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Part A – Glenmore Park Stage 1

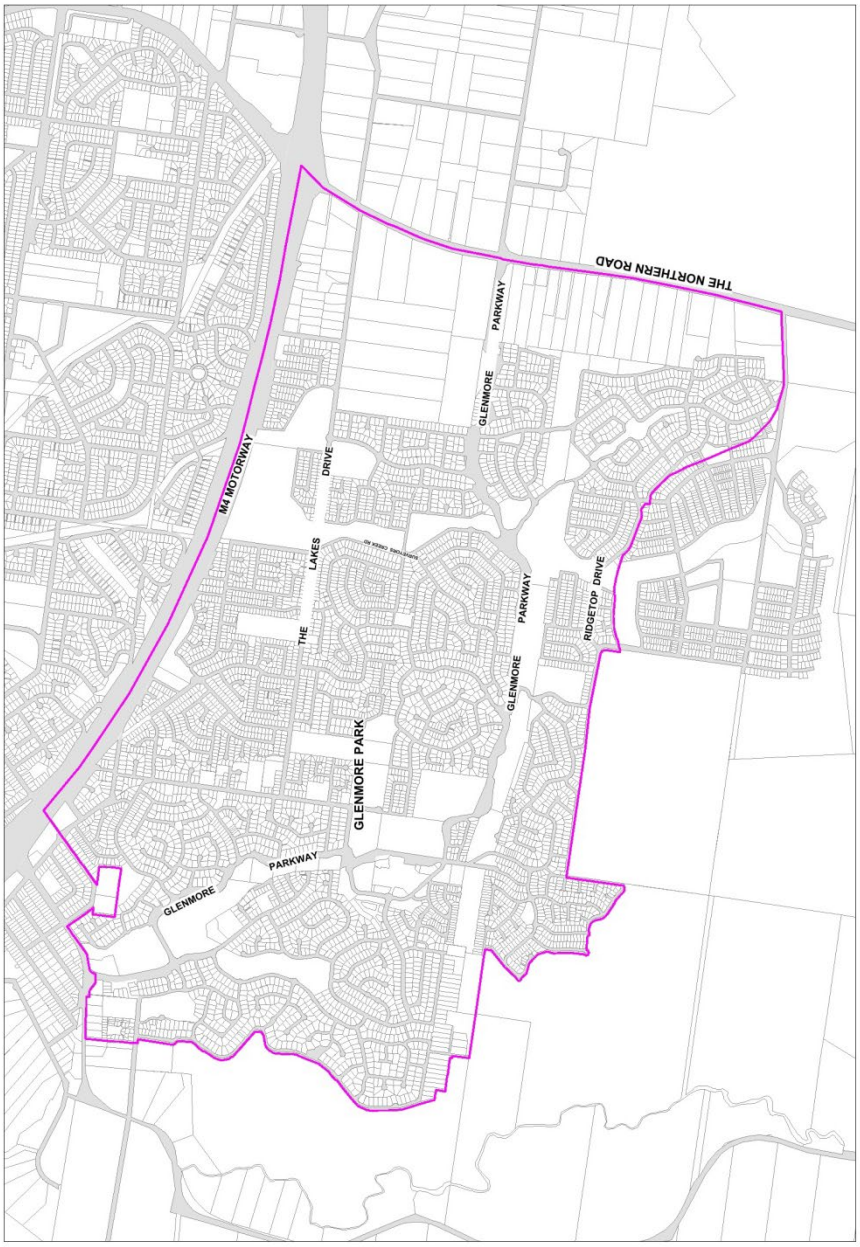
7.1 Preliminary

This Section relates to site specific controls within the Glenmore Park Area Stage 1 area to supplement the provisions of the Penrith LEP 2010.

7.1.1 Land to which this Part Applies

This Part applies to the land as shown on Figure E7.1 below.

Figure E7.1 Glenmore Park Stage 1



7.2 Glenmore Park Town Centre

7.2.1 Preliminary

Land to which this Section Applies

This section applies to development on land covered by the Glenmore Park Local Centre (GPLC) as shown in Figure E7.2. This section provides specific controls for the GPLC in addition to the general controls elsewhere in this DCP.

Figure E7.2 – Map of Glenmore Park Local Centre

A. Objectives

This section of the DCP provides more detailed provisions for development in the GPLC that will:

a) Contribute to the growth and character of GPLC ,

b) Provide a framework to guide the future development of GPLC ,

c) Ensure development responds to the characteristics of the site and the amenity of the surrounding neighbourhood,

d) Ensure future redevelopment integrates with existing access paths, pedestrian and cyclist

e) Promote public/community transport,

f) Encourage and facilitate high quality design, and

g) Protect and enhance the public domain.

The objectives of the controls for GPLC, in addition to the general objectives of the plan and other sections, are to create a community focus and to facilitate development that will:

a) Provide for a range of retailing and community activities to primarily serve the Glenmore Park community's needs.

b) Provide accessibility within the GPLC, connecting to activity nodes, public open space and surrounding residential areas.

c) Encourage quality urban design and architectural excellence development within GPLC that creates an attractive, vibrant and distinctive centre.

d) Encourage pedestrian and bicycle access and public transport through improved linkages and accessibility to the centre.

e) Provide flexibility in the future planning of the centre to ensure that future development can be responsive to changes in market, consumer and planning considerations.

f) Achieve an attractive and sustainable GPLC.

g) Ensure the development of the GPLC is consistent with the desired future character as described in the following section.

7.2.2 Character of the Glenmore Park Local Centre

The main principles of the Glenmore Park Town Centre are:

a) The desire for a Town Centre with a "heart".

b) The Town Centre needs to have its own identity.

c) The Town Centre is the hub or focus for the local Glenmore Park community

d) Desire for a distinctive and proportioned, attractive, safe 'main street' character.

e) Provide facilities sufficient to serve its residents.

f) The Town Centre is a place to serve the entire community of Glenmore Park.

Importantly, however, the form and location of the development will change over time in response to changing needs. This Part of the Section responds to the growth and changing demands of Glenmore Park and its community over time.

While the centre is referred to as a "Local Centre" in the DCP, it is known as a "Town Centre" by the local community.

Town Terrace East/West Spine Road

Town Terrace east/west spine road is to provide an active shopping street. It will function as the town centre's "Main Street" providing a convenience to shoppers, in a setting that provides for both retail/commercial services.

Town Terrace East West Spine Road will be abbreviated *Main Street* within this part of this Section and should be treated as a pedestrian priority zone.

Town Square

The Town Square is to be the primary urban public focal point of the GPLC. It is to be a vibrant, active town square with links to both business as well as community facilities. The Town Square should be a pedestrian zone characterised by activity around its perimeter, pleasant micro climate including weather protection at its edges, comfortable seating with distinctive landscaping and public artwork, access to food and toilets and be conveniently located for as many people as possible. Its design needs to be flexible enough to

accommodate special community events with or without closing the vehicular traffic or disrupting the dominant existing pedestrian flows and paths.

Existing Community Centre

The existing community centre is to be integrated into the GPLC through improved pedestrian amenity along the east/west Main Street and by improving entry points to the Community Centre.

The treatment of the interim space between the Community Centre and future development adjacent to it is to be an attractive area that may incorporate landscaping with good active surveillance. Vehicular car parking either under croft or at grade will not be allowed.

Demarcating Public and Private Spaces

Planning for the development of the Local Centre needs to clearly differentiate between "public spaces" and "publicly accessible private spaces". Future development of the centre is to provide a public street or Main Street which is open to the public at all times. Conversely, the centre is also expected to incorporate internal malls (including the existing mall) that will be publicly accessible at times when the centre is operating.

Arcades, laneways and terraces though privately owned are to be perceived as part of the public network. Redevelopment is to ensure good accessibility, connectivity and design continuity within the GPLC and reinforce the sense of these spaces being part of the perceived public realm.

Gateways

The current GPLC lacks identifiable gateways. Redevelopment will need to address this aspect of the GPLC by providing welcoming, visually interesting and unique responses at the entrances by a combination of landscape, built form and artwork. Additionally, the gateways will be designed to calm traffic movements, allow safe pedestrian or cyclist movement and provide necessary systems of *way finding* graphics in order to make sense of accessing and parking within the centre.

7.2.3 Urban Context

The GPLC represents an important focal point in the local community. Key characteristics include:

a) The site connects to Glenmore Parkway, the primary arterial vehicle route through the precinct.

b) Glenmore Parkway also provides a bus route through the local area with a bus stop located on the western side of the centre.

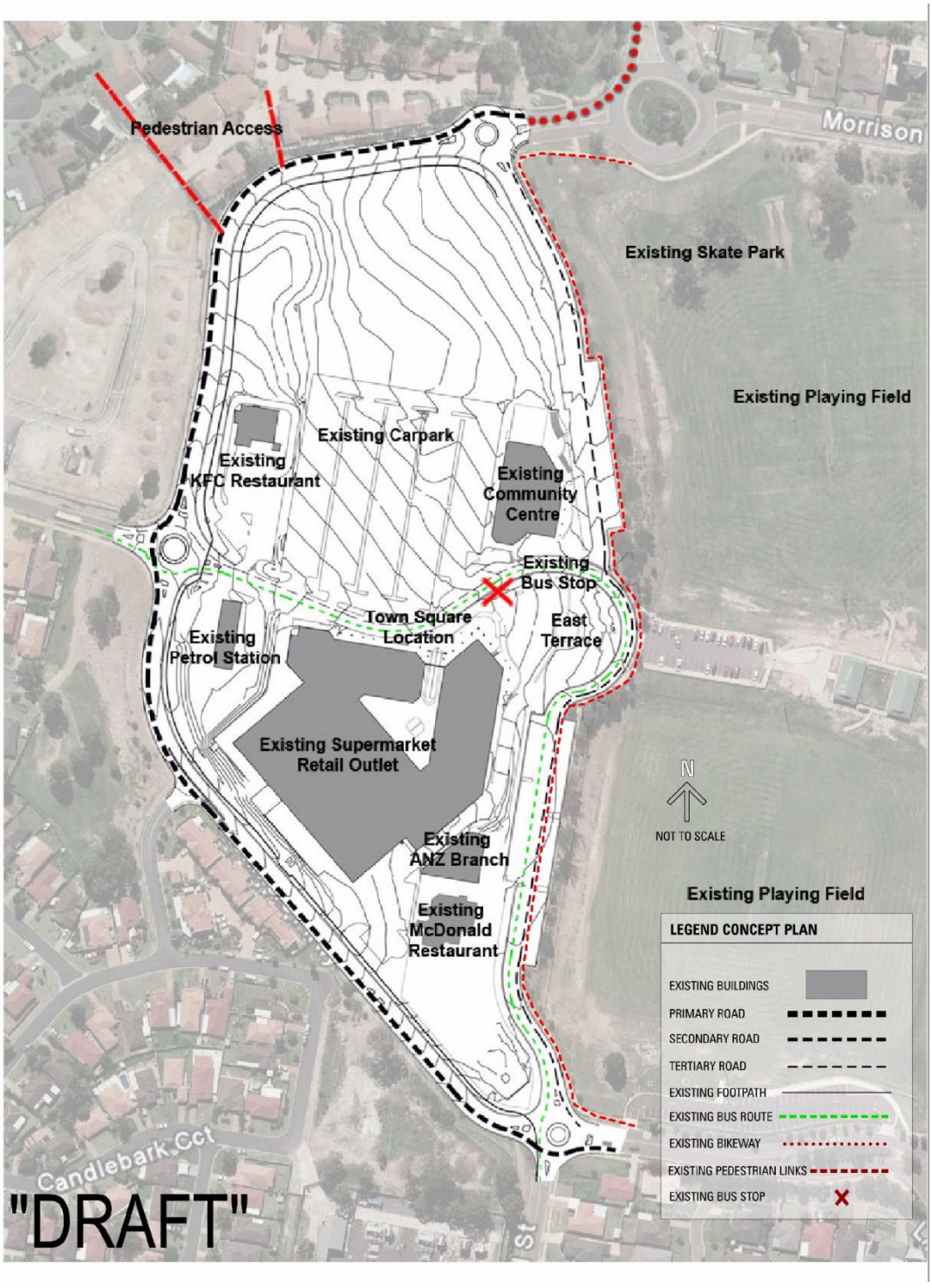
c) Luttrell Street provides a secondary road adjacent to the playing fields linking into the Main Street.

d) Urban residential development surrounds the GPLC to the south, west and north, with the playing fields and a school overlooking the GPLC to the east.

e) There are existing points of pedestrian paths and connections from the residential precincts as well as from the reserve to the east. A pedestrian path exists to the north east across Glenmore Parkway.

Some of these characteristics are shown in Figure E7.3: The Context Plan.

Figure E7.3 Context Plan



7.2.4 Land Use Controls

A. Background

A Concept Plan, providing a vision for the future evolution of the centre has been prepared. The Concept Plan is shown in Figure E7.4. The main features of the GPLC include:

a) An east/west spinal Main street connection to Luttrell Street/Town Terrace and Glenmore Parkway.

b) A Town Square in the centre of the east / west Main Street.

c) An extension of the existing arcade axis to the north of Main street/Town Square within any proposed development.

d) Two to three storey developments in key locations in the centre.

e) A mix of retail, commercial and community uses supermarkets, speciality retail, service retail, office premises and community centre.

f) Provide opportunity for office premises and residential above ground level.

g) Designated at grade and underground parking areas.

B. Objectives

a) To encourage a variety of uses in the GPLC;

b) To create lively streets and public spaces in the Town Centre; and

c) To enhance public safety by increasing activity in the public domain on week nights and weekends.

C. Controls

1) This section allows flexibility for the location of uses, except as follows:

   a) Development along the Main Street and the Town Square should have active retail premises on the ground floor such as café, restaurants and shop fronts.

   b) Development along the Luttrell Street frontage should, where possible, be used for community services, offices and retail purposes to activate Luttrell Street.

   c) Future land uses on the site are to complement and extend the range of the existing activities within the centre.

   d) The Main street is to be primarily a high quality vibrant pedestrian oriented street, which allows for local access to both public transport options, taxis, cyclists as well as a limited amount of short term parking for shoppers on both sides of the street.

Figure E7.4 – Concept Plan for site

7.2.5 Built Form Controls

7.2.5.1 Background

The GPLC will continue to evolve and expand over time to provide retail services to the whole of the Glenmore Park community. The development provisions in this Section of the DCP are intended to encourage high quality design for not just new development, but to encourage improvements to the existing town centre. The resulting built form and character

of new development should contribute to an attractive public domain and produce a desirable setting for its intended uses.

Future development should aim to retain the local atmosphere that is characterised by:

a) A diversity of retail, commercial and community services.

b) A small scale, safe, compact environment.

c) An attractive social focus.

d) Convenient and safe access for pedestrian, cyclists, public transport/taxis and motor vehicles.

7.2.5.2 Objectives

In addition to the general objectives of this Part, the controls in this section aim to:

a) Establish an appropriate scale, bulk and form of buildings.

b) Achieve active street frontages where appropriate.

c) Provide for pedestrian comfort and protection from weather conditions.

d) Define the public domain area and make these accessible.

e) Ensure that new development makes a positive contribution to the streetscape or public domain.

f) Encourage high quality architectural and innovative design for all buildings and ensure that there is a comprehensive suite of street furniture elements to compliment the architecture.

g) Encourage use of quality and durable materials.

h) Provide for quality public domain to contribute to the amenity of the town centre and a sustainable urban environment.

i) Ensure the design of buildings considers the surrounding residential amenity and responds accordingly to the amenity of the surrounding residential precinct without reducing the quality of that existing amenity.

7.2.5.3 Street Setbacks and Building Alignment

A. Background

Street setbacks and building alignments establish the front building line and reinforce the spatial definition of streets. They contribute to the public domain by enhancing streetscape character and the continuity of street facades. Setbacks also allow for improved ventilation, daylight and solar access and increased privacy.

B. Objectives

a) To achieve a consistent definition of the public domain and street edge.

b) To provide street setbacks appropriate to building function and character.

c) To locate active uses closer to pedestrian activity areas.

d) To maintain solar access to the public domain, particularly during the critical mid-winter lunch time periods of 12pm to 2pm.

e) To ensure an appropriate interface with adjoining land uses.

f) Allow for and assist in defining street landscape character where appropriate.

g) Ensure any new development provides building separation to achieve the above objectives.

h) Reduce the apparent bulk and scale of buildings by breaking up expanses of building facades with modulation of form, variation of setback, modulation of window and a range of other architectural design means.

C. Controls

1) Setbacks are to be generally consistent with those shown in Figure E7.5. Architectural features and other projections such as car park ramps which may encroach into this setback area are subject to appropriate design guidance by council officers and assessment.

2) Glenmore Parkway should have a minimum 3m setback to be consistent with the existing setback with a minimum average setback of 6m.

3) Luttrell Street should have a variable setback with a minimum zero setback to create an active edge, where appropriate.

4) Buildings along the Main Street and in the Town Square should be constructed to the front street alignment to create an active edge.

5) Long continuous walls and facades are to be avoided. All walls, particularly those addressing the peripheral road boundary, are to incorporate architectural design treatments to reduce the visual mass and bulk.

6) Development must demonstrate that it does not adversely impact on the adjoining community centre. Figure E7.6 illustrates the relationship of new buildings located to the rear of the community centre.

Figure E7.5 – Specific Street alignment and building setback diagram(s)

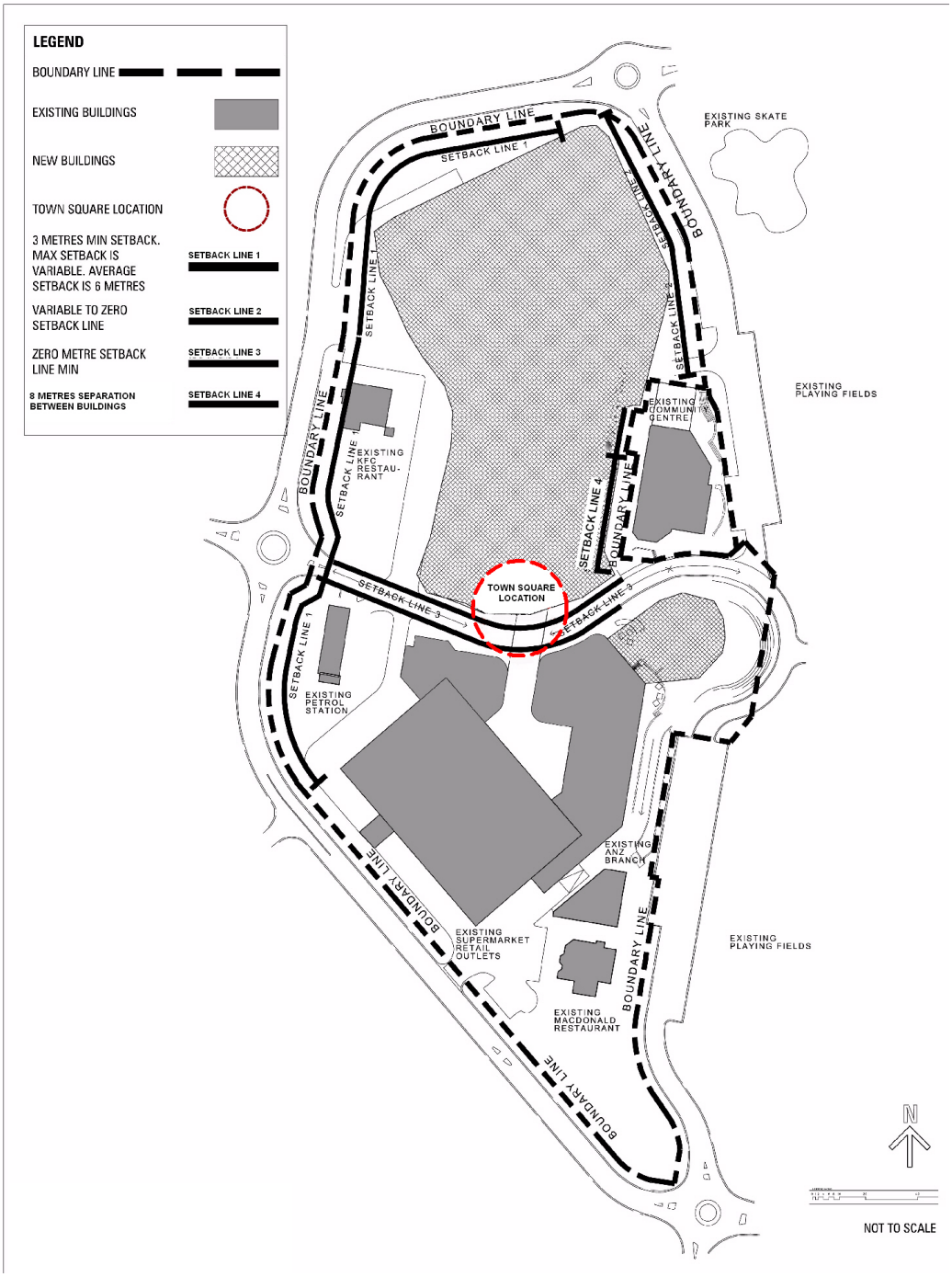
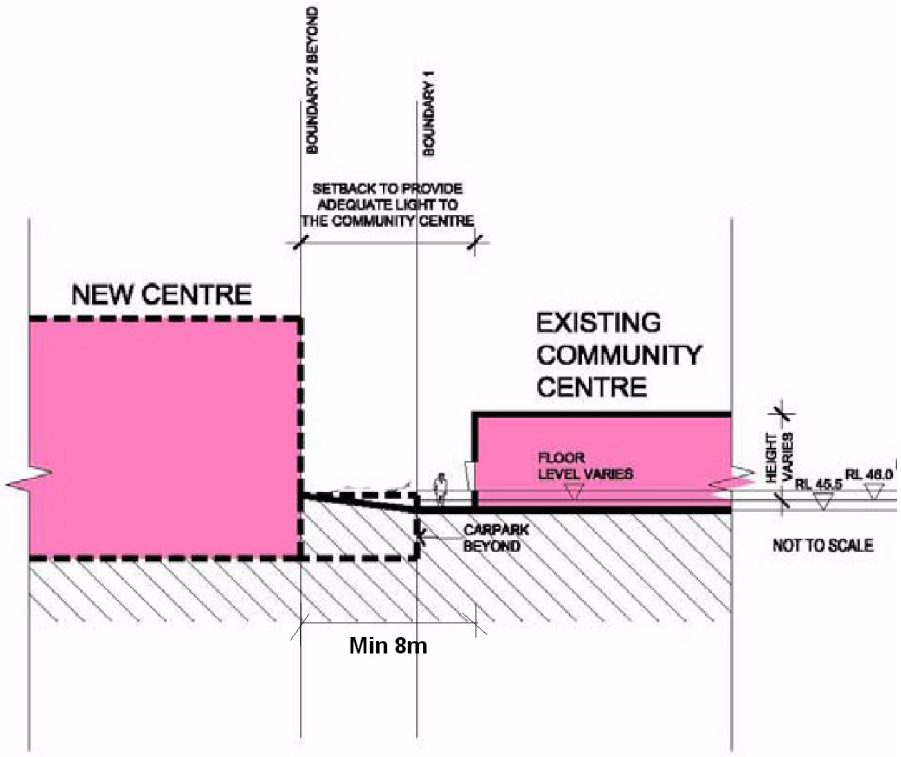


Figure E7.6 – Section between rear of community centre and development



7.2.5.4 Building Height Controls

A. Background

Building heights is an important characteristic of a town centre. Heights specified in this section will ensure future development will create a sense of place, streetscapes that respond positively to human proportions and will reflect the role of the GPLC.

B. Objectives

a) To provide for maximum height controls acknowledging the varying site topography, orientation and surrounding land uses.

b) To ensure an appropriate scale relationship between new development and street width, local context, adjacent building and public domain.

c) To achieve comfortable street environments for pedestrians in terms of daylight, solar penetration, scale, sense of enclosure and wind mitigation as well as a healthy environment for street trees and/or other landscape elements together with public art work, where appropriate.

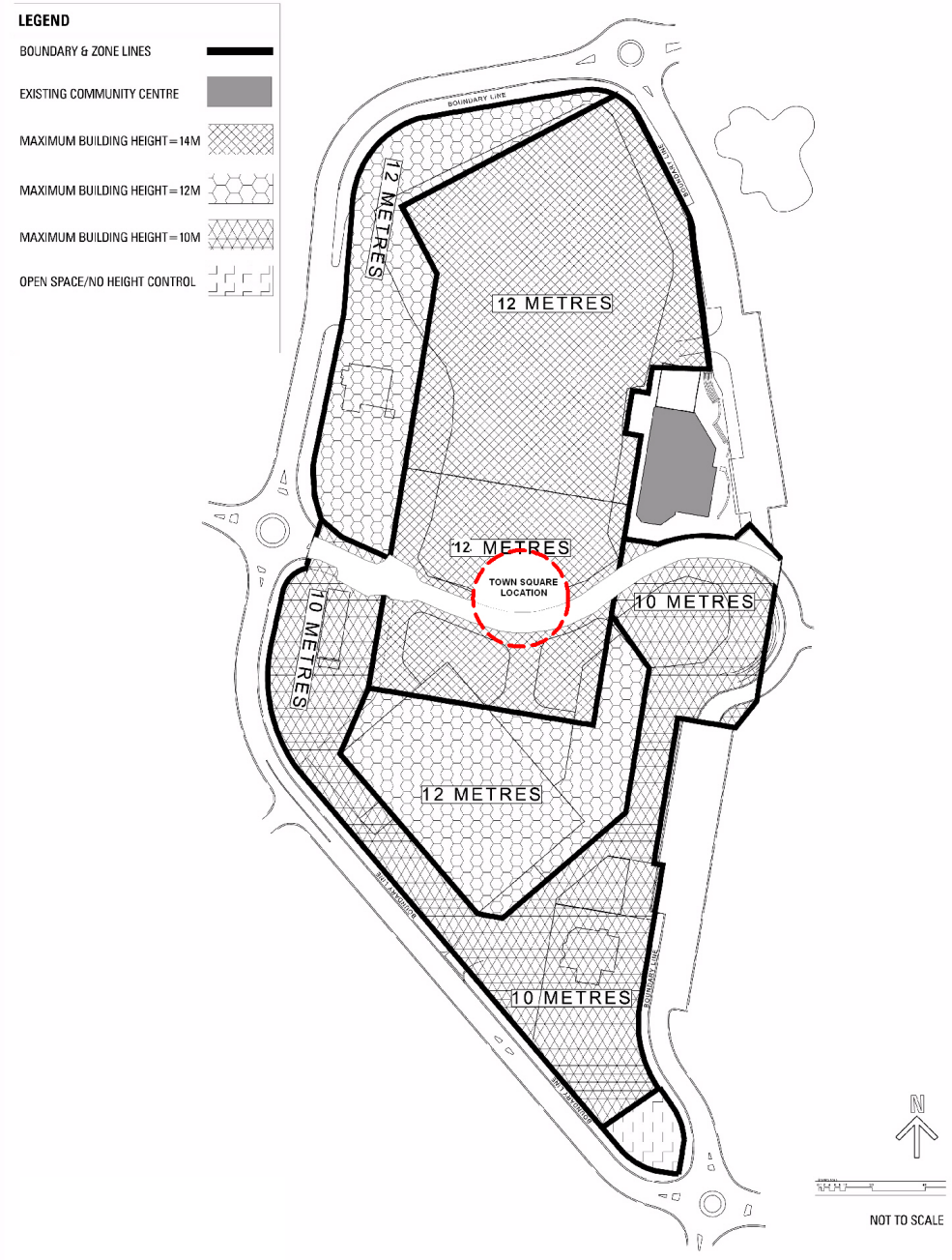
d) To allow sunlight to significant public spaces in the town centre particularly during critical times.

e) To ensure appropriate management of overshadowing, access to sunlight and privacy.

C. Controls

1) New buildings should comply with the relevant maximum heights as shown on Figure E7.7.
2) Other building elements including plant or roof top treatment, may exceed the height controls provided that the consent authority is satisfied that the specific elements either represents a positive addition to the streetscape or the element won't be visible from the public realm and/or is generally screened from view from the street level within the public domain.
3) Proposals for buildings that exceed the specified heights must demonstrate through an urban design analysis that the built form outcomes will be consistent with the built form objectives of this Section of the DCP.

Figure E7.7 – Height diagram



7.2.5.5 Building Exteriors

A. Background

The character of GPLC is defined by the massing and articulation of building forms and its streetscapes. The surrounding topography accommodates views and vistas to the centre particularly from the adjoining eastern ridge. As such the visual character of the centre needs to present a varied harmonic address at ground level as well its roofscape. Building exteriors contribute to the character and quality of the public domain. Furthermore, building exteriors are able to accommodate active uses and displays usually at street/ground level that directly contribute to a healthy visually stimulating, vibrant urban setting.

B. Objectives

a) To ensure that new development buildings make a positive contribution to the streetscape or public domain.

b) To encourage quality architectural design for all buildings.

c) To encourage use of quality and durable materials.

d) Clearly define the adjoining streets, street corners and public spaces and avoid ambiguous external spaces with poor pedestrian amenity and security.

e) Maintain a pedestrian scale in the articulation and detailing of the lower levels of the building.

f) Provide appropriate design responses to nearby development.

g) Achieve an articulation and finish of building exteriors that contribute to design excellence.

h) Ensure that the roofscape is considered as a design element and its appearance and form is of a high standard and does not distract from the visual amenity within the GPLC.

C. Controls

1) Articulate exterior facades to provide visual interest.

2) External walls should be constructed of high quality and durable materials and finishes.

3) To assist articulation and visual interest, avoid large expanses of any single material.

4) Maximise glazing for retail uses but break glazing into modulated rhythmic sections to avoid long expanses of glass.

5) Ensure that reflections from building materials that may negatively impact on the surrounding residential precinct's amenity are avoided.

6) Encourage the use of display windows that are regularly rearranged/ designed during afterhours and evening time.

7) Long continuous walls are to incorporate design treatments to reduce the visual mass and bulk by a variety of architectural and design treatments including landscaping.

8) Rooftop plant and equipment are to be integrated into building/roof forms or screened in a manner compatible with the building design and to minimise visual and acoustic impacts.

9) Roof forms are to be visually interesting, well-proportioned and consist of good quality, non-reflective, neutral toned and coloured material.

7.2.5.6 Interface with Residential Areas

A. Background

To the north and west of the GPLC are residential areas, requiring visual, acoustic and amenity consideration.

B. Objectives

a) To ensure that the design of development acknowledges the amenity of surrounding residential properties.

b) To ensure that vehicular services areas (including loading/unloading areas) and vehicular accessways are integrated within the development.

c) To avoid vehicular egresses that have an impact on existing vehicular traffic flows and impact negatively on the pedestrian amenity of the public realm.

d) To effectively manage the visual and acoustic impact of loading dock and back of house activities.

C. Controls

1) New development of the site must not significantly diminish the amenity of residents on Glenmore Parkway.

2) Loading/unloading areas and access to underground parking should be designed to minimise noise and amenity impacts on adjacent residents.

3) Loading/unloading areas are to be integrated into the design of the development with consideration of visual and landscaping screening as appropriate.

4) Provide quality architectural treatment to all external sides of the site.

5) Where vehicular service areas are above ground, implement noise reducing design elements, e.g. solid berm earth walls and /or acoustic wall panels.

7.2.5.7 Landscape Design

A. Background

Good landscaping provides breathing space, passive and active recreational opportunities and enhances air quality along with other environmental benefits.

GPLC has limited opportunity for landscaped open spaces. However, its main street, town square, laneways retail arcades need to respond positively in adding appropriate landscape elements. The design of public spaces in the centre should incorporate landscape elements and street furniture, contributing to the overall public amenity within the town centre.

Placement and species of tree types within the public realm will need to respond to seasonal solar penetration.

B. Objectives

a) To introduce landscaping and trees around perimeter to soften views to the site and reduce scale.

b) To ensure that the use of potable water for landscaping irrigation is minimised.

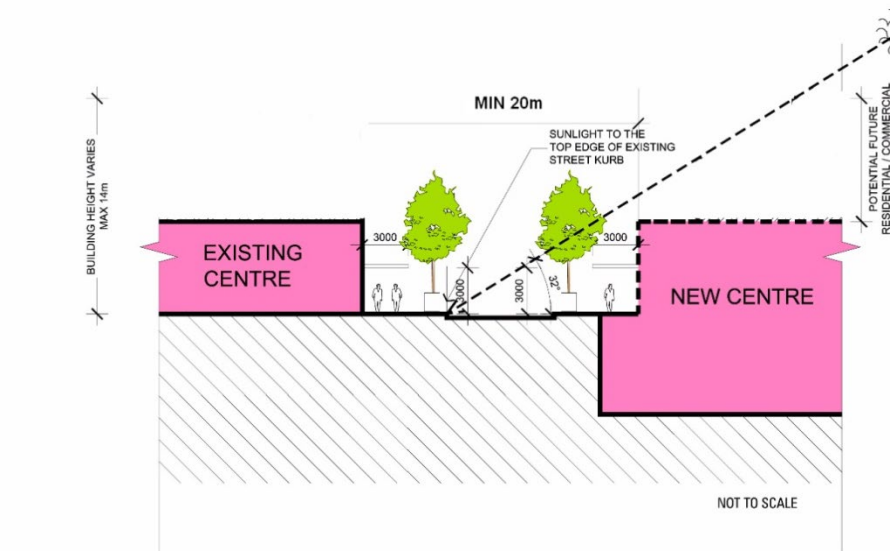
c) To ensure landscaping is integrated into the whole Glenmore Park Local Centre.

d) To visually define and promote attractive public spaces by use of landscaping association with other design elements, street furniture, artwork etc.

C. Controls

1) New development along all external boundaries shall incorporate landscaping that screens or softens building elements and spaces from the surrounding residential precincts.
2) Landscaping treatments along with improved pedestrian amenity shall be integrated into the design of new entry points and gateways from the surrounding street network to the town centre.
3) Recycled and re-used water should, where possible, be used to irrigate new landscaped areas.
4) The use of plants with low water consumption characteristics is encouraged.
5) Street furniture and other public domain elements are integrated into the design of all public spaces and may include:
    a) Seats
    b) Litter bins
    c) Lighting
    d) Street and information signs
    e) Bicycle racks
    f) Planter boxes
    g) Other items suitable to the function of each public space
    h) Shade structures
    i) Awnings
    j) Water features
    k) Public art
6) Provide deep soil zones for landscape areas.
7) Landscape is integrated with public and street lighting to not diminish the effectiveness of existing lighting.
8) Minimise changes in level and enhance access for those who may be disabled.
9) Embrace Universal design initiatives.
10) Ensure landscape enhances views and vistas to and from the town centre's open spaces contributing to passive surveillance and providing visual vitality to the overall streetscape.
11) The width of the main street (east-west link) is to be in accordance with Figure E7.8.

Figure E7.8 – Streetscape East/West Link



7.2.5.8 Public Domain

Pedestrian amenity incorporates all elements of individual developments that directly affect the quality and character of the public domain. The pedestrian amenity provisions are intended to achieve quality urban design and pedestrian comfort in the public spaces of the centre. The public gather spaces/places within the town centre must be attractive to all ages including both the very young as well as the elderly residents/visitors.

The controls in this section aim to increase vitality, safety, security, attractiveness and amenity of the public domain.

1) Pedestrian Amenity and Weather Protection

A. Background

Awnings and weather protection elements increases the suitability and amenity of public footpaths by protecting pedestrians from all weather conditions. They encourage pedestrian activity along streets and in conjunction with active edges such as retail frontages (cafes etc.), support and enhance the vibrancy of the local area. Awnings also provide architectural continuity and contribute to the streetscape.

Connecting the shoppers/retail visitors of the centre to the underground concealed car parking needs careful design consideration. It is envisaged that there will be alternative routes both covered and partially covered that allow shoppers to access underground car parking form either side of the Main Street. The Main Street will remain uncovered.

B. Objectives

a) To provide shelter from wind, rain and sun for streets where most pedestrian activity occurs.

