PART 8A MENANGLE PARK PRECINCT

DEVELOPMENT CONTROL PLAN

Prepared by Campbelltown City Council
In conjunction with APP Corporation Pty Limited
October 2021

Contents

1. Application

1.1 Name and Application of this plan

This Development Control Plan (DCP) is the Menangle Park Development Control Plan (MPDCP) 2021. It has been prepared pursuant to the provisions of Section 3.43 of the *Environment Planning and Assessment Act 1979.*

The MPDCP applies to land in the Menangle Park Precinct shown on the Land Application Map in Figure 1.1 below.

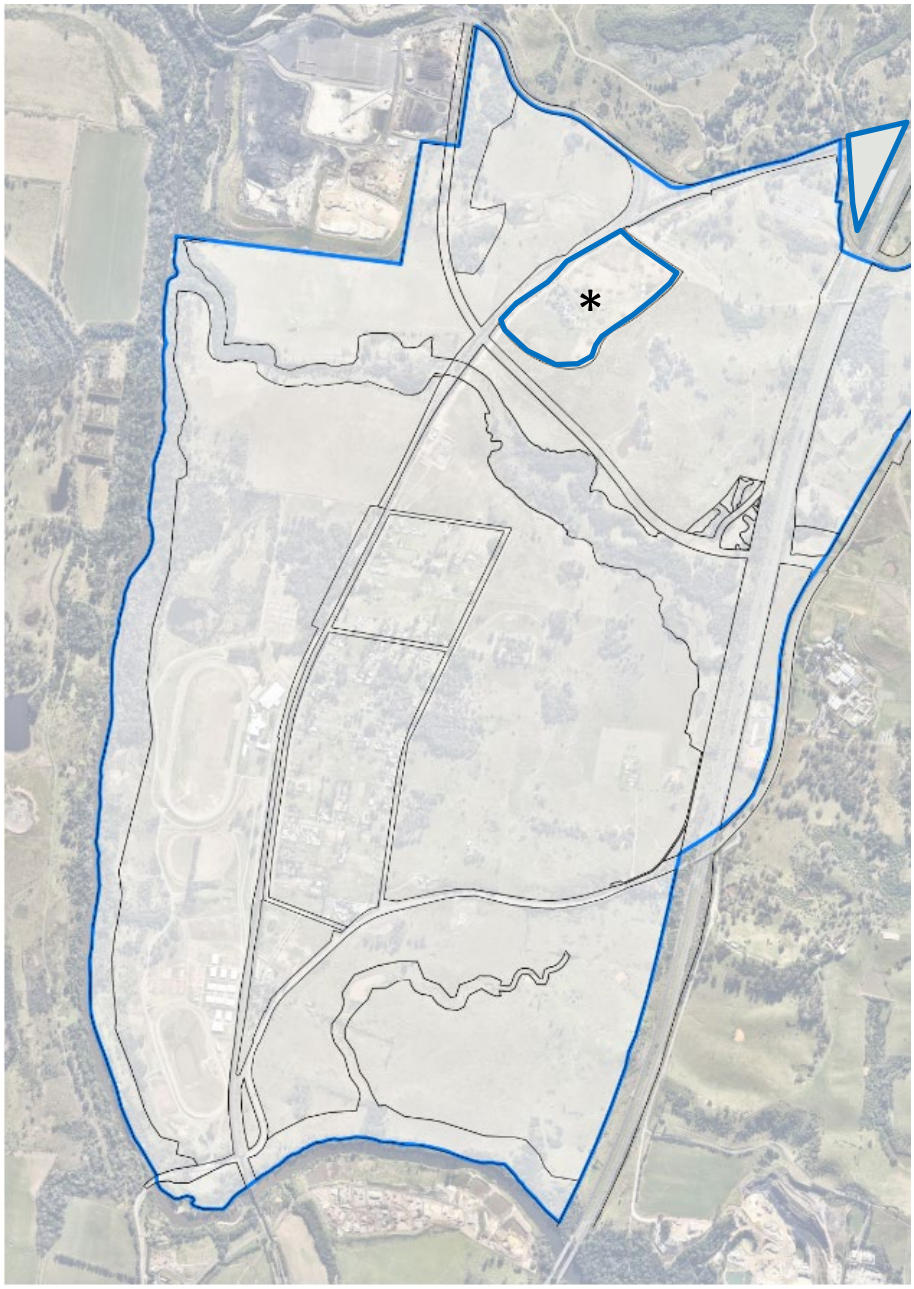


Figure 1.1 - Land Application Map (Satellite) - * Glenlee Precinct is currently not included in this Part 8 DCP

1.2 Purpose of this Plan

The purpose of this MPDCP is to identify the planning, design and environment objectives and controls against which Campbelltown City Council will assess future applications for development in Menangle Park.

The MPDCP also intends to promote high quality urban design outcomes for the Menangle Park release area within the context of environmental, social and economic sustainability.

This part of the DCP addresses the requirements of Clause 6.3 of the Campbelltown Local Environmental Plan 2015.

1.3 Compliance with the LEP

This part of the DCP addresses the requirements of Clause 6.3 of the Campbelltown Local Environmental Plan 2015.

Table 1- Compliance with Clause 6.3 of Campbelltown Local Environmental Plan 2015

CLEP 2015 Clause 6.3 Requirement	Relevant Provision/Control
a. A staging plan for the timely and efficient release of urban land, making provision for necessary infrastructure and sequencing	Development may be undertaken in a single stage (as shown in Figure 1.2 Staging Plan) or in any number of sub-stages provided that development reflects the progressive delivery of road, utility and local infrastructure over the land. Development Applications with an explanation of how this is compatible with the delivery of infrastructure.
b. An overall transport movement hierarchy showing the major circulation routes and connections to achieve a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists.	This infrastructure shall be provided in accordance with Section 4.5 of the MPDCP.
c. An overall landscaping strategy for the protection and enhancement of riparian areas and remnant vegetation, including visually prominent locations, and detailed landscaping requirements for both the public and private domain.	All development shall be undertaken in accordance with Section 4.6 andAppendix 1 Streetscape Masterplan.
d. A network of passive and active recreational areas.	All development shall be undertaken in accordance with Section 4.6 and Section 4.7 of the MPDCP.
e. Stormwater and water quality management controls	All development shall be undertaken in accordance with: ▪ Campbelltown City Council (Council's) Engineering Design for Development (Guide) ▪ Section 2.18 of Volume 1 of CSCDCP

	▪ Work on Land Adjacent to the Upper Canal Corridor Volume 1 Clause 1.11.1. ▪ Section 3.5 of MPDCP
f. Amelioration of natural and environmental hazards, including bushfire, flooding and site contamination and in relation to natural hazards, the safe occupation of and the evacuation from, any land so affected.	Bushfire: The development precincts have been informed by the bushfire risks associated with the site. All future development is to comply with Section 3.3 and the NSW Rural Fire Services Planning for Bushfire Protection. Flooding: the development precincts have been informed by the flooding characteristics of the site. All future development is to comply with Council's Engineering Design for Development (Guide). Contamination: All future development is to comply with State Environmental Planning Policy No.55 – Remediation of Land. Mine Subsidence: All future development is to comply with the requirements of the NSW Subsidence Advisory.
g. Detailed urban design controls for significant development sites.	This precinct does not contain any significant development sites.
h. Measures to encourage higher density living around transport, open space and service nodes.	All development shall comply with the Structure Plan.
i. Measures to accommodate and control appropriate neighbourhood commercial and retail uses.	All development shall comply with the Structure Plan.
j. Suitably located public facilities and services, including provision for appropriate traffic management facilities and parking.	Public facilities and services are to be provided in the B2 Local Centre Zone and shall be provided in accordance with Council's Engineering Design for Development (Guide).

Note: *Unless otherwise specified, a reference to a section of figure is a reference to the corresponding section or figure in this Volume 2, Part 8 of Campbelltown (Sustainable City) Development Control Plan 2015.*

1.4 Staging

Objective

a. Ensure the orderly development of the land and assist in the coordinated programming and provision of necessary infrastructure and sequencing.
b. Ensure staging of works protects the amenity of future residents from the effects of mining, industrial and waste disposal activities.
c. Ensure services and works are carried out in logical and related stages.
d. Ensure the overall order of residential subdivision includes provision of community infrastructure and "living" infrastructure to deal with stormwater drainage in an ecologically sensitive manner.

Controls

1. The overall stages proposed are as follows and are illustrated in the Staging Plan in Figure 1.2:
    a. Stage 1 – Menangle Park Central and Village
    b. Stage 2 – Menangle Park South
    c. Stage 3 – Menangle Park North
    d. Stage 4 – Paceway, Employment and Environmental
2. Development is to be generally undertaken in accordance with the Staging Plan. Where alternative staging is proposed, the proposed development is to demonstrate that sufficient utility services and community infrastructure is, or is capable of being made available to service the proposed development.
3. Sub-stages may be undertaken concurrently within the Menangle Park Precinct.

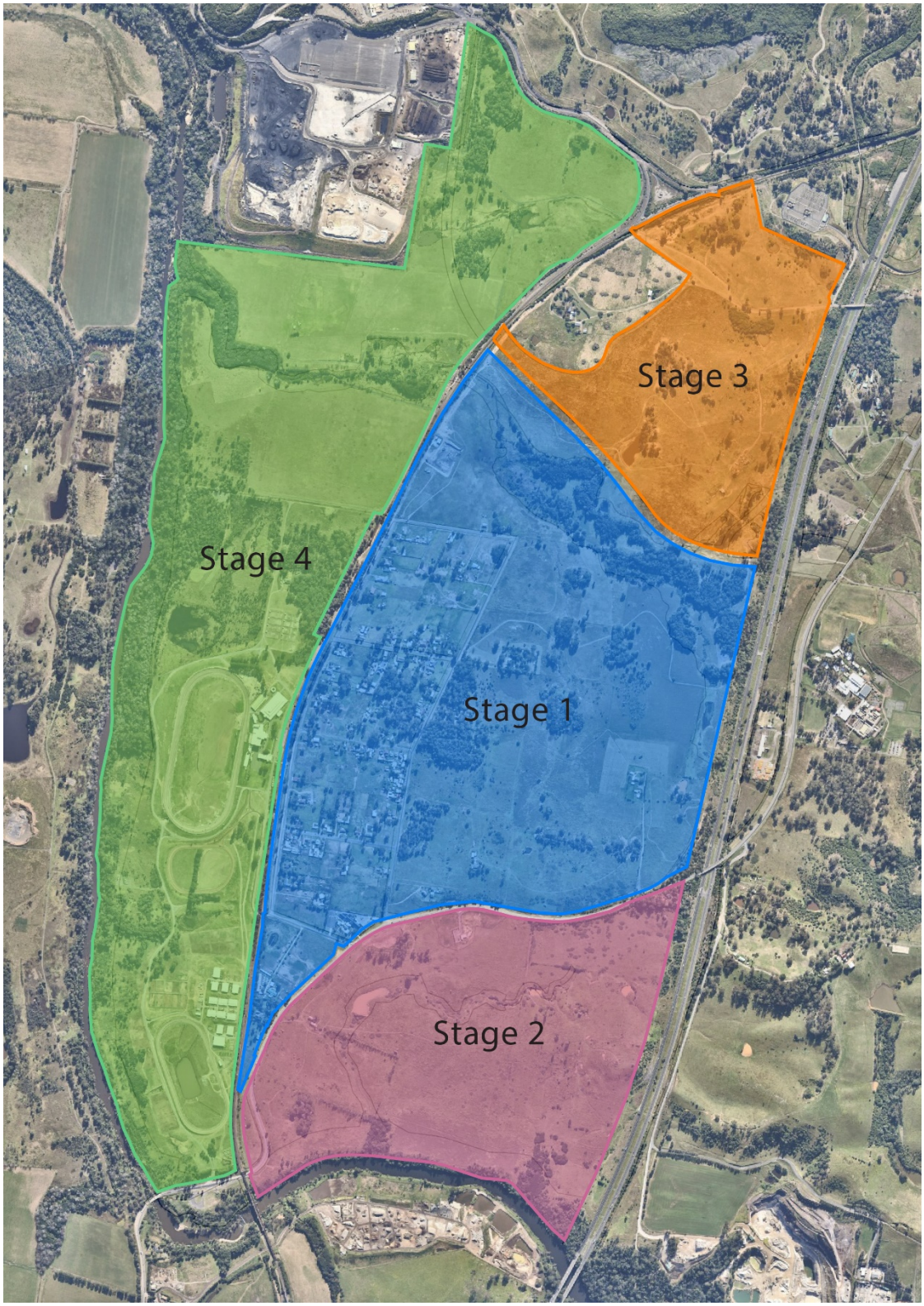


Figure 1.2 – Staging Plan

1.5 Relationship to other planning documents

1.5.1 Campbelltown Council Planning Documents

The controls applicable to the development of land within Menangle Park are generally detailed in this Part. When a development control is not specified in this Part, development should be consistent with all other relevant controls contained in Volume 1 of the Campbelltown (Sustainable City) Development Control Plan 2015. Where there is an inconsistency between controls in Volume 1 and any other part of this MPDCP, this Part will prevail to the extent of the inconsistency.

The Campbelltown City Council Engineering Design Guide for Development applies to development specified in this Part.

1.6 Development Applications

1.6.1 Information to be submitted with Development Applications

Council's checklist for information is required to be referred to prior to the preparation of any application and is available at www.campbelltown.nsw.gov.au.

The information required includes (but is not limited to) the following:

- Survey Plan
- Site Plan
- Site Analysis Plan
- Floor Plan
- Elevation Plan
- Section Plan
- Shadow Diagrams
- Landscape Plan
- Statement of Environmental Effects
- Stormwater Concept Plan
- Waste Management Plan
- Subdivision Plan
- Advertising Structure
- Photomontage and Scale Model
- NatHERS/BASIX Certificate
- Heritage Impact Statement
- Access Report
- Flora and Fauna Reports
- Contamination Report
- Bushfire Report

1.6.2 Variations to Development Controls and DCP Amendments

Compliance with the Indicative Layout Plan

The ILP in Figure 2.1 is intended to show how the overall Precinct will develop over time. It shows how the numerous developments undertaken over numerous years will come together to ensure that the overall development of the Precinct is integrated, sustainable and attractive. However, it is recognised that some variation to the layout shown on the ILP may be reasonable to address new or more detailed information about the site, or other factors that might influence individual developments.

Council may grant consent to a proposal that differs from the Indicative Layout Plan (ILP), where the variation is considered to be minor and the proposal is demonstrated to be generally consistent with the ILP. DAs will be considered on their merits, and the proposed developments are required to demonstrate that the proposed variation is:

a. consistent with the Vision, Desired Future Character Statement and Principles in Section 2 of this DCP; and/or

b. not likely to significantly impact on the amenity, safety or environmental quality of adjoining lands, or the ability of adjoining development to be carried out generally in accordance with this DCP.

Where a proposed variation to the DCP does not meet the above requirements, Council may either:

a. refuse consent for the application; or
b. condition the development consent to ensure that the above requirements are achieved, subject to compliance with any condition Council imposes.

Compliance with Objectives and Controls in this DCP

Each section in this DCP contains Objectives and Controls relating to various aspects of development (for example, building setbacks, requirements for car parking, and minimum requirements for landscaping).

The Objectives enable Council and Applicants to consider whether a particular proposal will achieve the development outcomes established for the Precinct in the ILP.

The Controls establish consistent standards, that when met, means the development should be consistent with the Objectives. However, in some circumstances, strict compliance with the controls may not be achievable, or may be difficult to attain due to the particular characteristics of a development site.

In this instance, Council may grant consent to a proposal that does not comply with the Controls in this MPDCP, providing the intent (i.e. the Objective/s) of the Controls is achieved and that the proposed development will be of minimal environmental impact. Where a variation is sought it must be justified in writing by indicating how the development will meet the Objectives of the relevant Control and/or is generally consistent with the ILP.

2. Vision and Objectives

2.1 Menangle Park Vision, Desired Future Character Statement and Principles

Vision

"To create an integrated, healthy and well-connected place which celebrates and preserves the natural landscape, important biodiversity, waterways and heritage. A place that provides a variety of new housing underpinned by quality architectural and landscape design elements with centres that successfully activate the ground plane, movement networks and natural corridors."

Desired Future Character Statement

Menangle Park will be an attractive residential community set against a natural landscape backdrop. Its historic connections to the Menangle Park Paceway, Glenlee Homestead and the Nepean River will provide important cues in establishing the character of the future residential community.

Menangle Park will provide for a mix of housing types, ranging from mixed use, medium density and small lot housing in and around the town centre through to medium and large lot dwellings elsewhere. Particular care will be taken with the lot layout and siting of dwellings in areas of high visual and environmental sensitivity.

The town centre will be located in the heart of Menangle Park, providing local shops and services, and acting as a focus for community activities. Local employment opportunities will be facilitated by the Town Centre and the Menangle Park Employment Area. An integrated transport, cycle and pedestrian network will offerimproved access within Menangle Park and to surrounding areas, particularly the Macarthur Regional Centre and Campbelltown City Centre.

Menangle Park will also play an important role as the Southern Gateway to Campbelltown. Particular consideration will be given to establishing an attractive tree canopy, especially as part of the streetscape, to soften the visual impact of future urban development and respect the earlier rural character of the area.

