8.2.3 GRANVILLE LOCAL CENTRE

In November 2016, the NSW Government released the Parramatta Road Corridor Urban Transformation Strategy (PRCUTS). The PRCUTS sets the long term vision and framework to support co-ordinated employment and housing growth in the Corridor in response to significant transport and infrastructure investment, economic and demographic shifts, and industrial and technological advances. Granville has been identified as one of the eight precincts along the corridor that has been earmarked for renewal because of its unique access to jobs, transport, infrastructure and services, and its ability to accommodate new development in a balanced way.

Granville Local Centre is proposed to be a vibrant place with a mix of new housing, shops and commercial spaces north of the railway line. Good Street will be the Precinct's main street, extending from the existing Town Centre of Granville on the southern side of the railway line, and will also include protection of the fine grain development pattern and delivery of a high quality public domain. Opportunities for residential, retail and commercial development will be integrated with the existing public transport facilities, capitalising use of the Granville Railway Station and Granville Bus Interchange.

The provisions of this Section of this DCP apply to development within Granville Local Centre (shown in Figure 8.2.3.1). This Section should be read in conjunction with Section 8.5 of this DCP which provides for additional development controls of specific sites within Granville Local Centre.

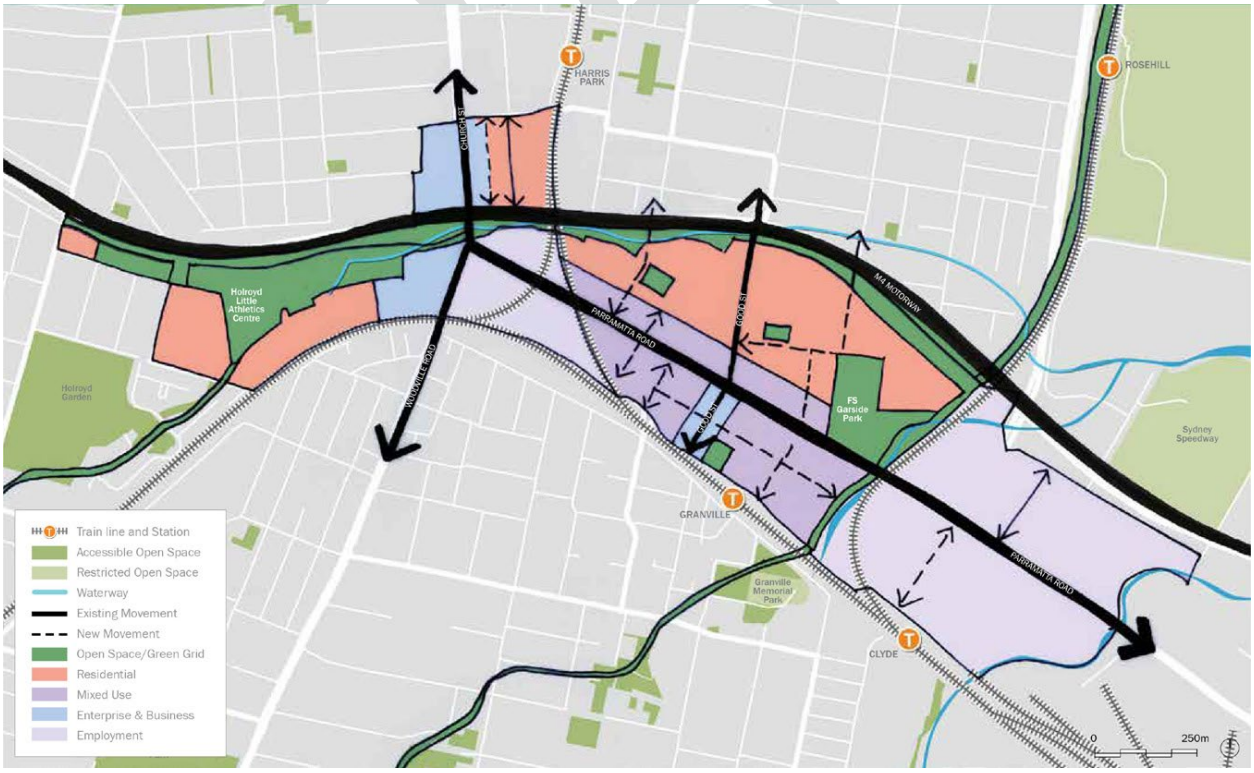


Figure 8.2.3.1 – Granville Local Centre (PRCUTS)

Objectives

O.01 Develop a mixed use core of retail, residential and business at the transport node serving the precinct, centred around Good Street, Cowper Street and Rowell Street, and extends to the north side of Parramatta Road.

O.02 Ensure new development within the mixed use core provides active ground floor uses to increase vibrancy, safety, use and interest of the area,

O.03 Preserve and improve significant open space areas within the precinct.

O.04 Maximise pedestrian links and connectivity through new laneways and through site links.

Control

C.01 New development is to be consistent with the *Parramatta Road Corridor Urban Transformation Strategy: Planning and Design Guidelines* unless otherwise detailed in this Section.

8.2.3.1 GRANVILLE TOWN CENTRE

8.2.3.1.1 DESIRED FUTURE CHARACTER

The Granville Town Centre precinct continues to be a vibrant place with a variety of activities within and surrounding the centre. This is achieved through a mix of uses, building heights and densities to support the role and function of Granville. Throughout the precinct, new development will retain and enhance the heritage character of the precinct. Specific characteristics for parts of the town centre are detailed below.

Parramatta Road Corridor: Parramatta Road accommodates non-residential development including business and office uses, light industries and specialised 'retail' developments that require large floor plates. New development is set back from the roadway to improve pedestrian amenity.

Mixed use development: is located between the railway line and Cowper Street with increased height limits and floor space ratios permitted on larger sites. The amalgamation of lots are required to achieve the maximum building heights and floor space ratios prescribed in the *Parramatta LEP 2023*. Where the required site amalgamation does not occur, reduced building heights and floor space ratios apply (refer to the *Parramatta LEP 2023*). The prescribed maximum floor space ratios may not be wholly achievable on all sites due to urban design considerations or site configuration. Residential development is located away from Parramatta Road to minimise adverse amenity impacts. The interface between development along Parramatta Road and residential development to the rear is carefully designed to ensure that privacy and visual amenity are managed and protected.

Retail Centre: New development in the main retail precincts north of the railway line is consistent with the scale and fine grain form of existing development. Active ground level frontages are provided, with at grade pedestrian access. The existing street pattern, including rear lanes, is retained to reflect the main streets' historical context. Shop top housing is encouraged and set back from the street alignment in order to respect pedestrian scale of the existing streetscape.

Residential zone: New residential development in Enid and Diamond Avenues facing Granville Memorial Park and Pool provides a residential edge to frame the public open space. New development maintains the heritage character and narrow subdivision pattern in the heritage conservation areas, and areas south of William Street and west of Duck Creek.

This Section is to be read in conjunction with Section 8.2.3 Granville Local Centre and Section 8.5 of this DCP which provides for additional development controls of specific sites within Granville.

Figure 8.2.3.1.1.1 – Granville Town Centre

Objectives

In addition to general objectives listed in Part 8 of this DCP, specific objectives of this precinct are identified below.

O.01 Ensure that new development provides a strong interface to Granville Railway Station, Parramatta Road, South Street and Good Street.

O.02 Ensure that new development maintains the character and function of South Street as a main retail/commercial street by continuing the fine grain pattern of retail and commercial uses.

O.03 Ensure that new development responds well to existing heritage items.

O.04 Ensure new development within the mixed use area provides active ground floor uses to increase the safety, use and interest of the area.

O.05 Ensure new buildings within the mixed use area provide articulation and an attractive composition of building elements.

O.06 Enhance residential amenity through provision of landscaping and communal open space at ground level.

O.07 Ensure an appropriate height transition of building heights to maintain amenity of adjacent development.

Investigation Areas

a) As shown in Figure 8.2.3.1.1.2, Council will investigate the potential for redevelopment of the bus interchange and car park to provide for a mix of community, residential and commercial uses.

b) Council will investigate the block bound by Railway Parade, Mary, Carlton and Jamieson Streets as shown in Figure 8.2.3.1.1.1. Development in this location will need to respect the significance of the existing heritage items and heritage conservation areas in relation to scale, character, form, siting, material, colour and detailing. In addition, the proportion and massing of buildings is to relate favourably to that of existing building patterns in the street.

Controls

Pedestrian Connections and Laneways

C.01 New pedestrian connections, roads and laneways should be provided in accordance with Figure 8.2.3.1.1.2. Where a development provides for public access connections, a variation to Council's floor space ratio control can be sought in accordance with C.02 below.

C.02 Where a development provides for dedication of land to Council for the purposes of providing public access and the construction of the access way, Council may consider increasing the maximum floor space ratio. As a guide, the maximum floor space ratio may be increased by the equivalent area represented by 50% of the land area to be dedicated to Council for the public access. The site area may include the area of land to be dedicated to Council for the purpose of the floor space ratio calculation. The proposed variation to floor space is to be addressed under Clause 4.6 'Exception to development standards' in the *Parramatta LEP 2023*.

C.03 New road connections and laneways should be provided to improve through block connections, remove dead end streets, extend existing connections, improve serviceability of retail development and improve the interface to the railway line.

C.04 Properties facing South Street are to form an extension of existing laneways to the rear to provide for vehicular access and servicing needs of development in the B2 Local Centre zone. The laneways will need to be located over or abutting the B2 Local Centre Zone.

C.05 New street links are to match the width of the existing public road that it forms and extension of. New laneways are to have a minimum width of 6 metres.

C.06 New pedestrian links are to improve through block connections and provide better links to and from Granville Railway Station.

C.07 New pedestrian connections are to have a minimum width of 3 metres and are to be consistent in width for their full length.

Setbacks

C.08 Front building setbacks are to be in accordance with Figure 8.2.3.1.1.2 and any additional controls set out below:

a) For development along Parramatta Road, setbacks shown in Figure 8.2.3.1.1.2 apply to the first 4 storeys (15 metres) of development. An additional 3 metre upper level setback applies to any portion of development above 4 storeys (15 metres) in height.

b) For development along Good Street, setbacks shown in Figure 8.2.3.1.1.2 apply to the first 3 storeys of development. Remaining storeys are to be set back an additional 3 metres. Balconies are not to encroach the upper level setback area.

c) For development in the B4 Mixed Use Zone with frontage to Mary, Jamieson and Carlton Streets, the front setback to be between 5 and 9 metres.

d) For development in the B4 Mixed Use zone between Parramatta Road and the railway line, setbacks shown in Figure 8.2.3.1.1.2 apply to the first 4 storeys (15 metres) of development. An additional 3 metre upper level setback applies to any portion of development above 4 storeys (15 metres) in height.

C.09 Side and rear building setbacks are to be in accordance with Figure 8.2.3.1.1.2 and the below controls:

Rear Setbacks

a) B2 Local Centre Zone

A zero rear setback is allowable for development in the B2 Local Centre Zone.

b) B4 Mixed Use Zone

A minimum rear setback of 9 metres is required for development up to 25 metres in height.

A minimum rear setback of 12 metres is required for development above 25 metres.

c) B6 Enterprise Corridor Zone

d) A minimum rear setback of 4 metres is required.

Side Setbacks

a) B2 Local Centre Zone

A zero side setback is allowable for development up to 4 storeys (15 metres) in height, except where the development addresses a lane.

b) B4 Mixed Use Zone

A zero side setback is allowable for development up to 4 storeys (15 metres) in height, except where the development addresses a lane.

c) For any portion of development above 4 storeys (15 metres) in height, a minimum side setback of 9 metres is required for habitable rooms and a minimum side setback of 6.5 metres is required for non-habitable rooms.

d) B6 Enterprise Corridor Zone

A zero side setback is allowable for development up to 6 storeys (21 metres) in height.

Side Setbacks (Addressing Lanes)

e) Where lanes are indicated in Figure 8.2.3.1.1.2 (see Front Setbacks above), half of the width of the lane is to be provided by each adjoining property. For passive surveillance and a high quality public domain, continuous full length blank walls are discouraged to lanes. Streetscape setbacks to lanes are shown in Figure 8.2.3.1.1.3. For visual and acoustic privacy the following additional setbacks are required.

6 Metre Wide Lanes

f) Development up to 4 storeys (12 metres) in height are to be setback a minimum of 1.5 metres from the lane where there are non-habitable rooms and setback a minimum 3 metres where there are habitable rooms.

g) For the portion of development above 4 storeys (15 metres) but less than 25 metres, a minimum 3.5 metre setback to the lane is required for non-habitable rooms and a minimum 6 metre setback to the lane is required for habitable rooms.

3 Metre Wide Lanes

h) For privacy of buildings up to 4 storeys a minimum 3 metre setback to the lane is required for non-habitable rooms and a minimum 4.5 metre setback to the lane is required for habitable rooms.

i) For the portion of development above 4 storeys (15 metres) but less than 25 metres, a minimum 5 metre setback to the boundary is required for non- habitable rooms and a minimum 7.5 metre setback for habitable rooms.

C.10 To achieve a continuous street edge development in the B2 Local Centre zone should have a nil side setback where it will not have a detrimental impact upon adjoining development.

C.11 Building setbacks to existing and desired laneways should be designed to activate the laneway while still allowing for the servicing needs of development.

C.12 Where development proposes of adjoins residential development greater than 2 storeys in height, building separation requirements prescribed by the Apartment Design Guide published by the NSW Department of Planning and Environment should be achieved.

C.13 The building separation distances between buildings on the same site are not to be less than those required between buildings on adjoining sites.

Site Frontage

C.14 The minimum site frontage for development in B4 Mixed Use zone or B6 Enterprise Corridor zone on land between Parramatta Road and the railway line is to be in accordance with the following table:

Table 8.2.3.1.1 – Minimum site frontage

Site area	<950m²	950m² - 2100m²	>2100m² – 3200m²	>3200m²
Minimum frontage (m)	24	30	45	60

Land Amalgamation

C.15 The preferred pattern of land amalgamation is to be side by side to maximise lineal street frontage and to encourage east west built form for good solar access, as shown in Figure 8.2.3.1.1.4.

Landscaping and Deep Soil

C.16 In the B6 Enterprise Corridor zone along Parramatta Road, a minimum of 20% of the site is to be a deep soil zone.

C.17 In the B4 Mixed Use zone between Parramatta Road and railway line, a minimum of 30% of the site is to be a deep soil zone, and not less than 40% of the site is to be landscaped.

C.18 The required deep soil areas are to be predominantly located at the rear of the site to provide a landscape corridor and visual screening between buildings.

C.19 Where a front building setback is required as shown in Figure 8.2.3.1.1.2 (with the exception of Parramatta Road), the front setback area is to be landscaped. Provision of street trees is required in this area.

C.20 For development fronting Parramatta Road, the setback area is to form an extension of the footway. Landscape planting including street trees is encouraged.

C.21 For Land at 2-22 William Street, communal open space and landscaping is to be provided at ground level where possible.

Development between Parramatta Road and Railway Line

C.22 Residential and commercial apartments are to be designed to enable casual surveillance of public spaces.

C.23 For development greater than 15 metres in height, buildings with large floor plates, must be expressed as separate building elements.

C.24 For development greater than 15 metres in height the horizontal dimension of any building façade must not exceed 35 metres.

C.25 For development greater than 15 metres in height the maximum floor plate area of a non-residential buildings is 480m^2, with a maximum depth of 25 metres.

C.26 For commercial buildings, the maximum building depth is 25 metres.

C.27 Use light wells and courtyards to improve internal building amenity and cross ventilation.

C.28 The roof forms of all buildings are to add interest to the skyline

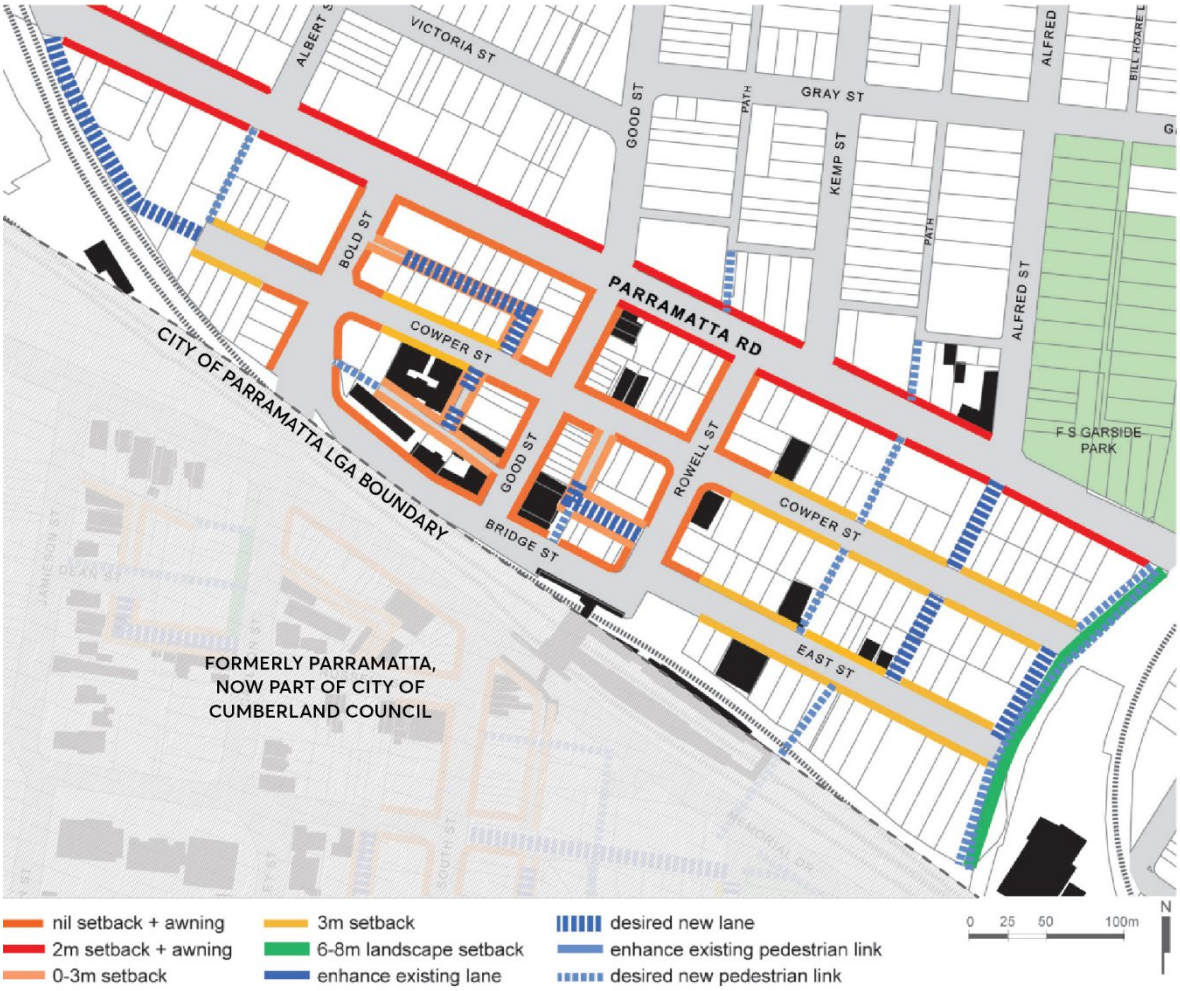


Figure 8.2.3.1.1.2 - Building Setbacks, Pedestrian Links and Laneways

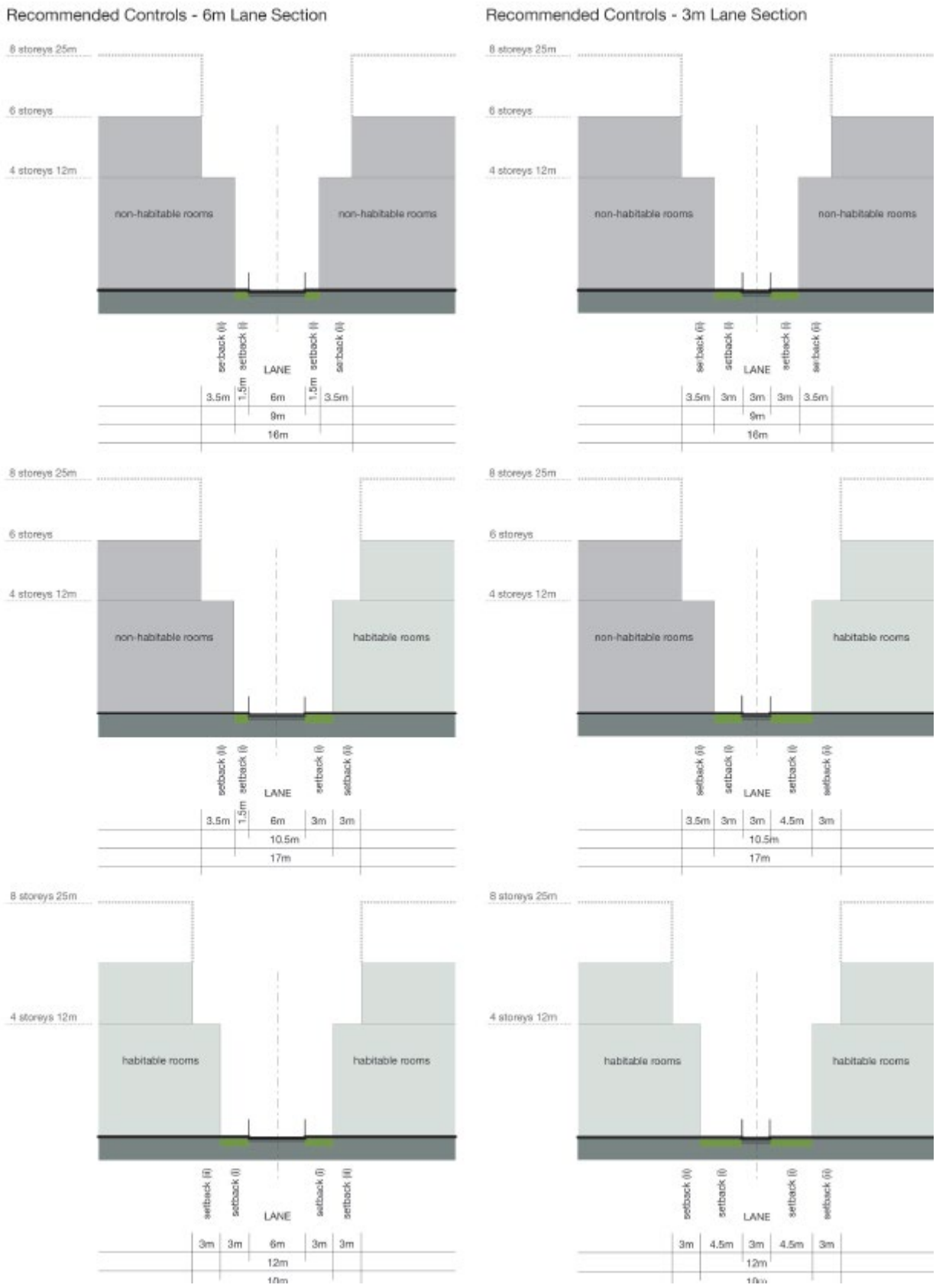


Figure 8.2.3.1.1.3 – Lane and Street Sections

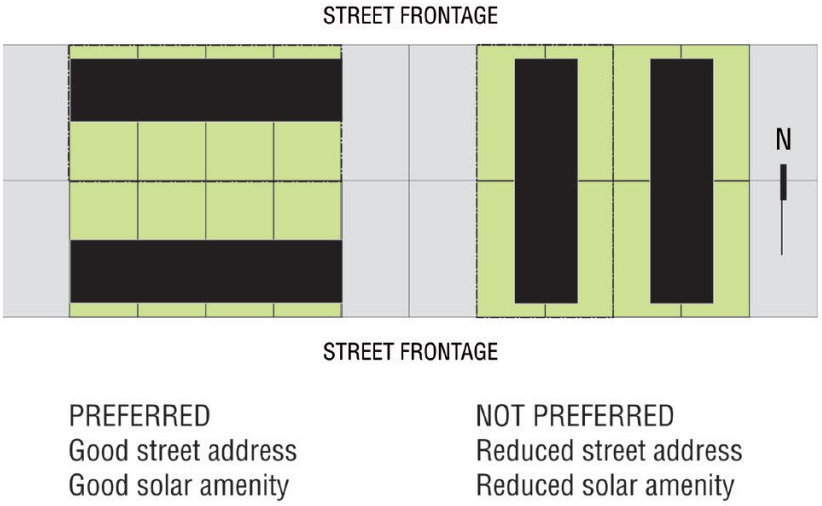


Figure 8.2.3.1.1.4 – Preferred Street Frontage condition

Development at 2- 22 William Street, Granville

C.29 Storeys above the first four storeys of the proposed development shall have an additional 3.1 metres upper level rear setback and the proposed development's rear building setback (facing the low density residential area) is to be a minimum of 9 metres (without the rear existing laneway).

C.30 The proposed development at 2-22 William Street, is to be not more than 5 storeys.

8.2.4 CAMELLIA AND RYDALMERE

8.2.4.1 DESIRED FUTURE CHARACTER

Camellia is a significant industrial hub, containing heavy industries such as the Shell Oil Refinery. It also contains sporting and convention sites at Rosehill Gardens and the Parramatta Raceway. The use of land for these purposes is expected to continue, as major destinations for visitors, tourists and the wider business community.

Rydalmere is defined by its wide range of complementary uses and functions that support the Parramatta central business district. Rydalmere is particularly notable because of the steadily expanding university campus (University of Western Sydney) and the adjoining light industrial uses.

Future development opportunities that mutually support the employment, industrial, educational and research functions of this precinct will be encouraged.

New industrial developments comply with stringent environmental controls, and operate sustainably. Council favours new industrial developments that improve water quality, the environment around the Parramatta River and the foreshore. A concerted effort is made to create pedestrian links along the Parramatta foreshore.

The Parramatta River corridor is enhanced as the major natural asset of the area, characterised by a healthy river and foreshore that provides public access opportunities while protecting vegetated riparian areas with appropriate setbacks. Parts 5.3.2 and 2.9 of this DCP are important controls for protecting and managing the river and the public domain.

Properties adjoining the foreshore address the aquatic gateway to Parramatta, with buildings displaying a high level of urban design quality and the less visually attractive elements of industrial development being screened by appropriate landscaping.

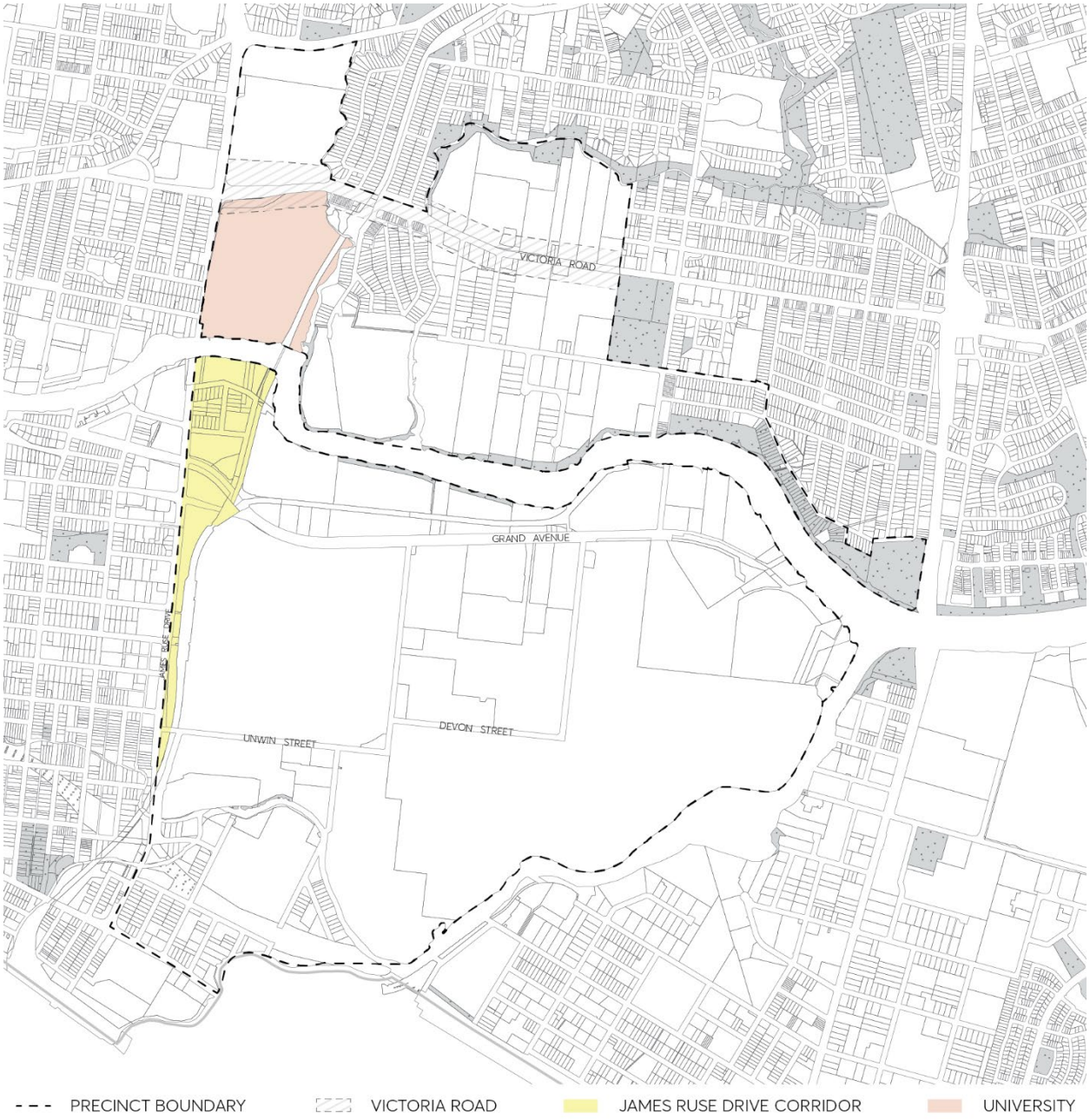


Figure 8.2.4.1 – Camellia and Rydalmere

General Objectives

O.01 Protect and support one of Sydney's significant industrial and educational hubs.

O.02 Create a vibrant, attractive and mutually supportive industrial, educational and research precinct.

O.03 Maintain and improve existing access to major public transport links outside the area.

O.04 Encourage industrial development that is innovative and incorporates into its business best practice environmental management.

O.05 Require development along the foreshore to be of a scale and character that is in keeping with its foreshore location, protection and enhancement of the unique visual and ecological qualities of the waterways and foreshore.

O.06 Improve the access and circulation for local traffic flows accessing the employment areas while protecting the level of service of James Ruse Drive and Victoria Road.

O.07 Improve public access along the foreshore to create a regional pedestrian and open space network.

O.08 Conserve and enhance identified views and encourage the conservation and adaptive reuseof heritage items within the Camellia and Rydalmere Precincts and wider community use andaccess of these assets.

O.09 Maximise opportunities for new development to support tourism as well as the racing industry.

O.10 Require industry to operate using best practice environmental management techniques.

O.11 Minimise energy and resource use and reduce impact to off-site air quality or disturbance by noise, odour, dust, water, soil and contamination.

8.2.4.2 HEIGHT OF BUILDINGS

Objectives

O.01 That buildings and structures adjoining the Parramatta River contribute to the attractive appearance of the foreshore and do not dominate the skyline in views along the Parramatta River.

O.02 Buildings should make a positive contribution to the streetscape and the skyline.

O.03 Create a strong and unified character along the major gateways into Parramatta.

O.04 That buildings that not significantly overshadow the public domain, vegetated riparian areas, environmental protection areas or adjoining properties.

O.05 Conserve heritage sites, their settings, identified views and their visual interconnections.

Controls

C.01 Development must not have an adverse impact on significant or historic views from or of heritage sites along the Parramatta River when seen from river and nearby historic sites.

C.02 Any development within the Rydalmere Precinct and on land shown on the Camellia Design Control Map as "Area of Height Sensitivity" must demonstrate through survey and photo montages, that the height of the proposed development does not have a significant adverse impact on identified views to the Female Orphan School (University of Western Sydney Rydalmere Campus) and its emergent trees, the Parramatta River Corridor and Pennant Hills

open space ridge line. The relevant identified views for the Camellia and Rydalmere precincts are provided in Appendix 1.

8.2.4.3 LANDSCAPING

Objectives

O.01 Enhance the appearance of these precincts and the setting of heritage items or areas, particularly from the waterway, major thoroughfares, and any other public places.

O.02 Protect and enhance the riparian ecosystem along the Parramatta River and its tributaries.

O.03 Improve environmental performance, particularly in terms of water management, pollution control, the natural environment, biodiversity, energy efficiency and transport management.

O.04 provide for recreational use of the foreshore and establishment of paths for walking and cycling where these will not diminish natural values.

Controls

C.01 Development must improve the foreshore landscape so that locally native vegetation and natural geomorphology are preserved, restored and extended and in accordance with any Government-adopted catchment strategies.

C.02 Any fencing is to be set back from the property boundary and screened in front by locally native and local provenance trees and shrubs.

C.03 Except where identified as culturally significant heritage landscape, the proposed landscaping is to be consist of plants that are local to the area, especially for the foreshore of the Parramatta River and tributaries, and of local provenance, and are to be planted in an appropriate vegetation sequence.

C.04 Open storage areas, material handling areas and car parking are to be located away from any boundaries that border on public areas, particularly the foreshore of the Parramatta River and its tributaries, and major transport routes.

C.05 Vegetated buffers are to be provided around areas of open storage or material handling, to soften the visual impacts and reduce dust and stormwater runoff.

C.06 Redevelopment of land adjacent to waterways must make provision for landscaped corridors that enhance the natural values of the foreshore ecosystem.

C.07 The landscape set backs along major streets and riparian vegetation along the rivers and creeks are to be in accordance with the Camellia and Rydalmere Precinct Design Control Map, with the exception of any riparian vegetation area along the Parramatta River for the University of Western Sydney site, which may be varied provided there is a Conservation Management Plan for the site and the redevelopment achieves all the outcomes specified for the University Special Area.

C.08 A landscape management plan and strategy is to be developed to ensure continuity and attractiveness of landscaping.

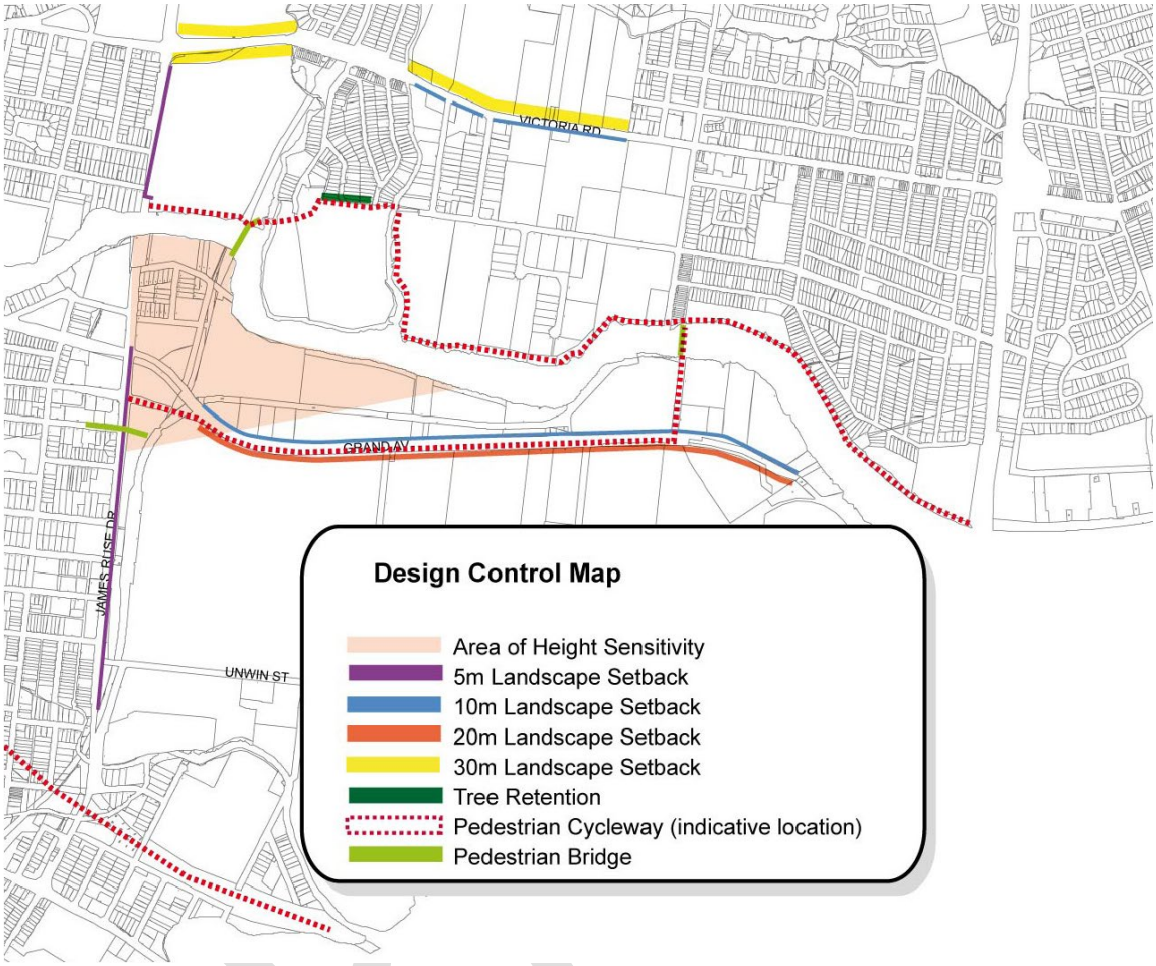


Figure 8.2.4.3.1 – Camellia and Rydalmere Design Control Map

8.2.4.4 TRAVEL PLANS AND TRAVEL INFORMATION GUIDES

Objective

O.01 Increase opportunities to use public transport, to cycle or walk to work.

Controls

C.01 Development that contains 5,000m² of gross floor space or 50 or more employees must prepare a Travel Plan.

A Travel Plan is a package of measures designed to reduce car trips and encourage the use of sustainable transport. Where a Travel Plan is required as a condition of development, it must be submitted to the Consent Authority prior to the release of the Occupation Certificate. If the future occupant(s) is known then the Travel Plan must be prepared in co-operation with them. The condition of consent remains for the life of the development.

C.02 A Travel Plan must include:

a) Targets: This typically includes the reduction of single occupant car trips to the site for the journey to work and the reduction of business travel particularly single occupant car trips.

b) Travel data: An initial estimate of the number of trips to the site by mode is required. Travel Plans require an annual survey to estimate the travel behaviour to and from the site and a review of the measures.

c) Measures: a list of specific tools or actions to achieve the target.

NOTE: A copy of the Travel Plan must be available to Council on request.

C.03 All other developments may be required to prepare a traveller information guide that provides detailed information about all public transport services, pedestrian paths, cycle ways and ferry timetables in the area that would be used to actively encourage employees to use public transport to and from the Camellia and Rydalmere Precincts.