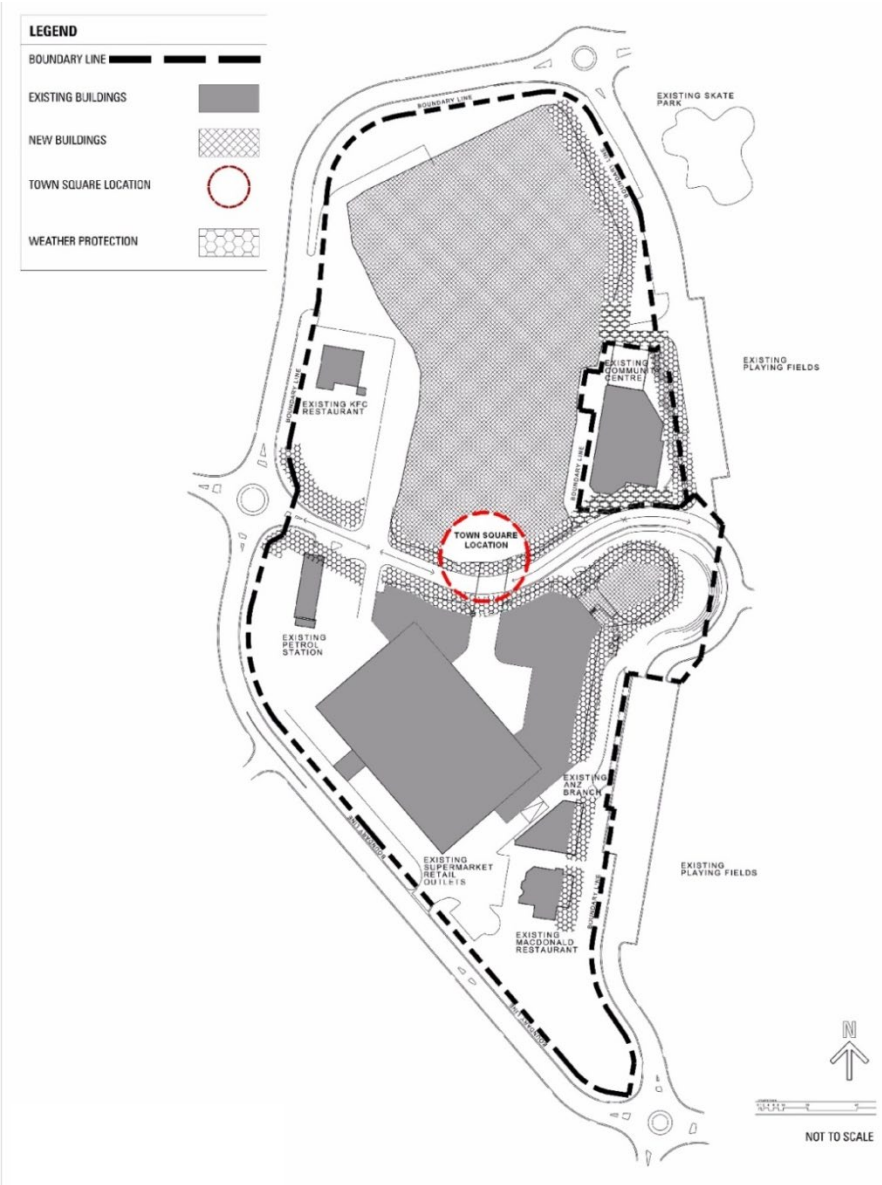
b) To provide a visually integrated streetscape.

c) To provide pedestrian convenience and amenity from existing centre to new centre via alternative covered routes to connect to the underground parking area without covering or roofing over the Main street.

C. Controls

1) Weather protection is to be provided for all new development as indicated in Figure E7.9.
2) The design of new development should consider where practical, the ability to incorporate weather protection measures from the existing centre to new centre and underground parking.
3) Weather protection must be consistent in appearance and relate to new or existing building facades.
4) Provide under awning lighting to facilitate night use and to improve public safety.

Figure E7.9 Weather Protection East West Link



2) Pedestrian Access and Mobility

A. Background

Any new development must be designed to ensure that safe and accessible access is provided to all people. Additionally, pathways are to have clear sightlines and be flanked, where possible, by active uses.

B. Objectives

a) To ensure that people who visit the centre are able to access and use all spaces, services and facilities through the creation of barrier free environment in all public spaces, in particular the Main Street as well as arcades and retail streets.

b) To provide a safe and easy access to buildings to enable better use and enjoyment by people regardless of age and physical condition, whilst also contributing to the vitality, diversity and vibrancy of the public domain.

c) To maintain and enhance, where possible, connections to the centre by public transport, as shown in Figure E7.3.

d) To provide services that support the needs of mobility impaired persons.

C. Controls

1) The design and provisions of facilities for accessibility including car parking must comply with Australian Standards AS1428.

2) The development is to provide at least one main pedestrian entrance with convenient barrier free access to the ground floor and/or street level.

3) The development must provide visually distinctive accessible internal access, linking to building entry points and the public domain.

4) Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours and comply with the relevant Australian Standard.

5) Pedestrian pathways are to accommodate adequate lighting and consistent style of way finding signage/graphics.

6) Future development must maintain safe and unimpeded paths of travel from bus stops and existing pedestrian links and crossovers to the site.

7) Any new development proposing basement car park shall make provision to connect the proposed and existing development.

Permeability

A. Background

Through site links provide access connections between the long sides of street blocks for pedestrian and vehicular access at street level. These links provide an important permeability function in form of shared zone, arcades and pedestrian ways.

The town centre through site links should form an integrated pedestrian network providing choice of routes at ground level for pedestrians. Where level change is unavoidable, ramps and/or mechanised access such as lifts, travelators etc. connecting to basement car parks, need to be considered.

B. Objectives

a) To maximise accessibility and permeability through the site within the constraints of the new development and the operational requirements of the centre.

b) To maintain current access to and from the centre or create new links as redevelopment occurs.

c) Use opportunities to improve existing links for better connectivity to the town centre.

d) To encourage active street format, where appropriate, along the length of the Main street.

e) To provide for pedestrian amenity and safety.

f) To connect the internal mall to key entrance points to those clearly identified.

g) To create a new northern address that activates and creates an arrival point for the centre to draw people along Luttrell Street.

h) To retain unrestricted access to both the Main Street spine road and town square at all times except for agreed community events.

C. Controls

1) Through site links are to be provided as indicated in Figure E7.10.

2) New through site links should connect to existing through site links, arcades and pedestrian ways, where possible.

3) Comprehensive way finding signage is to be provided throughout the site.

4) Designated pedestrian routes are to be well designed incorporating the following elements, natural and artificial lighting, seating and other street furniture appropriate for public use.

5) All entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.

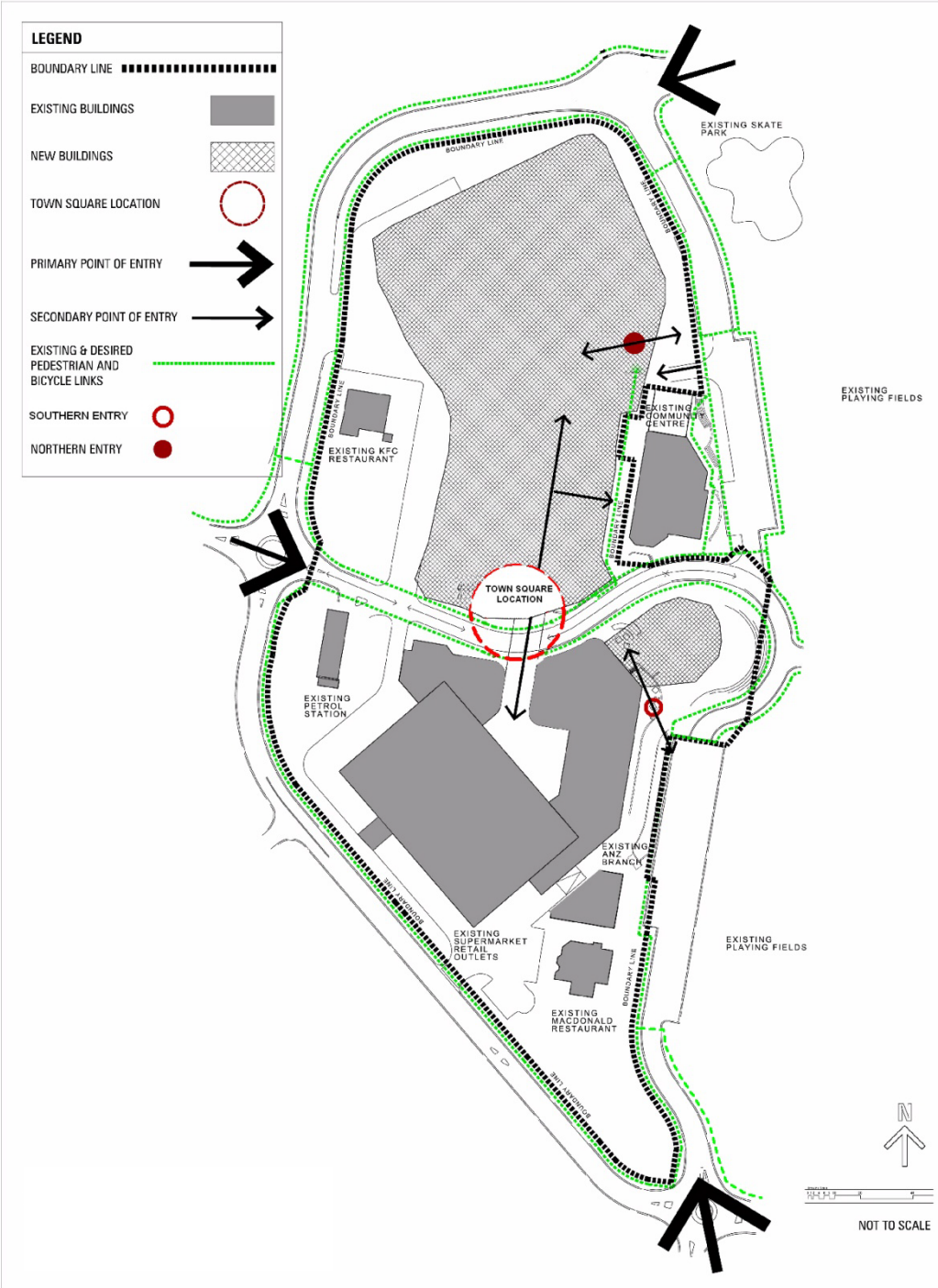
6) Provide safe and legible pedestrian access to and from car park.

7) Future development is to provide safe pedestrian movement through the car park to the centre.

8) New development along Luttrell Street (eastern) frontage to incorporate pedestrian links to the site in accordance with Figure E7.10.

9) Improve existing links along the eastern terrace south of Main Street through to Luttrell Street.

Figure E7.10 – Existing and Desired Pedestrian Links



3) Active Street Frontages and Address

A. Background

Active street frontages promote an interesting and safe pedestrian environment. Busy pedestrian areas (such as shops, cafes, offices, etc.) that offer direct physical engagement with the public space create the most active street frontage.

B. Objectives

a) To promote pedestrian activity and safety in the public domain.

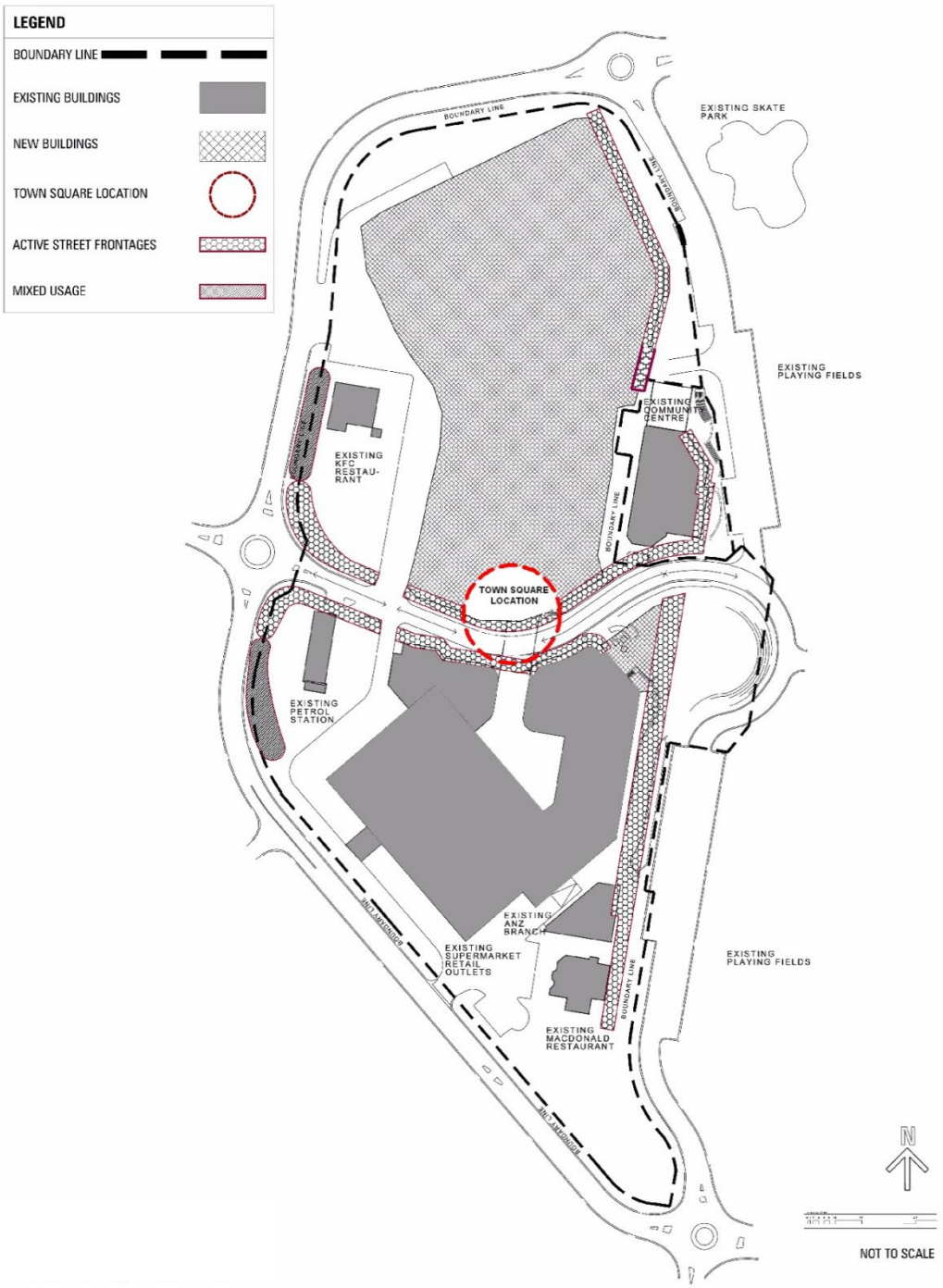
b) To maximise active street frontages to the site.

c) Promote shop front displays or encourage outdoor dining that externalise the buildings both night and day.

C. Controls

1) Active frontage uses are defined as one or a combination of the following at street level:
   a) Entrance to a retail premises.
   b) Shop front.
   c) Glazed entrance to an active commercial premises located on the ground floor, such as reception.
   d) Café or restaurant if accompanied by an entry from the street
2) Active street frontages are to be located at the ground level of all buildings located in those areas shown in Figure E7.11.
3) Only open grill or transparent security shutters are permitted to retail frontages or approved innovation.
4) Restaurants, cafes and the like are to consider providing operable shop fronts.

Figure E7.11 – Active street frontages



4) Internal Building Circulation Space

A. Background

Internal pedestrian retail paths/arcades are an integral part of the public space network. Although they are privately owned they are perceived as "public spaces" during centre operating hours. As these spaces form a significant part of the internal urban structure of the site, it is desirable for them to achieve a high level of environmental performance including thermal comfort, natural ventilation and good daylight access. Furthermore, these accessways should be connectors to the public domain.

B. Objectives

a) Pedestrian retail access paths should connect to external through site links and pedestrian ways, where possible.

b) Provide pedestrian convenience and amenity.

c) Promote pedestrian activity and safety.

C. Controls

1) Pedestrian retail access paths are to:

   a) Be direct and publicly accessible during business trading hours.

   b) Be designed as an accessible path for all persons.

   c) Have active frontage on either side by the full length.

   d) Have, where possible, access to natural light for part of their length and at all openings.

   e) Where air conditioned, have clear glazed doors to at least 50% of the entrance.

7.2.6 Car Parking and Access

This section contains detailed objectives and controls on vehicular access and site facilities.

7.2.6.1 Vehicle Footpath Crossings and Driveways

A. Background

GPLC benefits from having access from a number of streets including Glenmore Parkway, Luttrell Street and Town Terrace. Vehicle crossings over footpaths disrupt pedestrian movement and raise safety implications. The design and location of vehicle access to buildings also influences the quality of the streetscape, building facade and the active use of street frontages. The design and location of vehicle access to developments should minimise conflicts between vehicles and pedestrians on footpaths, particularly in pedestrian priority places such as the spine road as well as Luttrell Street.

B. Objectives

a) To facilitate efficient and convenient access to and from the site.

b) To avoid conflict between pedestrian/cyclists and vehicles, particularly in high priority pedestrian locations.

c) To minimise the impact of vehicular access points on the quality of the public domain.

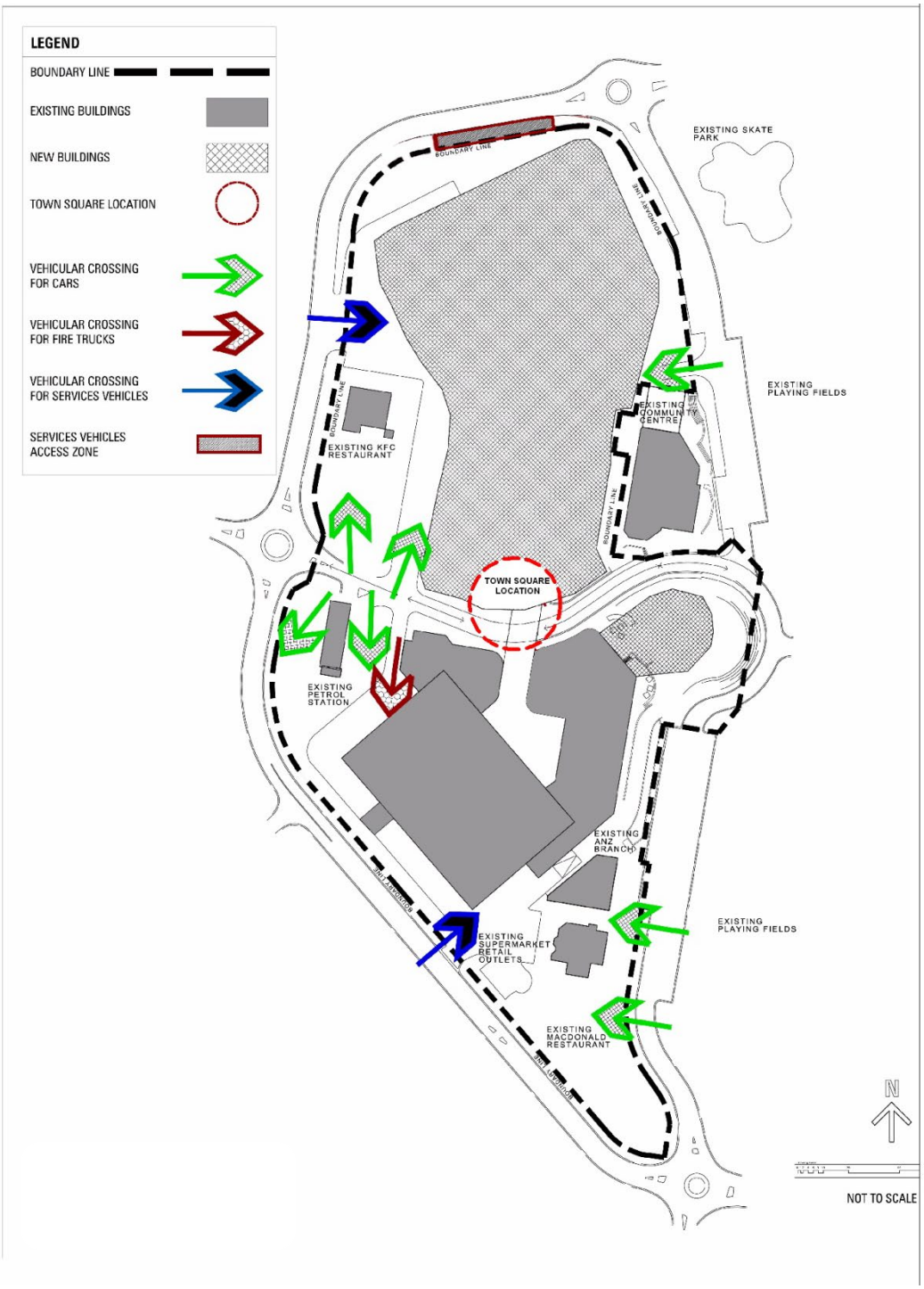
d) To ensure vehicle entry points are integrated into building design.

e) To minimise stormwater runoff from uncovered driveways and parking areas.

B. Controls

1) Vehicle access points to the centre shall be provided generally in accordance with the Access Plan, shown on Figure E7.12.
2) Vehicle access widths and grades are to comply with the Australian Standards.
3) Design of driveway crossings must be in accordance with Council specifications for Vehicle crossovers.
4) The driveway threshold is to be designed to prevent ingress of stormwater.
5) Vehicle entries are to have high quality finishes to walls and ceilings as well as high standard detailing.
6) Vehicular driveways should be located wherever practical as follows:
   a) Setback a minimum of 6m from the tangent point in the kerb.
   b) Located taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees.

Figure E7.12 – Vehicle entry/crossing diagram



7.2.6.2 Access, Servicing and Manoeuvring

A. Background

Adequate on-site provision for delivery and service vehicle access should be made to facilitate the efficiency of the commercial, retail and other functions.

B. Objectives

a) To ensure the appropriate on-site provision for parking of service vehicles.

b) To provide for efficient service vehicle movements and access within the site.

c) Establish appropriate access and location requirements for servicing.

d) Ensure that servicing routes and egress points do not adversely impact on the pedestrian routes connecting to the centre.

C. Controls

1) All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn.

2) The final location for the ingress of large trucks to the northern boundary of the site from Glenmore Parkway is subject to detailed design and traffic analysis.

3) Loading/unloading facilities are to be:

   a) Separated from customer parking and circulation path of other vehicles.

   b) Integrated into the design of developments and screened from the street.

   c) Located away from circulation paths of other vehicles.

   d) Designed for commercial vehicle circulation and access complying with AS2890.2.

4) The Main Street is to be a traffic calmed roadway together with raised thresholds for pedestrian cross over points and a reduced speed limit. Vehicular traffic is to give way to pedestrian at the raised threshold location/s.

5) Traffic calming devices are to be provided along the Main Street for safe pedestrian movement.

6) Traffic calming devices are to be considered along Town Terrace to reduce speed and truck movements as appropriate.

7) Generally, provision must be made for all vehicles, including emergency vehicles, to enter and leave the site in a forward direction.

8) For large scale retail and commercial development, consultation is to occur with Westbus regarding future bus access routes to the site.

7.2.6.3 On-Site Parking

A. Background

Onsite parking includes underground (basement) and surface (at-grade) parking for vehicles and bicycles. The following section provides on-site parking controls for the site.

B. Objectives

a) To provide an appropriate amount of on-site car and bicycle parking to cater for future development.

b) To integrate parking appropriately with the design of buildings to minimise its visual and environmental impact.

c) To provide adequate space for parking and manoeuvring of vehicles.

d) To ensure the appropriate on-site provision and design of accessible car parking.

C. Controls

1) Car parking is to be provided in accordance with the rates outlined in the Transport, Access and Parking Section of this Plan, unless it can be demonstrated that a lesser rate can still achieve sufficient parking provision to meet the needs of the shopping centre.
2) Accessible car parking spaces are to be provided and designed in accordance with the requirements with the Building Code of Australia and AS2890.
3) The car park and all its components including but not limited to driveway, aisle and ramp widths, ramp grades, and car space dimensions are to comply with the relevant Australian Standard (*AS 2890.1 2004*) – *Parking Facilities – Off-Street Car Parking*, as amended.
4) Where possible, natural ventilation is to be provided to underground parking areas with ventilation grills and structures that are integrated into the overall façade of the development and located away from the primary street frontage.
5) Short term parking is to be provided along one side of the Town Terrace east/west spine road.
6) 4 Council car spaces and driveway access adjacent to community centre are to be retained and integrated into design. These spaces are to be dedicated parking spaces for the community centre.
7) Proposals for basement parking areas are to be accompanied with a geotechnical report prepared by appropriately qualified professional and other supporting information to the Development Application.

7.2.6.4 Site Facilities and Services

A. Background

Adequate site facilities and amenities are important elements of a successful local centre function, and include bicycle storage and associated amenities, toilets and parents change rooms, accessible toilets, public telephones and staff facilities. Other servicing requirements of the site should be designed and sited to minimise visual and environmental impact.

B. Objectives

a) To provide adequate site facilities to meet the needs of the local community.

b) To establish appropriate access and location requirements for servicing.

C. Controls

1) The provision of site facilities such as bicycle storage and associated amenities, toilets and parents change rooms, accessible toilets, public telephones and staff facilities are to be considered as part of any redevelopment of the site.
2) Air conditioning, service vents and other associated structures should be:
   a) Located away from street frontages

b) Located in a position where the likely impact is minimised

c) Adequately set back from the perimeter wall or roof edge of buildings

d) Where it is to be located on the roof it should be integrated into the roof scale design and in position where such facilities become a feature in the skyline at the top of the building.

The responsibility for the ongoing management of waste facilities must be determined prior to work commencing on any redevelopment of the centre. Details of the management of waste by future tenants are to form part of the Waste Management Plan (in accordance with Section C5 Waste Management of this Plan) for the development.

7.2.7 Design Principles

7.2.7.1 Energy Efficiency

A. Background

The ability of development to optimise thermal performance, thermal comfort and day lighting will contribute to the energy efficiency of the buildings, provide increased amenity to occupants and reduce greenhouse emissions.

B. Objectives

a) To encourage architectural design to minimise the need for mechanical heating and cooling of spaces to provide comfortable conditions for the community.

b) To reduce the proportion of overall energy consumption in the construction and use of buildings.

B. Controls

1) Integration of shading devices and ventilation of building faces where practical, in order to reduce solar energy loads at high luminance periods of the day.

2) Using an architectural design to harness natural light into spaces where practical through integration of light wells, sky lights and voids to reduce lighting energy consumption.

7.2.7.2 Water Management and Water Sensitive Urban Design

A. Background

Building design can contribute to environmental sustainability by incorporating measures for improved water quality and efficiency of use. Integrating water use, collection and reuse measures into building and infrastructure design contribute to achieving environmentally sustainable outcomes.

B. Objectives

a) To help improve the environment by improving the quality of water run-off.

b) To ensure infrastructure design is complementary to current and future water use.

c) To maintain pre-existing stormwater runoff flows off site.

C. Controls

1) The following water saving measures to be incorporated into new development:

a) Water fixtures (low flow shower heads and taps, dual flush toilets, low flush/ water efficient urinals, etc.) are to be 3 stars (WELS Scheme) or better rated.

b) Select water efficient plants and/ or, indigenous vegetation for landscape in accordance with Council's preferred species.

c) Use non-potable water for watering new gardens and landscape features.

2) A Stormwater Management Plan is to be prepared that identifies how the quantity and quality of urban runoff from the site will be managed on the site as part of any major redevelopment of the centre.

7.2.8 Waste Management

A. Background

Waste management refers to all stages of development from demolition to design, construction and occupation. The following objectives and controls are in addition to those outlined in the Waste Management Section of this Plan, and are specific to the GPLC.

B. Objectives

a) To minimise waste generation and disposal to landfill with careful source separation, reuse and recycling.

b) To plan for the types, amount and disposal of waste to be generated during demolition, excavation and construction of the development.

c) To ensure efficient storage and collection of waste and quality design of facilities.

C. Controls

1) Development applications involving major demolition or construction works should include proposed waste management strategies.

2) Such strategies could include any of the following:

a) Proposals for recycling and reuse of construction and demolition materials.

b) Use of sustainable building materials that can be reused or recycled at the end of their life.

c) Handling methods and location of waste storage areas, such that handling and storage has no negative impact on the streetscape, building presentation or amenity of occupants and pedestrians.

d) Procedures for the on-going sustainable management of green and putrescibles waste, garbage, glass, containers and paper, including estimated volumes, required bin capacity and on-site storage requirements.

3) Details of the management of waste by future tenants are to form part of the Waste Management Plan for any redevelopment of the centre.

4) A Waste Management Plan for the site is to be implemented as part of any redevelopment of the site, in accordance with the Waste Management Section of this Plan.

7.2.9 Safety and Security (Crime Prevention through Environmental Design)

A. Background

A safe and secure environment encourages activity, vitality and viability, enabling a greater level of security. Planning and design can identify and address safety and security issues through the use of environmental and technical measures.

B. Objectives

a) To address safety, security and crime prevention requirements in the planning and design of development (including the NSW Police 'Safer by Design' crime prevention though environmental design (CPTED) principles).

b) To ensure developments and the public domain is safe and secure for pedestrians.

c) To encourage a sense of ownership of the public domain.

C. Controls

1) For any large scale retail and commercial development an assessment is to be provided in accordance with the CPTED principles.

2) Applicants should refer to the Site Planning and Design Principles Section of this Plan and address the CPTED principles in their development application.

7.2.10 Site Topography

A. Background

A site's natural topography and landform are important features that inform the urban structure of the place.

B. Objectives

a) Development should respond to a site's natural topography and landform, minimising excavation and potential visual impacts and in turn reduces construction costs.

C. Controls

1) Applicants must demonstrate how their design/ development respond to the natural topography and landform of the site, based on site analysis drawings.

7.2.11 Other Controls

7.2.11.1 Town Square

A. Background

The Town Square is to be the primary social focus of the GPLC. It is to be a vibrant, active town square that forms the hub of the centre.

The Town Square should be designed as a multi-functional public space that is able to operate on various levels responding to special events (such as markets) without disrupting the pedestrian flows of the shopping centre or the traffic calmed vehicular movements. On a few occasions each year this space will be totally closed off but this will be done within a clearly defined and communicated management regime.

B. Objectives

a) To provide a vibrant, active, town square with a shopping Main Street character.

b) To provide improved connectivity and interaction between the Town Square and the community centre.

c) To encourage the Town Square is to be the pedestrian focus of the GPLC.

d) To promote uses around the square that maximise activity and vibrancy, which permit and promote after hours usage of the space.

e) To encourage use of high quality and durable materials.

f) To ensure that the Main street will be a primarily a pedestrian oriented street with traffic calming measures for vehicular movement, which allows for local access and a limited amount of short term parking for shoppers on both sides of the street.

g) To provide a flexible Town Square space capable of being enlarged without disrupting the normal pedestrian flows or vehicular traffic movements, provision should be made for temporary closing of the road for specific larger community events and be controlled within the town centres management program.

C. Controls

1) Retail facades should be designed to activate the frontages to the Square both during and after hours.

2) Two/three storey buildings are encouraged forming the edge of Town Square to provide a sense of enclosure.

3) Development fronting the Town Square is to have active retail premises on the ground floor.

4) Active uses including restaurants and cafés fronting the Town Square are encouraged, specifically after normal business hours e.g. restaurants/ cafes. Awnings and/or colonnades create a weather edge to the Town Square.

5) Adequate lighting should be provided for evening use, safety and security.

6) The surface of Town Square should reflect its primary pedestrian focus. Appropriate traffic calming measures, different paving or clearly defined pedestrian crossings should be considered for the east/west spine road.

7) The area of the Town Square shall be not less than 400m^2 and will not incorporate the vehicular traffic's carriageways and/or the standard public pedestrian width within its dimensions.

8) The surface of Town Square should be designed to permit its use by service and emergency vehicles.

9) Allow sunlight access into the town square in all seasons while also allowing for adequate weather protection and sun-shading opportunities.

10) A detailed design for the Town Square should be prepared with any major DA for the centre. The detailed design should establish the appearance of facades to the Square, materials, street furniture, seating, lights, signage, traffic management devices, soft landscaping and other elements relevant to the character of the Town Centre.

11) The Town Square and adjacent 'Main street' roadway is to be managed in order to allow for specific community events and activities.

7.2.11.2 Community Centre Building

A. Background

The current Community Centre Building is isolated from the remainder of the existing shopping centre fronting towards the playing fields. The development of the shopping centre will bring opportunities to better connect and integrate the community facility with the surrounding development, although this will remain relatively constrained while the community facility remains in its present configuration.

The role and function of the Community Centre Building is expected to continue to evolve and expand over time in order to meet the needs of the growing community. Accordingly, provision should be made to ensure that if and when a substantial expansion or redevelopment occurs with the community facility there is a mechanism in place that would enable the potential to physically integrate or link with any approved retail development.

However, in the interim, the space between the Community Centre and any new development should be treated as usable public walkway/pathway space with provision for adequate landscaping and passive surveillance from the retail centre.

B. Objectives

a) To consider any additional community needs and facilities that may arise with an expansion to the Community Centre Building.

b) To ensure that the new development improves connections and access to the Community Centre Building in its present form.

c) To provide for improved connections and physical linkages between the shopping centre development and the Community Centre Building in the event that this facility is redeveloped or substantially expanded.

C. Controls

1) New development is to demonstrate that the design enhances the amenity of existing linkages and access to the community facility building in its present form.

2) New development is to make provision for access by a potential future physical connection from the community facility building in the event of a major expansion or redevelopment of the community facility building, which would enable a connection at a floor level consistent with the adjacent development. The provision of access will be approximately 3m in width and be of mutually acceptable timing, design and location between the Council and the owners of GPLC.

3) New Development to have a minimum setback of 8m between the existing Community Centre building and any new development. Additionally the interim space between the community centre and new shopping centre is to be landscaped, attractive and enjoy a high degree of surveillance with pedestrian paths.

7.2.11.3 Management Plan

A. Background

The management for the ongoing care, control and management of both public and private domain is important and needs to be clearly defined in terms of responsibility for these various areas.

B. Objective

a) To ensure that all public and private domain located within the town centre is adequately managed.

C. Control

1) Prior to the final approval of any further development of the town centre a Plan of Management is to be prepared and submitted to Council for approval. The Plan of Management shall incorporate measures for the ongoing care, control and maintenance of both the public and private domain and shall differentiate those lands and facilities, which will remain in private ownership.

7.3 Glenmore Park Major Land Use

7.3.1 Land to which this Section applies

This Section applies to all land at Glenmore Park Stage 1.

7.3.2 Purpose of the Section

The central purpose of this section is to clearly establish and identify major land use areas within Glenmore Park Stage 1.

A. Objectives

a) To establish major land use areas which identify specific precincts for key development activities;

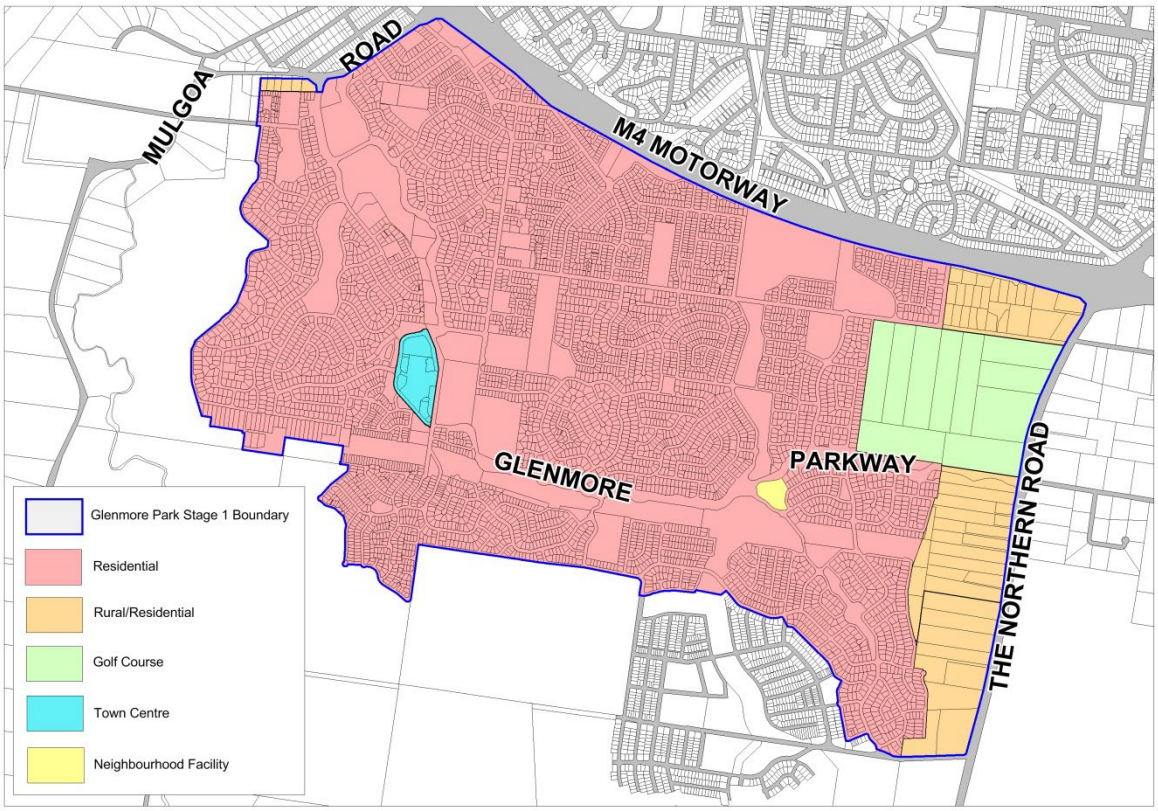
b) To promote the continuation of the open, semi-rural character of the estate's edges along The Northern Road and Mulgoa Road by maintaining a low density development pattern; and

c) To restrict commercial or retail related activities from establishing along The Northern Road or Mulgoa Road frontages.

