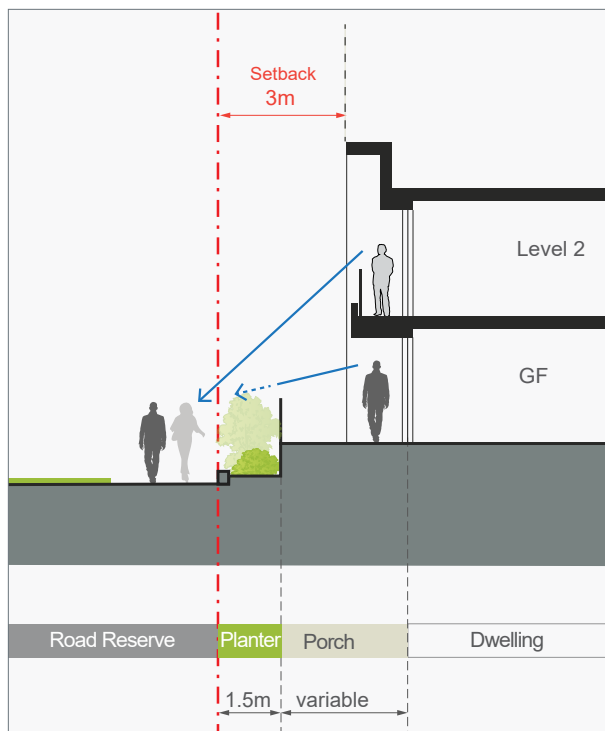


Figure K22-13 Indicative 3m front setback for residential ground floors



Landscaped setbacks with integrated entries and tree planting contribute to the residential streetscape.

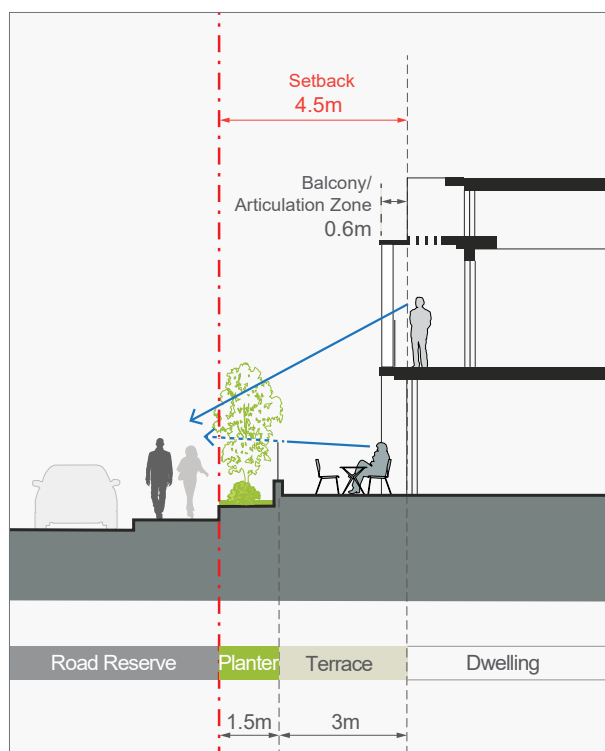


Figure K22-14 Indicative 4.5m front setback for residential ground floors



A low stone wall and visually permeable fencing provides privacy for ground floor units and passive surveillance of the street.

K22 Homebush North (PRCUTS)

K22.12 Safety and Accessibility

The way in which buildings address streets, links and open space creates an important transition between public and private land. The careful design of this interface zone contributes to the liveliness, interest, comfort and safety of the public domain. Good accessibility to and from new development increases activity levels further and contributes to the visible activity in a neighbourhood.

Objectives

- O1 To ensure new development supports the wider neighbourhood and community safety and maximises opportunities for passive surveillance.
- O2 To incorporate a high degree of accessibility into the design of new buildings and the public domain that considers the various mobility levels of future users, i.e. disabled and elderly.
- O3 To encourage ground floor activities to spill out into the public domain and create a vibrant streetscape in parts of the precinct that should be a focus for local retail (active frontages).

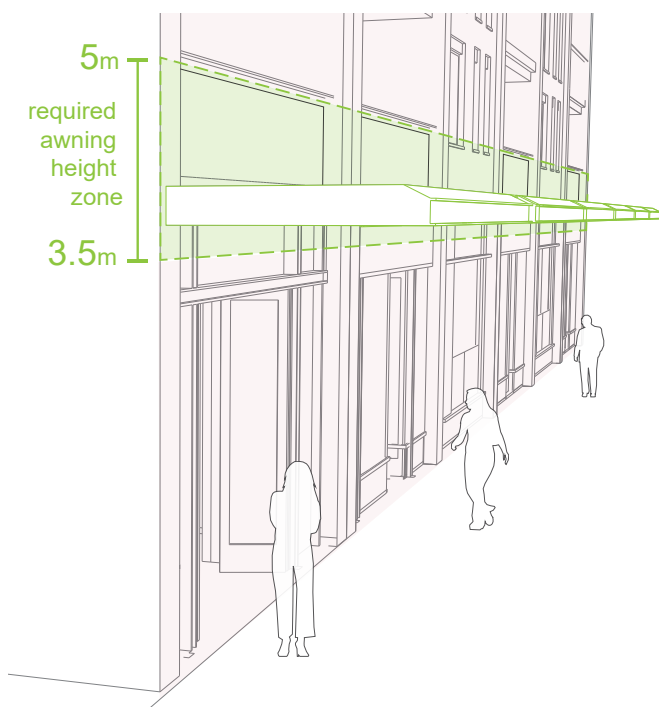


Figure K22-15 Awnings are to be between 3.5m and 5m above ground level along active frontages

Controls

- | | |
|-----|--|
| C1. | Development is to consider and comply with Crime Prevention Through Environmental Design (CPTED)'s Safer by Design Guidelines. |
| C2. | New development addresses and defines the public domain through entrances, lobbies, windows and balconies that overlook public spaces, maximising opportunities for passive surveillance. |
| C3. | <p>All building entries are clearly visible from the public domain.</p> <p>Access is to be provided according to:</p> <ul style="list-style-type: none"> a) Active Frontages: at ground level unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only. b) Interactive frontages for residential development in the R3 Medium Density zone: at ground level and set in a landscaped front setback that is to be raised above natural ground level to between 0.6m and 1.0m. |
| C4. | The location and width of vehicle entries is to minimise impacts on the pedestrian network. |
| C5. | To avoid blank walls and create visual interest, the maximum length of any wall at the ground floor level, without articulation such as a door or window is 5m. |

C6.	<p>Along active frontages (see Figure K22-8):</p> <ol style="list-style-type: none"> a) the finished ground floor level is to match the footpath level; where this is not possible due to topography, the ground floor level is a maximum of 0.4m above the footpath. Where ground floor level is elevated above the footpath, the elevated area is to form an activated continuation of the interior, and not to create a visual barrier to the interior; b) continuous awnings must be provided to shelter pedestrians from weather conditions; c) awnings should be designed to allow for street tree planting; d) awnings are to be between 3.5m and 5m in height above ground level (see Figure K22-15); and e) consistent paving, street furniture, signage, planting and lighting is desirable.
C7.	Residential uses on the ground floor can be raised to a maximum of 1.0m above the footpath level to improve internal privacy. Direct access from the footpath to individual dwellings is encouraged.
C8.	Front setback treatments incorporate safety considerations such as lighting after hours. For more controls see <i>Section K22.15 Landscape Design</i> .
C9.	Front fencing for residential uses on the ground floor are to display an appropriate balance of visibility and outlook, informal surveillance of the street and privacy for residents and building users. Fences are to be a maximum height of 1.2m and at least 25% transparent. Solid walls are only acceptable to a maximum height of 0.6m.
C10.	Common areas for building users/ residents are encouraged within the front setback with seating facilities located close to the public footpath to encourage surveillance of the street, visible activity and social interaction.



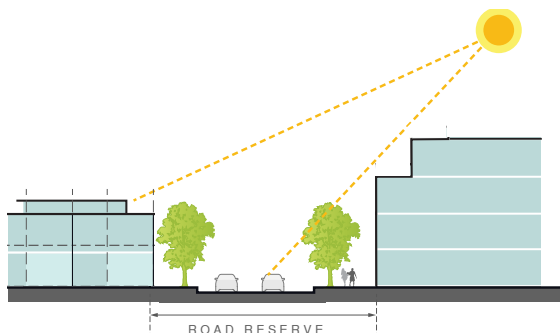
Public domain activated by ground level retail and dining that enhances passive surveillance.



Figure K22-16 Awnings should be designed to allow for street tree planting

K22 Homebush North (PRCUTS)

K22.13 Amenity



New housing and employment uses need to provide a high level of amenity for future residents and building users. At the same time, development is required to protect and where possible enhance the quality of the public domain and adjoining private properties. The following controls seek to help maximise privacy, solar access and outlook for all. This section also identifies design treatments to mitigate air quality and noise impacts for development along the rail line and Homebush Bay Drive.

Objectives

- O1 To minimise the impact of new development on the outlook, privacy and sun access of adjoining properties.
- O2 To minimise overshadowing of streets, links and public open spaces.
- O3 To protect building users from negative impacts (noise, air quality, vibration) from the rail line and Homebush Bay Drive.

Controls

C1.	Siting and built form configuration optimises solar access within the development and minimises overshadowing of adjoining properties.
C2.	New development adjacent to existing residential uses complies with the following: <ul style="list-style-type: none"> a) at least 50% of the private open space of adjoining residential properties receives sunlight for a minimum of 2 hours between 9am and 3pm in mid-winter; or b) where the adjoining private open space does not currently receive 2 hours of sunlight, the development does not reduce sunlight by more than 30%.
C3.	Taller elements of built form are oriented north-south where possible. The height and modulation of east-west buildings allows solar access to courtyard spaces (where courtyards are appropriate).
C4.	Louvres, shading devices and windows are able to be operated by buildings users to allow building occupants to regulate climatic conditions rather than rely solely on mechanical systems.
C5.	Development near the rail line and Homebush Bay Drive is to consider the provisions of the <i>State Environmental Planning Policy (Infrastructure) 2007</i> and <i>Development Near Rail Corridors and Busy Roads Interim Guidelines</i> and the design approaches illustrated in Figure K22-17 .
C6.	For residential components of new development, noise sensitive areas (living rooms, bedrooms) are located away from the rail line and Homebush Bay Drive.

C7.	Windows located along the rail line and/ or Homebush Bay Drive are double-glazed (or use laminated glazing) and have acoustic seals.
C8.	Habitable rooms of dwellings (excluding balconies) are to be designed to achieve internal noise levels of no greater than 50dBA.
C9.	Windows, balconies, terraces and porches should be included on street elevations to increase opportunities for passive surveillance.
C10.	Front doors should be located where they are visible from the street.

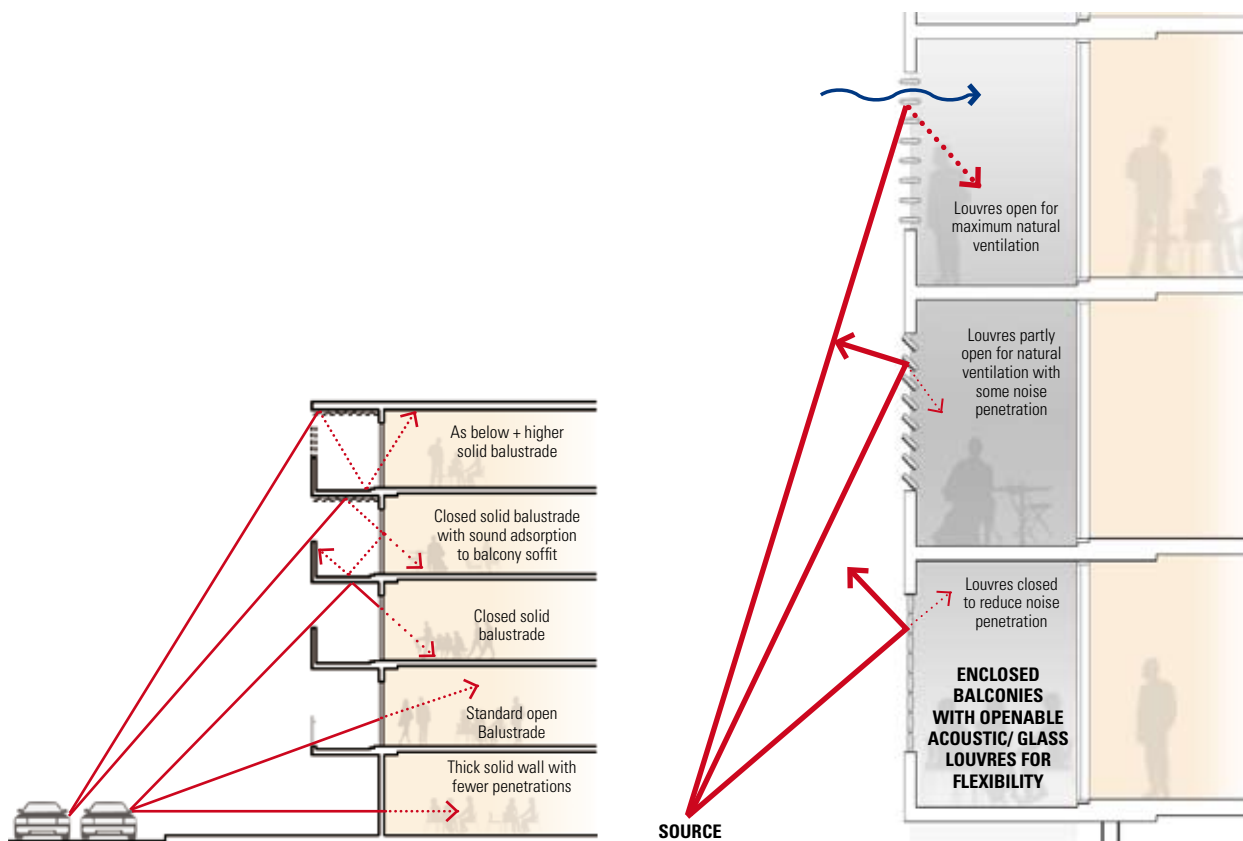


Figure K22-17 Noise mitigating facade treatments

(Source: Development Near Rail Corridors And Busy Roads Interim Guideline, NSW)

K22 Homebush North (PRCUTS)

K22.14 Appearance

The design of buildings contributes to the streetscape character and adds visual richness, complexity and interest. In addition, the selection of signage, materials, finishes and colours should have regard to compatibility to the surrounds and consider robustness, durability and ease of maintenance.