8.2.4.5 BUILDING DESIGN

Objectives

O.01 Provide opportunities for casual surveillance of the streetscape and public domain.

O.02 Improve architectural interest by minimising the bulk of buildings and to encourage articulation and modulation of development.

O.03 Development that respects, conserves and responds to identified views and the existing heritage character of the precinct.

Controls

C.01 Development is to contribute to improved amenity, safety and appearance of the public domain through landscaping, building setbacks, attractive and clearly defined entrances to sites and buildings, and clear and attractive signage.

C.02 Major facade and entries of buildings are to address major public places, including roads, parks and waterways.

C.03 Development is to have regard to adjoining building works and transition of height, massing and scale.

C.04 Building setbacks, design, materials, glazing and colours are to minimise the visual impact of the development, particularly if the development is visible from roads and the Parramatta River.

C.05 Buildings on sites adjacent to the Parramatta River and its tributaries are to be set back in accordance with any foreshore building line.

C.06 Building bulk created by large unbroken expanses of wall is to be reduced by articulation and modulation, particularly where facing a public place such as a street, a park or the Parramatta River.

C.07 Buildings are not to overshadow environmental protection areas or riparian vegetation areas.

C.08 Lighting is not to have adverse impact on the natural habitats.

C.09 Open storage areas, material handling areas and car parking are to be located away from any boundaries that border on public areas, particularly the foreshore of the Parramatta River and its tributaries, and major transport routes.

C.10 Building roofs and lift overrun structures are to be dark and have matt colours so as to be recessive.

8.2.4.6 ECO-INDUSTRIAL DEVELOPMENT

Objectives

O.01 Promote and achieve the principles of eco-industrial development in the Camellia Precinct.

O.02 Capitalise on the potential that exists in the Camellia Precinct for eco-industrial development.

O.03 Identify all opportunities to move from a traditional industrial system to a cyclical system whereby the energy, by-products or waste produced by a local industry are reused by another local industry.

Control

C.01 Identify the bio-products and/or waste produced by the proposal that can be reused by another local industry. Refer to Section 5.4.9 – Waste Management.

8.2.4.7 SPECIAL AREAS

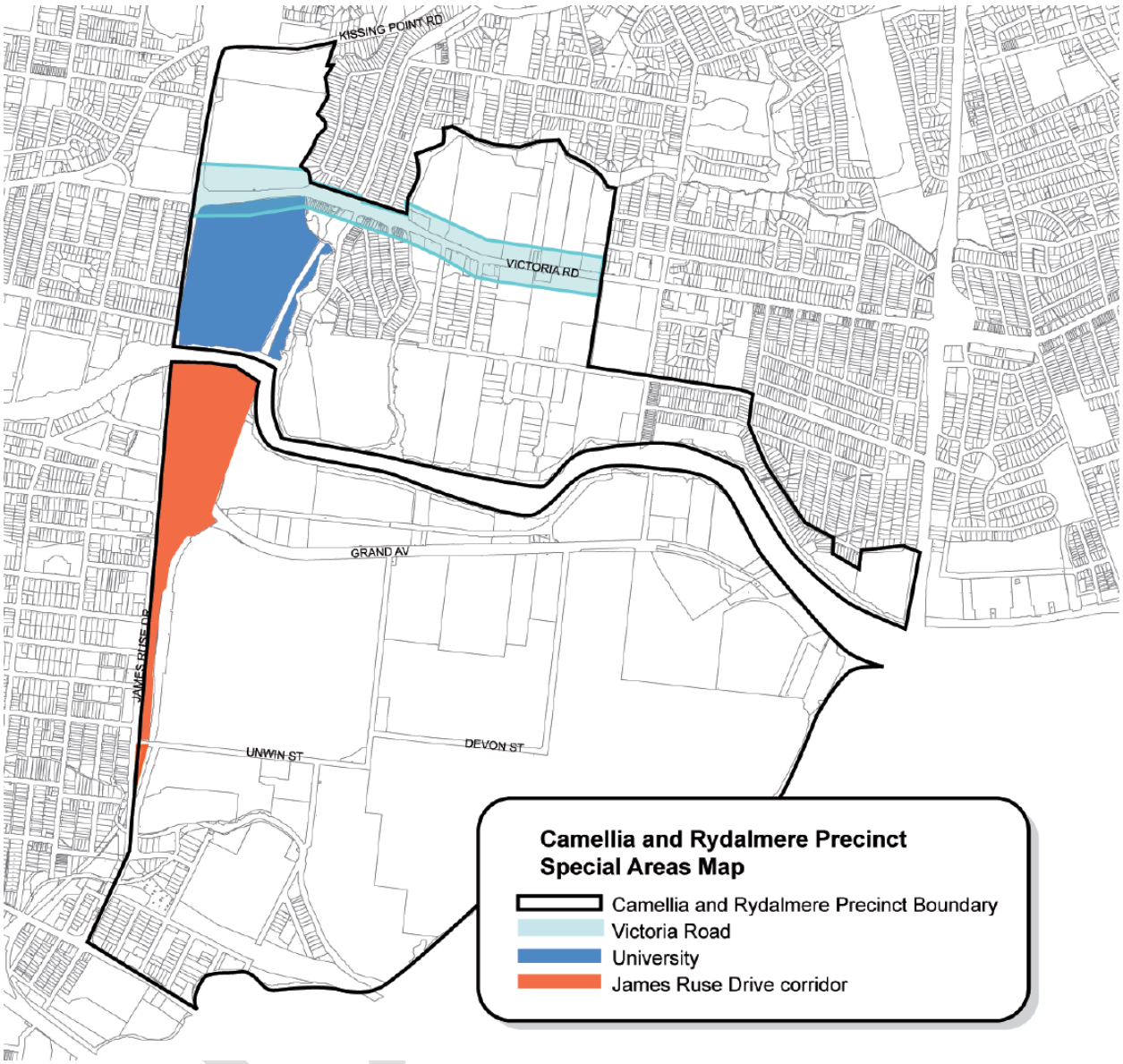


Figure 8.2.4.7.1 – Special Areas

8.2.4.7.1 THE JAMES RUSE DRIVE CORRIDOR SPECIAL AREA

James Ruse Drive will be an attractive gateway thoroughfare to Parramatta supporting institutional uses, accommodation for visitors and business-related uses. The road will continue to be a significant regional transport artery. The corridor will be defined by well-designed buildings situated behind a significant landscaped frontage where possible, access to sites will be via adjoining local roads. View corridors will be retained to significant heritage buildings and the surrounding ridge lines.

Controls

C.01 Development must contribute to a strong, unified and visually attractive character for James Ruse Drive, enhancing its role as an important gateway to Parramatta.

C.02 Best available construction materials, design techniques, finishes and interior layouts should be used to minimise the potential environmental impacts arising from James Ruse Drive and the rail line.

C.03 Development has vehicular access via local roads and not directly off James Ruse Drive.

C.04 Management of the traffic impacts of development on James Ruse Drive.

C.05 Integration of development with public transport.

C.06 Land within proximity of the proposed Sydney West metro station is to be developed with consideration of the following:

- The impact of the development on the delivery of the Sydney West Metro Link.
- The impact of the proposed Sydney West Metro link on the development.
- The integration and interface between the development and any proposed station.
- The provisions of any relevant planning and development principles produced by Sydney Metro or its equivalent.
- The potential for land use to respond to the Sydney West Metro link in the future (e.g. maintain large development parcels without further subdivision in the short term).

C.07 New development along this corridor needs to be carefully planned and based on the following design principles:

- improve interaction with surrounding streets and parks for improved passive surveillance and improved urban form.
- create permeable spaces that foster pedestrian movement throughout the site for workers and people visiting the site.
- where permitted, retail areas should address, and be directly accessible from surrounding public uses, streets or the foreshore.
- modulate buildings to improve views into the site from the river and James Ruse Drive.
- underground car parking should be encouraged to create a better street address, allow more trees to act as shade and improve amenity and to create a linear form to be more easily crossed by pedestrians.

C.08 Any development undertaken for Rosehill Racecourse, will require the preparation of a detailed structure plan prepared by the proponent. Emphasis of the Structure Plan should be on meeting key tourism objectives, improving the physical appearance of development along James Ruse Drive, and to demonstrate positive measures to manage traffic issues and encourage public transport use.

8.2.4.7.2 THE VICTORIA ROAD SPECIAL AREA

Victoria Road will continue to be a significant gateway to Parramatta. The amenity and appearance of the area will be enhanced by high quality buildings, landscaping and public domain improvements. The high exposure offered by the location will strengthen the employment area. The area will focus on innovative and emerging technologies for production. The road will cater for access by public transport and significant freight and private transport movements.

Controls

C.01 Buildings must have high quality finishes where visible from the street and a high quality frontage with landscaping.

C.02 Signage has a high standard and provides clear information as to the use of the land, the street address and clearly marked entrance and exit ways and is of a scale and nature sympathetic to the building form.

C.03 Where a property adjoins a natural waterway, the land is revegetated with locally native flora where possible and any area adjacent to the foreshore is maintained so as to limit run-off and such areas are considered for outdoor recreation or lunch areas.

C.04 The landscape setbacks shown on the Design Control Map in this Section are to be met.

8.2.4.7.3 THE UNIVERSITY SPECIAL AREA

The University, comprising an area of historical significance set by the Parramatta River, will continue to be developed as a key centre of learning for Western Sydney. Heritage buildings and their settings will be preserved and adaptively reused as modern educational facilities. New development will ensure that glimpses of the heritage buildings from Victoria Road and James Ruse Drive will be maintained. Where appropriate, public pedestrian access and cycleway linkages along the river and between hinterland and the river, and recreation opportunities, will be pursued and implemented while protecting the riparian vegetation with appropriate set backs along the Parramatta River. Opportunities for improving access to water based transport will be pursued. The bushland east of the railway line will be retained. The Parramatta River and Vineyard Creek foreshores will be enhanced with vegetation locally native to the area through bush regeneration, except where exotic species have been identified for retention through a conservation management plan, while conserving significant and historic views from and to heritage items situated along the Parramatta River.

Controls

C.01 Development must conserve and enhance items of heritage significance consistent with a Conservation Management Plan for the area.

C.02 Development must respect, conserve and respond to key views identified in that Plan.

C.03 Development must protect and enhance cultural plantings and native bushland and other natural features along the foreshore.

C.04 Development must provide for public access along the foreshore.

C.05 The scale and character of the development must recognise and complement the unique visual qualities of the site.

C.06 Development should integrate with the public transport network and facilitate access for pedestrians and cyclists to the site and, where appropriate, through the site.

C.07 The siting and design of the development must minimise adverse effects from adjoining land uses, including noise from James Ruse Drive.

C.08 Development must enhance the key approach routes to Parramatta, being James Ruse Drive, Victoria Road, the rail line and Parramatta River.

8.2.5 NEWINGTON LOCAL CENTRE

Newington Local Centre has a long history of Aboriginal, early colonial, and government uses. The precinct was later used as the site of Sydney's athlete village during the 2000 Sydney Olympic Games. At the time, this precinct was the largest solar-powered suburb in the world, with solar panels and water recycling facilities to service the village. These facilities are still used today.

This Section outlines specific provisions for Newington Small Village, Business Park, and Residential Precinct, as shown in Figure 8.2.5.1, and must be read in conjunction with any relevant Parts of the Parramatta DCP 20XX. Where there are inconsistencies between the controls contained within this Section and other controls within this DCP, these controls prevail to the extent of the inconsistency.

Figure 8.2.5.1 – Newington Local Centre

8.2.5.1 NEWINGTON SMALL VILLAGE

This Section applies to Newington Small Village, as shown in Figure 8.2.5.1.1, which is zoned B2 Local Centre under the *Parramatta LEP 2023*. The development controls for these sites apply in addition to the development controls presented in previous Sections of this Part. Where there are inconsistencies between the controls contained within this Section and other controls within this DCP, these controls prevail to the extent of the inconsistency.

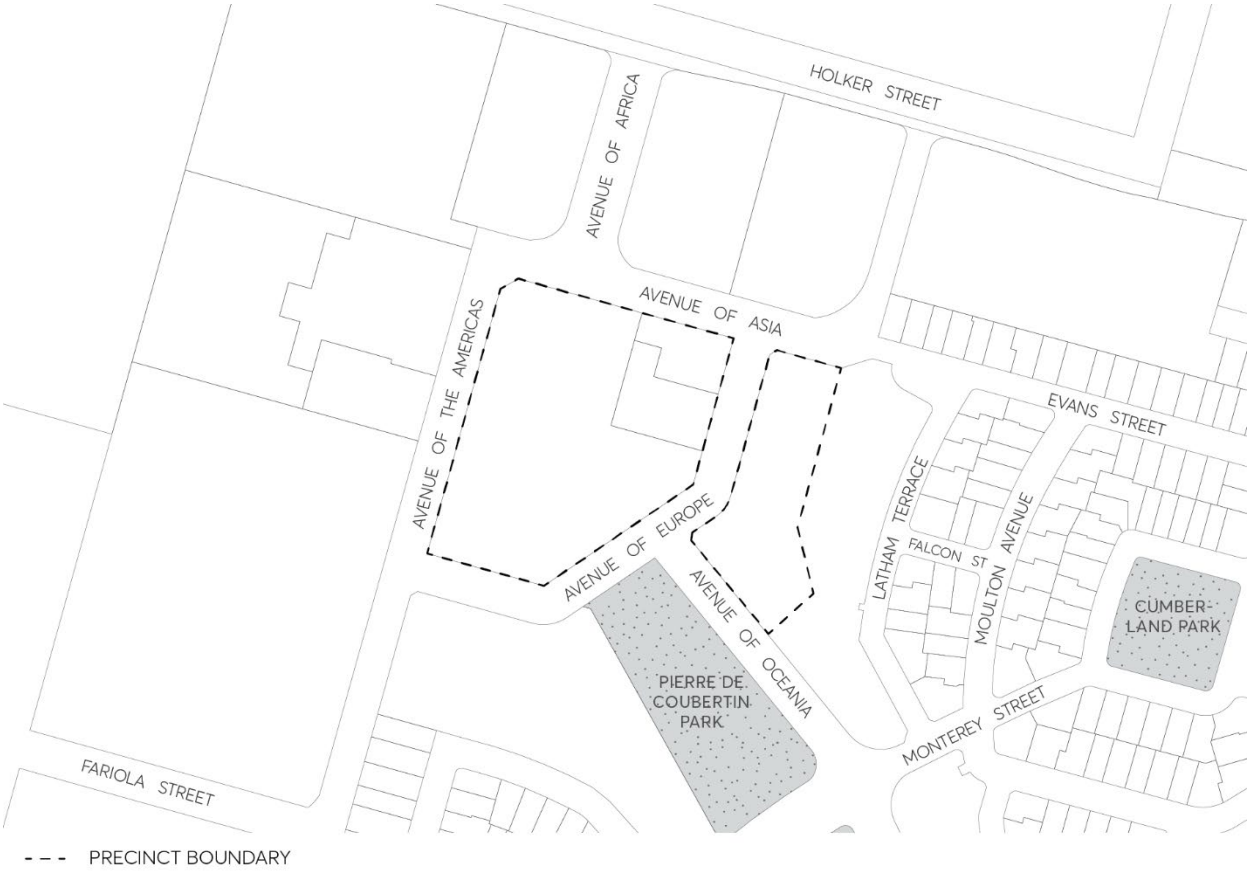


Figure 8.2.5.1.1 – Newington Small Village

Controls

Site coverage

C.01 A maximum site coverage of 80% shall be permitted on site.

Figure 8.2.5.1.1 - Newington Small Village

Setbacks

C.02 The following setbacks shall apply:

- Setback from residential areas shall be 3-6 metres.
- Setback from Newington Business Park shall be 1 metre.
- Setback to retail front shall be 3.5 metres.

Loading areas

C.03 Loading areas shall be screened from public roads and public access areas.

C.04 Active and defined frontages

C.05 Entrances and windows shall be located on the ground floor of the building to face the public domain and created visual surveillance.

C.06 Buildings on street corners or the interface with public space shall emphasise the corner by appropriate architectural treatment.

Materials

C.07 All building materials used shall be durable, low maintenance and of high quality.

Pedestrian amenity

C.08 Public pedestrian networks within sites shall provide solar, wind and rain protection using a colonnade, an awning or other appropriate shading devices.

Architectural elements

C.09 Awnings/colonnades in buildings shall be designed to a height of 3.5 metres.

C.10 Signage shall be located below the awning height of a building.

Parking rates

In addition to the general parking requirements in Part 6 – Traffic and Transport of the Parramatta DCP 20XX, parking controls below are to be applied to the Newington Small Village. Where there is an inconsistency, the parking controls below prevail.

Bicycle Parking

C.11 Bicycle parking requirement is 1 bicycle space per 300m^2 of retail space.

Car Parking

C.12 Minimum of 1 car space per 38m^2 GFA

8.2.5.2 NEWINGTON BUSINESS PARK PRECINCT

This Section contains specific provisions for the Newington Business Park, as shown in Figure 8.2.5.2.1, which is zoned B7 Business Park under *Parramatta LEP 2023*. This Section applies in addition to the provisions held in Part 2 – Design in Context and Part 4 – Non-Residential Development of this DCP. Where there is any inconsistency between this Section and Parts 2 and 4, the provisions in this Section prevail to the extent of the inconsistency.

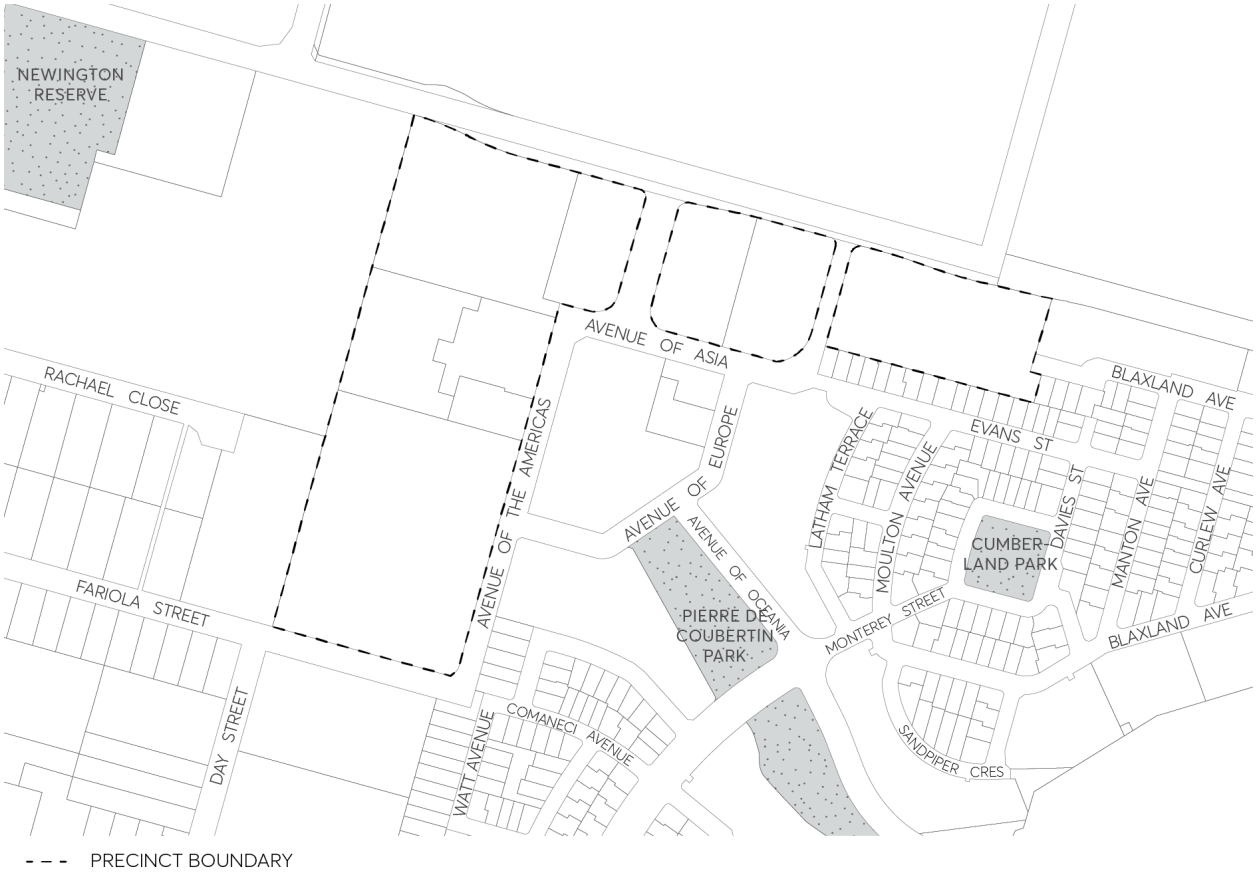


Figure 8.2.5.2.1 – Newington Business Park

8.2.5.2.1 ECOLOGICALLY SUSTAINABLE DEVELOPMENT REQUIREMENTS

Controls

C.01 Stairwells shall be positioned to create a stack effect to enhance natural ventilation and remove warm summer air from upper floors.

C.02 Plant types shall be selected so as not to overshadow potential location of rooftop solar collectors.

C.03 Refer to Part 5 – Environmental Management of this DCP for other development controls for energy efficiency and water conservation.

Landscaping

C.04 Plant species that are drought tolerant or will require minimal watering once established shall be used.

C.05 Water-conserving landscape practices shall be applied where possible, including soil amendment, mulch, irrigation zoning, limited turf areas, planting in relation to micro-climate, water scheduling and selection of plants with water needs that match site rainfall and drainage conditions.

C.06 No imported topsoil shall be used. Stockpile and rehabilitate existing topsoil on site.

C.07 Landscape plant species used in the public domain shall be predominantly native, including local indigenous species.

C.08 Native ground covers and grasses shall be used in lieu of turf where practicable.

8.2.5.2.2 URBAN DESIGN

Objectives

O.01 Maximise the exposure of active zones to ensure an active streetscape.

O.02 Reduce the impact of large building mass and service areas.

Controls

C.01 Where appropriate, street corners and main entry points shall be emphasised by appropriate architectural treatment.

C.02 Setbacks shall be designed to provide for a street edge defined by built form and landscape treatment, with minimum setbacks to active façade zones, and increased setbacks to solid walls.

C.03 Streetscapes shall be treated as active zones. Where possible, entry and office facades shall be orientated to the street. Other façade zones, such as setback solid walls, shall be treated with landscape areas to provide shade and amenity as well as visual interest to the streetscape.

C.04 Where buildings are setback to allow for car parking at entry zones, street edges shall be designed with permeable landscape buffers to permit street address/exposure, whilst maintaining defined edges.

Site coverage

C.05 The total site coverage shall not exceed 60% of the area of the allotment.

C.06 Building setbacks: Holker Street: 4 metres minimum

Main access street (linking Holker Street and Village Centre Boulevard): 5 metres minimum

Village Centre Boulevard and other streets: 1 metre minimum to active façade zones (ie. office, showroom, etc.)

2 metre minimum to other façade zones

Awnings, sunshading etc, shall be excluded from setbacks listed above.

Service areas

C.07 Service areas generally shall not detract from the character of the public street.

Loading docks and access points to service areas shall be via the side or rear of the building or be appropriately treated by building or landscape means.

Landscape

C.08 10% of the site area shall be soft landscaping.

Architectural Elements

C.09 Building facades and/or landscape treatment shall create a defined edge to the Newington Small Village boulevard and primary public streets.

C.10 Identification signs shall be integrated with the building design or within the landscape zone not higher than 2.4 metres above ground. All signage shall be permitted to be illuminated as per the relevant Australian Standards.

8.2.5.2.3 BICYCLE PARKING RATES

In addition to the general parking requirements in Part 6 – Traffic and Transport of this DCP, parking controls below are to be applied to the Newington Business Park. Where there is an inconsistency, the parking controls below prevail.

C.01 1 bicycle space/1,000m^2 (GFA) is to be provided.

8.2.5.3 NEWINGTON RESIDENTIAL PRECINCT

This Section applies to the Newington residential precinct as shown in Figure 8.2.5.3.1, specifically to land zoned R3 Medium Density Residential and R4 High Density Residential under *Parramatta LEP 2023*.

Figure 8.2.5.3.1 - Newington residential precinct

Objective

O.01 Ensure that the Newington residential precinct: „

- is pleasurable to live in and creates enjoyable urban places.
- maintains a high level of amenity. „
- contributes to the overall street locality and streetscape. „
- minimises the impact on the environment. „
- optimises use of the land. „
- responds appropriately to allotment size, location, opportunities and constraints.

8.2.5.3.1 GENERAL CONTROLS

This Section applies to single lot housing types such as detached, semi-detached (town house), attached (terrace house), courtyard dwellings and residential flat buildings.

Objectives

O.01 Ensure that development provides a degree of consistency to establish the neighbourhood character of the precinct.

O.02 Ensure that the appearance of the development is of high visual quality and enhances and addresses the street.

O.03 Ensure that the form, scale and height of proposed development protects the amenity of adjoining properties and the locality.

O.04 Ensure that the form, scale and height of the proposed development responds appropriately to site characteristics.

O.05 Ensure that the development is designed, detailed and finished to provide an appropriate scale to the street.

O.06 Ensure that new development relates well to surrounding development.

O.07 Ensure that when 'built out' the precinct provides a high quality sustainable environment.

Controls

C.01 All buildings shall address the street.

C.02 Where a building has two street frontages, it shall address the primary (major) street.

C.03 Stepped building arrangements may be encouraged where narrow lot types reinforce the street.

C.04 Entrances to residential flat buildings shall be clear and legible from the street.

C.05 The storey height shall be controlled in residential areas to avoid overshadowing of neighbouring private open spaces.

C.06 Car court arrangements shall ensure that a minimum of 60% of dwellings have garages at rear.

C.07 Where private open space is located on the street frontage, 2 metre walls shall be permitted for a maximum of 60% of frontage.

C.08 Driveways and high fences shall be paired where possible.

Stormwater drainage

C.09 Applicants shall consult the Part 5 – Environmental Management of this DCP for Stormwater Drainage.

Waste

C.10 Applicants shall consult the Section 5.4.9 of this DCP for waste requirements.

Landscaping

C.11 Table 8.2.5.3.1.1 below lists the plant species to be used in the private domain for single lot housing and residential flat buildings.

Table 8.2.5.3.1.1 – Plant species to be used in the private domain

		Indigenous	Invasive	Allergenic	Bird attracting
TREES					
Acacia elata	Cedar Wattle	x		x	x
Acacia glaucesens	Coast Myall	x		x	
Acmena smithii	Lilly Pilly	x			x
Allocasuarina glauca	Swamp Oak	x		x	
Angophora floribunda	Rough Barked Apple	x			x
Banksia serrata	Old Man Banksia	x			x
Callicoma serratifolia	Black Wattle	x			
Ceratopetalum apetalum	Coachwood	x			
Eleaocarpus reticulatus	Blueberry Ash	x			x
Eucalyptus citriodora	Lemon Scented Gum	x			
Eucalyptus maculata	Spotted Gum	x			x
Eucalyptus scoparia	Tallangatta White Gum	x			
Eucalyptus sideroxylon	Mugga Ironbank	x			x
Livistona australis	Cabbage Tree Palm	x			x
Melia azedarach	White Cedar	x		x	
Pittosporum revolutum	Yellow Pittosporum	x			x
Pittosporum undualtum	Sweet Pittosporum	x			x
Syncarpia glomulifera	Turpentine	x			
TALL SHRUBS					
Backhousia myrtifolia	Lemon Ironwood	x		x	
Banksia ericifolia	Heath Banksia	x		x	
Banksia integrifolia	Coast Banksia	x		x	
Baurea rubioides	Dog Rose	x			
Ceratopetalum gummife	NSW Christmas Bush	x		x	
Grevillea banksii	Banks Grevillea	x		x	

		Indigenous	Invasive	Allergenic	Bird attracting
Grevillea hookeriana	Toothbrush Grevillea	x		x	
Hakea salicifolia	Willow Leaved Hakea	x		x	
Leptospermum laevigatu	Coast Tea Tree	x			
Melaleuca armillaris	Bracelet Honey Myrtle	x		x	
Melaleuca nesophila	Honey Myrtle	x		x	
Shrubs					
Boronia serrulata	Native rose	x		x	
Correa reflexa	Native Fuschia	x			
Epacris pulchella	Coral Heath	x			
Erisotemon australasius	Waxflower	x		x	
Grevillea 'Robyn Gordon'	Grevillea	x	x	x	
Grevillea sericea	Pink Spider Flower	x	x	x	
Westringia fruticosa	Coast Rosemary	x			
GROUND COVERS					
Acacia suaveolens	Sweet Scented Wattle	x		x	
Cissus antartica	Grape Ivy	x			
Hardenbergia violacea	Native Sarspirella	x	x		
Hibbertia scandens	Gold Guinea Flower	x			
Kennedia rubicunda	Dusky Coral Pea	x	x		
Kenzea 'Badja Carpet'	Badja Carpet	x		x	
Muehlenbeckia axillaris	Wire Plant	x	x		
Myoporum parvifolium	Creeping Boobialla	x			
Viola hederacaea	Native Violet	x			
GRASSES					
Cyperus gracilis	Dwarf Umbrella Grass	x			
Dianella revoluta	Flax Lily	x		x	
FERNS					
Adantum aethipoicum	Maidenhair Fern	x			
Asplenium australasicu	Birds Nest Fern	x			
Blechnum nudum	Hard Tree Fern	x			
Culcita dubia	False Bracken	x			
Cyathea cooperi	Coopers Tree Fern	x			

		Indigenous	Invasive	Allergenic	Bird attracting
Doodia aspera	Rasp Fern	x			
Pleris spp	Jungle Brake	x			
Todea barbera	King Fern	x			

Accent plants for dramatic foliage effect	Innovative use of materials in softscape	Private
Anigosanthos flavidus	Kangaroo Paw	
Apinia caeruiea	Native Ginger	x
Araucaria cuninghamii	Norfolk Island Pine	
Cordyiine stricta	Erect Palm Lily	x
Crinum pedunculatum	River Lily	x
Curculigo capitulata	Weevil Lily	x
Dendrobium speciosum	Native Orchid	x
Dicksonia antartica	Soft Tree Fern	x
Doryanthes excelsa	Gymea Lily	x
Gahnia sieberiana	Slender Saw Sedge	
Heimholtzia glaberrima	Stream Lily	x
Livistona chinensis	Cabbage Tree Palm	x
Lomandra longifolia	Mat Rush	
Macrozamia communis	Burrawang	x
Vitextrifolia 'Purpurea'		
Xanthorrhoea australis	Grass Tree	

Australian native plants for special effect	Unique showcase of native Australian plants	Private
Acmena smithii	Blue Lilly Pilly	x
Aiphitonia excelsa	Red Ash	x
Amaianthus populifolius	Bleeding Heart	x
Archontophoenix alexan	Alexander Palm	x
Archontophoenix cunnin	Bangalow Palm	x

Backhousia citriadora	Lemon Scented Myrtle	x

Car parking

C.12 Applicants shall refer to the relevant provision within the Section 6.4 – Loading and Servicing of this DCP.

Public domain

C.13 Applicants shall consult the Parramatta Public Domain Guideline for all public domain requirements.

Access and mobility

C.14 Applicants shall consult the relevant provisions within Section 2.11 – Access for People with a Disability of this DCP.

Adaptable housing

C.15 Applicants shall consult the relevant provisions of the Multi Dwelling or the Residential Flat Building sections within Part 3 – Residential Development of this DCP.

8.2.5.3.2 SINGLE LOT HOUSING

This Section provides detailed and specific controls for single lot housing which comprises of detached, semi-detached and attached housing types.

Controls

Private open space

C.01 A minimum area of 25m^2 of continuous open space relating to living areas shall be provided on each site.

C.02 Major open space shall be screened if located at the front of the building.

Privacy

C.03 Visual privacy shall be required and may be achieved by:

- separation of functions by lot layout.
- placement of buildings between adjoining private open spaces.
- window placement that avoids overlooking from living area to living area.
- use of screening where the above strategies cannot be achieved.

C.04 For acoustic privacy, buildings shall:

- separate active recreation areas from bedroom areas.
- locate noise sensitive rooms and private open space away from the noise source or use of solid barriers where dwellings are close to high noise sources.
- minimise transmission of sound through the building structure, and in particular, protect sleeping areas from noise intrusion.
- include shared floors and walls between dwellings to be constructed in accordance with noise transmission and insulation requirements of the Building Code of Australia (BCA).

Solar amenity

C.05 Single lot dwelling living spaces shall be orientated within 20 degrees west of North and 30 degrees east of North and open directly onto north facing private open space where possible.

C.06 North facing external walls to living areas of dwellings shall achieve 2 hours of solar access in mid winter.

C.07 Single lot dwellings shall be designed to ensure minimum of 2 hours of solar access to a minimum of 50% of the required provision of adjacent private outdoor living space between 9:00am and 3:00pm midwinter.

C.08 North facing windows shall be maximised and have horizontal protection to ensure shading of glazing occurs when the midday sun angle is 65 degrees or more. Shading devices to north facing windows shall provide sun penetration when the midday sun angle is 34 degrees or less.

C.09 Window sizes shall be minimized when facing south, west and east or shall be installed with vertical screens or solar film to west and east facing windows.

C.10 High mass materials shall be used where possible.

Building height

C.11 Building heights shall reinforce the scale and quality of the streetscape within Newington's residential precinct and surroundings. To allow flexibility, sloping sites shall have a maximum building height of two storeys plus attic.

Front fences

C.12 Front fencing shall be 50% transparent. The minimum requirement for front fencing shall be 900mm. The maximum front fencing height requirement shall be 1.2mm.

C.13 Dividing fences shall be a maximum of 1.8 metres in height and, where required, shall allow for surveillance of street.

C.14 Privacy shall be provided to private open space where it abuts the street. Surveillance via the entry and living/kitchen room windows shall be maintained.

C.15 Design of wall/fence shall be integrated with the design of the building and shall allow for penetration of breezes.

C.16 Where surveillance of the street or open space is required, fences shall be permeable. Refer to Table 8.5.3.2.1 for building materials, colours and finishes.

Garden walls

C.17 Garden walls (semi transparent) shall be a minimum height of 1.5 metres and a maximum height of 2 metres.

C.18 Garden walls shall be permitted to the street only when enclosing north facing private residential open space with a maximum width of 60% of street frontage and a maximum unarticulated length of 12 metres wide residential areas.

C.19 Garden walls shall not obscure the view of the front door from the street. Refer to Table 8.5.3.2.1 for garden wall materials, colours and finishes of this Part.

Carports and garages

C.20 Garages and carports shall read as secondary to building forms and compatible with the architectural character. Refer to Table 8.5.3.2.1 for materials, colours and finishes for carports and garages.

Pergolas

C.21 Dimensions of pergolas as shown below shall be appropriate to the function and design of pergolas shall be integral with architectural design of the building. Refer to Table 8.5.3.2.1 for building materials, colours and finishes.

Height	Maximum 3 metres

Depth Minimum 1 metre and 3 metres maximum

Width 2 metres over outdoor living areas

C.22 Pergolas shall provide shade when sun is above 65 degrees or more (summer) and when the sun angle is 34 degrees or less (winter).

Decks, porches, terraces, verandahs

C.23 Refer Table 8.5.3.2.1 for development controls and finishes relating to decks, porches, terraces and verandahs.

Materials

C.24 Refer to Table 8.5.3.2.1 for materials, sizes and finishes for various building elements associated with the development.

Table 8.5.3.2.1 - Architectural materials, sizes and finishes

Building elements	Material	Shape and size	Colour and other requirements
Carports and garages	Walls to be timber or rendered or bagged and paint finish masonry.	Refer detail building controls.	Masonry to be off white to earth tones. Timber can have colour accents.
Front door	Timber and glass (max 50%)		Weather strips required. Any colour allowed. Shall be visible from the street.
Plumbing	No exposed sanitary plumbing.		Vent pipes and other roof protrusions. See roof additions.
Hot water/ Photovoltaic cells		Solar panels mounted flush onto roofing or incorporated into built form.	Storage tank to be remotely located at ground level.
External paving	Permeable materials preferred.	Position to minimise site coverage	
Roof	Terracotta or pre-finished concrete tile or metal	North facing pitch to be sufficient in area for solar collectors.	Highly reflective surfaces not allowed. Colour range generally light colours including greys, terracotta, light earth tones. Overhang to shade windows midday midsummer and allow maximum penetration to windows of midday midwinter sun.
Roof additions (i.e., satellite	Refer *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*	Refer *State Environmental Planning Policy (Exempt and Complying*	Not to be visible from the street.

Building elements	Material	Shape and size	Colour and other requirements
dish, TV aerial)		*Development Codes) 2008.*	
Skylight			Shaded to exclude 100% midday midsummer sun and allow maximum penetration of midwinter sun.
Wall	Ground Level: rendered or bagged and paint finish masonry. Upper Level: As for ground or mixture of rendered or bagged and paint finish masonry and light weight cladding including FC sheet/ shingles/timber boarding.	Front wall parallel to front property boundary except for articulation elements and lots less than 10 metres in width.	Wall colour to range from off-white to earth tones. 20% of light weight upper level walls can be an accent colour.
Window and glass door	Timber and metal framing and shading. No reflective or tinted glass.	No maximum limit for appropriately shaded glazing.	All rooms including bathrooms and kitchens shall have minimum window opening area to meet BCA for natural ventilation and natural light. Weather strips to all windows. All windows shall have external shading to exclude 100% midday midsummer sun and allow maximum penetration of midday midwinter sun. Colour of frames shall be accent colour.
Balcony	Floor: timber, pavers (pre-cast, brick or unit) or tiles. Balustrade: mild steel, timber or masonry.	Refer detail building controls in Part 3	Shall be screened to prevent overlooking. To be timber trellises, lattices, shutters, fabric screens.
Deck	Floor: As for balcony. Balustrade: mild steel, timber or clay brick.	Min 1.2 metres max 3 metres deep. Min 2.5 metres wide.	Do not shade minimum required windows midday midwinter. Screened to prevent overlooking. Screen materials as per balcony.
Garden wall	Clay brick, earthen construction or timber.	Refer to C.17 – C.19.	Refer to C.17 – C.19.
Pergola	Timber or clay brick posts. Metal or timber beams.	Refer to C.21 and C.22.	Do not shade minimum required windows midday midwinter provide shade midday midsummer.
Porch	Clay brick, earthen construction, timber or glass.	Roofed cover to front door. Min 1 metre, max 2 metres deep. Min 2 metres, max 4 metres wide.	

Building elements	Material	Shape and size	Colour and other requirements
		Max 1 storey high.	
Terrace	Floor: As for Balcony. Balustrade: mild steel, timber or clay brick.	Min 2 metres deep. Min 2.5 metres wide.	Screened to prevent overlooking.
Verandah	Posts: timber or clay brick. Paving: As for Balcony.	Min 1.2 metres deep. Min 3 metres wide.	Do not shade windows minimum required midday midwinter. Screened to prevent overlooking.

8.2.5.3.3 LANDSCAPING

Objective

O.01 Provide landscaping within a site that comprises predominantly of native species with an emphasis on those species that existed on site.