B. Controls

The following controls applying to all development proposals within Glenmore Park set the guidelines to be observed for each major land use area, as shown in Figure E7.13.

Figure E7.13: Major land use development areas in Glenmore Park Stage 1



1) Residential

In addition to the controls outlined in Section D2 Residential Development, the following objectives and controls apply:

A. Objectives

a) To provide for a range of activities consistent with the establishment of a quality living environment;
b) To encourage a diversity of housing types; and
c) To provide development opportunities for non-residential activities which:
   i) support neighbourhood planning concepts;
   ii) do not impact on neighbourhood amenity;
   iii) enhance access to a range of community services and facilities; and
   iv) to make provision for a general store / neighbourhood shop within Glenmore Park, as show in Figure E7.25.

B. Controls

1) Minimum average density of 11 dwellings per net hectare; and
2) Range of lot sizes desirable.

2) Rural / Residential

A. Objectives

a) To conserve the open, semi-rural character of The Northern Road and Mulgoa Road frontages of Glenmore Park;

b) To promote the need to maintain a low density settlement pattern which:

   i) recognises the importance of conserving the rural land use pattern and image of the gateways into the urban areas of the city located along the major road frontages; and

   ii) provides sufficient flexibility for dwelling siting and orientation of allotments to minimise the visual impact of development and to overcome noise constraints;

   iii) To provide an acceptable level of development in the event that reticulated sewer is not available to The Northern Road sub-catchments; and

   iv) To provide for large lot residential living opportunities.

B. Controls

1) A minimum dwelling setback of 50m;

2) A range of lot sizes is desirable; and

3) No additional vehicle access to The Northern or Mulgoa Roads.

3) Neighbourhood Shopping Facilities

A. Objectives

a) To provide for a range of commercial and retail activities and services at a neighbourhood level which satisfy day-to-day resident needs; and

b) To encourage the early provision of retail and professional services and temporary facilities.

B. Controls

1) Scale and nature of the neighbourhood facility shall be supportive to, and not delay the timing for the natural inception of the major shopping facility at the Town Centre;

2) Activities which are inconsistent with the objectives of this major land use or which detract from the establishment of a high quality neighbourhood scale business centre, or the amenity of the surrounding area, will not be supported by Council; and

3) Maximum floorspace up to 1,500m^2.

4) Golf Course

A. Objectives

a) To enable the continuation of the Penrith Golf Course to service the needs of Glenmore Park and the broader community.

B. Controls

1) Ensure that supplementary development is:

a) consistent with the above-stated objectives for the rural/residential edge of the estate along The Northern Road and that the visual quality and amenity of the surrounding locality is conserved;

b) managed in a manner which does not give rise to traffic conflicts on The Northern Road; and

c) corporate signage is limited and consistent with the semi-rural character of the area.

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Part B – Glenmore Park Stage 2

7.4 Glenmore Park Stage 2

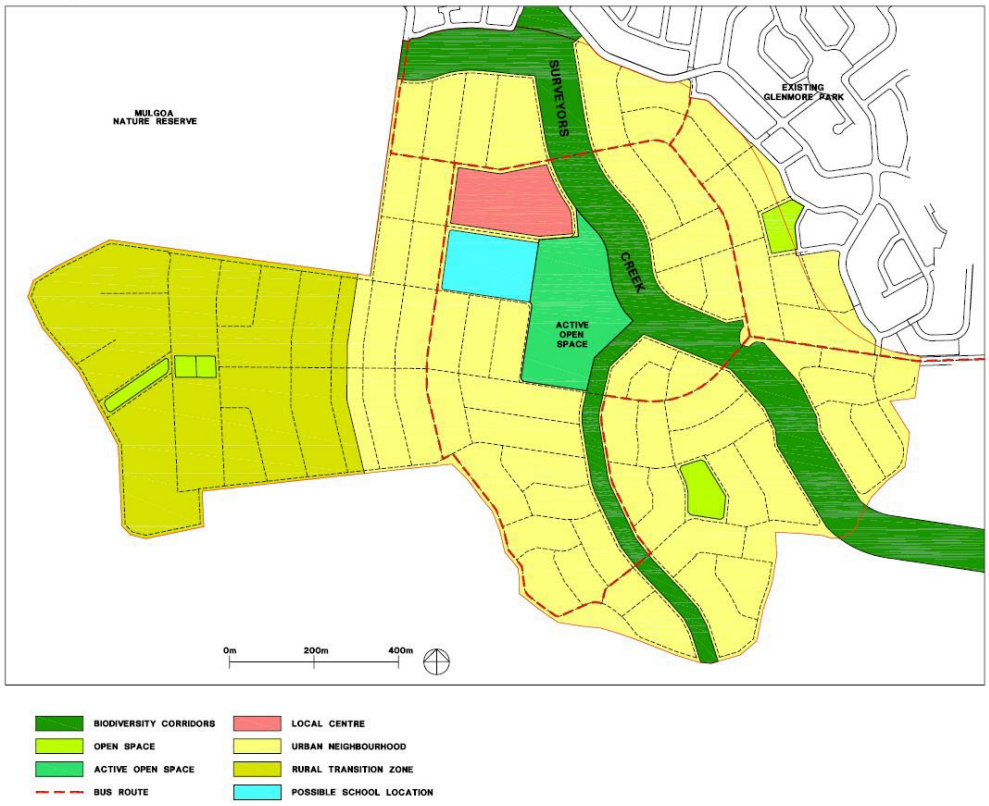
7.4.1 Preliminary

This Part is called 'Glenmore Park Stage 2' and supports the objectives of the Penrith Local Environmental Plan 2010 and to facilitate the sustainable development of residential, mixed use, retail and open space on the site.

7.4.1.1 Land to Which This Part Applies

This Section applies to the land as shown on Figure E7.14 below.

Figure E7.14: Glenmore Park Stage 2 Subject Land



7.4.1.2 Relationship to Other Plans and Documents

In addition to the provisions of the Penrith LEP 2010, the Section must be read in conjunction with any relevant Planning Agreement between the Glenmore Park Stage 2 Landowners (or individual landowners) and Penrith City Council. This section must be also read in conjunction with the Glenmore Park Stage 2 Development Contributions Plan 2007 where relevant.

The requirements of this Section are informed by Penrith's adopted Sustainability Blueprint for Urban Release Areas 2005.

7.4.1.3 Supporting Studies

The following supporting studies and documents have been used in the preparation of this Section:

a) *Local Environmental Study* prepared by EDAW (November 2003).

b) *Asset Protection Zone Assessment* prepared by Bushfire + Environmental Services (December 2006).

c) *Corridor Management Plan* prepared by Cumberland Ecology (October 2006).

d) *Stormwater Management Strategy* prepared by J. Wyndham Prince (October 2006).

e) *Transport Management and Accessibility Plan* prepared by Transport and Traffic Planning Associates (October 2006).

These documents are available for reference from Council.

7.4.1.4 How to Use This Section

The section identifies key planning issues that Council will address when considering Development Applications. Each planning issue is structured in the following manner to provide a clear understanding of Council's expectations with regard to development:

Objectives:	Describe the rationale of the planning issue and what it is trying to achieve.
Performance Measures:	Qualitative measure against which a development's ability to achieve the objectives will be assessed. These measures provide flexibility for developers to achieve those objectives through a suite of design responses.
Development Controls:	Numeric based measures that will need to be achieved to meet the relevant objectives.

7.4.1.5 Concept Plans

A Concept Plan setting out proposals for the development of each precinct or site is required to be lodged and approved by Council prior to, or with, the first subdivision development application for each precinct.

A Concept Plan shall demonstrate:

a) Proposed urban structure and public domain elements, including Landscape Masterplan.

b) Delivery of required dwelling yield and diversity targets set out in Table E7.1.

c) Distribution of lot types and housing forms to suit a variety of lifestyles, household types and financial capacities.

d) Road hierarchy, sections and details.

e) The location and design of open space networks

f) The location of pedestrian and cycle paths.

g) The Northern Road view shed analyses where required.

h) Development Staging.

i) Infrastructure Delivery Strategy.

7.4.2 Structure Plan

7.4.2.1 Introduction

A. Vision

A vision for Glenmore Park Stage 2 was established through the Local Environmental Study (LES). In brief, it recommended that the southern expansion of the Glenmore Park community should:

a) Promote, service, and support a diverse, vital, and healthy community that is socially, environmentally, and economically sustainable, ensuring the quality of life for future generations.

b) Demonstrate new benchmarks in urban outcomes and quality lifestyles.

c) Be characterised by garden village precincts and rural living environments.

d) Reflect the site's unique identity while building on its connection with Penrith City and the wider Region.

e) Be characterised by innovation, accessibility, connectivity, sustainability, and diversity, celebrating the natural and cultural heritage of the area.

B. Objectives

a) To provide a clear planning framework for development of the subject lands.

b) To ensure that the most efficient use of urban zoned land is achieved.

c) To ensure development meets sound environmental planning practices and standards.

d) To encourage development that satisfies ecologically sustainable design principles.

e) To protect the environmental heritage of the area.

f) To utilise and enhance the area's natural character of the lands to provide opportunities for a unique community identity.

g) To promote sustainable building forms.

h) To facilitate the provision of diverse housing forms reflecting the increasingly diverse profile of Penrith's communities.

i) To facilitate increased dwelling densities in areas of the highest amenity and accessibility.

j) To integrate all modes of transport to ensure there are efficient links within and between open spaces, neighbourhood centre and adjacent residential areas and services.

k) To protect and enhance watercourses as natural systems, riparian corridors and biological linkages.

7.4.2.2 Urban Structure

a) The principal land use within Glenmore Park Stage 2 will be residential. The residential areas will straddle either side of a lineal open space network represented as a riparian corridor that is centred on and conserves Surveyors Creek.

b) A neighbourhood centre, active open space and primary school, are centrally located to provide a focal point for the new community.

c) Vehicle access will be provided via Bradley Street and a loop collector road will represent the primary organising element of the road network.

d) The loop road enables a legible road hierarchy to permeate throughout the subject lands.

e) Two additional road connections through to the existing Glenmore Park suburb will also be provided at the northern edge of the release area.

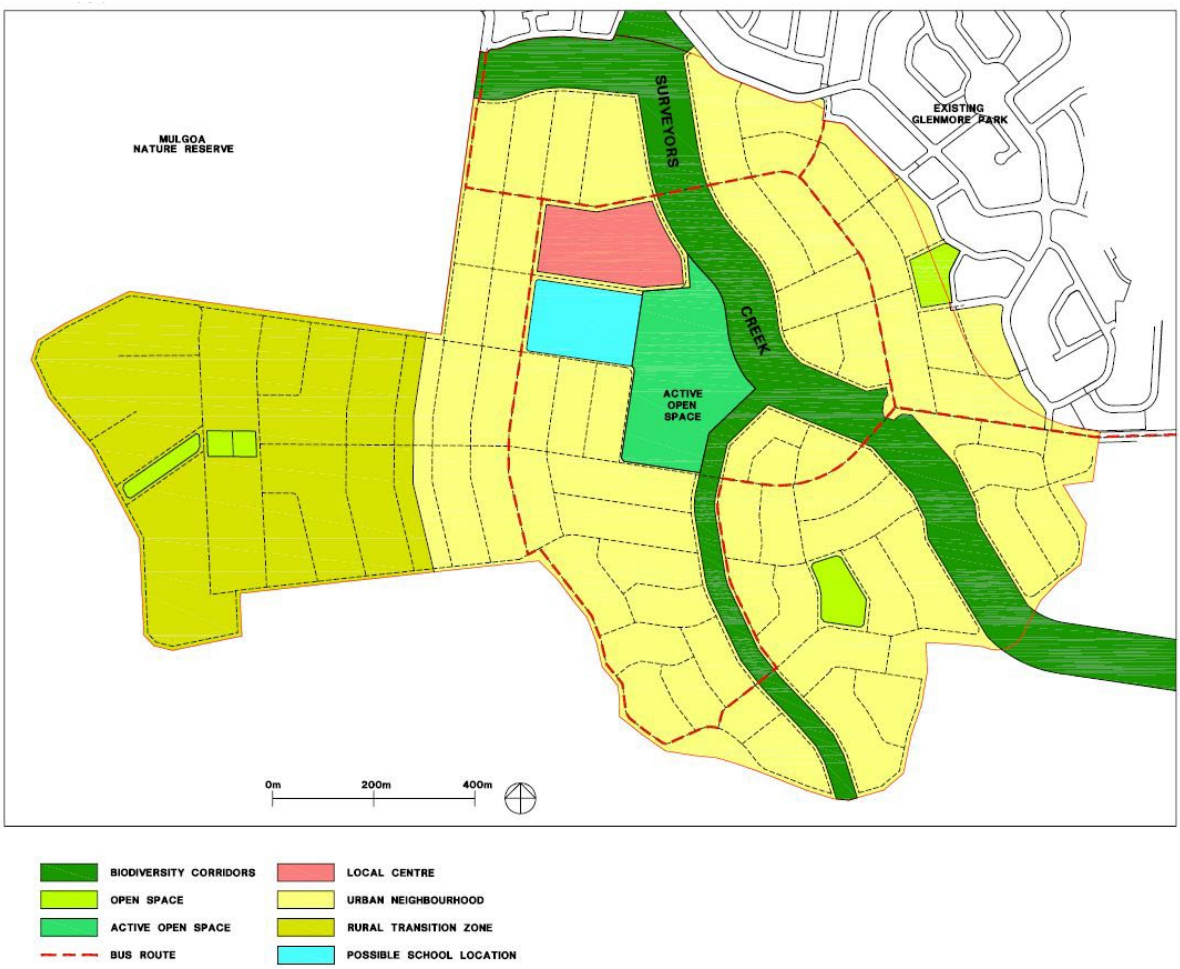
f) Active and passive open spaces will be distributed throughout the urban area, building on existing natural assets and providing a coordinated and integrated network throughout the release area.

g) Higher density forms of housing will be provided along corridor edges, around the Neighbourhood Centre, in good proximity to public transport routes and adjacent to active and passive open spaces

h) Residential areas in the west of the release area will provide larger lots that provide a transition between urban areas and the surrounding rural landscape.

i) Glenmore Park Stage 2 Structure Plan establishes the structure and form for the planning and future development of the subject lands. This Plan is illustrated at Figure E7.27 with the main elements being described and expanded upon in more detail in Section 7.4.3 Public Domain of this Section.

Figure E7.15: Glenmore Park Stage 2 Structure Plan



7.4.2.3 Dwelling Yield

A. Objectives

a) To achieve ensure efficient use of zoned land and required infrastructure is achieved

b) To sustain services and facilities required for diverse urban communities, including public transport.

c) To promote a diverse range of housing types which will accommodate a wide demographic profile.

d) To promote affordable housing opportunities.

e) To achieve a dwelling density of 15 dwellings per hectare over the Net Developable Area.

B. Development Controls

1) A minimum of 1,628 dwellings is delivered across the entire release area.

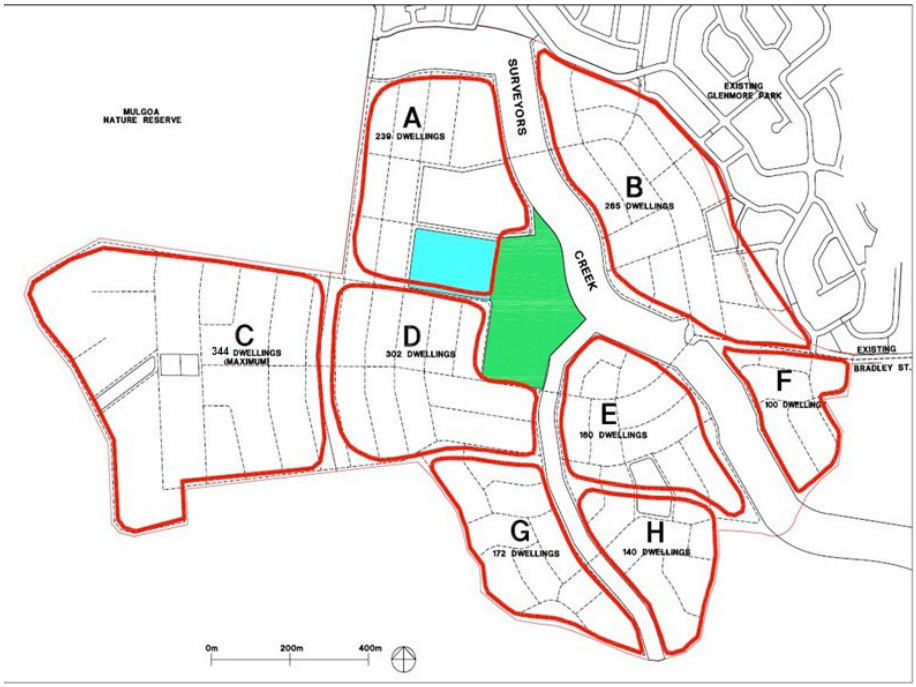
2) Precincts as identified at Figure E7.16 are to deliver the dwelling yield indicated. All dwelling numbers identified at Figure E7.16 are minimum targets except Precinct C which provides a maximum dwelling target.

3) As subdivision of a precinct occurs a mechanism (such as Section 88B instrument) will accompany the subdivision plan and will identify individual lots for future accommodation of single dwellings, dual occupancies, terraces, apartments, etc. inclusive of the number of dwellings that each lot will deliver.

4) Any creation of 'super lots' and residue parcels will specify the minimum dwelling yield that those lots will be required to deliver. This may be achieved by way of a Section 88B instrument or other mechanism as agreed.

5) Council may require a detailed demonstration that proposed yields for lots are able to be suitably met as part of a Development Application.

Figure E7.16: Dwelling Yield



7.4.2.4 Dwelling Diversity

A. Objectives

a) To promote diverse housing forms that meet the increasingly diverse demands of the local community.

b) To ensure affordable housing strategies for the release area are achieved.

B. Performance Measures

These objectives may be achieved where diverse housing forms are provided within precincts and across the overall development area.

C. Development Controls

1) Development achieves indicative housing type numbers identified for each precinct at Table E7.1.

Table E7.1: Dwelling Diversity.

Precinct	Apartments and Studios	Terraces/Live-Works and Semi-Detached	Built to Boundary	Detached	Precinct Total
A	50	33	56	100	239
B	15	20	70	160	265
C	0	30	0	314	344
D	25	40	97	140	302
E	25	40	30	65	160
F	4	20	30	46	100
G	4	21	45	102	172
H	4	18	40	78	140
Total	127	222	368	1,005	1,722
% of Total	7.4	12.9	21.3	58.4	100

Note: Representations of these dwelling types are provided at Section 7.4.5 - Typical Development Forms of this Section.

7.4.3 Public Domain

7.4.3.1 Responding to the Site's Natural Features

7.4.3.1.1 Corridors

A. Objectives

a) To conserve biodiversity by providing linkages between significant natural vegetation units within the City.

b) To ensure that important natural features inform the urban structure of the place.

c) To provide high amenity areas for residents.

d) To protect, restore and enhance the environmental values and functions of watercourses and riparian corridors along Surveyors Creek and the western tributary of Surveyors Creek.

B. Performance Measures

These objectives may be achieved where:

a) The natural drainage lines of Surveyors Creek and its western tributary are conserved as healthy and naturally functioning riparian corridors.

b) Existing healthy remnant vegetation is retained within those corridors.

c) Significant revegetation of the riparian corridors occurs as part of development.

d) The corridors and other topographical features are represented as special places within the urban form.

e) The design of the bridging structures over the corridor ensure the following:

   i) Use of open piered bridge structures.

   ii) 1% AEP flood conveyance.

   iii) Flora and fauna connectivity.

   iv) Scour protection.

   v) Light penetration beneath structure.

f) A Corridor Management Plan that identifies how the corridor will be established is prepared developed and implemented on site as part of its development.

C. Development Controls

1) A minimum corridor width of 100m is provided along the Surveyors Creek Corridor with an 80m Core Riparian Zone.

2) A minimum corridor width of 40m with 20m Core Riparian Zone is provided along the western tributary of Surveyors Creek.

3) The profile of the riparian corridors is consistent with that represented at Figures E7.18 and E7.19.

4) Riparian corridors are to be fully vegetated and provided in accordance with Figures E7.17, E7.18 and E7.19.

5) A Vegetation Management Plan must be prepared for the rehabilitation of the riparian corridors in Glenmore Park Stage 2 in accordance with the NSW Office of Water guidelines.

6) All remnant vegetation within the riparian corridors must be protected and rehabilitated.

7) All riparian corridors are to be vegetated with appropriate local native vegetation (i.e. fully structured trees, shrubs and groundcovers) at a density that would occur naturally.

8) An open and low perimeter fence or low bollard type barrier is to be provided along the entire perimeter of the riparian corridors to prevent inadvertent damage to riparian corridors.

Figure E7.17: Corridor Width Plan

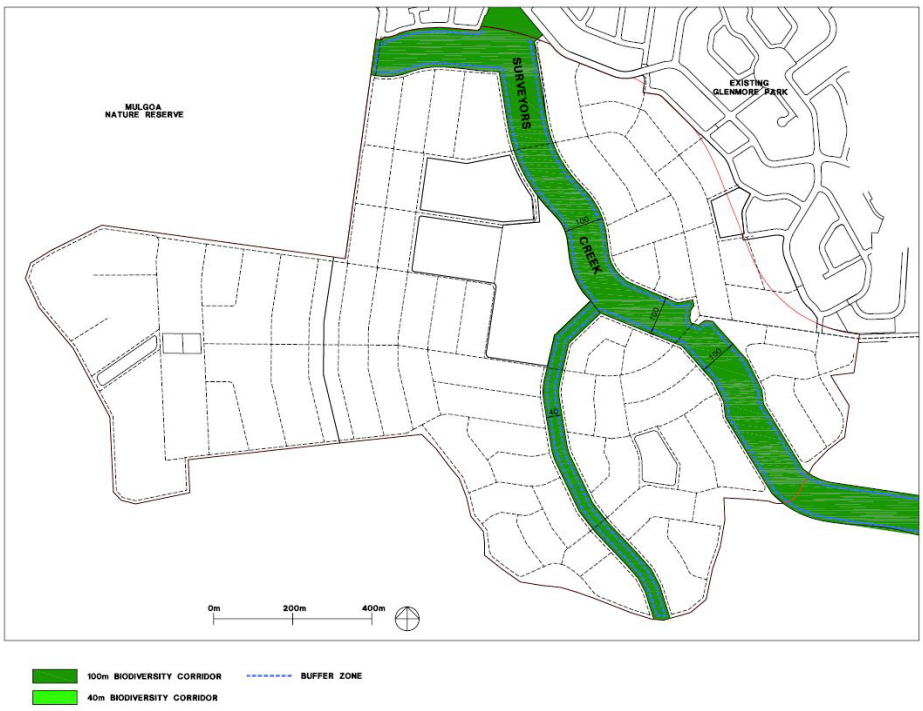


Figure E7.18: Corridor Profile Plan

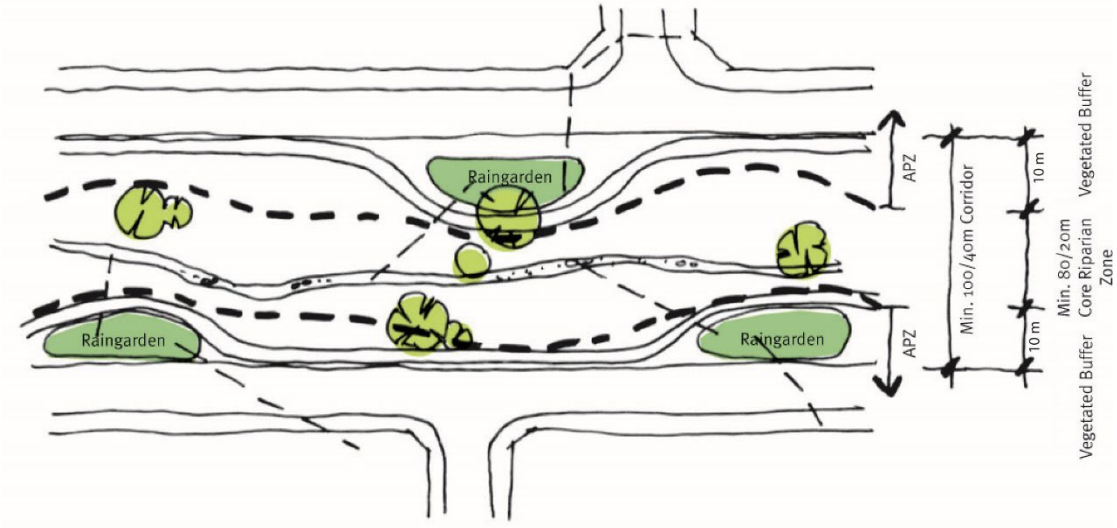
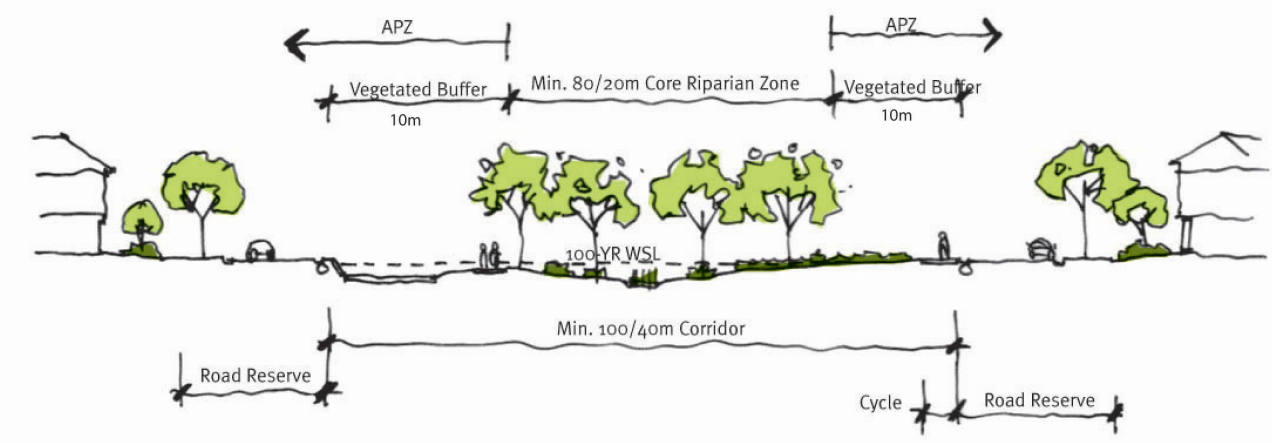


Figure E7.19: Corridor Profile Section



7.4.3.1.2 Bushfire Hazard Management

A. Objective

a) To manage the risk to life and property assets from bushfire events while ensuring that the natural environment including riparian corridors are protected and enhanced.

B. Performance Measures

The objectives may be achieved where:

a) Asset Protection Zones (APZs) of a scale and type suitable to the NSW Rural Fire Service are provided between all built forms and adjacent bushland units.

b) APZ may incorporate the building setback of the adjoining built forms.

C. Development Controls

1) A minimum of 50m of the 100m wide corridor connection to the Mulgoa Nature Reserve is to be kept clear of vegetation that might promote the eastward spread of fire within the Reserve.

7.4.3.1.3 Water Management

A. Objectives

a) To ensure Mulgoa Creek and Surveyors Creek are able to function as healthy, natural riparian corridors.

b) To maintain the stability and integrity of the finished creek profile.

c) To ensure the quality of water leaving the urban areas does not adversely impact upon the health of Mulgoa Creek and Surveyors Creek.

d) To reduce the volume of stormwater run-off from the site.

e) To ensure stormwater runoff is adequately treated before it enters the riparian corridors.

B. Performance Measures

These objectives may be achieved where:

a) Trunk drainage works are provided as an initial stage of development of the release area.

b) Stability within the watercourses prevents bank erosion.

c) The stormwater management regime provides a treatment trains including pit inserts, bio-retention swales and rain-gardens to improve the quality of urban runoff before it enters the creek channels.

d) The active playing fields, school site and neighbourhood centre incorporate on-site water quality treatment devices as part of their development.

e) Separate Stormwater Management Plans for both the Mulgoa Creek and Surveyors Creek catchment that identify how the quantity and quality of urban runoff from the site will be managed are prepared and implemented on site as part of its development.

C. Development Controls

1) Achieve Council's downstream water quality objectives and measures in accordance with the Water Management Section of this Plan.

7.4.3.1.4 Flood Management

A. Objectives

a) To manage the risk to life and property assets from flooding events.

b) To allow the riparian corridor to function as a naturally occurring waterway.

c) To manage most flood waters within the site.

B. Performance Measures

These objectives may be achieved where:

a) Appropriate areas of land are provided outside the Core Riparian Zone for detention and storage of flood waters and may only be located within the vegetated buffer if no alternative location outside the vegetated buffer can be found, the basins only occupy limited areas and the basins can be designed in such a way that they will not reduce the function of the adjacent core riparian zone.

b) Flood waters are managed within the riparian corridor.

c) A Stormwater Management Plan for both the Mulgoa Creek and Surveyors Creek that identifies how the flood waters will be managed is prepared and implemented on site as part of its development.

d) Refer to the flood liable provisions of Section C3 Water Management of this Plan for further details.

C. Development Controls

1) Stormwater detention is provided to reduce 1 year ARI post development flows to pre development levels.

2) Stormwater events larger than the 1 year ARI will be managed within the existing Blue Hills Wetland.

7.4.3.1.5 Trees

A. Objectives

a) To protect and embellish local vegetation and habitat.

b) To integrate significant trees within the landscape of the new urban area.

B. Performance Measures

These objectives may be achieved where:

a) Existing mature trees are conserved for their natural functions and aesthetic value.

b) Open spaces are co-located with existing stands of significant trees.

c) Significant trees located within developable areas are able to conserved on site as part of the landscaped area of future development.

d) No disturbance to existing ground levels occurs within the drip line of existing significant trees.

e) Existing native vegetation in riparian corridors will be protected and corridors revegetated to fully structured native vegetation communities to provide habitat and movement for flora and fauna species.

7.4.3.1.6 The Northern Road View Shed

A. Objectives

a) To conserve the important local view shed from The Northern Road as identified at Figure E7.20.

b) To ensure that development in Glenmore Park Stage 2 is not visible from The Northern Road.

B. Performance Measures

These objectives may be achieved where:

a) Built forms (including outbuildings, fences and other structures) are located below the level of the ridge that extends along the southern and eastern perimeter of the site.

b) Built forms do not adversely impact upon the existing rural landscape character as viewed from The Northern Road and its view shed.

c) Urban infrastructure such as street lighting and other structures do not adversely impact upon the existing rural landscape character as viewed from The Northern Road and its view shed.

C. Development Controls

1) The roofline of dwellings and other buildings are to be located below the southern and eastern ridgeline when viewed from The Northern Road. This may be achieved through:
   a) Benching of road reserves and building lots.
   b) Use of single storey dwelling construction along precinct edges.
2) Road reserves adjacent to the southern and eastern ridgeline are to be landscaped with local native species.

3) View-line analysis maps are to accompany each Precinct Concept Plan for Council's approval.

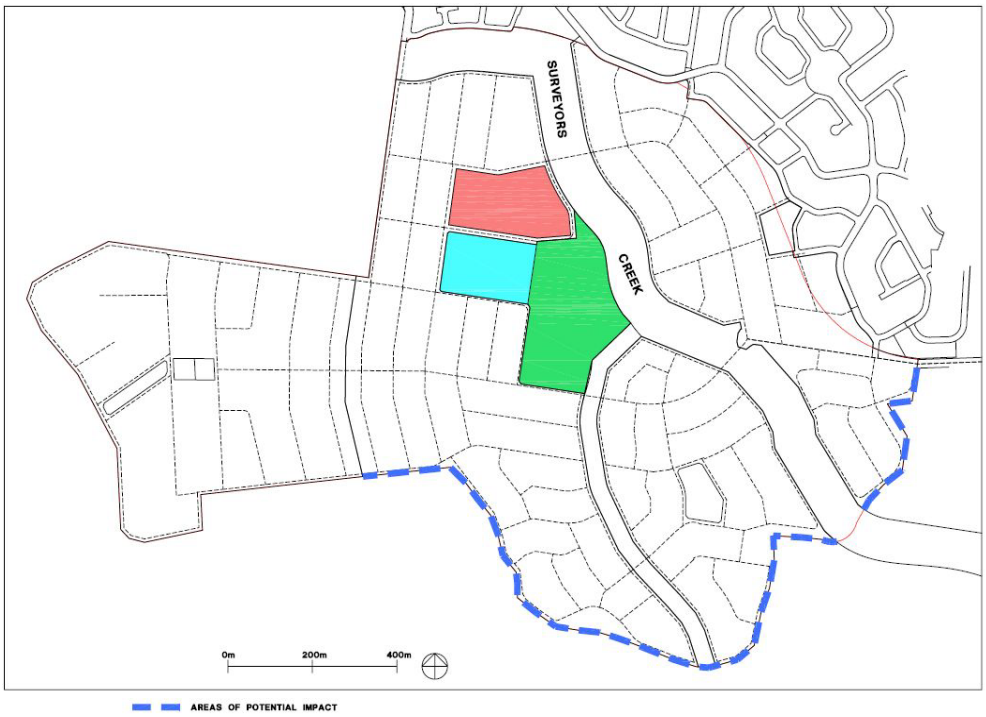


Figure E7.20: Areas of Potential Views from The Northern Road

7.4.3.2 Access and Movement

7.4.3.2.1 Urban Structure

A. Objectives

a) To provide a clear urban framework for the entire release area that informs the location of land uses.

b) To identify a clear hierarchy for movement within the subject lands and adjacent urban areas.

c) To provide a safe and efficient movement network for all users.

d) To promote public and active transport options.

B. Performance Measures

These objectives may be achieved where:

a) The street network is a modified grid that facilitates walking and cycling for access to daily activities; and also enables direct local vehicle trips within the neighbourhood and to local activity points.

b) The suburb has a coherent urban system of compact walkable neighbourhoods which cluster to form a suburb with a high degree of street connectivity.

c) Neighbourhood identity is reinforced by the location of mixed use and open space areas at focal points within convenient walking distance for residents.

d) The vehicle, cyclists and pedestrian networks, land-use mix and lot density assist in reducing local vehicle trips, travel distances and speeds, maximising public transport effectiveness, and encouraging walking and cycling to daily activities.

7.4.3.2.2 Vehicular Movement

A. Objectives

a) To create a legible road hierarchy.

b) To provide a high degree of connectivity within the site and between the site and the adjoining areas.

c) To minimise the negative impacts of through traffic.

B. Performance Measures

These objectives may be achieved where:

a) A hierarchy of streets should reflect the function and traffic load of each street in a network, minimise travel distances, maximise access to facilities and services and assist people find their way.

b) A loop type internal collector road is provided as a defining element of the urban form and can accommodate bus movements. The route of this road is shown at Figure E7.21.

c) The street network connects with adjacent collector routes and neighbouring streets to maximise movement efficiency and social connection.

d) 3 vehicular access points to adjoining areas will be provided at locations shown at Figure E7.31.