Principles

a. To facilitate urban development that promotes environmental sustainability objectives, innovation and resilience through best practices.
b. To ensure development achieves a high standard of urban and architectural design quality that promotes a vibrant, successful Town Centre as well as residential environments.
c. Deliver a broad range of housing and lot typologies to meet the future need of a diverse community. Focusing on higher residential densities around landscaped open space amenity, transport and centres. Lower density residential areas to be focused around the periphery of the precinct at important rural interfaces and significantly sloping land.
d. Recognise and ensure all future development is cognizant of the history of Menangle Park by sensitively responding to the interface and surrounding areas of Glenlee House, Mount Annan Botanic Gardens and Club Menangle Racecourse, while being sympathetic to State and Locally listed items of heritage significance
e. Provide quality landscape outcomes in both the public and private domains to counter the urban heat island effect and contribute to the creation of the green spine and open space.
f. Provide integrated stormwater and flood control infrastructure to protect properties and improve the utilisation of publicly accessible open space.
g. Deliver a new diverse town centre comprising of active retail and business uses at the ground floor with new civic and community buildings and infrastructure.
h. Recognise the importance of contributing towards healthy, active lifestyles through efficient pedestrian and cycle connections.
i. To provide social infrastructure that is flexible, adaptable and fit for purpose.
j. To protect and enhance riparian corridors, wetlands, significant trees and native vegetation.
k. To ensure the effective delivery of critical infrastructure in a timely, cost efficient, and equitable manner, which does not burden the community.
l. To ensure all proposals for new development demonstrate a high standard of ecologically sustainable design maintaining high value vegetation, natural bushland and native habitats.

2.2 The Indicative Layout Plan

An Indicative Layout Plan (ILP) is contained in Figure 2.1 below. The Indicative Layout Plan forms the basis for urban development in the Precinct by setting out:

a. Road networks;
b. Public transport routes;
c. Open space and drainage networks;
d. Locations of land uses including residential development, schools, community facilities, utilities, centres and employment lands;
e. Areas requiring protection because of environmental or heritage values; and
f. Density and types of housing that are preferred in various parts of the Precinct.

Objectives

a. To ensure that development within the precinct occurs in a coordinated manner consistent with the Menangle Park Indicative Layout Plan (ILP).

Controls

1. All Development Applications are to be generally prepared in accordance with the ILP.
2. When assessing DAs, Council will consider the extent to which the proposed development is consistent with the ILP.
3. Any proposed variation to the general arrangement of the ILP must be demonstrated to Council's satisfaction, and is to be consistent with the Vision, Desired Future Character Statement and Principles in Section 2.1 of this DCP.

3. Environmental Management

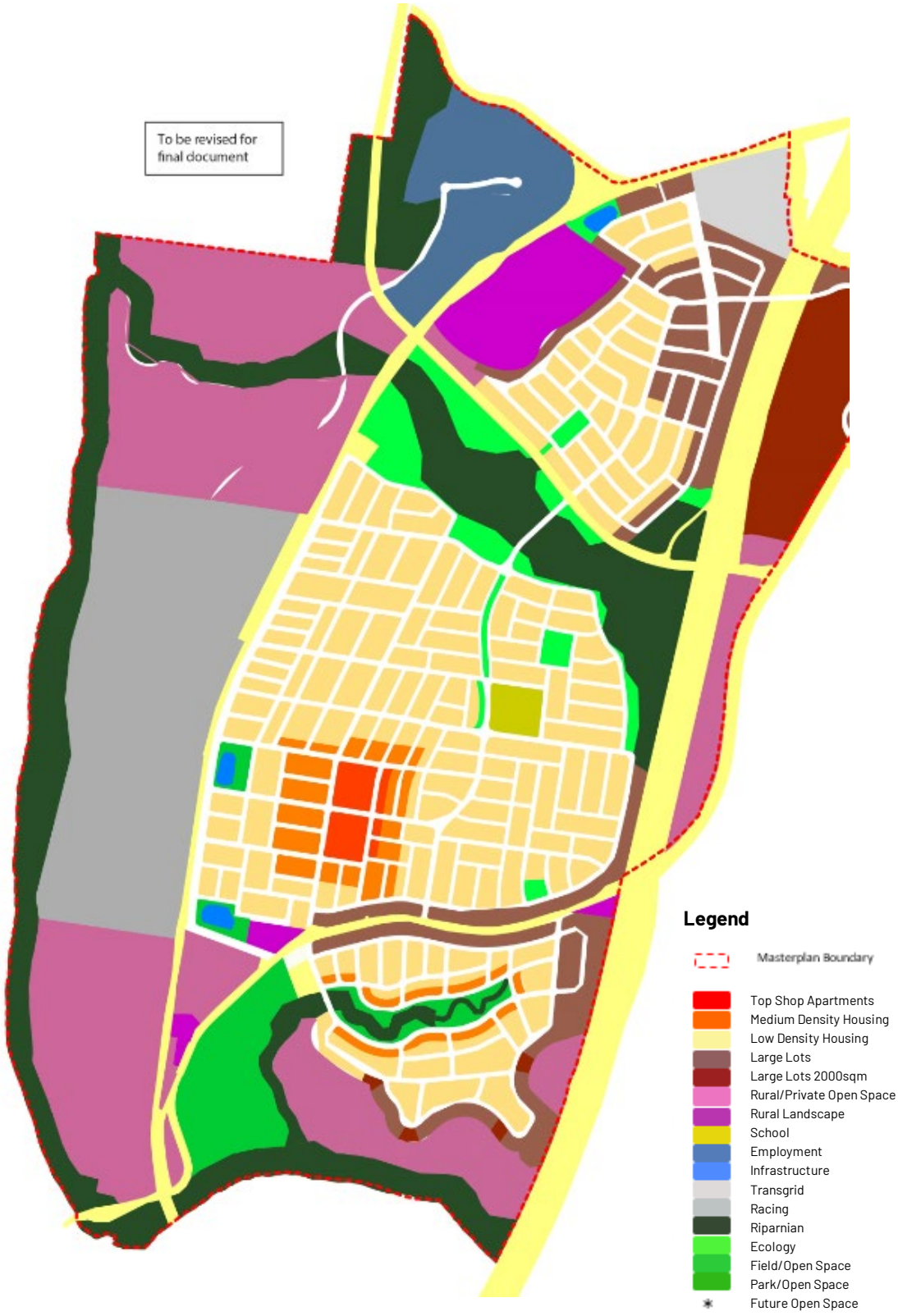


Figure 2.1 - Indicative Layout Plan (ILP)

3.1 Riparian Corridors

Objectives

a. Protect, restore and enhance the environmental qualities of water courses, in particular the Nepean River and Howes Creek.
b. Allow the use of riparian corridor buffers for low impact recreational activities such as walking and cycling.
c. Manage riparian corridors, wherever possible, in single ownership and as a continuous corridor.
d. To ensure that land development does not result in the degradation or loss of groundwater dependent ecosystems.

Controls

1. The location of access ways to and within a riparian buffer is not to compromise the ecological integrity of any existing riparian vegetation, the stream bed or bank stability.
2. The impact of pedestrian and cycle ways, general access points to riparian corridors and road crossings is to be minimised by using ecologically informed design principles.
3. The impact of salinity on the landscape and watercourses shall be managed in accordance with the Local Government Salinity Initiative series of booklets provided by the NSW Office of Environment and Heritage.
4. All core riparian zones are to be rehabilitated and revegetated with appropriate native vegetation having regard to their drainage function and vegetation management for bushfire protection.
5. A works plan is to be submitted to Council for Development Applications and Modifications, on land containing a riparian corridor or for subdivision of land adjacent to a riparian corridor. The works plan is to:
    a. Identify existing trees to be retained;
    b. be consistent with NSW Department of Primary Industries Office of Water guidelines; and
    c. indicate the location, mature height, pot size and spread of species.
6. Where wetlands are proposed, a vegetation management plan outlining ownership, ongoing management, annual maintenance costs and initial development costs shall be submitted with any Development Application and Modifications.

Figure 3.1 - Riparian Protection Areas

3.2 Flora and Fauna Conservation

Objectives

a. To conserve and rehabilitate native vegetation within the Menangle Park Urban Release Area
b. To preserve and enhance the ecological values of the Menangle Park Urban Release Area, and improve habitat connectivity
c. To help ensure that development in the Menangle Park Urban Release Area results in no net loss of biodiversity values
d. Ensure examples of native ecological communities found within the Menangle Park Urban Release Area on site are included in the open space network (which includes the offset areas) and are appropriately conserved within the Menangle Park Urban Release Area.
e. To conserve and enhance tree canopy cover within the Menangle Park Urban Release Area.

Controls

1. Proposed subdivisions must seek to retain and minimise impacts to biodiversity via informed and careful planning that enables the retention of trees and other vegetation in areas such as private allotments, the public domain or within road reserves.
2. For sites containing native vegetation and fauna habitat:
    a. The development shall be sited, designed and managed to avoid and minimise any negative impact on biodiversity.
    b. Where an impact on biodiversity cannot be avoided and no reasonable alternative is available, the proposed development shall be sited, designedand managed in a manner that minimises the impact on biodiversity and maintains habitat connectivity as much as practicable.
3. Removal, rehabilitation and regeneration of native vegetation and trees should be undertaken in accordance with an offsetting strategy that has been prepared to the satisfaction of Council.
4. Any approved tree clearing must be replaced at a ratio of at least 2:1 (new to existing).
5. For all Development Applications, the Applicant is to demonstrate:
    a. the opportunity to provide new trees and retain existing trees on the proposed development site to contribute towards Greater Sydney Region Plans 40% Canopy Cover.
    b. the approach to incorporating and protecting existing trees as part of the development design to enhance urban amenity and provide established urban canopy across the development.
    c. whether an efficient water source for trees has been incorporated into the design.
    d. potential opportunities for alternative water supplies, including stormwater capture, sewer harvesting and the like, to ensure adequate soil moisturing during warm months and drought conditions.
    e. any buildings and access driveways should be located to avoid or minimise removal of existing trees.
6. Native trees and other vegetation are to be retained where possible by careful planning of subdivision to incorporate trees into areas such as private allotments, the public domain or within road reserves.
7. Native vegetation is to be conserved and managed in accordance with the Guidelines for Corridors prepared by the NSW Office of Water.
8. Subdivision design and bulk earthworks are to consider the need to minimise weed dispersion and to eradicate weeds on site. Should Council believe that a significant weed risk exists, a Weed Eradication and Management Plan outlining weed control measures during and after construction is to be submitted with the subdivision development application.

3.3 Bushfire Hazard Management

Objectives

a. To prevent loss of life and property due to bushfires by providing for development compatible with bushfire hazard, and
b. To encourage the appropriate management of bushfire-prone areas.

Controls

1. For development located on bushfire prone land (detailed in figure 2.2):
   a. A Bushfire Assessment Report shall accompany the application and
   b. The development shall be consistent with *Planning for Bushfire Protection 2019*.
2. Subject to a detailed design at DA stage, the indicative location and widths of Asset Protection Zones (APZs) are to be provided generally in accordance with the Bushfire risk and APZ Requirements under *Planning for Bushfire Protection 2019*. APZs and construction standards are to be accurately mapped and detailed for each affected lot on plans submitted with the development application.
3. The Bushfire Attack Level (BAL) shall be determined by a person recognised by the NSW RFS as a suitably qualified consultant in bushfire risk assessment and meet:
   a. A maximum of BAL - 12.5 for Special Fire Protection Purposes (SFPP).
   b. A maximum BAL – 29 for all other development.
4. APZs:
   a. may incorporate roads, verge areas and flood prone land,
   b. are to be maintained in accordance with the guidelines in *Planning for Bushfire Protection 2019*,
   c. may incorporate private residential land, but only within the building setback (no dwellings are to be located within the APZ),
   d. are not to burden public land, and
   e. are to be generally bounded by a public road or perimeter fire trail that is linked to the public road system at regular intervals in accordance with *Planning for Bushfire Protection 2019*.
   f. are to be maintained in accordance with the *Planning for Bushfire Protection 2019*.
5. Where an allotment fronts and partially incorporates an APZ it shall have an appropriate depth to accommodate a dwelling with private open space and the minimum required APZ. The APZ will be identified through a Section 88B Instrument.
6. Temporary APZs, identified through a Section 88B Instrument, will be required where development is proposed on allotments adjoining undeveloped land that is mapped as bushfire prone land. Once the adjacent stage of development is undertaken, the temporary APZ will no longer be required and shall cease.
7. Buildings adjacent to APZs are to be constructed in accordance with the requirements of Appendix 3 of *Planning for Bushfire Protection 2019* and Australian Standard 3959-1999-Construction of Building in Bushfire Prone Areas.
8. An emergency bushfire evacuation and management plan should be prepared as part of each Subdivision Development Application Stage and indicate the proposed emergency management arrangements for such developments.

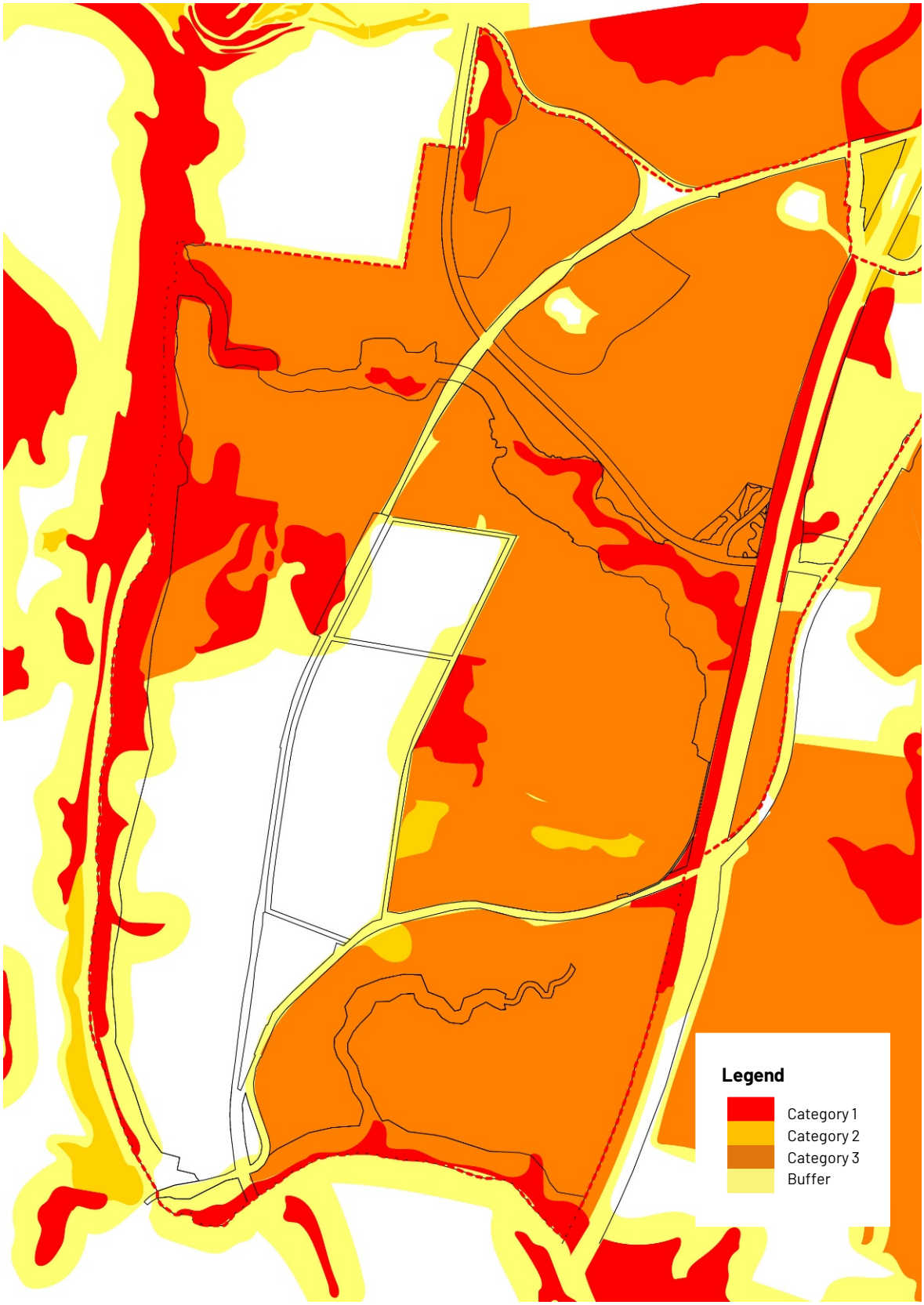


Figure 3.2 – Bushfire Prone Lane Map Menangle Park

3.4 Air Quality

Objectives

a. Minimise land use conflicts between residential land uses and other potentially incompatible land uses through the establishment of appropriate buffers.
b. Minimise the potential for adverse air quality impacts from current/future industrial activities on residential development.
c. Provide adequate buffers to ameliorate anticipated air quality impacts as a result of industrial activities.

Controls

1. A minimum buffer distance of 200m is to be provided between any operating coal seam gas well and new residential development. The consent authority may consider a reduced buffer where evidence is provided that residential amenity will not be adversely impacted in terms of air quality as a result of coal seam gas operations.
2. A buffer distance of at least 200m is to be provided between any sand extraction and new residential development within the Menangle Park precinct, unless it has been demonstrated that suitable dust management practices can be put in place to reasonably reduce this buffer.

3.5 Stormwater, Watercycle Management and Flooding

Objectives

a. To manage the flow of stormwater and integrate Water Sensitive Urban Design in the urban areas of the Menangle Park Precinct.
b. To minimise the potential of flooding impacts on development,
c. To incorporate best practice stormwater management principles and strategies in development proposals.
d. To avoid adverse impacts from stormwater runoff on other properties as a result of development in the catchment for all storm events up to and including a 1% Annual Exceedance Probability (AEP) flood event.
e. To minimise potable water consumption and maximise re-use of stormwater within urban areas, and
f. To maintain and enhance the quality of runoff to natural water bodies and the Nepean River.