O.02 Planting shall ensure optimum ecological sustainable development (ESD) advantage and residential amenity through:

- good planning and design.
- practical lawn areas.
- efficient irrigation.
- soil improvement.
- use of mulches.
- low water demand plants.
- good maintenance.

Controls

C.01 The following percentage targets of landscape treatments within dwelling lots shall be required:

Grass	30%
Mass planting/trees	40%
Mulches/gravels	30%

C.02 Deciduous trees shall be used where summer shading and winter sun is required.

C.03 Mass planting areas shall be fully mulched.

8.2.5.3.4 SINGLE LOT HOUSING TYPES

DETACHED FAMILY DWELLING – STANDARD LOT

Controls

Lot size

C.01 Minimum lot width shall be 12 metres and minimum lot depth shall be 18 metres.

Siting

C.02 Living areas shall face north. Minimum 25m² shall be required as private open space with direct access to living area.

C.03 Dwelling entry shall be clearly visible from street.

C.04 A 2 metres garden wall shall be permitted where private open space is on street frontage. The maximum dwelling width shall be 60% of frontage.

Solar amenity and private open space

C.05 Minimum 50% of private open space area shall be required and north facing living area wall shall have a minimum of 2 hours solar access during mid-winter.

Setbacks

C.06 Front setback shall be a minimum of 1.5 metres and 3 metres at a collector street. Add 1 metre where private open space is to the street. 50% of frontage shall be within the 5 metres building alignment zone.

C.07 Rear setback shall be zero lot lined. Side setback shall be zero lot lined on one boundary.

C.08 Where it is not zero lot lined, side setback shall be a minimum of 1 metres.

Dwelling height

C.09 Maximum height shall be 2 storeys plus attic to the street. Dwelling setback at upper levels shall be determined by overshadowing of adjoining block. Single storey shall be in the rear 50% of site.

Note: Figure 8.2.5.3.4.1 below illustrates the site layout for a detached family dwelling for a standard lot.

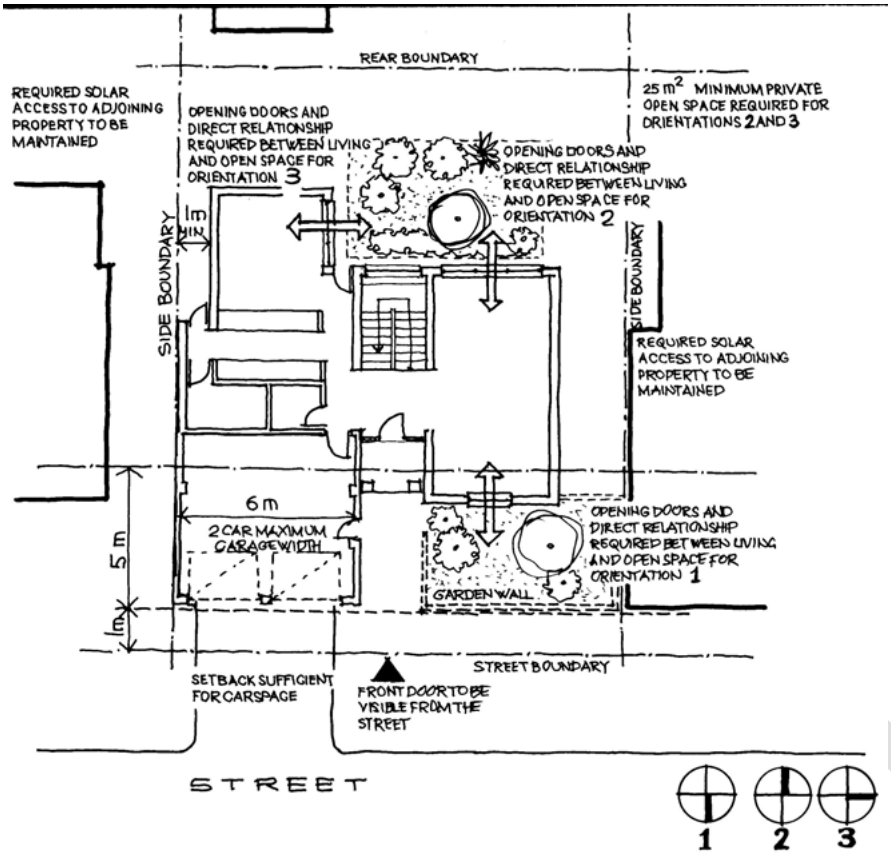


Figure 8.2.5.3.4.1 - Detached family dwelling – standard lot.

DETACHED FAMILY DWELLING – ZIPPER LOT

Controls

Lot size

C.01 Minimum lot width shall be 12 metres and minimum lot depth shall be 18 metres.

Siting

C.02 Living areas shall face north. Minimum 25m² is required as private open space with direct access to living area.

C.03 Dwelling entry shall be clearly visible from street.

Solar amenity and private open space

C.04 Minimum 50% of private open space area shall be required and north-facing living area wall shall have a minimum of 2 hours solar access during mid-winter.

Setbacks

C.05 Front setback shall be a minimum of 1.5 metres and 3 metres at a collector street. Add 1 metre where private open space is to the street.

C.06 50% of frontage shall be within the 5 metres building alignment zone.

C.07 Rear setback shall be zero lot lined.

C.08 Side setback shall be zero lot lined on one boundary. Where it is not zero lot lined, side setback shall be a minimum of 1 metre.

Dwelling height

C.09 Maximum dwelling height shall be 2 storeys plus attic to the street. Dwelling setback at upper levels shall be determined by overshadowing of the adjoining block.

C.10 Single storey shall be in the rear 50% of site.

Note: Figure 8.2.5.3.4.2 below illustrates the site layout for a detached family dwelling for zipper lot.

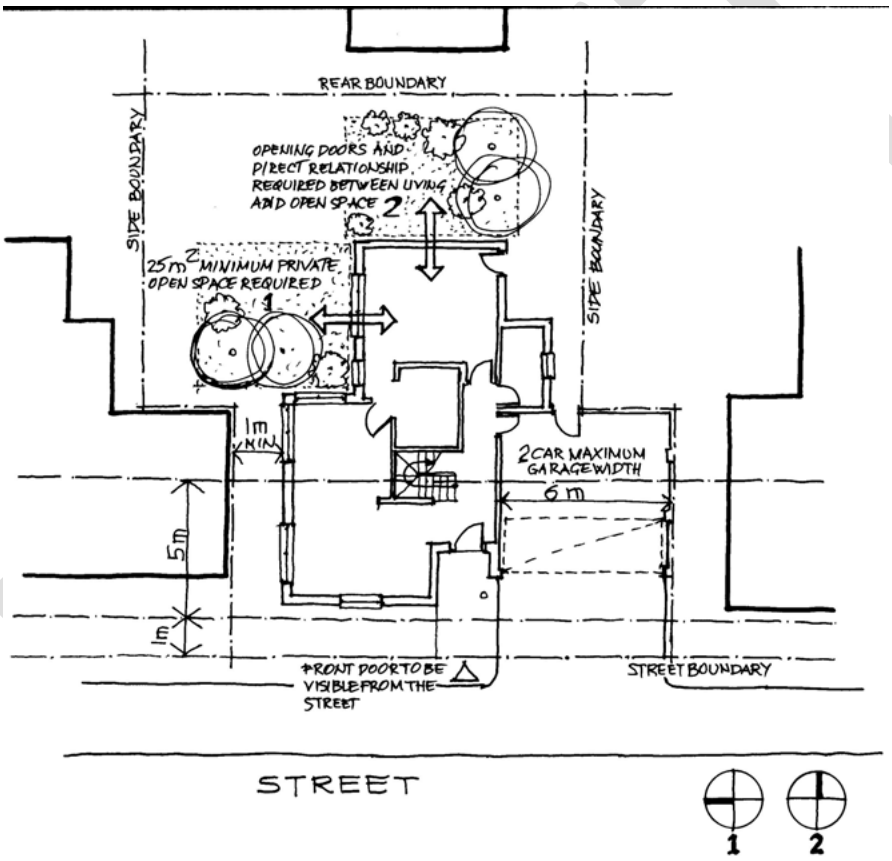


Figure 8.2.5.3.4.2 - Detached family dwelling layout – zipper lot.

SINGLE STOREY COURTYARD DWELLING

Controls

Lot size

C.01 Minimum lot width shall be 10 metres and minimum lot depth shall be 20 metres. (Includes 12 metre buffer at boundary to existing industrial development).

Siting

C.02 Living areas shall face north. Minimum 25m^2 area of private open space shall be required with direct access to the living area. Dwelling entry shall be clearly visible from street.

Solar amenity and private open space

C.03 Minimum 50% of private open space area shall be required and north facing living area walls shall have a minimum of 2 hours solar access during mid-winter.

Setbacks

C.04 Front setback shall be a minimum of 1.5 metres and 3 metres at a collector street. 50% of frontage to be within the 5 metres building alignment zone.

C.05 Rear setback shall be zero lot lined or 12 metres where site is adjacent to industrial development areas on the western side of the precinct.

C.06 Side setback shall be zero lot lined on one boundary. Where not zero lot lined, side setback shall be a minimum of 1 metre.

Dwelling height

C.07 Maximum height of a dwelling shall be 2 storeys plus attic.

C.08 Dwelling setback at upper levels shall be determined by overshadowing of the adjoining block.

Note: Figures 8.2.5.3.4.3 and 8.2.5.3.4.4 illustrate the site layout and cross section for a single storey courtyard dwelling.

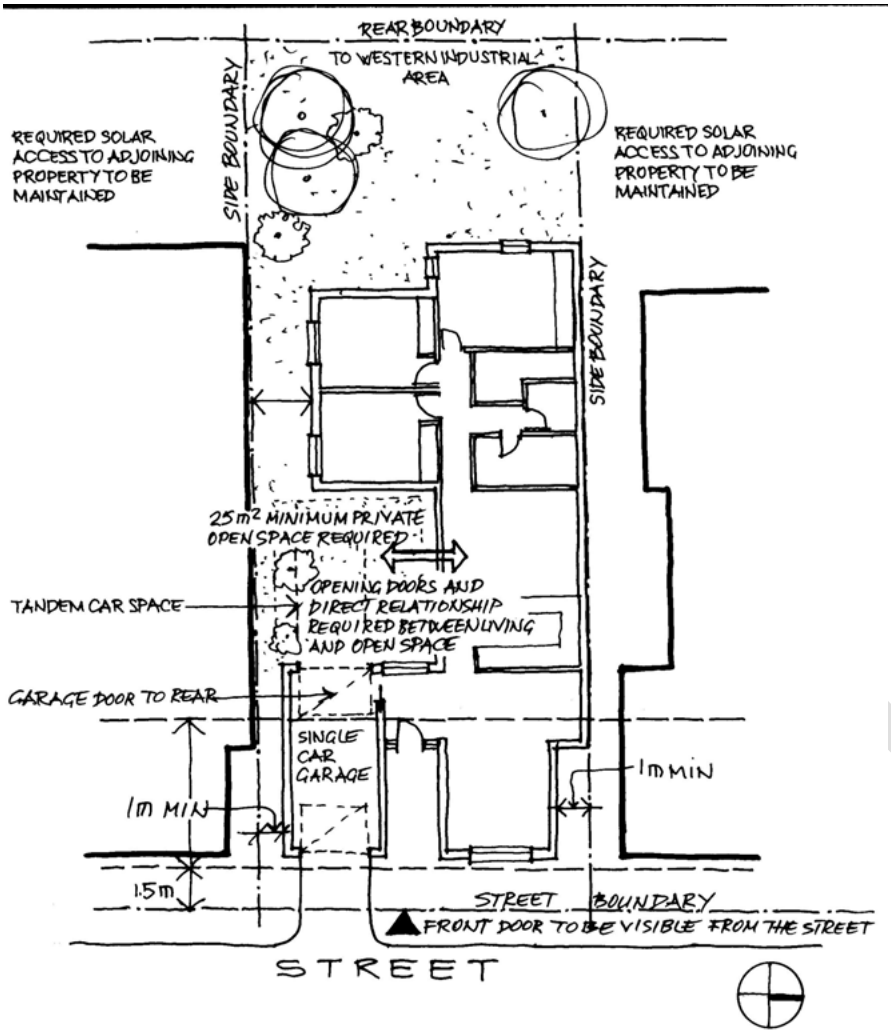


Figure 8.2.5.3.4.3 – Single storey courtyard dwelling layout.

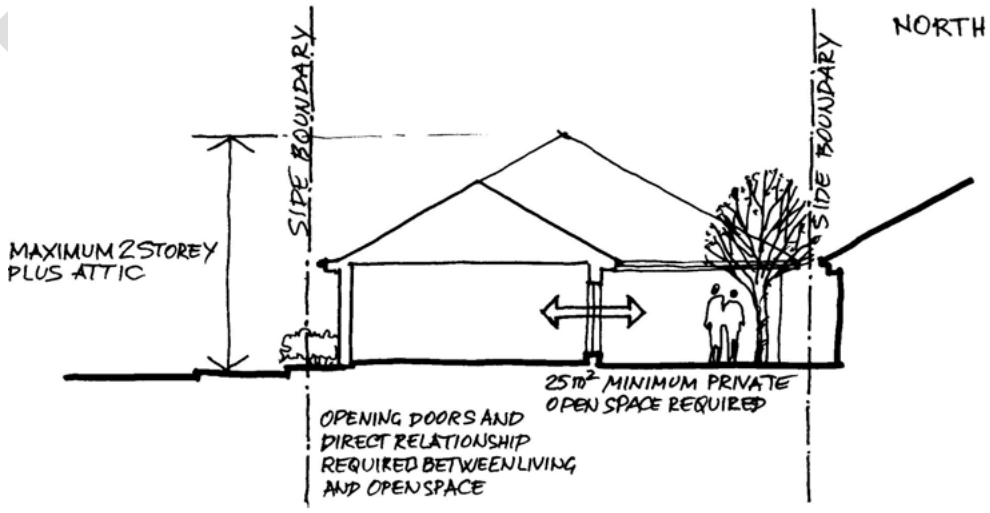


Figure 8.2.5.3.4.4 - Cross section of single storey courtyard dwelling.

TWO STOREY COURTYARD DWELLING

Controls

Lot size

C.01 Minimum lot width shall be 10 metres and minimum lot depth shall be 20 metres.

Siting

C.02 Living areas shall face north. Minimum 25m^2 of private open space shall be required with direct access to living areas.

Solar amenity and private open space

C.03 Minimum 50% of private open space area shall be required.

C.04 North facing living area walls shall have a minimum of 2 hours solar access during mid winter.

Setbacks

C.05 Front setback shall be a minimum of 1.5 metres and 3 metres at a collector street. 50% of frontage shall be within the 5 metres building alignment zone.

C.06 Rear setback shall be zero lot lined or 12 metres where site adjacent to industrial development areas on the western side of the precinct.

C.07 Side setback shall be zero lot lined on one boundary. Where it is not zero lot lined, side setback shall be a minimum of 1 metre.

Dwelling height

C.08 Maximum height of dwelling shall be 2 storeys plus attic.

C.09 Dwelling setback at upper levels shall be determined by overshadowing of the adjoining block.

Note: Figures 8.2.5.3.4.5 and 8.2.5.3.4.6 illustrates the site layout and cross section for a two storey courtyard dwelling.

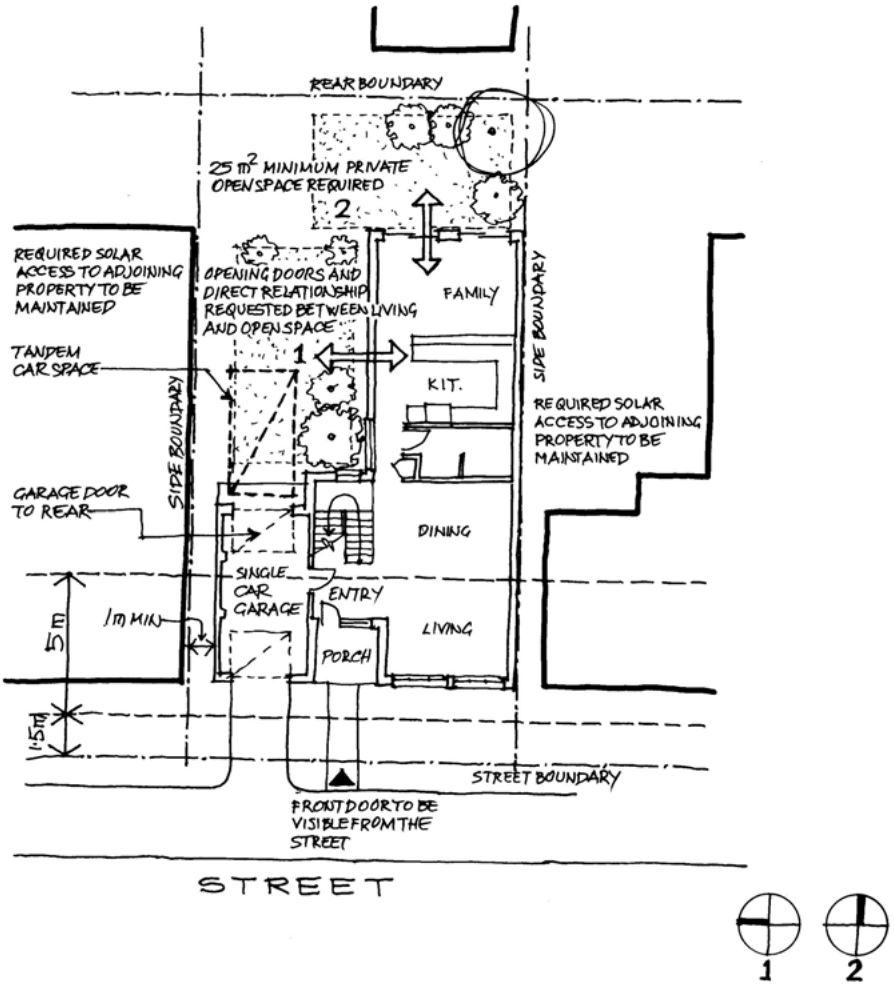


Figure 8.2.5.3.4.5 - Two storey courtyard dwelling layout.

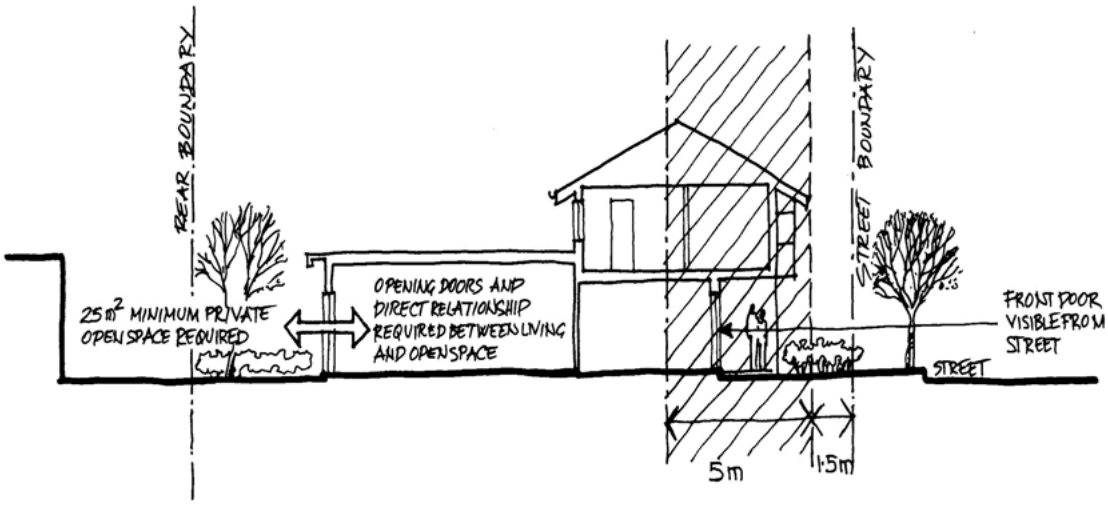


Figure 8.2.5.3.4.6 - Section of two storey courtyard dwelling.

TERRACE HOUSE – NORTH TO THE STREET

Controls

Lot size

C.01 Minimum lot width shall be 6 metres and minimum lot depth shall be 20 metres.

Siting

C.02 Living areas shall face north. Minimum 25m^2 shall be required as private open space with direct access to living areas. Dwelling entry shall be clearly visible from street.

Solar amenity and private open space

C.03 Minimum 50% of private open space area shall be required and north facing living area wall shall have a minimum of 2 hours solar access during mid-winter.

Setbacks

C.04 Front setback shall be a minimum of 1.5 metres and 3 metres at a collector street. 50% of frontage shall be within the 5 metres building alignment zone.

C.05 Rear setback shall be 3 metres minimum or 12 metres where site is adjacent to western industrial development area of the precinct.

C.06 Side setback shall be zero lot lined on both boundaries. Where it is not zero lot lined, side setback shall be a minimum of 1 metre.

Dwelling height

C.07 Maximum dwelling height shall be 2 storeys plus attic. Dwelling setback at upper levels shall be determined by overshadowing of the adjoining block. Single storey shall be in rear 50% of site.

Note: Figure 8.2.5.3.4.7 illustrates the site layout for a two storey terrace house.

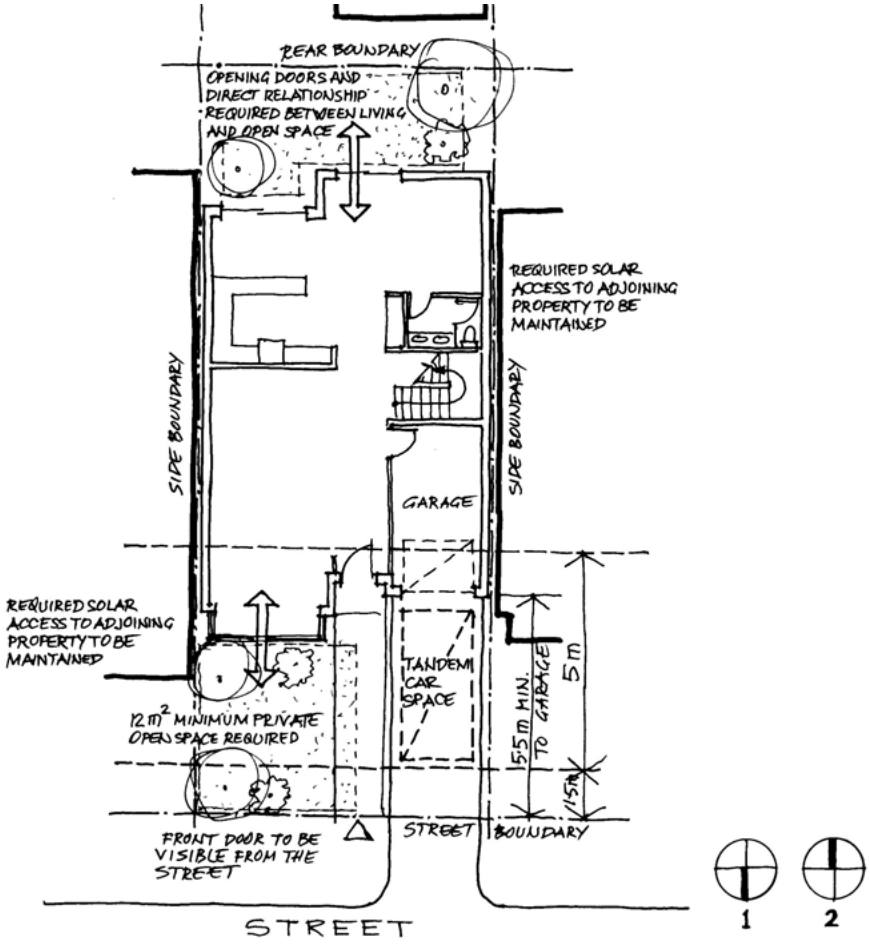


Figure 8.2.5.3.4.7 - Terrace house layout - north to the street.

TOWN HOUSE (SOUTH TO THE STREET)

Controls

Lot size

C.08 Minimum lot width and depth shall be 6 metres and 20 metres.

Siting

C.09 Living areas shall face north. Minimum 25m^2 shall be required as private open space with direct access to living area. Dwelling entry shall be clearly visible from street.

Solar amenity and private open space

C.10 Minimum 50% of private open space area shall be required and north facing living area wall shall have a minimum of 2 hours solar access during mid-winter.

Setbacks

C.11 Front setback shall be a minimum of 1.5 metres and 3 metres at a collector street. 50% of frontage shall be within a 5 metres building alignment zone.

C.12 Rear setback shall be 3 metres minimum or 12 metres where site is adjacent to western industrial development area.

C.13 Side setback shall be zero lot lined. Where it is not zero lot lined, side setback shall be a minimum of 1 metre.

Dwelling height

C.14 Maximum dwelling height shall be 2 storeys plus attic. Dwelling setback at upper levels shall be determined by overshadowing of adjoining block. Single storey shall be in rear 50% of site.

Note: Figures 8.2.5.3.4.8 and 8.2.5.3.4.9 illustrates the site layout and a cross section for a two storey town house.

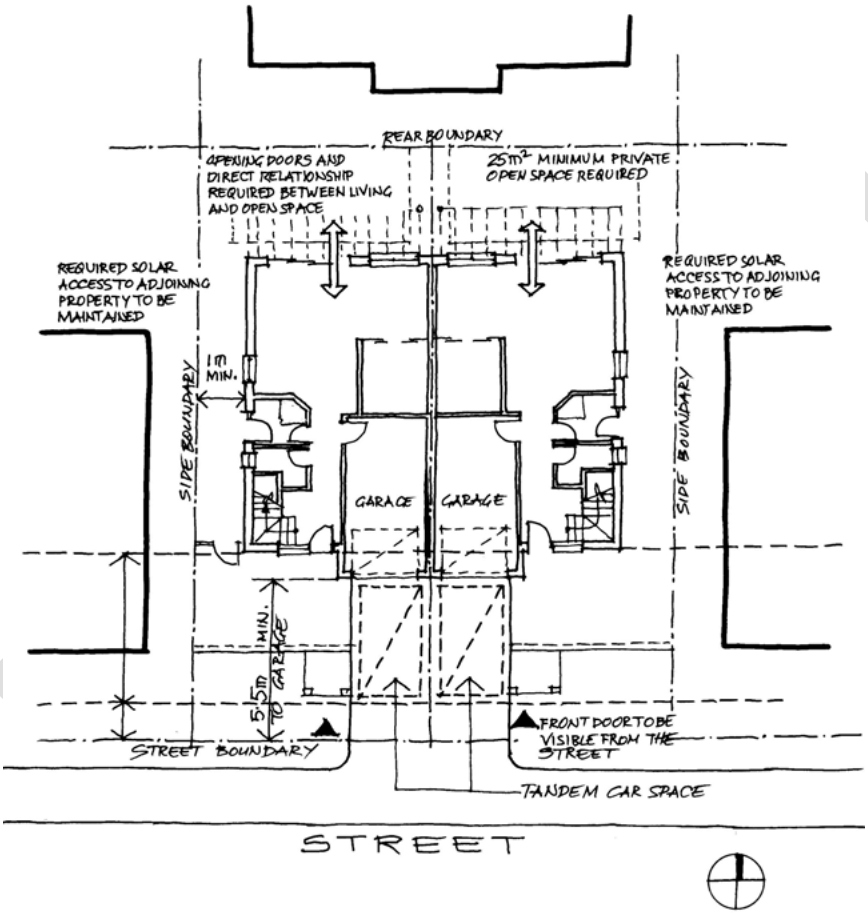


Figure 8.2.5.3.4.8 - Town house layout (south to the street).

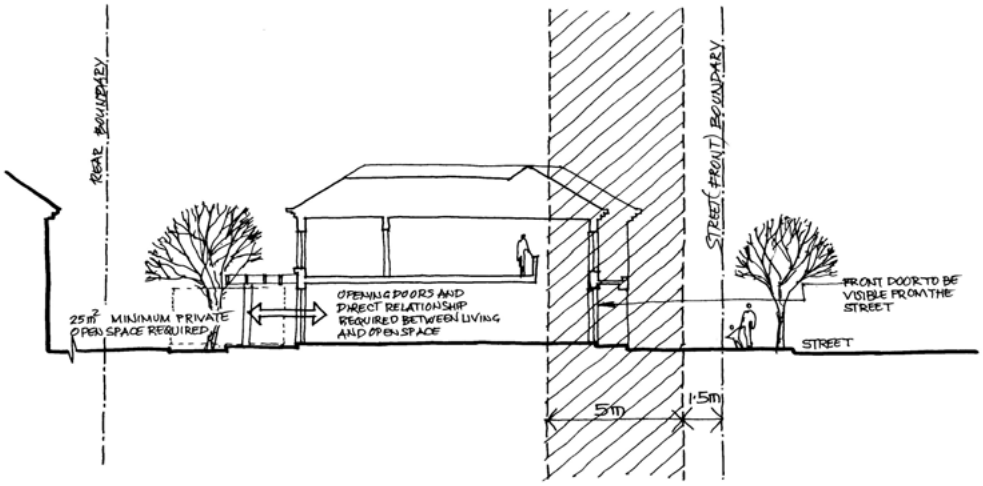


Figure 8.2.5.3.4.9 – Cross section of town house.

8.2.5.3.5 RESIDENTIAL FLAT BUILDINGS

This Section provides detailed controls for residential flat buildings development on the land zoned R4 High Density Residential within the Newington residential area shown in Figure 8.2.5.3.1.

Controls

Site planning and solar amenity

C.01 Site planning shall maximise the northern aspect for a majority of units of the development.

Site coverage

C.02 The maximum site coverage shall be 60%.

Private open space

C.03 The above ground floor level shall have a 7m² minimum area of private open space for a balcony and a minimum width of 1.8 metres.

C.04 The ground floor level shall have 10m² minimum area of private open space per dwelling and a minimum dimension of 3 metres.

Privacy

C.05 Visual privacy shall be required and may be achieved by:

- separation of functions by lot layout.
- placing buildings between adjoining private open spaces.
- window placement that avoids overlooking from living area to living area.
- use of screening where above strategies cannot be achieved.

C.06 For acoustic privacy, buildings shall:

- be designed to locate noise sensitive rooms and private open space away from the noise source or by use of solid barriers where dwellings are close to high noise sources.
- minimise transmission of sound through the building structure and in particular protect sleeping areas from noise intrusion.
- all shared floors and walls between dwellings to be constructed in accordance with noise transmission and insulation requirements of BCA.

Built form

C.07 Building height

C.08 Building heights shall be set to reinforce the scale and quality of the streetscape. A maximum building height of 4 storeys (residential) for a residential flat building shall be permitted.

Fencing/screening

C.09 Fencing or screens shall be used to maintain privacy between balconies/terraces.

C.10 Fencing or screens shall not be permitted to lot boundaries unless for security or privacy or to screen service areas or equipment.

C.11 Surveillance of the street shall be allowed where required.

C.12 Privacy shall be provided to ground floor private open space where it abuts the street. Surveillance via the entry and living/kitchen room windows to be maintained.

C.13 Design of the wall/fence shall be integrated with the design of the building.

C.14 Front walls/fences unless enclosing private open space shall be a maximum of 1.2 metres in height.

C.15 The front and side dividing fences, where located within the front yard area, shall not exceed a height of 1.2 metres as measured above existing ground level and shall be a minimum of 50% transparent. Front and side dividing fences where located within the front yard area shall not be constructed of solid pre-coated metal type materials such as Colorbond or similar.

C.16 Front walls/fences shall be a maximum of 1.8 metres high if enclosing private residential open space with a maximum width of 60% of street frontage and a maximum unarticulated length of 12 metres in residential development.

Materials

C.17 Refer to Table 8.5.3.2.1 for materials, finishes and colours.

Lot size

C.18 Minimum lot width shall be 40 metres and minimum lot depth shall be 25 metres.

Siting

C.19 Minimum 10m^2 private open space with direct access to living areas shall be required at ground floor levels.

C.20 Minimum 7m² private open space with direct access to living areas shall be required at upper floor levels. Building entry shall be clearly visible from the street.

Setbacks

C.21 The following setbacks shall apply:

- Front setback shall be 4 metres minimum (6 metres at collector street). 50% of frontage to be within 8 metres building alignment zone.
- Rear setback shall be 6 metres minimum (12 metres minimum between buildings).
- Side setback shall be 3 metres minimum.

Note: Setbacks are illustrated in Figure 8.2.5.3.5.1.

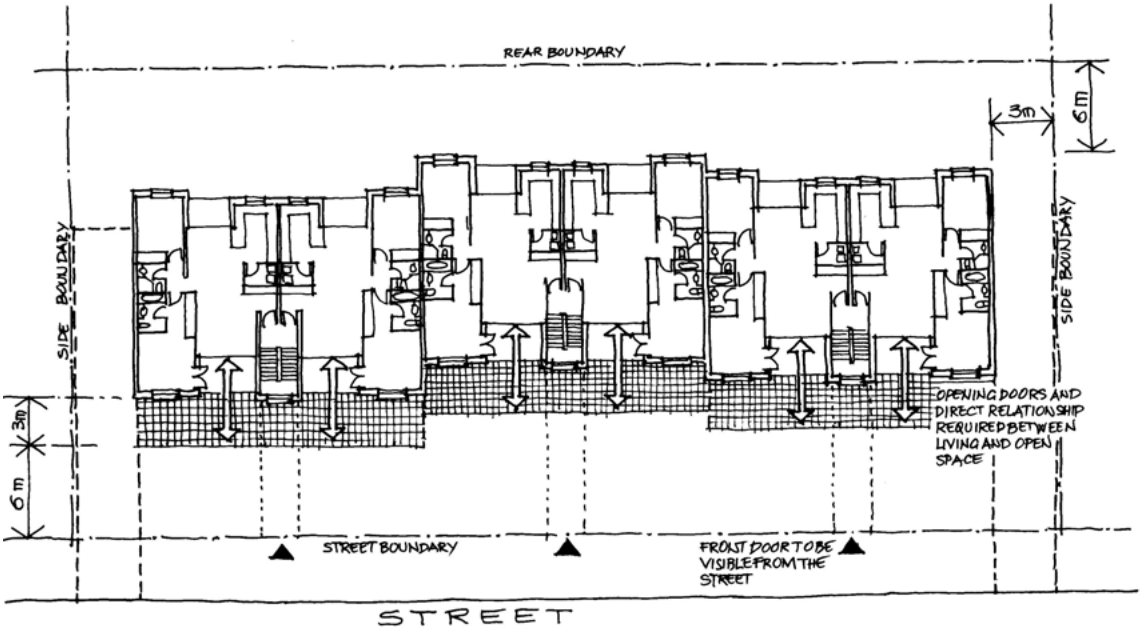


Figure 8.2.5.3.5.1- Plan - residential flat building development.

Number of Storeys

C.22 Residential flat building shall be a maximum of 4 storeys above ground level (existing), as shown in Figure 8.2.5.3.5.2. Setback at upper levels is determined by overshadowing of adjoining block.

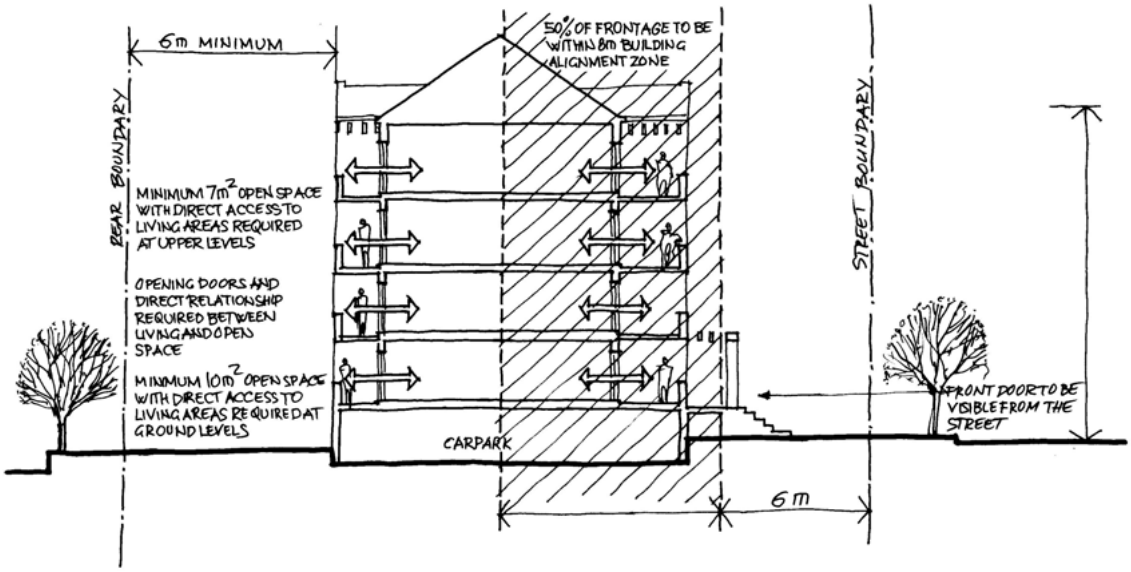


Figure 8.2.5.3.5.2 - Cross section - residential flat building.

8.2.5.3.6 PARKING

In addition to the general parking requirements of Part 6 – Traffic and Transport of this DCP, parking controls below are to be applied to the Newington Residential Precinct. Where there is an inconsistency, the parking controls below prevail.

Single lot housing

C.01 Maximum of 2 car parking spaces on-site shall be either tandem or adjacent spaces, covered or uncovered. Drive through single garages permitted.

Residential flat buildings and multi unit dwellings

- The following parking controls shall apply.
- 1 visitor space per 7 units.
- 1 space per 1 bedroom unit.
- 1.2 spaces per 2 bedroom unit.
- 1.5 spaces per 3 bedroom unit.
- Minimum one resident space per unit in semi-basement.

Note: Refer to Part 6 – Traffic and Transport of this DCP for additional parking and loading requirements.

8.2.6 MELROSE PARK URBAN RENEWAL PRECINCT

Section 8.2.6 of this DCP will contain the controls that apply to Melrose Park Urban Renewal Precinct. The Melrose Park Urban Renewal Precinct is located on the eastern boundary of the City, approximately 7km east of the Parramatta City Centre. Approximately 55 hectares in size, the precinct is divided into northern and southern parts, with Hope Street dividing the two.

The northern part is bound by Victoria Road to the north, Wharf Road to the east, Hope Street to the south and Hughes Avenue to the west which is referred to as Melrose Park North. Melrose Park North is part of the finalised former Parramatta LEP 2011 (Amendment no 59) which is supported by a Council-endorsed site-specific DCP.

The southern part is approximately 20 ha in size and is bound by Hope Street to the north, Wharf Road to the east, Parramatta River to the south, and Atkins Road to the west. The Precinct is referred to as Melrose Park South, however it also incorporates a portion of Ermington along the western edge. Melrose Park South is part of the finalised former Parramatta LEP 2011 (Amendment no 67) which is supported by a Council endorsed site-specific DCP.

Both LEP amendments contain deferred commencement clauses. This means that the LEP planning controls and site-specific DCPs will come into effect after the deferred commencement period ends.

The Draft DCP does not contain any changes to the recently finalised DCP controls for Melrose Park North and Melrose Part South as adopted by Council. As part of the finalisation of the Draft DCP, Council officers anticipate that there may be some minor administrative/drafting updates within Section 8.2.6 to ensure that the final DCP is consistent and up to date as required. These changes will not alter the intent or effect of any of the adopted planning provisions.