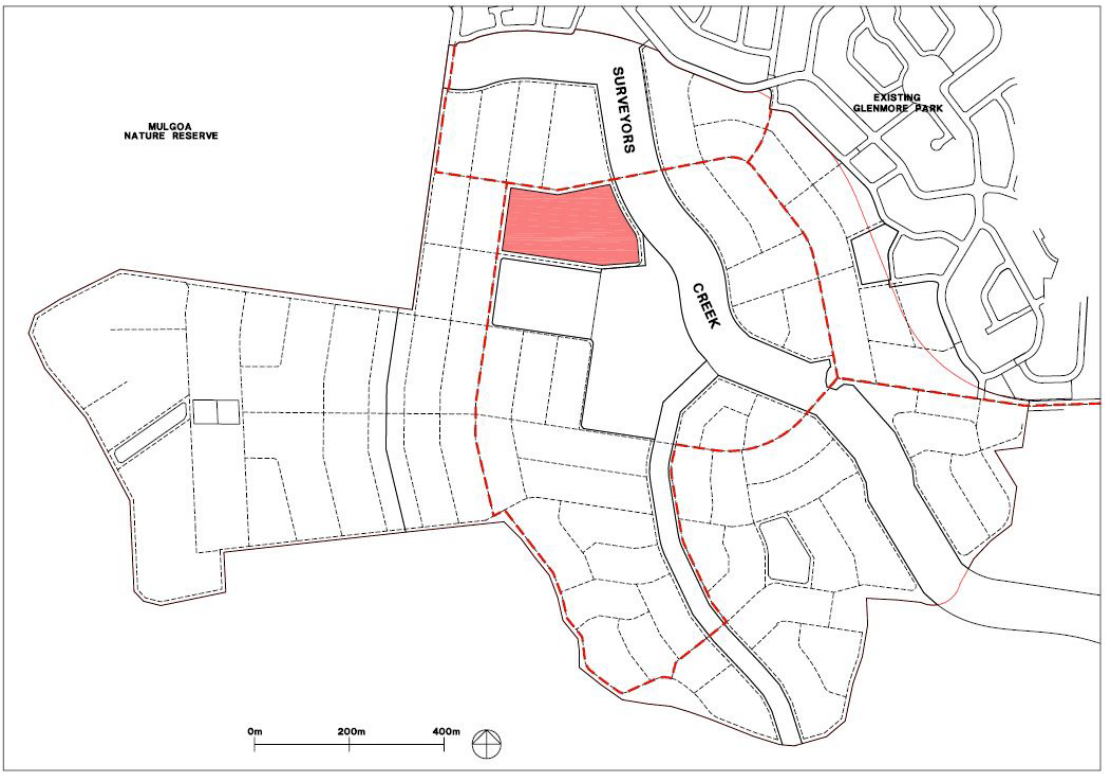
e) The predominant local street pattern is an east-west axial grid that maximises quantity of lots with a north-south axis.

f) The street network takes account of the topography and vegetation and respects any existing or potential site assets.

g) The street network allows all development to address the street.

h) Rear lanes assist in reducing potential pedestrian and vehicle conflicts within the broader road network.

C. Development Controls



1) Street blocks have a maximum length of 300m and a maximum depth of 90m.
2) Cul-de-sacs are discouraged, however where their use is justified, will have a maximum length of 60m and only be used to improve the lot efficiency of deep or odd shaped street blocks and will always have their head located away from dominant movement direction.

Figure E7.21: Road Network

7.4.3.2.3 Public Transport

A. Objectives

a) To increase opportunities for use of public transport.

b) To enable the efficient operation of bus routes on designated roads.

c) To encourage the early introduction of bus services within the estate.

B. Performance Measures

These objectives may be achieved where:

a) The bus route facilitates connections between Precincts, the existing Glenmore Park estate and key facilities within the subject lands, local facilities and the Penrith CBD.

b) A 10% modal shift from private vehicle to active and public transport modes is reached or exceeded.

c) Bus routes and sheltered bus stops are designed, constructed and clearly marked.

d) The planning principles for public transport are shown at Figure E7.22 are delivered as part of the development.

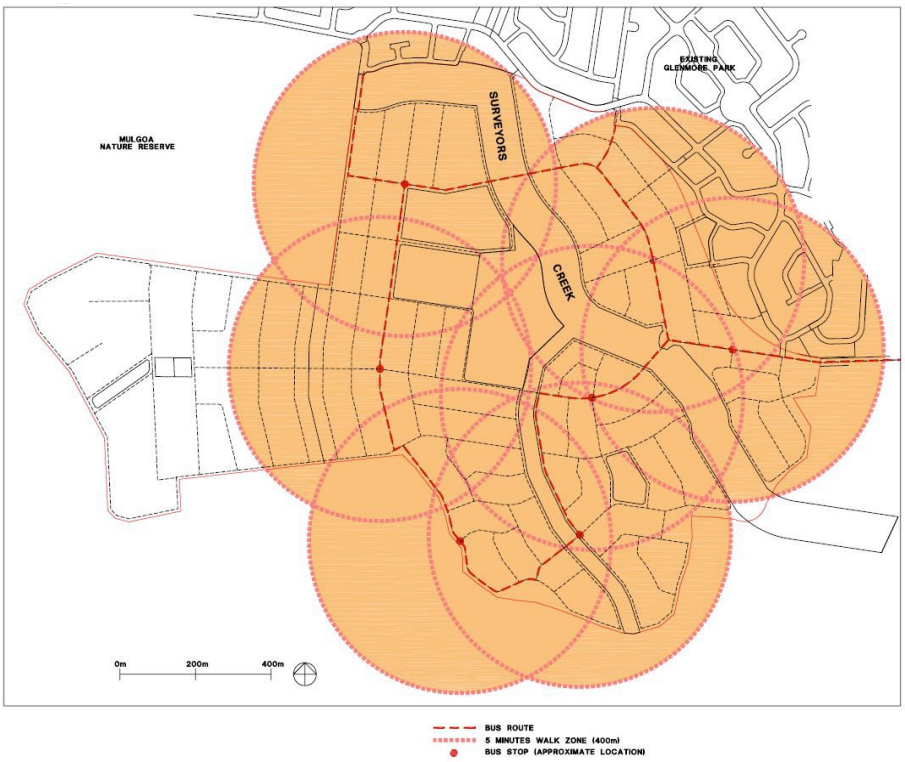
e) The early delivery of bus services as the community grows.

C. Development Controls

1) All dwellings within the Surveyors Creek catchment are within 400m distance from the designated bus route.

2) The bus route will be designed and constructed in accordance with the road profiles identified at Section 7.4.3.3.3 Road Sections of this Part.

Figure E7.22: Public Transport Principles



7.4.3.2.4 Pedestrians and Bicycles

A. Objectives

a) To promote active transport options by providing safe and convenient routes to and from key focal points within the release area and to the existing Glenmore Park estate.

b) To promote an active and healthy lifestyle.

c) To promote casual social interaction among neighbours.

d) To promote Universal Design principles in all new facilities.

B. Performance Measures

These objectives may be achieved where:

a) Footpaths are an integrated element of the normal street network.

b) The cycle network is a combination of on street and dedicated pathways that link the main points of attraction and significant natural features.

c) Separate pathway will operate within parks and open spaces areas as well as the locations identified at Figure E7.23.

d) Pathways in open spaces are aligned approximately parallel with its interface to the street to take advantage of the street lighting and allow for casual surveillance by residents and drivers.

e) When provided within the street network, development that adjoins the shared pathway will generally provide vehicle access from rear lanes.

f) Pathways are designed and constructed wherever possible and practical to be of appropriate width, longitudinal gradient and sight distance.

g) Kerb details cater for all users, including aged people, people with prams and in wheelchairs, and people with disabilities, and take account of Universal Design principles.

h) Street landscaping is provided to enhance the appearance of the street and pedestrian environment, including providing protection from the sun.

i) A primary pathway network is designed, constructed and clearly marked in accordance with Figure E7.24, and with appropriate connections to existing Glenmore Park.

j) Bicycle racks are provided as part of all developments that attract significant public patronage.

k) Pedestrian paths and cycleways that are located within the riparian corridor must be in accordance with the Department of Water and Energy's 'Design and Construction of Paths, Cycleways and Accessways along Watercourses and Riparian Area Guideline 2007'.

C. Development Controls

1) The minimum width for footpaths provided as part of a road reserve is 1.2m.

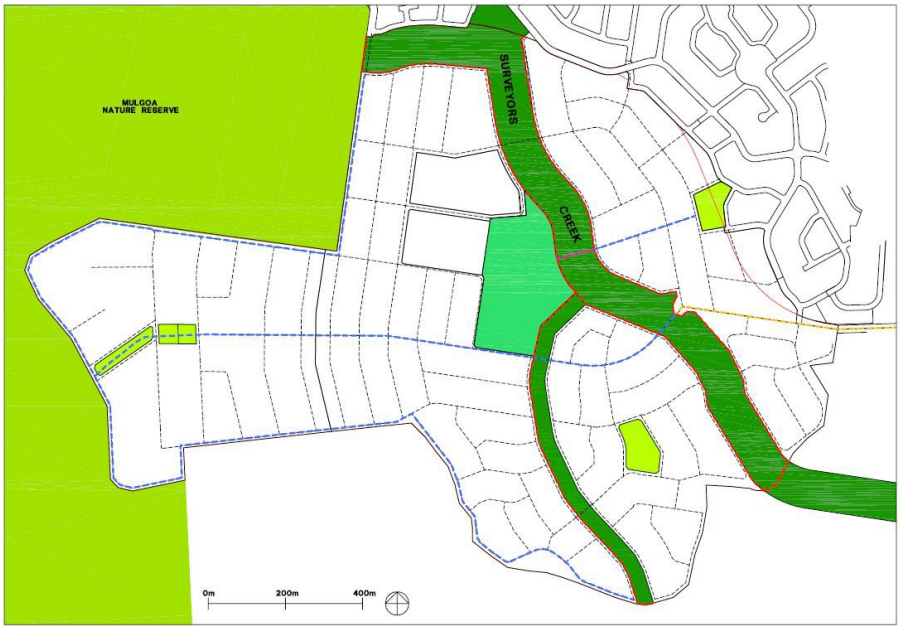
2) Pathways on the collector roads and Bradley Street will be a minimum of 1.5m.

3) Pathways that form part of the open space network are a minimum of 2.5m.

4) Where the pathway aligns with the street network, as identified at Figure E7.23, the road reserve will be widened by 1.3m where it aligns with a local road or minor local road and 1.0m where it aligns with a collector road as determined by section 7.4.3.3.3 Road Sections, to ensure a 2.5m pathway can be provided.

5) Footpaths are to be provided to both sides of all roads (except Bradley Street Entry Area where a footpath is required only on the northern side).

Figure E7.23: Pedestrian + Cycle Network



7.4.3.3 Streetscapes

7.4.3.3.1 Landscape Character

A. Objectives

a) To provide an attractive and sustainable residential community.

b) To ensure development contributes to cohesive streetscape and desirable pedestrian environments.

c) To provide safe and secure environments for pedestrians and cyclists.

d) To promote casual social interaction among neighbours.

e) To encourage an active and healthy and active lifestyle.

f) To ensure street layouts provide well distributed public open spaces that contribute to the legibility and character of the development.

g) To promote landscape treatments that is appropriate to the character and constraints of each locality.

B. Performance Measures

These objectives may be achieved where:

a) The release area landscape includes streets lined with tall tree species.

b) Landscaping is provided to create a character that is distinct to each Precinct.

c) Streets are designed to establish or enhance the unique character of the precinct by responding to its topography, desirable views or local features.

d) Street vistas are terminated with views to open spaces, parks and the Blue Mountains, where possible.

e) The carriageway is visually contained to promote steady, predictable traffic speeds by:

   i) Clearly defining the boundary between pedestrian and vehicle zones.

   ii) Providing on-street parking.

   iii) Planting street trees at regular spacing within the carriageway and/or verge.

f) Boundaries between street verges and private front yards are clearly defined and houses are designed to encourage passive surveillance.

g) Landscaping helps define boundaries, create continuity and provide shade.

h) Water sensitive urban design elements are integrated into street verges, where possible.

i) On-street parking is provided at a rate appropriate to the anticipated demand while ensuring the landscape character and street function is not compromised.

j) Design details such as footpath and driveway cross-overs are uniformly applied to make the street character more consistent.

k) Street signage is designed to be complementary to the overall streetscape design and character and signage clutter is avoided.

C. Development Controls

1) Street trees are provided at a rate of one tree for every 10m of site frontage.

2) Street trees are provided at minimum size of 75 litres and fitted with tree guards.

3) Species selection is appropriate to the character and constraints of the locality.

4) Footpath verges are increased adjacent lots which have building setbacks less than 4.5m and where large street tree planting is proposed.

7.4.3.3.2 Street Furniture and Public Art

A. Objectives

a) To visually define and promote attractive public spaces.

b) To enhance public spaces so that they are vibrant, safe and welcoming.

c) To create a sense of identity for the area by building distinctive places which reflect cultural diversity and local heritage and illuminate contemporary significance and meaning.

d) To facilitate cultural identity through art and design in public places, with the engagement of the local community.

B. Performance Measures

a) Public art is used to define entry ways to the new release area.

b) Public art is provided throughout key public domain areas.

c) Public art may be freestanding art objects or works integrated into building facades, other built edges, and landscaping adjoining public spaces.

d) Street furniture maximises pedestrian comfort, convenience and amenity.

e) Street furniture forms an integrated element of the streetscape.

f) Street furniture is integrated into the design of all public spaces and includes:

   i) Seats.

   ii) Litter bins.

   iii) Drinking fountains.

   iv) Lighting.

   v) Street and information signs.

   vi) Bicycle racks.

   vii) Planter boxes.

   viii) Other items suitable to the function of each public space.

g) Street furniture throughout precincts should be consistent in design and style.

h) Street furniture is to be located so as not to impede mobility, in accordance with AS1428:1-4.

i) Location and detailing of all proposed street furniture and public art is indicated on Landscape Plans submitted with Development Applications.

7.4.3.3.3 Road Sections

A. Objectives

a) To provide a safe and efficient movement network for all users.

b) To encourage responsible driving behaviour, particularly low travel speeds on residential streets.

c) To cater for the efficient provision of public utilities.

d) To incorporate the natural features of the site including the movement of stormwater, existing and new trees.

B. Performance Measures

These objectives may be achieved where:

a) Streets are designed to ensure vehicle speeds can be controlled and it is clear where vehicles can be parked, cyclists can ride and where pedestrians should walk or cross.

b) Opportunities for walking and cycling are well provided for.

c) The materials, line marking and landscaping of the streets clearly delineate the travel lanes from the parking “lanes”.

d) Where the provision of parking “lanes” is included in the street reserve width, they are landscaped as parking bays and defined by means of line marking and/or built tree planting bays.

e) Parking on the grassed verge or on parks is restricted.

f) Intersections are designed for the safe and convenient passage of vehicles, pedestrians and cyclists.

g) Kerb radii at intersections and junctions are kept to a minimum, subject to satisfying required turning templates, to keep pedestrian crossing distances to a minimum, to control the speed of turning vehicles and to reduce the visual impact of large junctions.

h) Speed control devices are provided to achieve target speeds.

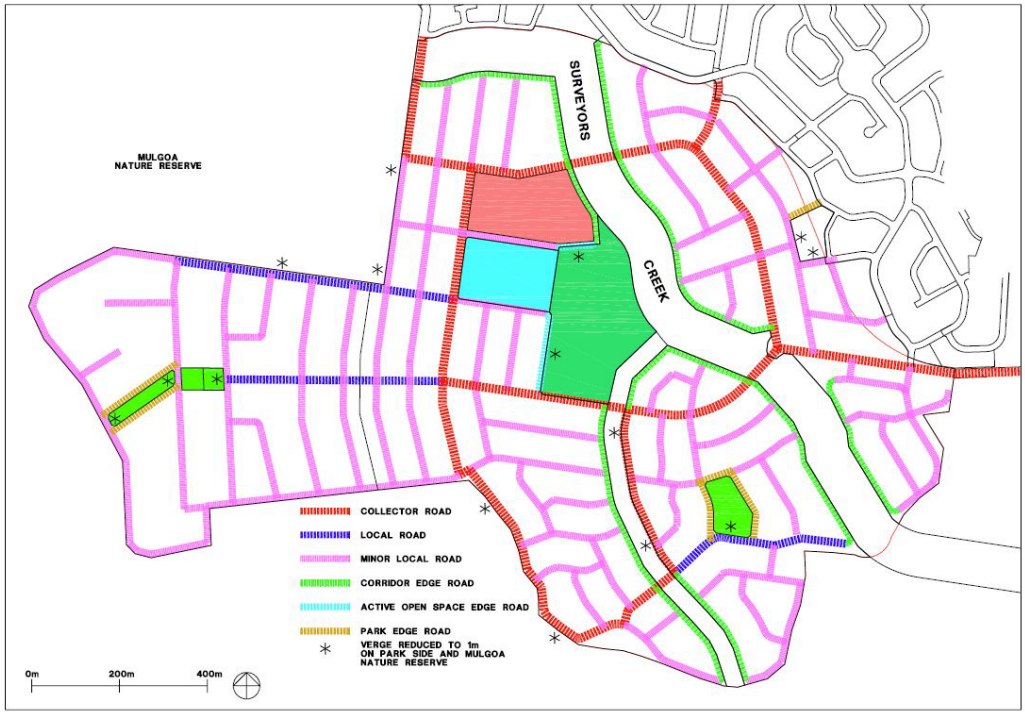
i) Any speed control devices, inclusive of road narrowing, are to be designed to take into account the needs of cyclists.

j) Varying degrees, relative to the road hierarchy, of delays or the need for driver co-operation due to vehicles parking on local roads is an acceptable, traffic calming outcome.

k) Upright kerbs are used throughout the suburb.

l) Development occurs in accordance with the road hierarchy demonstrated at Figure E7.24.

Figure E7.24: Road Hierarchy



1) Bradley Street

A. Performance Measures

a) Provides an entry statement to the release area.

b) Where the topography allows, the road reserve provides water treatment swales rather than kerb and gutter.

c) All development directly addresses the road.

d) Direct vehicular access to development occurs only where topography and site distances allow.

e) Provides for dedicated cycle lane on carriageway.

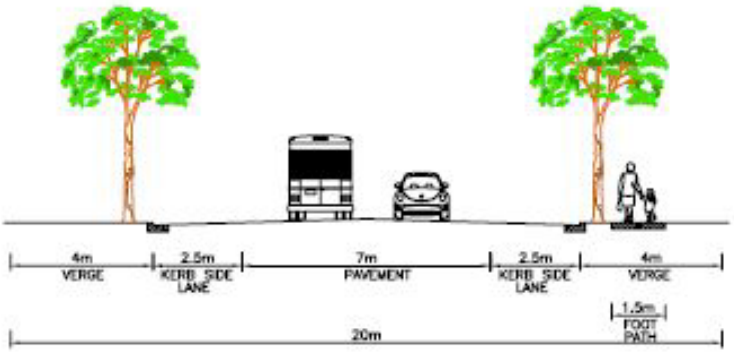
f) The configuration of Bradley Street within the Urban Area - specifically the width of the kerb side lanes, can be adjusted to suit alternate access arrangements, such as services roads or areas where access is denied or not required.

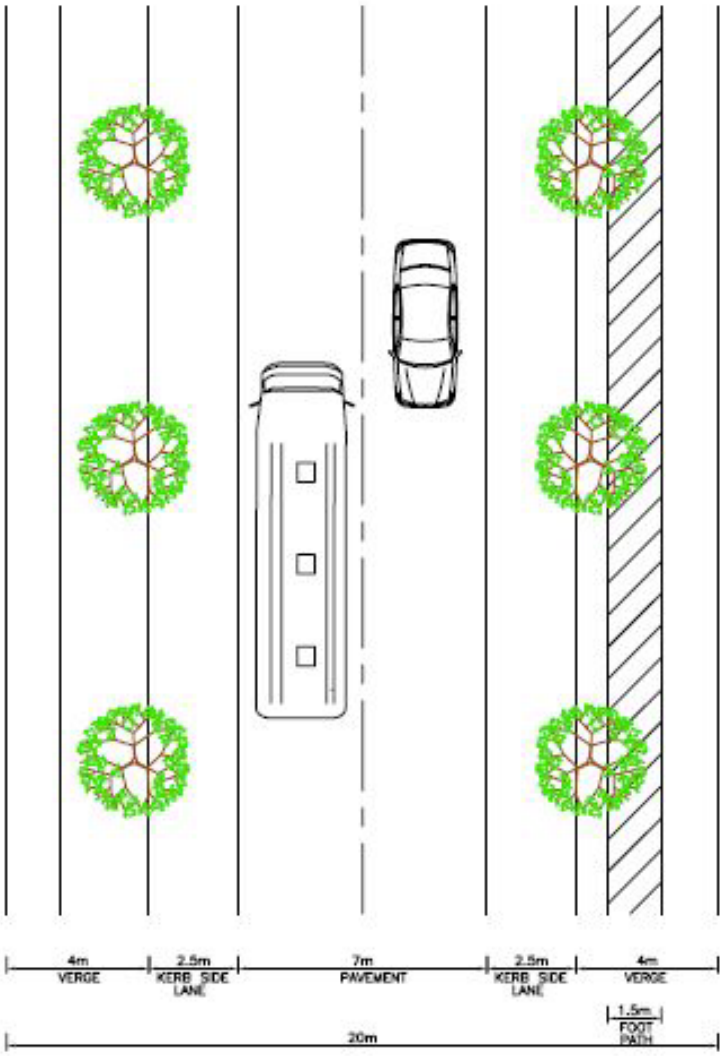
B. Development Controls

a) Bradley Street entry area is constructed in accordance with dimensions identified at Figure E7.25.

b) Bradley Street urban area is constructed in accordance with dimensions identified at Figure E7.26.

Figure E7.25: Bradley Street – Entry Area


4m
VERGE
2.5m
KERB SIDE
LANE
7m
PAVEMENT
2.5m
KERB SIDE
LANE
4m
VERGE
1.5m
FOOT
PATH
20m


4m
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KERB SIDE
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7m
PAVEMENT
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KERB SIDE
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FOOT
PATH
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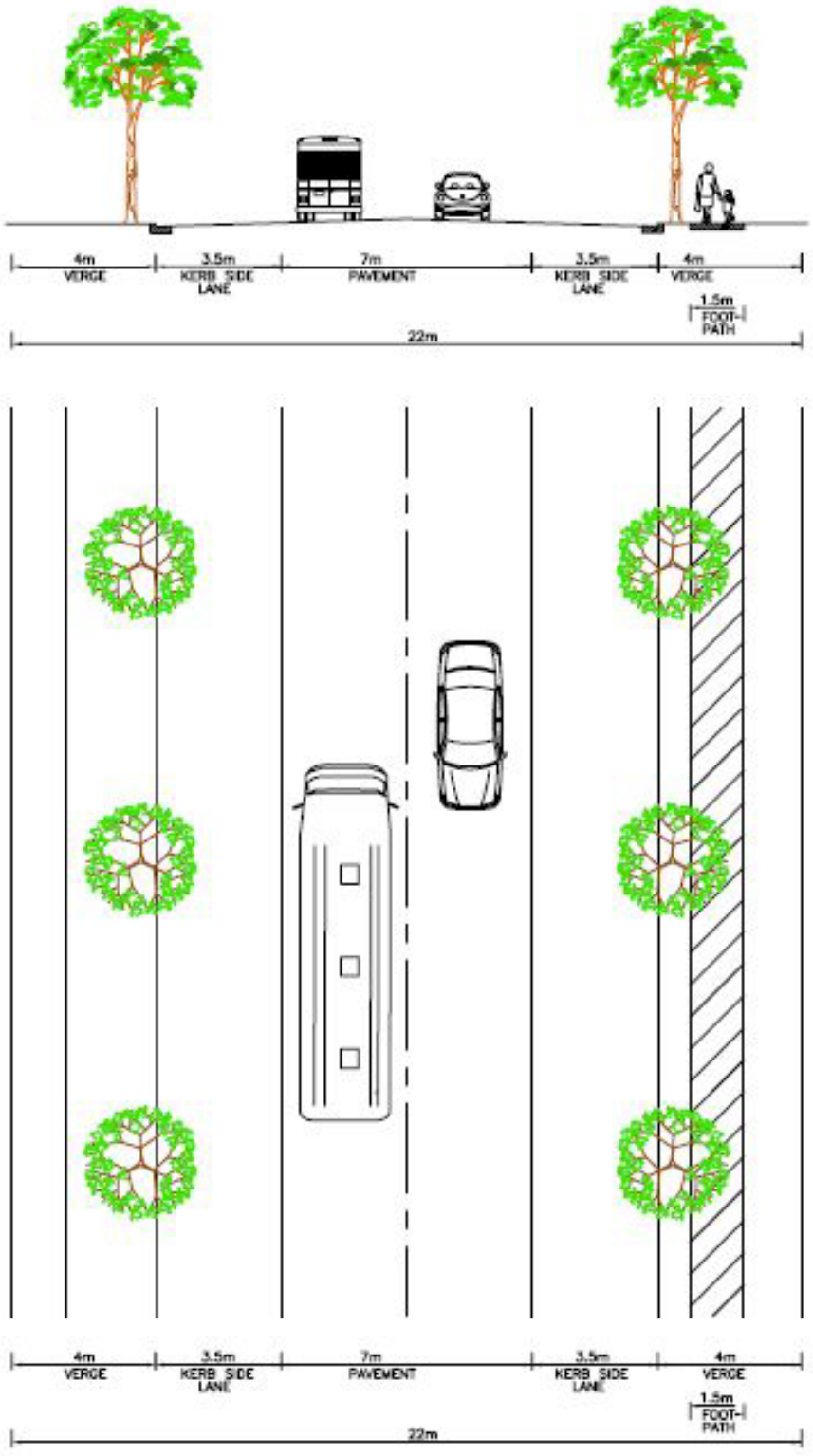
Figure E7.26: Bradley Street – Urban Area



2) Collector Roads

A. Performance Measures

a) Provide high accessibility for all road users throughout the release area.

b) Exhibit an urban landscape character.

c) Have a clear lane width able to handle local bus services.

d) Are of a scale consistent with the higher order role these roads will play in the overall movement network the release area.

e) Integrate footpaths and establish pedestrian amenity that reflect the linking role these streets will play in the urban fabric.

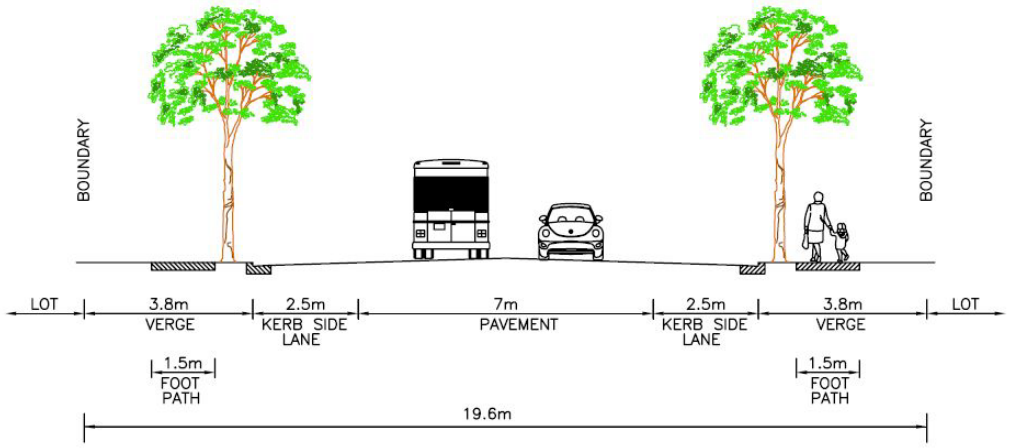
f) Be designed to provide safe pedestrian crossing points and lighting in accordance with the relevant Australian Standard.

g) Are able to comfortably accommodate the co-location of bus shelters and pathways.

B. Development Controls

1) Collector Streets are constructed in accordance with Figure E7.27.

2) Widening of road may be required where topographical or road curve circumstances dictate.



3) Local Roads

A. Performance Measures

a) Provide high levels of accessibility between the loop road and adjoining precincts.

b) Roads are designed to allow a reasonable free flow of traffic at lower speeds.

c) Occasional, minor delays or the need for driver co-operation due to vehicles parking on local roads is an acceptable, traffic calming outcome.

d) Speed controls are provided as integrated element of the streetscape.

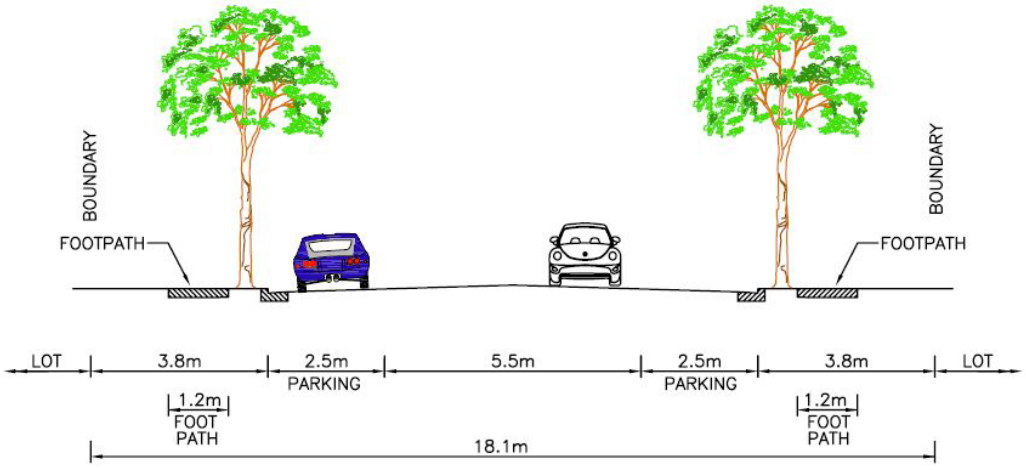
e) Comfortably accommodate informal on-street parking.

B. Development Controls

a) Streets are constructed in accordance with the dimensions identified at Figure E7.28.

b) Widening of road may be required where topographical or road curve circumstances dictate.

Figure E7.28: Local Road



4) Minor Local Roads

A. Performance Measures

a) Provide limited vehicle access for through traffic looking to access or exit the local road network.

b) Regular, minor delays or the need for driver co-operation due to vehicles parking on local roads are an acceptable, traffic calming outcome.

c) Maintaining high levels of permeability for non-vehicle road users.

d) Roads are designed to ensure a low speed traffic environment.

e) Informal on street parking constrains traffic movement.

B. Development Controls

1) Streets are constructed in accordance with the dimensions identified at Figure E7.29.

2) Widening of road may be required where topographical or road curve circumstances dictate.

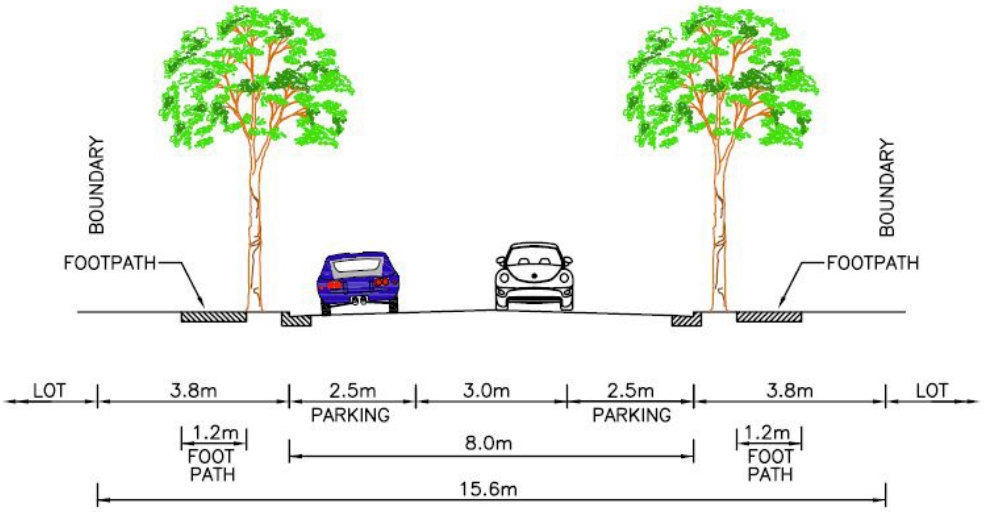


Figure E7.29: Minor Local Road

5) Lane Ways

A. Performance Measures

a) Lanes are shared zones allowing vehicular traffic for access to rear loaded garages only.

b) Are to incorporate a change in materials and/or kerb cuts to provide differentiation to other vehicular streets.

c) Are constructed in plain concrete pavement.

d) No parking is permitted in Lane Ways.

e) Designed with a central invert for drainage where topography allows.

f) Studio units built above or adjacent to garages will be encouraged to provide surveillance.

g) Laneway provide distinctive plantings at lane entry areas.

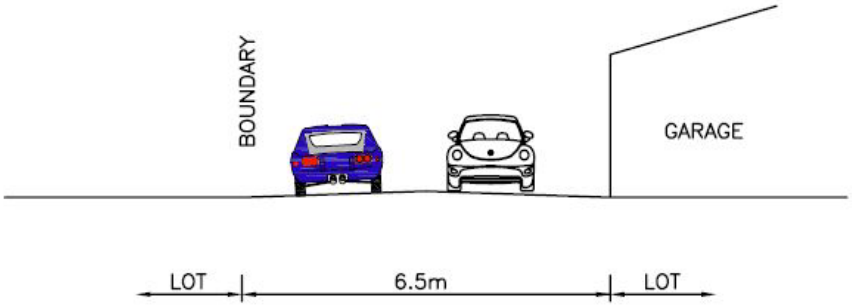
B. Development Controls

1) Streets are constructed in accordance with the dimensions identified at Figure E7.30.

2) Widening of road may be required where topographical or road curve circumstances dictate.

3) The road design seeks to provide a maximum speed of 15 km/h.

Figure E7.30: Laneways



7.4.3.4 Open Spaces

7.4.3.4.1 Active Open Space

A. Objectives

a) To provide for the active recreational needs of the local community.

b) To provide multipurpose sporting and recreational activities that reflects seasonal demands.

c) To provide a central neighbourhood place for community activities and gatherings.

d) To provide the focus of interconnected high amenity landscaped environment.

e) To encourage an active lifestyle for residents.

B. Performance Measures

These objectives may be achieved where:

a) An active open space area is provided in accordance with the Figure E7.31.

b) The open space provides a diverse range of active and sporting facilities.

c) Active playing areas are provided with facilities and infrastructure to support various sporting events, including amenities for spectators.

d) Active playing areas are differentiated as separate places by plantings, paths and other landscape elements.

e) Pathways provide:

   i) connection between the site and the broader pedestrian and bicycle network.

ii) spectator access to and around the playing fields.

iii) connection to the Neighbourhood Centre and Primary School.

f) Adjacent buildings provide passive surveillance of the park area.

g) No back fences of development are to face public open space.

h) Parking is provided both as a central parking lot and parking bays on the streets around the park.

i) Large trees are provided around the perimeter of the park to enclose the space.

j) The park is provided with an open and low fence or bollard type barrier along its perimeter.

k) The park either provides or is co-located with the following facilities

i) large children playground.

ii) BBQ + Picnic facilities.

iii) Shade and seating structures,

within or adjacent the riparian zone, but only within the vegetated buffer if no alternative location outside the vegetated buffer can be found, they only occupy limited areas, and they can be designed to not reduce the function of the adjacent core riparian zone.

l) The indicative layout of the open space areas is shown on Figure E17.32.

C. Development Controls

1) A minimum area of 6.9 hectares is to be provided for active open space in a single location and configuration that can accommodate all identified uses.

2) Minimum Sporting facilities are to include:

a) Two Rugby League fields capable of use for cricket in summer cricket.

b) A multi-purpose Little Athletics and AFL field.

c) Two long jump pits.

d) One discus and shot put cage with associated throw space.

e) All active areas are provided with training lights.

f) Playing fields are provided on a north-south axis.

g) Safe and functional spectator seating and standing areas adjacent to the playing on their east and west sides.

h) A centrally metered irrigation system for the playing fields.

i) Shade structures for spectators.