Objectives

- O1 To ensure building exteriors positively contribute to the desired future character of the area and streetscape.
- O2 To ensure that signage is integrated and not detrimental to the local character by limiting its cumulative impact with other signage.

Facade design

Controls	
C1.	The composition of facades balances solid and void elements and does not display large areas of a single material, including reflective glass.
C2.	External walls are constructed of high quality and durable materials and finishes with low maintenance attributes ('self-cleaning') such as face brickwork, rendered brickwork, stone, concrete and glass.
C3.	Any blank sidewalls (including temporary walls that may be covered in the future) that are visible from the public domain are designed as an architecturally finished surface that complements the main facade.
C4.	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality.
C5.	Roof plant, lift overruns, utilities, vents and other service related elements are to be integrated into the built form design and complementary to the architecture of the building.

Signage and advertising

Controls	
C6.	Signage is to comply with the requirements of State Environmental Planning Policy No 64-Advertising and Signage. Also refer to requirements in the <i>City of Canada Bay DCP Part I Signage and Advertising</i> .
C7.	Signage is to be integrated into the overall architectural design. Advertising signs should complement the design of buildings and the overall character of the precinct. Signage must relate to an approved use on the site.
C8.	The main facades of buildings from the first floor to the rooftop or parapet are to be uncluttered and generally free of signage.
C9.	Freestanding signs are not to be located on the top of buildings and should not impact on the skyline when viewed from the street. Signs painted on or applied to the roof of a building are not permitted.



Example of terrace houses with a variety of solid and void in the facade composition and treatment

K22 Homebush North (PRCUTS)

K22.15 Landscape Design

Landscape design plays an important role in the successful integration of new development into the surrounding streetscape and context. It enhances the appearance and amenity of the area, provides for recreation, preserves biodiversity and improves micro-climatic conditions.

Landscape and built form need to be designed together and landscaped areas should not be generated by 'left-over spaces' resulting from building siting. A portion of the landscaped area is required to be deep soil suitable for the growth of mature trees and vegetation.

Objectives

- O1 To promote high quality landscape design as an integral component of the overall design of new development, softening the appearance of buildings.
- O2 To improve the local micro-climate, native fauna and flora habitats and control climatic impacts on buildings and outdoor spaces.
- O3 To allow adequate provision on site for infiltration of stormwater, deep soil tree planting, landscaping and areas of communal outdoor recreation.

Precinct Wide

Controls	
C1.	Existing street trees and landscape features are to be retained wherever possible. All 'significant trees' that are identified as either High Significance or Medium Significance in the PRCUTS Public Domain Plan are to be retained and assessed by a suitably qualified Arborist. Refer also to CCB DCP Part B General Controls, <i>B6.10 Urban Tree Canopy</i> and <i>Australian Standards - AS 4970-2009 Protection of Trees on Development Sites</i> .
C2.	The layout and key design features of all parks and plazas are to be as per the PRCUTS Public Domain Plan.
C3.	Landscape design complements the proposed built form and minimises the impacts of scale, mass and bulk of the development in its context.

C4.	Landscape design highlights architectural features, defines entry points, indicates direction, and frames and filters views from and into the site.
C5.	For development along Parramatta Road, a minimum of 1 canopy tree per 10m of length of frontage is to be planted in the 'green edge' setback area, capable of reaching a mature height of at least 10m.
C6.	For development along all other streets (excluding active frontages) a minimum of 1 canopy tree per 12m of frontage is to be planted. New trees are to be capable of a mature height of at least 6m.
C7.	Where surfaces on rooftops or podiums are used for community open space, the development must demonstrate at least 50% of the accessible roof area is shaded by a shade-structure or covered with vegetation, including tree canopy.
C8.	Where surfaces on rooftops or podiums are not used for community open space, for example solar PV or heat rejection, the development must demonstrate at least 75% of the remaining roof area or podium is covered in vegetation, including tree canopy.
C9.	A minimum of 40% projected tree canopy coverage on publicly accessible streets and laneways, unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only.
C10.	A minimum of 75% projected tree canopy coverage shall be achieved for all parks.
C11.	Adequate soil volume is to be provided for the tree species. In areas where deep soil is restricted, opportunities for structural soil or under paving vault systems should be included to meet these requirements. Where the building setback is 1.5m or less, additional uncompacted soil volumes are to be provided under pavements to provide the soil volumes suitable for the tree species.

C12.	Tree planting is to be prioritised in the planning and design of all public domain areas and, where possible, utilities to be bundled, undergrounded and located away from tree planting areas.
C13.	Tree species are to be selected for their respective micro-climatic suitability and need to provide a high level of urban amenity, noting that the duration and density of overshadowing from buildings will impact the growth and species suitability.
C14.	<p>A landscape architect to be engaged to ensure that:</p> <ul style="list-style-type: none"> the architectural planning, building footprint and basement engineering result in adequate deep soil zones and podium planter boxes. the deep soil zones are located in areas where canopy and landscape outcomes will best serve the future users and general architectural amenity. species selection considers site suitability, shade requirements of any communal open space and solar access into internal building spaces.

Mixed Use Zone

Controls	
C15.	A minimum of 15% projected tree canopy coverage shall be achieved for all private land (i.e. non-public) developments. This shall be measured as the projected square metre canopy of the trees using reasonable estimates of the mature size of the chosen trees.
C16.	Trees are to be planted in sufficient deep soil to support them to maturity (refer to PRCUTS Public Domain Plan for soil volumes). A tree shall be as defined by City of Canada Bay's LEP.
C17.	Tree coverage may include trees planted at ground level as well as any trees planted in upper levels of buildings, such as podiums and roofs. It may also include any canopy overhanging from an adjoining public domain area.

Residential Zones

Controls	
C18.	Development consent must not be granted unless the development achieves at least 25% canopy cover across the site, identified on the landscape plan and measured by the extent of canopy at maturity.
C19.	Native species must comprise at least 75% of the plant schedule, incorporating a mix of locally indigenous trees, shrubs and groundcovers appropriate to the character of the area (see CCB DCP Part B General Controls B6.3 <i>City of Canada Bay tree species Table B-N</i> and <i>Table B-O</i> for further details).
C20.	<p>A minimum of 30% of the total site area is to be provided as landscaped area.</p> <p><i>Note: landscaped areas are used for growing plants, grasses and trees, but do not include any building, structure, basement or hard paved areas such as paths and driveways.</i></p>
C21.	50% of the required landscaped area is to be deep soil with deep soil planting (trees and shrubs) and a preference for native species.
C22.	Calculation of landscaped and deep soil areas is not to include any land that has a length or a width of less than 1.5m.
C23.	<p>Trees and vegetation provide a high degree of amenity and environmental benefit. Their selection and location should:</p> <ol style="list-style-type: none"> Provide shade in summer and sun access in winter to building facades and public and private open spaces; Reduce glare from hard surfaces; Channel air currents into built form; and Provide windbreaks, screen noise and enhance visual privacy where desirable.
C24.	For residential development in the R3 Medium Density zone, at least 50% of the front setback area is required to be deep soil.

K22 Homebush North (PRCUTS)

K22.16 Sustainability and Resilience

To create sustainable, resilient and affordable communities along the Corridor, the PRCUTS identifies that the following three key areas of intervention should be pursued:

- 1) High performance buildings;
- 2) Reduced and decoupled strategic parking; and
- 3) Urban resilience and infrastructure delivery.

Further details are provided in the Parramatta Road Corridor Sustainability Implementation Plan and should be considered when assessing proposals.

Objectives

- O1 To deliver world leading urban transformation of the precinct by exceeding current sustainability requirements.
- O2 To mitigate the impacts of climate change on key infrastructure and assets.

Controls

C1.	A residential flat building or a mixed use development (that contains dwellings) which complies with Table K22-1 is eligible for an amount of additional residential floor space (above that already permitted) by up to 5%, subject to the consent authority being satisfied that this additional residential floor space does not adversely impact on neighbouring and adjoining land in terms of visual bulk and overshadowing.
C2.	Future development should demonstrate consistency with the smart parking strategies and design principles outlined in <i>Section K22.17 Access and Parking</i> .
C3.	All new streets should implement water sensitive urban design treatments at the point source across all catchment areas.

C4.	Public domain and buildings shall be designed to reduce localised heat created by the urban heat island affect by: <ol style="list-style-type: none"> a) maximising canopy cover on streets designated as streets with 'interactive frontage' as identified in Figure K22-8; b) retaining existing street trees, especially those identified as High Significance or Medium Significance in the PRCUTS Public Domain Plan, by minimising driveway crossovers and locating driveways between existing trees; c) targeting canopy cover of at least 60% over all pedestrian spaces such as footpaths, pedestrian links and the new Station Square; and d) maximising the use of vegetation on buildings, including above ground parking facilities vegetation, green roofs, green walls and materials with a high solar reflectance index are encouraged on at least 50% of the surfaces of all buildings with western and northern building facades a particular areas of focus; and e) complying with landscape DCP guidelines within <i>Section K22.15 Landscape Design</i>.
C5.	Flow rates from the site should not be more than pre-development site discharge.
C6.	Stormwater run-off quality should seek to reduce annual loads of: <ol style="list-style-type: none"> a) total Nitrogen by 45%; b) total Phosphorus by 65%; and c) total suspended solids by 85%.
C7.	New development is to contain both potable water pipes and recycled water pipes for the purposes of all available internal and external water uses.

Table K22-1 Energy and Water Targets by Use

Use	Energy Target	Water Target
Residential		
<14 storeys	BASIX Energy 50	BASIX Water 50
15 - 29 storeys	BASIX Energy 40	
30 - 39 storeys	BASIX Energy 35	
40+ storeys	BASIX Energy 30	
Commercial and Retail Development < 10,000m² GFA		
Smaller scale non-residential development is governed by the National Construction Code, and should demonstrate consistency with relevant requirements of the Code.		
Commercial Development ≥ 10,000m² GFA		
Base building and/or individual tenancies	NABERS 5-star	NABERS Water 4-star NABERS Water 5-star should be pursued where recycled water is available
Shopping Centre Development		
Base building only	NABERS 5-star	NABERS Water 4-star NABERS Water 5-star should be pursued where recycled water is available

Source: PRCUTS Planning and Design Guidelines, Urban Growth, Nov 2016



Maximising canopy cover significantly improves the micro-climate and supports active transport choices.



All new streets and pedestrian/ cycle links should implement water sensitive urban design treatments (WSUD).

K22 Homebush North (PRCUTS)

K22.17 Access and Parking

The location of car parking has a significant impact on pedestrian safety and the quality of the public domain. Vehicle access points need to be integrated carefully to avoid potential conflicts with pedestrian movement and the desired streetscape character.

Objectives

- O1 To transition to lower car ownership and support the uptake of walking, cycling and public transport use.
- O2 To minimise the visual impact of car parking areas and vehicle access points.
- O3 To minimise conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian desire lines such as George Street.

Parking and access design

Controls

C1.	Vehicular access points minimise visual intrusion and disruption of the streetscape, emphasise the pedestrian experience and maximise pedestrian safety.
C2.	The width and height of vehicular entries is kept to a minimum. Roller doors or gates should be integrated with the architectural design of the development. Vehicular entry/exit points are to be recessed at least 0.5m behind the building line.
C3.	The public footpath treatment is to be continued across driveways to create a threshold, signal pedestrian priority and slow vehicle speeds.

C4.	Vehicle access points are not permitted along active street frontages. Where rear or side access is not possible, development without parking will be considered.
C5.	Vehicular access points off George Street are only permitted if a development has no other street frontage.
C6.	At grade parking, if unavoidable, is screened from public view by active uses and not permissible within any of the setback zones.
C7.	Parking is to be designed to be 'adaptable' and able to be converted to other uses in the future. Underground car parking and basement spaces are to have a minimum floor to floor height of 3.7m to be able to be converted to commercial uses. At ground level parking areas are to have a minimum floor to floor height of 4.4m to be able to be converted to retail uses. Above ground parking areas are to have a minimum floor to floor height of 3.7m (second floor level) to be able to be converted to commercial uses, or 3.1m-3.7m (above second floor level) to be able to be converted to commercial or residential uses.
C8.	Where unavoidable due to topography, basement parking can only protrude above natural ground level by a maximum of 1.0m in R3 zones and cannot protrude into the front setback area within an R3 zone.

Car parking

Controls	
C9.	On-street parking to be integrated to the streetscape and parallel to the kerb.
C10.	Parking is to be listed on a separate title (unbundled) from the development.

Car share and ride share

Controls	
C11.	On-site parking can be reduced at a rate of 5 parking spaces per 1 car share space where an active car-sharing program is made available to residents and/ or employees and where ride share or other organised car pooling initiatives are available on site.
C12.	Additional car share should be provided at a rate of 1 space per 20 dwellings without parking and 1 space per 100 dwellings with parking.
C13.	Car share will be located in publicly accessible sites, either on-street, in public parking stations or, if provided within a building it should be accessible to all car share members.
C14.	The following car share targets have been established for the precinct: <ul style="list-style-type: none"> • 10% - 15% of residents by 2031 • 15% of residents by 2050

Parking rates

Controls	
C15.	For parking rates, refer to clause 8.11 of the Canada Bay LEP 2013 and Part B of this DCP.

Bicycle parking

Controls	
C16.	For bicycle parking controls, Refer to <i>DCP Part B - General Controls, B3.6 Bicycle parking and storage facilities; and B3.7 End of trip facilities.</i>

Electric vehicles

Controls	
C17.	<i>Refer to DCP Part B - General Controls, B3.8 Electric Vehicles</i>

Common loading docks and service vehicle parking

Controls	
C18.	<i>Refer to DCP Part B - General Controls, B3.9 Common loading docks and service vehicle parking.</i>

K22 Homebush North (PRCUTS)

K22.18 Housing Diversity

A mix of dwelling types in the precinct will provide greater housing choice and support equitable housing access by offering a diversity of dwelling types, amount of floor space, number of bedrooms and level of accessibility and affordability.