8.2.7 TELOPEA LOCAL CENTRE

The provisions of this Section of this DCP apply to development within the Telopea precinct as shown in Figure 8.2.7.1 and any relevant controls in Parts 2, 3 and 5 of the Parramatta DCP 20XX. Where there is any inconsistency the Telopea Precinct provisions of this part will prevail.

Figure 8.2.7.1 – Land application map

8.2.7.1 DESIRED FUTURE CHARACTER

Anchored by the Parramatta Light Rail, the Telopea Precinct is placed to become a transit- oriented development where the distribution of densities and land uses enable a more compact, walkable and sustainable community delivering improved access to public transport and a range of community and retail services.

The planning controls for Telopea facilitate the transformation of the Precinct, including the provision of new retail, community facilities, roads, and the renewal of existing buildings to deliver additional social, affordable and private market housing.

The highest densities will be located in the street block opposite the light rail stop known as the 'Core' where retail offerings and community facilities are to be located. The Core will be permeable, with new roads and pedestrian links which will be designed to assist pedestrians to navigate the topography, and include opportunities to provide lifts, escalators and ramps for the public. Outside of the Core, land uses will be residential, with the densities and heights transitioning down from apartments to townhouses toward the perimeter of the precinct.

A new public arrival plaza will be located adjacent to the Light Rail stop with opportunities for new public and publicly accessible open space and links to be provided throughout the precinct. Sturt Park and Acacia Park will be the primary open space for residents in the neighbourhood, with the Ponds Creek Reserve and Rapanea Community Forest providing important environmental and recreation functions.

The precinct will be part of the recycled water network of the Greater Parramatta and Olympic Park precinct, as new buildings will contain dual water systems. The Precinct will improve liveability by designing buildings and spaces that cool and protect the community from heat stress.

Wherever possible existing mature trees and new plantings will help inform the design of private and public domains, including landscaped setbacks and private communal open space. In streets and public spaces trees will enhance the walking environment and landscape character of Telopea. The State heritage-listed dwellings 'Redstone" and its heritage curtilage will continue to be protected.

General Objectives

O.01 Create a vibrant, cohesive and safe mixed-use precinct which delivers shared civic spaces, community facilities and services and retail facilities.

O.02 Deliver new open spaces, public domain, pedestrian links and streets to support higher densities in the Core. These spaces should provide amenity, places for interaction and aid in navigating the topography of the precinct.

O.03 Design buildings that respond to the topography, landscape and solar access, and improve safety and connectivity by clearly identifying between private and public spaces.

O.04 Ensure development promotes the reduction of water and energy consumption, reducing the impact of urban heat and improving pedestrian comfort.

O.05 Ensure development maximises opportunities for future planting of trees and retention of existing significant trees within the public and private domain.

Council owned land

In the context of the transformation of Telopea Precinct, Council will investigate the future of its sites within Telopea – namely 21 Sturt Street (the current Dundas Community Centre and Library) and the land between the existing Waratah Shops and the formed section of Evans Road (also known as Benaud Place). These Council owned sites are shown on Figure 4.3.9.1.

Council has identified that the medium to long term needs of the community include delivery of a new multipurpose neighbourhood centre and Telopea District Library.

The delivery of adjacent green space or public domain areas should be considered as a complementary part of a new library and community facility.

Any future investigation of the Council owned land at Sturt Street (the current Dundas Community Centre and Library) will consider the future increased demand for community facilities and the potential relocation of community facilities to alternative sites. The investigation should include the potential to consolidate this land with adjoining properties or redevelop this property with or without community facilities but only where it is intended that the existing and proposed community floor space has been or will be permanently relocated on other sites in or around the community facility.

Any future investigation of the Council owned-land between the existing Waratah Shops and the formed section of Evans Road (also known as Benaud Place) will consider the potential to consolidate with adjoining private land owners as part of a future mixed use or residential development (only if the road reserve is no longer required to provide access to adjoining privately owned sites). Should the Council land be consolidated, any subsequent development should retain an area of adjacent green space or public domain to complement the development.

8.2.7.2 TRAFFIC AND TRANSPORT

8.2.7.2.1 ROAD CONNECTIONS

Objectives

O.01 Provide new or relocated road connections and intersections to service the new retail precinct and residential developments.

O.02 Road connections are to be provided to increase accessibility and appropriately navigate the topography of the precinct for motorists, pedestrians and cyclists.

O.03 To ensure new streets are designed to maximise equitable access, where possible, and as topography permits.

O.04 Where possible, that new road connections connect with the existing street pattern in order to provide direct connections.

Controls

C.01 Any new road or any relocation of an existing road or active transport connections are to be provided in accordance with Figure 8.2.7.2.1.1 and the specifications in Table 8.2.7.2.1.1.

C.02 Any additional new road connections not listed in Table 8.2.7.2.1.1 shall be designed to incorporate a minimum of a 7 metre wide carriageway and a minimum 2.5 metre parking indented parking bays to one side of the street and a minimum of 3 metre verges.

Table 8.2.7.2.1.1 – Dimensions for new road and upgraded connections in Telopea

Road/ Connection	Road Carriageway (including roadway and on street parking)	On street Parking (included in road carriageway width)	Footpath with landscape verge	Activated frontage (where active uses on ground level)
Wade Street (relocated)	13 metres	On both sides	3 metres each side	3 metres - 5 metres
Extension of Elyse Street	10 metres	On the northern side of the street.	4 metres - metres each side	-
Benaud Place	9 metres	One the western side of the street.	3 metres each side	-

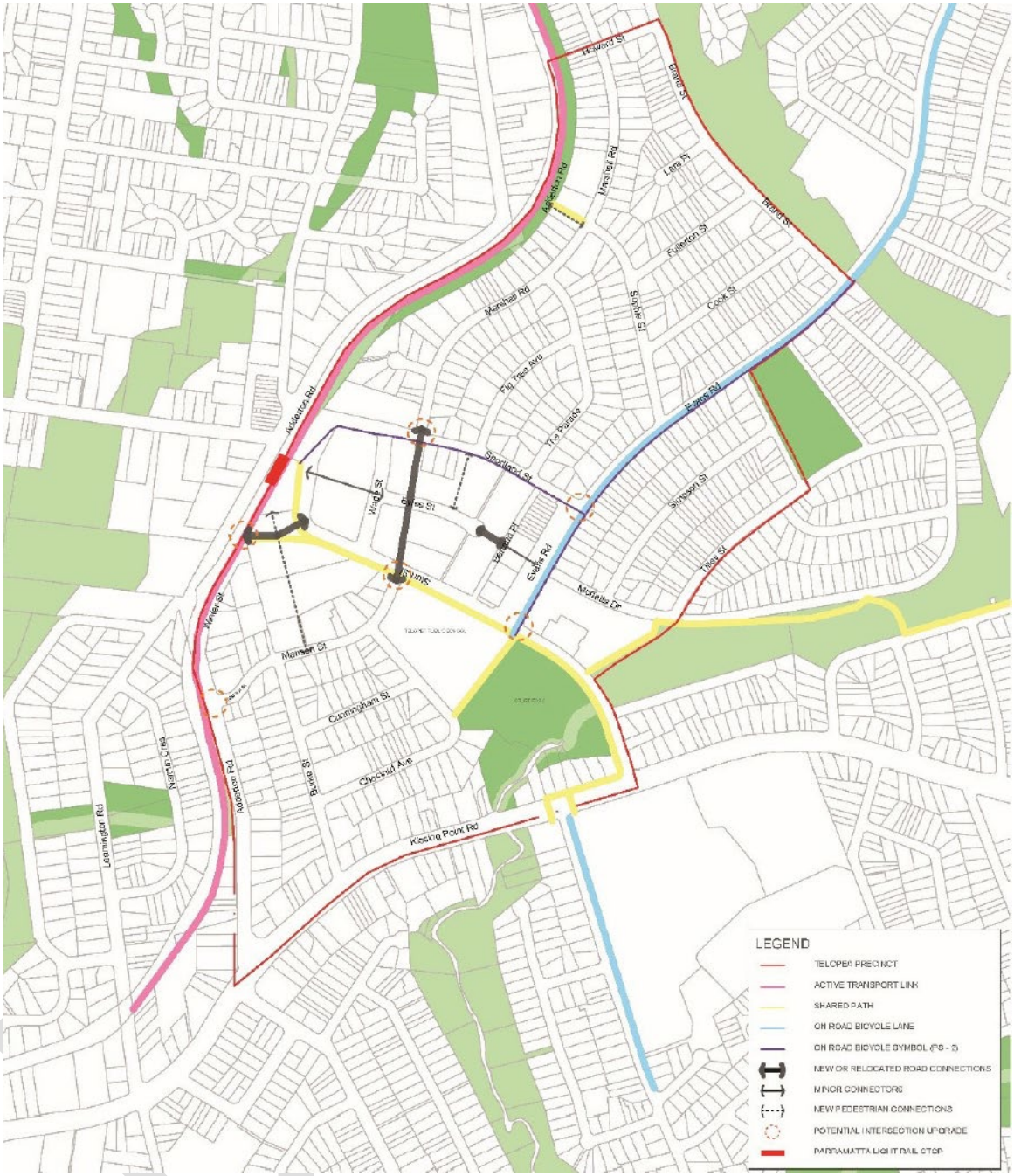


Figure 8.2.7.2.1.1 – Road and Transport Connections

8.2.7.2.2 VEHICLE ACCESS

Controls

C.01 Driveways should be:

a) Provided from lanes and secondary streets rather than the primary street, wherever practical.

b) Located to take into account any services within the road reserve, such as street lights or power poles, drainage inlet pits and existing street trees.

c) Located a minimum of 10 metres from the perpendicular of any intersection of any two roads.

d) Designed so that vehicles can enter and leave in a forward direction without the need to make more than a three-point turn.

e) Separated and clearly distinguished from pedestrian access.

f) Located at least 2 metres from the side boundary with any public domain area, street, lanes or parks.

C.02 Access to basement parking or service areas should be located in combined and consolidated entries to minimise impacts on pedestrians.

C.03 Vehicular crossing widths are to comply with AS2890.1.

C.04 Doors to vehicle access points in apartment buildings are to be non-solid roller shutters or tilting doors fitted behind the building façade and to be of materials that integrate with the design of the building and contribute to a positive public domain.

8.2.7.2.3 OFF-STREET PARKING AND BICYCLE STORAGE

Objectives

O.01 Development shall provide adequate off-street car parking which responds to Telopea as a suburban centre and access to the Parramatta Light Rail.

O.02 Development shall encourage sustainable and active transport usage by residents and visitors.

Controls

C.01 Development must provide a minimum number of the car parking spaces specified in Table 8.2.7.2.3.1 below.

C.02 Car parking will be generally be incorporated into basement (for apartments, shopping centres and community facilities) and utilised by occupants or visitors.

Table 8.2.7.2.3.1 – Telopea Precinct Parking Rates

Type	Rate
Residential flat buildings, shop top housing or mixed use development with a residential accommodation component	

Studios, 1, 2, and 3+ bedroom apartments	Minimum Car Parking: Rate: Studio 0.6 spaces 1 0.6 spaces 2 0.9 spaces 3+ 1.4 spaces	
Visitors parking	Minimum 1 space per 5 dwellings.	
Car share spaces	A minimum of 1 space is to be allocated to car share for developments with 50 or more dwellings. Any car share spaces should be located on street where practical, if not practical car share spaces can be provided in basements.	
Affordable and social housing parking		
Studios, 1, 2, and 3+ bedroom apartments	Minimum car parking rates as per the relevant State Environmental Planning Policy	
Non-residential uses parking		
Supermarket and Specialty Shops	1 space per 30m² of Gross Floor Area	
Commercial (including medical and professional consulting)	1 space per 50m² of Gross Floor Area	
Community Uses, Places of Public Worship or Recreation Facilities	Assessed on merits based on a submitted Traffic Impact Assessment Report, and will take into account integration of retail/community uses and ability to share car parking as it would facilitate multi-stop facilities	
Other non-residential uses	To comply with rates in Part 6 of the Parramatta DCP 20XX. Any uses not specified in Part 3 will be assessed against the RMS Guide to Traffic Generating Development	
Bicycle parking areas		
Land Use	Residents	Visitors
Residential accommodation	Minimum 1 bicycle storage space per dwelling	Minimum 1 bicycle storage space per 15 dwellings.
All non-residential uses	To comply with rates in Part 6 of the Parramatta DCP 20XX.	

8.2.7.2.4 ACTIVE TRANSPORT CONNECTIONS

Objectives

O.01 Encourage walking and cycling and public transport use in order to reduce the number of motor vehicles travelling to and from the precinct.

O.02 Improve existing and create new quality pedestrian and cycling routes which seek to improve permeability and access to and from the community facilities, the retail precinct and the light rail stop.

Controls

C.01 Any new or improved pedestrian or cycle connections are to be provided in accordance with Figure 8.2.7.2.1.1.

C.02 A new pedestrian connection extending from the existing through site link from Manson Street toward the new Light Rail line crossing shall be provided as part of any new development. It is to have a minimum width of 3.5 metres. It should be publicly accessible at all times and adjoining buildings should be designed to provide passive surveillance.

C.03 The new shared pedestrian and cycleway connections from Marshall Road to the Greenway Corridor are to have a minimum width of 3 metres and be provided as an extension of Sophie Street. This connection shall be provided as part of any new development and in this case setbacks and deep soil requirements specified in this precinct DCP may be varied to ensure the delivery of the link.

8.2.7.2.5 2.5 ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

The following technical terms are used as part of controls in this Section of this DCP:

EV Ready Connection is the provision of a dedicated spare 32A circuit provided in an EV Distribution Board to enable easy future installation of cabling from an EV charger to the EV Distribution Board and a circuit breaker to feed the circuit.

Private EV Connection is the provision of a minimum 15A circuit and power point to enable easy future an EV in the garage connected to the main switch board.

Shared EV Connection is the provision of a minimum Level 2 40A fast charger and Power Supply to a car parking space connected to an EV Distribution Board.

EV Distribution Board is a distribution board dedicated to EV charging that is capable of supplying not less than 50% of EV connections at full power at any one time during off-peak periods. This will ensure that the impacts of maximum demand are minimised and that increases to electrical feed sizes are not required. to ensure impacts of maximum demand are minimised. To deliver this, the distribution board will be complete with an EV Load Management System and an active suitably sized connection to the main switchboard.

EV Load Management System is to be capable of:

- reading real time current and energy from the electric vehicle chargers under management
- determining, based on known installation parameters and real time data, the appropriate behaviour of each EV charger to minimise building peak power demand whilst ensuring electric vehicles connected are full recharged.
- scale to include additional chargers as they are added to the site over time.

Objectives

O.01 Recognise the positive benefits of increased electric vehicle adoption on urban amenity including air quality and urban heat.

O.02 Ensure new development in Telopea provides the necessary infrastructure to support the charging of electric vehicles.

O.03 Minimise the impact of electric vehicle charging on peak electrical demand requirements.

Controls

C.02 All apartment residential car parking must:

a) Provide an EV Ready Connection to at least one car parking space per dwelling.

b) Provide EV Distribution Board(s) of sufficient size to allow connection of all EV Ready Connections and Shared EV connections.

c) Locate EV Distribution board(s) so that no future EV Ready Connection will require a cable of more than 50 metres from the parking bay to connect.

d) Provide adequate space for the future installation (post construction) of compact meters in or adjacent to the EV Distribution Board, to enable the body corporate to measure individual EV usage in the future.

e) Identify on the plans the future installation location of the cable trays from the EV Distribution Board to the car spaces allocated to each dwelling that are provided a Future EV connection, and to make spatial allowance for it when designing in other services.

C.03 All car share spaces and spaces allocated to visitors must have a Shared EV connection.

C.04 All commercial building car parking must provide 1 Shared EV connection for every 10 commercial car spaces distributed throughout the carpark to provide equitable access across floors and floor plates.

C.05 Shared bicycle storage facilities and visitor bicycle parking spaces are to include 10A e-bike charging outlets to 10% of spaces with no space being more than 20 metres away from a charging outlet. Chargers are to be provided by the owner.

8.2.7.3 DEVELOPMENT AND DESIGN

This Section provides built form and public domain and open space controls for future developments within the Telopea precinct.

The planning controls for Telopea Precinct envisages delivery of high-quality buildings and public places. The Telopea Precinct planning controls allow for significant transformation and renewal of existing buildings, however new buildings and places shall be designed to maintain existing site characteristics such as mature trees, topography and access to open spaces to retain and enhance the sense of place.

Design excellence of buildings will be required to be demonstrated as required by the *Parramatta LEP 2023*. Development Applications for new buildings or external alterations to existing buildings within the Telopea Precinct must demonstrate that it exhibits design excellence. This ensures that new development contributes positively to the natural, cultural, visual and built character values of the area. Further, Development Applications for development higher than 55 metres or a capital value of more than $100 million, or where chosen by the applicant, must undertake an architectural design competition.

8.2.7.3.1 DEVELOPMENT WITHIN THE CORE AREA

The following principles and controls apply to all development within the Core Area, which is bounded by Sturt Street, Shortland Street and Evans Road as identified in Figure 8.2.7.1 .

Objectives

O.01 Facilitate the development of a new neighbourhood retail, commercial and residential precinct which supports activation, a quality public domain and pedestrian connections to the Parramatta Light Rail.

O.02 Ensure taller buildings are slender in form and are adequately separated to ensure solar access, view to the sky and minimise wind impacts.

O.03 Encourage an urban form which works with the topography, addresses the streets, maximises solar access and creation of views.

O.04 Ensure development facilitates a healthy environment for landscaping and street trees.

Controls

C.01 Provide appropriate building depth, bulk and separation which protects amenity, daylight penetration, privacy between adjoining developments and increases solar access and amenity to the public domain.

C.02 Allow building setbacks which reinforce the human scale of the streets, mitigate wind impacts, enable views to the sky in streets and public places, and recognise the variation in street

setbacks within the precinct to allow for an appropriate response to topography, street trees and other site constraints.

C.03 Maximise amenity to below street level apartments, including privacy, solar access and natural light.

C.04 Ensure that the design and material selection of buildings and the public domain contribute to a high quality, durable and sustainable urban environment.

C.05 Maximise the opportunity for deep soil to encourage retention of, and planting of new trees, as well as the provision of landscaping on public and private land.

Lodgement of a Concept Application

C.06 Prior to, or concurrently with, the lodgement of a Development Application for all or part of the Core Area, a Masterplan or a Concept Development Application shall be lodged with Council for consideration. The Masterplan or Concept Application must address the Objectives, Principles within this DCP, and demonstrate that the controls are capable of being complied with when detailed Development Applications are submitted for each stage within the Core.

C.07 The following information shall be submitted as part of the Masterplan or Concept Application for the Core:

a) Street and pedestrian layout and hierarchy;

b) Each development lot and indicative staging;

c) Building envelopes – the footprints, heights, building typologies, gross floor areas and separation distances for each development lot;

d) Indicative location of all communal open space, including at grade and roof top areas;

e) Setbacks to streets and setbacks between building and buildings on podia;

f) Streets and street sections, including building and basement setbacks;

g) Public domain plan based on the Parramatta Public Domain Guidelines;

h) A contour and slope plan;

i) Trees to be retained and additional tree planting in the public domain;

j) A deep soil network plan;

k) A basement plan, including entry locations; and

l) Future land ownership and responsibilities as it relates to publicly accessible spaces.

C.08 The Masterplan or Concept Application shall calculate residential gross floor area (GFA) at a minimum of 75% of the building envelope.

C.09 The Masterplan or Concept Application shall allocate to each development lot a GFA range for both residential and non-residential uses, including calculations demonstrating that the proposed envelopes can accommodate the allowable GFA including a reasonable allowance for building articulation

C.10 That the maximum gross floor area for development lots are not to exceed the gross floor area nominated by a Notice of Development Consent granted by a relevant consent authority.

C.11 A minimum of 900m² of public open space, provided as one contiguous area, and associated with the new community and library facility.

Existing Waratah Shops

C.12 A Masterplan or Concept Application for the area known as Waratah Shops (the area bounded by the street block Evans Road, Shortland Street, Sturt Street and Benaud Lane) is to address the controls for concept application required in C.7 of this DCP and to incorporate the following design principles:

a) Where possible, consolidate the existing holdings into development sites comprising privately owned and Council land including the existing Benaud Place car parking and landscaped area along Evans Road.

b) Building forms should be articulated to ensure solar access to private open space and future apartments.

c) Consolidated vehicular access to basements from Benaud Lane.

d) Consider publicly accessible pedestrian and/or vehicle connection extending directly from Eyles Street.

e) Potential retail uses are to be located, in their current location along Benaud Place if the site is not consolidated.

Core Area Built Form Controls

C.13 The maximum length of a building, (excluding perimeter block buildings) is 50 metres.

C.14 Where the length of a perimeter building exceeds 50 metres, it is to be broken into two or more components. Building breaks should be a minimum of 3 metres deep and 3 metres wide.

C.15 Street setbacks within the Core Area should be as follows:

a) Between 0 metres to 3 metres for activated street frontage with retail or commercial uses; or

b) Between 3 metres and 6 metres (or greater) where residential uses are at ground level to allow for landscaping and the protection of significant trees.

c) The setbacks are measured to the face of the building and should be consistent along the length of the street block.

C.16 Buildings that are of a podium and tower form, should provide a street wall of between 2 and 4 storeys, with a tower setback of between 3 metres and 6 metres.

C.17 Upper levels of any buildings are not to extend over the lower levels.

C.18 The maximum floorplates for residential buildings is 1,000m². The floorplate must be measured to the outside face of the building including balconies, vertical and horizontal circulation, internal voids and external walls.

C.19 Where the building is setback from the street, 30% of the balconies or architectural elements may project up to 400mm into front building setbacks. This excludes awnings at the ground floor used for wind mitigation and weather protection, which may extend to a maximum of 3 metres (maintaining a distance of 600mm from the face of the kerb) from the building face.

C.20 The ground floor of buildings used for retail and/or commercial use are to have a minimum floor to ceiling height of 4.2 metres. All retail and commercial floors above the ground floor are to have a minimum floor to ceiling height of 3.3 metres.

C.21 All Development Applications must include a streetscape analysis and provide details of the street wall and perimeter block. The analysis must include:

a) the street wall elevation at 1:200 scale in context showing existing buildings on the block.

b) a detailed street wall elevation at 1:100 scale including immediately adjacent buildings accurately drawn.

c) sections through the street wall and awning at 1:50 scale including the public domain.

d) detailed facade plans/sections at 1:20 scale including ground floor active frontage and awning details.

C.22 Basement car parking is to be predominately located under the building footprint and cannot extend into the street or deep soil set-backs. Externally visible basement car parking cannot protrude above ground by more than 1 metre .

Street Frontages and Access

C.23 Buildings must:

a) address a street.

b) be articulated with depth, relief and shadow on the street façade. A minimum relief of 150mm between the masonry finish and glazing face must be achieved.

c) Utilise legible architectural elements and spatial types such as doors, windows, loggias, reveals, pilasters, sills, plinths, frame and infill. Plinths are particularly encouraged in Telopea so that the topography is emphasised.

C.24 Apartments can be located below the street level, where it demonstrated that they cannot be located at street level due to the slope of the land. If located below street level the following applies:

a) Adequate solar access to habitable rooms and balconies is demonstrated;

b) The distance of the apartment front wall is a minimum of 5 metres from the street boundary or adequate privacy screening and landscaping is demonstrated;

c) the FFL of the lowest apartment is not more than 1500mm below the level of the street; and

d) The minimum floor to floor height of 3.3 metres, with a minimum floor to ceiling height of 2.9 metres and the head height of the windows is not less than 300mm from the underside of the slab above for ground floor and level 1 apartments.

C.25 Ramp access must demonstrate that it can be accommodated without compromising the entrance to the building or the ground floor apartments. If ramp access cannot be adequately accommodated, disability access is to be provided within the building.

C.26 Retaining walls must:

a) be located within the lot boundaries on all development lots or on the boundary if the land is within the same ownership;

b) be designed in consultation with Council if adjoining existing or future Council- owned land;

c) retain a horizontal line, with minimal stepping;

d) be fully masonry or a combination of masonry and timber; and

e) enable casual seating where possible.

8.2.7.3.2 DEVELOPMENT WITHIN PRECINCTS

This Section sets out the objectives, design principles and controls for development within the Precinct Areas which is identified in Figure 8.2.7.1 .

New development in Telopea must develop a sound response to the precinct's unique topography, subdivision and curvilinear streets. The hillside character of Telopea offers many opportunities for views across the Dundas Valley. It also presents many challenges to minimising the environmental, visual and amenity impacts of increased development on the surrounding landscape. These differences are reflected in the high and low sides of the streets, the irregular subdivision pattern on curved streets, and the sites that have a steep slope along the frontage. The following design guidance should be considered as part of all applications in Telopea.

Objectives

O.01 Allow for the renewal of housing stock.

O.02 Encourage the amalgamation of lots where possible to achieve a better built form.

O.03 Provide opportunities for publicly accessible pedestrian through site links between large street blocks, including new pedestrian and cycle links to the Greenway Corridor.

O.04 Develop residential buildings that maximise frontage to the street.

O.05 Provide adequate deep soil networks which allow for infiltration of water, reduce stormwater runoff, maintain natural ground water movement, support tree retention, promote healthy growth of trees and vegetation and provide amenity for residents.

O.06 Minimise the need for partially undergrounded apartments and encourage a level transition between apartments and the street or rear setback zone.

O.07 Take up site level changes within the building design to avoid excessive cut and fill or high retaining walls.

O.08 Preserve natural features of the precinct such as knolls or ridgelines through sensitive site grading.

O.09 Buildings are to form a continuous pattern of consistent street setbacks and building separation to create a comfortable neighbourhood environment.

O.10 Development is designed to enhance and maintain the topography, streetscape and natural environment as key features of Telopea.

O.11 Development is to provide breaks between the buildings to provide opportunities for views to the Dundas Valley.

O.12 To maximise the number of apartments facing the street, provide separation between buildings and allow for greater rear and front setbacks and contiguous landscape areas.

O.13 Front and rear setbacks and basement design is to respond to topography, allow for landscaping, privacy and amenity and minimise the undergrounding of apartments.

O.14 To design buildings to retain existing trees, where possible, and provide deep soil to plant new trees.

Sloping Sites

O.15 Match building design to suit the degree of slope, adapting proposed slab construction to either take up the slope of the site with additional half levels or step to complement the slope.

O.16 Prevent site benching and large retaining walls at shared property boundaries to minimise overshadowing, overlooking and drainage issues.

O.17 Locate vehicular crossings where they minimise the need for steep ramping from the street, so that the visual impact of driveways is minimised.

O.18 For sites that are located on the low side of the street (generally sloping from the street down to the rear boundary as per 8.2.7.3.2.3):

a) Consider how the fall of the site may be utilised by sleeving the first level of basement with apartments to the rear.

b) Consider designing buildings with higher street wall / building height on the low side of the street than buildings on the high side of the street. This can help balance the space created on the street.

O.19 For sites that are located on the high side of the street (generally sloping from the rear boundary down to the street as per Figure 8.2.7.3.2.3)

a) Development may utilise the provision for basements to be built to the front boundary where it is necessary to minimise apartments at the rear being located below natural ground.

b) he larger 6 metre front setback may be more appropriate to assist with vehicular access to the basement.

O.20 For cross slope sites that slope along the street (generally sloping from one side boundary to the other):

a) Vehicular access should be provided at the lowest point of the street frontage.

b) The split slab arrangement of the ground floor is encouraged to manage access requirements and prevent large retaining walls on the high side of the site.

Controls

C.01 New developments should be sited and designed in accordance with the Indicative Block and Building Layout Plan at Figure 8.2.7.3.2.1 or demonstrate it is consistent with the above objectives.

Figure 8.2.7.3.2.1 – Indicative Block Plan and Building Layout

C.02 Development of a residential flat building should have a minimum site frontage of 24 metres, except 18 metres for sites with two street or lane frontages.

C.03 New development must provide between a 4 to 6 metre setback to the street as outlined in Figure 8.2.7.3.2.2. The setback must demonstrate that it adequately considers the following site conditions:

a) site levels;

b) existing vegetation;

c) topography;

d) surrounding built form; and

e) footpaths and boundaries.

C.04 The minimum setback to the side boundaries is 3 metres for part of the length of the building. Where apartments habitable rooms only face the side boundary, allow a 6 metre wide side setback, as outlined in Figure 8.2.7.3.2.2.

C.05 The rear setback is to be a minimum of 10 metres or 15% of the total length of the site as measured from centre of the rear boundary (whichever is the greater), as shown in Figure 8.2.7.3.2.2. The setback can be averaged to align with the building footprint where the rear alignment is not regular.

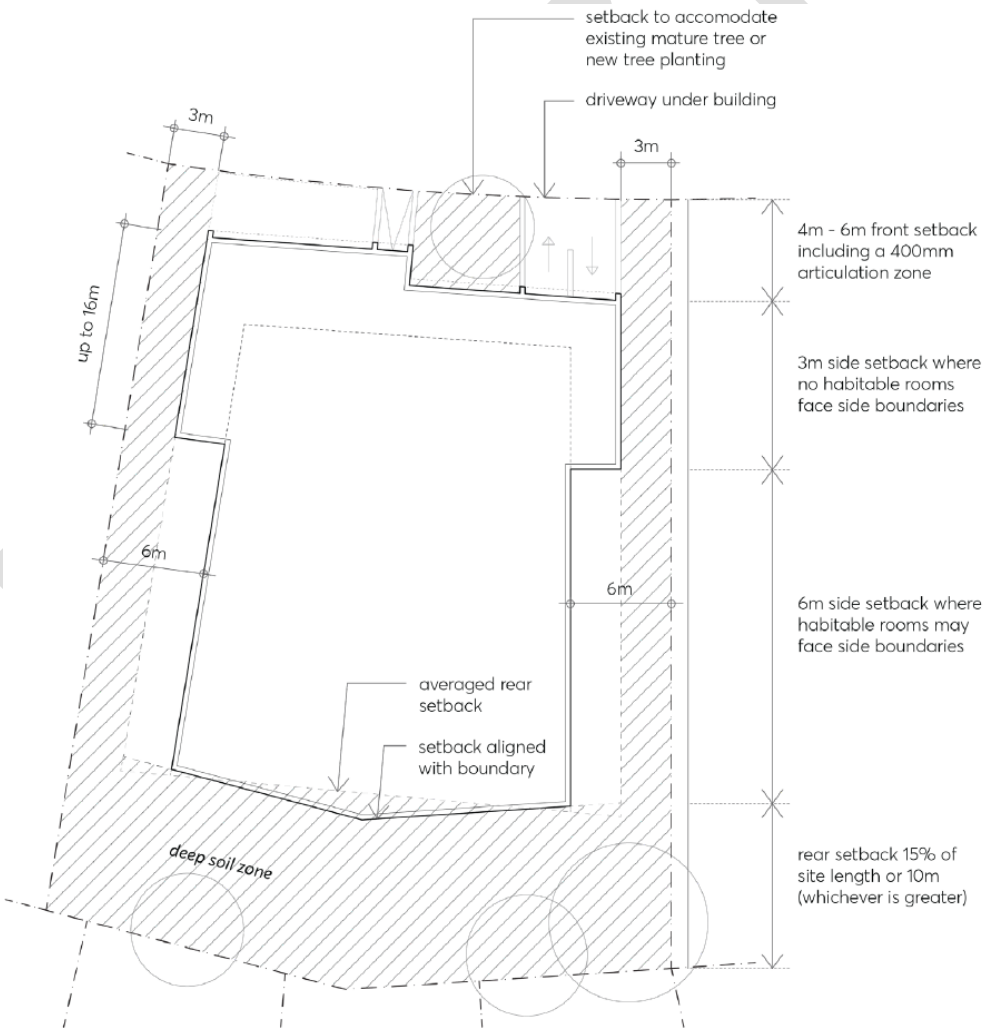


Figure 8.2.7.3.2.2 – Building Setback Plan

C.06 Buildings along the western side of Marshall Road should be designed to provide passive surveillance to the Greenway.

C.07 30% of balconies or architectural elements such as bay windows, may project up to 400mm into front building setbacks only.

C.08 Provide a minimum of 30% of deep soil zone on the site area, with the following requirements:

a) A minimum of half of the total deep soil area is located at the rear of the site.

b) A minimum of 7% of the total site area which is provided as deep soil area shall be designed to have a minimum dimensions of 6 metres (or greater). The remaining deep soil areas shall provide minimum dimensions of 4 metres (or greater). Noting that a deep soil with a minimum dimension of less than 4 metres does not contribute to the deep soil calculation.

C.09 Deep soil should be designed to create a contiguous deep soil network formed with adjacent lots.

C.10 Removal of existing trees should be avoided, and new trees should be planted, as detailed in Part 5 – Environmental Management of this DCP.

C.11 Where significant excavation is required as part of new development, it must be demonstrated that deep soil back fill must comprise constructed horticultural soil profiles in order to support local vegetation communities.

C.12 Basements are to be located predominately under the footprint of the building, as shown in Figures 8.2.7.3.2.3 and 8.2.7.3.2.4. As detailed in the Design Principles for Sloping Sites contained in this DCP, there may be conditions where basements may extend into the front setback to avoid raising from ground at the rear and/or extending into the rear setback.

C.13 Basement car parking entries are encouraged to be located under the apartment building as shown in Figures 8.2.7.3.2.4 and 8.2.7.3.2.5. Any above ground car parking structures should be of a solid, masonry construction. Vents to car parking must not be located at the street frontage.

C.14 Basement car parking structures should be predominantly located below existing ground level. Where the slope conditions mean this is unachievable, the basement structures may project to a maximum of 1 metre above ground, except within the front setback where it may project up to 1.5 metres above ground where it helps prevent re-grading the site in other locations (see Figure 8.2.7.3.2.3 Indicative Street Section).

C.15 Front setbacks are to be landscaped. Where trees are located in the front setback above a basement structure, a minimum soil depth of 1 metre above drainage layer is to be cut into the slab.

C.16 Impervious surface at ground level must be minimised in all setback areas.

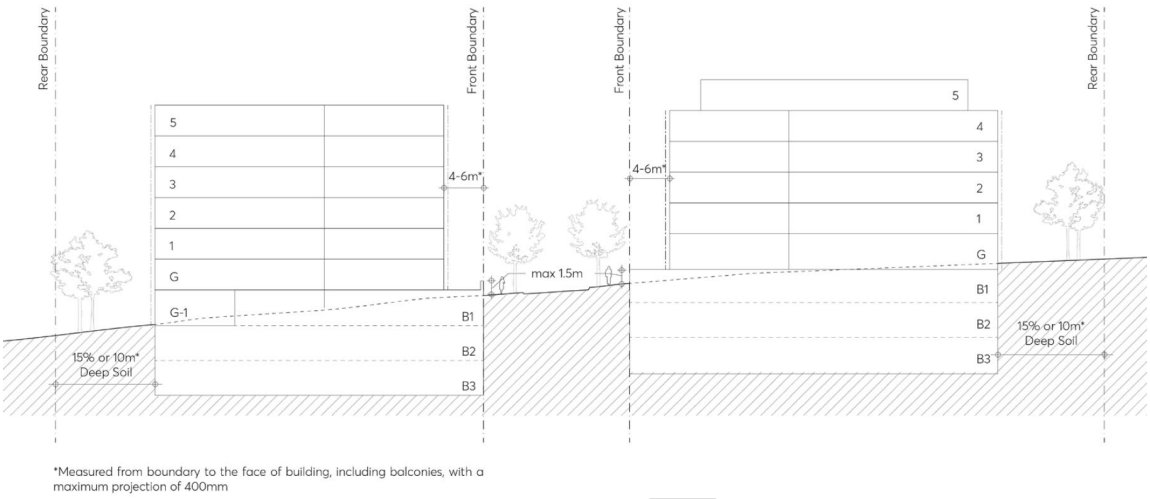


Figure 8.2.7.3.2.3 – Indicative Street Section

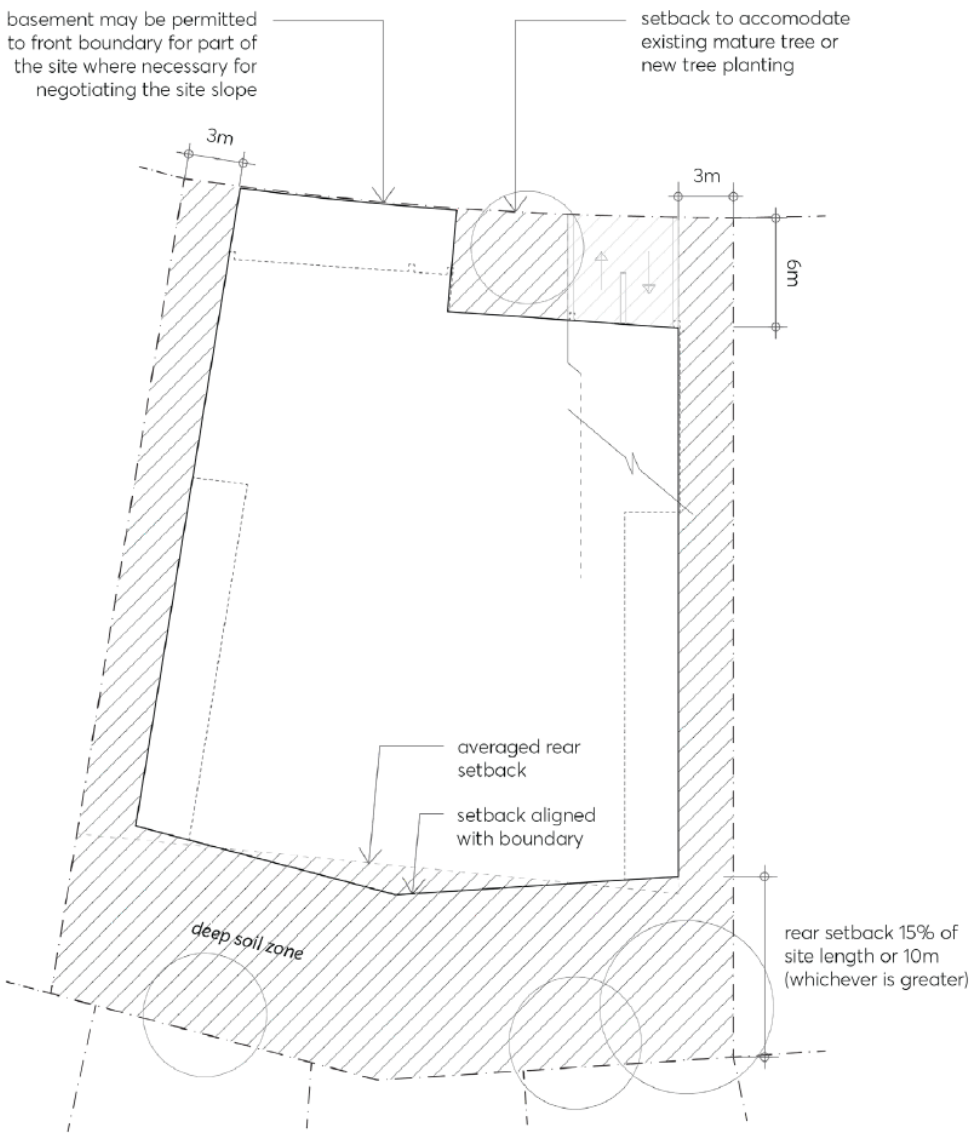


Figure 8.2.7.3.2.4 – Indicative Basement and Deep Soil Plan

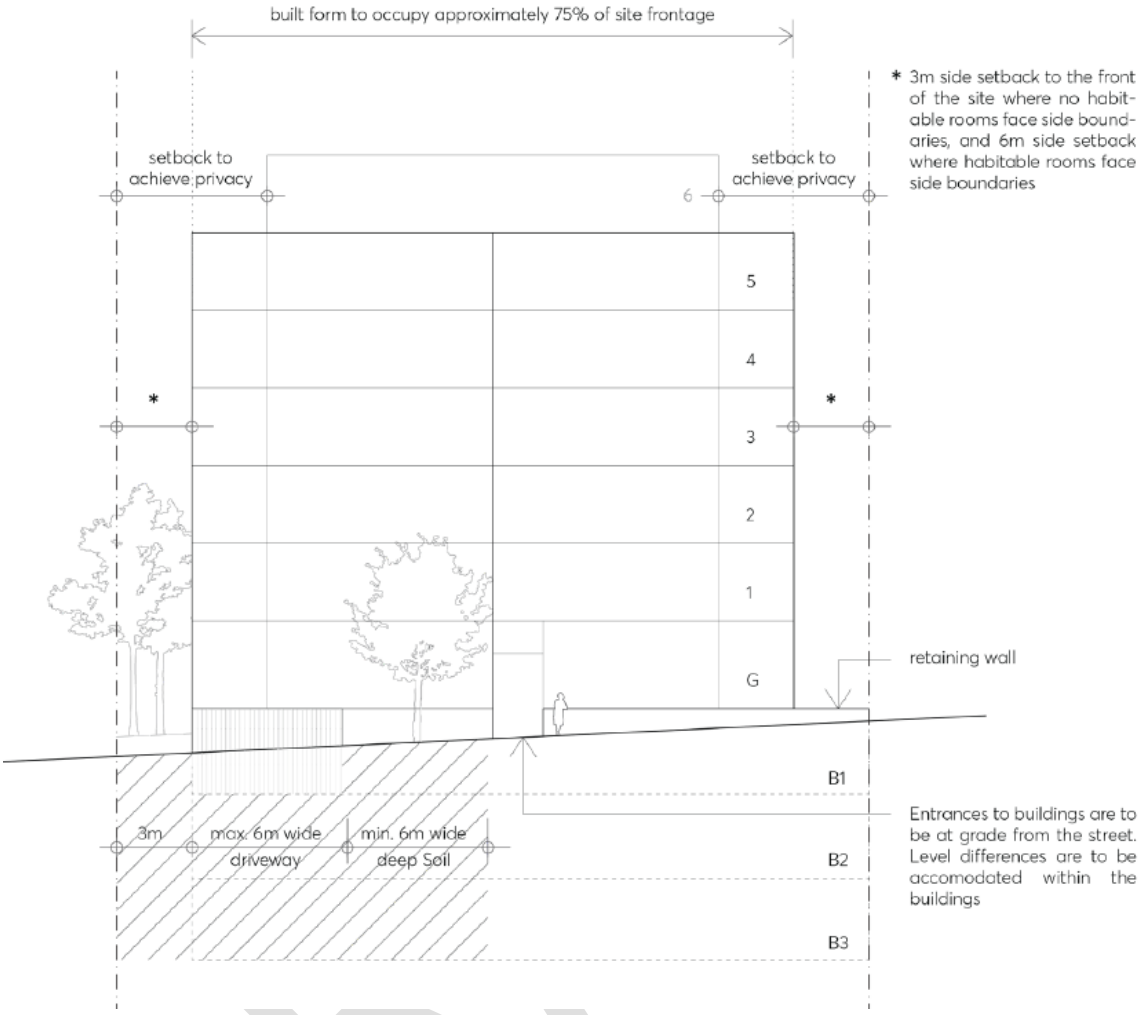


Figure 8.2.7.3.2.5 – Indicative Street Frontage

C.17 Development of 3 and 4 storeys should be designed as a street wall building.