3) A centrally located amenities complex containing:

a) 4 x team change rooms.

b) 2 x referee change rooms.

c) 2 x public toilet facilities appropriate for the number of spectators.

d) 2 x canteen spaces with a shared kitchen.

e) 2 x storage spaces.

f) 1 x field management facility approximately 200m^2 in area.

g) Wide paved apron area and roofed verandahs.

h) A bitumen sealed, line-marked and lit area for 100 parked cars (including adequate accessible parking) and associated manoeuvring.

Figure E7.31: Open Space Network

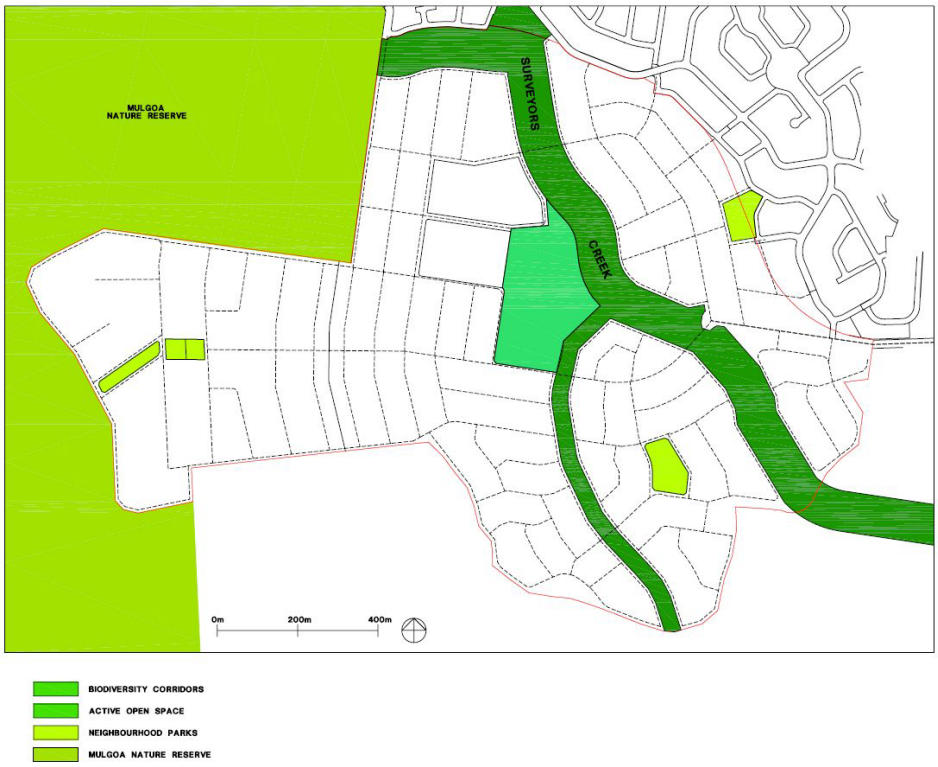


Figure E7.32: Active Open Space Layout

7.4.3.4.2 Neighbourhood Parks

A. Objectives

a) To create a variety of public spaces that provides both passive and informal active open spaces.

b) To conserve natural features of the site.

c) To provide high amenity areas for adjacent residential development.

d) To facilitate cultural identity through art and design in public places, with the engagement of the local community.

B. Performance Measures

These objectives may be achieved where:

a) Each park is provided with has its own distinctive landscape character.

b) Existing vegetation is retained and enhanced by additional complementary plantings.

c) Parks create a precinct focus for the surrounding neighbourhood.

d) Parks are generally bounded by streets with buildings oriented towards the open space providing outlook and passive surveillance.

e) There are no back fences of development facing public open space.

f) The parks provide linkages between the broader pedestrian and bicycle networks.

g) Playground facilities are provided within the parks.

h) Seating and shade opportunities are provided within the parks.

i) The indicative location of neighbourhood parks is shown on Figure E7.31.

j) Public art is provided throughout key public domain areas (refer Section 7.4.3.3.2 Street Furniture and Public Art).

C. Development Controls

1) A minimum total of 3.0 ha will be dedicated to Council to create 3 x large neighbourhood parks in areas generally shown at Figure E7.31.

7.4.3.4.3 Riparian Corridor Edge Parks

A. Objectives

a) To provide an integrated network of open spaces.

b) To enhance the character of major drainage routes through revegetation of those corridors.

c) To provide high amenity areas for adjacent residential development.

d) To link and extend the access and movement network for bicycles and pedestrians.

e) To encourage an active lifestyle for residents by providing recreational and educational opportunities.

B. Performance Measures

These objectives may be achieved where:

a) Recreational and educational opportunities dominate over the stormwater function of this location.

b) A perimeter pathway is provided along both edges of the corridors.

c) The pathway meanders through a diversity of landscaping settings that provide shade opportunities for users.

d) The park is generally bounded by streets with buildings oriented towards the open space providing outlook and passive surveillance.

e) There are no back fences of development facing the public open space.

f) The park is provided with an open and low perimeter fence or bollard type barrier along the entire edge.

g) Facilities including seating, shade, playgrounds and interpretive signage are provided at regular intervals along the edge.

h) Parking opportunities are provided within the road reserve and co-located with recreational facilities.

i) Riparian corridor parks can be co-located with active open spaces and neighbourhood parks.

C. Development Controls

1) The minimum width for shared and dedicated paths in open space network is 2.5m.

7.4.3.5 Neighbourhood Precinct

A. Objectives

a) To create a memorable village experience for the local community.

b) To provide a highly accessible community focal and gathering point.

c) To create a retail centre based on traditional 'Main Street' shopping experiences.

d) To ensure that a safe public domain represents a defining element of the centre.

e) To accommodate a diverse mix of land uses including residential.

f) To ensure that adequate land is reserved for the provision of a Primary School.

g) To ensure the scale of retailing facilities sits comfortably within the local and regional retail hierarchy.

h) To avoid duplication of parking provision by co-locating key land uses.

i) To facilitate and encourage walking, cycling and public transport access as well as car access.

7.4.3.5.1 Urban Structure

A. Performance Measures

a) The Neighbourhood Precinct is located at the heart of the community within a 10 minute walk for most of that community.

b) A high quality public domain area is provided as part of a central organising element of the centre.

c) The centre is co-located with other high use public places including active open space and the primary school.

d) The retail area is located on the loop collector road.

e) Accessible and legible linkages are provided between other key community components such as recreation areas and schools.

f) The Precinct accommodates multi-mode transport ensuring excellent pedestrian and cycle links.

g) Public transport is accommodated within the centre of the retailing precinct.

h) The precinct shall provide both open-lot car parking and street based parking for convenience.

i) Various land uses co-located in the Neighbourhood Precinct make efficient use of the total car parking spaces available.

j) People are able to park their car in one location and engage in a variety of activities in close proximity to that space and within a safe pedestrian environment.

k) Retail facilities are delivered as an early element of the broader release area.

7.4.3.5.2 Urban Character

A. Performance Measures

a) The Precinct creates a sense of arrival and community identity.

b) The Precinct is integrated into the overall release area landscape structure, emphasising the hierarchy of the precinct in the overall urban structure.

c) A walkable pedestrian friendly environment is to be established with leafy active wide footpaths and pedestrian links that connect activities and gathering spaces.

d) The precinct includes public meeting places, squares or promenades to create varied, comfortable, and accessible environments that provide a focus and destination for community activity.

e) Car parks are to be leafy plazas that provide opportunities for other uses (i.e. markets or public gathering) with clear defined pedestrian links.

f) Where medium to large scale uses are planned, finer grained uses should be incorporated time to minimise the impact of bulk and scale to the main thoroughfares of pedestrian movement.

g) Opportunities for residential development are carefully planned within and adjacent to the Precinct Centre providing for passive security and surveillance.

h) Appropriate dwelling forms encourage growth of the Precinct in time, both in terms of extended active hours and adaptive uses that allow for home based incubator businesses to emerge.

i) The building form creates a series of spaces that provide shade in summer, sun in winter and are sheltered from unpleasant prevailing winds.

j) Buildings define the street and provide a relatively continuous street frontage.

k) Public art is incorporated at key focal points to promote community identity.

l) The Main Street road reservation will allow for the provision of generously wide footpaths.

m) Housing forms in the precinct will provide opportunities for home based employment and businesses.

n) Key street intersections and transport interchanges are provided with distinctive paving and threshold type landscape treatments.

7.4.3.5.3 Retail Built Forms

A. Performance Measures

a) Retailing is provided in a combination of traditional main street and internalised spaces.

b) Smaller scaled single shops are presented to the main street.

c) Maximise the percentage of active shopfront to public streets.

d) Buildings are built primarily to the street edge.

e) Glazed shop fronts are provided at the interface with the street.

f) Wide awnings or verandahs are provided to the main street to provide pedestrian amenity.

g) Shop fronts and awnings return around corners.

h) Building design reflects a human and village scale.

i) Buildings provide an appropriate environmental response to encourage pedestrian activity, seating and gathering spaces and contributing to safety and security.

j) Two storey scale forms are provided at key road intersections within the centre.

k) Entry areas to internalised retail areas are well defined and highly legible.

l) The impact of deliveries should be minimised through location and separation of those activities.

m) Figure E7.33 provides an indicative structure and layout Image for the Neighbourhood Precinct.

B. Development Controls

1) Detailed design and planning of the Neighbourhood Precinct shall be subject to the formulation of a Concept Plan as part of a Staged Development.

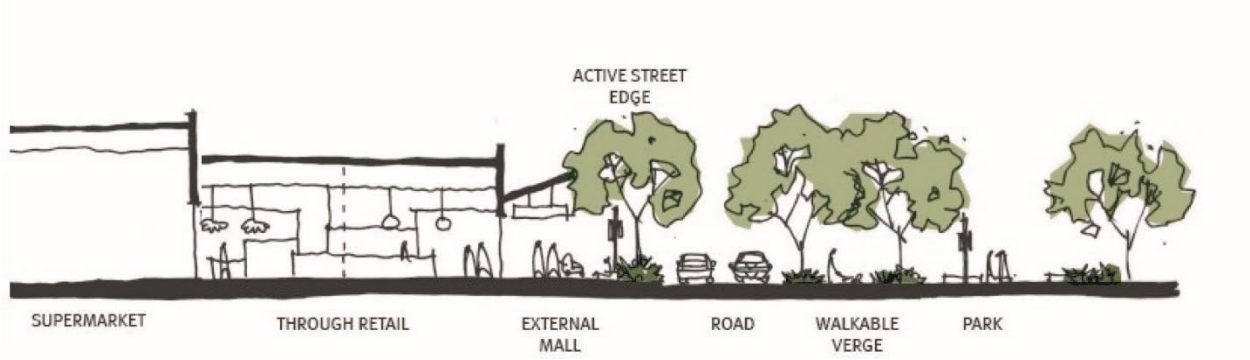
2) The road reservation for the Neighbourhood Centre Main Street will be designed and constructed as per Figure E7.36.

3) Any supermarket facility has an 'open' exterior.

Figure E7.33: Neighbourhood Precinct Structure

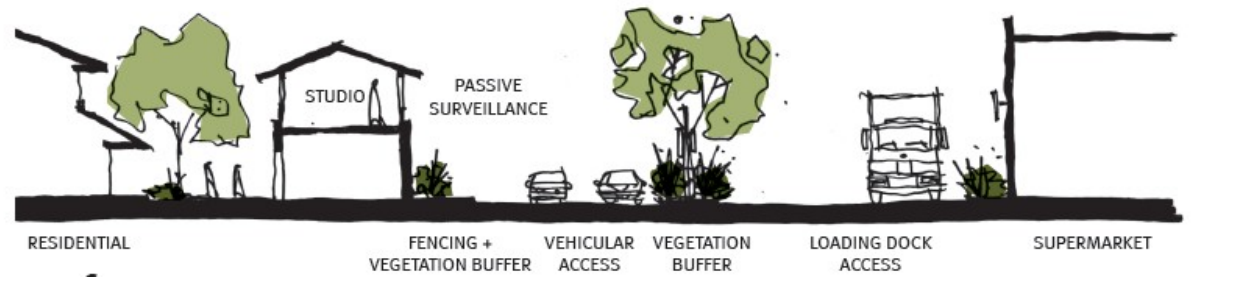

option for
local open space
B
corridor
main street
retail strip
A
supermarket
D
corridor
parking
C
pick up + drop off
bus bay
primary school
active
open
spaces
0 10 20 30 40 50

Figure E7.34: Section for the Neighbourhood Centre Main Street



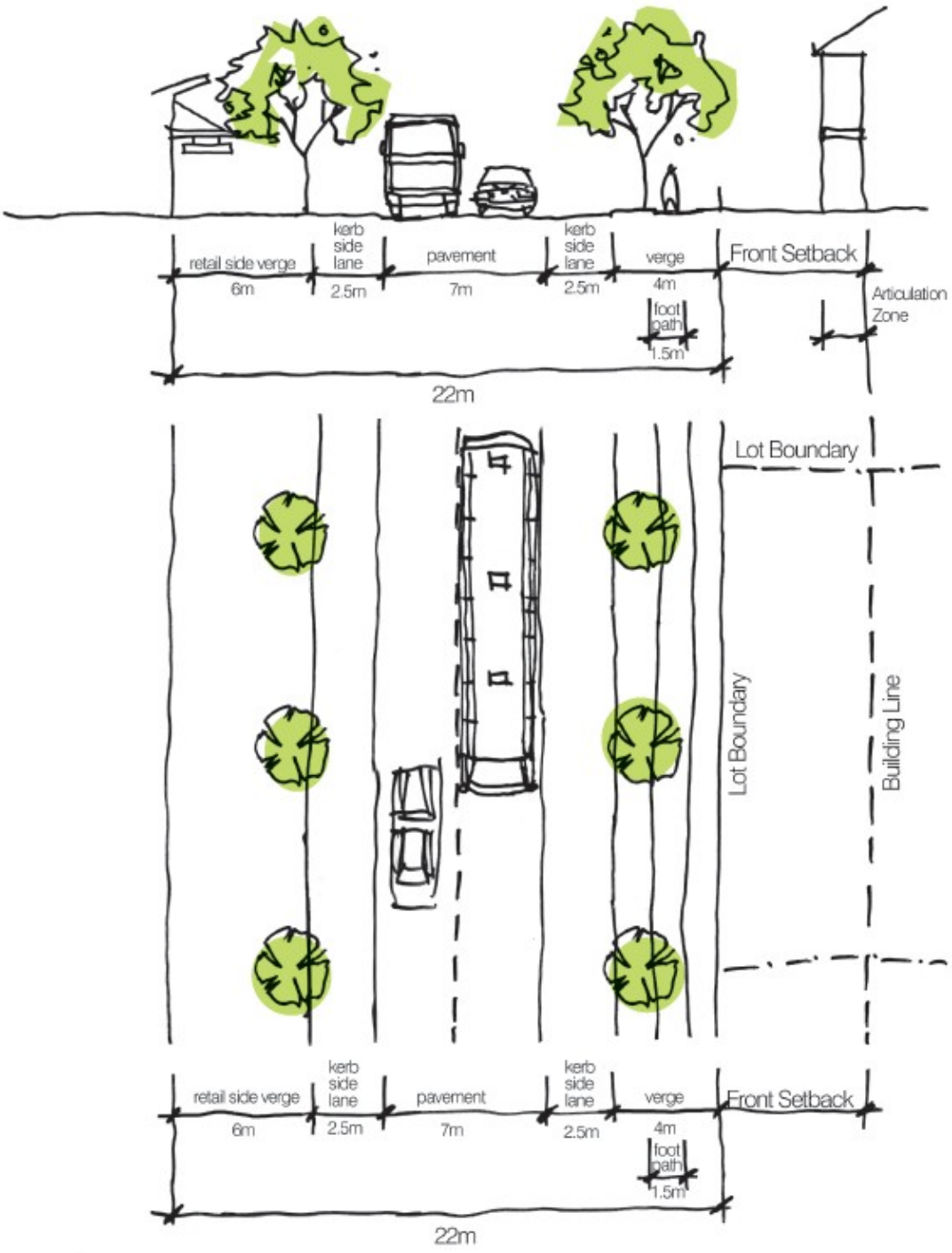
A **SECTION** **B**

Figure E7.35: Section for the Neighbourhood Centre Main Street (2)



C **SECTION** **D**

Figure E7.36: Neighbourhood Precinct Road Reserve



7.4.3.5.4 Primary School

A. Performance Measures

a) The school is located adjacent or closely linked by a pedestrian safe route to public playing fields.

b) The school is located on a public bus route.

c) Provides landmark buildings that define key road intersections.

d) The built form of the school engages and activates the street edge to contribute to the pedestrian character and mutually benefit from passive surveillance.

e) Suitable space should be provided for the short term pick-up and drop-of students that avoid the need for continuous circulating traffic.

B. Development Controls

1) Detailed design and planning of the School and Neighbourhood Centre shall be subject to the formulation of a Concept Plan as part of a Staged Development.

2) A minimum site frontage of 60m must be provided. This includes a minimum length of 40m for a single bus bay. Additional frontage, the equivalent of 12m per bus, may be required if a larger bus set-down area is needed.

7.4.4 Private Domain

7.4.4.1 Subdivision

A. Objectives

a) To provide block sizes that maximise access to solar orientation.

b) To provide a subdivision pattern that accommodates a range of dwelling densities and lot sizes.

c) To provide lot sizes and shape that reflect the broader urban structure.

d) To promote the most appropriate locations for higher density housing forms.

e) To ensure development responds to site topography and natural assets.

B. Performance Measures

a) Blocks and lots are generally rectilinear.

b) Lots are oriented to facilitate siting of dwellings and private open space to take advantage of winter solar access and summer sun deflection.

c) Lots identified to accommodate higher density housing forms will be focused on or around:

   i) Open space areas.

   ii) Neighbourhood centre.

iii) Areas of highest accessibility.

iv) Areas of high quality amenity.

d) Larger lot frontages provided on street corners to allow development to address both street frontages.

e) Lot sizes will respond to site topography by providing larger lots on sloping lands.

f) Larger lots are provided in the rural transition (R2 Low Density Residential) zone.

g) Lot sizes and dimensions take into account site topography and reduce the need for earthworks and retaining wall construction.

h) Lot sizes and dimensions allow for retention of existing trees as part of subsequent site development.

i) Lots front streets and overlook open spaces to provide passive surveillance of those areas.

j) Benching of sites should preferably be undertaken at subdivision stage and earthworks plans should indicate positions of necessary retaining structures and associated drainage.

C. Development Controls

1) Subdivision including the creation of super lots will provide for the achievement of minimum dwelling targets.

2) Single dwelling lots are a minimum of 25m deep.

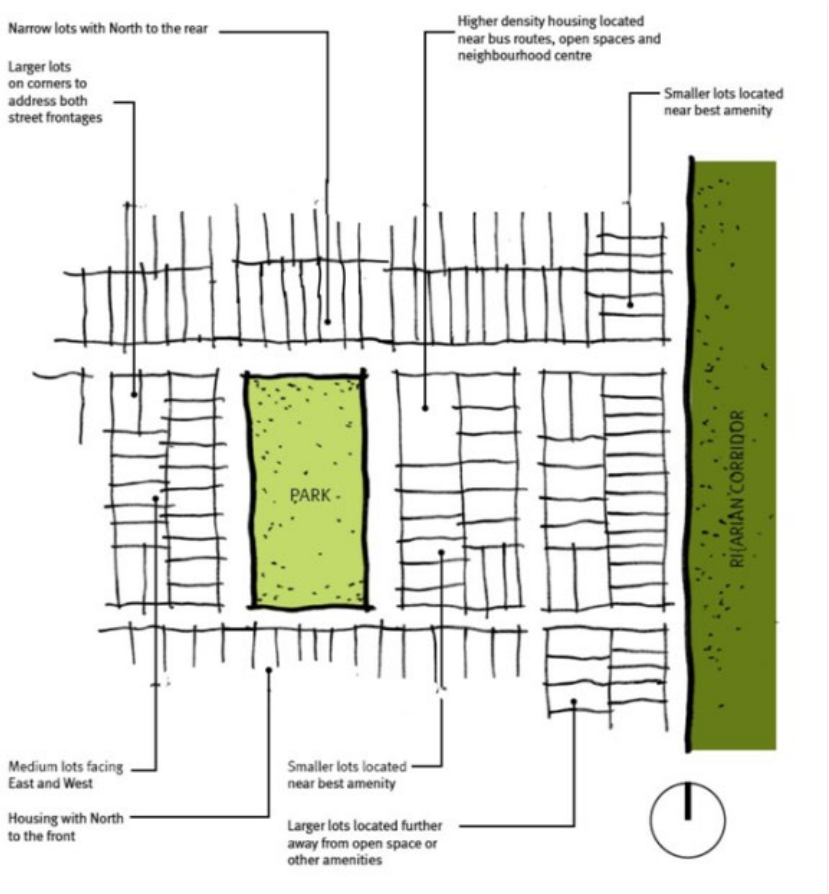
3) Lots in the rural transition (R2 Low Density Residential) zone will have a minimum lot size in accordance with Penrith LEP 2010.

4) Vary the depth of north-south oriented lots to provide longer, narrower lots on the south side of the street and shorter, wider lots on the north side, where possible.

5) Ensure lots with an east-west axis are 12m or more wide where possible, unless they are intended for use by attached dwellings.

6) Retaining walls are to be constructed with appropriate masonry materials.

Figure E7.37: Lot Design Principles



7.4.4.2 Shared Driveways

A. Objectives

a) To provide make efficient use of urban land.

b) To create high quality streetscapes.

c) To minimise conflict between pedestrians and vehicles.

B. Performance Measures

a) Shared driveways are formalised through the creation of right of carriageways as part of the subdivision.

b) Provide safe and convenient access to rear garages.

c) Shared driveways are a low maintenance environment.

d) Shared driveways are used solely by residents with garages accessed by the private driveways.

e) Shared driveways are the smallest configuration possible to serve the required rear garages.

f) At the street entry, the driveway is narrow and landscaped to have low visual impact at the street entry and be clearly distinguishable as private access only.

g) A studio is provided at the end of the longest driveway axis and provides windows that overlook the shared driveway.

h) Adjacent dwellings provide additional passive surveillance opportunities over the driveway.

i) Pedestrian gates are provided from the driveway to adjoining rear yard areas.

j) Subdivision provides an appropriate arrangement for the long term maintenance and management for the driveway.

C. Development Controls

1) Will serve a maximum of 6 dwellings.

2) Are generally configured as one of four general types depending on block geometry and garages to be accessed as per Figure E7.38.

3) Are generally 3m wide and allow for exiting in a forward direction.

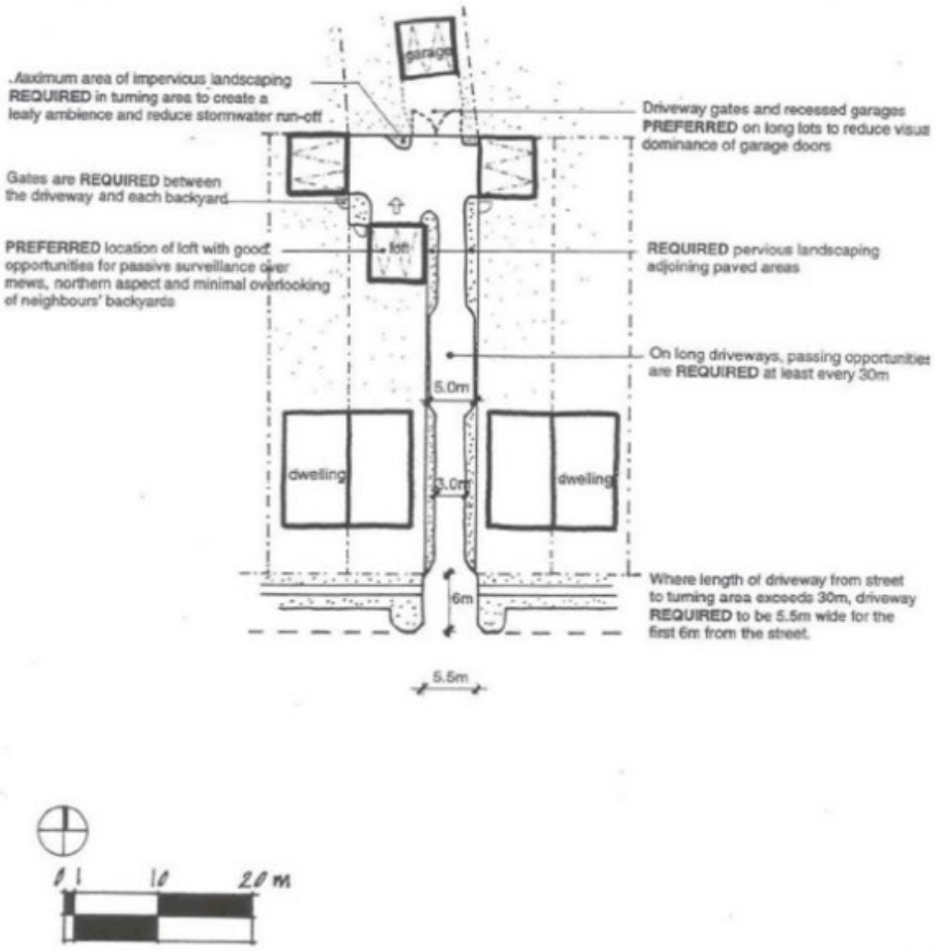
4) If connected to a street that will carry more than 300 vehicles per day, the shared driveway shall have a width of 5.5m for a distance of 6m from the kerb line.

5) All private driveways shall achieve the design standards as identified per Figure E7.39.

6) A minimum of one garage fronting the Shared Driveway provides a studio above the garage.

Figure E7.38: Shared Driveways Access Options

Figure E7.39: Shared Driveway - Design Principles



7.4.4.3 Site Planning

7.4.4.3.1 Principal Private Open Space

A. Objectives

a) To provide a high level of residential amenity with opportunities for outdoor living within the property.

b) To enhance the spatial quality, outlook, and usability of private open space.

c) To optimise solar access to the living areas and private open spaces of the dwelling.

B. Performance Measures

a) Principal private open spaces are the primary organising element of site planning and dwelling design.

b) Private open spaces should be located at ground level in rear yard areas that maximise opportunities to obtain solar access for all dwelling types other than apartments.

c) Development with a northern orientation provides secondary private open spaces area at the street frontages through the use of courtyards and balconies.

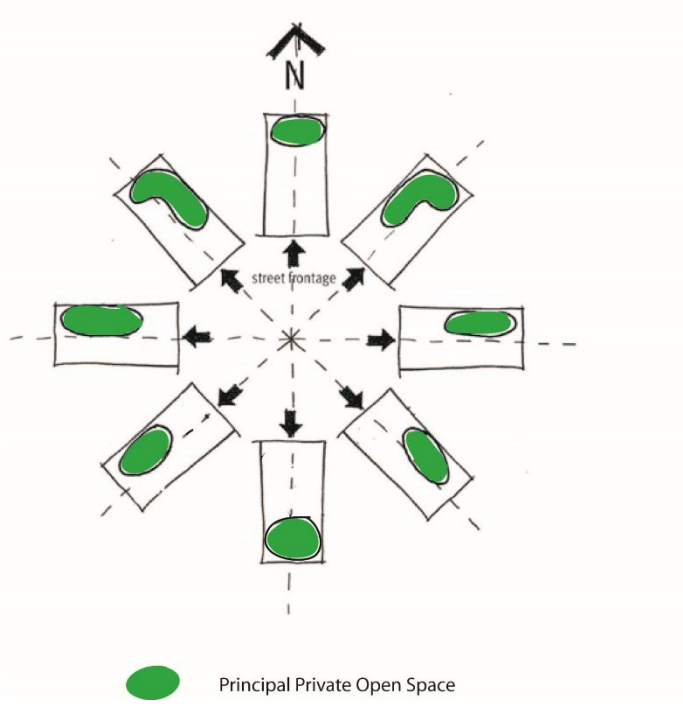
d) The principal private open spaces should have a direct interface with primary internal living area of its dwelling.

e) Development should achieve the preferred location for open space location as demonstrated at Figure E7.40.

C. Development Control

1) Dwellings will achieve the minimum standards for Principal Private Open Space as identified at Section 5 of this section.

Figure E7.40: Private Open Space Siting



7.4.4.3.2 Garages and Parking

A. Objectives

a) To provide sufficient and convenient parking for residents and visitors.

b) To reduce the visual impact of garages, carports, and parking areas on the streetscape and improve dwelling presentation.

c) To promote safe public domain areas.

B. Performance Measures

a) Garages are sited as per the preferred siting diagram at Figure E7.41.

b) The width of the lot will determine the maximum size of garage provided in either street frontage or rear lane locations as demonstrated at Figure E7.42.

c) Front garages are to be setback behind the front most element of the house and integrated as part of the dwelling façade.

d) Garages are constructed in materials and colours, which blend the garage doors into the main building.

e) Garages provide flexible accommodation for vehicles, storage, and covered areas for outdoor recreation.

f) Stacked parking is an acceptable outcome provided it is accommodated entirely within the property.

g) Studios are provided over garages to rear lanes to provide surveillance, work from home or residential accommodation opportunities.

h) Vehicle crossings between the street and front boundary shall be constructed in plain concrete only.

C. Development Controls

1) Double garages are the maximum garage size allowed for single dwelling houses.

2) Where a dwelling provides vehicular access to the street the garage will be setback a minimum of 5.5m from the front boundary.

3) Garages are to be provided per AS 2890.1 Off Street Parking, including:

   a) Minimum width of 3.2m for single garages.

   b) Minimum width of 5.8m for double garages.

Figure E7.41: Garage Siting

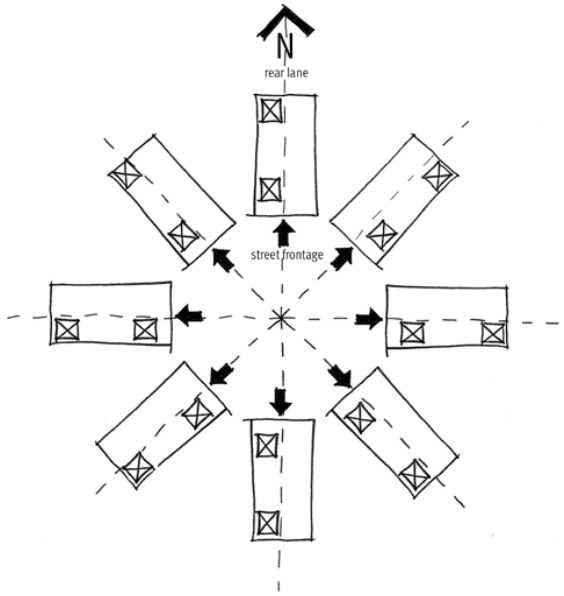
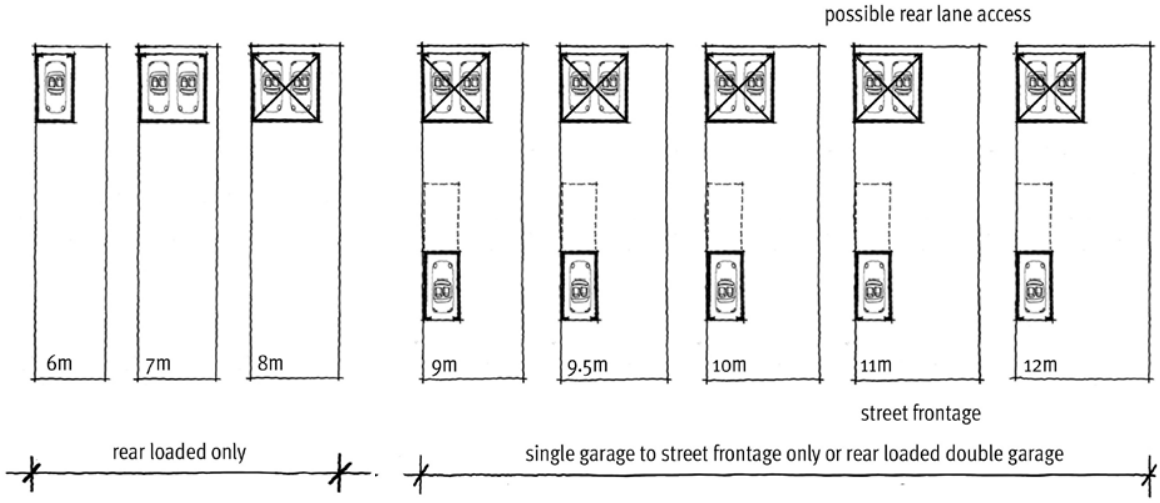
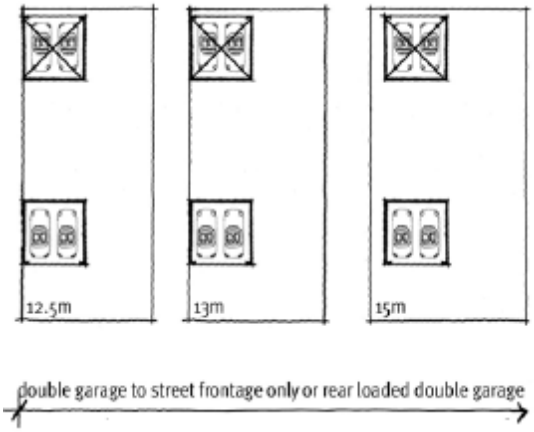


Figure E7.42: Maximum Garage Size





7.4.4.3.3 Building Footprints

A. Objectives

a) To provide a variety of streetscapes that reflect the character of different precincts.

b) To create an attractive and cohesive streetscape within local precincts.

c) To maximise provision of solar access to dwellings.

d) To minimise the impacts of development on neighbouring properties in regard to view, privacy, and overshadowing.

e) To encourage the efficient and sustainable use of land.

f) To allow for landscaped rear yard areas.

g) To promote public safety of public domain areas.

h) To manage risk from bushfire events.

B. Performance Measures

Front Setbacks

a) Front setbacks are site responsive and will be determined for individual lots as part of the Subdivision Approval process given consideration to the following matters:

i) Future dwelling type.

ii) Orientation of lots.

iii) Provision of front yard open space and associated fencing.

iv) Availability of direct vehicle access to the street.

v) Relevant role of street in local road hierarchy.

vi) Proximity to open space areas.

vii) Location within Neighbourhood Centre.

viii) Requirements to provide Asset Protection Zone.

Rear Setbacks

a) Landscaping provision to allow tall trees in the rear yard area to provide a vegetated backdrop to the development.

C. Development Controls

1) Front Setbacks

a) Front setbacks are identified in Section 7.4.5 – Typical Development Forms, for each dwelling type.

2) Side Setbacks

a) The width of the lot will determine the ability of the site to provide zero lot lines as demonstrated at Figure E7.43.

b) Where only one side of a lot can provide a zero lot line, then Figure E7.44 will be used to determine which of those boundaries accommodates that zero lot line.

c) A maintenance easement of at least 900mm is to be provided on the boundary adjacent to the zero lot line.

d) All other side setbacks will be a minimum of 900mm.

e) Fascias, gutters, downpipes, eaves (up to 450mm wide) and chimneys flues may encroach into the side setback.

f) No windows are provided in zero lot line walls.