Objectives

- O1 To provide a diverse range of dwelling types and sizes to cater for the needs of the existing and future residents over time, and encourage social diversity.
- O2 To ensure that low to moderate income households can afford to live in the precinct by increasing the stock of appropriate affordable housing.

K22.19 SEPP 65 and the Apartment Design Guide

SEPP 65 and the NSW Apartment Design Guide (ADG) applies to all apartment buildings that are three or more storeys high and that comprise at least four dwellings.

Controls

C1.	For mix of residential flat buildings and residential components of mixed use developments, refer to LEP clause - 6.11 <i>Mix of dwelling sizes in residential flat buildings and mixed use development</i>
C2.	Regarding the amount of adaptable (accessible) housing to be provided refer to requirements in <i>City of Canada Bay DCP Part B1.1 Adaptable Housing</i> .
C3.	Dwellings dedicated to Affordable Housing are to be of equivalent design quality, diversity and mix as all other dwellings.
C4.	Contributions towards Affordable Housing are to be provided according to Council's <i>Affordable Housing Contributions Scheme</i> .

K22.20 Residential Uses not covered by SEPP 65 and the Apartment Design Guide

The NSW Apartment Design Guide (ADG) applies to buildings that are three or more storeys high and that comprise at least four dwellings. For other residential development developments not covered by these codes such as 2-3 storey terraces, low rise up-over or walk-up apartments, multiplexes, urban courtyard houses and the like, the following controls apply.

Objective

- O1 To ensure design quality, performance of and amenity created by new residential development is of a high standard and consistent across the precinct.

Controls

C1.	The maximum building depth is 18m unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. through the use of a courtyard design.
C2.	The minimum private open space of a ground floor dwelling is calculated by the number of bedrooms x 4m ² .
C3.	Single aspect dwellings, if unavoidable, are only permitted if they have a northerly or easterly aspect.
C4.	Except for development in the 8.5m height limit zone, parking is not permitted to be visible from streets and open spaces. Access to parking via a driveway, lane or basement carpark entry is permitted if one access point services a minimum of 5 dwellings. Front garages, carports and individual driveways are not permitted.
C5.	Living rooms and private open spaces of at least 70% of apartments receive a minimum of 2 hours direct sunlight between 9 am and 3 pm in mid winter (21 June).
C6.	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² .
C7.	Building separation is as per the <i>Apartment Design Guide, Section 3F Visual Privacy</i> .

C8.

Private open space (POS) is designed to maximise useability, privacy, outlook and solar access.

For dwellings on the ground floor including terraces, the minimum private open space is as follows:

Dwelling type	Min. POS
Studio/ 1 bedroom	20m ²
2 bedroom	28m ²
3+ bedroom	35m ²

The minimum dimension is 4.0m x 4.0m.

For dwellings on upper levels such as decks and balconies, the minimum private open space is as follows:

Dwelling type	Min. POS
Studio/ 1 bedroom	10m ²
2 bedroom	14m ²
3+ bedroom	18m ²

The minimum dimension is 2.0m x 3.0m.

K23 160 Burwood Rd, Concord (former Bushells Factory)



Figure K23-1 Aerial photo (source: nearmap.com)



Figure K23-2 Council area map



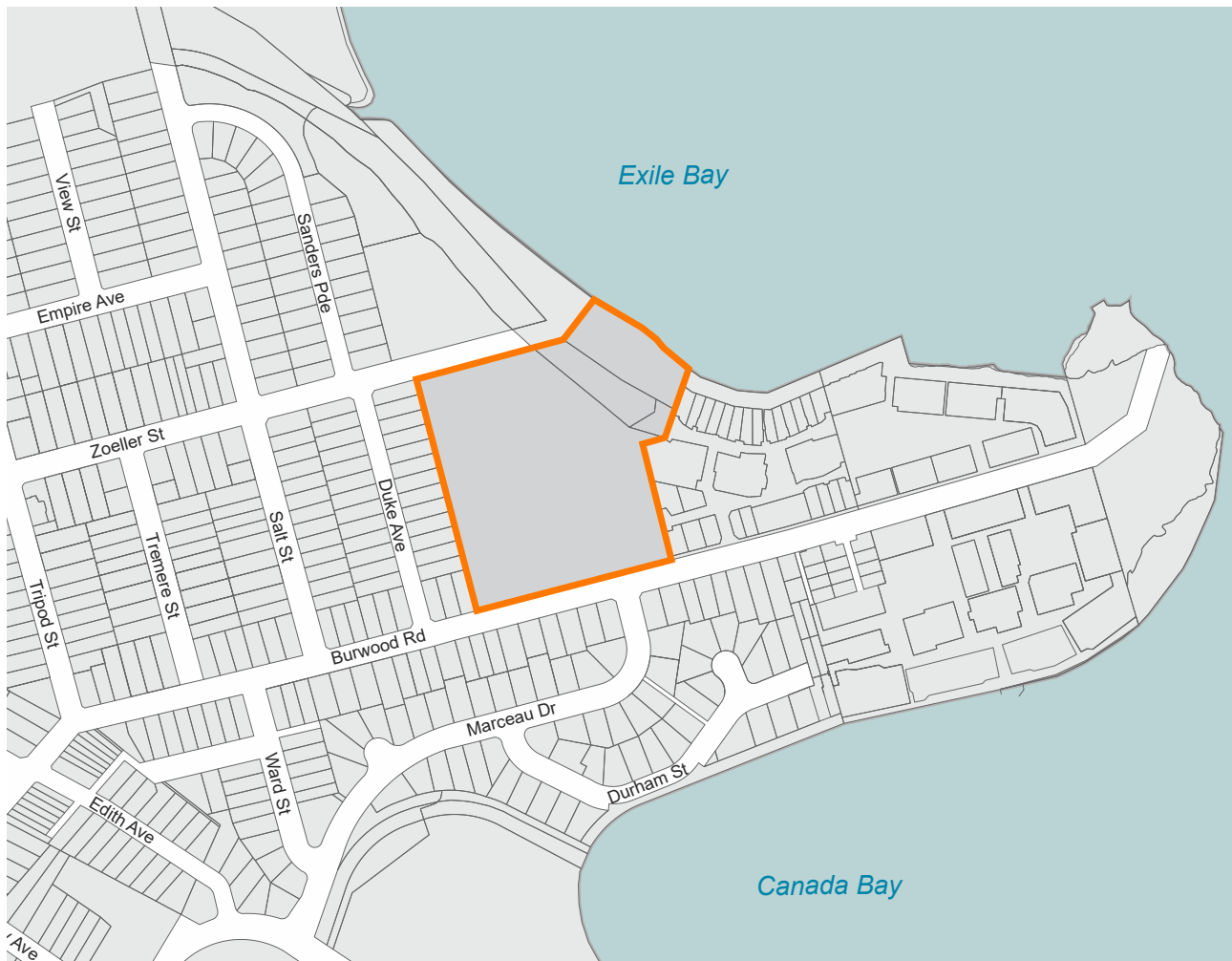


Figure K23-3 160 Burwood Road, Concord - Location Plan



K23 160 Burwood Rd, Concord (former Bushells Factory)



K23.1 Introduction

Location

The site is located at 160 Burwood Road, Concord, approximately 15km to the west of the Sydney CBD, 2.6km from Burwood District Centre and Burwood Train Station, 3km from Strathfield Train Station and 5.5km from Rhodes Strategic Centre. The nearest local commercial/ retail centre is located at Majors Bay Road, approximately 1.5kms from the precinct.

The precinct comprises approximately 3.9Ha of land and is bounded by Massey Park Golf Course to the north, Exile Bay foreshore area to the north east, medium density residential developments to the east, and low density residential developments to the west and south. Bayview Park is located further to the east along the foreshore line of Exile Bay and the Parramatta River.

Context

The precinct is surrounded by low to medium density residential development. To the east lies a medium density housing development known as 'Pelican Quays'/ 'Pelican Point' which was built in the last 10-20 years. Another medium density development known as 'Phillips Landing' is located to the south of the precinct.

The Massey Park Golf Course is located along the northern boundary of the site and is publicly owned. The surrounding streets comprise tree lined avenues with on street parking reinforcing a residential streetscape character.

Current use, built form and character

The precinct is located on a small peninsula of land between Exile Bay and Canada Bay. The shape of the peninsula, combined with the generally flat topography of the surrounding area and 2 to 3 storey buildings along the foreshore, creates a landscape that has a strong horizontal dominance, formed by the water, the land and the tree line.

The site currently operates as a coffee manufacturing facility. The main industrial building is a multi-storey brick and concrete structure that is orientated north-south and is sited in the western part of the site and contains an industrial building, known as the 'Robert Timms Factory' or 'Bushell's Factory' featuring a prominent 78m high chimney stack. A two storey administration building is located to the eastern side of the factory and a covered walkway joins the two structures. A security booth/ gatehouse and boom gates are located at the Burwood Road frontage.

Vehicular access to the precinct is provided off Burwood Road, which extends along the centre of the peninsula to Bayview Park. A small section of the north west corner of the precinct connects to Zoeller Street.

K23.2 Desired Future Character

Vision statement

“The precinct will be a fine-grain, river-orientated village bringing broad public benefit to locals including new parklands, community uses, daily needs retail and diversity of housing choice. The retention of the existing Roasting Hall as a heritage item incorporating a combination of selected light industrial and commercial functions, as well as new economy and creative uses, will contribute to precinct activation and diversity and create a unique sense of place and enhance local identity.”

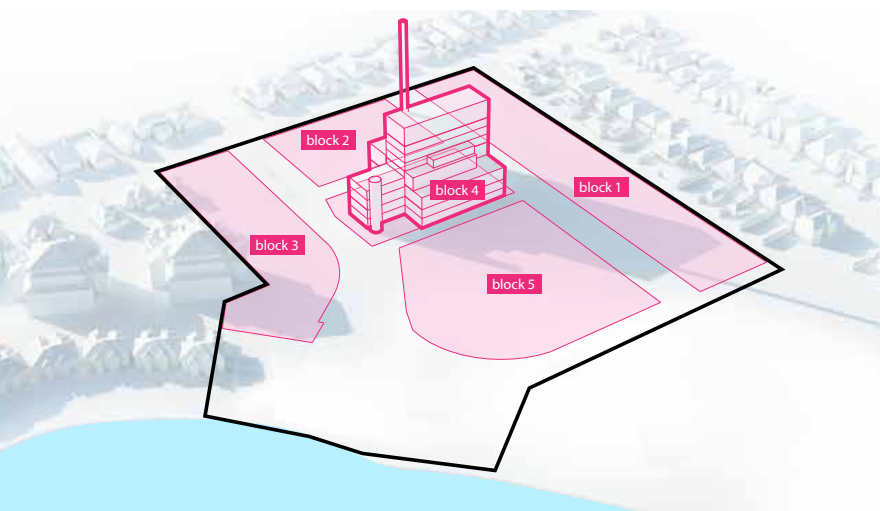
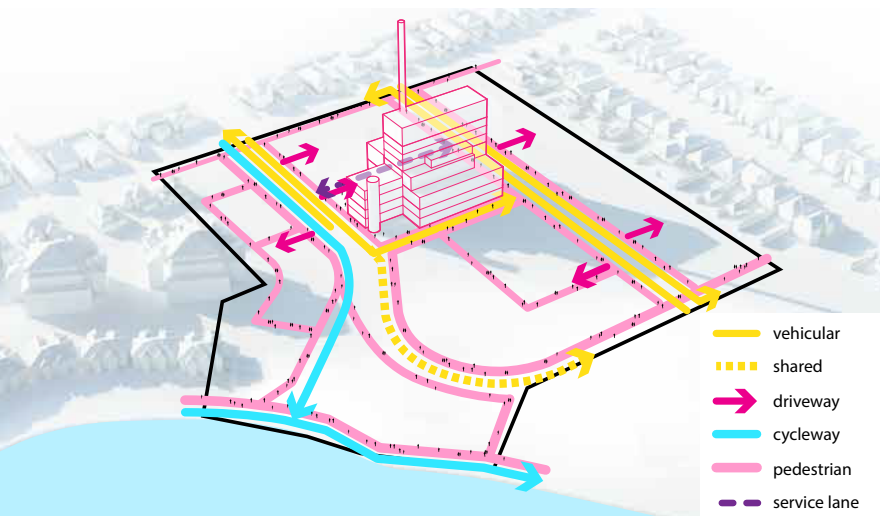
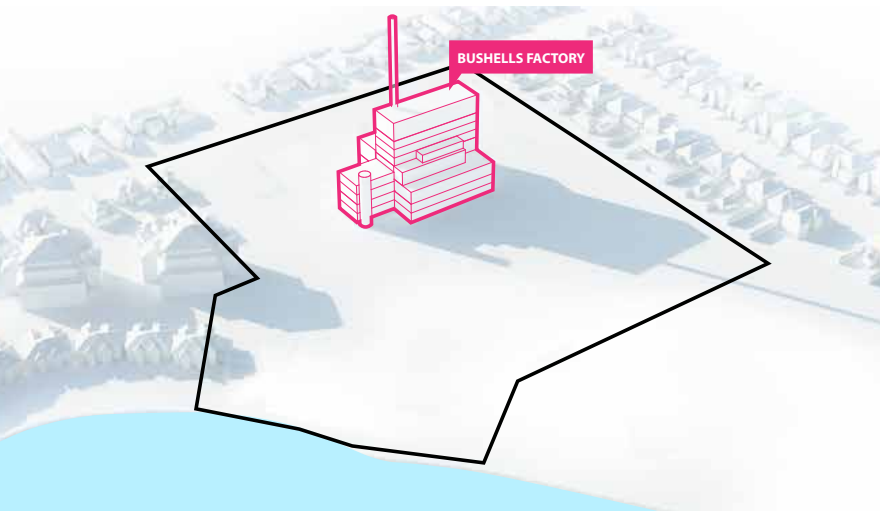
General objectives

- O1 To create a river-orientated ‘urban village’ providing jobs and diversity of housing.
- O2 To celebrate the natural landscape assets and the precinct’s history through view corridors, unique public spaces and physical connections.
- O3 To reconnect the precinct to the water by providing a new public foreshore and publicly accessible plaza for the benefit of the wider community and ensuring the access to the site is inviting to the public.
- O4 To maintain the precinct’s connection to the past by protecting and adaptively reusing the former ‘Bushell’s Factory’ Central Roasting Hall for urban services and retail/commercial uses with residential above.
- O5 To sensitively transition to the surrounding residential built form and support the existing neighbourhood & landscaped character.
- O6 To focus on people and improve the overall ‘quality of life’ by fostering social connectedness, connecting people to place and strengthening the sense of community.
- O7 To support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal people from the Wangal clan and informed by the Connecting with Country framework.
- O8 To achieve a high quality urban development that exhibits design excellence and reflects the desired future character of the area.