C.18 Development of 5 and 6 storeys in height may be designed as a street wall building or provide one upper level storey setback of 3 metre from the building line, as outlined in Table 8.2.7.3.2.1.

C.19 Development of 7 and 8 storeys shall provide a 6 storey street wall and shall setback upper level storeys in accordance with Table 8.2.7.3.2.1.

C.20 Development of 9 storeys shall provide a street wall and upper level setback in accordance with Table 8.2.7.3.2.1.

Table 8.2.7.3.2.1 – Street wall and upper level storeys and setbacks

Total height (in storeys)	Street wall in storeys	Upper Storeys and Upper Level Setbacks
3 or 4 storeys	3 or 4 storeys	0

5 storeys	4 storeys; or 5 storeys	1 storey setback 3 metres from the building line; or 0
6 storeys	5 storeys; or 6 storeys	1 storey setback 3 metres from the building line; or 0
7 storeys	6 storeys	1 storey setback back 3 metres from the building line
8 storeys	6 storeys	2 storeys setback 6 metres from the building line
9 storeys	8 storeys; or 7 storeys	1 storey setback 3 metres from the building line; or 2 storeys setback 6 metres from the building line

C.21 Buildings are to occupy approximately 75% of the street frontage to maximise potential for apartments facing the street as outlined in Figure 8.2.7.3.2.5.

C.22 Where the length of a perimeter building exceeds 50 metres, it is to be broken into two or more components. Building breaks should be a minimum of 3 metres deep and 3 metres wide.

C.23 Front fences are to be designed to:

a) be articulated at any gates and visually permeable in part to enhance the feeling of address and passive surveillance along this edge of the development;

b) be integrated with dividing masonry walls (or a combination of masonry and timber) between the private open spaces where the fences relate to individual apartments facing the street;

c) be located on the front boundary and be designed to form a consistent edge along the street;

d) Not be comprised of sheet metal;

e) address the slope of the site by providing a masonry base with a minimum height of 300mm. This base should form a horizonal plinth with minimal stepping. Upper portions of the fence are to be made of open and lightweight material; and

f) be made of open and lightweight material where located above retaining walls.

C.24 Retaining walls must:

a) be located within the lot boundaries on all development lots or on the boundary if the land is within the same ownership;

b) be designed in consultation with Council if adjoining existing or future Council- owned land;

c) retain a horizontal line, with minimal stepping;

d) vary to suit the topography with a maximum height of approximately 1500mm.

e) be of fully masonry construction or a combination of masonry and timber

f) utilise terracing where necessary to subtly manipulate the existing landscape, avoiding large areas of cut and fill.

8.2.7.3.3 PUBLIC SPACE

The renewal of the Precinct presents the opportunity to deliver upgraded public spaces and new public spaces. For the purposes of this DCP 'public space' is defined as places publicly owned or for public use, accessible and enjoyable by all for free, including active and passive public open spaces, streets, pedestrian and cycleway connections and plazas.

Objectives

O.01 Provide quality public spaces domain, including publicly accessible and safe open space and plazas within new development.

O.02 Maximise the areas for contiguous deep soil network to sustain existing and new vegetation and street tree canopy planting and to provide for permeable ground surface.

O.03 Provide universal access and key connections to transport nodes (buses, light rail, taxi stand etc), community facilities and retail precinct in the Core Area.

O.04 Provide for active living and connectivity through the provision of healthy, walkable, green built environments which integrate sustainable water and energy features.

Controls

C.01 Clearly delineate public space separate from private space.

C.02 Incorporate passive and active recreational facilities to complement and enhance those already provided in Sturt Park and other nearby Council public open spaces.

C.03 Provide safe opportunities and points of interest for the community to gather / meet, walk, engage in physical activity and children's play.

C.04 Improve pedestrian connections to and between existing public spaces.

C.05 Maximise solar access to public areas during winter months and shade during summer months.

C.06 Provide flexible public spaces that provide multifunctional offerings in different areas for different activities.

C.07 Respond to local character and identity and support connection with Country in design of public space.

C.08 A Public Domain Plan is to be provided for all new developments over six (6) storeys. The Public Domain Plan is to detail:

a) Upgrades, expansion of, and connectivity improvements to the surrounding public domain network, including footpaths, cycle paths, street tree planting, green networks, street furniture, street lighting and the like.

b) Consistency with Council's Public Domain Guidelines and finishes/street trees specified should be in line with Council's preferred palette for Telopea.

c) Street and pedestrian lighting in accordance with AS/NZS 1158.0:2005 – Lighting for roads and public spaces.

C.09 All public spaces and connections are to be safe and publicly accessible 24 hours, 7 days a week.

C.10 All public space that is dedicated to Council is to be designed:

a) on deep soil with no underground car parking;

b) to maximise solar access across the year;

c) to maximise its frontage with a public road or laneway or pedestrian pathway with a minimum width of 4 metres;

d) to be associated with and support walkable connections to other public amenity such as libraries, community facilities and transportation nodes; and

e) to provide equitable universal access across the whole site; and

f) to be safe and welcoming.

C.11 Wherever possible, universal access is to be provided in the public domain or through a community facility building. Existing streets cannot be relied upon to provide universal access.

C.12 Where universal access routes for the public spaces are provided within a building, they are to be designed to be:

a) clearly visible and accessible from the public domain;

b) communicate that it is operable 24/7 without the need for signs;

c) provide protection from the weather;

d) clearly connect via the shortest distance to the nearest associated vertical access (lift).

C.13 Vertical access (lifts) and internal routes for the public to be designed to provide access to all levels and amenity between the street levels within the publicly accessible open space. In the event of a breakdown of any one vertical access (lifts), alternative systems/options to move across the site are to be integrated in to the public domain and to be clearly visible without an over reliance on signs.

C.14 The primary access point to all private buildings and vertical lifts are to be universally accessible, contained within the building. Ramps and landings do not interfere with the public domain.

C.15 Wherever possible, universal access is to be provided in the public domain or through a community facility building. Existing streets cannot be relied upon to provide universal access.

Arrival and Retail Plaza

C.16 The new hilltop Arrival Plaza and pocket park will be located adjacent to the Light Rail stop. The detailed design of the Arrival Plaza should incorporate the following:

a) Integration with the future Light Rail stop and retail services across Sturt Street.

b) Bicycle parking spaces to encourage transition between active transport and other modes.

c) Safe cycle access through the Arrival Plaza to link with the Greenway Corridor and other regional cycle connections.

d) Integration with future design of bus stop, taxi rank and pick up/drop off zones.

e) Pedestrian footpaths to provide clear sightlines and minimise the number of pathways to prevent the 'carving up' of plaza space.

f) Optimising active and passive recreational opportunities.

g) Complement and integrate with any adjacent open space, including any future retail plaza.

C.17 If a retail plaza is located between Wade Street and Sturt Street, it is to be designed to:

a) provide access to internal lifts, escalators or similar to help people move between Wade Street and Sturt Street through the retail centre;

b) be safe and publicly accessible 24 hours 7 days a week;

c) have an area of at least 600m^2;

d) achieve 3 hours of solar access to at least 300m^2 of the plaza during mid- winter; and

e) Be active which may include retail frontages, residential entrances to individual properties, residential lobbies and residential communal facilities.

New pedestrian and cycleway connections

C.18 Any new pedestrian and / or cycleway connections are to be designed to:

a) Respond to the level change by providing an accessible vertical transportation (lift, escalator and/or travelator) 24/7;

b) Have a general width of between 6 and 12 metres if the connection is for pedestrians and cyclists only. The connection may widen in order to provide for tree retention and stair landings;

c) Have clear sight lines;

d) If the connection is pedestrian only, basement parking may extend below this area, except where those areas are intended to be dedicated to Council;

e) Be safe and welcoming; and

f) Be inclusive and accessible to all ages and abilities.

8.2.7.4 NATURAL ENVIRONMENT AND HERITAGE

8.2.7.4.1 TREE PRESERVATION AND ENHANCEMENT

This Section shall be read in conjunction with Part 5 – Environmental Management of this DCP. To the extent of any inconsistency in relation to tree provisions contained in other parts of this DCP, the provisions in this Section shall prevail.

Objectives

C.01 Maintain natural amenity, increase biodiversity and reduce urban heat through preservation and enhancement of tree canopy.

C.02 Ensure the longevity of the trees through minimising disturbance to their root zone and canopy, the disruption of the subterranean water table and the reduction of solar access.

Controls

C.03 Street layout and building location and design should demonstrate viable retention of existing trees of high significance, including clusters of significant trees.

C.04 To ensure the existing canopy tree character is maintained by planning for and implementing replacement tree planting to naturally replace the existing trees.

C.05 New street trees should be planted to maximise and enhance tree canopy cover and provide opportunities for wildlife corridors.

C.06 Building setbacks and public domain should maximise deep soil zones to accommodate existing and newly planted large trees.

C.07 As part of any Development Application where a tree, as defined by Part 5 in the Parramatta DCP 20XX, is proposed to be removed, or directly impacted by the development, the following information may be required to be submitted with the application:

a) An Arboricultural Impact Assessment (AIA) report prepared by an AQF Level 5 consulting arborist and prepared in line with the *Australian Standard AS4970- 2009 Protection of trees on development sites.*

b) If there are trees to be retained, a detailed, site specific Tree Management Plan (TMP) should be provided to ensure that the design can be successfully implemented without detrimental impacts to the trees proposed for retention.

c) A Landscape Plan showing existing tree retention, protection zones and any additional trees to be planted, including in the public domain.

C.08 Where a tree is proposed to be removed, removal will only be granted where it is demonstrated that the removal of the tree will result in significant benefit in relation to built form, heritage or public domain outcomes.

C.09 If removal of a tree is required on private land, replacement trees are required to be provided as part of the Landscape Plan submitted with the Development Application as follows:

a) Approximately 1 canopy tree per 80m² of ground level landscaped area including natural deep soil area is required. Trees are to be capable of reaching a mature canopy height of 13 metres.

b) Additional trees can be provided on podium in set down slabs (not planter boxes) with minimum dimensions in accordance with Apartment Design Guide.

C.10 Tree species shall be in accordance with Council requirements as per the Parramatta DCP 20XX, Section 5.3.1 – Biodiversity.

8.2.7.4.2 NATURAL ENVIRONMENT

Two Endangered Ecological Communities, river-flat eucalypt forest and blue gum high forest, listed under the *Biodiversity Conservation Act 2016* are located within the Telopea Precinct and are identified on Figure 8.2.7.4.2.1 as Core Habitat. Any impact to Core Habitat will require further assessment at Development Application stage, including any formal impact assessments required under the relevant New South Wales and Commonwealth legislation. In relation to tree preservation and enhancement, this Section should be read in conjunction with Part 5 – Environmental Management of this DCP.

Objectives

O.01 Protect and enhance natural areas to provide habitat to native flora and fauna, as well as for the enjoyment of the community.

Controls

C.01 Future development will retain, protect and improve those areas nominated as Core Habitat in Figure 8.2.7.4.2.1.

C.02 Any enhancement of Sturt Park, where proposed, should be undertaken using native species characteristic of Alluvial Woodland and using local native provenance where possible.

C.03 The boundaries of impacted areas should be clearly delineated using fences or similar means to prevent encroachment of the works into the surrounding bushland and riparian areas.

C.04 Sediment and erosion control plans are to be submitted with each Development Application. Installation of sediment and runoff control measures are to be installed prior to any construction works commencing to prevent runoff entering adjacent riparian areas and watercourses.

C.05 Areas proposed for disturbance where noxious weeds are present should be managed according to the weed class.

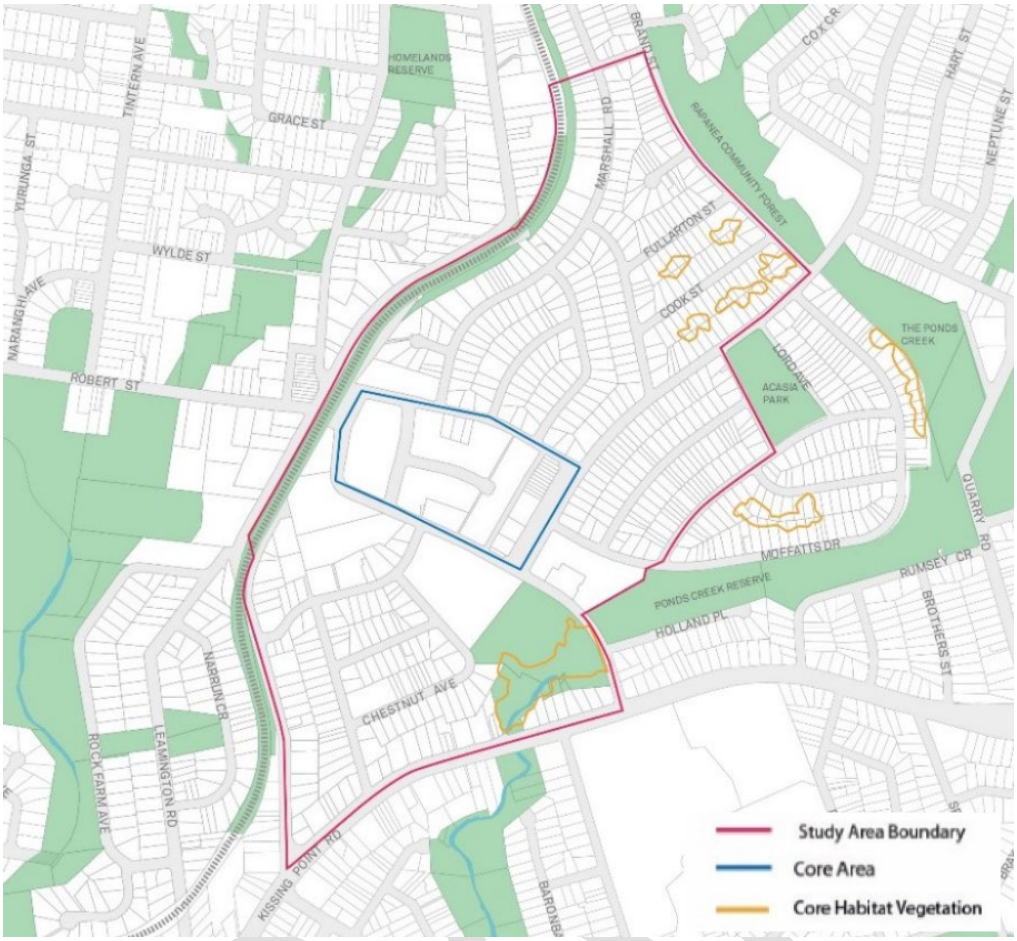


Figure 8.2.7.4.2.1 – Core Habitat

8.2.7.4.3 HERITAGE

A State heritage site, known as known as Redstone, is located at the corner of Adderton Road and Manson Street. The building was designed by Sir Walter Burley Griffin in 1935 and the garden is an intact example of an interwar garden which contributes to the setting of the house. Adjacent to the Telopea Precinct is Acacia Park, which is listed as an archaeological site under the *Parramatta LEP 2023*. The large tract of bushland known as the Rapanea Community Forest along the north-eastern edge of the Precinct is listed as a local heritage item under the *Parramatta LEP 2023*.

Objective

O.01 Any new development must demonstrate consideration of and response to minimising the impact on the heritage and archaeological significance of the listed items in Telopea.

Controls

C.01 A new development located within 200 metres of the heritage item 'Redstone' may require a specific heritage impact statement (HIS) to be submitted as part of a Development Application. This is to ensure that detailed design is sympathetic and responds appropriately to the heritage

items in terms of design, form, materiality, setbacks. Council can provide advice, prior to the submission of a Development Application, if the nature and size of the development would require the preparation of the HIS.

C.02 There will be no removal or pruning of trees shown on Figure 8.2.7.4.3.1 unless the application is accompanied by a heritage impact statement demonstrating that the removal or pruning of the tree does not detrimentally impact on the contextual setting of Redstone.

C.03 Any future development located within the Telopea Precinct and located adjacent to or facing Acacia Park and the Rapanea Forest will require a specific heritage impact statement, including consideration of potential archaeological impacts, to be submitted as part of any Development Application.

Figure 8.2.7.4.3.1 – Trees to be retained in relation to Redstone

8.2.7.5 SUSTAINABILITY

8.2.7.5.1 DUAL WATER SYSTEMS

Objectives

O.01 Increase resilience and water security by providing an alternative water supply to buildings.

O.02 Reduce the technical and financial barriers to upgrading buildings to connect to future non-drinking water supply infrastructure.

O.03 Support the growth infrastructure requirements for the Greater Parramatta Olympic Peninsula area.

Controls

C.01 All development must install a dual reticulation system to support the immediate or future connection to a recycled water network. The design of the dual reticulation system is to be such that a future change-over to an alternative water supply can be achieved without significant civil or building work, disruption or cost.

C.02 The dual reticulation system is to provide:

a) One reticulation system servicing drinking water uses, connected to the drinking water supply, and

b) One reticulation system servicing non-drinking water uses, such as toilet flushing, irrigation and washing machines. The non-drinking water system is to be connected to the rainwater tank (if available) with drinking water supply back up, until an alternative water supply connection is available.

c) Metering of water services is to be in accordance with the current version of Sydney Water's Multi-level individual metering guide. Individual metering of the non-drinking water service is optional.

8.2.7.5.2 URBAN HEAT

The following controls aim to reduce and remove heat from the urban environment at the city and local scale. These are innovative controls based on Australian and international evidence on cites and the urban heat island effect. The controls address the:

- reflectivity of building roofs, podia and facades;
- reduce the impacts of heat rejection sources of heating and cooling systems.

Solar heat reflectivity should not be confused with solar light reflectivity, as these are distinctly different issues. Solar heat contributes to urban warming and solar light reflectivity can be the cause of glare.

These controls do not consider energy efficiency or thermal comfort within buildings. These important issues are dealt with in other controls, State Environmental Planning Policies and the National Construction Code.

The following technical terms are used as part of controls in this Section of this DCP:

Solar heat reflectance is the measure of a material's ability to reflect solar radiation. A 0% solar heat reflectance means no solar heat radiation is reflected and 100% solar heat reflectance means that all of the incident solar heat radiation is reflected. In general, lighter coloured surfaces and reflective surfaces such as metals will have typically higher solar heat reflectance, with dark coloured surfaces or dull surfaces will typically have lower solar heat reflectance. External solar heat reflectance measured at the surface normal (90 degrees) is used in these controls.

Solar transmittance is the percentage of solar radiation which is able to pass through a material. Opaque surfaces such as concrete will have 0% solar transmittance, dark or reflective glass may have less than 10%, whilst transparent surfaces such as clear glass may allow 80 to 90% solar transmittance.

Solar Reflectance Index (SRI) is a composite measure of a materials ability to reflect solar radiation (solar reflectance) and emit heat which has been absorbed by the material. For example, standard black paint has a SRI value of 5 and a standard white paint has a SRI value of 100.

Reflective Surface Ratio (RSR) is the ratio of reflective to non-reflective external surface on any given façade.

Reflective surfaces are those surfaces that directly reflect light and heat and for the purposes of this DCP are defined as those surfaces that have specular normal reflection of greater than 5% and includes glazing, glass faced spandrel panel, some metal finishes and high gloss finishes.

Non-reflective surfaces are those surfaces that diffusely reflect light and heat and for the purposes of this DCP are defined as those surfaces that have specular normal reflection of less than 5%.

Maximum External Solar Reflectance is the maximum allowable percentage of solar reflectance for the external face of a Reflective Surface. The percentage of solar reflectance is to be measure at a normal angle of incidence

Objectives

O.01 Reduce the contribution of development to urban heat; and

O.02 Improve user comfort in the local urban environment (private open space and the public domain).

8.2.7.5.3 ROOF SURFACES

Objectives

O.01 Reflect and radiate heat from roofs and podium top areas;

O.02 Improve user comfort of roof and podium top areas.

Controls

C.01 Where surfaces on roof tops or podia are used for communal open space or other active purposes, the development must demonstrate at least 50% of the accessible roof area complies with one or a combination of the following:

a) Be shaded by a shade structure;

b) Be covered by vegetation consistent with the controls on Green Roofs or Walls;

c) Provide shading through canopy tree planting, to be measured on extent of canopy cover 2 years after planting.

C.02 Where surfaces on roof tops or podia are not used for the purposes of private or public open space, for solar panels or for heat rejection plant, the development must demonstrate the following:

a) Materials used have a minimum solar reflectivity index (SRI) of 82 if a horizontal surface or a minimum SRI of 39 for sloped surface greater than 15 degrees; or

b) 75% of the total roof or podium surface be covered by vegetation; or

c) A combination of (a) and (b) for the total roof surface.

8.2.7.5.4 VERTICAL FACADES

Objectives

O.01 Minimise the reflection of solar heat downward from the building façade into private open space or the public domain.

Controls

C.01 The extent of the vertical façade of street walls, podia, perimeter block development (or if no street wall, as measured from the first 12 metres from the ground plane) that comprise Reflective Surfaces must demonstrate a minimum percentage of shading as defined in Table 8.2.7.5.4.1 as calculated on 21 December on the east facing façade at 10am, northeast and southeast facing façade at 11.30am, north facing façade at 1pm, northwest and southwest facing façade at 2.30pm and the west facing faced at 4pm.

Table 8.2.7.5.4.1 – Minimum percentage shading for the street wall or first 12 metres from the ground plane of a building

Reflective Surface Ratio (RSR)	<30%	30%-70%	>=70%
Minimum percentage shading (%)	0	1.5*RSR-45	75

C.02 Calculation of RSR for each relevant façade must be submitted with the Development Application.

C.03 Shadow diagrams must be submitted with the Development Application quantifying the extent of shading at 10am, 11.30am, 1pm, 2.30pm and 4pm on 21 December for each relevant façade. Shadows from existing buildings, structures and vegetation are not considered in the calculations. Refer to Table 8.2.7.5.4.2 for sun angles corresponding to shading reference times.

C.04 Where it is demonstrated that the RSR is less than 30% shadow diagrams are not

Table 8.2.7.5.4.2 – Shading sun angles

Façade Orientation	Sun Angles
East ± 22.5∞	Reference Time: 10am AEDT (UTC/GMT+11) Sun Elevation: 51∞ Sun Azimuth: 86∞v
Northeast/Southeast ± 22.5∞	Reference Time: 11.30am AEDT (UTC/GMT+11) Sun Elevation: 69∞ Sun Azimuth: 66∞
North ± 22.5∞	Reference Time: 1pm AEDT (UTC/GMT+11) Sun Elevation: 80∞ Sun Azimuth: 352∞
Northwest/Southwest ± 22.5∞	Reference Time: 2.30pm AEDT (UTC/GMT+11) Sun Elevation: 67∞ Sun Azimuth: 290∞
West ± 22.5∞	Reference Time: 4pm AEDT (UTC/GMT+11) Sun Elevation: 48∞ Sun Azimuth: 272∞

C.05 The extent of the vertical façade of the tower (above the street wall or if no street wall, as measured above the first 12 metres from the ground plane) that comprise Reflective Surfaces must demonstrate a minimum percentage of shading as defined in Table 8.2.7.5.4.3 as calculated on 21 December on the east facing façade at 10am, northeast and southeast facing façade at 11.30am, north facing façade at 1pm, northwest and southwest facing façade at 2.30pm and the west facing faced at 4pm.

Table 8.2.7.5.4.3 – Minimum tower percentage shading

Reflective Surface Ratio (RSR)	<30%	30%-70%	>=70%
Minimum percentage shading (%)	0	0.8*RSR-24	40

C.06 Calculation of RSR for each relevant façade must also be submitted with the Development Application.

C.07 Shadow diagrams must be submitted with the Development Application quantifying the extent of shading at 10am, 11.30am, 1pm, 2.30pm and 4pm on 21 December for each relevant façade. Shadows from existing buildings, structures and vegetation are not considered in the calculations. Refer to Table 8.2.7.5.4.2 for sun angles corresponding to shading reference times.

C.08 Where it is demonstrated that the RSR is less than 30% shadow diagrams are not required to be submitted with the Development Application.

C.09 Shading may be provided by:

a) External feature shading with non-reflective surfaces;

b) Intrinsic features of the building form such as reveals and returns; and

c) Shading from vegetation such as green walls that is consistent with the controls on Green Roofs or Walls.

C.10 Non-reflective surfaces of vertical facades do not require shading and these areas can be excluded from the calculations.

C.11 Where it is demonstrated that shading cannot be achieved in accordance with the above controls, a maximum external solar reflectance as defined in Table 8.2.7.5.4.4 is generally acceptable.

Table 8.2.7.5.4.4 – Maximum solar reflectance of Reflective Surfaces

Reflective Surface Ratio (RSR)	<30%	30%-70%	>=70%
Maximum External Solar Reflectance (%)	No Max.	62.5- 0.75*RSR	40

C.12 Where multiple reflective surfaces or convex geometry of reflective surface introduce the risk of focussing of solar reflections into the public spaces:

a) Solar heat reflections from any part of a building must not exceed 1,000W/m^2 in the public domain at any time;

b) A reflectivity modelling report may be required to qualify extent of reflected solar heat radiation.

8.2.7.5.5 AWNINGS

Objectives

O.01 Ensure awnings are designed to improve user comfort, providing shelter from the sun and reduced solar heat at the street level.

Controls

C.01 All awnings and shading devices should have non-reflective surfaces

C.02 Transparent awnings are not encouraged on buildings. If transparent awnings are used, the awning must have a maximum solar transmittance of 20.

8.2.7.5.6 HEATING AND COOLING SYSTEMS – HEAT REJECTION

Objectives

O.01 Reduce the impact of heat rejection from heating, ventilation and cooling systems from contributing to the urban heat island effect in the Parramatta Local Government Area; and

O.02 Avoid or minimise the impact of heat rejection from heating, ventilation and cooling systems on user comfort in private open space and the public domain.

Controls

C.01 Residential apartments within a mixed-use development or residential flat building should incorporate efficient heating, ventilation and cooling systems which reject heat from a centralised source on the upper most roof.

C.02 Where the heat rejection source is located on the upper most roof, these should be designed in conjunction with controls in this Section of this DCP relating to Roof Surfaces and Green Roofs or Walls.

C.03 Where it is demonstrated that heat rejection cannot be achieved in accordance with the above controls C.1 and C.2 above and these units are installed, the HVAC system must demonstrate:

a) Heating, ventilation and cooling systems exceeds current Minimum Energy Performance Standard requirements; and

b) The heat rejection units are situated with unimpeded ventilation, avoiding screens and impermeable balcony walls; and

c) The area required by the heat rejection units is additional to minimum requirements for private open space.

C.04 Where a mixed use development or residential flat building proposes wintergardens as the primary private open space, no heat rejection source from heating, ventilation and cooling systems are permitted to be located in the wintergarden.

8.2.7.5.7 GREEN ROOFS OR WALLS

Objectives

O.01 Ensure that green roofs or walls are integrated into the design of new development.

O.02 Encourage well designed landscaping that caters for the needs of residents and workers of a building.

O.03 Design green walls or roofs to maximise their cooling effects.

O.04 Ensure green walls and roofs are designed and maintained to respond to local climatic conditions and ensure sustained plant growth.

Controls

C.01 Green roofs located on upper most roofs or podium levels should be designed as part of communal open space for residential development and as part of usable roof top space for commercial developments.

C.02 Green roof and wall structures are to be assessed as a part of the structural certification for the building. Structures designed to accommodate green walls should be integrated into the building façade.

C.03 Waterproofing for green roofs and walls is to be assessed as a part of the waterproofing certification for the building.

C.04 Where vegetation or trees are proposed on the roof or vertical surfaces of any building, a Landscape Plan must be submitted which demonstrates:

a) Adequate irrigation and drainage is provided to ensure sustained plant growth and health and safe use of the space;

b) Appropriate plant selection to suit site conditions, including wind impacts and solar access; and

c) Adherence to the objectives, design guidelines and standards contained in the NSW Department of Planning and Environment's Apartment Design Guide for Planting on Structures.

C.05 Green roofs or walls, where achievable, should use rainwater, stormwater or recycled water for irrigation.

C.06 Container gardens, where plants are maintained in pots, may be an acceptable alternative, however should demonstrate that the containers are of significant scale to support high quality vegetation growth for cooling and amenity.

C.07 Register an instrument of positive covenant to cover proper maintenance and performance of the green roof and walls on terms reasonably acceptable to the Council prior to granting of the Occupancy Certificate.

8.2.7.5.8 SOLAR LIGHT REFLECTIVITY (GLARE)

Objective

O.01 Ensure that buildings restrict solar light reflected from buildings to surrounding areas and other buildings.

Controls

C.01 New buildings and facades should not result in solar light reflectivity that results in glare that is hazardous, undesirable or causes discomfort for pedestrians, drivers, and occupants of other buildings or users of public spaces.

C.02 Solar light reflectivity from building materials used on facades must not exceed 20%.

C.03 Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar light reflectivity from the proposed development on pedestrians, motorists, or surrounding areas may be required.

C.04 Buildings greater that 40 metres in height require a Reflectivity Report that includes the visualisation and photometric assessment of solar light reflected from the building on the surrounding environment. Analysis is to include:

a) the extent of solar light reflections resulting from the development for each day in 15 minute intervals; and

b) A visual and optometric assessment of view aspects where solar light reflections may impact pedestrians, or drivers, occupants of other buildings or users of public spaces including assessment of visual discomfort and hazard.

8.2.7.5.9 WATER SENSITIVE URBAN DESIGN

Objectives

O.01 Manage the quantity of stormwater run-off

O.02 Protect and enhance existing natural or constructed drainage networks including channel bed and banks by controlling the magnitude and duration of erosive flows.

O.03 Ensure that downstream flora and fauna are protected from stormwater impacts during and post construction.

O.04 Minimise surcharge from the existing drainage systems.

O.05 Ensure that on-site stormwater management measures are operated and maintained in accordance with design specifications.

Controls

C.01 The development must:

a) integrate WSUD principles into the development through the design and use of 'green' stormwater systems, biological water retention and treatment and integration of water management into the landscape rather than relying on 'end of pipe' proprietary treatment devices prior to discharge.

b) employ operating practices that prevent contamination of stormwater.

c) maximise pervious surfaces and use soft landscaping and deep soil to promote infiltration and reduce stormwater run-off.

d) WSUD elements should be located and configured to maximise the impervious area that is treated through them.

e) make adequate provision for the control and disposal of stormwater run-off from the site to ensure that stormwater has no adverse impact on Council's stormwater drainage systems, natural watercourses, the development itself, or adjoining properties.

f) Stormwater drainage design criteria are to be in accordance with Council's Stormwater Disposal Policy and current Development Engineering Design Guidelines.

g) Stormwater, including overland flows entering and discharging from the site, must be managed. The site drainage network must provide the capacity to safely convey stormwater run-off resulting from design storm events listed in Council's Development Engineering and Guidelines.

h) Council will generally not permit the construction of stormwater drainage lines through public reserves.

i) The design and location of stormwater drainage structures, such as detention and rainwater tanks, is to be in accordance with Council's *Stormwater Disposal Policy* and current *Development Engineering and Design Guidelines*.

j) Run-off entering directly to waterways or bushland is to be treated to reduce erosion and sedimentation, nutrient and seed dispersal.

k) The discharge of polluted waters from the site is not permitted. Discharges from premises of any matter, whether solid, liquid or gaseous is required to conform to the *Protection of the Environment Operations Act and its Regulations*, or a pollution control approval issued by the NSW Environmental Protection Authority for Scheduled Premises.

C.02 Where site conditions mean that water sensitive urban design cannot be integrated within the landscape area, the applicant must demonstrate to Council why integration is not possible and the range of alternatives considered.

C.03 Development Applications must prepare and implement a Site Stormwater Management Plan (SSMP) incorporating water sensitive urban design measures is required. The SSMP must:

a) identify the potential impacts associated with stormwater run-off for a proposed development and provide a range of appropriate measures for water quantity, water quality, water efficiency and re-use; and

b) be developed in accordance with Council's *Stormwater Disposal Policy* and current *Development Engineering and Design Guidelines*; and

c) to the maximum extent practical, achieve pollution reduction targets identified in Table 8.2.7.5.9.1 and consider measures including vegetated swales; vegetated filter strips; sand filters; bioretention systems; permeable pavements; infiltration trenches; infiltration basins; landscape developments; Gross Pollutant Traps and filters; and

d) utilise the MUSIC modelling tool (or equivalent) to determine pollution load reduction as defined in Table 8.2.7.5.9.1; and

e) be prepared by a suitably qualified professional.

Table 8.2.7.5.9.1 – Stormwater Treatment Targets for Development

Pollutant	Performance Target reduction loads
Gross Pollutants	95% reduction in the post development mean annual load of (greater than 5mm)
Total Suspended Solids	90% reduction in the post development mean annual load of Total Suspended Solids (TSS)
Total Phosphorus	85% reduction in the post development mean annual load of Total Phosphorus (TP)
Total Nitrogen	65% reduction in the post development mean annual load of Total Nitrogen (TN)
Hydrocarbons, motor oils, oil and grease	No visible oils for flows up to 90% of the one- year ARI peak flow specific for service stations, depots, vehicle body repair workshops, vehicle repair stations, vehicle sales or hire premises, car parks associated with retail premises, places of public worship, tourist and visitor accommodation, registered clubs and pubs
NOTE: Reductions in loads are relative to the pollution generation from the same development without treatment	

8.2.8 CARLINGFORD LOCAL CENTRE

Carlingford Local Centre comprises of three precincts referred to as Carlingford Central, Carlingford South, and Carlingford East. The precinct has a notable history of Aboriginal, early colonial, agricultural, and educational uses. It has been identified as a precinct with opportunities for a range of built forms and allowing for a mix of housing styles, commercial, retail and community uses.

This Section outlines specific provisions for Carlingford Central, Carlingford South, and Carlingford East, as indicated in Figure 8.2.8.1, and must be read in conjunction with any relevant Parts of the Parramatta DCP 20XX. Where there are inconsistencies between the controls contained within this Section and other controls within this DCP, these controls prevail to the extent of the inconsistency.