Figure E7.43: Zero Lot Lines

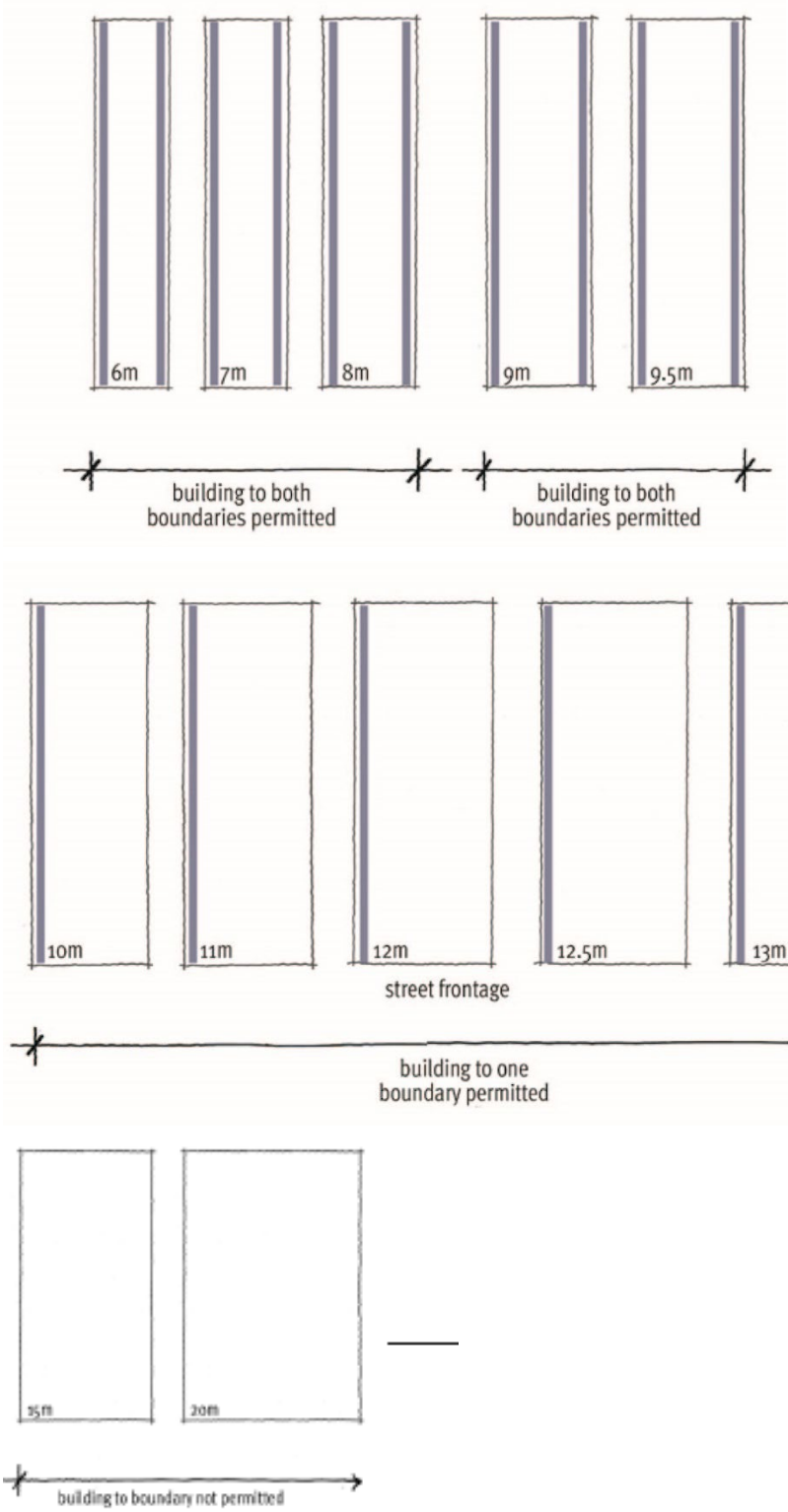
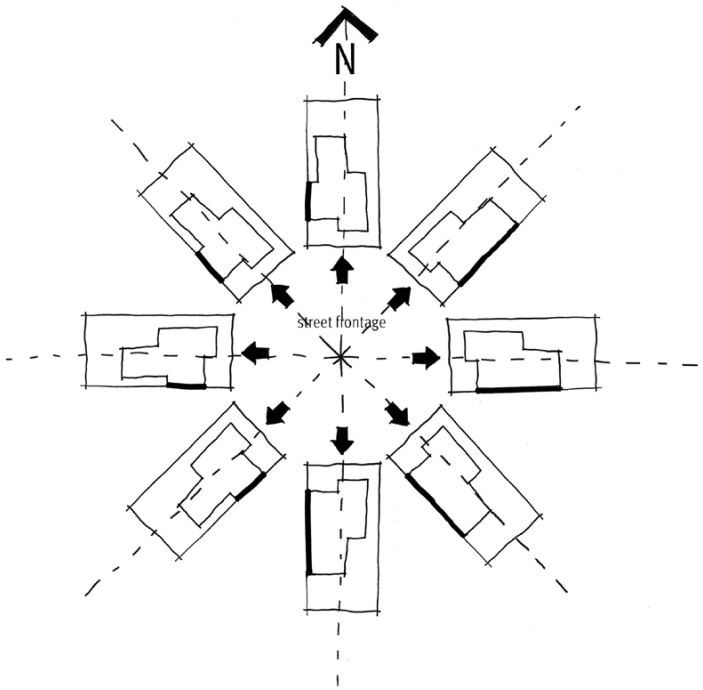


Figure E7.44: Zero Lot Line Location



7.4.4.4 Solar Planning

A. Objectives

a) To achieve a high standard of residential amenity; and

b) To protect reasonable amenity expectations of neighbouring sites.

B. Development Controls

1) Areas of Principal Private Open Space should achieve at least 3 hours of sunlight to 50% of the required private open space area between 9am and 3pm on 21 June.

2) Buildings should be designed to ensure that 40% of the Principal Private Open Space areas of adjoining dwelling sites receive a minimum of 3 hours of sunlight between 9.00am and 3.00pm on 21 June each year.

7.4.4.5 Dwelling Design

A. Objectives

a) To provide simple and articulated building forms.

b) To provide a high quality and cohesive streetscape.

c) To promote an architectural style that is contemporary and innovative.

d) To promote a safe public domain area.

e) To promote energy efficient and sustainable development.

f) To reduce the dominance of garages on the streetscape.

g) To identify appropriate design responses for corner lots.

B. Performance Measures

a) All development addresses the street and is provided with a clear, legible and well lit pedestrian entry.

b) The street elevation is well articulated by the use of awnings, verandahs, balconies and feature elements on the front facades of dwellings.

c) Development will achieve the principle of three layers of front setbacks as illustrated at Figure E7.45.

d) The finished ground level of development is raised above the street level to improve the outlook and enhance visual privacy from within the dwelling and front verandahs.

e) Garages will be recessed or capped by overhanging elements that provide shading over the garage opening.

f) Dwellings orientate living spaces to the north, sleeping areas to the east or south and utility areas to the west or south.

g) Dwellings provide shading of north, east and west facing windows with pergolas and awnings.

h) Buildings are to be to be designed to allow cross ventilation by positioning windows and doors opposite each other within rooms.

i) Material and external finishes of buildings in bushfire hazard areas comprise appropriate construction standards for those areas.

j) Built forms on corners provide important place making and way finding elements in the streetscape.

k) Corner sites provide a frontage to both streets and articulate their corner location with an architectural feature such as a wraparound verandah, bay window, corner entry or roof feature.

l) Garages on corner lots are accessed from the secondary street.

m) Dwellings provide adaptable house floor plans for the inclusion of a home office/business activity area.

C. Development Controls

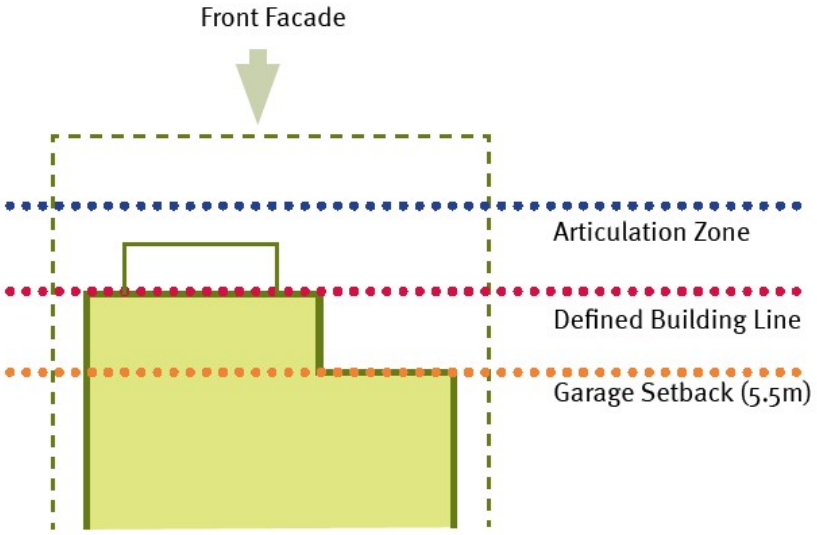
1) Verandahs, awnings, etc. may project forward of the front building setback line by a maximum of 1.5m.

2) Building elements projecting forward of the front building setback are limited to a maximum of 60% of the dwelling width.

3) Eaves are required over all walls except those on zero lot lines.

4) External building materials/finishes are to be varied across front elevations of buildings.

Figure E7.45: Setbacks and Articulation



7.4.4.6 Visual and Acoustic Privacy

A. Objectives

a) Ensure buildings are designed to achieve the highest possible levels of visual and acoustic privacy.

b) Protect visual privacy by minimising direct overlooking of habitable rooms and private open space.

c) Contain noise within dwellings and minimise the intrusion of noise from outdoor areas.

B. Performance Measures

a) Windows to upper storeys to be located on front or rear facades where possible.

b) Offset second storey windows of living areas that face directly to windows, balconies or private open space of adjoining properties.

c) First floor balconies or living room windows not permitted to directly overlook private open space of adjoining dwellings unless suitable screening is provided.

d) The design of attached dwellings must minimise the opportunity for sound transmission through the building structure, with particular attention given to protection bedrooms and living areas.

e) Living areas and service equipment are located away from bedrooms of neighbouring dwellings.

f) In attached dwellings, bedrooms of one dwelling are not to share walls with living spaces or garages of adjoining dwellings, unless it is demonstrated that the shared walls and floors meet the noise transmission and insulation requirements of the Building Code of Australia.

g) Noise sensitive areas are to be located away from the noise emitting sources.

C. Development Controls

1) Habitable room windows with a direct sight line to habitable room windows in adjacent dwellings are to be avoided, however within 9m must be obscured by fencing, screens, or sufficient landscaping;
2) A screening device is to have a maximum of 25% permeability to be considered effective.

7.4.4.7 Defining Boundaries

A. Objectives

a) Creates a clear distinction between public and private domain areas.
b) To ensure front fences contribute to the streetscape.
c) Maintain safety in the public domain.
d) Rear and side fencing provide privacy to open space areas.

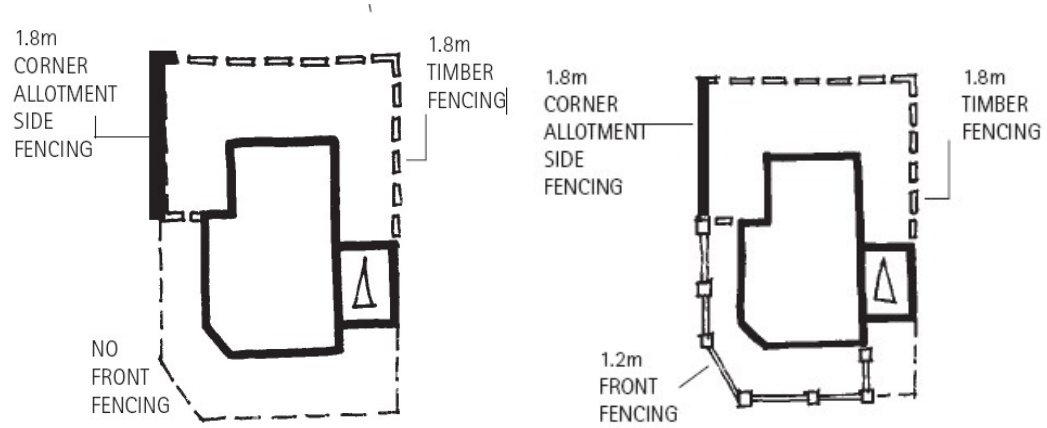
B. Performance Measures

a) Delineation of front property boundaries is achieved through use of landscaping, low fences or changes of site level.
b) Front fences must be transparent.
c) Side property fences in front of the building line shall be treated as the front fence.
d) Side property fences terminated at the front building line and returned to finish against the building.
e) All retaining walls are to be of a masonry construction and where located on a boundary, traditional fencing material to be positioned on top of the retaining wall.

C. Development Controls

1) Fences to the street frontage:
   a) are to be a maximum of 900mm in height.
   b) may be a maximum of 1.2m in height where they define the primary open space of a dwelling.
2) Side property fences are to be a maximum of 1.8m high.
3) Fences to corner lots that accommodate single dwelling houses are to be a maximum 900mm high on both the primary street frontage and secondary street frontage to a point 10m from the dwelling frontage where it may then increase to 1,800mm in height.
4) Fences to corner lots that accommodate multi-unit housing forms are to be a maximum of 900 mm on the primary street frontage and 900 mm in height along the secondary street frontage in areas in front of the built form or 1.2m if they define the primary open space areas.
5) Transparent fencing shall have a minimum opening ratio of 50%.
6) Where solid fences are required to satisfy acoustic abatement, these fences shall not exceed 8m in length without some articulation or detailing to and must be softened on the street side with a landscaping strip of 700mm minimum.

Figure E7.46: Examples of Corner Lot Principles



7.4.4.8 Site Facilities

A. Objectives

a) To ensure that adequate provision is made for site facilities.

b) To ensure that site facilities are functional and accessible to all residents and are easy to maintain.

c) To ensure that site facilities are thoughtfully integrated into development and are unobtrusive.

B. Performance Measures

a) Development demonstrates that the design takes into account garbage bin storage and collection without reducing the amenity of the dwelling or neighbouring lots.

b) Garbage bin storage and mail box structures are to be integrated with the overall design of buildings and/or landscaping and are not visible from the street or rear lane way.

c) External clothes drying areas are to be provided for all residential development

7.4.5 Typical Development Forms

The development controls outlined in this Section are typical, generic arrangements for Glenmore Park Stage 2. Developers can establish more detailed controls for each precinct as part of approved Concept Plans, as long as those controls reflect the objectives and performance measures identified.

7.4.5.1 Apartments

A. Performance Measures

a) Development is designed to:

i) Provide a higher degree of urban orientated development outcomes.

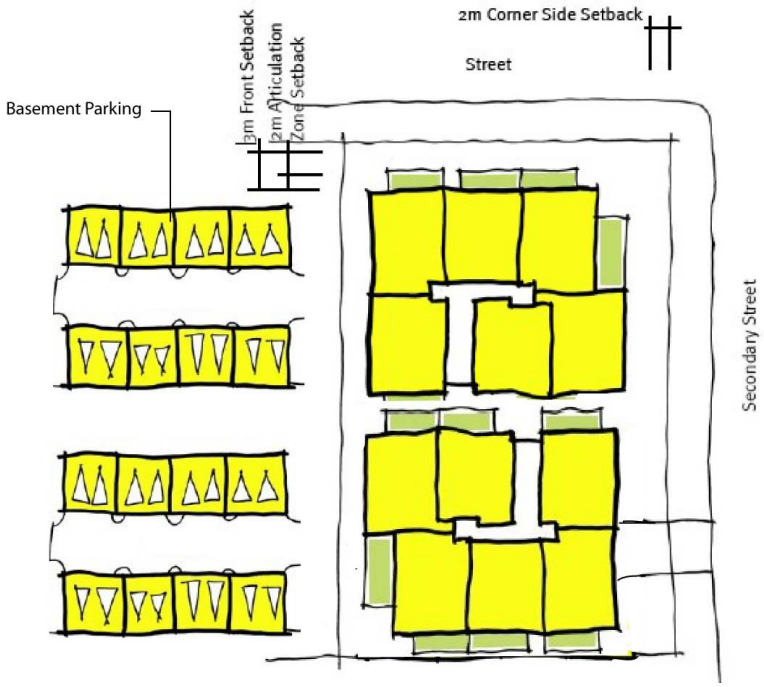
ii) Be compatible in scale with the mass and character of adjacent building types.

iii) Provide parking on site and underground where possible.

B. Development Controls

Allotment Requirements	
Allotment Requirements	650m^2
Minimum Lot Frontage	25m
Open Space	
Ground level Principal Private Open Space	
Minimum Area	20m^2
Minimum Dimension	2.5m
Upper Level Principal Private Open Space	
Minimum Area	10m^2
Minimum Dimension	2m
Communal Open Space	
Development that provides more than 10 dwellings will provide a communal open space area that is at least 10% of the total site area.	
Minimum Dwelling Setbacks	
Front	3m
Secondary Setback	2m
Side	• 1.5m for walls without openings to habitable rooms. • 3m for walls with an opening to a habitable room.
Rear	• 5m where development directly adjoins other residential development. • 0m where development adjoins a rear lane or other public domain areas.
Garage to rear lane	0m
Other Requirements	
Location	• In and adjacent to the Neighbourhood Centre • Adjoining the major active open space facility
Height	Development shall: • Have a maximum height of 4 storeys. • Ensure building facades are articulated (balconies, blade walls, stepped facades, etc.) to provide visual interest and reduce overall building bulk.
Built Forms	Development must utilise multiple entries and circulation cores in buildings where a length greater than 15m.
Adaptable Dwellings	10% of dwellings shall be adaptable as per AS1428.1 – 1998 – Design for Access and Mobility.
Vehicle Manoeuvring	Provide turning movements as defined by AS2890.1 – 2004.

Figure E7.47: Apartment Design Principles



7.4.5.2 Terrace Dwellings and Live - Works

A. Performance Measures

a) Development is designed to:

i) Provide for parking with a rear loaded garage accessed from a rear lane or shared driveway.

ii) Rear of lot is generally orientated to the north.

iii) Integrated studio units located above a ground level garage or at ground level, located at the rear of the site in some locations.

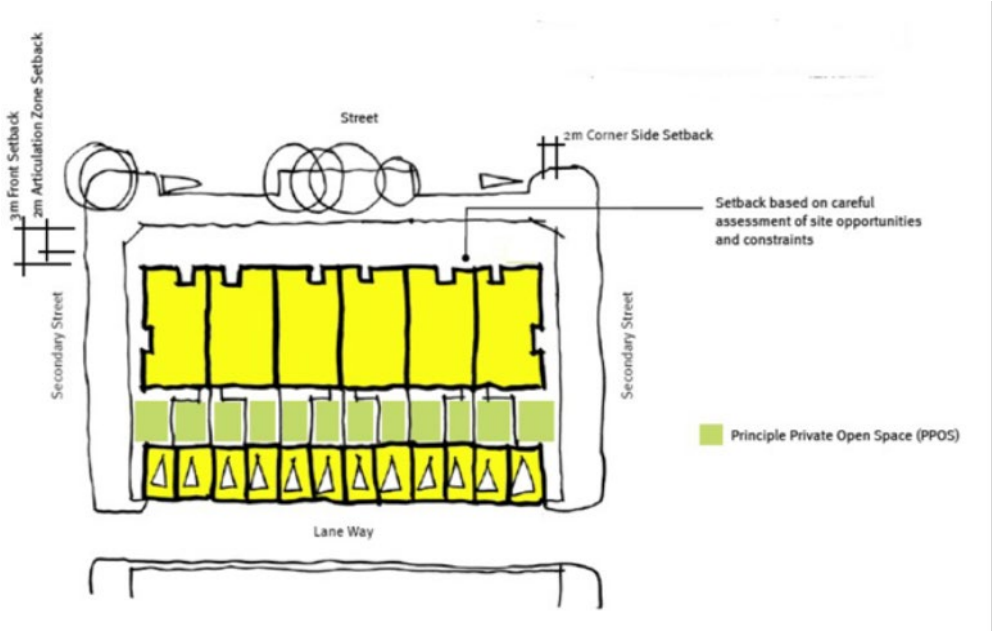
iv) Dwellings are designed to incorporate the option of 'live-work' activities (homed-based businesses), particularly in locations adjacent to the Neighbourhood Centre.

B. Development Controls

Allotment Requirements	
Lot Size Range	195 – 230m^2
Lot Frontage	6m – 9.5m
Principal Private Open Space	
Minimum Area	20m^2
Minimum Dimension	4m

Minimum Dwelling Setbacks	
Front	3m
Secondary Frontage	2m
Side	0m
Rear:	
Ground Floor Upper Floor	4m 6m
Garage to rear lane	0m
Other Requirements	
Location	• In and adjacent to the Neighbourhood Centre; • Adjoining the major active open space facility, riparian zones and neighbourhood parks.
Height	• Dwellings shall have a maximum height of 3 storeys.

Figure E7.48: Terrace Design Principles



7.4.5.3 Semi Detached Dwellings

A. Performance Measures

a) Have the appearance of a larger home, but are comprised of 2 dwellings (3 dwellings including studio opportunity) on separate Title.

b) When located at a corner, have distinct entries for each unit usually located on different street frontages.

c) When located at a corner, provide vehicle access of different street frontages.

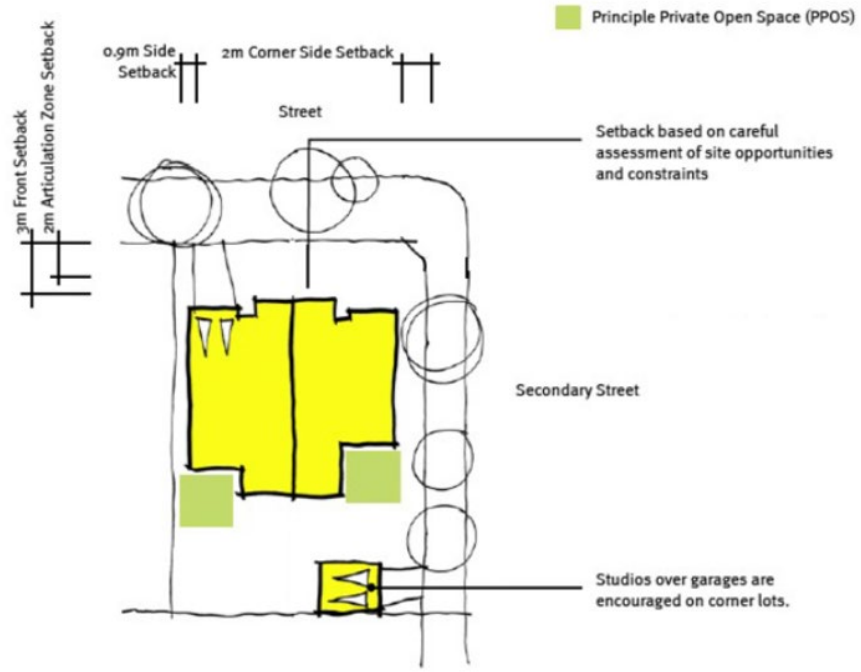
d) Dwellings have an adaptable design which can incorporate options for home-based business activities.

B. Development Controls

Allotment Requirements	
Lot Size Range	230 – 450m^2
Lot Frontage	12 – 15m
Principal Private Open Space	
Minimum Area	30m^2
Minimum Dimension	4m
Minimum Dwelling Setbacks	
Front	3m

Secondary Frontage	2m
Side	• 0m on defined boundary as Figure E7.45: Setbacks and Articulation • 0.9m on other boundary
Rear:	
Ground Floor Upper Floor	4m 6m
Garage to rear lane	0m
Other Requirements	
Height	• Dwellings shall have a maximum height of 2 storeys

Figure E7.49: Semi Detached Dwellings Design Principles



7.4.5.4 Studios

A. Performance Measures

Development is designed to:

a) Be located above garages that are accessed from rear lanes or shared driveways.

b) Provide their own sleeping, living, kitchen and bathroom areas.

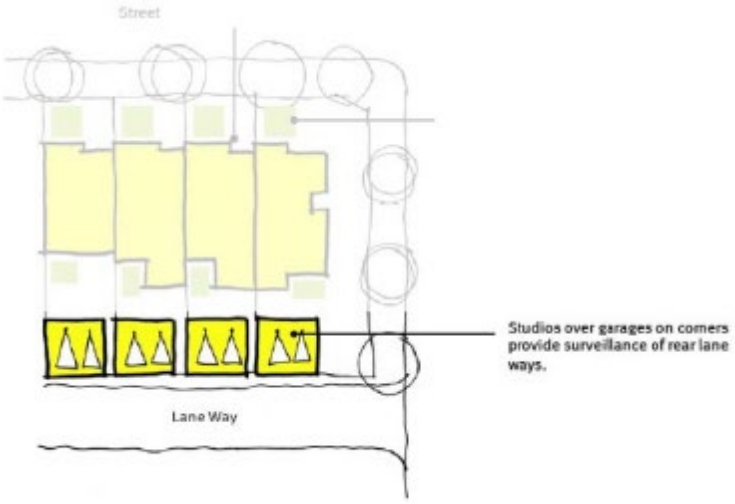
c) Provide causal surveillance over rear lanes or shared driveways.

d) Windows and private open spaces do not overlook the private space of any adjacent dwellings.

e) Do not overshadow the private open space of living space of any adjacent dwelling.

f) Balconies or verandahs do not overhang vehicle access areas.

Figure E7.50: Studio Design Principles



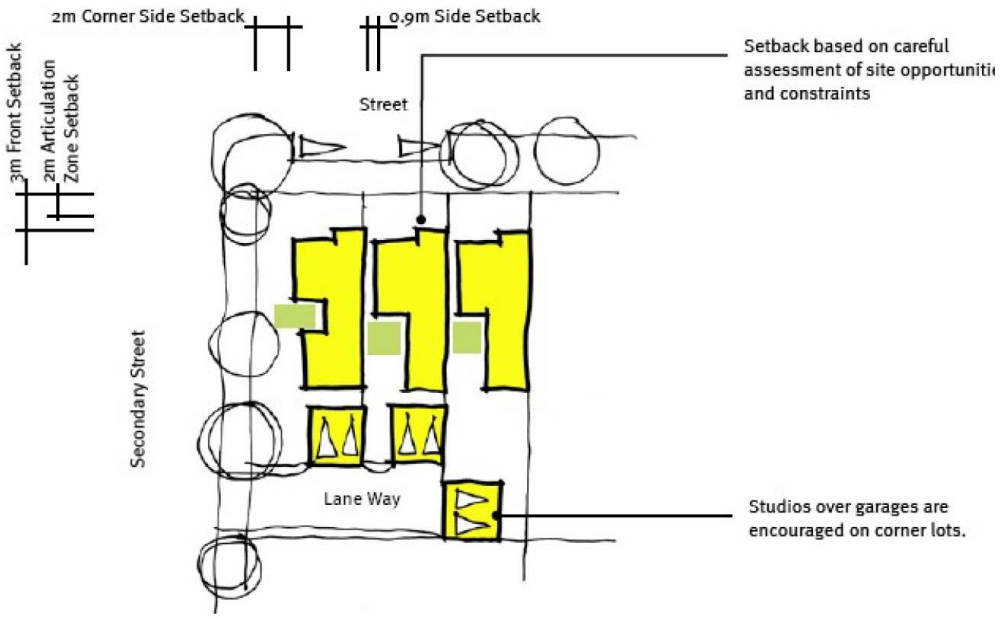
7.4.5.5 Built to Boundary Dwellings

A. Development Controls

Allotment Requirements	
Lot Size Range	230 – 450m^2
Lot Frontage	9.5 – 15m
Principal Private Open Space	
Minimum Area	40m^2
Minimum Dimension	4m
Minimum Dwelling Setbacks	
Front	4.5m
Secondary frontage	2m
Side:	• 0m on defined boundary. • 0.9m from other boundary.
Rear:	
Ground Floor Upper Floor	4m 6m
Garage to Rear Lane:	0m
Other Requirements:	

Height	• Dwellings shall have a maximum height of 2 storeys.

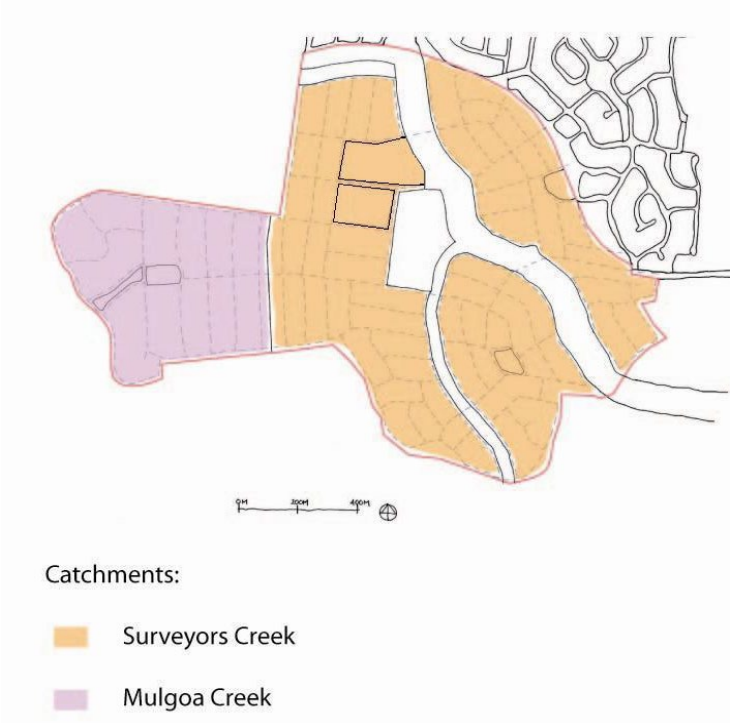
Figure E7.51: Built to Boundary Dwelling Design Principles



7.4.5.6 Detached Dwellings

Different development controls will apply to development of detached housing forms within the two catchments in the release area. These catchments are identified at Figure E7.52 below:

Figure E7.52: Catchments



7.4.5.6.1 Surveyors Creek Catchment

Allotment Requirements	
Lot Size Range	360m^2 – 600m^2
Lot Frontage	12m – 15m
Principal Private Open Space	
Minimum Area	50m^2
Minimum Dimension	4m
Minimum Dwelling Setbacks	
Front	4.5m
Secondary Frontage	2m
Side	0.9m
Rear:	
Ground Floor Upper Floor	4m 6m
Garage to rear lane	0m

Other Requirements:	

Height	• Dwellings shall generally have a maximum height of 2 storeys.
	• 3 storey development will only be permitted on land:
	  ○ Located at key intersections within a precinct, as identified part of an approved Concept Plan, and where they provide built form consistent with that shown at Figure E7.54.
	  ○ With slopes with a grade greater than (1:8) when they achieve built form consistent with that shown at Figure E7.55.

Figure E7.53: Detached Dwelling Principles

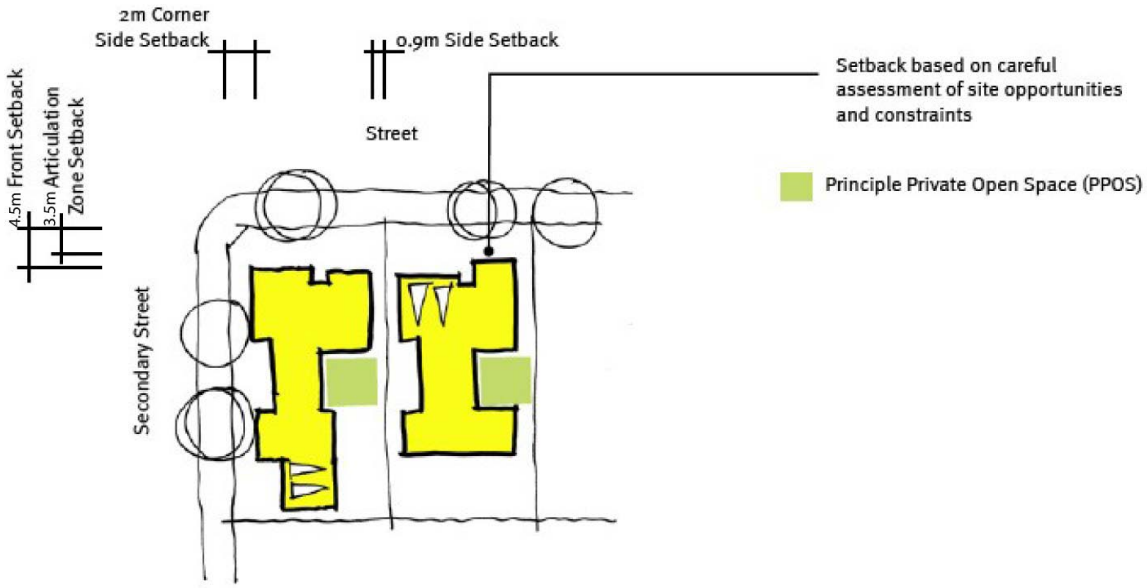


Figure E7.54: Three Storey Development at Key Intersections

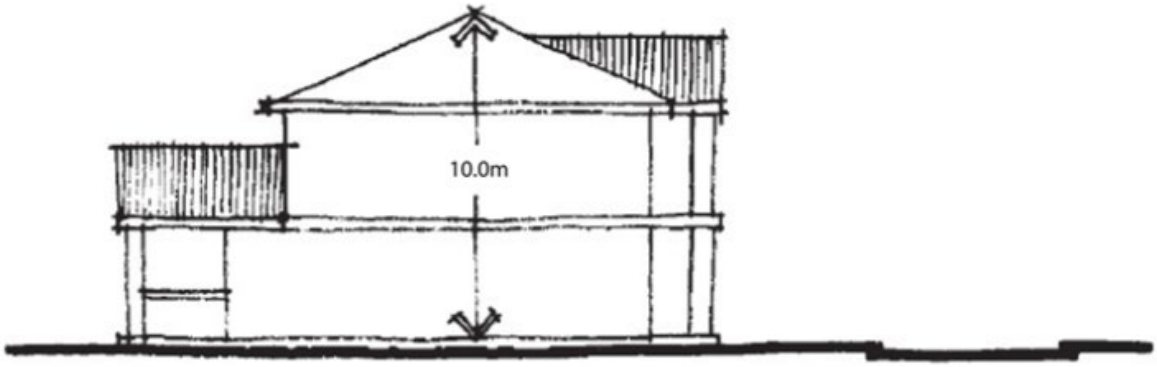
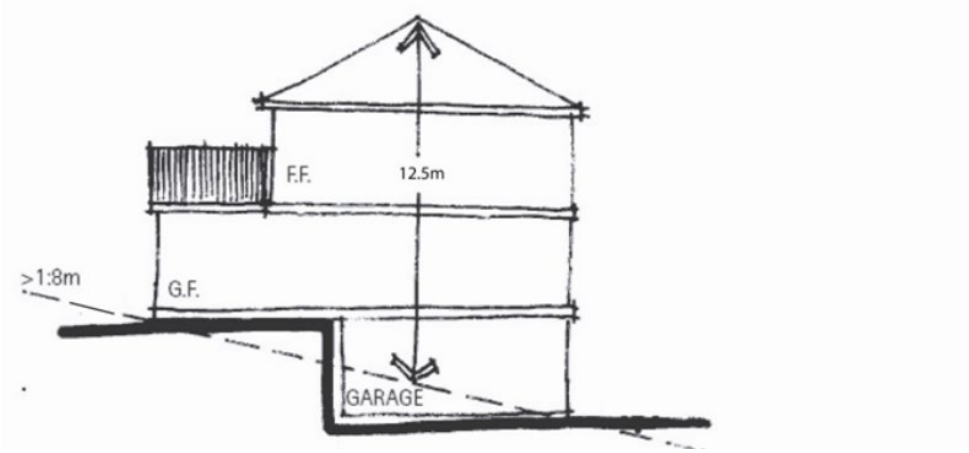


Figure E7.55: Three Storey Development on Lands With Grade >8:1



7.4.5.6.2 Mulgoa Creek Catchment

A. Performance Measures

a) Allow for landscaped side setbacks to provide visual separation between dwellings and a more spacious streetscape environment.

b) Reflect the semi - rural character in road detailing, landscaping and fencing details.

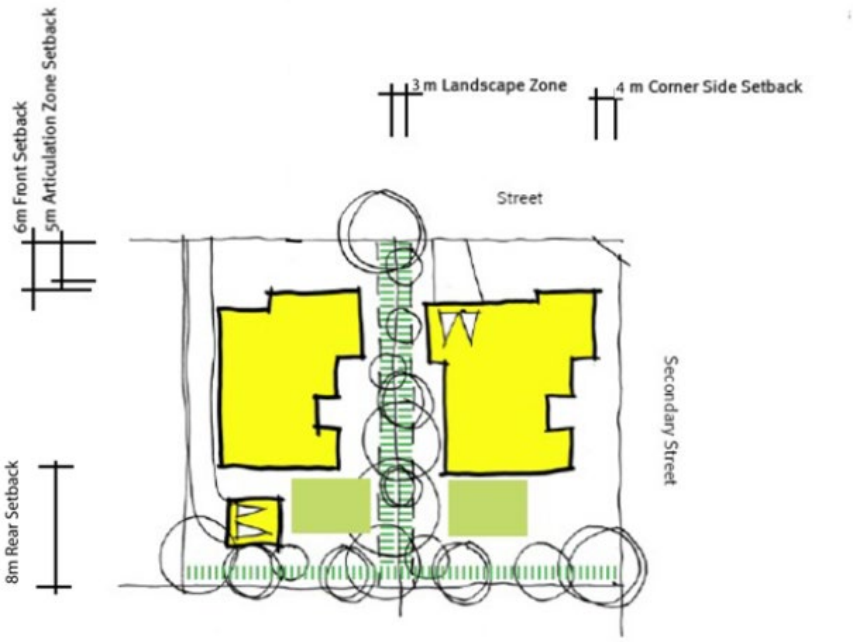
c) Lot sizes are to transition from the smaller lots in the Surveyors Creek catchment to the largest lots adjacent the Mulgoa Nature Reserve.