K23 160 Burwood Rd, Concord (former Bushells Factory)

K23.3 Urban Design Principles



Character Retention

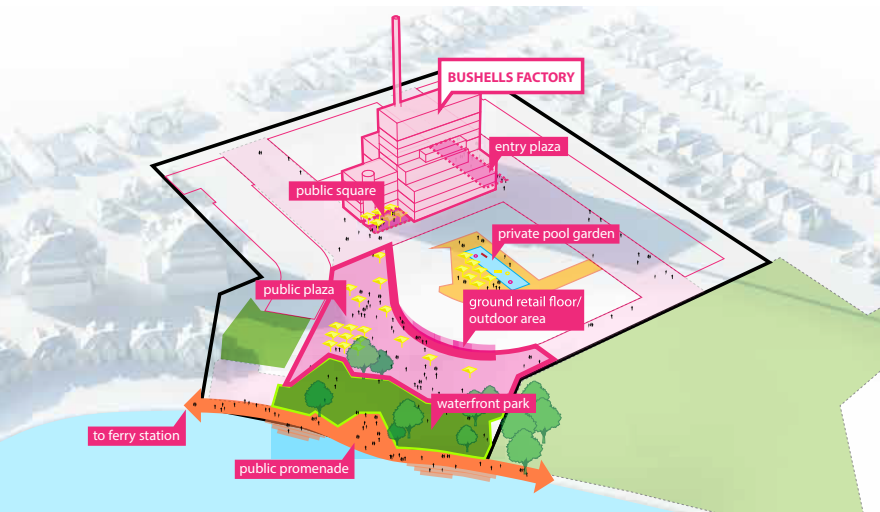
The existing former 'Bushell's Factory' Central Roasting Hall and associated chimney stack will remain the dominant built form features on the site, ensuring the value of the factory as a recognisable landmark.

Movement & Access

An internal hierarchy of movement networks increases the overall permeability & accessibility within the site and to other local networks. Free flowing public movement along the foreshore (east west) and along north south streets helps create a movement network that prioritises pedestrians.

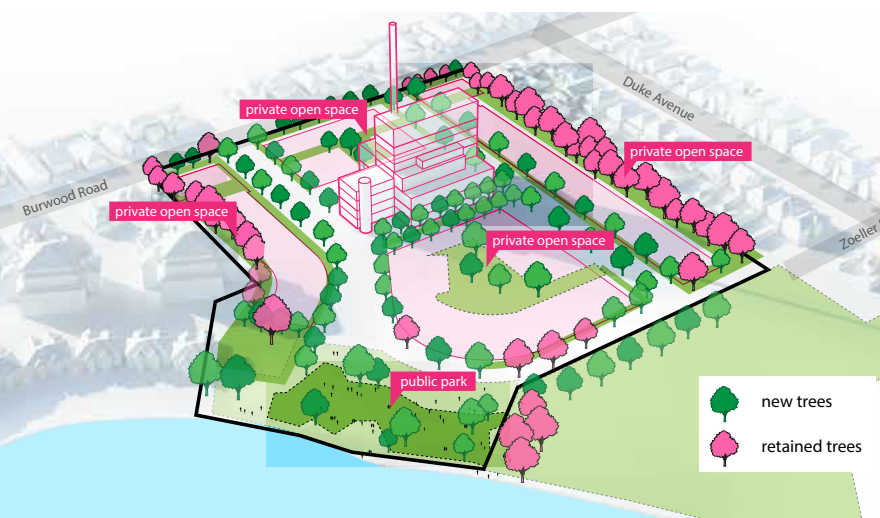
Block Structure

The block structure and internal movement network orientates towards key landmarks and public places allowing for enhanced permeability and uninterrupted view corridors to key landmarks and spaces.



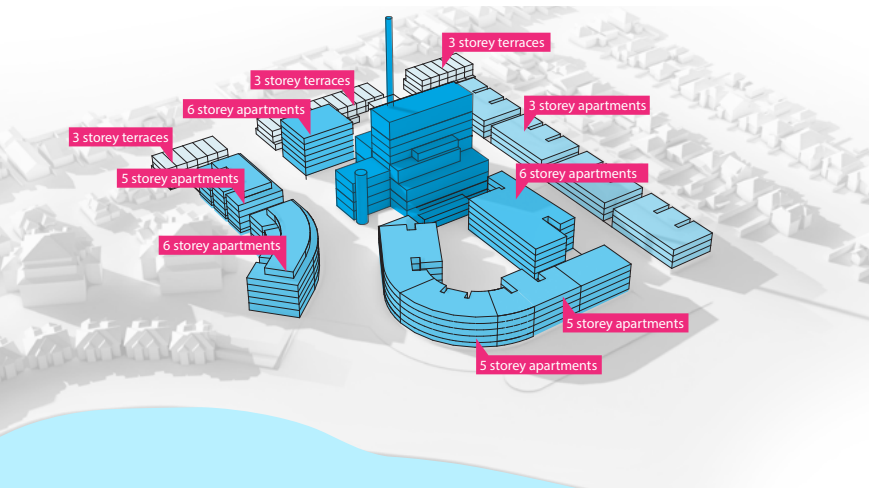
Public Domain

An abundance of flexible public space is a key public benefit, aiming to create a series of destinations, complementing the existing natural and urban context. Highly activated spaces create various stages for social and cultural connectedness, wellbeing and community relationships. Across the site, the public domain will be a combination of areas dedicated to Council and spaces that are privately owned but publicly accessible.



Greenery & Tree Retention

The adjacent diagram illustrates the concept of greening the precinct through public parks, planting new trees along pedestrian networks, as well as retaining significant mature trees which contribute to the overall amenity, local character and identity of the area.



Scale & Height Transition

Built form is appropriately scaled based on function, orientation and views to amenity and public spaces. Heights sensitively transition to the surrounds, maintaining privacy and amenity for neighbours with lower building heights to the precinct's periphery.

Note: The graphics used to explain the "Urban Design Principles" are illustrative only. Please refer to specific DCP controls for required outcomes.

K23 160 Burwood Rd, Concord (former Bushells Factory)

K23.4 Movement and Access Network

Objectives

- O9 To provide a new, fine grain and publicly accessible access network that effectively connects the Precinct to its surrounds.
- O10 To provide a hierarchy of new local streets consistent with their function.
- O11 To maximise permeability and public access through the Precinct and to be visually and physically integrated into the surrounding street network.
- O12 To strongly promote active transport (walking and cycling) and the use of public transport.
- O13 To encourage activity in public (and publicly accessible) open spaces, with a particular focus on the Exile Bay foreshore.
- O14 To ensure the safety of pedestrians, cyclists and users of the foreshore walk and open space.
- O15 To enable access and a safe environment for all including children, disabled people and the elderly.
- O16 To enable innovative and effective access and loading solutions for the functioning of the urban services uses.

Access Network

Controls

C1.	New streets, through-site links, and cycle and pedestrian routes are to be constructed to the satisfaction of Council in accordance with Figure K23-5 Public Domain Framework Plan and Figure K23-8 to Figure K23-14 Building Envelope Controls Sections.
C2.	Any vehicle, pedestrian or cycle network that varies from that shown in Figure K23-5 Public Domain Framework Plan, and Street Sections is to demonstrate an improved public benefit and design excellence having regard to: <ul style="list-style-type: none"> • The objectives, character statement and principles of this DCP; • The degree to which any alterations may enhance or detract from public enjoyment of the public benefits associated with the development.
C3.	The access point located on Burwood Road opposite Marceau Drive is to be the main vehicular access to and from the Precinct and provide access to retail, commercial and urban services, and the new public open space. The road network shall focus site traffic to that intersection.
C4.	<p>An additional vehicular access point is to provide access between Burwood Road and Zoeller Street along a new north-south street. Vehicle access should in the first instance be provided from Burwood Road. Vehicle access from Zoeller Street should not encroach into any part of the existing adjoining golf course (see Figure K23-5).</p> <p>This access should only be provided as an alternative or secondary access to the main access off Burwood Road and should not service any Heavy Rigid Vehicles (HRV) required for retail, commercial or urban service uses.</p>

C5.	Ensure permanent public access through the site and linkage to the new public open space, along publicly accessible private roads, is provided through an easement or similar.
C6.	<p>A Traffic Operations Plan is to be submitted with the development application and implemented prior to issue of the occupation certificate. The plan is to include measures to:</p> <ul style="list-style-type: none"> • calm traffic and implement a maximum speed of no more than 40km per hour for all streets and lanes; • 10km per hour maximum speed limit for service lanes; • prioritise pedestrian and cycle access across the site with kerb extensions, continuous raised footpath thresholds, tight corner radii and street trees; • discourage inappropriate through traffic; • manage potential vehicle and pedestrian conflict at the interface of open spaces and streets; and • manage access to commercial, retail and urban services including access by heavy vehicles for the servicing of permissible uses.
C7.	<p>Where roads or lanes are closed to vehicular access, connections to public open space or between public roads are to provide:</p> <ul style="list-style-type: none"> • public access whether or not the land is public; and • are to be designed so that the access is clearly public and encourages pedestrian and cycle traffic to and from the open space and the adjoining public roads.

Pedestrians and Cyclists

Controls	
C8.	Pedestrian and bicycle access is to be provided as shown in the K23.3 Movement & Access Design Principle and to the satisfaction of Council.
C9.	Ensure the continuation of the foreshore walk through the public open space provides a wide, direct, accessible and legible route between Bayview Park and the Massey Park Golf Club.
C10.	<p>Pedestrian and bicycle access throughout the Precinct, including connections from roads to the public open space, is to be designed to:</p> <ul style="list-style-type: none"> • be direct and accessible to all; • be easily identified by users and have a public character; • include signage advising of the publicly-accessible status of the link and the places to which it connects; • be clearly distinguished from vehicle access unless it is a purpose built shareway; • allow visibility along the length of the link to the public domain at each end; • include materials and finishes (paving materials, tree planting, furniture etc.) integrated with adjoining streets and public spaces and be graffiti and vandalism resistant; • include landscaping to assist in guiding people along the link while enabling long sightlines; • be well lit to safety standards (AS1158 pedestrian lighting) with use of metal halide (white) lighting, giving regard to highlighting any unique architectural or public art features; and • be open to the sky along the entire length and accessible 24 hours a day.

K23 160 Burwood Rd, Concord (former Bushells Factory)

K23.5 Public Spaces & Public Access

Objectives

- O17 To provide high quality public space and a network of publicly accessible spaces and connections.
- O18 To capitalise on the precinct's unique setting and location by creating strong visual and physical connections to heritage items and the water.
- O19 To reconnect the precinct to Exile Bay and provide a highly accessible public park on the foreshore for the benefit of local residents.
- O20 To cater for a range of passive recreational activities within the public spaces.
- O21 To create memorable places with high quality public domain design that the wider community uses and enjoys.

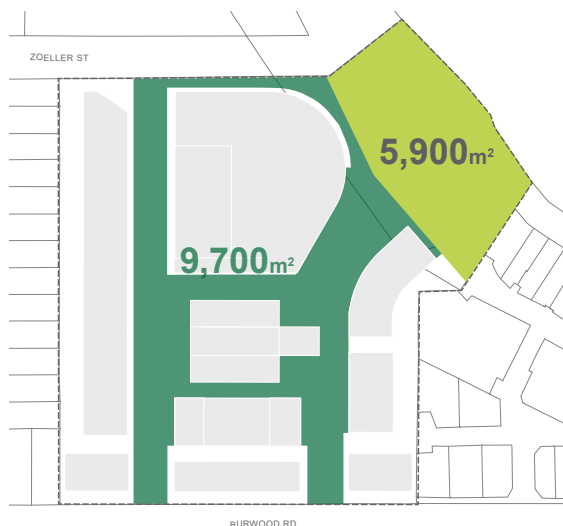
Public Domain Network

Controls	
C11.	A highly permeable and high quality public domain network including various open spaces, foreshore plaza, and new internal streets and pedestrian links, is delivered as per Figure K23-5.
C12.	A minimum of 9,700m ² of publicly accessible, privately owned public domain is to be provided within the Precinct and is to be generally consistent with that shown in Figure K23-4. This includes any potential service lane.
C13.	<p>The layout of public open space and publicly accessible, privately owned public domain is to be generally consistent with that shown in Figure K23-5. Alterations to that layout will be considered where they demonstrate an improved public benefit and design excellence having regard to:</p> <ul style="list-style-type: none"> • The objectives, character statement and principles of this DCP; • The degree to which any alterations may enhance or detract from public enjoyment of the public benefits associated with the development.
C14.	Maximise direct sunlight to streets with active frontages between 9am and 3pm on 21 June.

C15.	50% of public and publicly accessible open space is to receive at least four hours direct sunlight between 9am and 3pm on 21 June.
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Foreshore Area

Controls	
C16.	The foreshore public open space is to be designed to provide for a range of passive activities.
C17.	<p>A minimum of 5,900m² of public open space as shown in Figure K23-4 is to be dedicated to Council and is to:</p> <ul style="list-style-type: none"> • create a new and vital public space on the waterfront that may include i.e. seating and furniture, opportunity for markets and events, provision of public BBQ's & shelter, a community garden, heritage interpretation and public art; • be located and designed so that it is clearly identifiable as public space and encourages public use; • reflect and respond to the heritage landscape character; • have clearly defined pedestrian entrances and paths, appropriate seating, and zones for activities that are clearly defined and encourage use; • maximise access for people with mobility difficulties, through design and location of paths and entrances; • the public open space is to primarily feature soft landscaping except for civic spaces, pathways, and small areas ancillary to active frontages; • minimise area required for stormwater and overland flow paths; and • provide legible pedestrian and cycle connections along the foreshore and connecting to Burwood Road and Zoeller Street.
C18.	The concrete sea wall along the boundary of the site to Exile Bay is to be replaced with terraced steps or alternatively repaired to a standard acceptable to Council.