Controls

1. All future development must comply with Council's Engineering Design for Development (as amended), Volume 1, Part 2, 2.10 of the Campbelltown (Sustainable City) DCP 2015 and the Menangle Park Water Cycle Management Report prepared by SMEC, dated 14 November 2018.
2. The pattern of subdivision is to ensure that no new dwellings are located within the post-development 1% AEP Flood extent.
3. All buildings are to be located above the Flood Planning Level (FPL). The FPL is a level 300mm-500mm depending on flow depth above the 1% AEP flood level.
4. The 1% AEP flood extent relating to creek flows (not the Nepean River) may be varied based on more detailed flood studies that are prepared to the satisfaction of the Council.

5. Pedestrian and cycle pathways and open space may extend within the 1% AEP flood level, provided the safe access criteria contained in the NSW Floodplain Development Manual are met. Reference should also be made to Appendix B (Riparian Protection Area controls) of the MPDCP.
6. Where development is proposed within or adjacent to land that is identified as being affected by the 1% AEP level, a detailed flood study is to be undertaken to confirm the extent of the flood affectation on the subject land.
7. Filling of land, within the floodway is not permitted due to its function as the main flow path for flood waters and the possibility of a significant threat to life and property in a major flood. Filling of flood storage areas may only be considered where offset storage is provided and where modelling demonstrates no adverse impacts.
8. Stormwater within new subdivisions is to be managed through a gravity network of pipes and overland flows generally following streets where flow volumes exceed the capacity of pipes.
9. Flows in roads must not exceed safety criteria as set out in Section 4.13.4 of Campbelltown City Council's Engineering Design For Development (as amended).
10. The acquisition or dedication of drainage easements over downstream properties will be required where direct access to a drainage system or discharge of stormwater to a creek via the street network is not possible (i.e. street kerb and gutter, piped system or open channels and watercourses). However, the design of subdivisions is to comply with Control 1 above and management of stormwater through easements will only be permitted by Council in exceptional circumstances where no other practical solution is available.
11. All outlet structures discharging to a creek system shall provide scour protection and energy dissipaters to minimise erosion of creek banks and beds. The number of outlet connections is to be minimised.
12. Some development areas within certain areas may not drain to the trunk stormwater system. In these locations, stormwater detention is managed by offsetting flows from these areas in detention basins located on other catchments. Water quality treatment is required for these areas and is to be managed within the street network.
13. The trunk stormwater system is to be constructed in accordance with the Council's Engineering Design for Development.
14. All water quality devices are to achieve Gross Pollutants >95% Total Suspended Solids 85%, Total Nitrogen 55%, Total Phosphorus 70%, Stream Erosion Targets (SEI) 1-2 and sized to cater for stormwater flows up to 3 months ARI (4 EY) storm events.
15. Where flood detention basins occur, water quality treatment areas can be co-located within the detention basin to reduce WSUD infrastructure area requirements.

3.6 Noise Management

Objectives

a. Limit environmental noise levels from road traffic and railway noise.
b. To minimise the impacts of noise from major transport infrastructure and employment areas on residential amenity.
c. To achieve an acceptable residential noise environment whilst maintaining well designed and attractive residential streetscapes.

Controls

The following controls apply where residential and other noise sensitive development is proposed within areas affected by road and rail noise as shown in Figure 3.3 below.

1. An Acoustic Reportwhich includes acoustic treatment requirements for dwellings is to be prepared by a suitably qualified professional for all subdivision and development proposals within the area of the site affected by road and/or rail noise as shown in Figure 3.3.
2. Compliance with the *State Environmental Planning Policy (Infrastructure) 2007* is required but not limited to in regards to Division 15 Railways and Division 17 Roads and Traffic and clause 101.

Table 3.1 - Acoustic Treatment Options

Acoustic Treatment Options	Application
Orientation of residences	Residences may be situated within lots along the sit eboundary so theat they provide acoustic shielding for residences at greater distance from highway, reducing the number of residences requiring noise treatment.
Orientation of rooms and windows	Less noise sensitive rooms such as garages, bathrooms and laundries can be oriented towards the noise sources, shielding more noise sensitive areas of the dwelling. Similarly, buildings can be constructed to minimise the number of doors and windows emposed to the noise source.
External Walls	Masonry (particularly double brick) or concrete facades provide greater transmission losses than weatherboard or other light-weight structures.
Doors	External doors which open into habitable rooms should be heavy solid-core doors with effective acoustic seals.
Acoustic Insulation	Acoustic insulation such as polyester or rockwool/glasswool batts placed between the wall studs of brick beneer and timber framed buildings will reduce the noise entering the building by an additional 5dB(A).
Architectural Treatment	Such as double-glazing or provision, enclosed balconies;

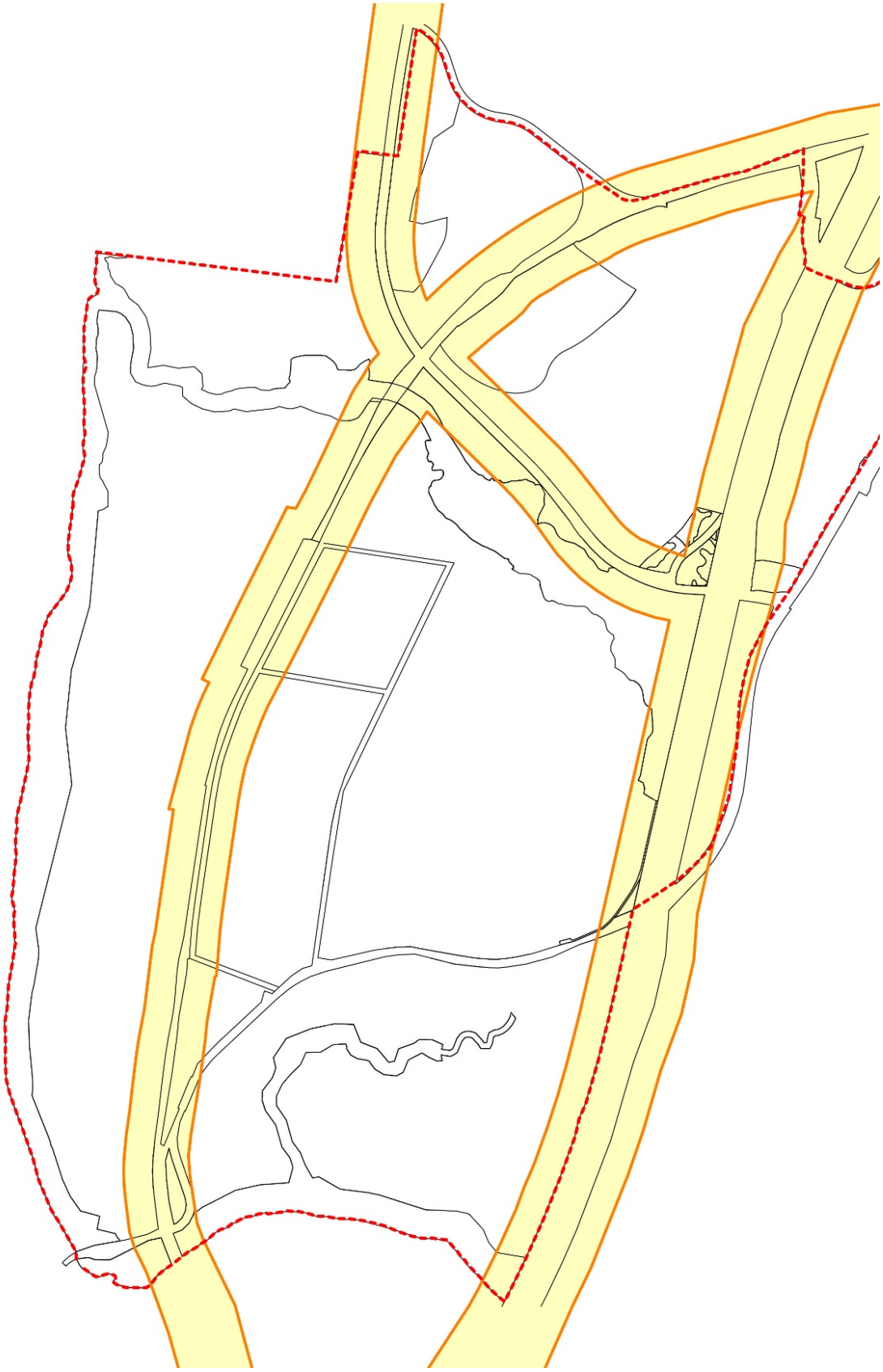


Figure 3.3 – Areas impacted by Road and Rail Noise

3.7 Salinity and Soil Management

Objectives

a. To manage and mitigate the impacts of, and on, salinity and sodicity.
b. To minimise the damage caused to property and vegetation by existing saline soils, or processes that may create saline soils.
c. To ensure development will not significantly increase the salt load in existing watercourses, and
d. To prevent degradation of the existing soil and ground water environment, and in particular to minimise erosion and sediment loss and water pollution due to siltation and sedimentation.

Controls

1. Subdivision Development Applications, that include earthworks on land with a moderate to high risk of salinity are to be accompanied by information detailing how the design and construction of the proposed subdivision intends to address salinity issues. All works are to comply with the Western Sydney Salinity Code of Practice 2004 (WSROC) and Volume 1, Part 2 Section 2.14 of the Campbelltown (Sustainable City) DCP.

- Salinity management is to complement WSUD strategies, improving or at least maintaining the current condition, without detriment to the waterway environment.

3.8 Night Sky Protection

Menangle Park currently affords good night sky visibility, unlike the urban areas of Sydney where ambient light significantly diminishes the ability to see the night sky. As far as practicable, Council seeks to ensure that the night sky experience at Menangle Park can remain for future residents.

Objectives

a. Ensure that the quality of the night sky is not significantly diminished.

Controls

1. Street lighting must be a “full cut-off light fixture”, i.e. a type of fixture that does not allow light (includes dispersed light or glare) to be emitted above a 90-degree, horizontal plane measured from the base of the fixture.
2. Accent lighting, shall be directed downward onto the building or object and not towards the sky or onto adjacent properties.
3. Direct light emissions are not to be visible above the roof line or beyond the building edge.
4. Spotlighting on landscaping and foliage is to be limited to 150 watts incandescent. The lamp is to be shielded and not create disabling or nuisance glare.

3.9 Site Contamination

Objectives

a. To minimise the risks to human health and the environment from the development of potentially contaminated land, and
b. To ensure that potential site contamination issues are adequately addressed at the subdivision stages.

Controls

The following controls apply to development proposals within areas affected areas of potential environmental concern shown in Figure 3.4 below. All applications are to address *State Environmental Planning Policy 55 – Remediation of Land.*

1. All subdivision Development Applications (or for applications proposing a change of use to a more sensitive land use (e.g. residential, education, public recreation facility etc.), shall be accompanied by a Stage 1 Preliminary Site Investigation prepared in accordance with the NSW Environmental Protection Authority Contaminated Sites Guidelines, *State Environmental Planning Policy 55 – Remediation of Land* and the *Contaminated Land Management Act 1995* and relevant Council Policies.
2. Where the Stage 1 Investigation identifies potential or actual site contamination a Stage 2 Detailed Site Investigation must be prepared in accordance with the NSW EPA Contaminated Sites Guidelines, *State Environmental Planning Policy 55 – Remediation of Land* and the *Contaminated Land Management Act 1995* and relevant Council Policies. A Remediation Action Plan (RAP) will be required for areas identified as contaminated land in the Stage 2 Site Investigation.

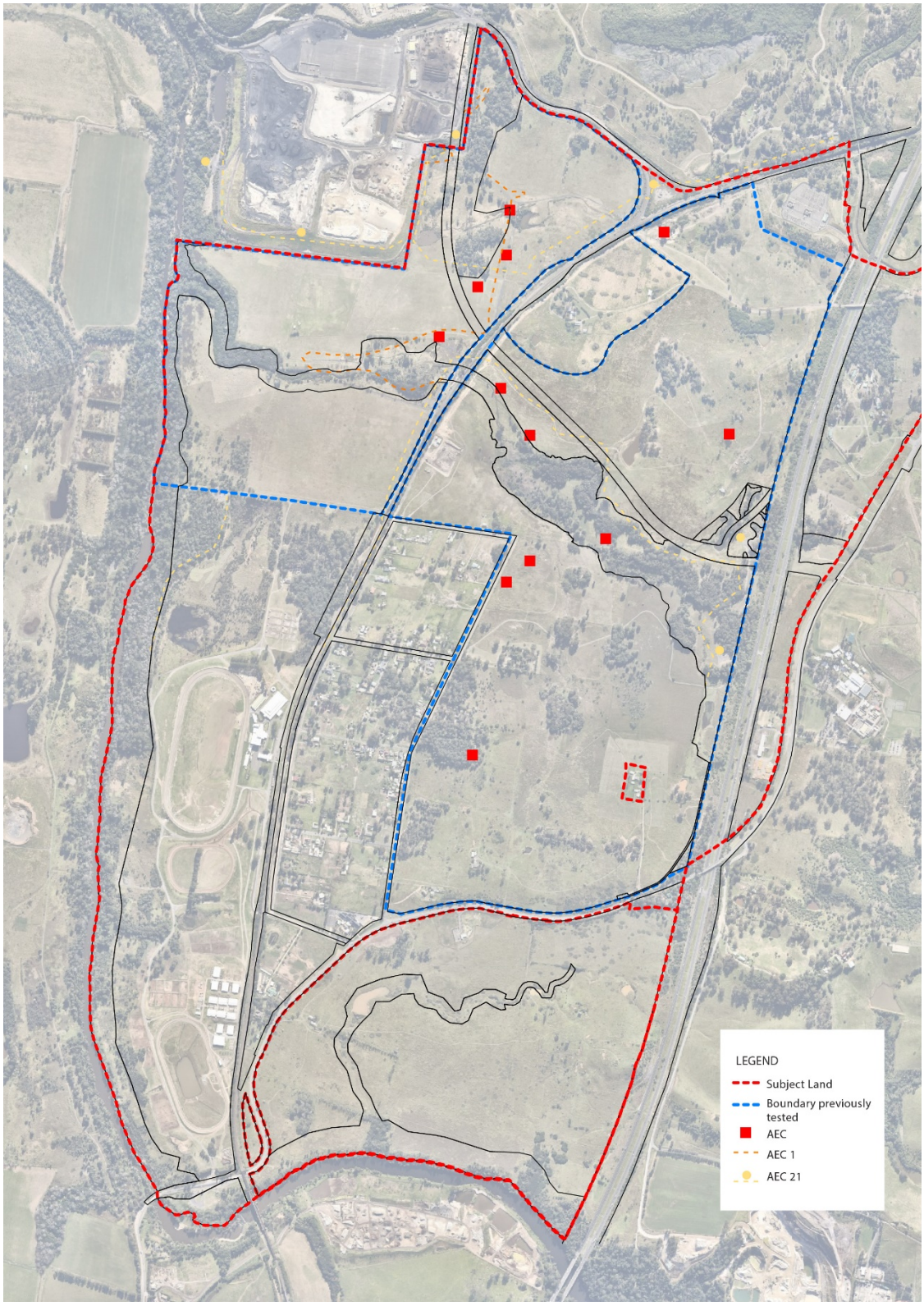


Figure 3.4 – Areas of potential environmental concern

3.10 Development on and Adjacent to Electricity and Gas Easements

Objectives

a. To ensure that development on or adjacent to land affected by major infrastructure easements does not impact on the continued operation of the infrastructure,
b. To provide for the safety and amenity of residents living near infrastructure easements, and
c. To encourage development to find appropriate uses for land burdened by an easement having regard to the particular circumstances.

Controls

1. Where development is proposed on land containing or adjacent to easements, Applicants are to consult with the authority or provider responsible for management of the easement as part of the process of preparing subdivision or other development plans. Any written requirements of the infrastructure organisation are to be submitted with the Development Application, and supporting documentation is to demonstrate how the requirements have been addressed in the design.
2. Earthworks (excavation or filling) and landscaping within easements are subject to conditions and requirements of the infrastructure authority or provider.
3. Requirements of the infrastructure organisation in relation to access to easements for inspections and maintenance are to be addressed in the design of the development. Access to the easement from public land (e.g. roads, open space or drainage land) is to be demonstrated..

3.11 Aboriginal Heritage

Objectives

a. Ensure that a representative sample of intact Aboriginal landscapes and a range of human responses (represented by the archaeology) are protected.
b. Ensure that areas of Aboriginal heritage significance are managed into the future on the basis of their Aboriginal (and scientific) heritage and environmental values.
c. Ensure that sites and/or landscapes with high archaeological potential or Aboriginal significance are retained and protected.

Controls

1. Development within areas shown in Figure 3.5 as:
    a. zone 1, and
    b. Cultural areas is subject to the controls for indigenous heritage in Section 2.11.1 of Volume 1 of the CSCDCP.

Is subject to the controls for Indigenous Heritage clause 2.11.1 of Volume 1 CSCDCP.

2. Development within areas of Zone 2 as shown in Figure 3.5 below may also be subject to the controls for Aboriginal heritage in Section 2.11.1 of Volume 1 of this DCP.