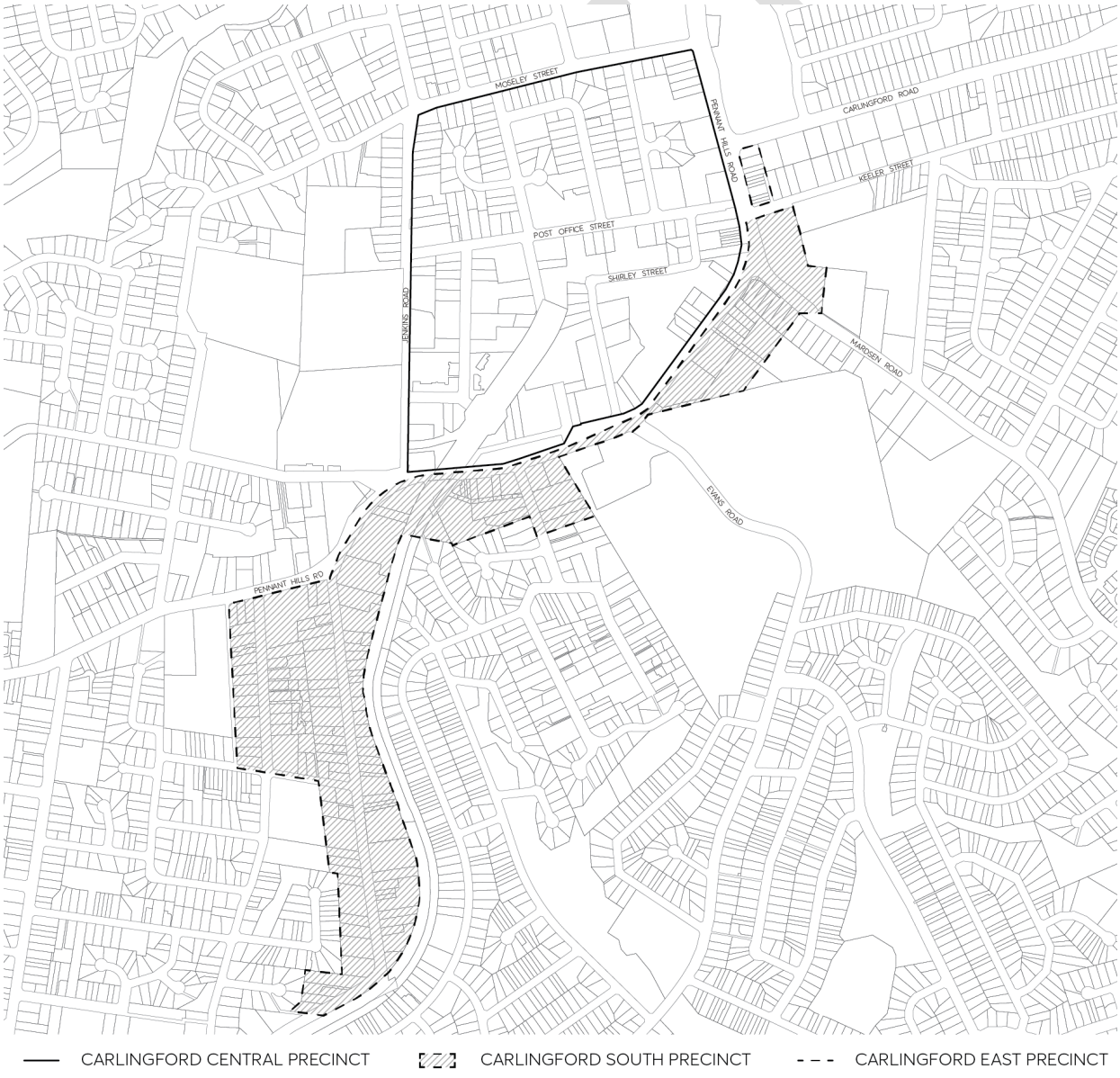


Figure 8.2.8.1 – Carlingford Local Centre

8.2.8.1 CARLINGFORD CENTRAL

This plan applies to land bounded by Jenkins Road to the west, Pennant Hills Road to the south and east and Moseley Street to the north within the City as shown in Figure 8.2.8.1.1 and referred to in this Section of this DCP as the Carlingford Precinct.

The aim of this is to provide parameters to guide development in the Precinct for a range of built forms that allow for a mix of housing styles, commercial, retail and community uses. This Section of this DCP, in association with a development contributions plan for the Precinct also proposes upgrades of open space, vehicular and pedestrian access, public realm and upgrades of existing infrastructure for electricity, drainage and roads.

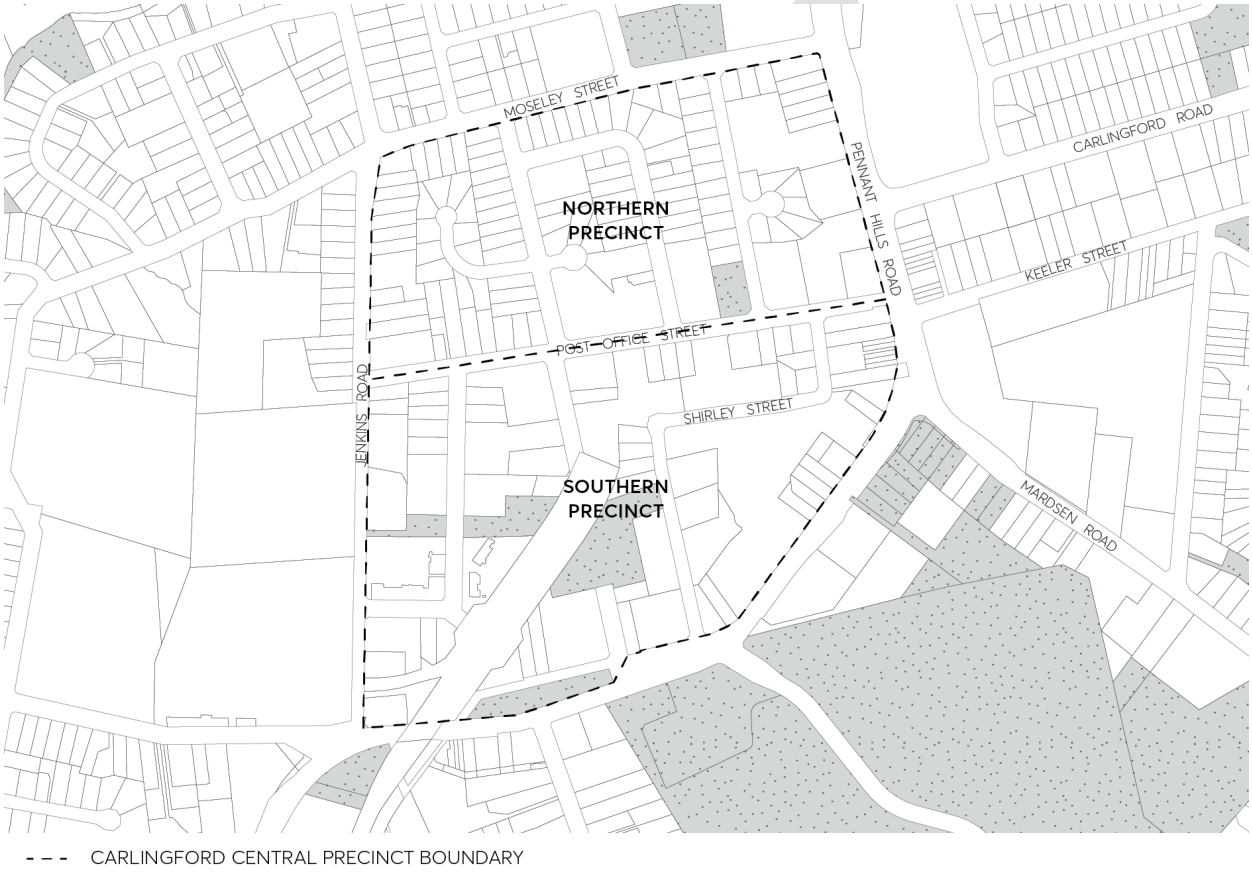


Figure 8.2.8.1.1 – Carlingford Central

8.2.8.1.1 DESIRED FUTURE CHARACTER

Southern precinct

The character of the southern end of the Precinct in the vicinity of the train station will be largely determined by the development of landmark buildings on the key sites and their role in creating street oriented village built form and character, open spaces and a civic plaza linked to the station.

In key sites affected by electricity easements, developments can contribute to publicly accessible open space with strong connections to the local open space network and civic area.

Buildings on key sites and in the southern side of the Precinct generally have been placed to provide transition in building scale and to provide natural ventilation, solar access, outlook from apartments and year round sunlight to communal open spaces.

Streetscapes are to be resident and visitor friendly in an urban landscaped setting associated with a street hierarchy that promotes a safe pedestrian and vehicular environment. The landscape works in the public realm help to define the character areas in the Precinct. These characters range from the more urban, civic and train station oriented village to the suburban character further from the train station.

North precinct

The northern end of the Precinct will comprise lower scale residential flat buildings interspersed with existing multi unit developments.

The built form of development will reflect a transition of scale between the larger residential flat buildings concentrated around the train station in the south of the Precinct and the smaller scale residential flat buildings proposed in the land north of Post Office Street.

Street setbacks are to complement the proposed garden setting in contrast to the strong street edge, activated urban village character of development closer to the train station.

Additional streets are proposed to complement this relationship of buildings to the public domain and establish a finer grained street hierarchy and built forms. Private and communal open space within developments is encouraged to visually compliment the public realm and where feasible, allow some public access.

General objectives

O.01 Provide a clear vision and the desired future character for the revitalization of the Carlingford Precinct.

O.02 Formulate structure plans and a Master plan in response to the opportunities and constraints identified and incorporating the following design concepts for the Carlingford Precinct:

- Streetscape character, particularly in the vicinity of Thallon and James Streets, including the concept of street level activity with living above and that adjacent public spaces be augmented and upgraded.
- Increased height and density, in targeted locations, will be used as a mechanism to ensure that the desired future character for the Precinct and public infrastructure can be achieved.
- Integration of floodplain management with adjoining development to achieve high quality open spaces.
- Alternative development approaches/patterns to address site specific issues within the Precinct.
- Undergrounding of local and 132kv power lines to improve streetscape appearance and street lighting.

O.03 Create a high quality, aesthetically pleasing, and functional Precinct for future residents.

Where any provision of this Section of this DCP is inconsistent with any provision of any other Part of this DCP, the provisions of this Section of this DCP shall prevail to the extent of that inconsistency.

Figure 8.2.8.1.1.1 – Communal open space with controlled public access to compliment developments (Source: Residential Flat Design Code, 2002)

Figure 8.2.8.1.1.2 – Urban character around train station with active retail on ground floor (Source: Residential Flat Design Code, 2002)

8.2.8.1.2 URBAN CONTEXT

OPPORTUNITIES AND CONSTRAINTS

The Precinct's opportunities and constraints are discussed in the supporting document for this Section of this DCP. The opportunities and constraints are synthesised in ways to provide for the development of the Precinct to the densities considered appropriate for the area while optimising urban design quality and environmental outcomes. See Figure 8.2.8.1.2.1 – Opportunities and Constraints.

There are a series of constraints that apply across the Precinct. These include the essentially immovable elements that tend to delineate, separate and punctuate the Precinct as a whole. These elements include the rail line with its station and heritage building, major roads and pedestrian routes, topography, drainage lines, existing overhead power lines and pylons. Land subject to overland flow paths occurs in both the northern and southern sides of the Precinct. Such land is both an opportunity and a constraint to development and has been influential in the structure planning for the Precinct.

Other constraints include the existing multi unit buildings that are unlikely to change due to their being under strata title, commercial developments and the fragmented pattern of land ownership.

The Precinct includes characteristics that are opportunities for development including amalgamated key sites, proximity to the railway station, topography, the relationship of sites to the road hierarchy, public open space, property boundaries, edges, nodes, slopes, drainage, roads, landmarks, existing developments, pedestrian desired lines and areas of potential high residential amenity or public activity and commercial opportunities.

The integration of the opportunities and constraints determines the suitability of a locality for a particular combination of spatial organisation, land use, built form and unit density, design approach to public realm, landscape theme, and movement system including traffic management. In this way areas of the same desired future character and built form are reflected by appropriate controls.

This process has led to the identification of a range of development scales and densities that generally decrease moving from the south of the Precinct to the north, further from the train station and village centre.

Figure 8.2.8.1.2.1. Opportunities and Constraints

KEY SITES

The major opportunity to achieve a coordinated, holistic development of the Precinct is the existence of several 'key sites'. These key sites comprise large land holdings that are mainly under single ownership, in locations critical to the establishment of a village centre and suitable for buildings containing a relatively large number of units. As a result, developments of a substantial size and complexity can be delivered promptly. In this way the development of these sites will be the catalyst for the redevelopment of the Precinct. These sites are identified as block numbers in Figure 8.2.8.1.2.2 – Key Sites and are described as follows:

Block 3	Jenkins Road and Thallon Street
Block 4	2-12 James Street
Block 6	1-7 Thallon Street
Block 17	Janell Crescent
Block 5	The 'Service station site' on corner of Pennant Hills Road and Jenkins Road
Block 16	The 'Bunnings site' at the corner of Pennant Hills Road and Post Office Street

Figure 8.2.8.1.2.2. Key Sites

This Section of this DCP recognises the role of the key sites and proposes development controls to ensure their development will contribute to achieving the objectives of this plan. The urban design, functional and socioeconomic outcomes proposed for these sites are the expression of the opportunity to:

- Provide landmark buildings denoting the core of an urban village centred around the train station, open space, pedestrian and cycle connections, and community facilities.
- Provide street level active uses and human scale in the village centre.
- Provide a substantial number of residential units in close proximity to the train station.
- Contribute to the local open space network while ensuring development applies water sensitive urban design principles.
- Provide open spaces to act as place making elements at a neighbourhood scale and the focus for outdoor activity in the areas of Janell Crescent.
- Provide landmark buildings at key gateways to the Precinct on Pennant Hills Road including the Bunnings site and the service station site.

8.2.8.1.3 STRUCTURE PLAN AND MASTERPLAN

STRUCTURE PLAN AND MASTERPLAN PROCESS

The interaction of the following parameters were analysed to inform the structure plans and masterplan:

- Access and transport.
- Stormwater management.
- Street hierarchy.
- Response of building bulk to topography.
- Design excellence (NSW Residential Flat Design Code).
- Open space and recreation.
- Public domain improvements.
- Pedestrian connections.
- Sustainability and water sensitive urban design.
- Infrastructure upgrades.
- Adaptive reuse of the railway heritage building and access to train station.
- Streetscape.

URBAN DESIGN PRINCIPLES

For each of the above parameters a set of design principles were identified. These principles are based on best practice, such as the co-location of drainage reserves and public open space.

Other principles are based on efficiency of connections and access, convenience and the synergies of place making such as locating highest residential densities close to the train station and civic areas. These principles are to ensure the creation of a quality living environment with appropriate relationship between residential buildings, public infrastructure and public realm and in response to topography.

The existing buildings of the railway station, in association with the Council owned library, future community facilities, open space and increased residential densities near the railway station provide a central focus and landmark for the Precinct and create a strong identity for the existing centre as a potential Town Centre. The following four layered series of structure plans show the major urban design proposals for the Precinct regarding:

- access and circulation.
- open space.
- public domain.
- building height and floor space ratio.

The desired future character statements for the Precinct outlined below are informed by the structure plans. Each structure plan includes a set of guiding urban design principles.

The structure plans inform the masterplan/indicative built form plans thus expressing the guiding principles. These plans show the distribution of the different built forms, the relationship of open space to built form, and the integration of outcomes to improve the public domain, open space, vehicle circulation and pedestrian links.

A set of development controls for each of the key sites are proposed as well as development standards for the whole of the Precinct and generic controls applying to all development. These provisions are set out in the following Sections of this DCP.

STRUCTURE PLAN – ACESS AND CIRCULATION

Street Hierarchy and Permeability

- Extend the northern section of Boundary Road to connect with Tanderra Street.
- Improve vehicular safety with the closure of Janell Crescent and the provision of new vehicular access arrangements from Shirley Street.
- Arrange open space and pathways to focus on the train station and link to open space/ community facilities to the east of the station also to connect to the James Ruse locality on the west of Jenkins Road (see Figure 8.2.8.1.3.2 – Structure Plan – Open Space Strategy).
- Establish a network of cycle/pedestrian access tracks throughout the open space network of the Precinct to connect with public transport links and routes beyond the Precinct (see Figure 8.2.8.1.3.3 – Structure Plan – Public Domain).

Proximity to Transport

- Locate the proposed residential flat buildings with highest density closest to the train station to maximise infrastructure use, improve convenience for commuters and to contribute to a critical mass for a future civic/transport hub.

Upgrade of existing road networks and footpath surfaces and traffic management works

- Provide progressively the road improvements and traffic management measures shown in Figure 8.2.8.1.3.1 in consultation and conjunction with Council, with possibilities for planning agreements.
- Install new signalised traffic signals and traffic management structures such as kerb blisters, medians and lane treatments in accordance with recommendations of the Carlingford Precinct Plan Traffic Report (May 2008) prepared by Masson/Wilson/Twiney Traffic and Transport Consultants.
- Install high quality pedestrian and cycle pathways in an efficient and coherent network designed to enhance the pedestrian experience.
- Improve local traffic management in accordance with the Carlingford Precinct Plan Traffic Report including the provision of a bus stop and 'kiss and ride' passenger set down area at the train station, intersection upgrades, roundabouts and signalisation.

Figure 8.2.8.1.3.1 – Structure Plan – Access and Circulation

STRUCTURE PLAN – OPEN SPACE STRATEGY

Linking of existing and potential open space areas

- The existing open space in the south of the Precinct is an opportunity to combine with the proposed open space "green spine" created by undergrounding of the electricity lines and dual use of flood prone land.
- The combination of the former easement with an overland stormwater flow path enhances the scenic and environmental outcomes of this element with the possibility of creating water features.
- Create a civic square addressing the entrance to the train station and connected to open space links associated with electricity easements.
- Install play equipment in safe and appropriate locations within open space.

Open space and built form relationships

- Several key sites close to the train station have easements for the existing electricity pylons. Once the pylons are removed, the former overhead easement can contribute to publicly accessible open space surrounding new developments and linked to the open space adjacent to Council's existing library building.
- In areas further from the train station, use key sites and flood prone land to create communal open spaces and new parks addressed by buildings. These parks help to impart a garden suburb character to complement residential buildings set in generous private / communal open space
- In areas further from the train station, site planning for buildings could aim to amalgamate private green spaces to optimise deep soil planting areas, communal open space, shared views and landscape and contribute to the garden suburb theme.

Quality residential open space areas

- Communal open space at ground or podium level for residents is to be provided. This open space should enhance the quality of the built environment by providing opportunities for landscaping in a parkland setting as well as providing a visual and activity focus for the new residential community created through this development.
- All communal open space areas are to accommodate appropriate facilities such as picnic and barbeque areas, children's play area and grassed areas for passive recreational use. Developments are to include designated communal open space areas with year round solar access.
- Water Sensitive Urban Design (WSUD) guidelines and On-site Stormwater Detention (OSD) principles are to be incorporated in both private and communal open space design.

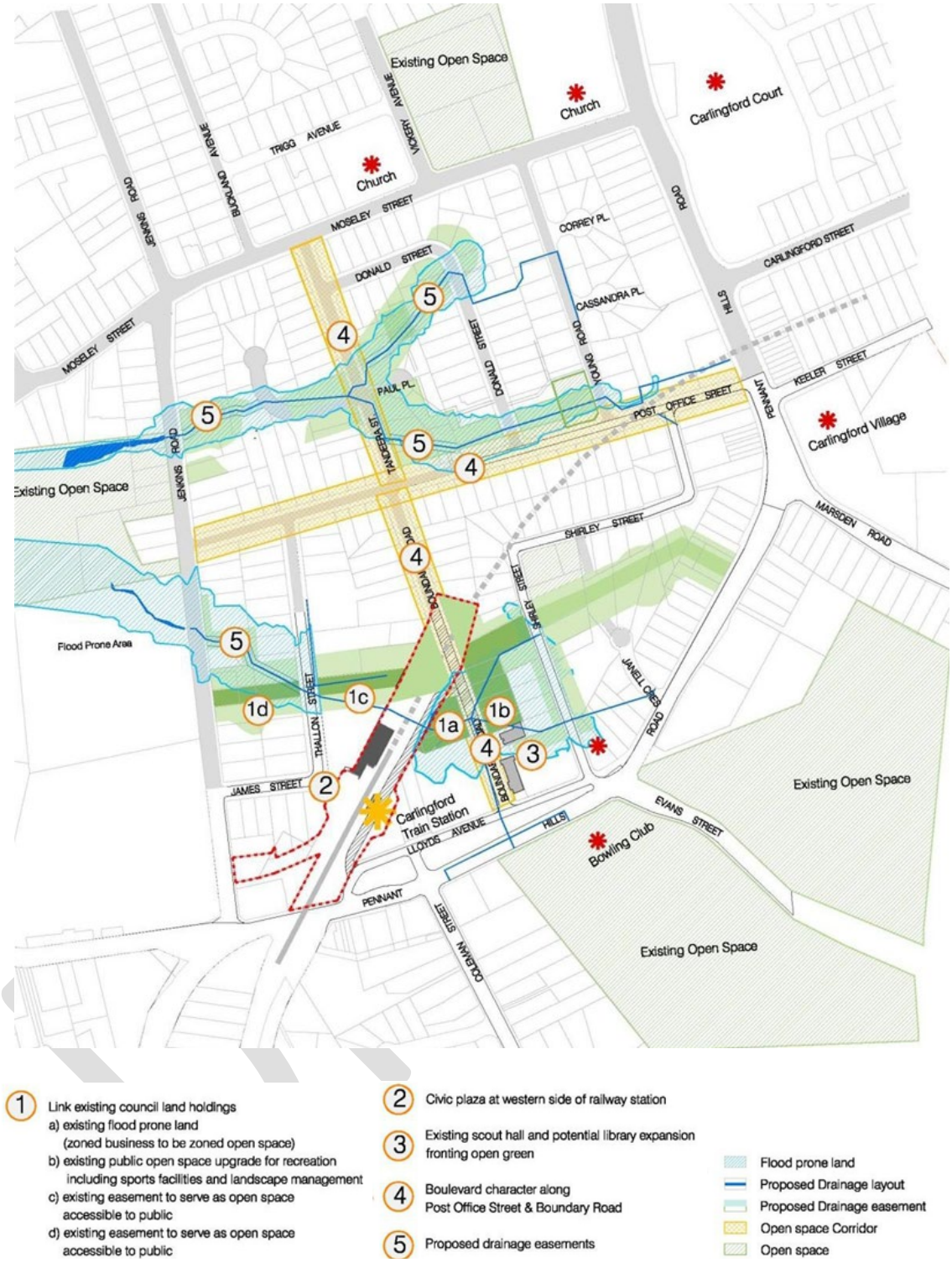


Figure 8.2.8.1.3.2 – Structure Plan – Open Space Strategy

STRUCTURE PLAN – PUBLIC DOMAIN

Streetscape

- Street tree planting and landscaping is to be consistent with the Carlingford Precinct Public Domain Plan.

Public domain improvements

- Embellish the existing public open space to the west of the rail reserve. The railway station, rail reserve and public open space near the scout hall are major organising elements in the Precinct. This is an opportunity to increase the pedestrian connections to the park and its attractiveness for recreation of the future residents of the Precinct.
- A public square on the west of the train station to act as a gateway entry point.
- Create new public parks using WSUD for floodways associated with the site amalgamations producing key sites in the Janell Crescent area.

Infrastructure upgrades

- It is proposed to underground both the street power lines and the high voltage power lines and pylons to remove the visual impact of the existing structure and provide public open space within the easement.

Pedestrian connections

- Provide improved footpath connections and unified hardscape treatment of the public realm.
- Provide cycle and pedestrian paths responding to desire lines.

Adaptive re–use of the railway heritage building

- The existing heritage building in the train station curtilage may have the potential for adaptive reuse. This would be an opportunity to add variety and activity to a future civic precinct that centres on the station and the public open space adjacent to the railway reserve.

Stormwater management

- Site planning and development generally must respond to the recommendations of Council's Carlingford Stormwater Study and Management Plan.
- On the southern side of Post Office Street a major opportunity arises from site amalgamation to provide a series of linked open spaces. These spaces could be combined with a stormwater capture system incorporating linked retention basins along the water course to form a "green spine" linking the upper Pennant Hills Road section of the Precinct to the lower section being the public open space adjacent to the railway line.
- Install a variety of bio-retention measures including grass depressions and swales on street edges and within open space.

Sustainability and WSUD

- Development in the Precinct will be required to undertake sustainability initiatives: stormwater capture, bio-retention basins, integration of watercourses with open space and landscaping.

Figure 8.2.8.1.3.3 – Structure Plan – Public Domain

STRUCTURE PLAN (INDICATIVE BUILDING HEIGHT AND FSR)

Building heights should increase the closer sites are to the train station

- Concentration of the residential density close to the station will maximise usage of the train service by the maximum number of people in the shortest, most convenient walking distance from the station.
- Concentration of high-rise buildings close to the station will provide an orienting landmark for the village centre.

Built Form Should Address Open Space

- In areas further from the train station, building placement should address adjacent open space to allow interaction of residents with that space and for passive surveillance.

Built Form Should Respond To Street Hierarchy

- In general, the low-rise buildings are proposed together with lower FSR limits on the local roads within the northern part of Precinct. This approach responds to the lower scale suburban desired future character for areas further from the train station.
- Maximum of 9 storeys is proposed for development fronting Pennant Hills Road. This is to achieve a presence associated with deep setbacks for major planting, footpath upgrades and pedestrian amenities.

ILLUSTRATIVE MASTERPLAN

Response of Building Bulk and Scale to Topography

- Site specific development controls are to be provided for Key Sites in the vicinity of the train station to minimise overshadowing and create pedestrian scale podiums containing retail and commercial uses and associated public open spaces.
- High rise developments are to be concentrated in the low ground close to the train station. This is an opportunity for the apparent height of high rise buildings to be diminished when viewed in their topographic context. The proposed building envelopes thus take up the opportunity for the prominence of tower buildings to be visually absorbed by the backdrop of the slopes leading up to the ridge lines along which runs Pennant Hills Road.
- Provide for home office and ancillary commercial and convenience retail uses on ground floor areas of developments on pedestrian routes to the train station.
- In areas further from the train station, the built form, site coverage, setbacks and composition of boundaries and building placement are to create a garden suburb character. This character should complement, in style and function, the public open space adjacent to the train station and community facilities to the east. This integrated approach is key to producing a synergy and coherence between private development and the public realm. This will be a unique place making force for a possible civic hub in the vicinity of the train station/scout hall.

Design Excellence (NSW Residential Flat Design Code)

- Buildings that are close to the train station should be in the form of a slender tower and positioned so as to minimise impacts on privacy and overshadowing of open space and adjacent development.
- Iconic buildings located at gateways, nodes and major intersections.

Built Form and Setbacks are to Relate to Street Hierarchy

- On the axial boulevards of the Precinct, built form, height and landscaping is to be of a scale that signifies the importance of these major urban elements and their intersections.
- Setbacks in the Thallon Street area are to contribute to the urban village character. Setbacks in the remainder of the southern part of the Precinct are to contribute to the landscaped character while allowing flexibility in the siting of buildings. The setbacks of proposed buildings are designed to minimise adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.
- Key sites are identified sites that can accommodate landmark buildings.
- Other key sites are identified in flood prone land that can act as dual usage parks and stormwater retention basins.

Figure 8.2.8.1.3.4 – Illustrative Masterplan

8.2.8.1.4 SITE COVEREGE AND REQUIREMENTS

Objectives

Site requirements

O.01 Encourage the amalgamation of sites thus promoting the efficient use of land.

O.02 Promote developments compatible with the desired Precinct character.

O.03 Encourage orderly development in regular allotment patterns.

Site coverage

O.04 Ensure an appropriate balance of open space surrounding buildings within their site area, reflecting the different scales of development appropriate in the north and south of the Precinct.

O.05 Provide solar access.

O.06 Control building bulk by working in conjunction with the FSR and height limits that help differentiate the desired future character appropriate in the north and south of the Precinct.

Controls

Site requirements

C.01 The minimum site area of development sites shall be consistent with the site areas specified in the potential site amalgamation plan (Figure 8.2.8.1.5.1).

Site coverage

C.02 Building site coverage shall not exceed of 35% of site area.

"Building" for the purpose of this control is defined as the building footprint to the outside of the external walls excluding underground parking structures no more than 1.2 metres above ground and where roof of the parking structure is a private or communal open space.

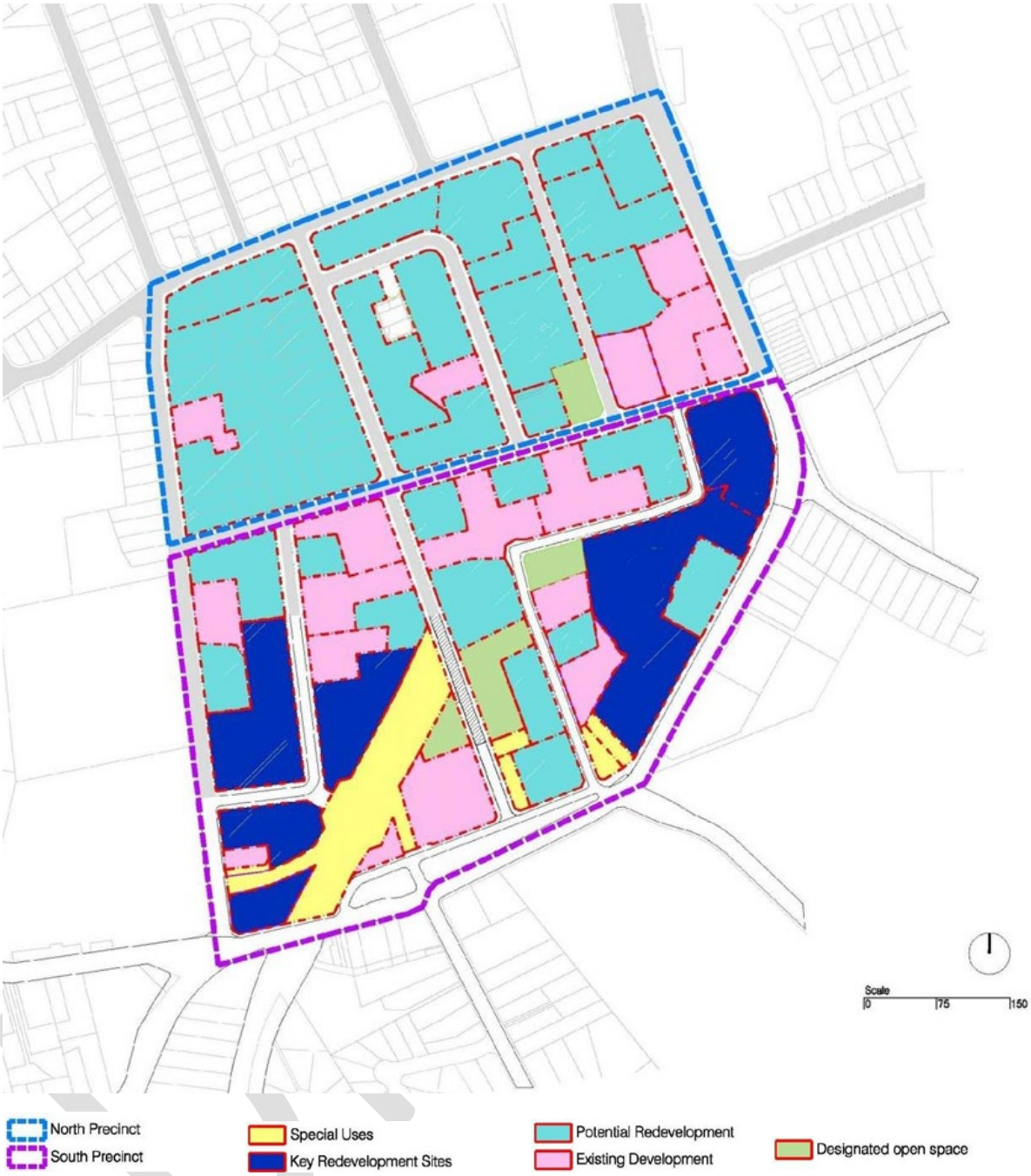


Figure 8.2.8.1.5.1. Potential Site Amalgamation Guide Plans

8.2.8.1.5 RESIDENTIAL DEVELOPMENT TYPES

Objectives

Residential flat buildings – apartment size

O.01 Provide a diversity of residential flat building/ apartment types, which cater for different household requirements now and in the future.

O.02 Maintain equitable access to new housing by cultural and socio-economic groups.

Mixed use development

O.03 Support the integration of appropriate retail and commercial uses with housing.

O.04 Create more active lively streets and urban areas, which encourage pedestrian movement, service the needs of the residents and increase the area's employment base.

O.05 Ensure that the design of mixed use developments maintains residential amenities and preserves compatibility between uses.

Ground floor apartments

O.06 Contribute to the desired streetscape of the range of localities in the Precinct and to create active safe streets.

O.07 Increase the housing and lifestyle choices available in residential flat buildings.

Controls

Residential flat buildings – apartment size

C.01 Single-aspect apartments should be limited in depth to 8 metres from a window.

C.02 The back of a kitchen should be no more than 8 metres from a window.

C.03 The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts.

C.04 Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory day lighting and natural ventilation can be achieved, particularly in relation to habitable rooms (see Daylight Access and Natural Ventilation).

Mixed use development

C.05 Choose a mix of uses that complement and reinforce the character, economics and function of the local area, for example, food retail, small-scale commercial and residential.

C.06 Desired uses at ground floor level of eighteen (18) storey buildings near the station include small supermarkets, post office, chemist, newsagent, bank and other service retail and commercial to meet the day-to-day needs of the local community.

C.07 Ensure the building positively contributes to the public domain and streetscape by:

- Fronting onto major streets with active uses.
- Avoiding the use of blank walls at the ground level.

Ground floor apartments

C.08 Optimise the number of ground floor apartments with separate entries.

C.09 Provide ground floor apartments with access to private open space, preferably as a terrace or garden.

8.2.8.1.6 BUILDING FORM

Objectives

Floor space ratio

O.01 Ensure that the bulk and scale of the development is in keeping with the site area and its surroundings in accordance with Council's ESD objective 7.

O.02 Ensure that the bulk and scale of development does not reduce the amenity of adjacent residential or other land uses.

O.03 Control the density of residential development.

O.04 Prevent excessive site coverage.

Building height

O.05 Ensure that buildings reflect the existing landform of the neighbourhood, including ridgelines and drainage depressions.

O.06 Protect privacy and amenity of surrounding residential developments and allotments in accordance with Council ESD objective 7.

O.07 Ensure that development responds to the desired scale and character of the street appropriate in different parts of the Precinct.

O.08 Allow reasonable daylight access to all developments and the public domain.

Building depth

O.09 Ensure that the scale of the development is consistent with the existing or desired future context.

O.10 Provide adequate amenity for building occupants in terms of solar access and natural ventilation.

O.11 Provide for dual aspect apartments.

Building separation and treatment

O.12 Ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings.

O.13 Provide visual and acoustic privacy for existing and new residents.

O.14 Control overshadowing of adjacent properties and private or shared open space.

O.15 Allow for the provision of open space of an appropriate size and proportion for recreational activities for building occupants.

O.16 Provide deep soil zones for stormwater management and tree planting.

Controls

Floor space ratio

C.01 Floor space ratio of a proposed development within the Precinct must not exceed the maximum ratio specified for that development site in the Floor Space Ratio Map of *Parramatta LEP 2023*.

Building height

C.02 The height of proposed development within the Precinct must not exceed the maximum height specified for that development site in the Building Height Map in *Parramatta LEP 2023*. The maximum height of the building at any point shall be measured from the natural ground level to the ridge of the roof or top of the flat roof slab or top of the parapet if there is parapet on the roof slab. Natural ground level means the actual physical level of the site as existing prior to development taking place.

C.03 For the purpose of this part of Parramatta DCP 20XX, building heights as specified in the Building Height Map in the *Parramatta LEP 2023* equal to number of storeys depicted in the following table:

Table 8.2.8.1.6.1 – equivalent storeys relevant to building heights

Building Height	Equivalent Storeys
10 metres	2 storeys
16 metres	4 storeys
21 metres	6 storeys
27 metres	9 storeys
28 metres	9 storeys, with retail at ground floor and commercial at first floor
33 metres	11 storeys
57 metres	18 storeys, with retail at ground floor and commercial at first floor

C.04 Development on sloping sites is to be stepped so that the ground floor does not exceed one metre above natural ground level immediately below any point on the ground floor.

Building depth

C.05 Building Depth: In general, a residential flat building depth of approximately 18 metres from glass line to glass line is appropriate. Developments that propose depths wider than 18 metres from glass line to glass line must demonstrate how satisfactory daylight and natural ventilation are to be achieved. The building envelope includes the articulation zone (balconies, bay windows, shading devices). Exceptions may be made to allow projections beyond the building where they are an appropriate minimum distance above the finished ground level. These exceptions do not include bay windows and balconies.

C.06 The 18 metre from glass line to glass line guideline generally applies to street wall buildings, buildings with dual aspects and buildings with minimal side setbacks.

C.07 Freestanding buildings (the big house or tower building types) may have greater depth than 18 metres only if can be demonstrated that they achieve satisfactory daylight and natural ventilation.

C.08 Building depth is to be in combination with other controls to ensure adequate amenity for building occupants. For example, a deeper plan may be acceptable where higher floor to ceiling heights allow solar access or where apartments have a wider frontage.

C.09 Building Length: In general, a residential flat building length of approximately 50 metres is appropriate. Developments more than 50 metres in length must demonstrate how satisfactory day lighting and natural ventilation are to be achieved. Note: this parameter for buildings on key sites is subject to site specific controls.

Building separation and treatment

C.10 The minimum dimensions within a development, for internal courtyards and between adjoining sites shall be:

Buildings up to 4 storeys

- 12 metres between habitable rooms/balconies.
- 9 metres between habitable/balconies and non-habitable rooms.
- 6 metres between non-habitable rooms.

Buildings from 5 to 8 storeys

- 18 metres between habitable rooms/balconies.
- 12 metres between habitable rooms/balconies and non-habitable rooms.
- 9 metres between non-habitable rooms.

Buildings 9 storeys and above

- 24 metres between habitable rooms/balconies.
- 18 metres between habitable rooms/balconies and non-habitable rooms.
- 12 metres between non-habitable rooms.

8.2.8.1.7 SETBACKS

Building setback requirements are shown in Figure 8.2.8.1.7.1 and for the Key Sites in Section 8.2.8.1.21 of this DCP. The objectives and development controls for each are set out below.

Objectives

Front setback

O.01 6 metres setback:

- Allow for the higher buildings proposed in the Thallon / James Street area to relate closely to the street.

- Allow buildings fronting Boundary Road and Shirley Street to form the basis of a more regular streetscape/built form relationship.

O.02 8 metres setback:

- Allow for new buildings along Jenkins Road to match the setback of the existing multi unit developments along the street.
- Allow visual separation from the traffic on Jenkins Road and space to install road noise attenuation structures within each development.
- Allow for buildings along Post Office Street sufficient space to provide substantial landscaping to create a boulevard character.
- In parts of the Precinct further from the train station, to allow privately owned land upon to be landscaped and embellished so as to complement the landscape themes of the public realm of the open space.

O.03 10 metres setback:

- Allow for new buildings along Jenkins Road to match the setback of the existing multi unit developments along the street.
- Allow visual separation from the traffic on Jenkins Road and space to install road noise attenuation structures within each development.
- Allow for buildings along Post Office Street sufficient space to provide substantial landscaping to create a boulevard character.
- In parts of the Precinct further from the train station, to allow privately owned land upon to be landscaped and embellished so as to complement the landscape themes of the public realm of the open space.

Side Setbacks

O.04 Minimise the impact of development on light, air, sun, privacy, views and outlook for neighbouring properties, including future buildings.

O.05 Retain or create a rhythm or pattern of development that positively defines the streetscape so that space is not just what is left over around the building form.