- Publicly Owned Open Space
- Privately Owned & Publicly Accessible Land

Figure K23-4 Public Spaces diagram

K23.6 Landscape Design

Objectives

- O22 To control climatic impacts on buildings and outdoor spaces, maximise provision of shade and reduce urban heat island effect.
- O23 To improve the local micro-climate, increase native fauna and flora habitats and promote biodiversity.
- O24 To promote high quality landscape design as an integral component of the overall design of new development, softening the appearance of buildings.
- O25 To allow adequate provision on site for infiltration of stormwater.
- O26 To strengthen indigenous vegetation and enhance Connecting with Country landscape values on Wangal land.
- O27 To encourage passive green roofs that increase building performance, air quality, biodiversity and contribute to urban greening.

Deep Soil

Controls	
C19.	Deep soil zones are to be provided as identified in Figure K23-5 Public Domain Framework Plan. Additional opportunities for deep soil zones beyond the areas identified should also be considered.
C20.	Buildings and structures including basements are not to encroach into identified deep soil zones.
C21.	Non-permeable hard surfaces (i.e. concrete slabs) are not permitted in identified deep soil zones.

Landscape Screening

Controls	
C22.	Development is to provide sufficient setbacks with deep soil zones along the boundaries (for more detail see <i>Section K23.9 Built Form Envelopes</i>) in order to create adequate landscape screening to the surrounding residential areas.
C23.	Existing trees and vegetation along the western and eastern boundaries of the site are to be retained in a healthy condition to provide screening for adjoining residential areas. If any trees are lost, they are to be replaced with well established trees of similar mature height.
C24.	Vegetation in the landscaped setback to Burwood Road is to be provided to soften the appearance of new built form.

Native Species Selection

Controls	
C25.	Native species must comprise at least 75% of the plant schedule, incorporating a mix of locally indigenous trees, shrubs and groundcover appropriate to local climatic conditions.
C26.	Where exotic species are proposed to provide a change of form, texture and seasonal colour, these must be consistent with the character outlined in section K23.3 Urban Design Principles.

K23 160 Burwood Rd, Concord (former Bushells Factory)

Tree Canopy Cover

Controls	
C27.	A minimum of 25% of the precinct area is to be covered by tree canopy.
C28.	Generous landscape opportunities exist to achieve the above control including the foreshore park, plaza, street verges, communal open space of apartments, and retention of most existing trees along the western boundary.
C29.	<p>To demonstrate compliance with the above control, a landscape plan is to be submitted as part of any future development application (DA), prepared by a suitably qualified landscape architect and supported by an arborist statement/ report that includes the following:</p> <ul style="list-style-type: none"> • A site plan showing the entire precinct and identifying the percentage of canopy of all retained trees, and the percentage of canopy achieved by proposed new tree planting (calculated for all tree species at 'established age' of no more than 20 years); and • A detailed plan showing the subject site of the DA including: <ul style="list-style-type: none"> – all retained trees and their percentage of canopy; – all new trees and their percentage of canopy at 'established age'; and – detail in regard to landscaped setbacks and screening, deep soil zones, protection measures for retained trees, and type of tree species to be planted including information on mature canopy size and height.

Retention of Trees

Controls	
C30.	All trees and vegetation identified in Figure K23-5 Public Domain Framework Plan are to be retained, protected and maintained.
C31.	Of particular importance are the mature groves of trees along the eastern and western boundary, which are to be retained and protected, to maintain the existing developed landscape and privacy for the neighbours.
C32.	Retention and ongoing protection of the large Hill's Weeping Fig (Tree 184) and its TPZ (tree protection zone) near the north eastern boundary of the site is a key requirement. This particular tree has been identified as "the best tree on the site" and is considered a significant item that contributes to the landscape of the precinct and the 'Factory in a Garden' setting.

Green Roofs

Controls	
C33.	Passive green roofs should be located on serviceable and visible parts of the roof, such as the roof of lower parts of a development with varying heights.
C34.	Green roofs must demonstrate adequate drainage, wind impact and waterproofing is provided for the species and volumes of plants and soil.

Other/ Miscellaneous

Controls	
C35.	Landscape design highlights architectural features, defines entry points, indicates direction, and frames and filters views from and into the site.
C36.	Consultation is to occur with the Massey Golf Course to determine if golf safety fences/ netting will be required to be constructed to protect people, vehicles and structures from potential stray golf balls. All fences would need to be of high design quality and visually unobtrusive.

Public Domain / Ground Floor Uses



Figure K23-5 Public Domain Framework Plan

K23 160 Burwood Rd, Concord (former Bushells Factory)

K23.7 Diversity of Uses

Objectives

- O28 To increase jobs and skills (employment generation) on site through the provision of adaptable retail uses and maker spaces.
- O29 To include industries that serve the population related needs of the Canada Bay community (urban support services).
- O30 To provide for a diverse mixture of housing types with a scale of built form that responds to existing neighbouring properties.
- O31 To ensure an adequate supply of low cost housing in the private market and facilitate the development of affordable housing by social and not-for-profit providers.
- O32 To minimise land use conflict and any potential impacts on the operational viability of employment/ light industrial uses.
- O33 To ensure new light industrial development, or other development for employment uses, is designed and built to mitigate any potential impacts they may have on existing and planned sensitive uses.
- O34 To ensure sensitive uses, particularly residential uses, are designed and built to mitigate against the potential impacts that light industrial uses, or other employment uses, may have on them.
- O35 To ensure appropriate noise attenuation measures are incorporated into building design and site layout.
- O36 To provide efficient vehicle access, circulation and loading docks that also ensures the safety and security of all users.

Housing Mix & Affordable Housing

Controls

C37.	Dwelling mix is to be provided in accordance with the Canada Bay Local Environmental Plan 2013.
C38.	Dwellings dedicated to Affordable Housing are to be of equivalent design quality, diversity and mix as all other dwellings.
C39.	Affordable housing is to be provided in accordance with the <i>Canada Bay Local Environmental Plan 2013</i> and the requirements of the <i>Canada Bay Affordable Housing Contribution Scheme</i> .

Urban Services, Commercial and Retail Uses

Controls	
C40.	The minimum provision of non-residential uses in the Precinct is 7,500m ² GFA.
C41.	Within the total 7,500m ² GFA, a minimum of 3,000m ² GFA is to be provided for 'urban services' (i.e light industrial uses).
C42.	A staged masterplan must be submitted to Council to demonstrate how non-residential GFA is to be distributed across the site. This must be provided with the first development application and updated for subsequent applications.
C43.	The maximum size of any supermarket in the Precinct is 1,000m ² GFA.
C44.	Non-residential uses should be predominantly located within the area zoned B1 Neighbourhood Centre.
C45.	Social and community uses, such as a childcare centre or community meeting space and/or gyms are encouraged within the commercial spaces.
C46.	Outdoor dining areas should be provided that overlook the foreshore plaza and public promenade.
C47.	Urban services including mixed light industry, new economy, operational making areas and creative uses are encouraged and should be located within the lower and upper ground floor levels of the Central Roasting Hall and the ground floor of adjoining buildings.
C48.	Any light industrial uses not located on the ground floor, must ensure suitable construction to accommodate floor loading, access and the suitability of space for industrial uses.
C49.	Buildings that are primarily for an industrial purpose are to have a minimum floor to ceiling height of 5m. This ceiling height may need to be adjusted slightly to accommodate the existing structure of the heritage Central Roasting Hall.
C50.	The design of large clear spans is desirable for light industrial floor spaces to achieve maximum flexibility.

C51.	Driveways which provide access to the development for car parking, deliveries for loading and unloading and waste collection, shall be provided from loading access locations identified on Figure K23-5 Public Domain Framework Plan.
C52.	New development should demonstrate that the design of driveways and loading docks is appropriate for the vehicular servicing requirements of the proposed use. Loading facilities should be provided in accordance with the current RMS 'Guide to Traffic Generating Developments 2002' and AS 2890.2.
C53.	Development must incorporate areas that accommodate bins for garbage collection and recycling of waste for industrial and other employment areas. These areas are not to be visible from the street or public open spaces.
C54.	<p>The service access and loading dock(s) for industrial uses must:</p> <ul style="list-style-type: none"> • allow easy access for the size, type and frequency of the service vehicles anticipated (ie Small Rigid Vehicles (SRV), Medium Rigid Vehicles (MRV) and/or Heavy Rigid Vehicles (HRV)); • incorporate sufficient space for service vehicles to turn within the site and minimise the need for trucks to reverse or manoeuvre on existing roads; • be separate from pedestrian routes and thoroughfares (unless the functionality of the service lane and safety of the pedestrians can be guaranteed); • demonstrate strong functionality and connectivity with any proposed freight lift; • accommodate the circulation of large items between the freight lift and industrial floor spaces, and; • be covered at least 1.2m beyond the edge of the loading dock to protect users and goods. Enclosed loading bays are encouraged.

K23 160 Burwood Rd, Concord (former Bushells Factory)

C55.	<p>In granting development consent for non-residential development on sites with proximity to residential uses, the consent authority will have regard to the potential impacts on the amenity of existing and future residential uses. The following matters must be considered and addressed:</p> <ul style="list-style-type: none"> a) noise impacts; b) operating hours; c) privacy; d) vehicular and pedestrian traffic; e) vibration; f) reflectivity; g) overlooking; and h) overshadowing.
C56.	<p>All applications for noise generating uses adjacent to or located in a building containing a residential use must be accompanied by a Noise Impact Assessment from a qualified acoustic engineer, certifying that the acoustic standard can be met.</p> <p>The Noise Impact Assessment should include mitigation strategies, such as utilising landscape buffers, screened and acoustically sealed balconies, mechanical ventilation, triple glazing, green walls, and the use of other specific building materials or sound walls that manage noise.</p>

K23.8 Maximum Density (FSR)

Objectives

- O37 To ensure the height and density of future development is compatible with the surrounding context.
- O38 To ensure each stage of the development contributes appropriately to the overall density of the Precinct.
- O39 To concentrate development at the centre of the site and away from the sensitive interfaces with surrounding area.

Controls

C57.	The maximum overall density of the Precinct is not to exceed the maximum FSR shown in the LEP.
C58.	Development of each part of the site is not to exceed the maximum floor space ratio shown in Figure K23-6.
C59.	Each stage of the development is to provide a table showing both the FSR of the parcel and the overall FSR (to date). The maximum FSR of both the parcel and the Precinct is not to be exceeded. If early stages maximise FSR, later stages may be required to have a lower FSR than shown on Figure K23-6 to ensure the maximum overall FSR is not exceeded.

Maximum FSR Block Plan

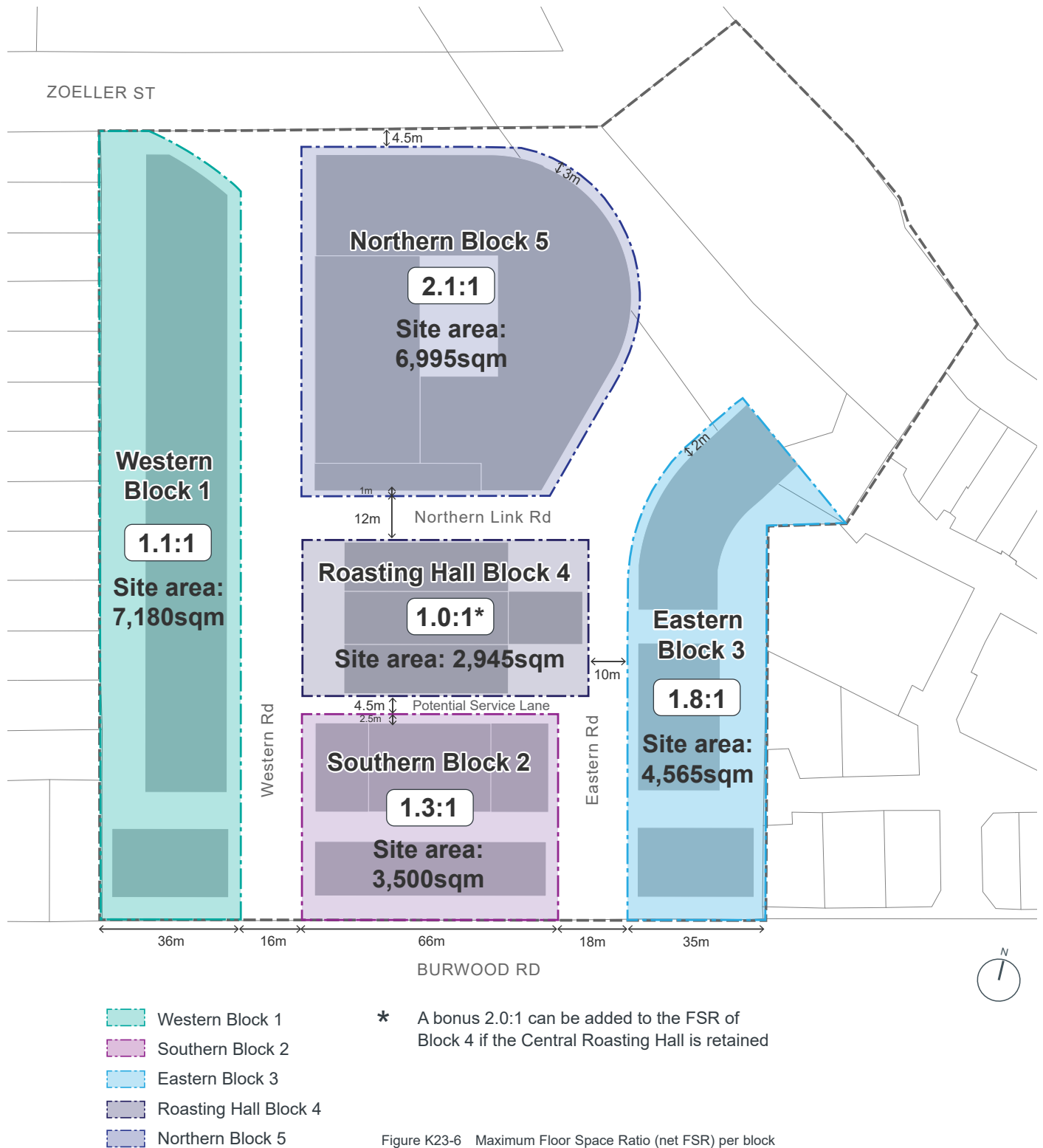


Figure K23-6 Maximum Floor Space Ratio (net FSR) per block

K23 160 Burwood Rd, Concord (former Bushells Factory)

K23.9 Built Form Envelopes

Objectives

- O40 To create building forms that reinforce the future desired character of the area and protect valued character attributes such as views to the foreshore and the Central Roasting Hall.
- O41 To facilitate daylight access and ventilation to streets, public places and neighbouring properties.
- O42 To define the proportion, scale and visual enclosure of the public domain and provide a level of consistency across the Precinct.
- O43 To ensure rooftop spaces do not create unreasonable amenity impacts such as overlooking, loss of privacy or unacceptable noise.