B. Development Controls

Allotment Requirements	
Lot size range	450m^2 – 1,000m^2
Lot Frontage	20m
Principal Private Open Space	

Minimum Area	100m^2		
Minimum Dimension	5m		
Minimum Dwelling Setbacks			
	Lots <600m^2	**600m^2-1,000m^2**	**Lots >1,000m^2**
Front	4.5m	6m	8m
Secondary Frontage	2m	4m	4m
Side	0.9m	0.9m	3m
Rear Ground Floor First Floor	 4m 6m	 4m 6m	 8m
Other Requirements			
Height	Dwellings shall have a maximum height of 2 storeys		

Figure E7.56: Mulgoa Creek Catchment Dwelling Design Principles



MULGOA CREEK CATCHMENT DWELLINGS

7.4.5.7 Non-Residential Development

A. Performance Measures

a) Non-residential development should be planned and designed according to principles of traditional suburban design, and to preserve the amenity of residential neighbourhoods.

b) Principles of urban form and urban design that apply to permissible multi-unit housing are applied to non-residential development.

c) Particular attention is paid to:

i) The development site including front setbacks, rear setbacks, dual frontage situations.

ii) Urban form including:

- Traditional building design features.
- Traditional garden frontages.
- Orientation of building entrances.
- Continuously occupied rooms facing the street.
- Detailed consideration of significant townscapes or landscapes.
- Signs.

iii) Driveways and parking including:

- Provision of on-site parking appropriate to the proposed use, and in accordance with Penrith Council's parking codes, the RTA or Australian Standards.

- Minimise site coverage by paved areas.
- Conceal garages from views available from public parks and streets.
- Locate driveways and parking areas away from any neighbouring residential development.

iv) Building envelope and side setbacks:

- To achieve a single storey appearance.
- To provide for effective landscaped separation from adjacent developments.

v) Minimise overshadowing of adjacent properties and minimise requirements for mechanical heating and cooling of interiors.

vi) Protect the privacy of adjacent properties.

vii) Sufficient areas are provided for storage and building services to meet requirements generated by the proposed development and located to protect the amenity of adjacent developments.

Table of Contents

E8 Kingswood

Part A – Design and Siting of Non-Residential Development on Land Fronting Morley Avenue and the Great Western Highway, Kingswood

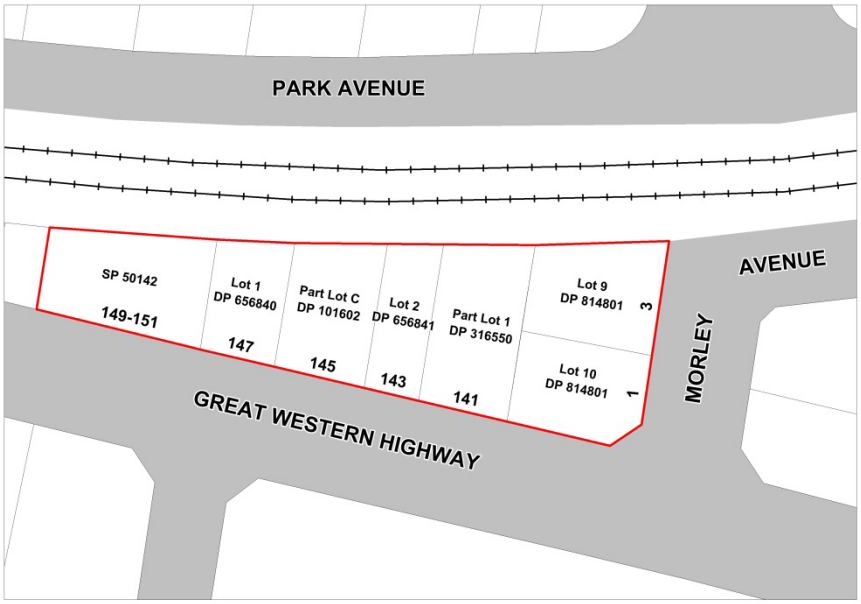
8.1 Preliminary

8.1.1 Land to which this section applies

This section applies to following land within Kingswood, as shown in Figure E8.1:

- Lots 9 and 10 DP 814801, 1 – 3 Morley Avenue, Kingswood,
- Part Lot C, DP 101602, 145 Great Western Highway, Kingswood,
- Lot 1, DP 656840, 147 Great Western Highway, Kingswood,
- Part Lot 1, DP 316550, 141 Great Western Highway, Kingswood,
- Lot 2, DP 656841, 143 Great Western Highway, Kingswood,
- SP 50142, 149 – 151 Great Western Highway, Kingswood.

Figure E8.1: Land to which this section applies



8.1.2 Aims and Objectives

a) To encourage low traffic generating developments with sufficient onsite parking which satisfies Council's Car parking Code and adequate on site loading / off loading facilities;

b) To encourage a proper design and landscape address to both the Great Western Highway and Western rail line consistent with the high visual exposure of the land;

c) To ensure that developments will not detrimentally affect the existing environments and are compatible with adjoining land uses, particularly whilst any residential properties remain;

d) To encourage amalgamation of allotments to allow orderly redevelopment to occur; and

e) To ensure that development in layout, landscaping and signage is in keeping with the residential character of the land and in turn discourage the visual appearance of commercial ribbon development.

8.2 Development Controls

In considering an application for the development of land subject to this Section, Council shall take into consideration the following matters:

8.2.1 Building Setbacks

1) The following front building setbacks apply to development along the Great Western Highway:

   a) 7m: 1 – 3 Morley Avenue and 141 – 147 Great Western Highway, Kingswood.

   b) 5m: SP 50142, 149 – 151 Great Western Highway, Kingswood.

2) All building setbacks are to be appropriately landscaped.

3) On-site car parking will be considered within the front setback where it can be demonstrated that it will be suitably screened by landscaping.

8.2.2 Signage

1) All signage is to comply with the requirements of the Advertising and Signage Section of this DCP.

2) Signs identifying the location and activities of business will be permitted only along the Great Western Highway frontage.

3) No signage is to be erected along the frontage to the railway.

8.2.3 Car Parking

1) Car parking is to be provided in accordance with the Transport, Access and Parking Section of this DCP.

2) Car parking areas are to be suitably located so as to serve all sections of the development.

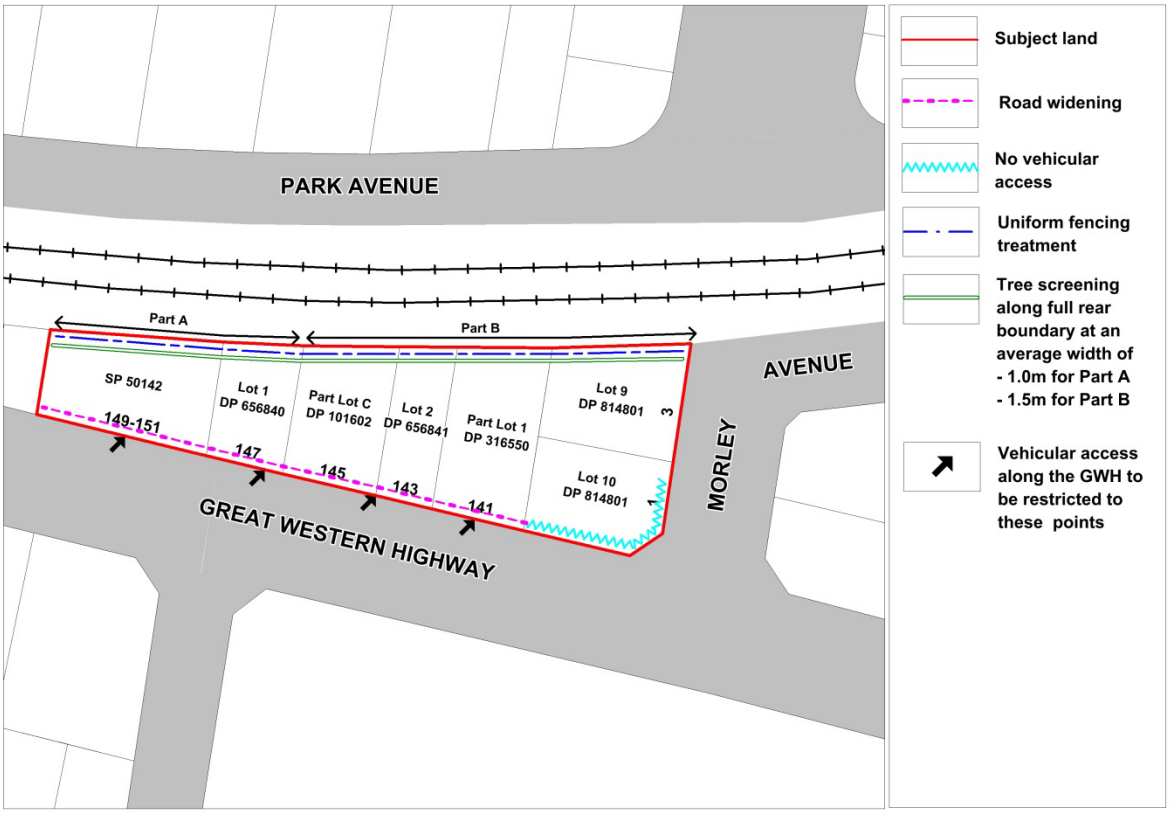
3) Car parking shall be provided with landscaping strips, particularly if adjacent to any existing dwelling being used for residential purposes and along the Great Western Highway and railway line boundaries of the allotments.

8.2.4 Vehicular Access

1) Vehicular access to 1 – 3 Morley Avenue, Kingswood will be provided off Morley Avenue only.

2) Vehicular access to other properties will be limited to existing vehicular access points, and in accordance with Figure E8.2: Vehicular Access. No new vehicular access points will be permitted off the Great Western Highway except for one access point to service SP 50142, 149 – 151 Great Western Highway, Kingswood.

Figure E8.2: Vehicular Access



8.2.5 Loading Areas

1) Sufficient loading areas shall be provided on site in accordance with the requirements of the Transport, Access and Parking Section of this DCP.

8.2.6 Storage Area

1) Storage areas will not be permitted along the Great Western Highway frontage. All goods and materials shall be stored within buildings.

8.2.7 Building Design and Layout

1) The design of buildings and layout of uses on site shall:

a) ensure a proper design and landscape address to both the Great Western Highway and Western Rail Line having regard to the high visual exposure of the land; and

b) ensure that any impact on the amenity of adjoining residential dwellings is minimised.

8.2.8 Western Rail Line

1) To achieve a high standard and uniform address to the Western Rail Line, the following shall be undertaken:

   a) The lot boundary to the Western Rail Line is to be screened with trees comprising of species consistent with the existing landscape setting of the area. This tree screen shall vary in width as per the plan attached to this section; and

   b) Any fencing treatment of the boundary to the Western Rail Line shall be uniform for all lots and comprise of wire mesh fencing to a height of 1.8m.

8.2.9 Landscaping along the Great Western Highway

1) Landscaping shall form an integral part of the use of the setback area from The Great Western Highway.

2) It shall at maturity effectively screen any car parks and visually ‘soften’ the built form nature of the development in order to emphasise the ‘low key’ commercial character of development and to be compatible with existing residences.

Part B – The Knoll

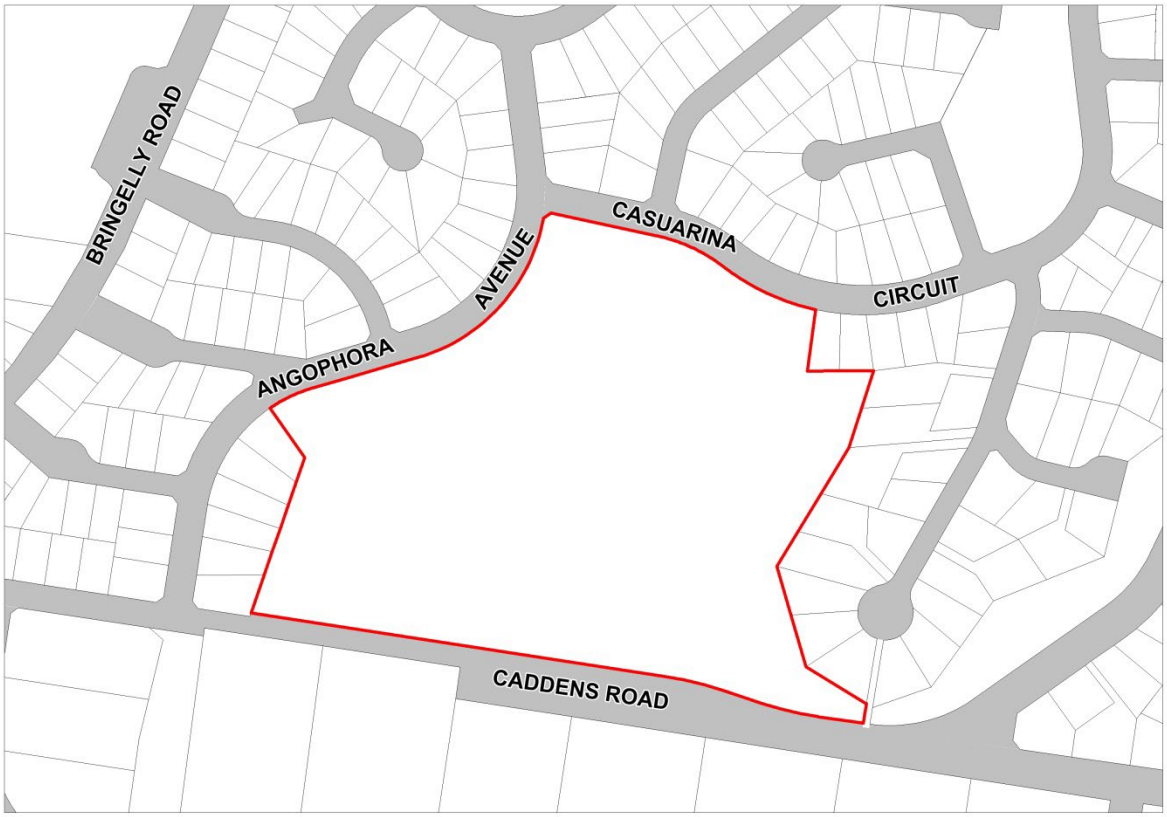
8.3 Preliminary

8.3.1. Land to which this Part Applies

This section applies to the land located at 17-53 Caddens Road, Orchard Hills (Lot 21 DP 1151724) within the Penrith Local Government Area.

The land, known as 'The Knoll' is identified in Figure 8.4.

Figure 8.4: Land to which The Knoll applies



8.3.1.1 Relationship to other Plans and Documents

This section must be read in conjunction with any environmental planning instrument applying to the land, as well as any Planning Agreement for The Knoll.

In the event of any inconsistency between this Section and the rest of this DCP, the requirements of this Section prevail.

Where a specific issue is not addressed in this Section, reference should be made to relevant sections of this DCP.

8.3.1.2 Supporting Studies

The following supporting studies and documents have been used in the preparation of this section and are available for reference from Council:

a) Aboriginal Heritage Assessment by Godden Mackay Logan and Jo McDonald (March 2012).

b) Ecological and Bushfire Report by EcoLogical Australia (March 2012).

c) Infrastructure and Services Report by J. Wyndham Prince (March 2012).

d) Phase 1 Environmental Site Assessment by WSP (March 2012).

e) Traffic Report by Halcrow (May 2012).

f) Stage 1 Road Safety Audit by GTA Consultants (November 2012)

g) Community Consultation Report by Manidis Roberts (May 2012).

h) Stormwater Management Report by J. Wyndham Prince (February 2013).

i) JBS Environmental Phase 2 Investigation (Feb 2012).

8.3.2 Structure Plan

8.3.2.1 Vision for The Knoll

The Knoll comprises accessible grassland with an area of approximately 7.33 hectares. The Knoll is surrounded by existing residential development.

The development of the Knoll is to:

a) Provide an appropriate balance between low-density residential development and public open space.

b) Create a 'Hill Top Park' for community use.

c) Demonstrate a high standard of residential amenity and a high standard of urban and architectural design quality.

d) Maintain the existing established character of the areas adjoining the Knoll.

e) Facilitate connections with land and development adjoining the Knoll.

f) Maintain district views and vistas attained from the Hill Top Park.

g) Provide an integrated, convenient and sustainable road, footpath and cycle network.

In order to achieve the vision for the Precinct, a Structure Plan was prepared as part of the planning proposal. This Structure Plan demonstrated the opportunity to subdivide land into a minimum of 45 individual residential lots and establish an area of informal public open space, to be known as Hill Top Park, at the central portion of the precinct.

The Knoll Structure Plan establishes the urban structure and form for the planning and future development of the Knoll. The Structure Plan (Figure E8.5) demonstrates the subdivision of the Knoll to provide 45 individual residential lots and an area of public open space in the form of a hill top park.

Figure E8.5 – Structure Plan for The Knoll

8.3.3 The Public Domain

8.3.3.1 Street Network

A. Objectives

a) To deliver a safe and convenient vehicular, pedestrian and cycleway network.

b) To provide visual interest within streetscapes.

B. Controls:

1) The street network is to be set out in accordance with the Structure Plan.

2) The cycleway network is to be built in accordance with the Structure Plan. The indicative route of the cycleway mostly crosses through the precinct and connects to the new Caddens residential development to the east of the precinct.

3) Street trees are required on all street verges/nature strips (between footpath and kerbs). Street planting will be located to:

   a) Minimise risk to utilities and services.

   b) Maintain adequate sight lines for vehicles and pedestrians particularly in locations of driveways and corners.

   c) Provide adequate shading for pedestrians.

   d) Provide attractive and interesting streetscape.

   e) Minimise interference with street lighting.

4) The provision of street trees should be of a uniform species and preferably native.

Figure E8.6 – Indicative cross-sections and plans of desired streetscapes for allotments with precinct

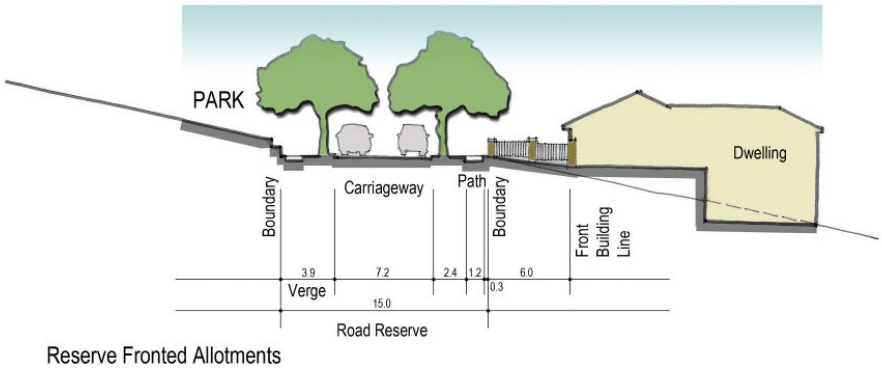
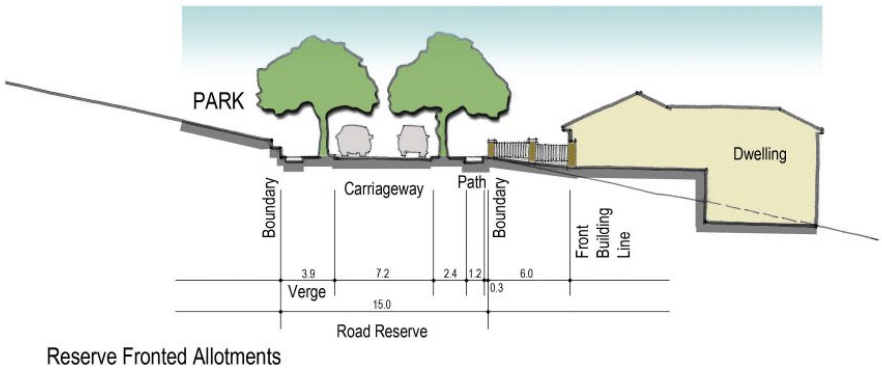
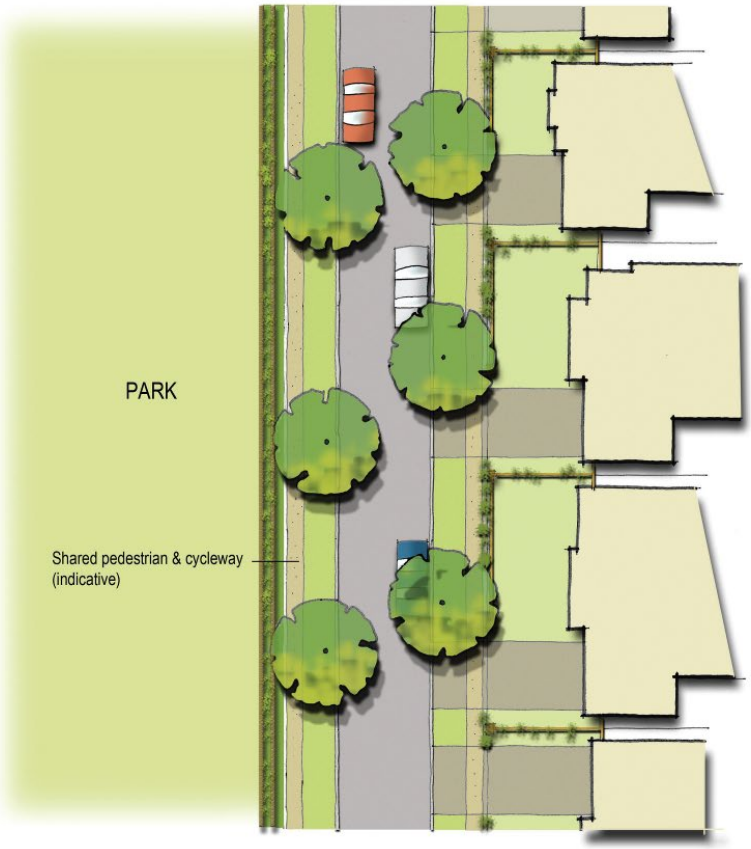


Figure E8.7 – Indicative cross-sections and plans of desired streetscapes for reserve fronted allotments within precinct





8.3.3.2 Pedestrian and Cycle Network

A. Objectives:

To provide a clear, convenient, efficient and safe network of pedestrian and cycleway paths for the use of the community, within and beyond the precinct.

To encourage residents to walk or cycle, in preference to using motor vehicles, as a way of gaining access to schools, shops, and local community and recreation facilities outside of the precinct.

B. Controls:

1) Pedestrian routes and cycleways are indicated on the Structure Plan.
2) Pedestrian footpaths are to have a minimum width of 1.5m.
3) All pedestrian and cycleway routes and facilities are to be consistent with the Planning Guidelines for Walking and Cycling (Department of Infrastructure, Planning and Natural Resources and the Roads and Traffic Authority, 2004).
4) Pedestrian and cycle routes and facilities in public spaces are to be safe, well lit, clearly defined, and be functional and accessible to people with a disability.
5) Clearly and frequently signpost shared pedestrian/cycle links.
6) Pedestrian and cycle pathways, and pedestrian refuge islands are to be designed to be fully accessible by all in terms of access points and gradients, generally in accordance with Australian Standard 1428:1-4.
7) Pedestrian and cycle pathways are to be constructed as part of road infrastructure works with detailed designs to be submitted with the development applications for subdivision.

8.3.3.3 Open Space Network

A. Objectives:

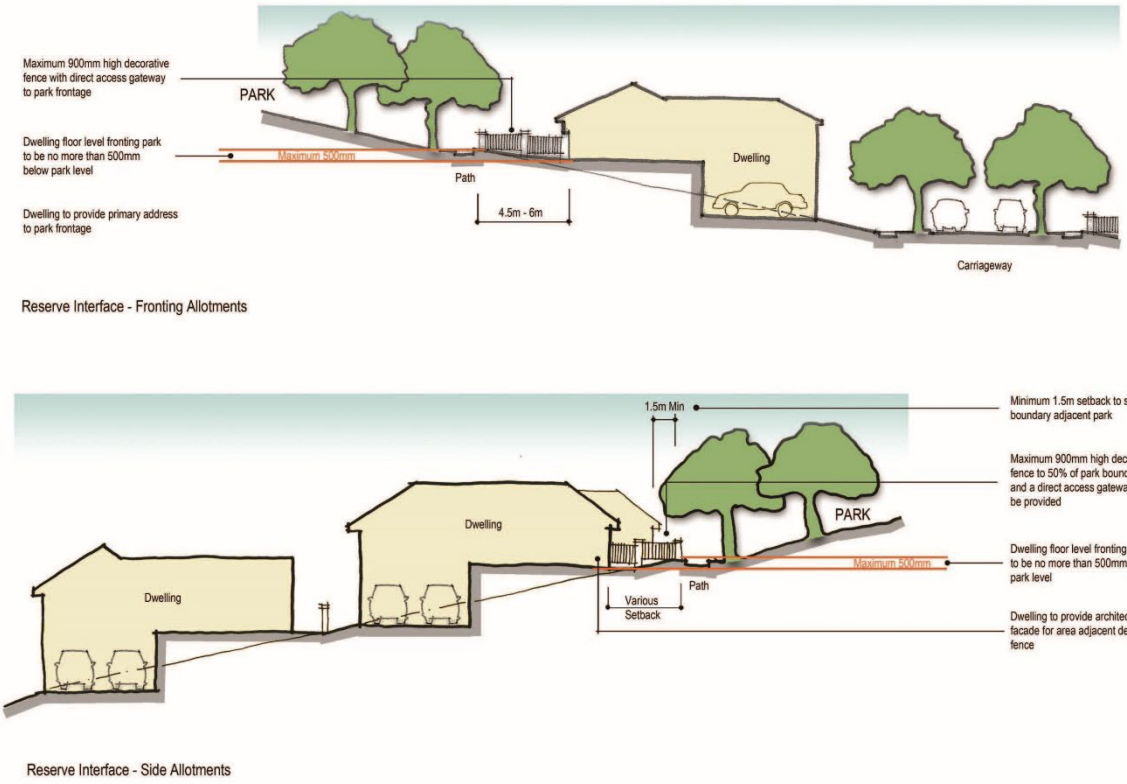
a) To create a sense of identity for the precinct while maintaining the existing character of surrounding development.
b) To respect the amenity and privacy of existing residential properties adjacent to the precinct.
c) To create passive recreational open space for the precinct for both future residents of the precinct and existing residents of surrounding properties.
d) To provide a visual focal point of the precinct.
e) To maintain district views and vistas of Orchard Hills and beyond from the hilltop at the precinct.

B. Controls:

1) Retain and embellish the land nominated as Hill Top Park on the Structure Plan.
2) Dwellings that border the Hill Top Park should generally be orientated towards the open space for passive surveillance and deliver an attractive surround to the Hill Top Park (refer to Figure E8.8)
3) Provide cycle ways and footpaths to form key open space linkages throughout the precinct.

4) Identify areas for passive recreational space within the proposed Hill Top Park.
5) Provide a three metre wide landscaped easement between existing residential properties and new lots abutting the precinct's western and eastern boundaries to respect privacy and amenity between the precincts.
6) Provide appropriate street furniture within the Hill Top Park which should be consistent in terms of appearance and design. A public domain plan should be prepared with the subdivision development application showing street furniture, including as appropriate:
   a) Seats
   b) Litter bins
   c) Drinking fountains
   d) Lighting
   e) Information signs

Figure E8.8 – Indicative interface with Hill Top Park on front and side allotments



8.3.4 Residential Development

8.3.4.1 Subdivision Design

A. Objectives:

a) To establish a consistent urban form and structure that encourages a low density residential character with desirable streetscapes.

b) To design lots that respond to the natural topography and street pattern of the precinct.

c) To provide a desirable level of amenity for individual lots in terms of solar access, views and outlook, and proximity to public open space.

B. Controls:

1) The subdivision layout of the precinct should be subject to survey generally in accordance with the Structure Plan at Figure E8.5.

2) Provide a balanced range of north-south and east-west orientated sites.

8.3.4.2 Streetscape, Feature Elements and Roof Design

A. Objectives:

a) To encourage dwelling designs which create a harmonious streetscape and responds to the predominate character of the surrounds of the precinct.

b) To provide a clear distinction between public and private space and to encourage casual surveillance of the street and Hill Top Park.

c) To identify elements of roof design that respond appropriately to the streetscape character while providing weather protection to windows.

d) To create an attractive and cohesive streetscape through the provision of simple and articulated building and roof forms in a contemporary style.

e) To reduce the dominance of garages on the streetscape.

f) To encourage eaves, verandahs, balconies and other feature elements on the front facades of dwellings.

B. Controls:

1) Primary street façade of a dwelling to incorporate at least one of the following building elements to articulate its presentation to the street:

   a) an entry feature

   b) awnings or louvres or other sunshade devices over windows

   c) open verandah

   d) bay windows

   e) balcony at first floor

   f) other decorative architectural features

2) Secondary street façade on corner lots include at least a window off a habitable room and particular design features (e.g. verandah, balcony or landscaping).

3) Eaves to be provided to all roofs with a minimum overhang of 400mm.

4) Roof pitch is to be a maximum of 25 degrees.

5) Garages and parking spaces are to be sited behind the front building line of dwelling or integrated into the façade of the dwelling for garages that are situated at basement or sub-ground floor level.

Figure E8.9 – Primary Street Façade Design Principles

8.3.4.3 Dwelling Height, Massing and Siting

A. Objectives:

a) To achieve consistency in design of dwellings and create an appropriate scale for dwellings to respond to the natural landscape and street pattern of the precinct.

b) To nominate building heights to create a desirable streetscape and respect solar access and privacy aspects of individual lots.

c) To avoid significant cut and fill of land to accommodate dwellings on steeply sloping site.

B. Controls:

1) Dwellings are to be a maximum of two storeys in height with the exception of dwellings that incorporate basement/undercroft garages or split level solutions for steeply sloping sites as illustrated in Figure E8.10.

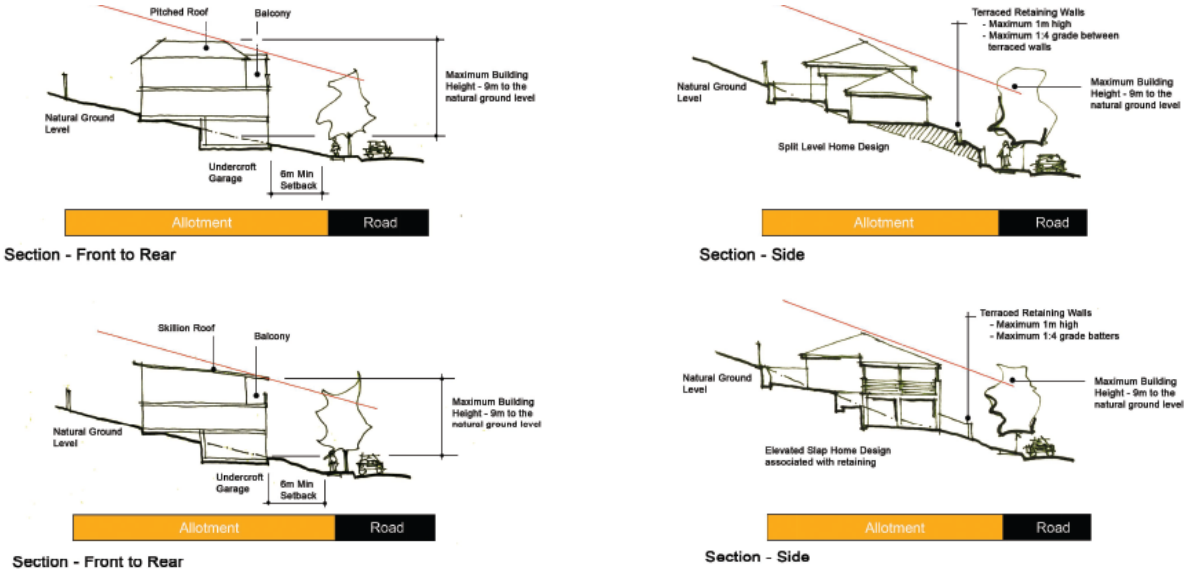
2) Maximum external wall height for all dwellings is 7m from the natural ground level.

3) At least 3 hours of direct sun between 9am and 3pm onto 50% of principal private open space should be achieved for new dwellings and their adjoining properties.

4) Satisfy cut and fill and excavation numeric controls set out in Section 8.3.4.5 Development on Sloping Land of this Part.

5) Housing interface to the Hill Top Park to be a maximum of 500mm below park level at the boundary.

Figure E8.10 –Building Height and Development Control solutions for sloping sites



8.3.4.4 Building Setbacks

A. Objectives:

a) To minimise the impacts of development on neighbouring properties in relation to views, privacy and overshadowing.

b) To provide space between buildings.

c) To reinforce the visual prominence of corner lots to promote a strong and legible character.

d) To reduce the visual impact of front garaging on street frontages.

B. Controls:

1) Dwellings are to be sited in conformity with the numeric controls specified in Table E8.1 and the landscape easement requirement specified in Section E8.3.3.3 Open Space Network, in order to establish a consistent front building line in response to the curve pattern of the road reserve as well as respecting solar access, privacy and amenity aspects of individual lots (refer figure E8.11).

Table E8.1: Building Setbacks

Allotment Type	Front	Side	Rear
Frontage with 18 and greater	6m	1.5m	6m
Frontage between 15m and 18m	6m	0.9m	6m
Frontage with 15m and lesser	4.5m	0.9m	4m

2) Secondary frontages for all corner sites are to be provided in accordance as follows:

   a) 2m on lots less than 18m wide

   b) 3m for dwellings on lots 18m and wider

3) Secondary frontages should be staggered to minimise the incidence of blank frontages.

4) Freestanding garages that are independent of a dwelling (i.e. not sited within the building envelope of a dwelling at basement/undercroft level) are to be sited at least 1m behind the front building line of dwellings to reduce its visual prominence within the street frontage of sites.

Figure E8.11 –Setback Principles

8.3.4.5 Development on Sloping Land

A. Objectives:

a) To minimise incidence of cut and fill and alterations in natural ground levels.

b) To encourage appropriate dwelling design which suits the topography of lots.

c) To protect adjoining properties from potential structural instability by proposed excavation.

d) To lessen the visual impact of retaining walls on allotment boundaries.

B. Controls:

1) Cut and fill of land is to be minimised under the following numeric controls:
   a) Maximum depth of any cut in the slope is 1m.
   b) Maximum height of any fill of the slope is 1m.
2) Side boundary retaining walls for development on cross slopes should retain a cut no higher than 1m.
3) Excavation works should be at least 1.5m from side and rear boundaries to respect the structural stability of adjoining sites.
4) Retaining walls should be setback at least 1m from any boundary and if possible screened by suitable landscaping.
5) Where the retaining of land is greater than 1m in height, retaining walls should be tiered with a minimum distance of 600mm between walls and suitably landscaped.
6) Enbankments should have a maximum grade of 1:4 and be suitably landscaped to prevent erosion.

8.3.4.6 Studio or Secondary Dwellings

A. Objectives:

a) To provide a diversity of housing and accommodation options to satisfy various family types and age groups.

b) To provide innovative housing solutions compatible with the surrounding residential development.

B. Controls:

1) The design of the studio or secondary dwelling should be compatible with the design scheme of the principal dwelling.
2) Windows and private open spaces should not overlook the private space of any adjacent dwellings.
3) Where practical private open space in the form of a balcony should be provided to the secondary dwelling in addition to private open space area requirements.

8.3.4.7 Private Open Space

A. Objectives:

a) To allocate sufficient space within an allotment for recreational purposes.

b) To provide a desirable level of residential amenity.

c) To optimise solar access on recreational areas.