O.06 Allow modulation of end walls for structures higher than 4 storeys.

Rear Setbacks

O.07 Maintain deep soil zones to maximise natural site drainage and protect the water table.

O.08 Maximise the opportunity to retain and reinforce mature vegetation.

O.09 Optimise the use of land at the rear and surveillance of the street at the front.

O.10 Maximise building separation to provide visual and acoustic privacy.

Controls

Front setback

C.01 6 metres setback: The front façade of buildings are to be set back a minimum of 6 metres from the front boundary of the site.

C.02 8 metres setback: The front façade of buildings are to be set back a minimum of 8 metres from the front boundary of the site.

C.03 10 metres setback: The front façade of the building is to be setback 10 metres from the front boundary of the site.

Side and rear setbacks

C.04 Side and rear setbacks must comply with building separation, open space and deep soil zone controls in this Section of this DCP.

C.05 Rear setback is to be a minimum of 8 metres.

C.06 Side setbacks are to be a minimum of 4.5 metres to walls and 6 metres to windows from ground floor to fourth storey, and 6 metres for walls and windows above the fourth storey.

C.07 Primary and secondary setback lines must comply with building separation, open space and deep soil zone controls in this DCP.

C.08 Where setbacks are limited by lot size and adjacent buildings, internal courtyards that limit the length of walls facing boundaries may be proposed. This approach must comply with building separation, open space and deep soil zone controls in this DCP.

C.09 In general, no part of a building or above ground structure may encroach into a setback zone. Exceptions are access to underground parking structures.

C.10 A 450mm articulation zone is permitted for non floor space building elements such as fins louvers, shading devices and balconies.

C.11 Future development is to be located in accordance with the setbacks in Figure 8.2.8.1.7.1, and, for the Key Sites, in Section 8.2.8.1.21 of this DCP.

Figure 8.2.8.1.7.1. Setback Controls

8.2.8.1.8 BUILDING DESIGN

Objectives

Facades

O.01 Promote high architectural quality in residential flat buildings.

O.02 Ensure that new developments have facades which define and enhance the public domain and desired street character.

O.03 Ensure that building elements are integrated into the overall building form and facade design.

Roof design

O.04 Provide quality roof designs, which contribute to the overall design and performance of residential flat buildings.

O.05 Integrate the design of the roof into the overall facade, building composition and desired contextual response.

O.06 Increase the longevity of the building through weather protection.

Building entry

O.07 Create entrances which provide a desirable residential identity for the development.

O.08 Orient the visitor.

O.09 Contribute positively to the streetscape and building facade design.

O.10 Provide entrances that are legible, safe, accessible and well lit.

Ceiling height

O.11 Increase the sense of space in apartments and provide well proportioned rooms.

O.12 Promote the penetration of daylight into the depths of the apartment.

O.13 Contribute to flexibility of use.

O.14 Achieve quality interior spaces while considering the external building form requirements.

Balconies

O.15 Provide all apartments with private open space.

O.16 Ensure balconies are functional and responsive to the environment thereby promoting the enjoyment of outdoor living for apartment residents.

O.17 Ensure that balconies are integrated into the overall architectural form and detail of residential flat buildings.

O.18 Contribute to the safety and liveliness of the street by allowing for casual surveillance.

Internal circulation

O.19 Create safe and pleasant spaces for resident circulation.

O.20 Facilitate quality apartment layouts, such as dual aspect apartments.

O.21 Contribute positively to the form and articulation of the building facade and its relationship to the urban environment.

O.22 Encourage interaction and recognition between residents to contribute to a sense of community and improve perceptions of safety.

Acoustic and visual privacy

O.23 Limit views into adjoining private open spaces and living rooms.

O.24 Protect residents from external noise.

O.25 Contain noise between dwellings without unreasonable transmission to adjoining dwellings.

Site facilities

O.26 Provide site facilities which are adequate and conveniently located for resident needs.

O.27 Ensure facilities are practical, attractive and easily maintained.

Storage

O.28 Provide adequate storage for everyday household items within easy access of the apartment.

O.29 Provide storage for sporting, leisure, fitness and hobby equipment.

Controls

Facades

C.01 Compose facades with an appropriate scale, materials and finishes, rhythm, and proportion, which response to the building use and the desired contextual character. Design should include but are not limited to:

- defining a base, middle and top related to the overall proportion of the building.
- expressing the variation in floor to floor height particularly at the lower levels.
- articulating building entries with awnings, porticos, recesses, blade walls and rejecting bays.
- selecting balcony types which respond to the street context, building orientation and amenity of the locality.
- incorporating architectural features which give human scale to the design of the building at street level. These include entrance porches, awnings, colonnades, pergolas and fences.

C.02 High quality materials and finishes for facades such as natural stone, granite or porcelain stoneware tiles must be used for the podium level of eighteen (18) storey buildings near the station.

C.03 Design facades to reflect the orientation of the site using elements such as sun shading, bay windows, as environmental controls depending on the façade orientation.

C.04 Express important corners by giving visual prominence to parts of the façade, for example, a change in building articulation, material or colour, roof expression or increased height.

Roof design

C.05 Articulate the roof to break down its mass on larger buildings, to minimise the apparent bulk or to relate to a context of smaller building forms.

C.06 Design the roof to relate to size and scale of the building, the building elevations and three dimensional building form.

C.07 Design roofs to respond to the orientation of the site, for example, by using eaves to respond to sun access.

C.08 Minimise the visual intrusiveness of service elements by integrating them into the design of the roof.

C.09 Facilitate the use or future use of the roof for sustainable functions, for example, water management and photovoltaic applications.

C.10 Where habitable space is provided within the roof optimise residential amenity in the form of attics or penthouse apartments.

C.11 The use of roof space to provide communal open space areas incorporating facilities such as swimming pools, BBQ areas and seating is encouraged.

Figure 8.2.2.1.8.1 – Articulation of rooflines to break up roof mass. (Source: Residential Flat Design Code)

Building entry

C.12 Provide as direct a physical and visual connection as possible between the street and the entry.

C.13 Achieve clear lines of transition between the public street, the shared private circulation spaces and individual apartments.

C.14 Provide safe and secure access. Design solutions include:

- Avoid ambiguous and publicly accessible small spaces in entry areas.
- Provide a clear line of sight between one circulation space and the next.
- Provide sheltered, well lit and highly visible spaces to enter the building, meet and collect mail.

C.15 Generally provide separate entries from the street for:

- Pedestrians and cars.

- Different uses, for example, for residential and commercial users in a mixed-use development
- Ground floor apartments, where applicable.

C.16 Design entries and associated circulation space to be of an adequate size to allow movement of furniture between public and private spaces.

Ceiling height

C.17 Ceiling heights shall be measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and do not preclude higher ceilings, if desired.

C.18 In mixed use buildings: 3.3 metre minimum for ground floor retail or commercial and for first floor residential retail or commercial to promote future flexibility of use in residential flat buildings in mixed use areas: 3.3 metre minimum for ground floor to promote future flexibility of use.

C.19 In general, 2.7 metre minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non-habitable rooms, however 2.25 metres is permitted.

C.20 For two storey units, 2.4 metre minimum for second storey if 50 percent or more of the apartment has 2.7 metre minimum ceiling heights.

C.21 For two storey units with a two storey void space, 2.4 metre minimum ceiling heights.

C.22 Attic spaces shall have a 1.5 metre minimum wall height at edge of room with a 30 degree minimum ceiling slope.

Balconies

C.23 Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary the minimum standards must demonstrate that negative impacts from noise and wind cannot be satisfactorily mitigated with design solutions.

C.24 The minimum area for a balcony is $10m^2$.

Figure 8.2.8.1.8.1 – Provide residents with functional balconies (Source: Residential Flat Design Code)

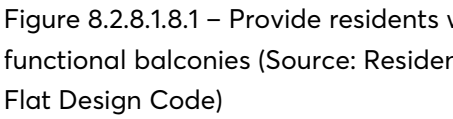
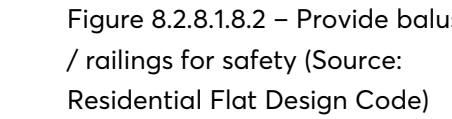


Figure 8.2.8.1.8.2 – Provide balustrades / railings for safety (Source: Residential Flat Design Code)



Internal circulation

C.25 In general, where units are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor should be limited to eight (8). Exceptions may be allowed:

- For adaptive reuse buildings.
- Where developments can demonstrate the achievement of the desired streetscape character and entry response.
- Where developments can demonstrate a high level of amenity for common lobbies, corridors and units.

Acoustic and visual privacy

C.26 The effective location of windows and balconies is preferred to the use of screening devices, high sills or obscured glass. Where these are used, they should have minimal negative effect on resident or neighbour amenity.

C.27 Direct views from the living rooms of dwellings into private open space or the interior of other dwellings should be obscured with landscaping, architectural detail and building design (refer to AMCORD).

C.28 Where minimum separation distances cannot be practically met, windows should be placed to minimise direct viewing between dwellings.

C.29 In general, dwellings are to be designed to limit the potential for noise transmission to living and sleeping areas of adjacent existing and future developments. Consideration should be given to minimising noise emissions from air conditioners, driveways and the like. This can be achieved by complying with the Building Code of Australia requirements.

C.30 Dwellings that adjoin Pennant Hills Road are to be designed to acceptable internal noise levels, based on *AS 3671 – Road Traffic Noise Intrusion Guidelines.*

C.31 Minimise direct overlooking of main internal living areas and private open space of dwellings both within and of adjoining development through building design, window locations and sizes, landscaping and screening devices.

C.32 Consider the location of potential noise sources within the development such as common open space, service areas, driveways, road frontage and provide appropriate measures to protect acoustic privacy by the careful location of noise- sensitive rooms (bedrooms, main living areas) and double glazed windows.

C.33 The location of the plant and equipment for residential flat buildings should be designed so that the noise level does not exceed the background noise level. This is to reduce background noise level creep.

C.34 In regard to the town houses and small lot integrated houses, ideal positions or specifically designed positions for any air conditioners should be provided in the plans at Development Application stage.

C.35 Air conditioners shall be located a minimum of three (3) metres from any property boundary and must not exceed 5dB(A) above the background noise level or alternatively if there is no other option and the air conditioner is located within three (3) metres of any property boundary it must not exceed the background noise level.

C.36 Private areas in a development are to be clearly recognisable.

Site facilities

C.37 Rubbish and recycling bin enclosures, letter boxes, and other site facilities should be adequate in size, durable, weather proofed and visually integrated with the development. Their location is to have regard to the protection of residential amenity, service vehicle access, visual impact and residential access.

Laundry Facilities

C.38 All apartments are to be provided with internal laundry facilities and internal drying facilities.

C.39 Laundries for town houses and small lot integrated housing shall be provided to each dwelling with a permanent or collapsible clothes line provided in a conveniently accessible courtyard.

Waste and recycling bins

C.40 Waste management requirements are to be in accordance with 3.5 of this DCP.

Waste Management Planning

C.41 Demolition and construction works must maximise the reuse and recycling of building/construction materials in accordance with Council's ESD objectives and State and Federal Government waste minimisation targets.

C.42 All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements.

C.43 All Development Applications are to be accompanied by a Waste Management Plan that demonstrates appropriate project management and construction techniques for ensuring waste minimisation including the re-use of waste on-site and off-site recycling.

C.44 The Waste Management Plan must include the following information:

- Types of waste to be produced.
- Quantities of waste likely to be produced.
- On-site and/or off-site reuse and recycling methods for waste.
- Details as to the contractor and destination of all waste materials.
- Location of on-site separation and storage facilities for waste materials.
- Design of waste management facilities for use by residents following occupation.

C.45 A Waste Data File (a file containing the Waste Management Plan together with records-waste receipts or dockets) of recycling and disposal of demolition and construction materials must be kept by the Construction Contractor responsible for the site.

A Waste Management Plan template is available in Appendix 2.

Mail Boxes

C.46 Mail boxes are to be generally incorporated into front fences, landscaped areas or integrated with individual building entry design.

C.47 Mail boxes should be in close proximity to the pedestrian entrance of all housing types, and be easily identifiable for ease of use.

C.48 The location of mail boxes and mail drop-off points will need to be confirmed with Australia Post.

Storage

C.49 In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:

a) Residential Flat Buildings

- Studio apartments – 6m^3
- One-bedroom apartments – 6m^3
- Two-bedroom apartments – 8m^3
- Three plus bedroom apartments – 10m^3

b) Multi Dwelling Housing

- As per Part 3 of this DCP.

8.2.8.1.9 LANDSCAPING AND PRIVATE DOMAIN

Objectives

Landscape design

O.01 Ensure a high quality public domain that is compatible with the achievable built forms and appropriate for the desired future character of the Precinct.

O.02 Add value to the quality of life of residents within the Precinct in the forms of privacy, outlook and views.

O.03 Improve stormwater quality and reduce quantity.

O.04 Improve the microclimate and solar performance within the development.

O.05 Improve urban air quality.

O.06 Contribute to biodiversity.

Deep soil zones

O.07 Assist with the management of the water table.

O.08 Assist with the management of water quality.

O.09 Improve the amenity of developments through the retention and/or planting of large and medium size trees.

Planting on structures

O.10 Contribute to the quality and amenity of communal open space on roof tops, podiums and internal courtyards.

O.11 Encourage the establishment and healthy growth of trees in urban areas.

Private domain

O.12 Provide residents with passive and active recreational opportunities.

O.13 Provide an area on site that enables soft landscaping and deep soil planting.

O.14 Ensure that communal open space is consolidated, configured and designed to be useable and attractive.

O.15 Provide a pleasant outlook. Provide high quality design for communal open spaces to encourage outdoor activities.

(Source: Residential Flat Design Code)

Controls

Landscape design

C.01 Development is to provide landscaping in accordance with Part 2.7 of this DCP.

C.02 Landscaping of the public domain is to be undertaken in accordance with the provisions of the Carlingford Precinct Public Domain Plan. This includes, but is not limited to, kurb and gutter construction, paving, landscaping, street furniture, lighting and street tree planting.

Deep soil zones

C.03 A minimum of 25 percent of the unbuilt upon area of a site is to be a deep soil zone. alternatively, 15% of the total site area, whichever is greater.

Planting on structures

C.04 Large trees such as figs (canopy diameter of up to 16 metres at maturity):

- minimum soil volume: 150 cubic metres
- minimum soil depth: 1.3 metre
- minimum soil area: 10 metre x 10 metre area or equivalent

C.05 Medium trees (8 metre canopy diameter at maturity):

- minimum soil volume: 35 cubic metres
- minimum soil depth: 1 metre
- approximate soil area: 6 metre x 6 metre or equivalent

C.06 Small trees (4 metre canopy diameter at maturity):

- minimum soil volume: 9 cubic metres
- minimum soil depth: 800mm
- approximate soil area: 3.5 metre x 3.5 metre or equivalent

C.07 Shrubs:

- minimum soil depths: 500-600mm

C.08 Ground cover:

- minimum soil depths: 300-450m

C.09 Turf:

- minimum soil depths: 100-300mm

C.10 Any subsurface drainage requirements are in addition to the minimum soil depths quoted above.

Private domain

C.11 The area of communal open space required should be at least 30 percent of the site area. (Larger sites may have potential for more than 30 percent.)

C.12 Provision of roof top communal open space will be considered when calculating the area of communal open space for mixed use developments with retail and commercial uses where it is not possible to provide 30 percent of the site area in communal open space at ground level.

C.13 Private open space must be readily accessible from living areas of dwelling units.

C.14 The minimum area of private open space for each apartment at ground level must be 25m^2. The minimum dimension is 4 metres.

C.15 In order to provide useable open space to dwellings above ground level, any balcony or terrace shall have a minimum area of 10m^2 and a minimum depth of 2 metres.

8.2.8.1.10 SOLAR ACCESS, NATURAL VENTILATION AND BUILDING ORIENTATION

Objectives

O.01 Ensure that solar access is provided to all habitable rooms and encouraged in all other areas of residential flat development.

O.02 Provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours.

O.03 Provide residents with the ability to adjust the quantity of daylight to suit their needs.

Natural ventilation

O.04 Ensure that apartments are designed to provide all habitable rooms with direct access to fresh air and to assist in promoting thermal comfort for occupants.

O.05 Provide natural ventilation in non-habitable rooms, where possible.

O.06 Reduce energy consumption by minimizing the use of mechanical ventilation, particularly air conditioning.

Orientation

O.07 Optimise solar access to residential apartments within the development and adjacent development.

O.08 Contribute positively to desired streetscape character.

O.09 Protect the amenity of existing development.

O.10 Improve the thermal efficiency of new buildings.

Controls

C.01 Buildings must be designed to ensure that adjoining residential buildings, and the major part of their landscape receive at least four hours of sunlight between 9am and 3pm on 21 June.

C.02 Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of four hours direct sunlight between 9 am and 3 pm on 21 June.

C.03 Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10 percent of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed (see Orientation and Energy Efficiency).

C.04 Main windows should have suitable shading or other solar control to avoid discomfort (shutters/blinds/screens/retractable awnings).

Figure 8.2.8.1.10.1 – Provide residents with means to adjust the quantity of daylight (Source: *Residential Flat Design Code*)

Figure 8.2.8.1.10.2 – Articulate built form to allow daylight access to habitable rooms (Source: *Residential Flat Design Code*)

Natural ventilation

C.05 Sixty percent (60%) of residential units should be naturally cross ventilated.

C.06 Twenty five percent (25%) of kitchens within a development should have access to natural ventilation.

C.07 Developments, which seek to vary the minimum standards must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms.

Orientation

C.08 Orient and design buildings to maximise the number of dwellings with direct sunlight where possible. Ideally, face the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in Figure 8.2.8.1.10.3.

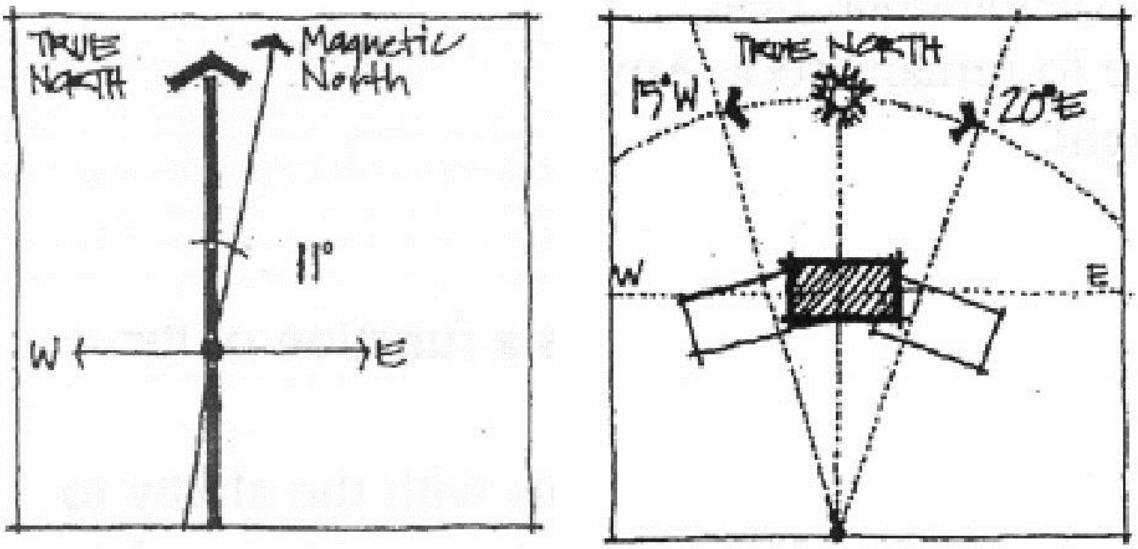


Figure 8.2.8.1.10.3: Building Orientation

C.09 Face living spaces to the north wherever possible.

C.10 No more than 10% of single aspect residential units are to face due south.

8.2.8.1.11 ACCESS AND PARKING

Objectives

Vehicle access

O.01 Ensure that vehicles may enter and leave the site in a safe and efficient manner.

O.02 Provide a legible and permeable road network.

Car parking

O.03 Ensure that all car parking demands generated by the development are accommodated on the development site.

O.04 Minimise car dependency for commuting and recreational transport use and to promote alternative means of transport including public transport, bicycling, and walking.

O.05 Provide adequate car parking for building users and visitors, depending on building type and proximity to public transport.

O.06 Integrate the location and design of car parking with the design of the site and the building.

Controls

Vehicle access

C.01 Access to the site is to be in accordance with the requirements within Part 6 – Traffic and Transport of this DCP.

C.02 Ensure vehicular ingress and egress to the site is in a forward direction at all times.

C.03 Adequate provision shall be made for service vehicle access and service areas.

C.04 Driveways are to have a minimum width of 6 metres at the property boundary for a distance of 6 metres within the development to ensure easy entry/exit of vehicles.

C.05 Access to multi-level basement car parks should be provided in the form of a two-way ramp (two lane width - minimum 5.5 metres wide) or two separate single lane (minimum 3 metres wide) ramps.

C.06 The design and configuration of access ways and driveways shall be in accordance with Part 6 – Traffic and Transport of this DCP.

C.07 Locate vehicle entries away from main pedestrian entries and on secondary frontages.

C.08 All car parking areas and spaces shall be designed in accordance with Part 6 – Traffic and Transport of this DCP.

C.09 Car parking space dimensions and gradient design shall be in accordance with the relevant Australian Standard. The relevant Australian Standard at present is *Australian/New Zealand Standard AS/NZS 2890.1:2004 - "Parking Facilities - Part 1: Off-street car parking" (AS/NZS 2890.1:2004).*

Car parking

C.10 Parking for residents is to be provided at the rate of 1 space per 1 bedroom apartment, 2 spaces per 2 bedroom apartment, and 2 spaces per 3 bedroom apartment. These car parking rates do not apply to the Key Sites identified in Section 8.2.8.1.21 of this Part of this DCP.

C.11 Visitor parking is to be provided at the rate of 2 spaces per 5 apartments for all development within the Precinct.

C.12 All car parking required by Council shall be provided on-site in accordance with the requirements of Part 6 – Traffic and Transport of this DCP.

C.13 Car parking including visitor parking shall be located underground to minimise the height of buildings above natural ground level.

C.14 Visitor parking is to be located in easily accessible and identifiable areas.

8.2.8.1.12 STORMWATER MANAGEMENT

Objectives

O.01 Control stormwater runoff and minimise discharge impacts on adjoining properties and into natural drainage systems before, during and after construction.

O.02 Minimise the impacts of residential flat development and associated infrastructure on the health and amenity of natural waterways.

O.03 Minimise the discharge of sediment and other pollutants to the urban stormwater drainage system during construction activity.

O.04 Provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways in accordance with Council's ESD objective 3.

O.05 Provide for on-site detention of site drainage.

O.06 Prevent flood damage to the built and natural environment, inundation of dwellings and stormwater damage to properties.

O.07 Ensure that proposed development does not adversely affect the operational capacity of the downstream stormwater system.

O.08 Encourage reuse, recycling and harvesting of stormwater to reduce wastage of water.

O.09 Encourage a reduction in water consumption.

Controls

C.01 Drainage easements will be required where the development property does not drain directly into the existing stormwater drainage system or a public road. Development Consent will not be issued until the submission of documents demonstrating the creation of any necessary easements over downstream properties.

C.02 Developments must comply with any requirements of the Sydney Catchment Management Authority.

C.03 On-site detention, water recycling, or water quality management systems may be required to Council's and/or the Sydney Catchment Management Authority requirements, to counteract an increase in stormwater runoff.

C.04 Drainage systems are to be designed and constructed in accordance with the design guidelines set out in Section 5.1 of this DCP.

C.05 Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.

C.06 Where necessary, downstream amplification of existing drainage facilities will be required including Council infrastructure if required.

C.07 Water Sensitive Urban Design (WSUD) principles shall be employed in the management of the site's stormwater in terms of water retention, reuse and cleansing in accordance with the *Water Sensitive Urban Design Technical Guidelines for Western Sydney* published by the Upper Parramatta River Catchment Trust (May 2004). In this regard the drainage design is to include measures to manage the water quality of stormwater runoff. At a minimum the design is to integrate bio retention filters along roadways, driveways and within open space areas.

C.08 On-site detention tanks are only permitted in common areas within a proposed development (for example driveways, common open space and not within private courtyards).

C.09 Drainage systems are to be designed and constructed in accordance with the design guidelines set out in Part 6 – Traffic and Transport of this DCP and/or the Sydney Catchment Management Authority.

C.10 On-site detention systems, where required, are to be designed in accordance with (a) above.

Note: Where land is identified as flood controlled land, please refer to Section 5.1.4 of this DCP.

8.2.8.1.13 FLEXIBILITY

Objectives

O.01 Encourage housing designs which meet the broadest range of the occupants' needs possible.

O.02 Encourage adaptive re-use.

O.03 Save the embodied energy expended in building demolition.

Controls

C.01 Provide robust building configurations, which utilise multiple entries and circulation cores, especially in larger buildings over 15 metres long.

C.02 Utilise structural systems, which support a degree of future change in building use or configuration. Design solutions may include:

- A structural grid, which accommodates car parking dimensions, retail, commercial and residential uses vertically throughout the building.
- The alignment of structural walls, columns and services cores between floor levels.
- The minimisation of internal structural walls.
- Higher floor to floor dimensions on the ground floor and possibly the first floor.

8.2.8.1.14 PUBLIC DOMAIN

Objectives

Fences and walls

O.01 Define the edges between public and private land.

O.02 Define the boundaries between areas within the development having different functions or owners.

O.03 Provide privacy and security.

O.04 Contribute positively to the public domain.

Awnings

O.05 Provide shelter for public streets.

O.06 In that part of the Precinct closer to the train station, to ensure signage is consistent with desired streetscape character and with the development in scale, detail and overall design.

Controls

Fences and walls

C.01 The fencing materials chosen must protect the acoustic amenity and privacy of courtyards. Courtyard fences shall be constructed of masonry.

C.02 Where residential buildings are required to be set back 10 metres from the front boundary, fencing / walls fronting a street shall be setback a minimum of 2 metres. This is to allow for consistent street edge landscaping, and shall include recesses and other architectural features.

C.03 All fencing or walls shall be combined and integrated with site landscaping.

C.04 The following fencing materials or finishes are not acceptable because of their poor visual appearance:

- Pre-painted, profiled metal sheeting.
- Rendered finishes when the entire fence is rendered.

C.05 The use of natural materials is encouraged.

C.06 Front fences should not be of a height so as to prevent casual surveillance of the public realm and adjacent prosperities.

C.07 In mixed use developments containing non residential uses on the ground floor, front boundaries should be defined by accessible paved and landscaped areas to demarcate public from private realm.

C.08 Ground floor retail edges should have barrier free access and public amenities such as awnings.

Combined wall/fencing materials with planting elements to soften the hard edge (Source: Residential Flat Design Code)

Awnings

C.09 Encourage pedestrian activity on streets by providing awnings to retail strips, where appropriate.

C.10 Contribute to the legibility of the residential flat development and amenity of the public domain by locating local awnings over building entries.

C.11 Enhance safety for pedestrians by providing underawning lighting.

8.2.8.1.15 ADAPTABLE HOUSING

In order to provide for disabled people and the aging population, apartments must be capable of adaptation so as to accommodate residents who may have special needs, declining mobility and sight. This is in addition to being appropriately designed for everyday pedestrian use.

Objectives

O.01 Ensure that developments provide appropriate and improved access and facilities for all persons (consistent with the provisions of Australian Standard AS1428.1-1998).

O.02 Ensure designers/developers consider the needs of people who are mobility impaired and to provide greater than the minimum requirements for access and road safety.

O.03 Ensure that building design does not prevent access by people with disabilities.

O.04 Incorporate design measures that are appropriate for people with disabilities.

Controls

C.01 Development to provide housing for a cross section of the community.

C.02 All Development Applications for residential flat buildings should be accompanied by a report prepared by a suitably qualified Access Consultant addressing access and mobility provisions within the development.

C.03 All apartments required under this Section of this DCP to be adaptable dwellings and those which cannot be directly accessed from ground level are to be served by a lift.

C.04 Units with a floor level within 1.5 metres of the natural ground must be accessible to the front door of each unit.

C.05 At least 1 unit in each residential flat building with less than 20 units, or 5 percent of the units in any development of 20 or more units, must be either:

- An accessible unit to AS 1428 Part 2, suitable for occupation by a wheelchair user. or
- Meet Class B adaptability provisions under AS 4299.

C.06 Each unit so provided above shall have an accessible car parking bay complying with AS 2890 for people with a disability, and be accessible to a pick-up and drop-off point. An accessible route between the unit's dedicated car parking spaces and unit shall be provided.

C.07 All stairs intended for circulation between levels, whether external or internal, shall comply with AS 1428 Part 1, if they are located on common property.

C.08 At least 10% of toilets (but not less than 1 male and 1 female toilet) provided on the common property must be wheelchair accessible.

C.09 At least one entry to any common facilities on the common property must be wheelchair accessible.

C.10 An accessible pick-up and drop-off point can be located on the public road (with Council or RMS permission) or on the site, but it must allow for vehicles up to a coaster size bus to pick up and drop off.

C.11 Apartments are to be designed to permit adaptation of units so that they can change to meet future needs. Design features that might be included are:-

- Lightweight or non-load bearing walls that can be removed to re-configure rooms.
- Wall panels that can be easily removed to connect adjoining apartments and cater for largest extended families.

Development Applications should address provisions contained in Part 2.11 Access for People with a Disability.

8.2.8.1.16 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Ecologically Sustainable Development (ESD), as identified in the National ESD Strategy, refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It embodies the responsibility to maintain ecological processes

(biodiversity and life support systems), quality of life and social interactions within a productive economic environment.

In order to fulfil Council's statutory responsibilities as required by Schedule 2 of the *Environmental Planning and Assessment Regulation 2000 and* the *Local Government Amendment (ESD) Act 1997* and to meet its adopted goals and objectives as defined in Council's Environmental Management Plan development is required to comply with the Council's Sustainability Objectives.

Objectives

O.01 Apply precautionary principles where development is likely to cause short or long-term irreversible or serious threats to the environment.

O.02 Address and allow for broad community involvement in respect to local issues of concern throughout the development process.

O.03 Ensure that during the design, construction and operation of the development, that water leaving the site is of a quality and quantity comparable to that which is received.

O.04 Ensure that biodiversity, and the integrity of ecological processes, are not compromised by the development.

O.05 Promote the following during the design, construction and operation of any development:

- The use of energy efficient materials and designs.
- Utilisation of renewable energy and materials.
- Energy efficient technology.

O.06 Follow the principles of the 'Waste Hierarchy' (reduce, reuse, recycle) in the use of materials and the design of waste recovery and disposal systems throughout the development process.

O.07 Protect neighbourhood amenity and safety in the design, construction and operation of the development.

O.08 Encourage the long term economic viability and health of the community in the development process.

O.09 Encourage the use of public transport, use of bicycles and pedestrian trips in the development and design process.

Controls

C.01 As part of the Statement of Environmental Effects required to be submitted with all Development Applications a summary of the action taken in order to achieve these objectives must be included.

C.02 To improve the air quality of the locality, the installation of wood heaters is not permitted.

8.2.8.1.17 ACCESS, SAFETY AND SECURITY

Objectives

O.01 Site and dwelling layouts are to ensure safe and convenient passage for residents and visitors.

Controls

C.01 Consideration should be given to the needs of residents in regard to prams, wheelchair access and people with disabilities.

C.02 Footpaths, landscaped areas and driveway designs are to provide opportunities for surveillance and allow for the safe movement of residents and visitors.

C.03 Apartments and town houses are to have adequate lighting in commonly accessible areas.

C.04 Stairs and ramps are to have reasonable gradients and non-slip even surfaces. Refer to AS 1428.1 – 1988 Design for Access and Mobility and supplementary AS 1428.2 – 1992.

C.05 Access to dwellings is to be direct and without unnecessary barriers. For example, use ramps instead of stairs/steps, consider the height and length of handrails and eliminate changes in level between ground surfaces.

C.06 Development Applications should address provisions contained in Part 2.14 Safety and Security.

C.07 Private areas in a development are to be clearly recognisable.

8.2.8.1.18 GEOTECHNICAL

Objectives

O.01 Ensure the possibility of soil movement or slip does not adversely affect proposed development.

Controls

C.01 All Development Applications submitted to Council shall be accompanied by geotechnical appraisal report from a suitably qualified experienced Geotechnical Engineer.

C.02 The geotechnical appraisal report must satisfy Council that the possibility of soil movement or slip will not affect the proposed development of the site and outline recommendations to ameliorate any geotechnical impacts.

8.2.8.1.19 UNDERGROUNDING OF EXISTING POWER LINES

Objectives

O.01 Improve streetscape/public domain appearance.

O.02 Utilise the former overhead easements for open space and drainage purposes.

Controls

C.01 The existing overhead high voltage power lines on a development site must be undergrounded in accordance with the requirements of the relevant power supply authority and respective controls in *Parramatta LEP 2023*.

C.02 A letter/correspondence from the relevant power supplying authority confirming that the applicant has consulted and made prior arrangements with the authority to underground the existing high voltage power lines within the site must be submitted with the Development Application.

C.03 Applicants are required to make satisfactory arrangements with Integral Energy for the provision of underground electricity to the site in accordance with Integral Energy's *Network Connection Contestable Works General Terms and Conditions Policy*.

C.04 Applicants are required to make satisfactory arrangements with the relevant authority(s) for the provision of underground telecommunications services to the site.

C.05 A new easement for undergrounded electrical works satisfying the relevant authority must be provided on-site. This is to enable any future maintenance works for the undergrounded network.

8.2.8.1.20 DEVELOPMENT NEAR RAIL CORRIDORS

Objectives

O.01 Minimise adverse impacts on rail safety.

O.02 Minimise impact of rail noise and vibration adjoining development.

Controls

C.01 New development and structures adjacent or near RailCorp facilities shall allow continued access to the rail corridor for maintenance.

C.02 Buildings should be designed so that objects cannot be thrown from windows or balconies into the rail corridor. This could be achieved through providing windows with a limited range of opening such as louvers, and by enclosing balconies.

C.03 All balcony and window design should meet the relevant BCA standards.

C.04 If excavation is involved, a geotechnical or site stability report needs to be prepared as part of the application.

C.05 Sound level in any bedroom must not exceed 35db(A) at any time between 10.00pm and 7.00am, and anywhere in the building (other than a garage, kitchen, bathroom or hallway) – 40db(A) at any time.

C.06 If Council is of the view that development is likely to be affected by rail noise or vibration, a consent shall not be granted unless it is satisfied that appropriate measures will be taken to ensure that above sound levels are not exceeded.

C.07 New development and structures adjacent or near RailCorp facilities must allow continued access to the rail corridor for maintenance.

8.2.8.1.21 KEY SITES BUILT FORM CONTROL

The controls for the development on these sites are set out below in the form of objectives, development standards and diagrams. These controls prevail over the Precinct Built Form Controls to the extent of any inconsistency.

General controls

C.01 Refer to LEP Building Height Map – Carlingford Precinct

C.02 Refer to LEP Floor Space Ratio Map – Carlingford Precinct

C.03 Residential car parking requirements are as follows:

0.8 space/ 1 bedroom unit

1 space/ 2 bedroom unit

1.3 spaces/ 3 bedroom unit

2 visitor spaces/ 5 units

BLOCK 3: JENKINS ROAD AND THALLON STREET

Objectives

O.01 To ensure optimal mix of uses within buildings by specifying FSR components for residential and commercial uses.

Controls

C.01 Retail and commercial uses are limited to ground floor.

Building height

C.02 By virtue of its location close to the train station, this site has the ability to provide development of substantial height to contribute to a landmark to denote the village centre. The eighteen (18) storey height limit for the tower on this site achieves this objective.

C.03 The placement of 2 x 18 storey towers maximises solar access to the ground level of the site and to the above ground units. also to minimise overshadowing of adjacent buildings and open spaces.

C.04 The six storey podium height for this key site provides street frontage development in a form and scale comfortable for civic life of the village centre and to allow for ground floor active uses. The placement and orientation of the eight (8) storey tower on the corner of James and Thallon Streets minimises overshadowing of development to the south.

Floor space ratio

C.05 The FSR limit for the key sites which are closer to the train station is higher than for sites further from the station. This is to encourage developments of substantial size thus creating a critical mass for the village centre.

Building footprint, site coverage, and deep soil cover

C.06 Due to the electricity line / floodway easements, the building footprint is limited to 40% of the site. This allows adequate deep soil provision.

C.07 Open space on the site is concentrated to its north side so as to maximise its amenity. This placement of open space maximises its ability to operate in conjunction with the open space of the former electricity easement to adjacent to the north.

C.08 Deep soil planting must be a minimum 15% of total site area.

C.09 The building site coverage must be a maximum of 40%.

Setbacks

C.10 Setback from Thallon and Jenkins Streets:

Eight (8) metre setback is required to ensure adequate solar access to the development and open space to the south. This setback also allows for landscaping and street tree planting. The setbacks from Thallon Street may be reduced to 6 metres for the first two storeys to encourage street level pedestrian activity.

C.11 Setback from James Street:

Six (6) metre setback is required to allow for landscaping and street tree planting.

Vehicular access

C.12 Vehicle access points must be provided as indicated in Figure 8.2.8.1.21.1.