Figure 3.5 – Areas of Aboriginal Heritage Sensitivity

3.12 Non-Indigenous Heritage

Objectives

a. Ensure that new development is undertaken in a manner that is sympathetic to, and does not detract from, the heritage significance of heritage items and their settings.
b. Promote the protection and/or conservation of the non indigenous heritage where possible.
c. Ensure the impacts of development on significant views to and from Glenlee House are minimised.

Controls

1. The controls for non-indigenous heritage in Section 2.11.2 of Volume 1 of this DCP apply to Menangle Park.
2. An archaeological assessment must accompany any application for the development of land (including subdivision involving the creation of allotments for future development) containing a known or potential archaeological site. Known and potential archaeological sites at Menangle Park are shown in Table 3.2. The archaeological assessment should be undertaken in accordance with Assessing Significant Historical Archaeological Sites and 'Relics' (Heritage Branch, NSW Department of Planning, 2009).
3. In recognition of the heritage significance of Glenlee House and its curtilage it will be necessary to delineate its boundary. Thus, any development applications for the subdivision of land adjoining Glenlee House may only be considered where a road is provided on the eastern and northern boundaries of this property, which is listed under the *NSW Heritage Act 1977*.
4. Screen vegetation should be provided along the route of the proposed Spring Farm Parkway to ameliorate the impact on views and vistas to and from Glenlee House.
5. Development Applications for subdivision in the vicinity of the Sydney Catchment Authority Upper Canal are to consider the potential impact of any stormwater runoff on the Canal and ensure that any impacts are appropriately mitigated. Refer to Section2.18 Work on Land Adjacent to the Upper Canal Corridor Volume 1 of the Campbelltown (Sustainable City) DCP.

Table 3.2 – List of known and potential archaeological sites

Site No	Name	Property Description	Significance
S1	Brien's farm and house site	Lot D DP 19853	Local
S3	Thomas Vardy's estate, including house and stable	Lot 1 DP 249393	Local
S4	Grazier's Inn	Portion 29 Parish Menangle (in road reserve Menangle Road)	Local
S5	Mt Pleasant	Lot 2 DP 598067	Local
S6	Noone's farm	Lot 32 DP 1101983	Local
S7	House and shed of Chinese market gardener	Lot D DP 19853	Local
S8	Railway Hotel (Edrop estate)	Lot 1 DP 877582	Local
S9	North Menangle railway station site	Lot 1 DP 877582	Further assessment required
US10	Thomas Taber's original homestead site	Lot 10 DP 122204 (previously Portion 16 Parish Menangle)	Local
S11	Madden's Hill house site	Lot 3003 DP 802845	Local
S12	Ward's house site	Lot 4 DP 249530	Local
US13	Railway sites, stone quarry, tramway, site of workers tent town	Lot 1 DP 249393 Lot 3 DP 236059	Local
US14	Original Edrop homestead, dairy and worker's cottages	Lot 3 DP 236059	Local
US15	Archaeological sites, Menangle Park Paceway	Lot 10 DP 1022204	Further assessment required
US16	Doyle's property	Lot 7 DP 787284	Further assessment required
US17	Tyson's estate	Lot 2 DP 790254 (previously Portion 27 Parish Narellan)	Further assessment required

Note: *The location of some of these sites is unknown and can only be more closely identified through further research and survey work.*
(Source: Non-Indigenous Heritage Study Menangle Park NSW, Casey & Lowe Pty Ltd, March 2010)

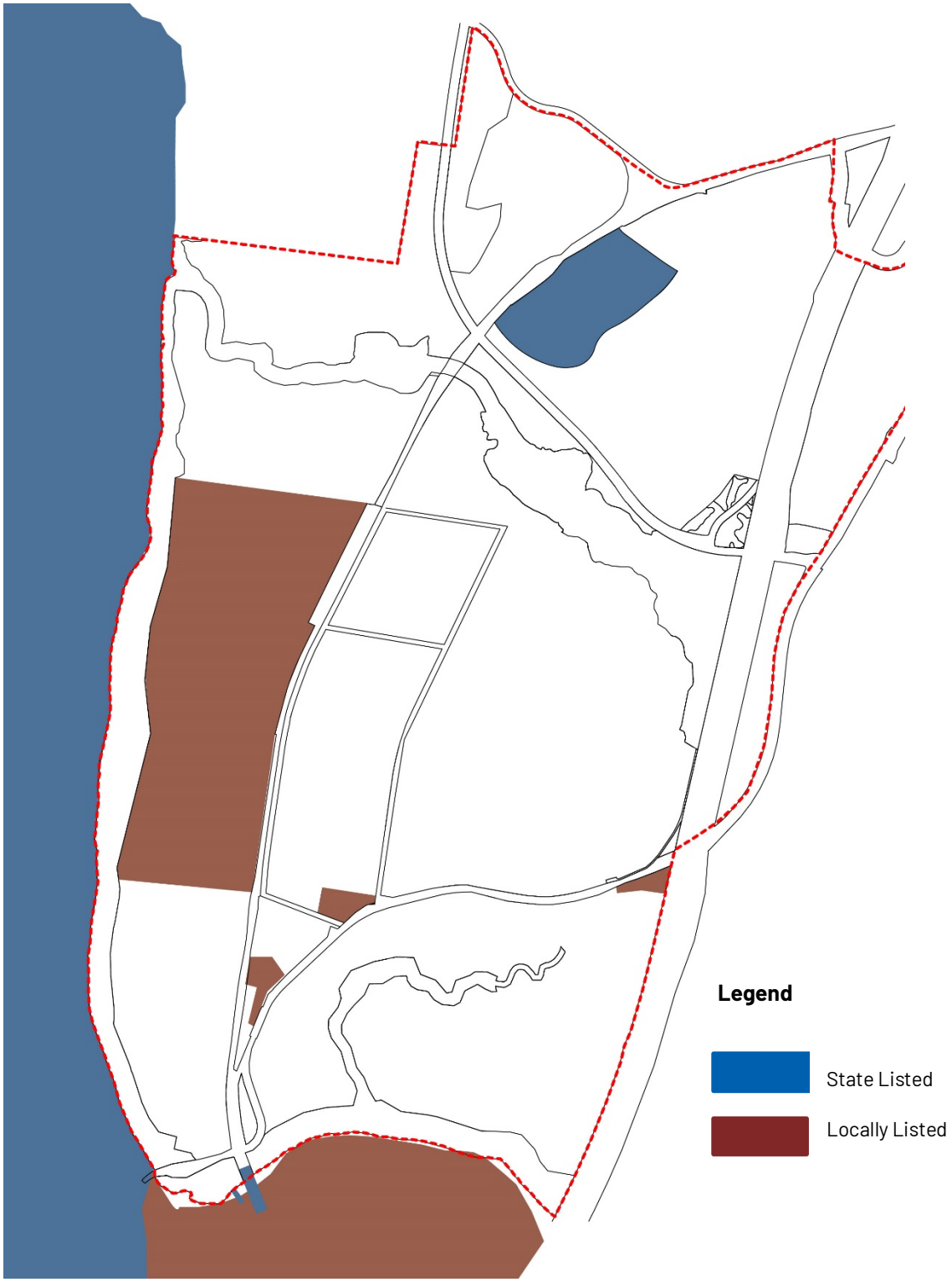


Figure 3.6 – Areas of European Heritage sensitivity

4. Precinct Planning Outcomes

4.1 Menangle Park - Urban Structure

The key elements of the Menangle Park Structure Plan are outlined below:

- Approximately 3,500 dwellings in a range of densities, lot sizes and dwelling types.
- Development of a higher order road hierarchy that provides for flexibility of development of various land uses including the creation of a green north-south collector road, a key structure which delivers distinct characters, land use types and density.
- A local street network that delivers engaging and active streets that promotes permeable connections and accessibility, trip containment, walking, cycling and urban cooling/ canopy cover.
- A large main street Town Centre will be the key built identity and focal point for the whole of the Menangle Park community.
- An integrated movement, destination and open space network that future-proofs Menangle Park to accommodate changes in infrastructure, modal shift and lifestyle trends.
- New development is to capitalise on existing views and create new views and vistas, particularly to adjacent heritage items. Significant green space located on important high points and roads are to maintain important views and vistas, allowing natural amenities to be enjoyed and celebrated. Visually sensitive areas such as the freeway, Menangle and Glenlee Roads are to retain a rural character.
- A range of densities and dwelling types providing housing choice to satisfy the needs of a wide spectrum of households, at different life stages and from varying socio-economic circumstances and lifestyle preferences.
- Walking and cycling networks including a new north-south green spine comprising an active transport link through the centre of the site. This corridor is designed to provide for workers, students and residents linking key amenities within the site including the Town Centre, schools, open space, neighbourhood centres and residential precincts.
- Extensive areas of passive and active open space (i.e. sporting fields, local parks and pocket parks and riparian corridor network) and land for environmental conservation.
- Use of water bodies, performing both an aesthetic and functional (water sensitive urban design) purpose, as a contributing element of the public domain.

4.2 Residential Density

Objectives

a. To provide guidance to Applicants on the appropriate mix of housing types and appropriate locations for certain housing types.
b. To establish the desired character of the residential areas.
c. To promote housing diversity and affordability.

Controls

1. Developments are to demonstrate consistency with yields in Table 4.1 below.
2. All applications for residential subdivision and the construction of residential buildings are to demonstrate densities compliant with the relevant Density Band/Housing Area in Table 4.1.
3. Residential development is to be consistent the 'typical characteristics' of the corresponding Density Band/Housing Area in Table 4.1 below.

Table 4.1 Housing Character/Density

Housing Area (Zone)	Net Residential Density dw/Ha	Typical Characteristics per Housing Area
RU2 Rural Landscape **E4 Environmental Living**	**>5 dw/ HA**	▪ Located on the edges of the precinct. ▪ Detached dwellings. Predominantly single storey in height with detached garages and outbuildings. ▪ Dwellings designed to respond to key environmental opportunities and constraints of lots. ▪ Development to retain protected biodiversity values and significant trees in lots. ▪ Development to be designed to respect and preserve rural scenic qualities of the landscape.
R5 Large Lot Residential	**10-15 dw/ Ha**	▪ Generally located at the outer fringes of the low density residential areas. ▪ Predominantly detached dwelling houses on larger lots with some semi-detached dwellings and secondary dwellings. ▪ Single and double storey dwellings. ▪ Mainly garden suburban and suburban streetscapes.

Housing Area (Zone)	Net Residential Density dw/Ha	Typical Characteristics per Housing Area
R2 Low Density Residential	**15-25 dw/ Ha**	▪ Predominantly a mix of detached dwelling houses, semi-detached dwellings and dual occupancies with some secondary dwellings. ▪ Focused areas of smaller lot dwelling houses (between 375-420m^2) in high amenity locations. ▪ Single and double storey dwellings. ▪ Diverse suburban streetscape.
R3 Medium Density Residential	**25-35 dw/ Ha**	▪ Generally located within the walking catchment of centres, corridors and public transport. ▪ Consists of predominantly small lot housing forms with some attached and multi-dwelling housing developments located close to neighbourhood centres, open space and public transport. ▪ Typically rear-loaded double storey dwellings with some single and three-storey dwellings. ▪ Incorporates laneways and shared driveways. ▪ Designed to provide activation of the public domain, including streets and public open space through the orientation and design of buildings and communal spaces. ▪ Mainly urban streetscape typology.
R4 High Density Residential **B2 Local Centre**	**35+ dw/ Ha**	▪ Generally located immediately adjacent centres and/or public transport nodes. ▪ Consists of predominantly residential flat buildings and shop top housing. ▪ Manor homes attached or abutting dwellings and multi-dwelling housing. ▪ Generally double and multi-storey buildings ▪ Predominantly urban streetscapes with minimal front

Housing Area (Zone)	Net Residential Density dw/Ha	Typical Characteristics per Housing Area
		setback; incorporates laneways and shared driveways.

4.3 Block and Lot Layout

Objectives

a. To establish a clear urban structure that promotes a 'sense of neighbourhood' and encourages walking and cycling.
b. To efficiently utilise land and achieve the target dwelling yields.
c. To minimise cut and fill; promoting a sustainable development and attractive streetscape.
d. To optimise outlook and proximity to public and community facilities, parks and public transport with increased residential density.
e. To encourage variety in dwelling size, type and design to promote housing choice and create attractive streetscapes with distinctive characters.
f. To accommodate a mix of lot sizes and dwelling types across a precinct.
g. To establish minimum lot dimensions for different residential dwelling types.
h. To ensure that all residential lots achieve an appropriate level of amenity

4.3.1 Block Layout Controls

1. Residential neighbourhoods are to be focused on elements of the public domain such as a school, park, retail, or community facility that are typically within walking distance.
2. Subdivision layout is to create a legible and permeable street hierarchy that responds to the natural site topography, the location of existing significant trees and site features, place making opportunities and solar design principles.
3. The design of subdivisions is to optimise the number of lots in areas with the greatest public open space and landscaped amenity balanced with diversity and equitable access to housing choice.
4. Pedestrian connectivity is to be maximised within and between each residential neighbourhood with a particular focus on pedestrian routes connecting to public open space, bus stops and railway stations, educational establishments, and community/recreation facilities.
5. Subdivision design and lot configuration for lots fronting streets is to demonstrate:
    a. suitable orientation to provide street address, activation and surveillance;
    b. appropriate interface (front to front and rear to rear housing),
    c. suitable access arrangements,
    d. adequate setback arrangements; and
    e. appropriate acoustic amenity.
6. Street blocks in the R3 Medium Density Residential zone are to be of a finer grain than blocks in the R2 Low Density Residential zone with greater incorporation of pedestrian/shared paths, laneways and secondary streets. Street block lengths are to be a maximum of 250m and broken up using the above thoroughfare types to ensure permeability.
7. Street block and subdivision design is to optimise solar orientation, taking into account other constraints such as open space location, views and topography. Medium Density housing opens shall optimise the number of east-west orientated lots in medium density housing areas.

8. Utilise laneways to provide rear-loaded access in medium density housing areas. Laneways are to be designed as a shareway to promote pedestrian and cycle safety.
9. Optimise secondary streets for garage access to corner lots.
10. Locate garages on the lower southern side wherever possible.