Building Heights

Controls

C60.	New development is to conform with the maximum heights (in metres) as shown in Figure K23-7 Building Envelope Controls Plan and Figure K23-8 to Figure K23-14 Building Envelope Controls Sections.
C61.	New development is to conform with the maximum number of storeys as shown in Figure K23-7 Building Envelope Controls Plan and Figure K23-8 to Figure K23-14 Building Envelope Controls Sections.
C62.	New development in the Southern Block should not exceed the existing Roasting Hall parapet height of RL26.8.
C63.	Minimum floor to floor heights for new development are as follows:

Use	Minimum floor to floor height	Minimum floor to ceiling height
Retail	4.4m	4m
Commercial	3.7m	3.3m
Adaptable	3.7m	3.3m
Residential	3.1m	2.7m
Community	3.7m	3.3m
Urban Services	5.4m	5m

Note: Exceptions for floor to floor heights within the existing Roasting Hall structure may be acceptable.

Height Transition to Adjoining Land

Controls

C64.	Building heights are to transition (be lower) towards the Precinct's boundaries and adjoining residential uses as identified in Figure K23-7 Building Envelope Controls Plan and Figure K23-8 to Figure K23-14 Building Envelope Controls Sections.
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Heritage Integration

Controls

C65.	New development is to minimise the impact on the visual curtilage and setting of the Central Roasting Hall.
C66.	New development near the Roasting Hall is to provide visual separation to preserve the iconic nature of the structure.

Solar Access/ Overshadowing

Controls

C67.	Overshadowing of neighbouring buildings is minimised while direct sunlight to the public domain and publicly accessible spaces is maximised.
C68.	Direct solar access (sunshine) to windows of principal living areas and to the principal area of open space of existing dwellings, particularly along the eastern and western boundary, should not be reduced to less than 3 hours between 9.00am and 3.00pm on 21 June (mid winter).
C69.	50% of publicly accessible open space is to receive at least four hours direct sunlight between 9am and 3pm on 21 June.
C70.	Shade from strong sun is available between September and March, for at least 20% of the area used for passive recreation, and protection from strong winds is provided to any space that is open to winds from the south.

Building Envelope Controls Plan

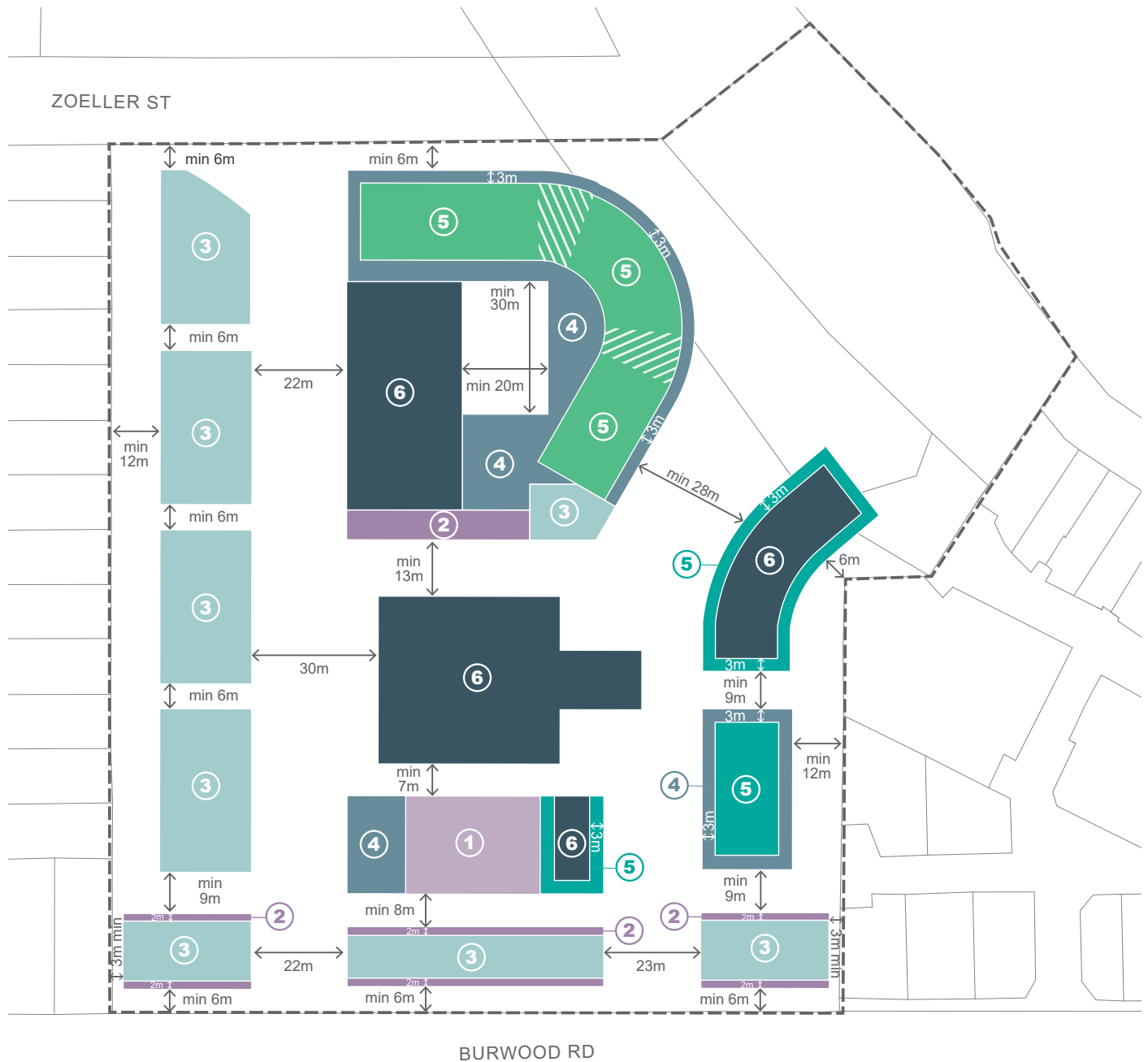


Figure K23-7 Building Envelope Controls Plan

K23 160 Burwood Rd, Concord (former Bushells Factory)

Building Footprints/ Envelopes

Controls	
C71.	<p>The maximum building/ floor plate depth of all residential apartment development is 18m. Deeper building/ floor plate depths may be considered where it can be demonstrated that apartments are able to satisfy ADG principles and all habitable rooms receive adequate ventilation and solar access.</p> <p>The maximum depth of medium density typologies (terraces) is 14m unless varied in accordance with K23.14 Medium Density Housing (Terraces) Control C125.</p>
C72.	<p>Along the western boundary of the site the maximum length of any building is 36m and buildings are to be broken into a minimum of five buildings with a building 'break' that is a minimum of 6m wide.</p>
C73.	<p>The maximum length of any building over 4 storeys high is 50m with a minimum building 'break' of 9.0m wide between buildings. This control does not apply to the 5 storey curved building within the Northern Block 5.</p>

Building Façades, Entrances and Articulation

Controls	
C74.	<p>Building façades are to be articulated into smaller elements at a scale or grain that reflects:</p> <ul style="list-style-type: none"> • different uses and/or components of the building; • the location of the building relative to pedestrian or public spaces; • building entries; and • the ground floor, lower floors, top floor and roof.
C75.	<p>Underground parking areas are to protrude no more than 1m above the level of the footpath or adjacent public domain and are to:</p> <ul style="list-style-type: none"> • be integrated into the landscape and building design; • not have car ventilation grills on the street frontage unless screened by landscaping in a garden bed with a minimum plan depth of 1m; and • have any ground floor car parking areas sleeved with uses fronting the street.
C76.	<p>Ground floor dwelling units facing the street and public domain are to have individual entries from the street.</p>
C77.	<p>Entrances to dwellings and or associated transitional spaces are to be designed to encourage personalisation of the space.</p>
C78.	<p>Individual dwelling layouts are to be planned and located to provide passive surveillance of the street and public open space.</p>

Setbacks

Controls	
C79.	New development must set back as identified in Figure K23-7 Building Envelope Controls Plan and Figure K23-8 to Figure K23-14 Building Envelope Controls Sections.
C80.	Setback areas are to be deep soil where identified in Figure K23-5 Public Domain Framework Plan. Basements are not permitted to encroach into deep soil zones.
C81.	'Undesirable' elements such as vents, electric substations, or plant and equipment spaces are not permissible within the setback area. Where unavoidable they must be screened from view by quality landscape.

Building Diversity and Architectural Character

Controls	
C82.	<p>To achieve diversity and interest in the architectural character of the Precinct:</p> <ul style="list-style-type: none"> • architectural expression of a development block should be varied and present as a group of buildings rather than one building designed by a single designer or company; • at least two architectural firms should be used within each block*; and • buildings designed by the same architectural company should not be adjacent or opposite to each other. <p>*Note: A single team may be permitted to design the urban service uses within the Central Roasting Hall and Southern Block 2 to solve the complexities of loading and servicing these uses.</p>

Rooftop Spaces

Controls	
C83.	<p>Private and communal open spaces may be provided on a podium or roof-top terrace if the following is shown to be addressed:</p> <ul style="list-style-type: none"> a) visual and acoustic privacy, b) safety and security, c) roof maintenance and servicing; and d) wind effects
C84.	Above ground open spaces must not directly overlook rooms and private landscaped areas of neighboring properties unless overlooking can be mitigated by increased setbacks, screening or other means.
C85.	The design of any rooftop spaces and associated rooftop lift overruns or structures must be integrated into the main building envelope and not increase the overall bulk and scale of the development.
C86.	The location and design of green roofs and rooftop spaces should not detract from the heritage significance of the Central Roasting Hall.

K23 160 Burwood Rd, Concord (former Bushells Factory)