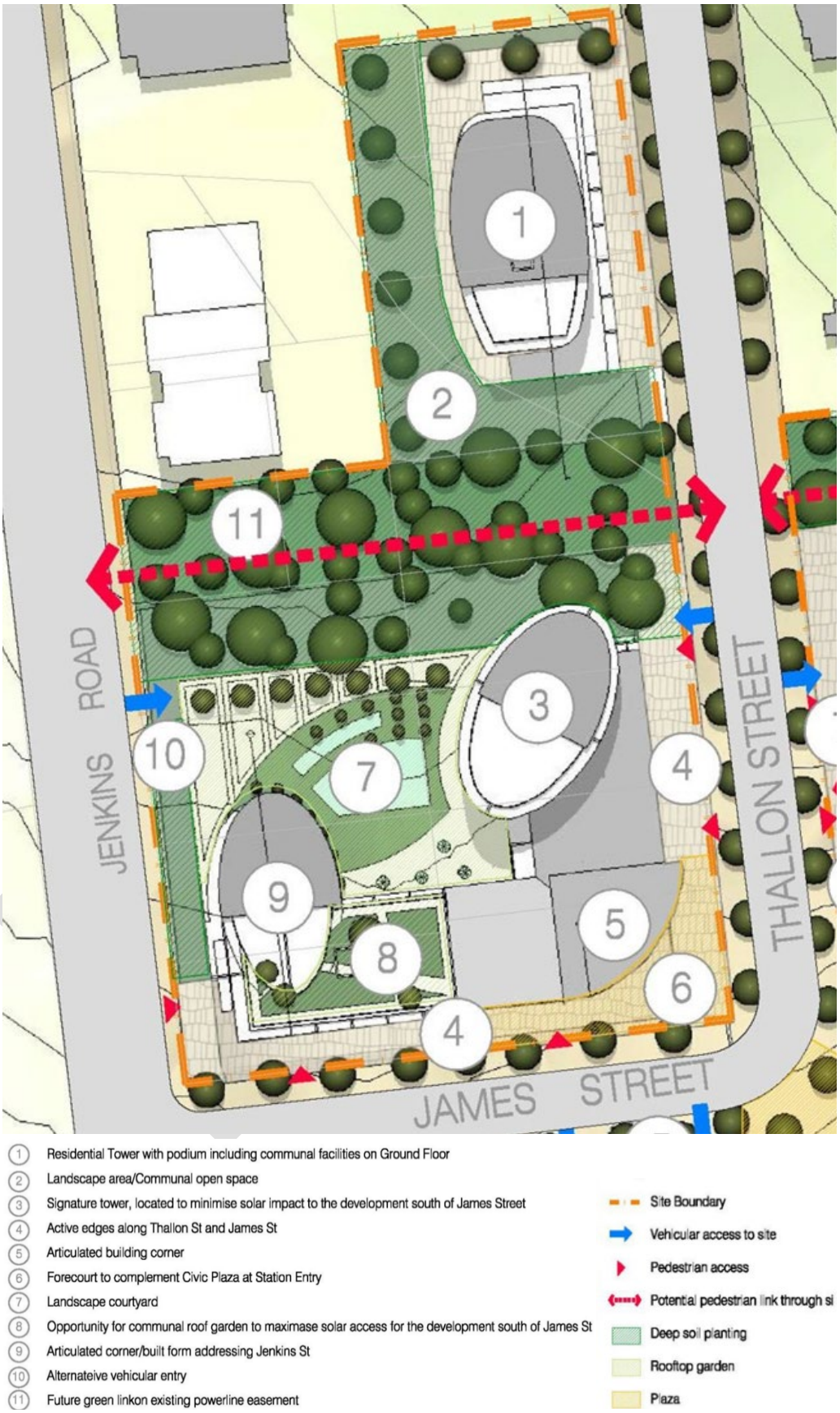


Figure 8.2.8.1.21.1 – Conceptual Built Form Controls: Block 3 Jenkins Road/Thallon Street

Figure 8.2.8.1.21.2 – Dimensional Built Form Controls: Block 3 Jenkins Road/Thallon Street

BLOCK 4: 2-12 JAMES STREET

Objectives

O.01 To ensure an optimal mix of uses within buildings by specifying distribution of residential and commercial uses within the building.

Controls

C.01 Retail and commercial uses are limited to ground floor.

Building height

C.02 Nos. 2-12 James Street, by virtue of their location close to the train station, have the ability to provide development of substantial height to contribute a landmark to denote the village centre.

C.03 The development of Nos. 2-12 James Street should provide for orderly development by maximising opportunities for a shared basement layout and common open areas.

C.04 Using the above urban design principles, Nos. 2-12 James Street may achieve two 18 storey towers. Placement of the towers minimises overshadowing of adjacent buildings and open spaces to the south (Figure 8.2.8.1.21.3).

C.05 The six storey podium on Nos. 8-10 James Street provides development to the street frontage in a form and scale commensurate with the civic life of the village centre and to allow for ground floor active uses.

C.06 Nos. 2-6 James Street will be developed to a maximum height of six storeys to maintain sufficient solar access to the existing low rise buildings to the south.

Floor space ratio

C.07 Due to its close proximity to the train station, the FSR limit for this key site is higher than sites further from the train station. This is to encourage developments of substantial size thus creating a critical mass for the village centre.

Building footprint, site coverage, and deep soil cover

C.08 Due to the more urban context to the site, a greater site coverage is appropriate. The building footprint is limited to 55% of the site. This allows deep soil provision of a minimum 15% of the total site area.

C.09 Due to the more urban context to the site open space is provided on a rooftop podium.

C.10 Deep soil planting must cover a minimum 15% of the total site area.

C.11 The building site coverage must be a maximum of 55%.

Setbacks

C.12 Refer to Figure 8.2.8.1.21.4. The setbacks from the irregular boundaries of this key site vary in response to the need to provide solar access, pedestrian circulation space and to introduce modulation in the street wall.

Vehicular access

C.13 Vehicle access points must be provided as indicated in Figure 8.2.8.1.21.3.

Figure 8.2.8.1.21.3 – Conceptual Built Form Controls: Block 4 2-12 James Street

Figure 8.2.8.1.21.4 – Dimensional Built Form Controls: Block 4 2-12 James Street

BLOCK 6: 1-7 THALLON STREET

Objective

O.01 Ensure an optimal mix of uses within buildings by specifying FSR components for residential and commercial uses.

Controls

C.01 Retail and commercial uses are limited to ground floor.

Building height

C.02 Nos.1-7 Thallon Street by virtue of their location close to the train station have the ability to provide development of substantial height to contribute a landmark to denote the village centre. The eighteen (18) storey height limit for the elliptical shaped tower on this site achieves this objective.

C.03 This key site contains both a higher rise landmark tower and a six storey rectangular building forming part of the podium aligned with Thallon Street.

C.04 A second six storey podium element that aligns with the railway reserve and faces the open space to the north of the main tower.

C.05 The two podium elements combine to create a courtyard area that addresses the retained railway heritage building.

Floor space ratio

C.06 The FSR limit for the various components of this key site which is close to the train station is higher than for sites further from the station. This is to encourage developments of substantial size thus creating a critical mass for the village centre.

Building footprint, site coverage and deep soil cover

C.07 Due to the electricity line / floodway easements, the building footprint is limited to 40% of the site. This allows adequate deep soil provision.

C.08 Open space on the site is concentrated to its north side so as to maximise its amenity. This placement of open space maximises its ability to operate in conjunction with the open space of the former electricity easement to adjacent to the north.

C.09 Deep soil planting must cover a minimum 15% of the total site area.

C.10 The building site coverage must be a maximum of 40%.

Setbacks

C.11 Setback from Thallon Street:

There is an eight (8) metre setback requirement for the rectangular building fronting Thallon Street. This allows for street landscaping and outdoor activities such as cafes that will benefit from solar access to the north.

Vehicular access

C.12 Vehicle access points must be provided as indicated in Figure 8.2.8.1.21.5.

Figure 8.2.8.1.21.5 – Conceptual Built Form Controls: Block 6 1-7 Thallon Street

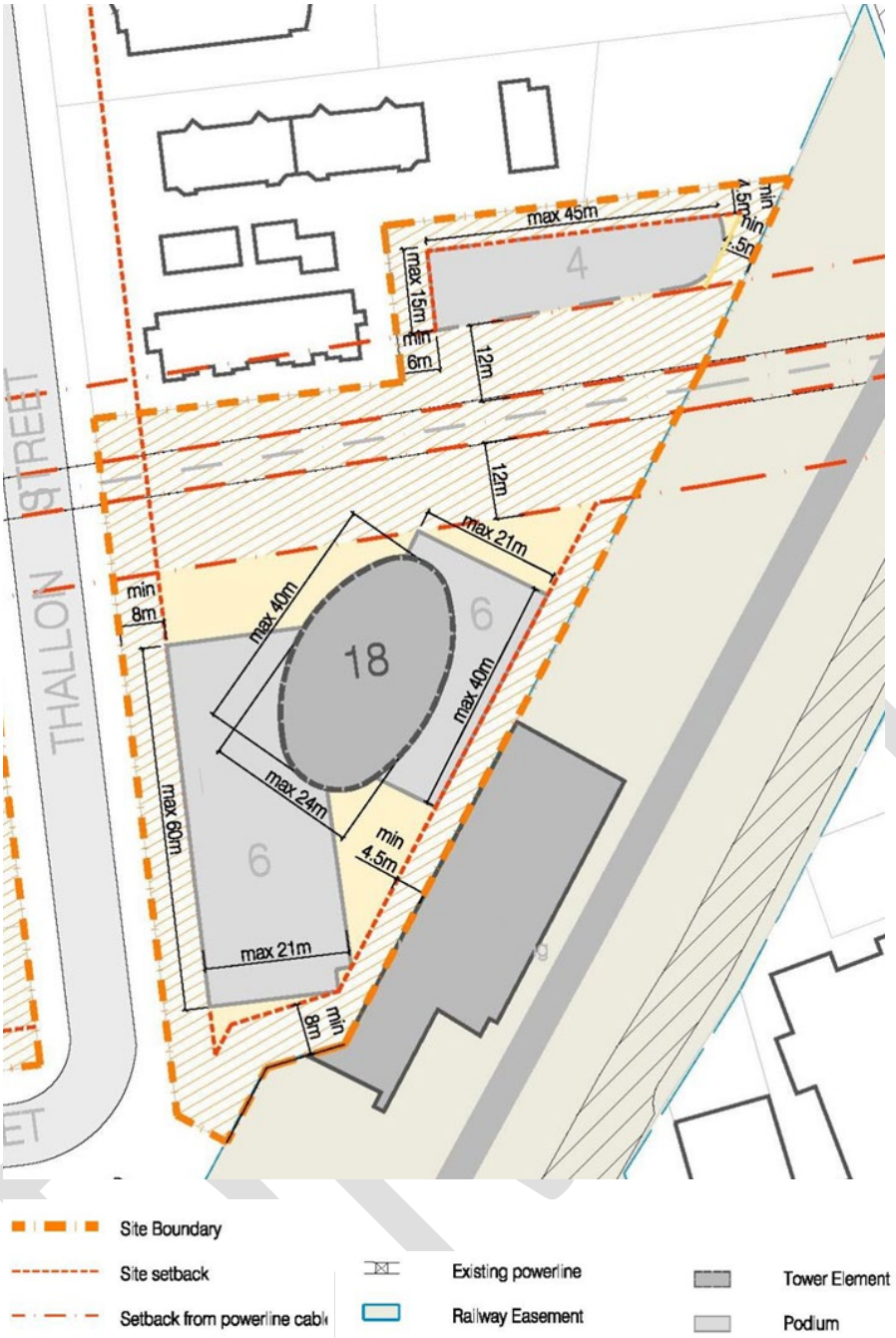


Figure 8.2.8.1.21.6 – Dimensional Built Form Controls: Block 6 1-7 Thallon Street

BLOCK 17: JANELL CRESCENT

This is a key site by virtue of its large size which provides an opportunity to develop a substantial number of units in a single amalgamated site with strong connections to the local open space green spine of the Precinct.

Controls

C.01 Development must only provide residential uses on all floors.

Building height

C.02 The higher elements of the development on this site are placed on either side of the electricity easement. This allows a separation between the two taller elements of approximately 35 metres.

C.03 The taller elements are located so as to minimise overshadowing.

C.04 Due to the considerable open space provided along the electricity easement in this site, the building heights are limited to eleven (11) storeys in order to achieve the nominated FSR of 2.3:1.

Floor space ratio

C.05 The FSR limit for the various components of this key site is to enable increased residential densities proximity to the public transport system consistent with the State plans, policies and strategies and Parramatta Local Strategic Planning Statement.

C.06 The site has frontage to an arterial road along Pennant Hills Road. For sites in this position in the hierarchy, more substantial buildings are appropriate.

C.07 The site is within 400 metres of the train station, accordingly a higher FSR is appropriate to maximise public transport usage.

Building footprint, site coverage, and deep soil cover

C.08 Due to the electricity line and floodway easements, the building footprint is limited to 40% of the site. This allows adequate deep soil provision.

C.09 Open space on the site is concentrated in the centre of the site so as to maximise its ability to operate in conjunction with the open space of the electricity easement that runs east west through the site.

C.10 Deep soil planting must cover a minimum 15% of the total site area.

C.11 The building site coverage must be a maximum of 40%.

Setbacks

C.12 12 metre setback from the centre line of the high voltage power lines.

C.13 6 metre side setbacks

C.14 6 metre setback to Shirley Street.

C.15 10 metre setback to Pennant Hills Road.

Vehicular access

C.16 Vehicle access points must be provided as indicated in Figure 8.2.8.1.21.7.

Figure 8.2.8.1.21.7 – Conceptual Built Form Controls: Block 17 Janell Crescent

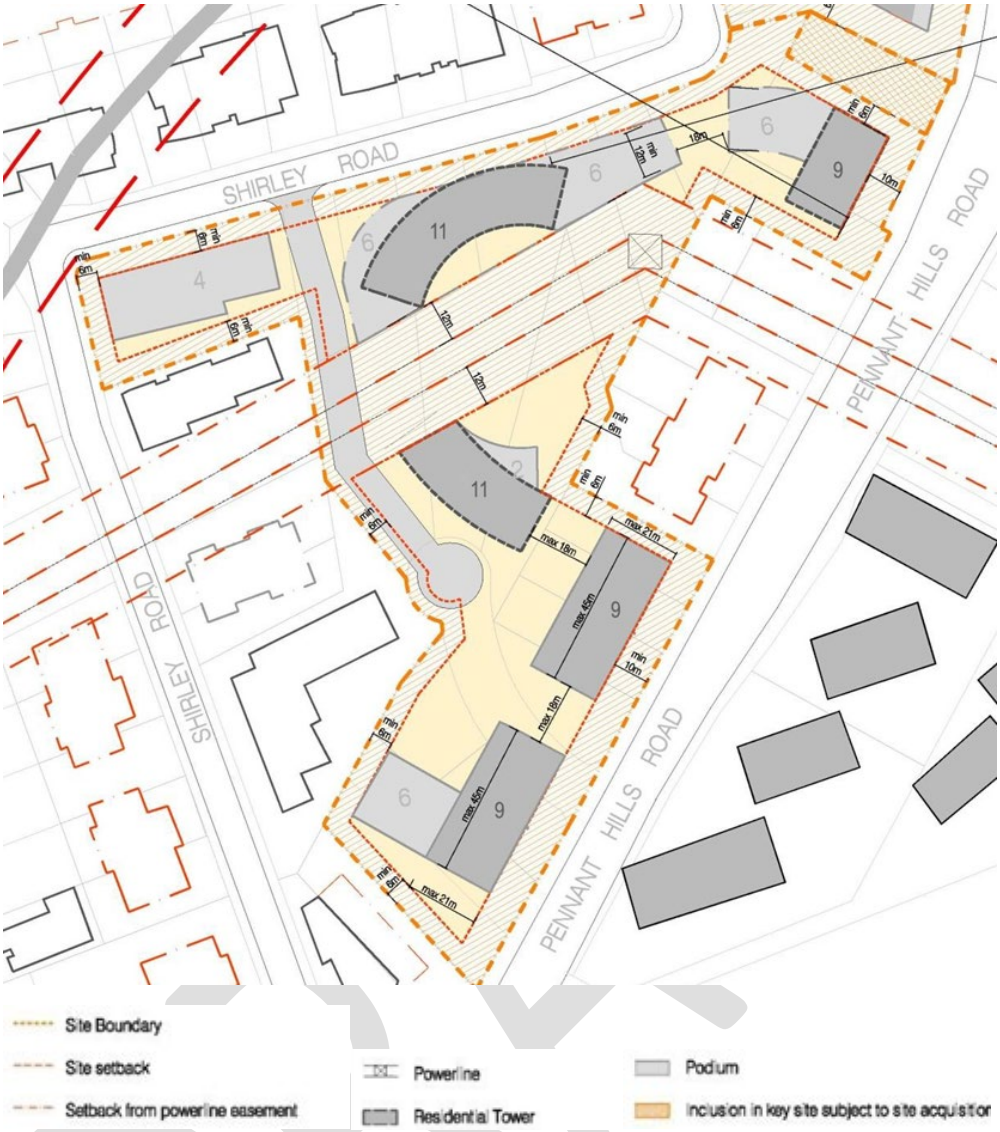


Figure 8.2.8.1.21.8 – Dimensional Built Form Controls: Block 17 Janell Crescent

BLOCK 5: SERVICE STATION SITE ON CORNER OF PENNANT HILLS ROAD AND JENKINS ROAD

This is a key site because of its highly prominent location. It is ideal for a landmark development denoting the southern gateway to the Precinct.

Controls

C.01 Development must provide uses as follows:

Ground floor – commercial

First, second and third storeys – home office

Fourth to 18th storeys – residential

Building height

C.02 The eighteen (18) storeys are proposed for the tower element of the building due to its close proximity to the train station.

C.03 The tower proposed on this key site is aligned to minimise its overshadowing of land to the south.

C.04 The tower element is to have a similar axial alignment to the tower elements on the key sites in the Thallon Street area. This is a compatible contribution to the more prominent urban form of the village centre close to the station.

C.05 The four storey podium proposed is to impart a comfortable scale to the street frontage that is compatible with the podiums containing active uses in the Thallon Street area.

Floor space ratio

C.06 The FSR limit for this site has been determined due to the limiting effect of site constraints and the lack of opportunity to amalgamate with other sites.

Building footprint, site coverage and deep soil cover

C.07 No restrictions apply to building footprint, building site coverage, and deep soil planting due to the highly constrained nature of the site.

Setbacks

C.08 Minimum setbacks are required to be:

6 metres from the site's northern and eastern boundaries.

3 metres from Pennant Hills Road and Jenkins Street.

0 metres for the tower façade at the apex of the street corner.

Vehicular access

C.09 Vehicle access points must be provided as indicated in Figure 8.2.8.1.21.9.

C.10 Vehicular access is prohibited from Pennant Hills Road.

Figure 8.2.8.1.21.9 – Dimensional Built Form Controls: Block 5 Corner of Pennant Hills Road and Jenkins Road

BLOCK 16: BUNNINGS SITE AT CORNER OF POST OFFICE STREET AND PERNNANT HILLS ROAD

This is a key site because of its highly prominent location. It is ideal for a landmark development denoting the northern gateway to the Precinct.

Controls

C.11 Retail and commercial uses are limited to ground floor. Level 1 and above must be allocated as residential use.

Building height

C.01 The nine (9) storey tower element of the building proposed on this key site is located parallel to Pennant Hills Road.

C.02 Two storey podium proposed is to impart a comfortable scale to the street frontage that is compatible with the podiums containing active uses in the Pennant Hills Road area.

Floor space ratio

C.03 The FSR limit is appropriate for a landmark building at a gateway to the Precinct.

Site coverage and deep soil cover

C.04 No restrictions apply to deep soil planting.

C.05 The building site coverage must be a maximum of 50%.

Setbacks

C.06 Minimum 10 metres setback from Post Office Street and Pennant Hills Road to allow for pedestrian circulation space and active uses on the street frontage.

C.07 Minimum 6 metre setback from Shirley Street and side boundaries.

Vehicular access and parking

C.08 Vehicle access points must be provided as indicated in Figure 8.2.8.1.21.10.

C.09 Vehicular access is prohibited from Pennant Hills Road.

C.10 Parking requirements for residential uses must comply with the general controls outlined in section 8.2.8.1.46.

C.11 Parking requirements for commercial uses must comply with Part6 of this DCP.

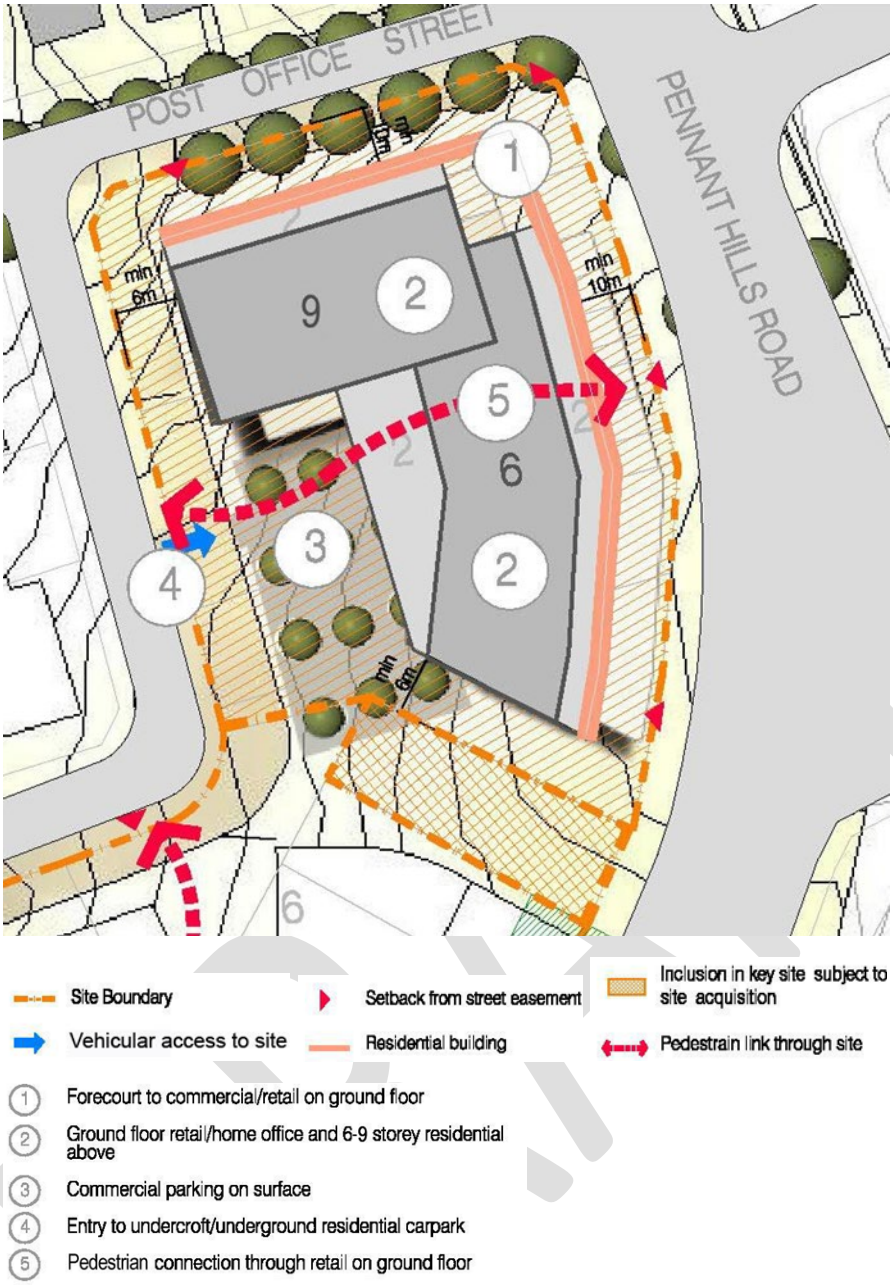


Figure 8.2.8.1.21.10 – Dimensional Built Form Controls: Block 16 Corner of Pennant Hills Road and Post Office Street

Further Information

Carlingford Precinct Plan Traffic Report (May 2008), prepared by Masson/Wilson/Twiney Traffic and Transport Consultants.

Faculty of the Constructed Environment, RMIT University et al, *Australia's Guide to Good Design – Residential*, prepared on behalf of the National Office for Local Government.

8.2.8.2 CARLINGFORD SOUTH

8.2.8.2.1 DESIRED FUTURE CHARACTER

New development is concentrated along Pennant Hills Road and Adderton Road, with connections to Carlingford and Telopea Train Stations via existing pedestrian networks. A mix of residential, retail and business uses are present the precinct to ecourage a mix of housing types including residential flat buildings, multi dwelling housing and shop top housing.

Renewed business and mixed use development opportunities are provided opposite Carlingford Train Station, and at the intersection of Marsden and Pennant Hills Roads, improving the local centre at the western end of the precinct. Redevelopment of the Carlingford Village site providse an improved pedestrian retail interface along Pennant Hills Road and Keeler Street while encouraging residential development away from major roads. Development of this site provides an appropriate interface to adjoining heritage items, educational establishment and low density housing to the east.

Building heights generally respond to topography and existing development. New taller buildings are located along the ridgelines of Pennant Hills Road and Adderton Road to reinforce natural topography, to optimise views, access to sunlight and breezes, and to maximise efficiency of existing pedestrian networks. New development are required to have regard to existing built and natural heritage items, and to consider noise impacts from Pennant Hills Road, Marsden Road and the railway line.

Figure 8.2.8.2.1 – Carlingford South

Objectives

In addition to general objectives listed in Part 8 of this DCP, specific objectives of this precinct are identified below.

O.01 Ensure that new development at the intersection of Pennant Hills and Marsden Roads recognises this location as an important gateway and responds to its hilltop location.

O.02 Ensure that new development responds well to the topography of land.

O.03 Ensure that new development is sympathetic to existing built and natural heritage items.

Controls

Pedestrian Connections and Laneways

C.01 New pedestrian connections and laneways should be provided in accordance with Figure 8.2.8.2.1. Where a development provides for public access connections, a variation to Council's floor space ratio control can be sought in accordance with C.02 below.

C.02 Where a development provides for dedication of land to Council for the purposes of providing public access and the construction of the access way, Council may consider increasing the maximum floor space ratio. As a guide, the maximum floor space ratio may be increased by

the equivalent area represented by 50% of the land area to be dedicated to Council for the public access. The site area may include the area of land to be dedicated to Council for the purpose of the floor space ratio calculation. The proposed variation to floor space is to be addressed under Clause 4.6 'Exception to development standards' in the *Parramatta LEP 2023*.

C.03 The existing laneway to the rear of the B1 Neighbourhood Centre zone is to be formalised to maintain the vehicular access and servicing needs of development.

C.04 A new vehicular lane or right of carriageway is to be provided to the rear of properties fronting Pennant Hills Road and Adderton Road as shown on Figure 8.2.8.2.1.This laneway is to provide for vehicular access to these sites.

C.05 Vehicular lanes, including any right of ways are to have a minimum width of 6 metres.

C.06 Existing pedestrian connections are to be retained and enhanced.

Setbacks

C.07 Building setbacks are to be in accordance with Figure 8.2.8.2.1 and Figure 8.2.8.2.3, and any additional controls set out below:

a) The nil setback shown along Pennant Hills Road and Keeler Street applies to the first 3 storeys of development. Additional storeys shall be setback a minimum of 3 metres from the boundary as shown in Figure 8.2.8.2.2.

Balconies may encroach the upper level setback area as shown on Figure 8.2.8.2.3 as follows:

- An unroofed terrace area permitted to the 4th storey. Balustrade can extend from building line of storey below.
- Balconies may extend 1 metre into the setback area for the upper 2 storeys.

b) The 2 metre setback shown along Pennant Hills Road, between Keeler Street and Marsden Road, applies to the first 3 storeys of development. Additional storeys shall be setback a minimum of 5 metres from the boundary as shown in Figure 8.2.8.2.4.

Balconies may encroach the upper level setback area as shown on Figure 8.2.8.2.4 as follows:

- An unroofed terrace area permitted to the 4th storey. Balustrade can extend from building line of storey below.
- Balconies may extend 1 metre into the setback area for the upper 2 storeys.

C.08 Where a nil front setback is shown on Figure 8.2.8.2.1 in the B1 Neighbourhood Centre Zone, development should have a nil side setback where it will not have a detrimental impact upon adjoining development, to achieve a continuous street edge.

C.09 Building setbacks to existing and desired laneways should be designed to promote activation of the laneway while still allowing for the servicing needs of development.

Minimum Site Frontage

C.10 Development for the purpose of residential flat buildings or multi dwelling housing in the R4 High Density Residential Zone on land fronting Pennant Hills Road and Adderton Road, as shown in Figure 8.2.8.2.1 is to have a minimum site frontage of 40 metres.

C.11 Redevelopment of the existing service station site on the corner of Pennant Hills Road and Adderton Road, for the purpose of a residential flat building or multi dwelling housing is to be redeveloped as one site and may require the amalgamation of the 2 existing land parcels.

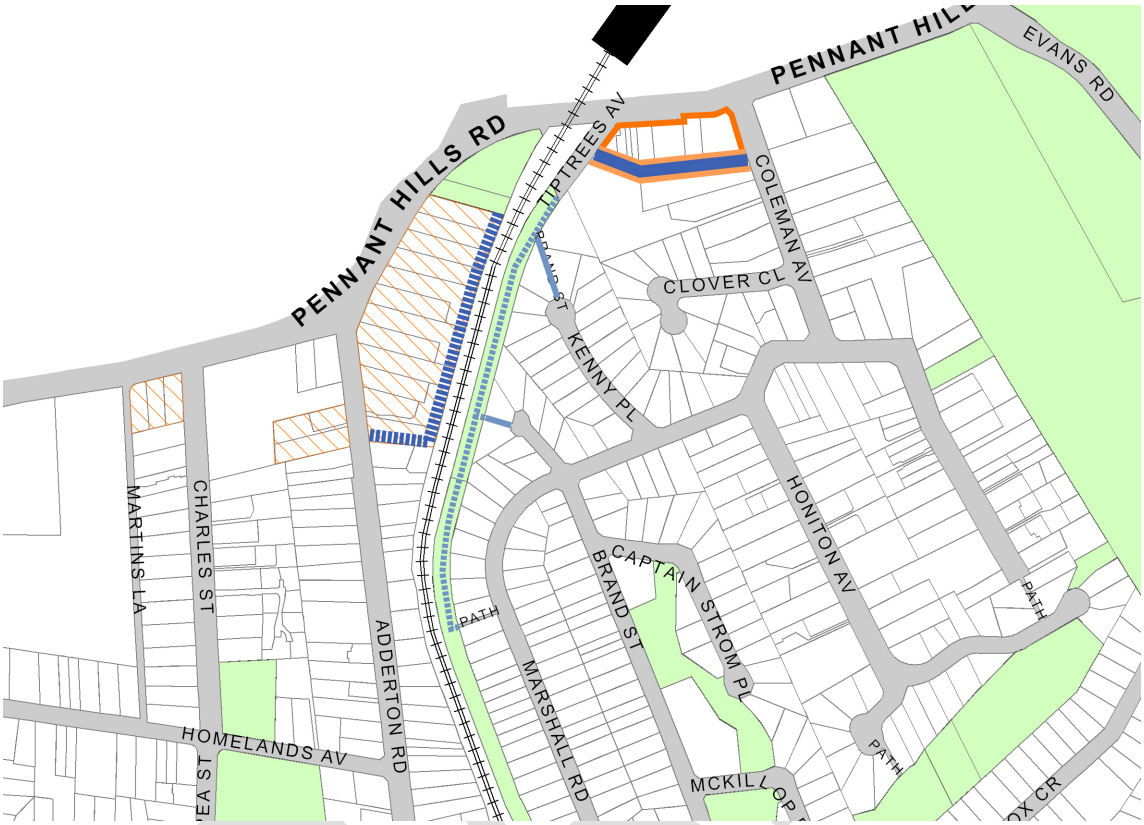


Figure 8.2.8.2.2 - Carlingford Precinct Setbacks and Lanes

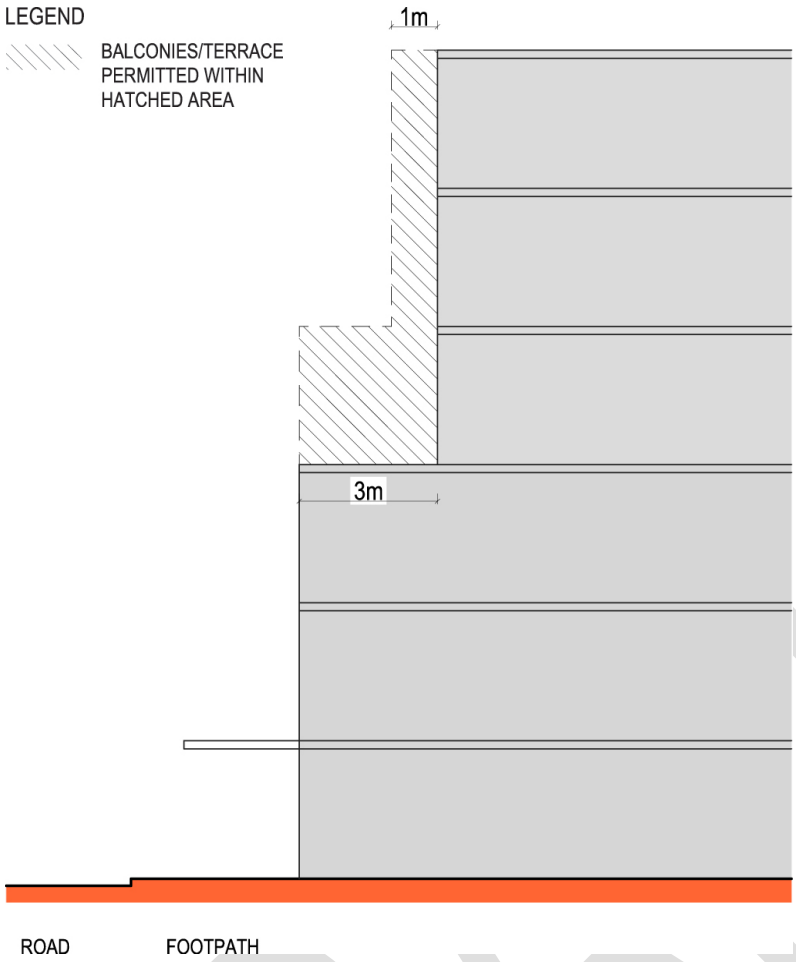


Figure 8.2.8.2.3 - Upper Level Setbacks and balcony locations

Redevelopment of Carlingford Village Shopping Centre Site – Bound by Marsden Road, Pennant Hills Road and Keeler Street

- The 2 metre front setback area to Pennant Hills Road is to be suitably treated to form an extension of the adjoining footway. Landscaping may also be provide in this area.
- New development should provide suitable corner treatments at the intersection of Marsden and Pennant Hills Roads and Keeler Street and Pennant Hills Road.
- New development shall provide an active and continuous pedestrian frontage along Pennant Hills Road with active ground level uses accessible from the roadway.
- A dense landscape setback shall be provided to Marsden Road to create a landscape corridor linking to existing vegetation on the adjoining property to the east and the existing parklands on the southern side of Marsden Road.
- New development must provide an appropriate height transition to adjoining residential development in Keeler Street.

Figure 8.2.8.2.4 - Ground Level Setbacks

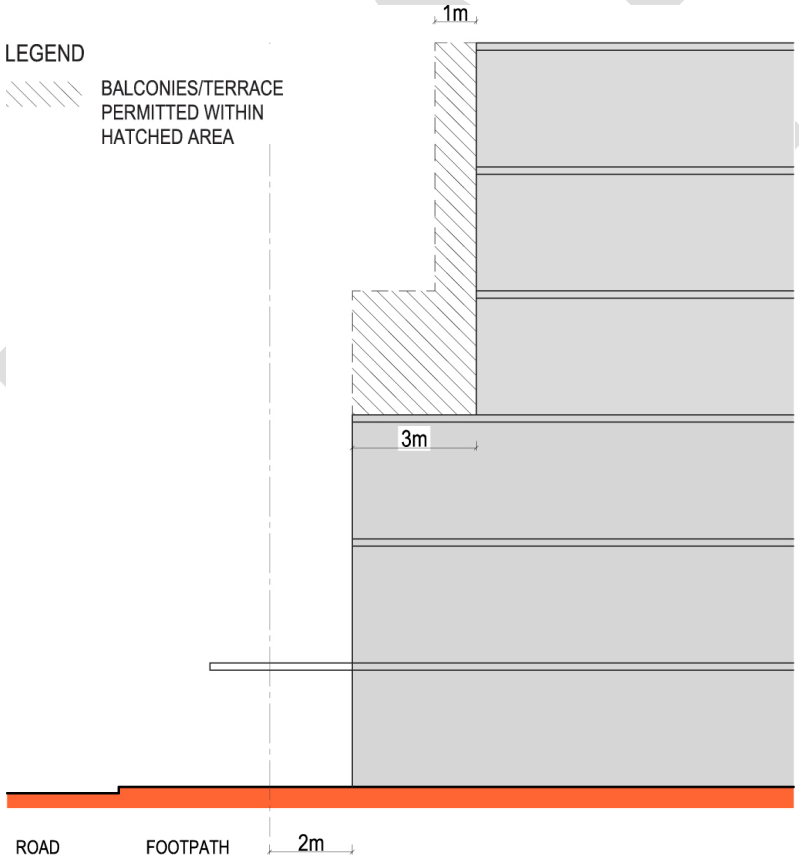


Figure 8.2.8.2.5 - Upper Level Setbacks and Balconies

8.2.8.3 CARLINGFORD EAST

8.2.8.3.1 DESIRED FUTURE CHARACTER

The locality is characterised by 5 storey mixed use buildings with at grade car parking for retail customers and underground car parking for employees and residents.

Business uses are located on the lower 2 storeys providing a broad podium for dwellings above to be setback from, creating a pedestrian friendly scale. Visible and active shops and street frontages with continuous awnings enhance streetscape character.

Low level business facades incorporate ribbons of shopfront windows and contrasting panels of light cladding, face brick or painted masonry. Mid-level and upper-storey residential facades incorporate indentations or projections in the alignment of exterior walls, balconies that are indented behind and/or project forward of exterior walls and steel framed balconies and balustrades of steel or glass that contrast the weight of masonry walls, with operable louvres for privacy, shade and glare control.

Figure 8.2.8.3.1 – Carlingford East Key Principles Diagram

Objective

O.01 Well articulated building forms with a pedestrian-friendly scale that encourages commercial activity and provides for landscaping, open space and separation between buildings.

Controls

Strategy

C.01 Redevelopment of up to five storeys should accommodate residential flats, offices, business or retail premises, serviced by basement parking.

C.02 Expand the existing public domain in order to encourage high levels of pedestrian activity plus a variety of new businesses and local employment.

C.03 Refer all Development Applications to Transport Asset Holding Entity to confirm any requirements in relation to the Parramatta – Epping railway.

Servicing

C.04 Establish a rear laneway to provide kerbside parking for customers and deliveries, access to basement parking, screened by trees and hedges to protect the amenity of residential neighbours.

C.05 Prevent left turns from Keeler Street to Pennant Hills Road.

Public frontages

C.06 Divide this street block by at least two broad outdoor walkways to encourage new pedestrian and business activities in locations which are commercially-visible and sunny.

C.07 Maximise activity facing all streets and walkways by siting lower storeys without any setback from footpaths and accommodating a nearly-continuous mix of shopfronts, building entrances and balconies.

C.08 Consolidate entries to basements and service areas via the new rear laneway to protect desired levels of activity facing all streets and new walkways.

Built form

C.09 Provide a continuous podium of up to two storeys facing all streets, and shape each podium to address major street corners.

C.10 Avoid extensive sheer vertical facades by setting upper storeys back from their podium.

C.11 Achieve a varied skyline by providing different heights, profiles and roof forms for successive buildings.

C.12 Design quality of facades should consider visibility from all quarters.

C.13 Siting and design of apartment storeys should provide at least two hours sunlight daily for living areas in 70% of new dwellings.

Setbacks

C.14 The minimum setbacks of all buildings and structures are prescribed in Table 8.2.8.3.1 and Table 8.2.8.3.2 below.

Table 8.2.8.3.1 – Minimum Setbacks for 2 storey podium

Setback	Minimum Building Setback
Primary and Secondary Front Boundary	0 metres
Rear Boundary	16 metres - 22 metres to provide a rear laneway accommodating 900 parking, 1 or 2 way traffic movements, the turning circle for a medium rigid delivery vehicle, a 2 metre wide footpath and a 2 metre wide deep soil verge

Table 8.2.8.3.2 – Minimum setbacks for 3rd storey and above (tower element)

Setback	Minimum Building Setback
Primary and Secondary Front Boundary	3 metres from commercial podium façade
Rear Boundary	0 metres from commercial podium façade
Top-Storey Setback	3 metres additional setback for exterior walls of the top-most two storeys, measured from the walls of the lowest storey above the podium