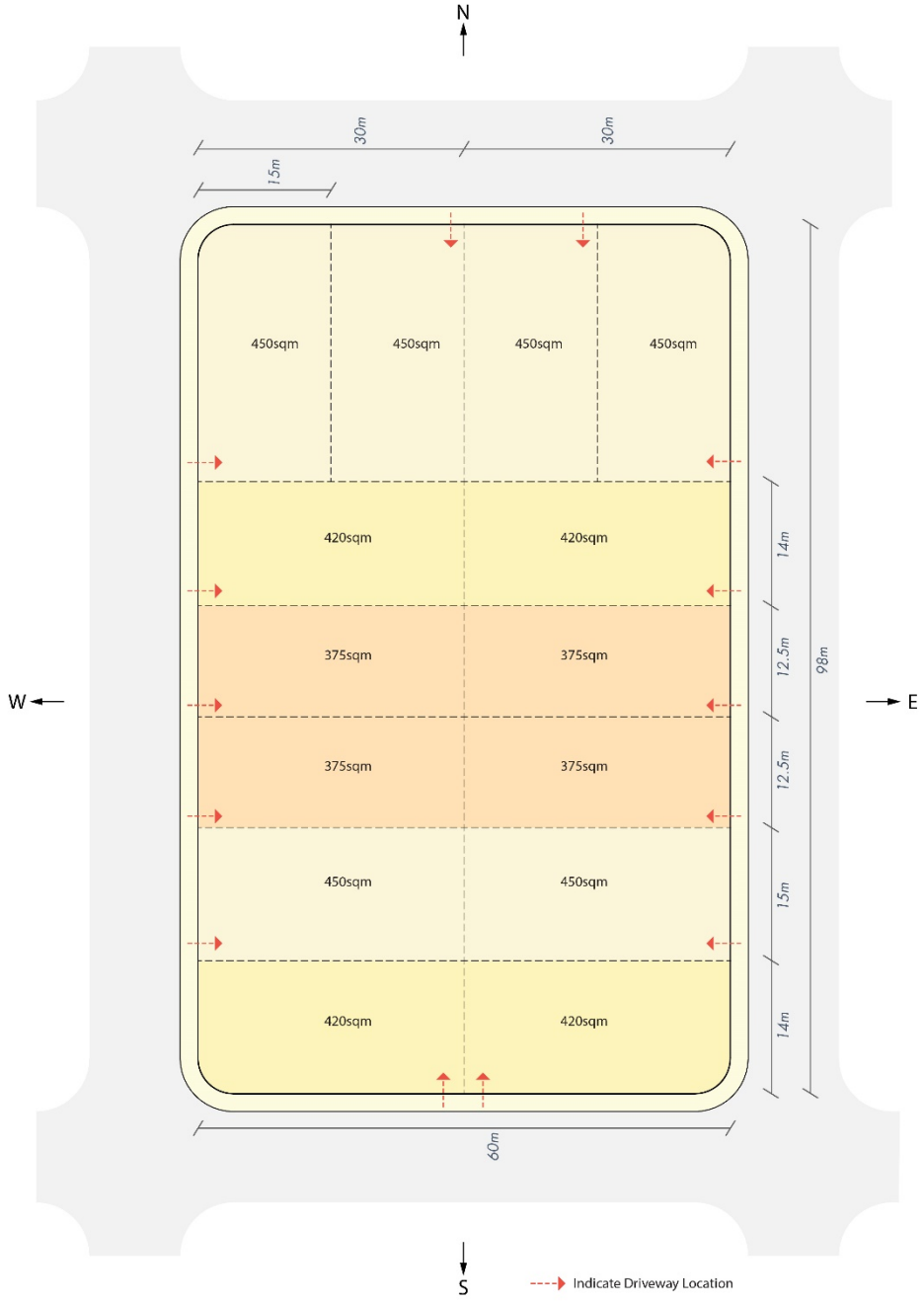


Figure 4.5 – Block layout principles East-West orientation

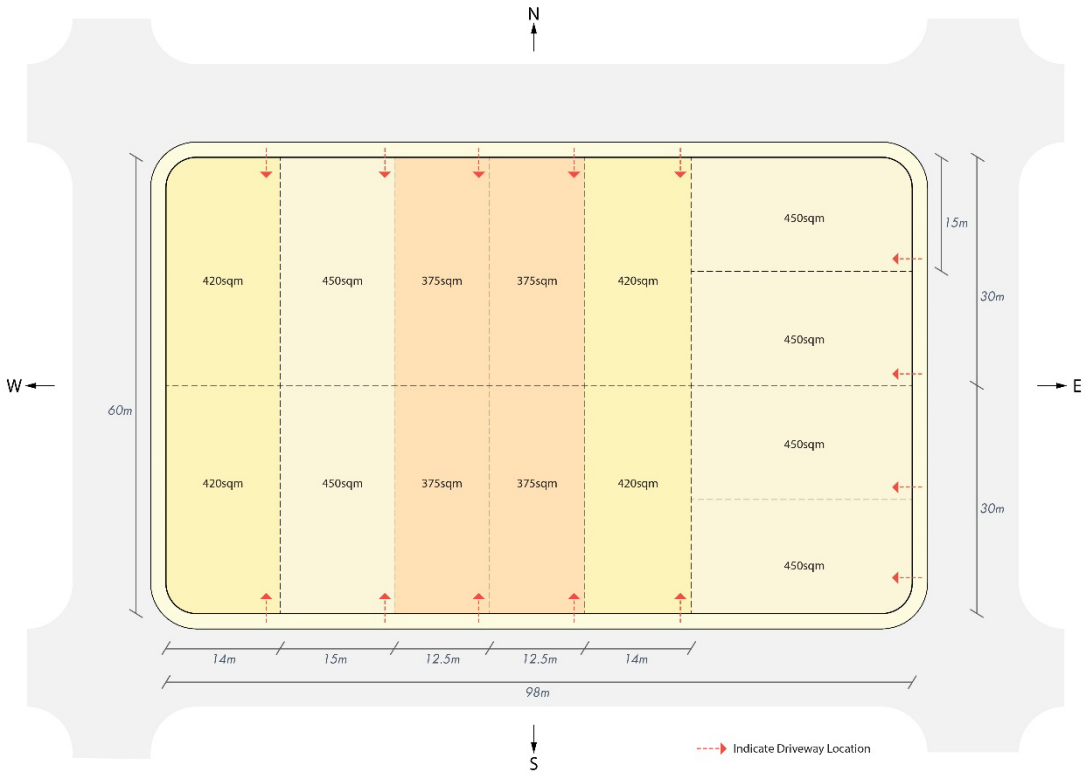


Figure 4.6 – Block layout principles North South orientation

4.3.2 Lot Layout

1. A range of residential lot types (area, frontage, depth, zero lot and access) must be provided to ensure a mix of housing types and dwelling sizes.
2. Lots should be rectangular and/or demonstrate that a viable rectangular building siting footprint exists within the irregular shaped lot.
3. Preferred block orientation is established by the road layout on the ILP. Optimal lot orientation is east-west, or north-south where the road pattern requires. Exceptions to the preferred lot orientation may be considered where factors such as the layout of existing roads and cadastral boundaries, or topography and drainage lines, prevent achievement of the preferred orientation.
4. Lot depths in the low density areas are to be generally between 25m-35m depending on orientation and garage location.
5. Lot depths in the medium density housing areas is typically 20-30m.
6. Minimum Lot Widths are:
   a. 4.5m – 6m for rear-loaded dwellings in the R3 zone,
   b. 8m for dwellings in the R2 zone,
   c. 15m for dwellings in the R5 zone,
   d. 15m+ for dwellings in the RU2 and E4 zones.
7. No more than three (3) x 4.5m wide rear-loaded lots are permitted in succession.
8. Continuous long runs of front loaded, narrow lots (i.e. less than 10m) are to be avoided in all Housing Areas.

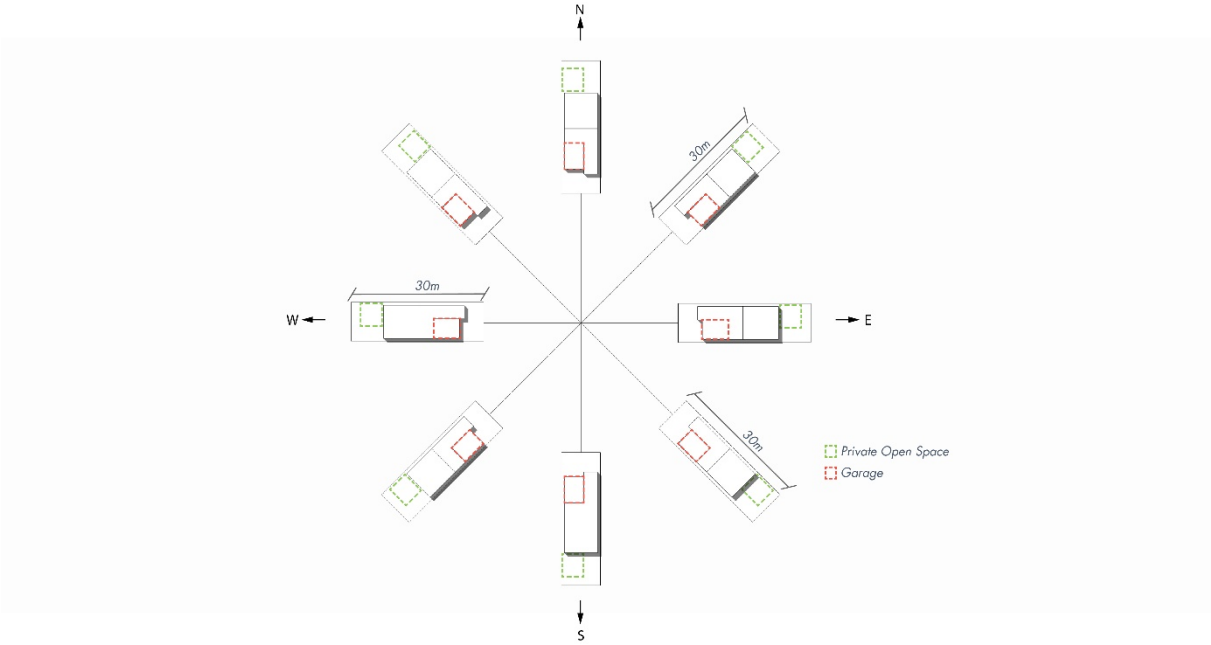


Figure 4.7 – Lot Layout Principles

4.3.3 Battle-Axe Lots

1. Principles for the location of battle-axe lots are illustrated at Figure 4.8.
2. All residential allotments are to have direct frontage to a public road. However, battle-axe and right of carriageways may only be considered if no other options are available, and an appropriate development outcome can be achieved.
3. Subdivision layout should minimise the use of battle-axe lots without public frontage to resolve residual land.
4. Battle-axe lots are to provide a building envelope which demonstrates compliance with provisions for solar access, private open space, setbacks and site coverage of this DCP, and to show adequate distance from existing or proposed dwellings to ensure privacy and amenity is achievable.
5. Battle-axe allotments are to:
    a. have a minimum site area of 420m^2 (excluding the handle),
    b. only permit a detached dwelling house,
    c. have a minimum access handle width of 3.5m,
    d. provide 500mm landscaping verge on each side of the access handle,
    e. have a minmum 3m x 3m splay at the dwelling end of access handle,
    f. have a maximum battle-axe handle length of 40m, and
    g. provide a driveway design that is in accordance with Council's specifications.
6. Battle-axes are to comply with the requirements under section 5.2 Dwelling Design Controls however, the garage can utilise the side setback control, while the remainder of the house must be setback as per the rear setback control.
7. Battle-axes must demonstrate that a vehicle can enter and exit the allotment in a forward direction without impacting the amenity of the front setback, or private open space. Pervious material will not be supported within the front setback to cater for vehicle manouvering.
8. Where battle-axe lots front open space or a road, development is to be designed to a dual frontage form, whereby the rear setback is facing the handle.
9. Shared access handles are to be 6m in width and service no more than 2 lots, stacked battle allotments are not permitted.

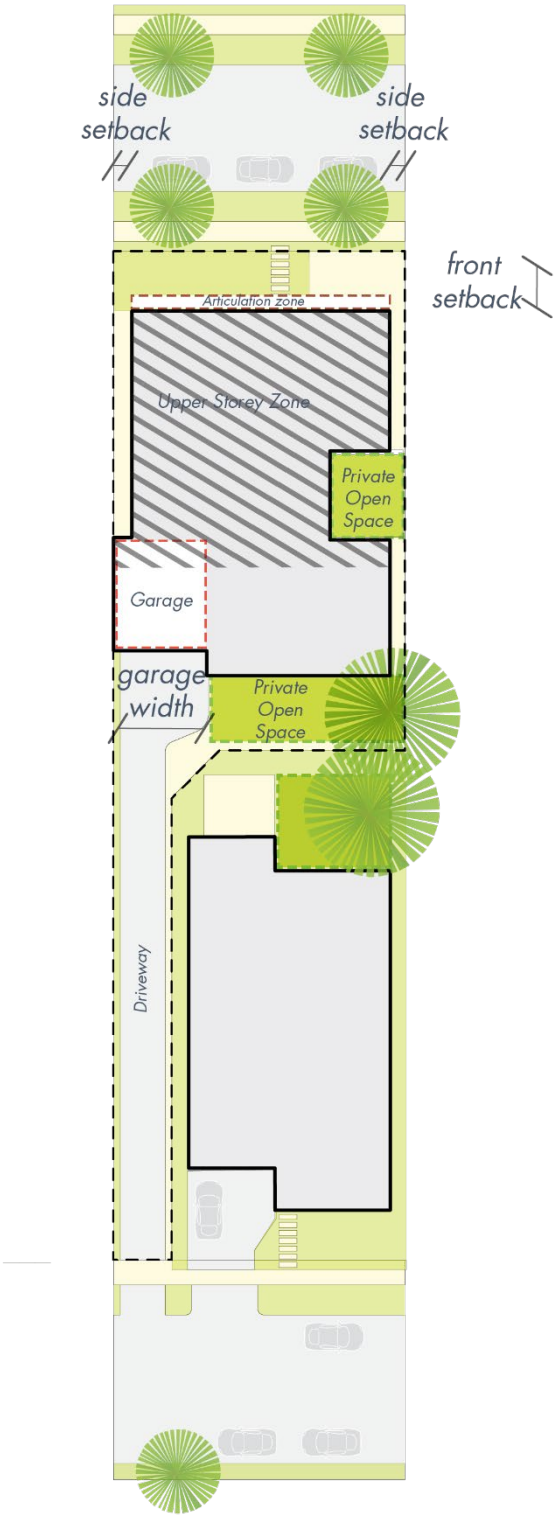


Figure 4.8 – Battle-axe lot typical configuration

4.3.4 Corner Lots

1. Corner lots, including splays and driveway location, are to be designed in accordance with AS 2890 and Council's Engineering Specifications.
2. Corner lots are to be designed to allow dwellings to positively address both street frontages as indicated in Figure 4.9 below.
3. Garages on corner lots are encouraged to be accessed from the secondary street or a rear lane.
4. Plans of subdivision are to show the location of proposed or existing substations, kiosks, sewer man holes and/or vents affecting corner lots.
5. Corner Lots are to comply with the requirements under section 5.2 Dwelling Design Controls.
6. Garages located on secondary street frontages are to be setback a minimum of 0.9m from the rear boundary of the lot (see Figure 4.9 below).

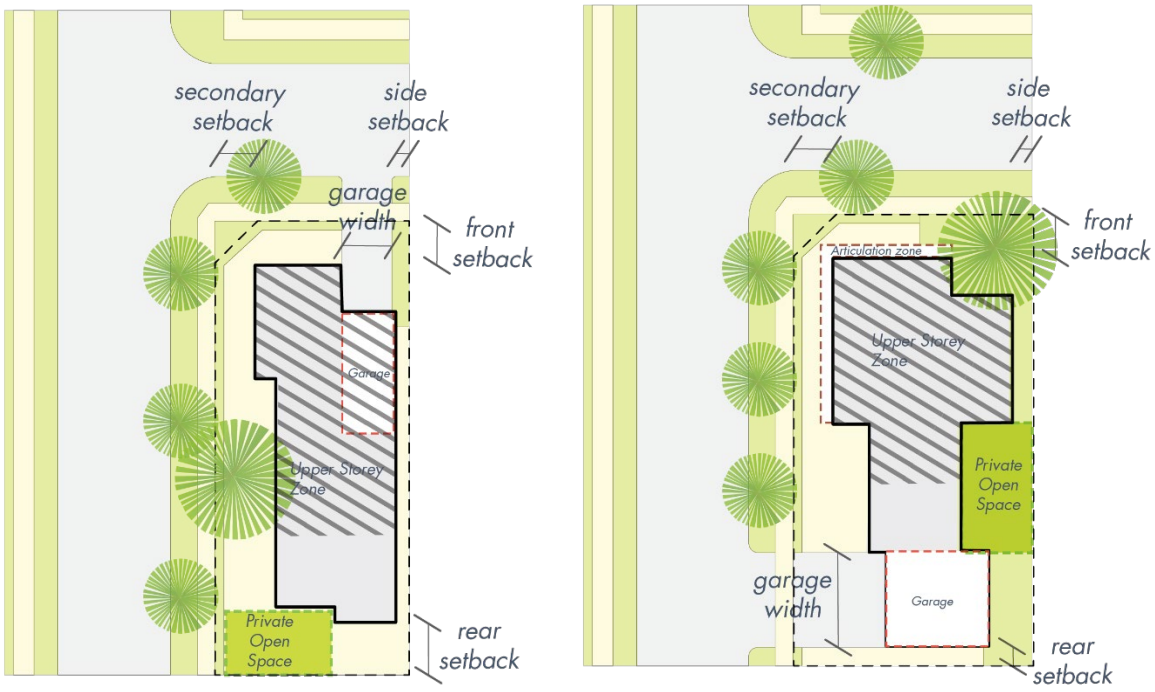


Figure 4.9 – Corner lot typical configuration

4.3.5 Dual Street Frontages

1. The secondary frontage is to be detailed with the same architectural features as the primary elevation.
2. The secondary frontage must include an alternate dwelling entry.
3. A minimum setback of 3m is to be provided to the secondary frontage, including articulation.
4. Articulation to the secondary frontage to a public road must not exceed 60% of the lot frontage.
5. Private Open Space is to be located to the side of the dwelling.
6. Dwellings with a boundary adjoining/adjacent to Menangle Road shall be designed to address Menangle Road (no access to be granted) or be designed to have a dual frontage to Menangle Road (and any access road) with a consistent fencing design facing Menangle road.
7. The applicant is to create an appropriate restriction in regards to the fencing along Menangle Road under Section 88B of the Conveyancing Act. The restriction is to address the following:
    a. Fencing detail and height to Menangle Road frontage – wholly within the lots;
    b. Fencing boundary treatment as approved along Menangle Road frontage.
8. A 1.8m high fence shall be erected for all lots that adjoin Menangle Road at the sole cost of the developer.
9. 'Colorbond' style metal fencing is not permitted for property boundaries that face the public area.

4.4 Subdivision Approval Process in the R2 and R3 Zones

Objectives

a. To facilitate a diversity of housing sizes and products.
b. To establish a concise process for the approval of certain dwelling and lot types.
c. To ensure that subdivision and development on smaller lots is undertaken in a coordinated manner.
d. To ensure that all residential lots achieve an appropriate level of amenity.

Controls

1. The land subdivision approval process is to be consistent with the requirements of Table 4.2 below.
2. Subdivision of land creating residential lots less than 420m² and/or less than 12m wide shall include a Development Lot Plan as part of the subdivision development application.
3. Subdivision of land creating residential lots less than 375m² and/or lots less than 8m wide shall include a Building Siting and Envelope Plan (BSEP) as part of the subdivision development application. The BSEP is to be incorporated into the S88B instrument, attached to the lot.