Building Envelope Controls Sections

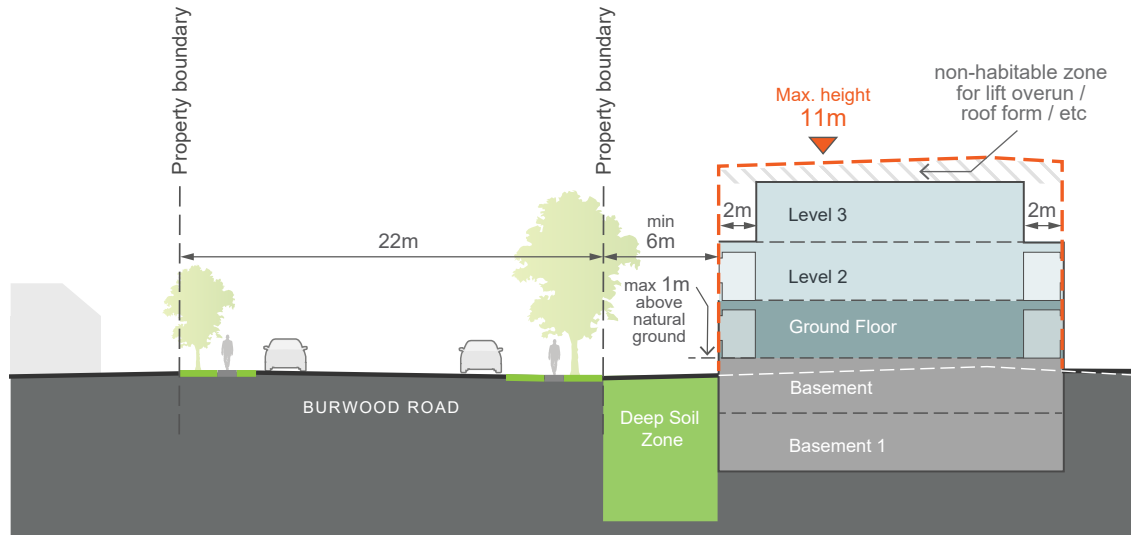


Figure K23-8 Section 1: Burwood Road and 3 storey terrace interface

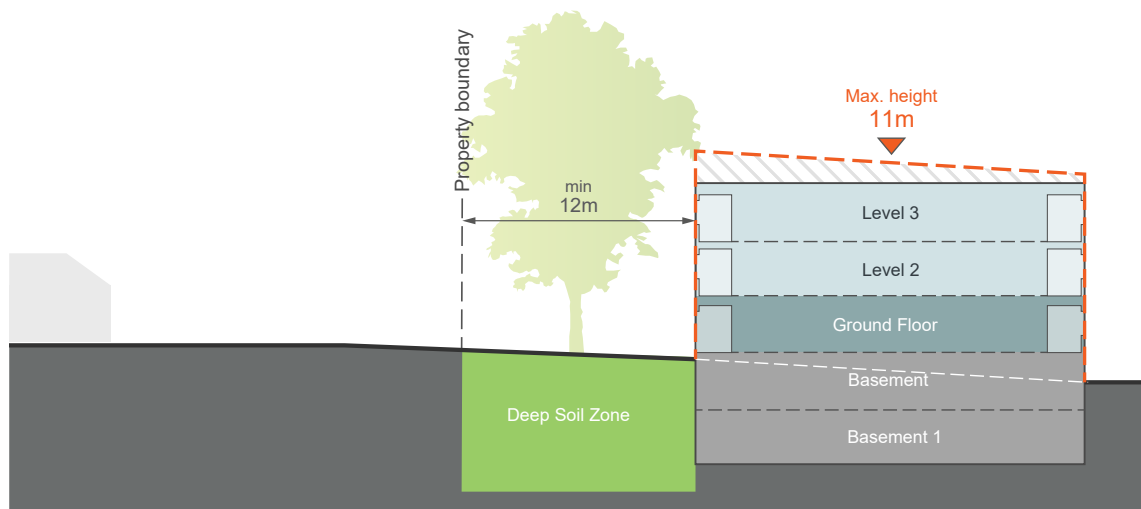


Figure K23-9 Section 2: Western boundary and 3 storey development interface



Figure K23-10 Section key

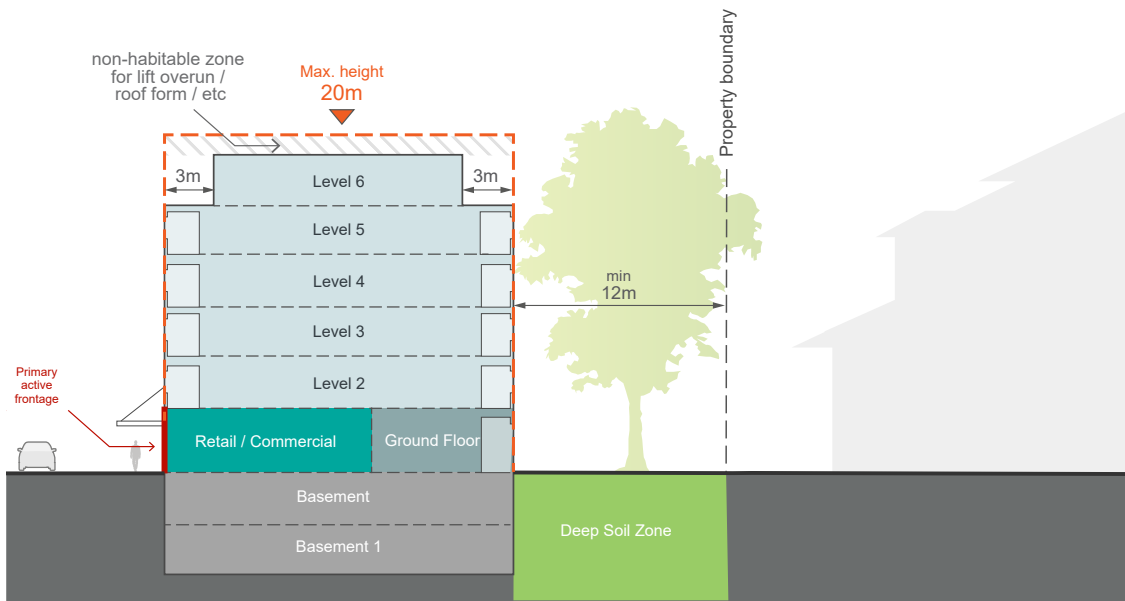


Figure K23-11 Section 3: Eastern boundary and 6 storey development interface

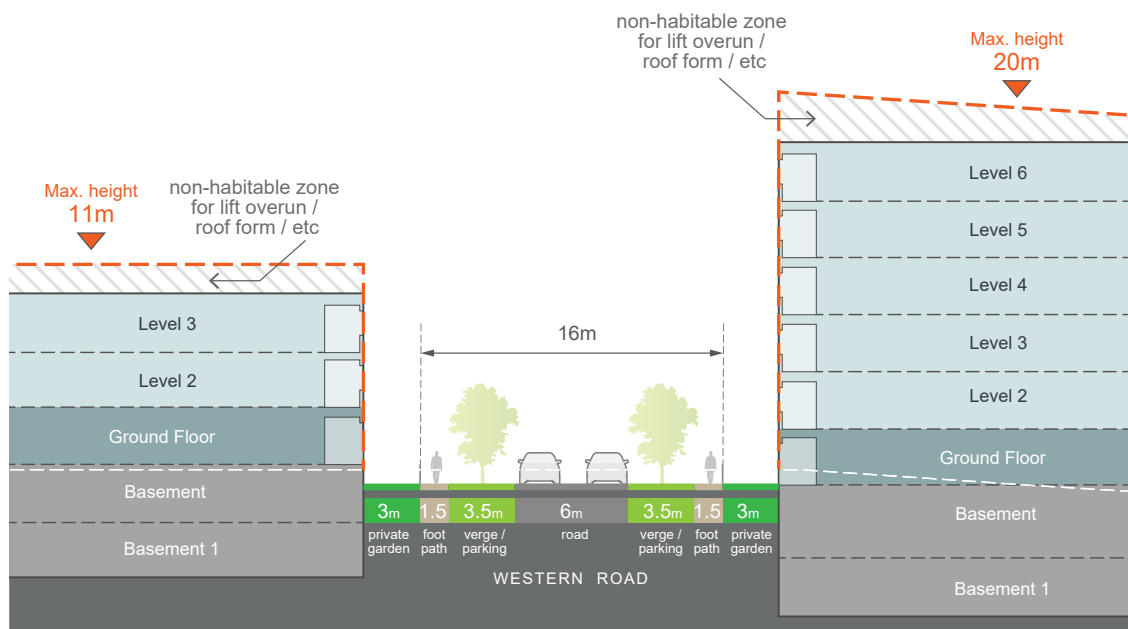
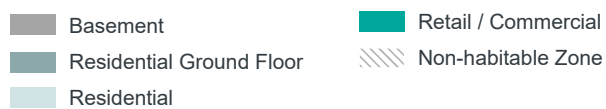


Figure K23-12 Section 4: Local street section



K23 160 Burwood Rd, Concord (former Bushells Factory)

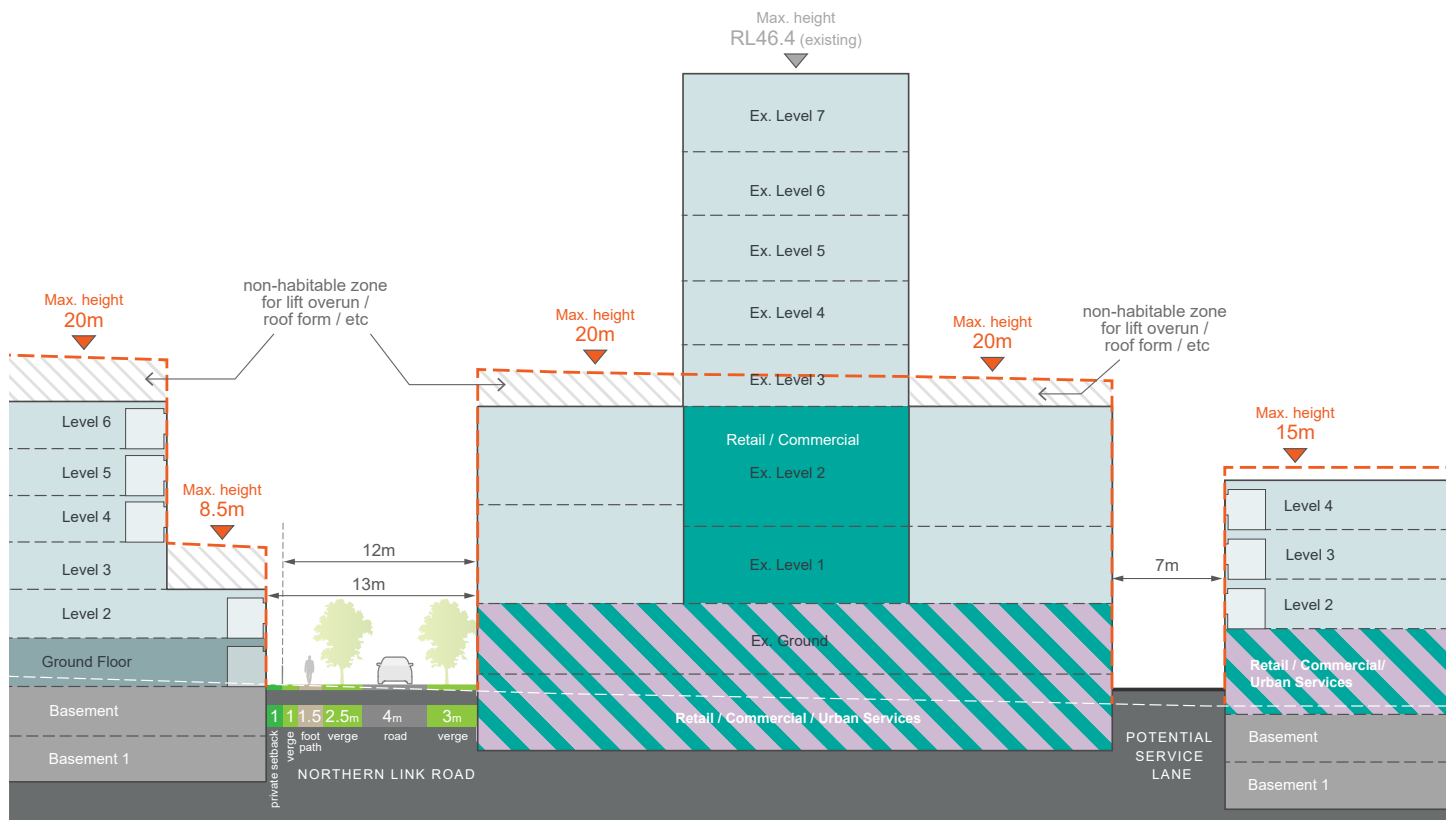


Figure K23-13 Section 5: Looking east towards 6 storey development, existing Central Roasting Hall and 4 storey development with indicative potential locations of urban service uses

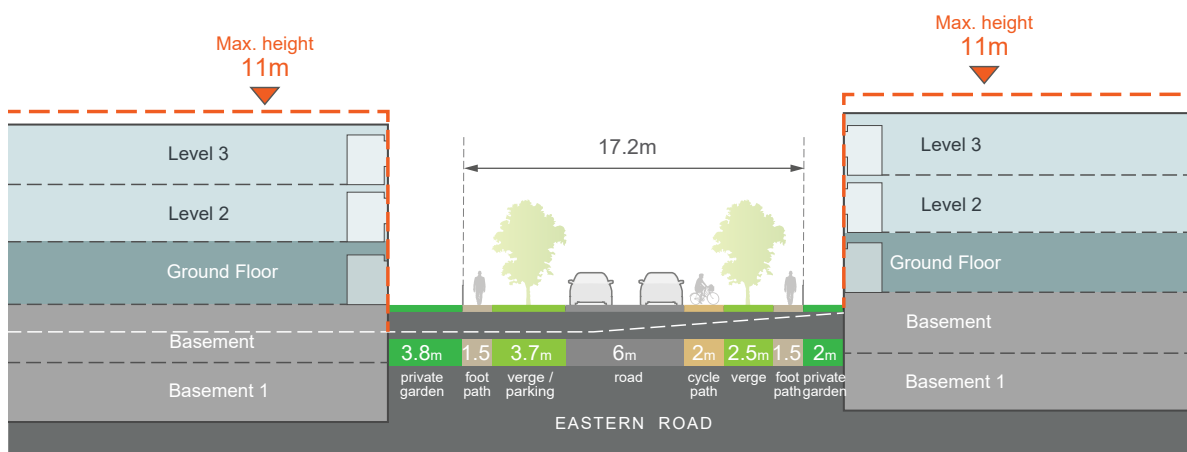


Figure K23-14 Section 6: Local street section

Basement	Retail / Commercial
Residential Ground Floor	Non-habitable Zone
Residential	Urban Services

K23.10 Public-Private Interfaces

Objectives

- O44 To provide a safe, interesting and vibrant environment that encourages pedestrian activity and supports the economic success of the Precinct.
- O45 To maximise opportunities for passive surveillance of the public domain.
- O46 To enhance the commercial viability of the area and complement existing retail, commercial, entertainment and community uses.

Active Frontages on the Ground Floor

Controls

- | | |
|------|---|
| C87. | Ground level active uses must be provided along 'Active frontages' as identified in Figure K23-15. |
| C88. | Vehicle access points are generally not permitted along active frontages. Where no alternative access point can be provided, their width must be kept to a minimum. |

C89.

Along active frontages:

- the finished ground floor level is to match the footpath level; where this is not possible, the ground floor level is to be a maximum of 0.35m above or below the footpath;
- active uses/ tenancies must be a minimum of 10m deep;
- continuous awnings must be provided to shelter pedestrians from weather conditions; and
- the design guidance shown in Figure K23-15 must be applied.

C90.

Residential entries and foyers are permitted along active frontages, however, they are not to compromise the commercial/ retail activity along the street, by keeping their frontage width to a minimum. The maximum width for residential entries/ foyers is 6m. Awnings should be provided at residential entries and foyers.