Controls:

1) Each dwelling must be provided with an area of private open space.

2) Minimum of 20% of site area is to be reserved for private open space capable for recreational uses.

3) 50% of the private open space should be exposed to direct sunlight for at least 3 hours between 9am and 3pm.

8.3.4.8 Site Coverage and Landscaped Area

A. Objectives:

a) To provide sufficient landscaped area to each allotment.

b) To encourage an appropriate level of amenity.

c) To enhance streetscapes.

d) To reduce impervious areas/or maximise pervious areas/or maximise stormwater infiltration/absorption to lessen site stormwater runoff.

Controls:

1) A 3m landscaped setback will be provided at the rear of properties which are adjacent to existing residents (as illustrated in Figure E8.5). This will be provided in additional to standard building setbacks detailed in section E8.3.4.4 Building Setbacks.

2) Landscaped area in any part of a site, at ground level, that is permeable and consists of soft landscaping, turf or planted areas and the like. On lots 450m^2 and greater, 35% of the lot area must be landscaped.

3) A landscape plan is to be submitted with all development applications for residential development. The development application must indicate the location and other requirements for landscaping contained in this DCP.

4) The front setback area of a dwelling is to be landscaped with the treatment to clearly delineate between the private and public domain. The front setback is to incorporate two trees. The rear garden must include at least one tree that will achieve a height of 6m at maturity. These may include existing trees that are to be retained.

5) To prevent accumulation of water and concentration of salts, subsoil drains are to be installed around the perimeter of residences and connected to the stormwater system.

6) Low water demand drought resistant vegetation is to be used in common landscaped areas, including native salt tolerant trees.

7) Garbage bin storage and clothes drying areas are to be concealed from view and shown on site plans.

8.3.4.9 Fencing

A. Objectives:

a) To provide privacy to both residents and neighbours.

b) To ensure boundary fencing is of a high quality and does not detract from the streetscape.

c) To ensure that fencing is consistent with the street and the design and style with its dwelling.

d) To permit causal surveillance of open space.

Controls:

1) The design of front fences is to take reference from, and complement, the architectural style of the dwelling on the site and dwellings on adjacent sites in terms of style, height and materials.

2) Maximum height of 1.2m for front fences.

3) On sloping sites, the height of the fence is to be averaged so that the fence steps down the slope (refer to Figure E8.12).

4) Any solid up-stand section should be limited to 600mm in height. The top half of the fence should be of an open design with a minimum open area of 50%, for visibility to and from the site. Components such as arched gates, piers and the like may exceed the maximum 1.2m height limit.

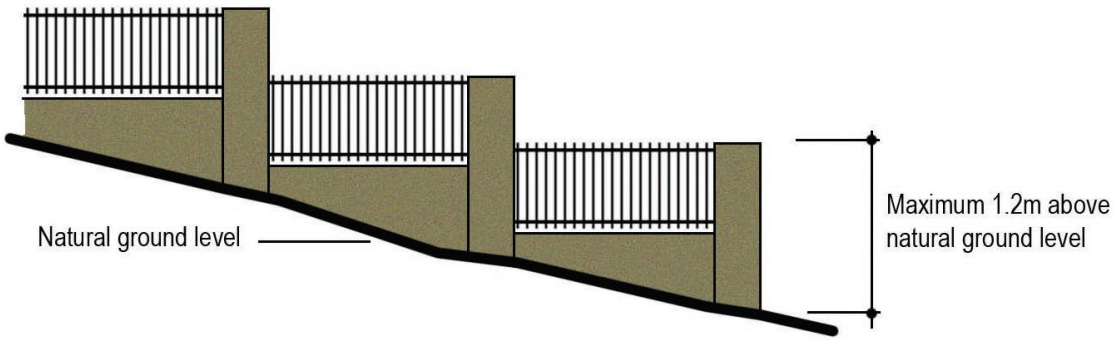
5) Maximum height of 1.8m for side and rear boundary fences.

6) Where a dwelling is located adjacent to open space, boundary fencing is to be of a high quality material and finish and the design is to permit causal surveillance of the open space.

7) The fencing on the secondary street of a lot with a frontage 17.5m or greater must be set back 0.9m from the secondary street boundary and must incorporate landscaped vegetation between the fence and the boundary.

8) Metal sheet fencing is not permitted anywhere.

Figure E8.12 – Front fencing



8.3.4.10 Garages and Access

A. Objectives:

a) To provide sufficient, safe and secure parking for residents.

b) To design and locate off-street car parking areas not to unreasonably detract from the appearance and quality of the dwelling-house or streetscape.

c) To maximise pedestrian and vehicular safety.

d) To minimise loss of views from the public domain.

e) To discourage garages from dominating the frontage of a dwelling.

Controls:

1) Off-street parking spaces should be provided in accordance with within the Transport, Access and Parking Section of this DCP.

2) All car accommodation including garages must be sympathetic in architectural character to the dwelling and not visually dominate or adversely impact on the existing built or landscape character of the street.

3) Where a carport or garage entry forms part of the front façade of a dwelling, it is to be set back a minimum of 5.5m from the front boundary and at least 1m behind the building façade.

4) The maximum dimensions for garage doors are to be less than 50% of the front façade, 6m in width and 2.4m in height. Front double garages are only permitted on lots with a frontage width equal to or greater than 12.5m. Triple width garages are discouraged.

5) Parking spaces are to comply with AS 2890.1 off street parking, including:

   a) Minimum internal width between main walls of 3m for a single garage; and Minimum internal width between main walls of 5.5m for a double garage.

   b) Driveway access to garages on steep land must comply with AS 2890.1. Stencil-crete on driveways is not permitted.

6) Driveways are to be no wider than 4.5m at the front boundary and should be located a minimum of 1.5m from street trees.

7) Where practical driveways and car parking facilities for corner lots are to be accessed off a secondary street.

8) The maximum number of dwellings to be serviced from a shared driveway is 4.

8.3.5 Environmental and Residential Amenity

8.3.5.1 Visual and Acoustic Privacy

A. Objectives:

a) To maintain visual and acoustic privacy for each property.

b) To discourage overlooking from one dwelling to another.

B. Controls:

1) Habitable room windows should not directly face other habitable room windows or private open space of adjoining dwellings on site or on adjoining sites.

2) Balconies at first floor with side and rear aspects to have a maximum area of 15m^2 and a depth of 1.7m to minimise the incidence of overlooking from one dwelling to another.

3) Windows of habitable rooms above ground floor level should have sill heights of 1.7m. Windows with sill heights less than 1.7m above floor level should comprise opaque glazing below this level.

4) Use of landscaping alongside boundaries is encouraged to provide natural screening between lots.

5) The internal layout of residential buildings, window openings, the location and design of outdoor living areas and elements (i.e. courtyards, balconies and retaining walls), and building plant should be designed to minimise noise impact and transmission and enhance visual amenity.

8.3.5.2 Safety and Surveillance

A. Objectives:

a) To reduce opportunities for concealment.

b) To encourage natural and passive surveillance of the street and public domain.

c) Dwelling design should encourage overlooking of primary and secondary streets as well as other public or communal areas, including the Hill Top Park. This is to be achieved by siting at least one living room to the front of the dwelling (which has an aspect to a primary street) and at least one habitable room to the side or rear (which has an aspect to a secondary street or public open space).

d) Front fencing to comply with design controls set out in the fencing section of this Part to enable reasonable passive and casual surveillance of the street.

e) Developments, including open space, are to avoid creating areas for concealment and blank walls facing the street.

f) Pedestrian and communal areas are to have sufficient lighting to ensure a high level of safety and must be designed to minimise opportunities for concealment.

g) Development applications for subdivision, public open space and community facilities are to incorporate the principles of Crime Prevention Through Environmental Design (CPTED). Refer to the Site Planning and Design Principles section of this Plan for the CPTED principles.

8.3.5.3 Sustainable Building Design

A. Objectives:

a) Design and build dwellings that are environmentally sustainable in relation to energy and water use.

b) Maximise opportunities for natural ventilation through building layout.

B. Controls:

1) Design of dwelling to be in accordance with energy and water use targets set out under State Environmental Planning Policy – Building Sustainability Index (BASIX). A BASIX Certificate is required for all new residential development.

2) Minimum dwelling floor to ceiling heights should be as follows:

   a) Ground floor habitable rooms of two storey single dwellings – 2.65m;

   b) Upper floors and all non-habitable rooms – 2.4m;

   c) Single storey dwellings – 2.65m;

   d) Attics – 1.5m wall height at edge of room with a 30 degree minimum ceiling slope; and

   e) All floors of multi-unit dwellings – 2.4m.

3) Door and window openings and building/dwelling layout are to encourage adequate cross ventilation and solar access.

4) North and west facing windows are to incorporate sunshade awnings/panels or appropriate weather control devices.

5) All dwellings are to incorporate an outdoor clothes line/drying area in a sunny location not visible from a street or public place.

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E9 Mulgoa Valley

A. Background

Area included within the Mulgoa Valley Precinct

The Mulgoa Valley Precinct includes land in the Mulgoa Valley and parts of Wallacia. It is bounded on the west by the Nepean River and Blue Mountains National Park, on the south by the village of Wallacia (and includes the village), on the east by Luddenham and on the north by Glenmore Park and Regentville. The extent of the land is shown on the LEP Clause Application Map with a notation 'Mulgoa Valley'.

The Precinct is characterised by its predominantly rural landscape comprising creek flats, undulating agricultural land, wooded hills and escarpment, and large estate gardens. The backdrop of the Nepean River and Blue Mountains contributes to this landscape. The Precinct includes the villages of Mulgoa and Wallacia, which also have important cultural and natural heritage qualities.

The Mulgoa Valley Precinct plays an important role in providing:

- A nature and heritage conservation area on the fringe of the Sydney metropolitan area;
- A rural, recreation and tourism centre for Penrith and suburbs in the surrounding region;
- An area of limited rural living opportunities in sympathy with its landscape and heritage values; and
- A landscape buffer between the Blue Mountains National Park and the suburbs of Western Sydney.

Aims of the controls for the Mulgoa Valley Precinct

The controls for this Precinct seek to conserve the heritage, rural and natural landscape of the Mulgoa Valley, and encourage its development as a rural area emphasising its visual and environmental heritage values.

The controls are in addition to and support the provisions in LEP relating to Mulgoa Valley and the Villages of Mulgoa and Wallacia. In particular, applicants will need to demonstrate how any proposed development will address the development consent criteria in subclause (3) of the Mulgoa Valley clause of the LEP.

B. General Objectives

a) To conserve the rural landscape of the Mulgoa Valley;

b) To protect the setting of the villages of Mulgoa and Wallacia within the rural landscape;

c) To conserve heritage items and vistas within the Valley;

d) To protect natural ecological elements within the Valley;

e) To protect the agricultural capability of prime agricultural land; and

f) To ensure that development in the Valley is consistent with conserving its rural and natural landscape, heritage and agricultural qualities.

C. Other Relevant Sections of this DCP

This DCP is a multi-layered document that recognises the relationship of a number of issues in achieving sustainable outcomes. Therefore, it is important to read all relevant parts of this DCP.

9.1 Siting and Built Form controls

9.1.1 Heritage Items and Vistas

A. Background

The Mulgoa Valley Precinct has played an important role in the history of the State's development. From 1810, the Valley was a key area of European settlement and it became closely linked to the activities of the wealthy Cox family and other prominent figures of the colony. The Precinct's heritage significance lies in the surviving sites, buildings, gardens and pastoral landscapes developed by the Cox family. These features provide some of the best remaining physical evidence in NSW of the manner in which the country was settled and the impact that this had on the landscape. This section seeks to protect the Valley's heritage items and their vistas from any unsympathetic development.

B. Objectives

a) To protect the surviving early colonial rural landscape from any further degradation;

b) To ensure development does not prejudice the remaining evidence of the Cox family's associations with the Valley, its houses and gardens;

c) To preserve and enhance the visual relationship between the sites of Cox's Cottage, St Thomas's Church and Fernhill;

d) To conserve the surviving structures, features and gardens at the major historic and archaeological sites;

e) To protect the visual catchments of heritage items by appropriately siting development having regard to the significance of the setting;

f) To prevent development within the historic landscapes and curtilages of heritage items which may detract from the significance of those sites; and

g) To prevent any activity which could destroy the potential archaeological resources of any heritage items.

C. Controls

1) No structures are to be located in the view corridors linking the heritage items of Cox's Cottage, St Thomas's Church and Fernhill.

2) Figures E9.1 and E9.2 show the extent of the historic landscapes and curtilages in the Mulgoa Valley and should be used in assessing the impact development may have on them. Buildings are to be screened from view from heritage items and their curtilages. (Figures E9.1 and E9.2 are located at the end of Section 9.1).

3) The vistas from the major heritage items in Mulgoa Valley are shown on the LEP on the Scenic and Landscape Values Map. No development is permitted in the vistas of these heritage items unless they are for the purpose of restoring, rehabilitating or preserving elements of the heritage items, such as fences, outbuildings, gates, roadways or plantings. Such structures should be designed and sited so as not to detract from the vistas.

4) Landscaping, including trees, should be sensitively sited to complement rather than interfere with the vistas.

9.1.2 Siting

A. Background

This section seeks to ensure that buildings are sited so they are in harmony with the existing landscape.

B. Objectives

a) To ensure that buildings are sited to protect and enhance the rural and natural landscape of the Valley, particularly when viewed from roads and other public places.

C. Controls

1) Buildings are to be located on mid-slopes to avoid visual impact on ridges and to avoid the banks of watercourses.

2) Buildings are to be setback at least 30m from public roads and at least 100m from Mulgoa Road. This control may be varied depending on the topography of the site.

3) Buildings are to minimise excavation, filling and high foundations by avoiding slopes greater that 1 in 6.

4) The longest façade of a building is to be parallel to the contours of the land.

5) Buildings are to be grouped to minimise the visual impact of buildings in an open rural landscape.

9.1.3 Building Form, Materials and Colours

A. Background

This section seeks to ensure that buildings adopt appropriate building forms, materials and colours that are consistent with conserving the Valley's rural and natural landscape and its heritage values.

B. Objectives

a) To ensure building forms are in keeping with the traditional buildings of the Mulgoa Valley;

b) To ensure building materials match or complement those of older rural buildings and heritage items; and

c) To ensure building colours are derived from the local natural landscape, especially the stone and soil, and from the traditional colours of the historic buildings of the Valley.

C. Controls

1) Buildings are to be a maximum of two storeys in height.

2) Pitched roofs are preferable with a slope of between 30 and 45 degrees. Skillion roofs by themselves are to be avoided except as verandahs or for extensions.

3) Large elements, especially flat surfaces, are to be avoided. Building façades and roof lines are to be broken into small elements. Garden structures, such as trellises and pergolas, can assist in breaking up large elements.

4) Buildings are to be designed with a horizontal rather than vertical emphasis. For example, elements such as verandahs and wide eaves can add a horizontal emphasis.

5) Windows and doors, expressed as openings in solid walls, are to have a vertical rather than a horizontal emphasis, and large unbroken glazed panels are to be avoided.

6) Building materials are to match or complement those of older rural buildings and heritage items. Examples of appropriate materials are:

   a) Walls – Dressed Hawkesbury sandstone, rendered brickwork, rendered concrete block work, pise, mud brick, earth wall construction, painted weatherboard (horizontal), corrugated iron and timber slab construction; and
   b) Roofs – Slate, timber shingles, clay tiles of traditional shape and colour, corrugated iron and ribbed sheet metal.

7) Building colours are to be derived from the local natural landscape, especially the stone and soil, and from the traditional colours of the historic buildings of the Valley. Examples are:

   a) Walls – Light Indian Red, Biscuit, Light Stone, Drab, Light Red/Brown, Light Cream, Pink Beige and Brown Pink. Lighter colours are also acceptable, but avoid white and variegated and mottled colours in brickwork;

   b) Roofs – Unpainted iron, Light Olive Green, Paynes Grey, slate grey and blue/grey; and

   c) Trim – Bold rich deep colours such as Maroon, Terracotta and Brunswick Green.

9.1.4 Planting

A. Background

This section seeks to ensure that important indigenous vegetation and historic introduced vegetation that contributes to the landscape of the Mulgoa Valley Precinct is protected and enhanced.

B. Objectives

a) To protect and enhance existing indigenous vegetation and historic introduced vegetation that contributes to the Valley's rural and natural landscape and its heritage values.

C. Controls

1) Existing stands of indigenous vegetation and key individual indigenous trees that contribute to the landscape character shall be retained.

2) Historic plantings of introduced trees and shrubs shall be retained where they have been identified as significant, or form a positive visual feature in the landscape, or complement a place of historic or cultural significance. For example, the entrance drive of *Pinus pinea* (Stone pines) at Winbourne, the *Araucaria bidwillii* (Bunya pines) at Glenmore, the *Ficus rubiginosa* (Port Jackson Fig) at Fairlight, and *Cinnamomum camphora* (Camphor Laurel) at Glenleigh.

3) Regrowth vegetation in the view corridors linking Cox's Cottage/St Thomas's Church/Fernhill may be selectively thinned to restore the landscape to an historic park-like character. However, the rough barked angophora species (*A. subvelutina* and *A. floribunda*) and their hybrids must be retained. For screening or to enhance this landscape character, clumps of three or four of these angophoras should be planted in appropriate locations. Naturally occurring seedlings or those specially propagated from specimens in the locality (provenance stock) for the purpose should be used.

4) A comprehensive list of suitable species is available on Council's website or by contacting Council.

5) Non-traditional introduced species with strongly coloured or otherwise prominent foliage is not recommended for planting in the Mulgoa Valley Precinct; e.g. golden cypress and *Pinus patula*. These species tend to detract from the landscape of traditional introduced species such as bunya pines or showy indigenous shrubs like wattles.

9.1.5 Access, Parking and Services

A. Background

This section seeks to ensure that access roads, parking areas and services do not detract from the Valley's rural and natural landscape or its heritage values.

B. Objectives

a) To ensure the visual impact of access roads, parking areas and services is minimised.

C. Controls

1) Driveways and access roads shall follow the contours of the land as much as possible and be of the minimum width.

2) Driveways and access roads shall be constructed of compacted gravel, or paved or sealed in a dark coloured material if located on steep slopes.

3) Parking areas shall be separated from access roads and from the buildings they serve by planting and other landscaping.

4) Large parking areas shall not be visible from public roads.

5) Services should be appropriately located and screened by walls and vegetation to form part of a coherent group.

9.1.6 Fences and Entrances

A. Background

This section seeks to ensure that fences and entrances do not detract from the Valley's rural and natural landscape or its heritage values.

B. Objectives

a) To ensure fences, gates and entrances are in harmony with the existing landscape and character of the Mulgoa Valley Precinct.

C. Controls

1) If practicable, avoid fences on road frontage boundaries.

2) Fences should be simple and unpretentious, and in keeping with traditional forms; e.g. unpainted timber post and rail, timber post and wire, or steel post and wire. Masonry fences, such as brick, blockwork or stone, should be avoided.

3) Gates and entrances should also be simple, and in keeping with traditional forms. Examples are:

   a) Rendered and pointed brickwork, blockwork, sandstone, painted timber or post and rail;

   b) Decorated gateposts with the property name carved or painted onto the gatepost or painted onto a wide timber top rail; and

   c) Decorated iron, steel or timber gates.

4) Gates and entrances should relate to the materials and colours of the building to which they belong.

9.1.7 Signage

A. Background

This section seeks to ensure that signage does not detract from the Valley's rural and natural landscape or its heritage values.

B. Objectives

a) To ensure signage is in harmony with the existing landscape and character of the Mulgoa Valley Precinct.

C. Controls

1) Signage, where permissible, shall relate to the style, character and function of the building or activity.

2) Signage shall not be freestanding in the natural landscape, but relate to walls, fences or buildings.

3) Signage shall be no larger than 0.72m^2 and no higher than 2m.

4) Illuminated signage is not permitted.

5) A distinctive signage system for the Valley is encouraged based on colonial lettering faces, proportions, sizes and details.

Figure E9.1: Historic landscapes

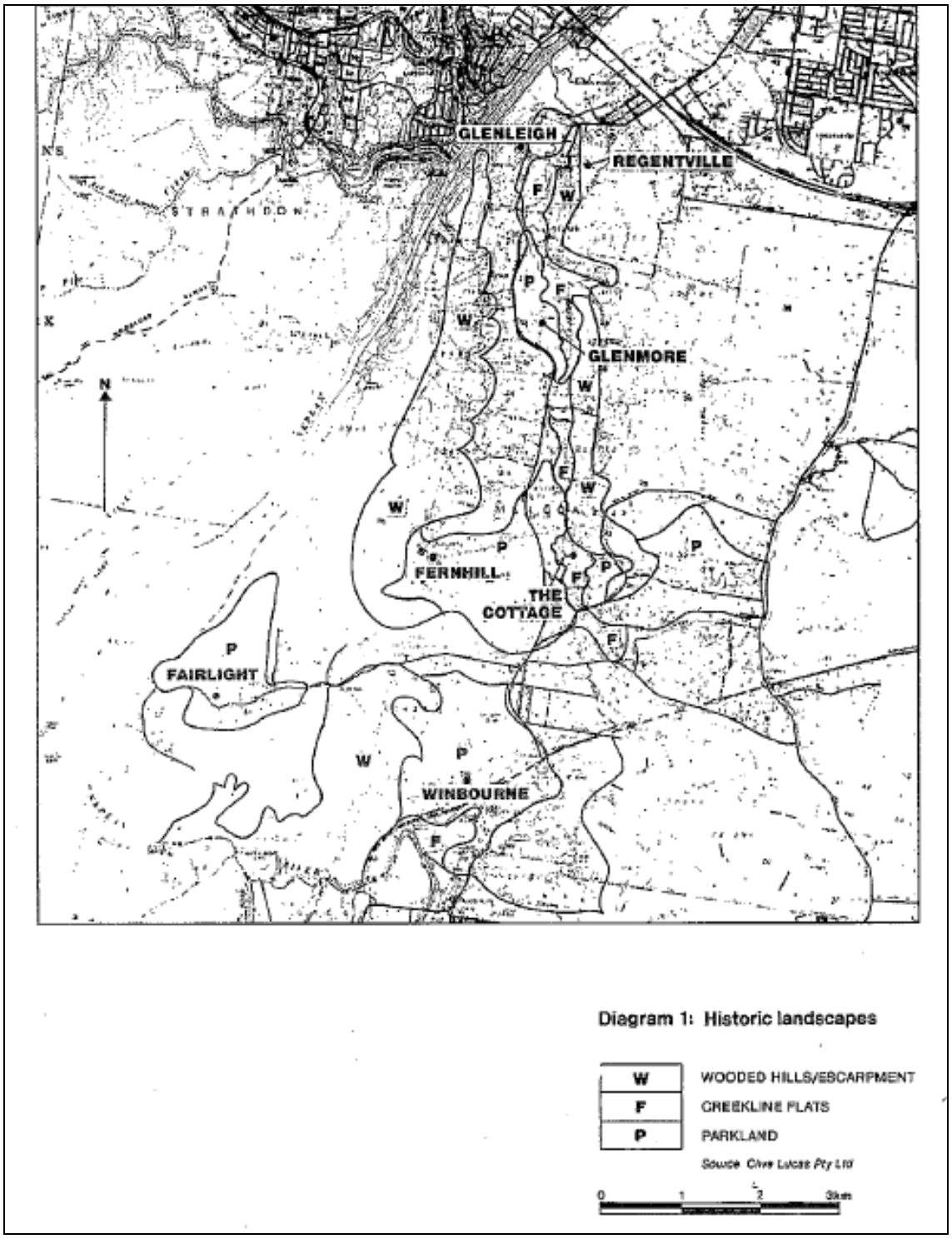
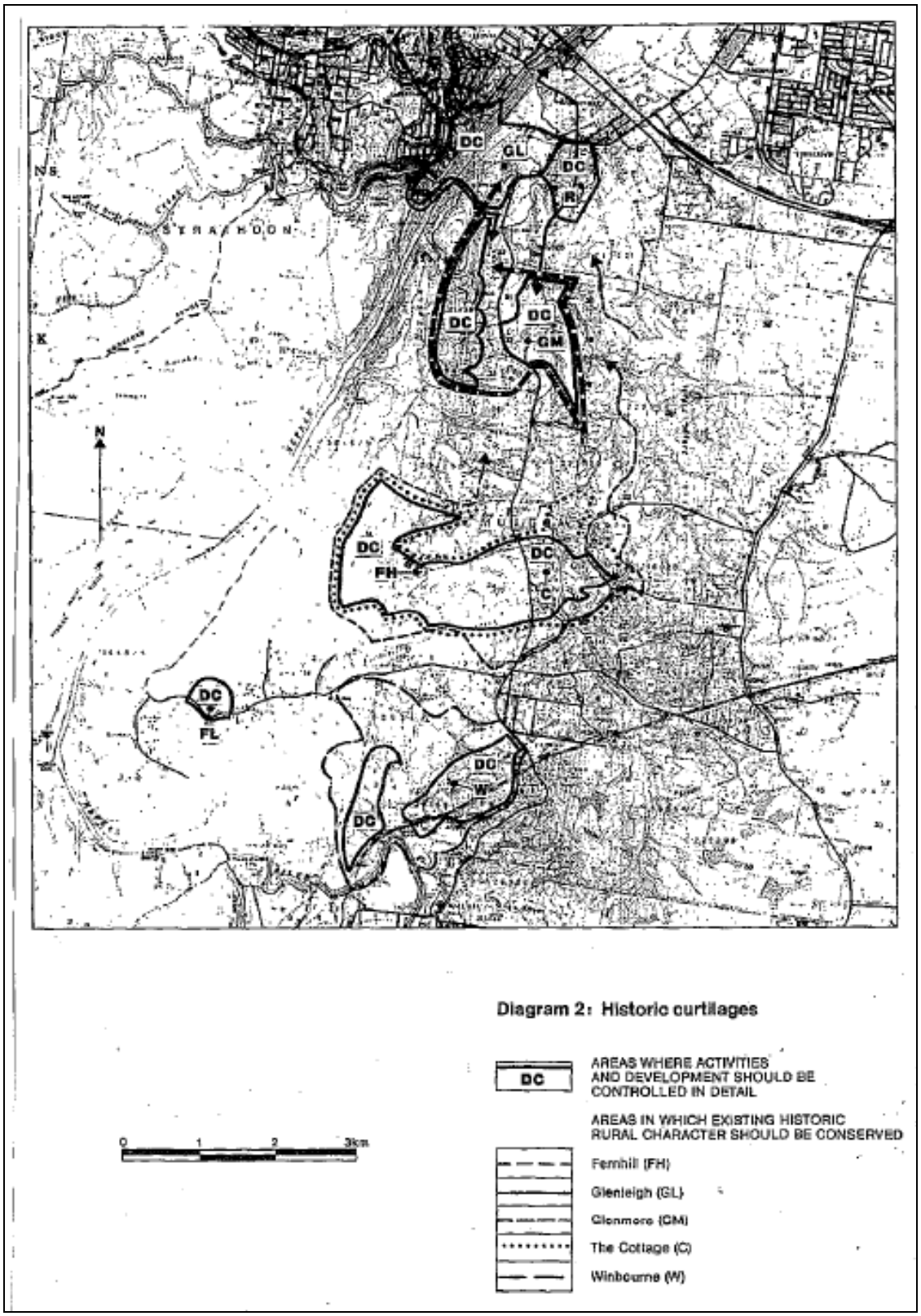


Figure E9.2: Historic curtilages



9.2 Other Controls

9.2.1 Mulgoa Road

A. Background

An important part of the Mulgoa Valley Precinct and appreciating its landscape is the drive along Mulgoa Road. Roadside vegetation, hills, gullies, bends and the changing views of heritage items and the landscape are the main attributes. This section seeks to ensure that Mulgoa Road and these attributes are protected.

B. Objectives

a) To protect the present rural character and function of Mulgoa Road; and

b) To ensure any new development does not impact on the safety and efficiency of Mulgoa Road.

C. Controls

1) Mulgoa Road shall be maintained as a rural road and shall not be improved to the level of a major regional thoroughfare.

2) Consent shall not be granted to development in the Mulgoa Valley Precinct if:

   a) The safety and efficiency of Mulgoa Road will be adversely affected by the design and siting of the proposed access and by the nature, volume and frequency of vehicles using Mulgoa Road to gain access to the development; and

   b) Any upgrading or strengthening of Mulgoa Road required to maintain its safety and efficiency detracts from the present rural character and function of Mulgoa Road.

9.3 Other Relevant Information

The following documents may assist applicants in addressing the controls for the Mulgoa Valley Precinct:

- Department of Environment and Planning 1984, Mulgoa Valley Regional Environmental Study
- Department of Environment and Planning 1987, Sydney Regional Environmental Plan No.13 – Mulgoa Valley – Parts I & II
- Penrith City Council 1999, Mulgoa and Wallacia Rural Villages Study.

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E10 Orchard Hills

A. Background

Area included within the Orchard Hills Precinct

The Orchard Hills Precinct is bounded by The Northern Road to the west, Caddens Road to the north, the South Creek corridor to the east, and the Orchard Hills defence establishment to the south. The M4 Motorway and The Northern Road are the main transport corridors in the area. Orchard Hills is a key part of the transition between the urban and rural areas of Penrith when approaching along the M4 Motorway and The Northern Road. The extent of the land is shown on the LEP Clause Application Map with a notation 'Orchard Hills'.

Orchard Hills has a predominately rural character with undulating hills and scenic vistas. Historically, its landscape was mainly overlaid with orchards and grapevines, and with rural farmhouses and outbuildings. A prominent line of hills mostly with an east-west orientation defines the topography of the area.

Today, Orchard Hills retains a largely rural character predominantly used for rural living on 2 hectare lots. There are also a number of intensive agricultural uses in operation throughout the locality. A number of schools and churches are dispersed in the area north of the M4 Motorway.

B. General Objectives

a) To ensure that development does not adversely affect the scenic qualities, character and amenity of this precinct;

b) To promote the continuation of the open, semi-rural character and regionally significant landscape setting of Orchard Hills and minimise the visual impact of development from major roads and public places;

c) To recognise that Orchard Hills forms part of an important entry to the residential areas of Penrith, and that careful management of development in this location is critical to conserving the values of this City entry;

d) To ensure that development does not unreasonably increase the demand for public infrastructure and public services;

e) To ensure that non-residential activities do not:

   i) Alter the character or scenic quality of the locality;

   ii) Detract from the existing landscape setting;

   iii) Promote the commercialisation of lands adjoining The Northern Road; or

   iv) Generate traffic volumes which cannot be readily accommodated within the existing road pattern, or which create a traffic safety problem.

10.1 Siting and built form controls

10.1.1 Siting and orientation of dwellings and outbuildings

A. Objectives

In addition to the general objectives for Orchard Hills, the objectives of this section are to ensure that buildings are positioned in a manner and location that will:

a) protect and enhance the semi-rural landscape of Orchard Hills;

b) minimise the visual impact of development from major roads and public places; and

c) enhance the important City entry qualities of Orchard Hills.

B. Controls

1) All buildings shall be set back a minimum of 30m to The Northern Road boundary and a minimum of 15m from all other roads.

2) An additional building setback shall be provided on those lots fronting The Northern Road, where in the opinion of Council, the development of the land is likely to impact on the open, semi-rural character of the land when viewed from The Northern Road.

3) Buildings and other structures shall not intrude into the skyline when viewed from The Northern Road or the M4 Motorway.

4) Buildings are to be located on mid-slopes to avoid visual impact on ridges and to avoid the banks of watercourses.

5) Buildings are to minimise excavation, filling and high foundations by avoiding slopes greater than 1 in 6.

6) The longest façade of a building is to be parallel to the contours of the land.

7) Buildings should be positioned to maximise opportunities for solar access in winter, and minimise exposure to summer sun and winter winds.

8) Buildings and other structures should be located to retain, whenever possible, remnant indigenous vegetation, including trees, shrubs, understorey plants and ground covers.

10.1.2 Building form, materials and colours

A. Objectives

In addition to the general objectives for Orchard Hills, the objectives of this section are to:

a) ensure building forms are in keeping with the setting and context of the precinct; and

b) ensure building materials contribute to maintaining the semi-rural character of the Precinct.

B. Controls

1) Buildings are to be a maximum of two storeys in height.

2) Pitched roofs are preferable with a slope of between 30 and 45 degrees. Skillion roofs by themselves are to be avoided except as verandahs or for extensions.

3) Large elements, especially flat surfaces, are to be avoided. Building facades and roof lines are to be broken into small elements. Garden structures such as trellises and pergolas can assist in breaking up large elements.

4) Buildings are to be designed with a horizontal rather than vertical emphasis.

5) Exterior windows and doors are to have a vertical rather than a horizontal emphasis. Large unbroken glazed panels are to be avoided.

6) Building materials and colours are to be in keeping with their surroundings, and are to be derived from the local horticultural and natural landscape.

10.1.3 Vegetation and plantings

A. Objectives

In addition to the general objectives for Orchard Hills, the objective of this section is to provide controls to ensure the layout of gardens and plantings, and the selection of species reflects the traditional landscape character of Orchard Hills.

B. Controls

1) Development on land occupied by existing vegetation (including, although not limited to, remnant and regrowth tree stands, existing or abandoned orchards and vineyards) shall demonstrate, in the design and siting of buildings, parking, access and general improvements, that all measures have been taken to retain and supplement this vegetation.

2) Landscape design should be based upon the traditional forms, colours, scale, textures, relationships and groupings of plant species in Orchard Hills. This can also include other garden elements of fences, gateways, hedges, windbreaks, driveways, and landscape built elements.

3) When deciding what to plant, applicants should consider the existing landscape and environmental amenity of the area with reference to agricultural, horticultural and homestead plantings, and the manner in which they have been traditionally used in the Orchard Hills landscape setting.

10.1.4 Access, parking and services

A. Objectives

In addition to the general objectives for Orchard Hills, the objective of this section is to ensure the visual impact of access roads, parking areas and services is minimised.

B. Controls

1) Access from properties fronting The Northern Road shall only be permitted if it serves dwellings or domestic outbuildings.

2) Traffic generating developments must demonstrate that traffic volumes can be readily accommodated within the existing road pattern and do not create a traffic safety problem.

3) Driveways and access roads shall follow the contours of the land, as much as possible, and be no wider than is necessary to allow for safe and effective vehicle movements.

4) Driveways, access roads and hardstand areas shall be constructed of compacted gravel, or paved or sealed in a dark coloured material if located on steep slopes.

5) Large parking areas shall not be visible from public roads, and shall be separated from access roads and from the buildings they serve by planting and other landscaping.

6) Any lighting provided should not intrude into the rural setting. Lighting structures and the light cast shall be discreet.

7) Services should be appropriately located and screened by walls and vegetation to form part of a coherent group.

10.1.5 Fences and entrances

A. Objectives

In addition to the general objectives for Orchard Hills, the objective of this section is to ensure fences, gates and entrances are in harmony with the existing landscape and character of the Orchard Hills Precinct.

B. Controls

1) If practicable, avoid fences on road frontage boundaries.

2) Fences should be simple and unpretentious, and in keeping with traditional forms; e.g. unpainted timber post and rail, timber post and wire, or steel post and wire.

3) Masonry fences, such as brick, blockwork or stone, should be avoided.

4) Gates and entrances should also be simple and in keeping with traditional forms. The scale, form and bulk should not detract from the established street frontage. Examples are:

a) Rendered and pointed brickwork, blockwork, sandstone, painted timber or post and rail;

b) Decorated gateposts with the property name carved or painted onto the gatepost or painted onto a wide timber top rail; and

c) Decorated iron, steel or timber gates.

5) Gates and entrances should relate to the materials and colours of the building to which they belong.

10.1.6 Signage

A. Objectives

In addition to the general objectives for Orchard Hills, the objective of this section is to ensure that signage is in harmony with the existing landscape and character of the Orchard Hills Precinct.

B. Controls

Any signage must be rural in character and must:

1) relate to the style, character and function of the building or activity it advertises;

2) only refer to the development on the land to which the sign is located;

3) not be illuminated;

4) not exceed 1.5m^2 in area, or a maximum height of 2m above ground level, or intrude in the sky line; and

5) not be freestanding, but related to walls, fences or buildings.

10.2 Other relevant information

The following documents may assist applicants in addressing the controls for the Orchard Hills Precinct:

- Penrith Heritage Study
- Penrith Rural Lands Study and Strategy.