The Development Block Plan should be at a legible scale (suggested 1:500) and include the following elements:

- Location of street and site trees
- Location of driveways
- Indicative location of dwelling

The BSEP should be at a legible scale (suggested 1:500) and include the following elements:

- Lot numbers, north point, scale, drawing title and site labels such as street names
- Maximum permissible building envelope (setbacks, storeys, articulation zones)
- Principal private open space
- Designated landscape zones

- Garage size (single or double) and location
- Zero lot line boundaries

A BSEP should be fit for purpose and include only those elements that are necessary for that particular lot. Other elements that may be relevant to show include:

- Fencing requirements
- Easements and sewer lines
- Retaining walls
- Preferred entry/frontage (e.g. corner lots)
- Access denied frontages
- Electricity kiosks or substations
- Indicative yield on residue or super lots

For further information, refer to the Department of Planning and Environment Delivery Note: **Building Sitting and Envelope Plans.**

Table 4.2 - Subdivision Approval Pathways

Approval Pathway	DA for Subdivision Only	DA for Subdivision with Development Block Plan	DA for Subdivision with BSEP
	Pathway A1	**Pathway A2**	**Pathway A3**
Application	Lots equal to or greater than 420m^2	Lots less than 420m^2 and/or with a width less than 12m	Lots less than 375m^2 and/or with a width less than 8m
Dwelling Plans Required	As part of future DA or CDC	As part of future DA or CDC	As part of future DA or CDC
Dwelling Design 88B restriction required	No	Yes	Yes
Timing of subdivision (release of linen plan)	Pre-construction of dwellings	Pre-construction of dwellings	Pre-construction of dwellings

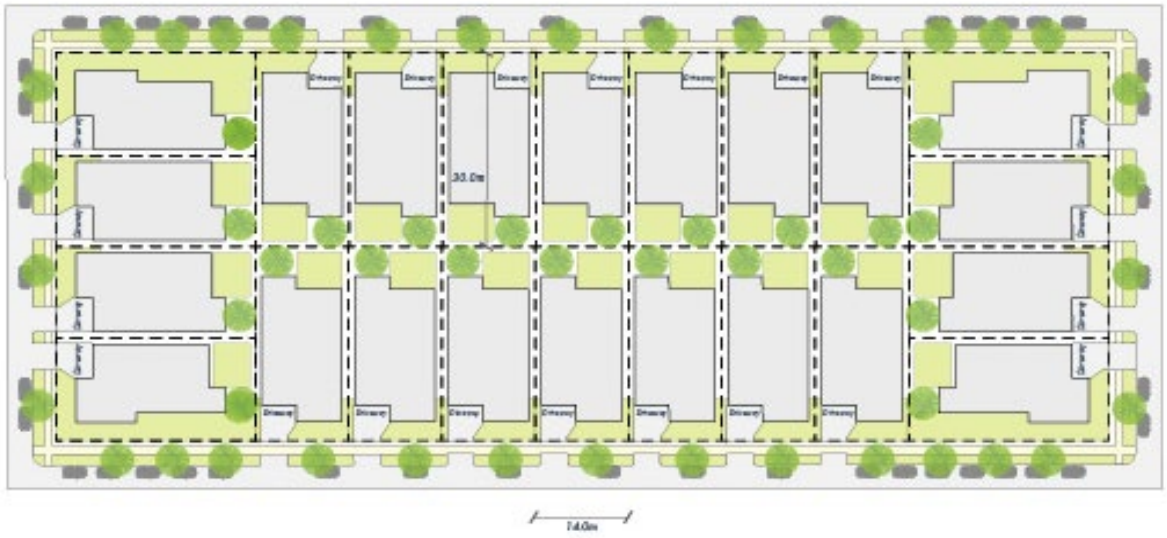


Figure 4.10 - Development Block Plan

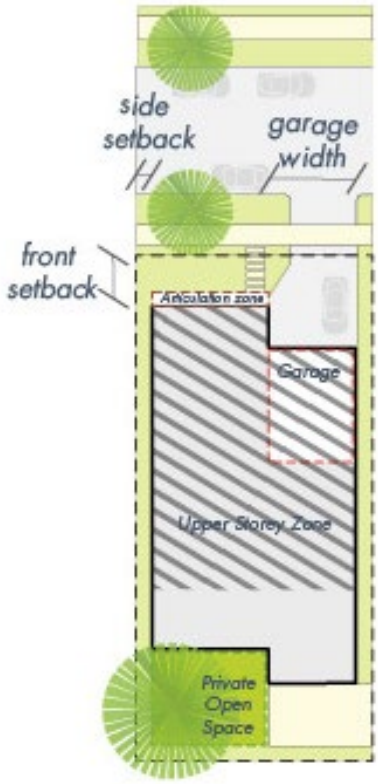


Figure 4.11 – Building Sitting Envelope Plan

4.5 Movement Network

4.5.1 Street layout and design

Objectives

a. To provide for the safe and efficient circulation of pedestrians, bicycles and motor traffic and on street parking requirements.
b. To provide an attractive and safe urban streetscape environment.
c. To provide a hierarchy of streets with good connectivity that utilises features and landmarks to enhance way-finding for pedestrians, buses, private vehicles.
d. To design the street network to consider streets as linear parks and/or recreation opportunities.
e. To encourage less motor vehicle use by enhancing pedestrian and cycle connections to the Town Centre, schools and parks.

Controls

1. The design and construction of streets in Menangle Park is to be generally consistent with the relevant typical designs in Figures 4.15 to 4.22 and Council's Engineering Design Guide. Where any variation to the street network is proposed, the alternative street network is to be designed to achieve the objectives of this section.
2. Where roads are adjacent to public open space or drainage land, or adjacent to arterial and sub-arterial roads, the verge width on the side adjacent to the open space, drainage land or major road may, in certain circumstances, be reduced to a minimum of 1m, subject to:
    a. appropriate arrangements for the provision of public utilities,
    b. provision of appropriate pedestrian access,
    c. compliance with road safety, and
    d. acoustic attenuation, bushfire asset protection zone, and riparian corridor requirements
3. Where streets are proposed as part of an application for subdivision that are located adjacent to public recreation land, drainage land, community facilities or schools, the applicant will be responsible for construction of the full width of the street, unless Council specifies otherwise.
4. Except where otherwise specified in this DCP, all streets and roundabouts are to be designed and constructed in accordance with the minimum requirements set out in Council's Engineering Design Guide for Development. Where a corner lot fronts a roundabout, the driveway shall be setback 10m from the splay.
5. Street trees are required for all streets. Street planting is to:
    a. be coordinated with subdivision layout, traffic plan and services,
    b. use the preferred species listed in Appendix 1,
    c. be consistently used to distinguish between public and private space and between different classes of streets within the street hierarchy,
    d. minimise risk to drainage swales, utilities and services,
    e. be durable and suited to the street environment and, wherever appropriate, include endemic species,
    f. maintain adequate lines of sight for vehicles and pedestrians, especially around driveways and street corners,
    g. be planted in kerb extensions to assist with traffic calming,
    h. be located to minimise conflicts between trees and driveways,
    i. provide appropriate shade in summer and solar access in winter,

j. provide an attractive and interesting landscape character without limiting passive surveillance of the street,
k. include a root guard to minimise damage to road pavements and foot paths,
l. not interfere with refuse collection and buried utilities, and
m. consider items of environmental heritage, heritage conservation areas, historic road alignments and significant view lines.

6. Signage, street furniture and lighting is to be:
   a. designed to reinforce the distinct identity and vision of the development;
   provided at all bus stops,
   b. located so as to minimise visual clutter and obstruction of the public domain; and
   c. consistent with any landscaping and public domain requirements specified by Council.
7. Water Sensitive Urban Design (WSUD) green infrastructure such as raingardens, swales, tree pits and parking areas where it contributes and meets the objectives and principles of the Menangle Park Stormwater Strategy and Councils Specifications are to be considered.
8. The construction of the proposed realignment of Glenlee Road and the intersection with Menangle Road must be completed before the release of any new residential lots within the northern precinct of Menangle Park Urban Release Area.

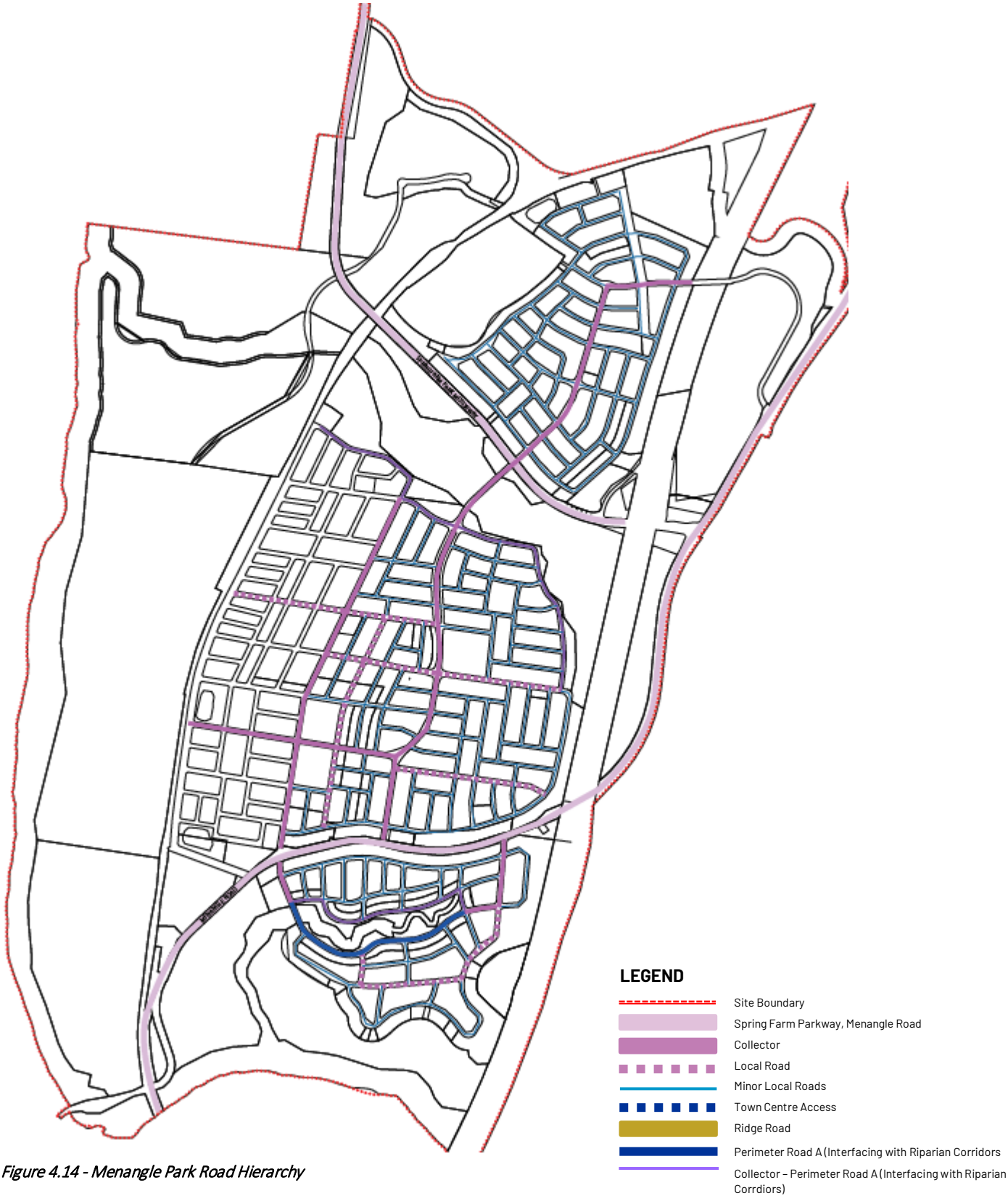


Figure 4.14 - Menangle Park Road Hierarchy

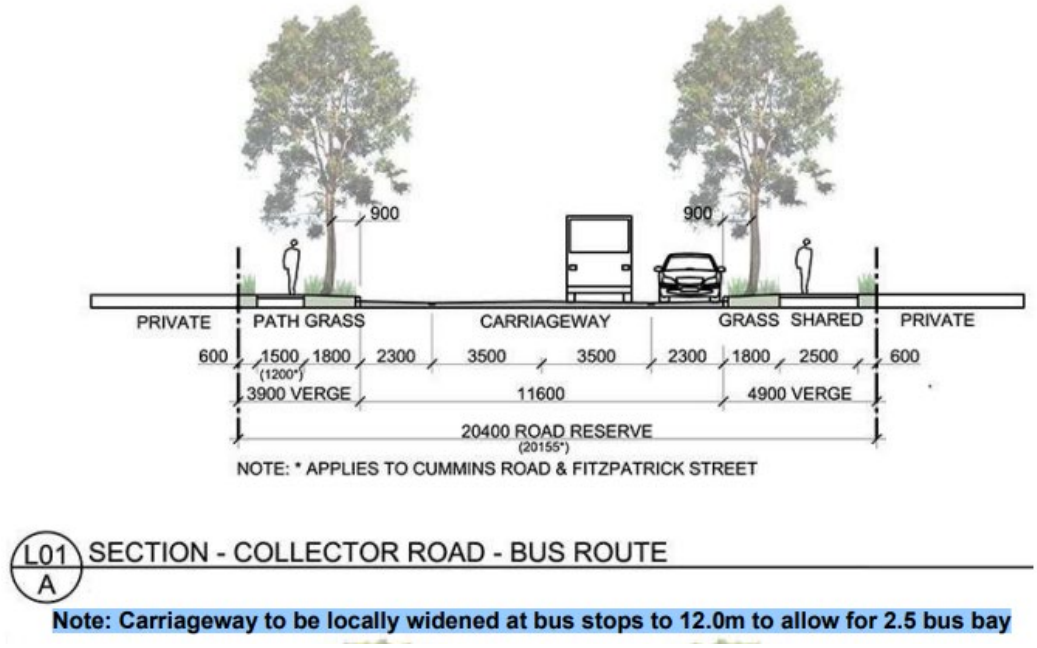


Figure 4.15 – Typical Road Sections - Collector Road (Bus Route)

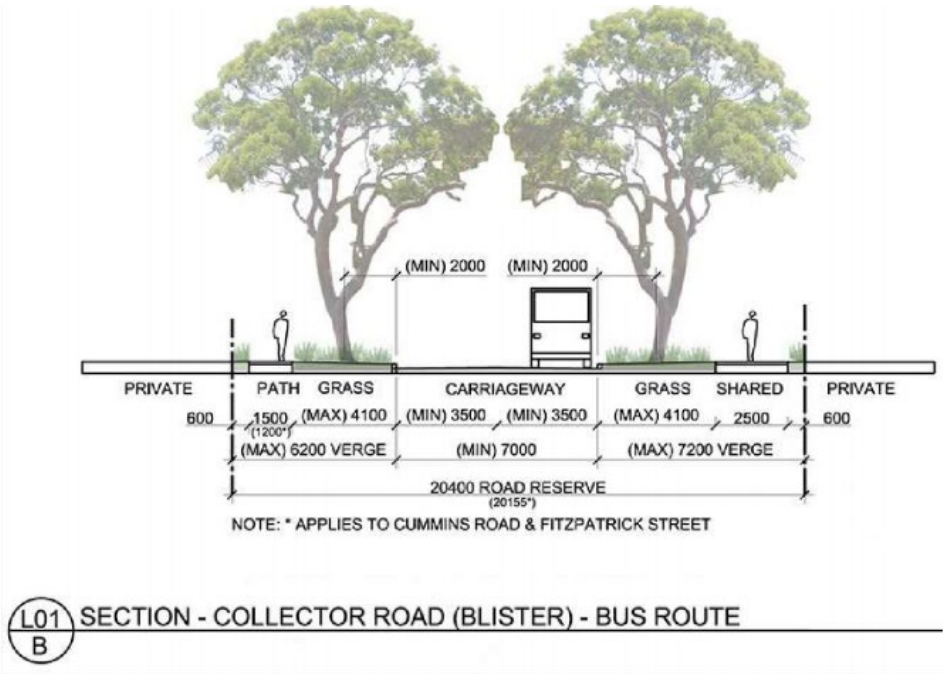


Figure 4.16 – Typical Road Sections – Collector Road (Bus Route)

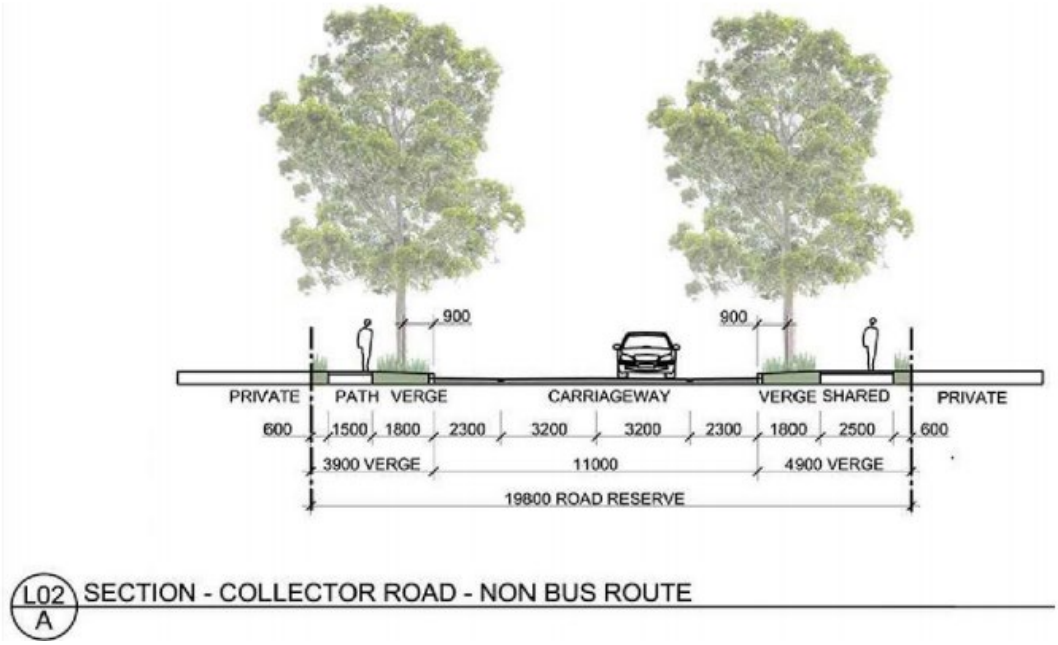


Figure 4.17 – Typical Road Sections - Collector Road (Non Bus Route)