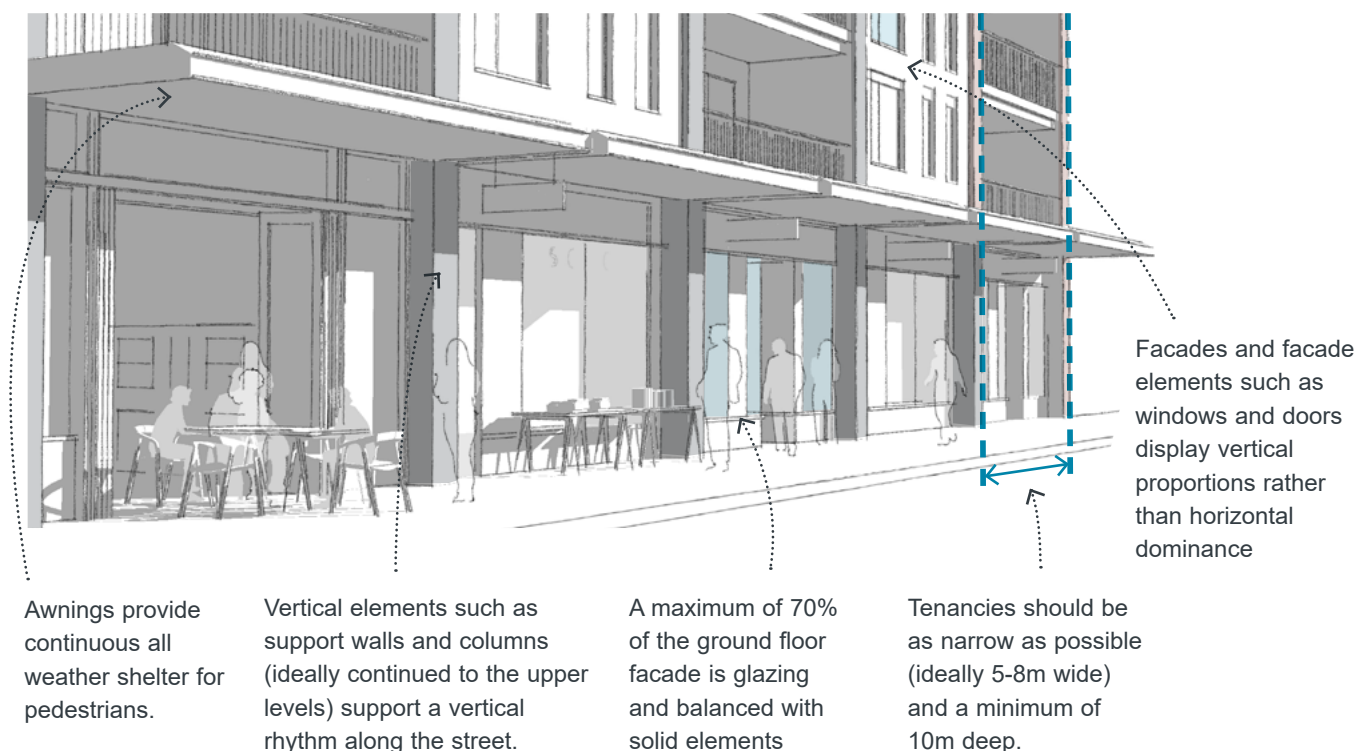


Figure K23-15 Design guidance for active frontages

K23 160 Burwood Rd, Concord (former Bushells Factory)

Activated Urban Services Frontage

Controls	
C91.	Consideration should be given to the nature of 'Activated urban services frontage' as identified in Figure K23-5.
C92.	Activated urban services frontage should be high quality with careful industrial detailing and integrated wayfinding. For reference, see the Caxton Works light industrial frontage in London.



Figure K23-16 Detailed, activated urban services frontage, Caxton Works, London (source: Google Streetview)

'Interactive' Frontages on the Ground Floor

Controls	
C93.	'Interactive' frontages comprise all ground floor frontages that address the public domain or publicly accessible spaces and are not designated as 'active frontages' in Figure K23-5.
C94.	<p>Interactive frontages must:</p> <ul style="list-style-type: none"> display a high level of architectural quality and detail; minimise vehicular access points; have a high level of visual permeability; minimise blank facades; avoid visually dominant building services where possible. Co locate service cabinets with loading, waste or parking areas where possible to avoid impact on the public realm; maximise the number of doors and windows and have no more than 5m along the ground floor facade that is without a door or window; and place a particular focus on 'human scale' and pedestrian views i.e. through the use of detailed design, insets and projections that create interest and diversity.

Residential Uses on the Ground Floor

Controls	
C95.	All ground floor residential units must have individual access directly off a street or laneway to improve activity levels and surveillance.
C96.	Where possible, ground floor residential units are to be elevated by up to 1m, with the exception of accessible units where level access off the street/ laneway/ footpath is preferred.

Safety & Surveillance

Controls	
C97.	New development is to address and define the public domain and publicly accessible spaces through entrances, lobbies, windows and balconies that overlook public spaces, maximising opportunities for passive surveillance.
C98.	The building design is to maximise opportunities for casual surveillance of the public domain and any semi-public or common open space, particularly adjacent to public open space.
C99.	Ground floor dwellings adjacent to public open space are to have an “address” or “front door” that is visible and directly accessible from the pedestrian paths within the public open space.
C100.	Balconies should be designed to balance visual privacy for the resident and opportunities to overlook the public domain. Design treatment may include a combination of solid and transparent balustrade materials.
C101.	A high level of surveillance is required from upper levels of buildings adjacent to public open space.
C102.	The detailed design of the external areas of the ground floor is to minimise blind-corners, recesses and other areas which have the potential for concealment.

K23.11 Massing and Articulation

Objectives

- O47 To ensure buildings and their individual elements are appropriately scaled to define the built form and respond to the surrounding character.

Controls	
C103.	The built form layout is to be generally consistent with that shown in Figure K23-7 Building Envelope Controls Plan and Figure K23-8 to Figure K23-14 Building Envelope Controls Sections. Alterations to the layout will be considered where they demonstrate an improved public benefit and design excellence having regard to: <ul style="list-style-type: none"> • the objectives, character statement and principles of this DCP; • the degree to which any alterations may enhance or detract from public enjoyment of the public benefits associated with the development; and • the impact on neighbouring properties.
C104.	All buildings that are over 4 storeys, are to be clearly articulated i.e. base, middle and top.
C105.	The maximum length of straight wall without articulation, such as a balcony, recess, projection or return, is 15m.
C106.	Roof plant, lift overruns, vents, carpark entries and other service related elements are to be located within the maximum building height, visually unobtrusive, integrated into the built form and complement the architecture of the building.
C107.	Ensure buildings exhibit high design quality, and minimise overshadowing of neighbouring buildings and public and private open spaces.

K23 160 Burwood Rd, Concord (former Bushells Factory)

K23.12 Appearance

Objectives

- O48 To add visual quality and interest to new buildings, with a focus on breaking up massing of higher density forms when viewed from the public domain, publicly accessible places and neighbouring properties.

Controls

C108.	All development along Burwood Road, Zoeller Street and the new public open space are to be of the highest architectural quality and reflect the prominence of the streets and spaces that they face.
C109.	The composition of facades balances solid and void elements and does not display large areas of a single material, including glass.
C110.	Visually prominent elements such as balconies, overhangs, awnings, and roof tops are to be of high design quality.
C111.	Facades are articulated using techniques such as projections, recesses, eave overhangs and deep window reveals. Elements are not to protrude into the front setback area. In general, vertical articulation should be more 'pronounced' than horizontal articulation.
C112.	Buildings on corners address both streets and architectural elements are composed so that they 'turn the corner'.

K23.13 Heritage

Objectives

- O49 To retain and integrate remnants of the precinct's history and structures of heritage value and connection to the past.
- O50 To acknowledge and celebrate the site's industrial history and the Central Roasting Hall's quality as a 'factory in a garden' setting.
- O51 To retain the 'Bushells Factory' Central Roasting Hall, being one of the few remaining industrial structures on the Sydney waterfront.
- O52 To protect the Central Roasting Hall's prominence as an iconic visual landmark (including 'B' sign and chimney) that can be seen from the water and surrounding suburbs.
- O53 To ensure future development is guided by a clear understanding of the heritage values of the place.

New Development

Controls

C113.	Development must comply with requirements in the City of Canada Bay DCP Part C2 'Development of heritage items'.
C114.	Any future development is to embrace the existing industrial character of the Precinct. Particular consideration should be given to the following: <ul style="list-style-type: none"> • built form shape and scale; • roof form; • architectural detail (e.g. window design inspired by the prominent translucent wall of the Central Roasting Hall); and • appropriate colours and materials such as natural red/ brown brick.
C115.	Surrounding new development is of appropriate scale and provides adequate separation of the historic structure(s). The minimum setbacks are identified in Figure K23-7 Building Envelope Controls Plan.

C116.	New development should support the heritage value of the Central Roasting Hall as a 'Factory in a Garden' setting, including the retention and ongoing protection of the large Hill's Weeping Fig (Tree 184) and other mature trees along the eastern and western site boundaries.
C117.	An archival record, in accordance with Heritage NSW guidelines, should be lodged with any application for demolition. The recording should include measured drawings.
C118.	A Schedule of Conservation Works, including drawings, must be prepared by a suitably qualified and experienced heritage consultant and submitted with any application for development.
C119.	A heritage Conservation Management and a heritage Interpretation Plan must be submitted with any application for development.

Adaptive Reuse of the Roasting Hall

Controls	
C120.	The arrangement of new built form, open space and roads is to enable the Central Roasting Hall to retain its landmark quality and 'factory in the garden' setting.
C121.	The Central Roasting Hall is to be protected and listed as an item of environmental heritage in the Canada Bay Local Environmental Plan 2013, including the Central Roasting Hall, chimney stack, 'B' sign and other characteristics such as the landscaped setting.

C122.	A Detailed Fabric Analysis of the Central Roasting Hall, undertaken by a suitably qualified heritage consultant, is required with any development application so as to help ensure no significant fabric of potential heritage value will be lost. The fabric analysis must include a grading of significance of building fabric and spaces.
C123.	All elements of the Central Roasting Hall with identified heritage value must be retained and restored including: <ul style="list-style-type: none"> • the chimney stack; • the 'B' sign; and • original structural elements and the translucent facade of the Roasting Hall.
C124.	The Central Roasting Hall is to be adaptively reused in accordance with Part 'C2.14 Adaptive reuse' of the City of Canada Bay DCP. Appropriate uses include the following: <ul style="list-style-type: none"> • community facilities and multipurpose cultural spaces; • spaces for temporary activation such as markets, events and concerts; • retail/ commercial and urban services uses; • food & drink premises, e.g. gourmet providores stores, wine/ tapas bars, market style food outlets; • short term accommodation; and • apartments.

K23 160 Burwood Rd, Concord (former Bushells Factory)

K23.14 Medium Density Housing (Terraces)

Objectives

- O54 To ensure high quality design of medium density residential typologies with a particular focus on their contribution to the local character.
- O55 To transition to lower density residential areas, in particular along the Burwood Road interface.

Controls

C125.	The maximum building depth is 14m unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. through the use of a courtyard design.
C126.	The minimum overall landscaped area for terraces is 35% of the lot area. The minimum dimension of landscaped area is 1.5m. A minimum of 50% of the overall landscaped area is to be deep soil.
C127.	A minimum of 35% of the front setback is to be landscaped area. A minimum of 50% of the landscaped area in the front setback is to be deep soil.
C128.	The minimum area of private open space (POS) is linked to the number of bedrooms as follows: <ul style="list-style-type: none"> • 15m² for 1 bedroom dwellings • 25m² for 2 bedroom dwellings • 30m² for 3+ bedroom dwellings
C129.	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² .
C130.	Driveways of front-loaded terraces are a maximum width of 3.5m.
C131.	Where basement parking is provided, the following applies: <ul style="list-style-type: none"> • basement car parking is not to protrude more than 1m above finished ground level except at the carpark entry; • carpark entries are to be set back behind the building line; • the first 4.5 metres of the carpark entry/ driveway measured from the street boundary is to be at grade; and • carpark entries are a maximum 2.7m high and 3.5m wide.

K23.15 Sustainability & Performance

Objectives

- O56 To celebrate the ecological values of the site and improve the ecology of the waterfront.
- O57 To reduce the embodied energy in new development through the retention and adaptive reuse of existing structures.
- O58 To achieve Australian leading practice in design, construction and operation to deliver on sustainability outcomes, targeting a net positive ecological impact.

Controls

C132.	<p>The development is to achieve beyond the baseline compliance requirements set by BASIX through the following key interventions:</p> <ul style="list-style-type: none"> • efficient appliances and improved thermal design; • avoid natural gas in all residential development and provide appliances that can be powered by renewable energy sources such as; <ul style="list-style-type: none"> – electric heat pumps for hot water, – induction cooktops, – electric heating and cooling e.g. efficient air-conditioners with low GWP (Global Warming Potential); • solar photovoltaic and battery ready facilities; • recycled water infrastructure; • green facade treatment for cooler dwellings; and • access to car share facilities best practice parking measures including provision of EV charging and smart metering systems for all parking spaces.
C133.	All new buildings are to implement the technology (or similar) of the 'Modelled Scenario' identified in Figure K23-17 and achieve the impact performance identified in Figure K23-18.

Technology	Benchmark	Modelled scenario
Hot water system	Centralised gas	Centralised gas
Thermal Design (NatHERS)	5-star average	8-star average (delivered through design & green façade)
Space heating and cooling	2-Star A/C	5-Star A/C
Lighting	Halogen, T8 & CFL	Efficient (LED)
Appliances	Dishwasher 2.5-star Energy, 2.5-star Water	Dishwasher 4-star Energy, 5-star Water
	Dryer 1.5-star Energy	Dryer Heat Pump Clothes Dryer
	Clothes washer (not installed)	Clothes washer 4.5-star Energy, 5-star Water
	Fridge (not installed)	Fridge 5-star Energy
Solar PV	None	300 kW* (0.5 kW per multi unit dwelling 2 kW per townhouse)
Water Fixtures & fittings	Toilet – 4-star Showerhead – 3+ Star Kitchen Taps – 5-star Other Taps – 5-star	Toilet – 4-star Showerhead – 3+ Star Kitchen Taps – 5-star Other Taps – 5-star
Water reuse	None	Recycled water for irrigation, toilet and laundry
Car parking rates	Affordable – 1 space 1 bed – 1 space 2 bed – 1.5 space 3 bed – 2 space 1 visitor per 3 apartments	Affordable – 0 space 1 bed – 0 space 2 bed – 1 space 3 bed – 1.5 space 1 visitor per 5 apartments Unbundled parking Provision of car share spaces

Figure K23-17 Technological assumptions for scenarios (Kinesis, Feb 2019)

	Impact of interventions
Greenhouse gas emissions	▼ 34%
Water consumption	▼ 38%
Peak electricity	▼ 50%
Solar PV contribution	20%
Recycled/rain water contribution	30%
BASIX Energy score (estimated)	53
BASIX Water score (estimated)	66
Annual household cost savings	\$7,200

Figure K23-18 Impact of interventions table (Kinesis, Feb 2019)