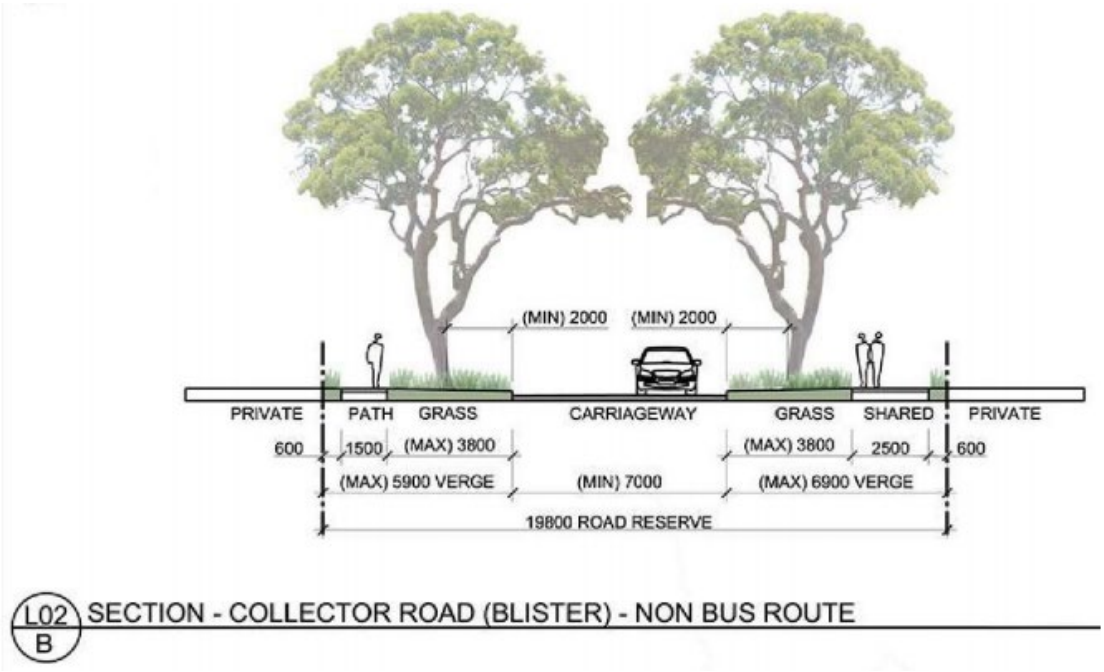


Figure 4.18 – Typical Road Sections – Collector Road (Non Bus Route)

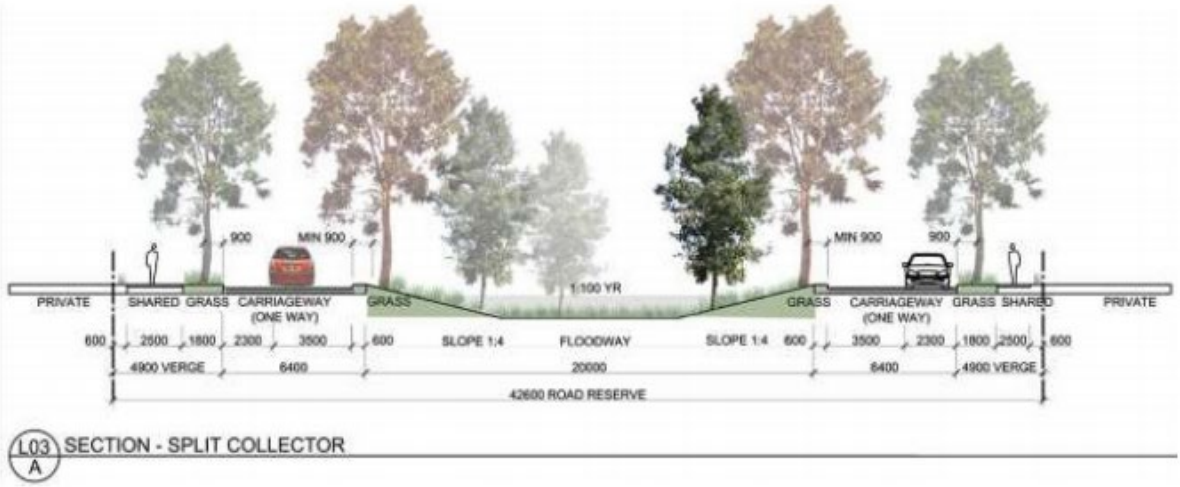


Figure 4.18 – Typical Road Sections – Split Connector

Figure 4.19 – Typical Road Plan – Split Connector

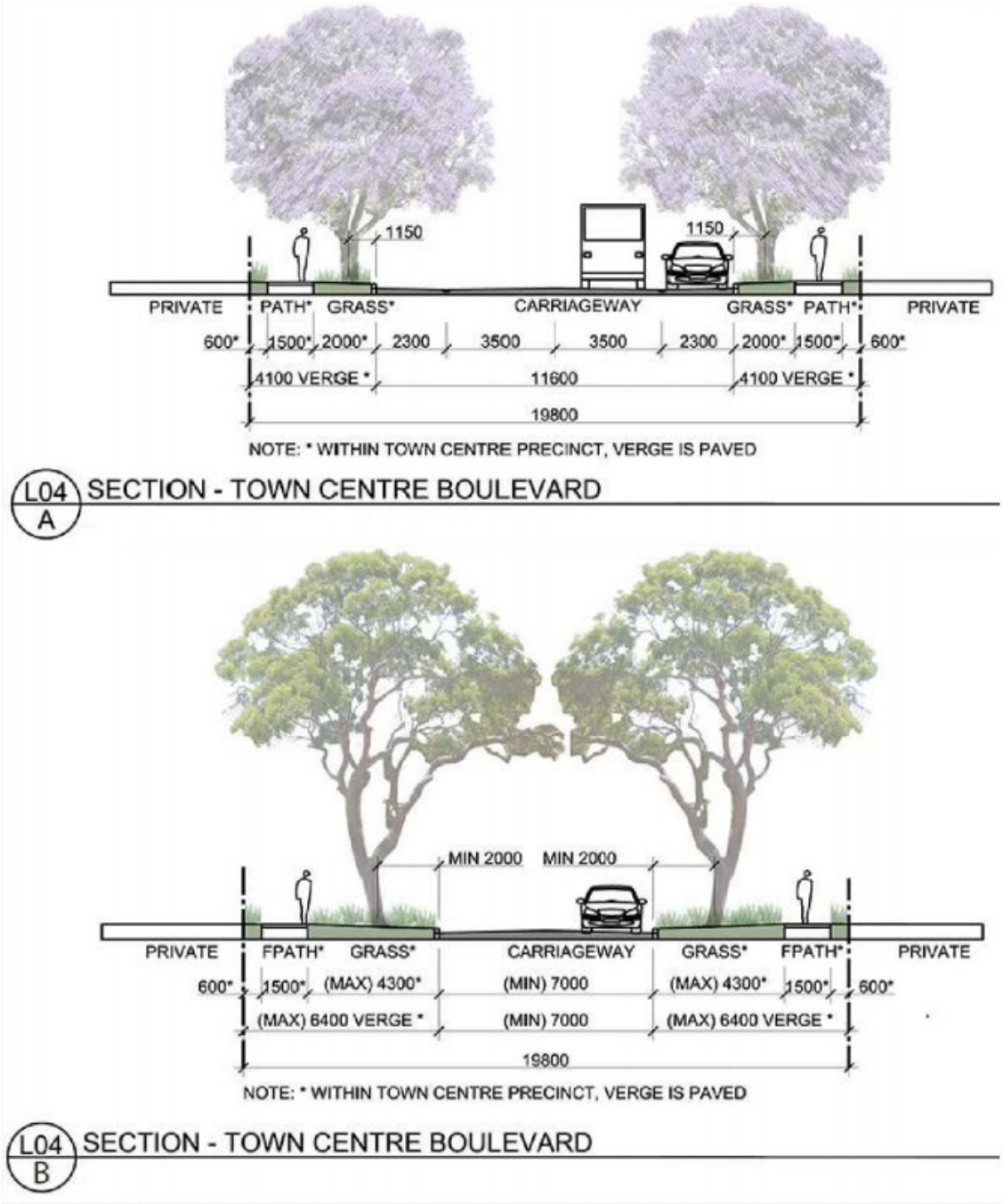
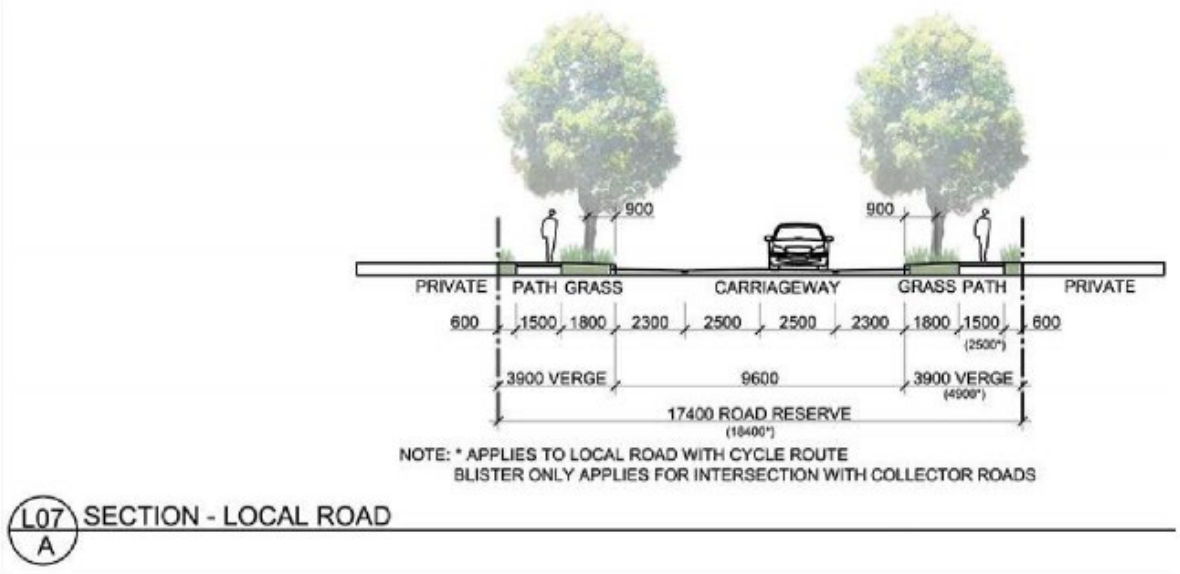


Figure 4.20 – Typical Road Sections – Town Boulevard



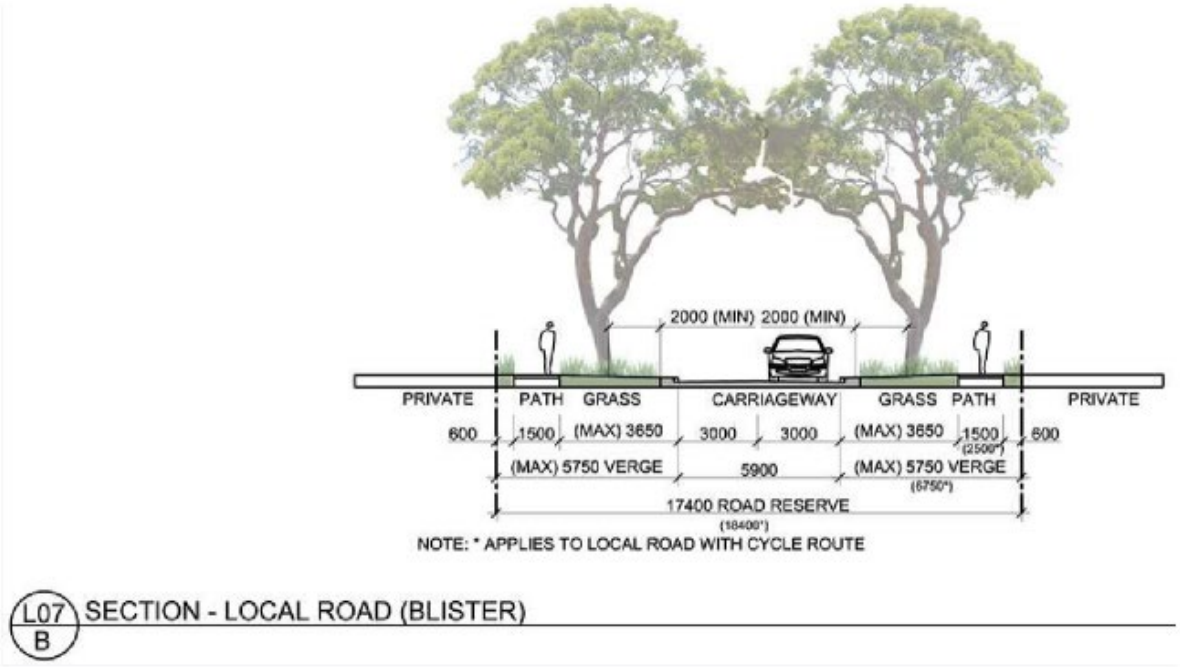


Figure 4.21 – Typical Road Sections – Local Road

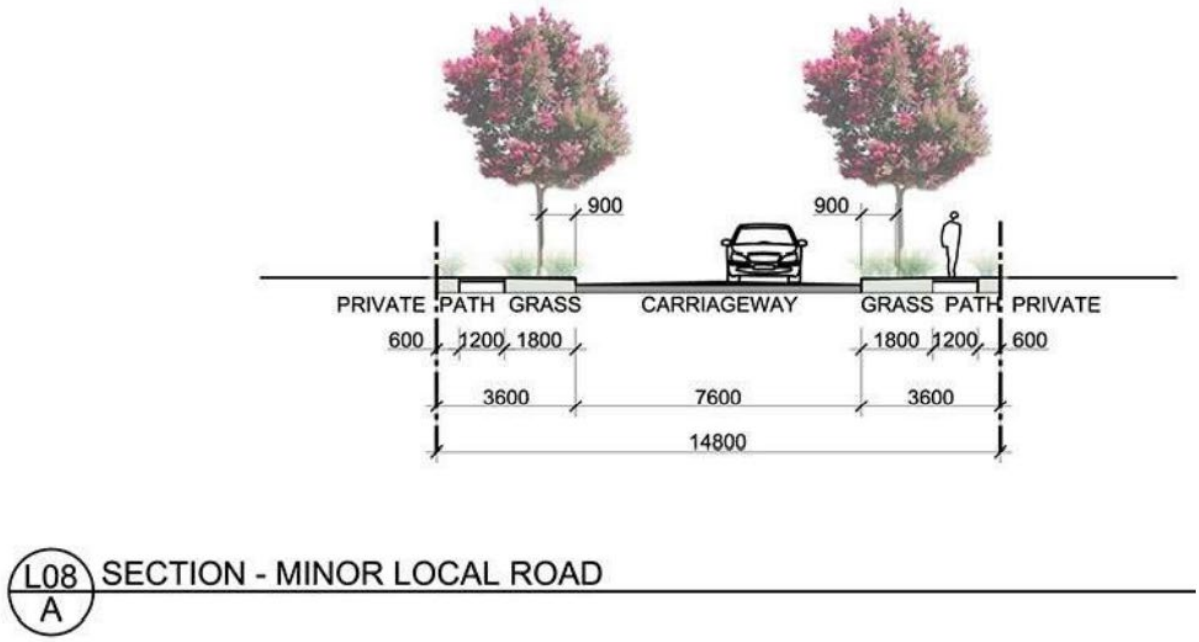


Figure 4.22 – Typical Road Sections – Minor Local Road

4.5.2 Laneways

Laneways are public roads that are shareways, utilitarian throughways of the street network that provide rear vehicular access to compact or restricted access lots. The primary purpose of rear laneways is to create attractive front residential streets by removing garages and driveway cuts from the street frontages, improving the presentation of houses and maximising on street parking spaces and street trees.

Objectives

a. To provide vehicular access to the rear or side of lots where front access is restricted or not possible, particularly narrow lots where front garaging is not permitted.
b. To reduce garage dominance in residential streets.
c. To maximise on-street parking spaces and landscaping in residential streets.
d. To enable garbage collection.
e. To facilitate the use of attached and narrow lot housing to achieve overall higher neighbourhood densities.
f. To create a slow speed shared zone requiring co-operative driving practices for the intended low volume and frequency of vehicle movements that is distinctly different in character and materials to residential streets.

Controls

1. The design and construction of laneways is to be consistent with Figures 4.23 - 4.24 below.

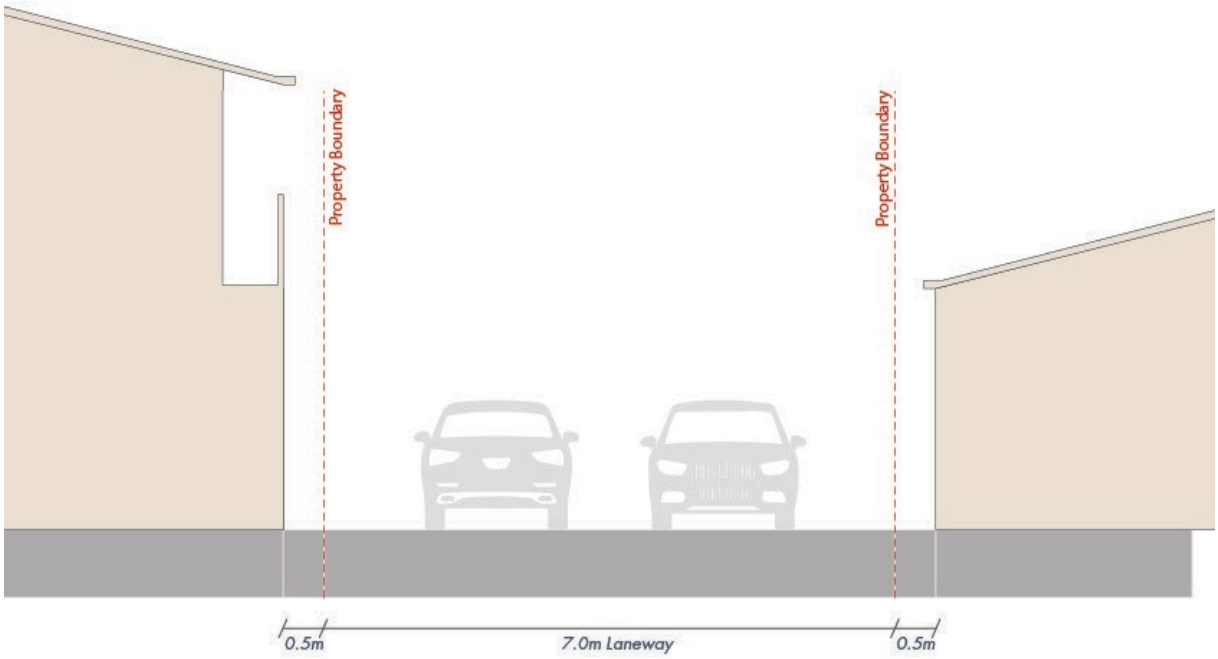


Figure 4.23 – Laneway cross section

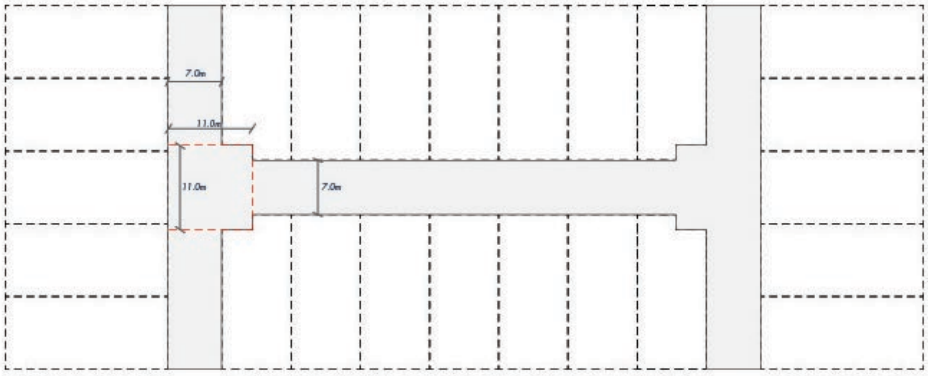


Figure 4.24 – Laneway Principles Plan

4.5.3 Pedestrian and Cycle Network

Objectives

a. To provide a convenient, efficient and safe network of pedestrian and cycle paths for the use of the community, within and beyond the site that provides links between all key activities, community facilities, open space areas and the Town Centre.
b. To create an interconnected pedestrian and cycle network comprising streets and paths that are safe, legible, and comfortable.
c. To ensure a high level of pedestrian and cycle accessibility and priority to and within the Town Centre.
d. To encourage cycling and pedestrian manoeuvrability and usage.

Controls

1. Pedestrian and cycle routes should be provided in accordance with Figure 4.25 below. Alternate configurations may be provided subject to consistency with the objectives.
2. Ensure pedestrian and cycle facilities in public spaces are safe, well lit, clearly defined, functional and accessible to all users.
3. Minimum pedestrian footpath width is to be 1.2m.
4. The minimum width of shared cycle/pedestrian paths is to be 2.5m.
5. Pedestrian and cycle paths are to be provided as part of the open space and recreation areas.
6. Where an open space related path exists generally in parallel, and proximate, to a road reserve; the footpath associated with the thoroughfare cross section is no longer required.
7. Design pedestrian and cycle ways and pedestrian refuge islands so that they are fully accessible by all users in terms of access points and gradients, in accordance with AS 1428 (Part 1 to 4 Design for access and mobility).
8. Footpaths must take visual priority over laneway and driveway crossovers.
9. Paving units or colour are encouraged to enhance the contrast between carriageway and crossing.
10. Place bicycle racks in clusters clear of pedestrian travel paths, and locate share bike parking adjacent to traditional bicycle racks with rack space left free for regular bicycles that need to be locked to a fixed point.

Figure 4.25 – Menangle Park Pedestrian and Cycle Network Plan

4.6 Public Domain, Parks and Community Infrastructure

Objectives

a. Create a network of open spaces, focal points and recreation and community facilities which meet the needs of the future residents and workers of Menangle Park.
b. To provide places and spaces that are accessible to all which accommodate a range of activities for residents and visitors.
c. To establish open spaces that promote local character, place making and identify as an interconnected network of open space including parks, squares and streets.
d. To incorporate environmentally sensitive areas such as riparian land, bushland and archaeologically sensitive sites into the open space network and provides appropriate protection and management mechanisms.
e. To ensure that public domain elements such as street trees, paving, street furniture, lighting and signage contribute to a consistent street character.
f. Create a living and working environment that promotes health, wellbeing, active living and sociability.
g. Optimise access and connectivity to all public open spaces, with a focus on walkability and cycle network.
h. Increase the urban tree canopy through high quality active and passive open space, riparian corridor and tree lined streets that enhance connectivity and landscaping.
i. Incorporate water sensitive urban design and other sustainable development practices in the creation of the public domain.

Controls

1. The open space network for Menangle Park is to be provided in accordance with Figure 4.26 below.
2. The open space network shall be connected via a network of pedestrian and cycle links focused along the riparian corridors as per Figure 3.1 below.
3. A Development Application for subdivision incorporating open space should be accompanied by a landscape plan where the park is to be constructed as 'works in kind'.
4. Perimeter streets are generally to be provided on 2-3 sides of an open space unless where a street frontage is not provided the development must front the park to provide surveillance.
5. Incorporate public art in open space areas where appropriate artwork should serve a dual role (e.g. as play equipment for children, informal seating, or a marker for a meeting place).
6. Riparian corridors and conservation areas are to provide opportunities for pedestrian and cycle ways, fitness trails and additional open space in a manner that maintains the environmental significance of these areas. A range of themed elements such as boardwalks, eco-pathways, and educational tracks should be utilised in appropriate locations (i.e. within the riparian corridor buffer).
7. Where parks are to incorporate interpretations of/or Aboriginal or European cultural heritage items, a public art strategy is to be submitted to ensure they are sensitively designed in accordance with the following provisions:
    a. for Aboriginal Heritage, areas identified in Figure 3.5 of this DCP.
    b. for European Cultural Heritage, the Conservation Management Plan, Interpretation Plan and Vegetation Management Plan as described in Section 3.12 of this DCP.
    c. all new plantings shall be in accordance with Council's Prescribed Trees and Preferred Species list contained in Appendix 1 of this DCP.
    d. landscape materials and design should respond to an identified planting palette.

e. street furniture, lighting, paving etc. should be of a contemporary design and reflect the local environmental character of the Precinct as well as interpretation initiatives (where appropriate).
f. the 'Silos' of Menangle Park are to be interpreted into the Public Domain.

8. A street tree planting plan is required to be submitted for subdivision Development Applications.
9. Street trees will be required to be planted at the time of subdivision construction.
10. Street tree planting is to be provided to all streets with a spacing of between 7-10 metres, with a minimum of one tree per lot frontage. Corner lots will have a minimum of two street trees. The location of street trees must complement the proposed driveway locations as demonstrated on plans and BSEP, where required.
11. An Arborist report prepared by a suitably qualified Arborist with an AQF 5 level accreditation, shall be provided with all applications proposing to remove trees or within close proximity to, detailing measures to be taken to ensure tree protection during construction.
12. Demonstrate the potential to double the existing (including proposed) canopy coverage over public landscaped areas (including street trees) from planting within 15 years from the completion of development.
13. A wayfinding signage strategy is to be provided to guide the provisions of wayfinding signage for development within Menangle Park, this strategy is to include:
    a. identification of locations within a building or external space,
    b. key places along a journey, including green links, arrival points, and destinations,
    c. passive and public transportation,
    d. opportunities to embed and enrich journeys and destinations with cultural meanings (i.e. Aboriginal languages, places of significance and stories).
14. The following principles are to be taken into consideration in the location of public parks:
    a. parks are to be located as focal points within the residential neighbourhoods. All dwellings are to be located within 400m from a public park.
    b. parks should be located within close proximity to community and education facilities and be highly accessible and linked by pedestrian and cycling networks.
    c. parks should be located and designed to accommodate remnant vegetation and where appropriate, should be linked to and integrated with riparian corridors,
    d. should be bordered generally, by streets on all sides with houses orientated towards them for surveillance.
15. The detailed design of public parks is to consider:
    a. the need for a range of play spaces and opportunities that cater for a range of ages.
    b. the provisions of adequate parking, lighting and waste management facilities,
    c. the inclusion of interpretive signage detailing local history, Aboriginal cultural values, environmental education themes and the like,
    d. the provision of amenities such as seating and shade structures, drinking fountains, street lighting, street and information signs, planter boxes, feature fencing and the like,
    e. CPTED Strategy which includes security cameras at key locations with parks to ensure coverage of primary movement and play zones,
    f. technology and tools to construct and operate new innovative infrastructure more efficiently and sustainably. Including the supply and installation of the Smart Lighting Network to Council's specifications.

Figure 4.26 – Menangle Park Open Space Network

4.7 Crime Prevention through Environmental Design

Objectives

a. To ensure the siting and design of buildings and spaces through casual surveillance, so as to decrease opportunities for crime and enhance safety.
b. To ensure that development encourages people to use streets, parks and other public places without fear of personal risk.
c. To ensure the design of publicly accessible areas (e.g. paths) encourages a sense of community ownership of open and public space.

Controls

1. Buildings should be designed to overlook streets, lanes and other public or communal areas to provide casual surveillance. The location of habitable windows are to be orientated to overlook the primary and secondary street frontages.
2. The design of all development, in particular, the public domain and community facilities is to enhance public surveillance of public streets and open space/conservation areas.
3. For residential development, the use of roller shutters other than garages are not permitted on doors and windows facing the street. Any security railings must be designed to complement the architecture of the building.
4. Developments are to avoid blank walls facing streets and creating areas for concealment.
5. Pedestrian and communal areas are to have sufficient lighting to ensure a high level of safety. These areas must be designed to minimise opportunities for concealment.
6. All development must aim to provide casual surveillance to the street as a means of passive security. This should be achieved by maximising outlooks and views however, minimising the overlooking of neighbouring properties. Opportunities for casual surveillance from dwellings are to be incorporated into the design of shared driveways and where rear access is proposed from laneways.
7. All developments are to incorporate the principles of Crime Prevention through Environmental Design (CPTED). Development Applications for subdivision, public open space and community facilities are to include a formal crime risk (CPTED) assessment.

5. Residential Development

5.1 Site Responsive Design

5.1.1 Site Analysis

Site analysis for each individual lot is an important part of the design process. Development proposals need to illustrate design decisions which are based on careful analysis of the site conditions and their relationship to the surrounding context. By describing the physical elements of the locality and the conditions impacting on the site, opportunities and constraints for development can be understood and addressed in the design.

The Site Analysis Plan should show the existing features of the site and its surrounding area, together with supporting written material. At a minimum the Site Analysis Plan must show the following features:

- the position of the proposed development in relation to site boundaries and any other structures and existing vegetation and trees on the site;
- the siting, design and layout of the proposed site coverage plan and first floor plan (see Figures 5.1 - 5.2);
- any easements over the land;
- the location, boundary dimensions, site area and north point of the land;
- location of existing street features adjacent to the property, such as trees, planting, street lights;
- contours and existing levels of the land in relation to buildings and roads;
- whether the proposed development will involve any changes to existing site levels;
- location and use of buildings and structures on sites adjoining the land; and
- a stormwater concept plan (where required).

5.1.2 Sustainable Building Design

Objectives

a. To maximise microclimate benefits to residential lots,
b. To enhance streetscape amenity and ensure an appropriate standard of landscaping,
c. To minimise energy usage and greenhouse emissions and encourage the adoption of renewable energy initiatives,
d. To minimise consumption of potable water for non-potable uses, minimise site runoff and promote stormwater re-use, and
e. To minimise the use of non-renewable resources and minimise the generation of waste during construction.

Controls

1. New residential dwellings, including a residential component within a mixed use building and serviced apartments intended, or capable of being strata titled are to be accompanied by a BASIX Certificate and are to incorporate all commitments stipulated in the BASIX Certificate.
2. The design of dwellings is to maximise cross flow ventilation.
3. The positioning and size of windows and other openings is to take advantage of solar orientation to maximise natural light penetration to indoor areas and to minimise the need for mechanical heating and cooling.
4. Outdoor clothes lines and drying areas are required for all dwellings and must be accessed from the principle private open space.
5. Metal roofs and garage doors are to have a solar absorption rate equal to or below 0.65 and tile roofs are to have a solar absorption rate equal to or less than 0.80 as classified by the National Construction Code. This selection is to be reflected in the BASIX report submitted with the DA.

6. All Development Applications are required to provide an external colours and materials schedule.

5.2 Dwelling Design Controls

5.2.1 Environmental Living, Large Lot and Low Density Residential

The following controls apply to residential development in the RU2 Rural Landscape, E4 Environmental Living, R5 Large Lot Residential and R2 Low Density Residential zones.

Objectives

a. Provide a genuine diversity of contemporary dwellings on traditional low density and large lots.
b. Deliver housing which is site responsive and sensitive to the natural and physical environments.
c. Encourage quality-designed dwelling houses that make a positive contribution to the streetscape and amenity of the neighbourhood.

Controls

1. Dwellings in the R2 Low Density Residential zone shall comply with the requirements set out in Table 5.1 below.
2. Dwellings in the RU2 Rural Landscape, E4 Environmental Living and R5 Large Lot Residential zone shall comply with the requirements set out in Table 5.2.
3. The primary street facade of a dwelling should address the street and must incorporate at least two of the following design features:
    a. entry feature or porch;
    b. awnings or other features over windows (excluding roller shutters);
    c. balcony treatment to any first-floor element;
    d. recessing or projecting architectural elements;
    e. open verandah;
    f. bay windows or similar features; or
    g. verandas, pergolas or similar features above garage doors.
4. At least 1 habitable window is to be provided to the front façade of the dwelling for lots with a frontage of less than 12 metres. At least 2 habitable windows are to be provided in the front façade for lots with a frontage exceeding 12m in width.
5. The articulation zone is to occupy no more than 50% of the frontage, excluding any garage.
6. Corner lot development should emphasise the corner. The secondary street facade for a dwelling on a corner lot should address the street and must incorporate at least two of the above design features. Landscaping in the front setback on the primary street frontage should also continue around into the secondary street frontage.
7. Modulation of the façade should be integral to the design of the building, rather than an unrelated attached element.
8. Eaves are to provide sun shading and protect windows and doors and provide aesthetic interest. Except for walls built to the boundary, eaves should have a minimum of 450mm overhang (measured to the fascia board). Council will consider alternative solutions to eaves so long as appropriate sun shading is provided to windows and display a high level of architectural merit.
9. Carports and garages are to be constructed of materials that complement the colour and finishes of the main dwelling.
10. Streets should be fronted with a diversity of housing types and architectural styles to create an attractive street character.

11. Lots larger than 750m² are to provide minimum four (4) treesas part of the Development Application to improve overall canopy cover in Menangle Park.
12. Minimum length of articulation from front building line for corner lots is 4m, the secondary setback articulation is to be 2m from the boundary.
13. For lots equal to or less than 420m^2, at least 2 hours of direct sunlight is to be received to 50% of the PPOS area of the proposed dwelling between 9am and 3pm on 21 June.
14. For lots greater than 420m^2, at least 3 hours of direct sunlight is to be received to 50% of the PPOS area of the proposed dwelling between 9am and 3pm on 21 June.
15. Applications for small lot housing must demonstrate opportunities for landscaping within the front and rear setback areas. The planting of at least two site tree should be provided as part of the application for the dwelling unless it can be sufficiently demonstrated that tree planting is not feasible due to other site constraints.

Table 5.1 – Dwelling Controls for the R2 Zone

Criteria	375-≤420 m^2	421-≤600 m^2	601 – ≤750 m^2
Setbacks (Min / m) to wall			
Primary Street	4.5m	4.5m	4.5m
Articulation Encroachment Zone	1m	1m	1m
Garage to Primary (Front)	5.5m	5.5m	5.5m
Side	900mm	900mm	1.5m
Rear	4m (ground floor) 6m (first floor)	4m (ground floor) 8m (first floor)	6m (ground floor) 8m (first floor)
Secondary Street Setbacks	3m	3m	3m
Maximum Site Coverage	65%	60%	60%
Maximum Upper Floor Area (UF:GF)	75%	70%	50%
Minimum Landscaped Area	25%	25%	30%
Minimum Principal Private Open Space (PPOS)	20m^2	25m^2	30m^2
Minimum Width POS – directly accessible from internal living areas, can include alfresco's	4m	5m	5m

Minimum No. of Car Parking Spaces (on site)	1 – 2 bedrooms = 1 car parking space 3+ bedrooms = 2 car parking spaces		
Maximum Garage Door Width	3.2m for lots with a lot width between 10-12m 6m for lots with a lot width greater than12m		
Outbuilding Maximum Floor Area	5m^2	15m^2	25m^2
Outbuilding Side and Rear Setbacks	900mm	900mm	900mm
Outbuilding Maximum Height	4.8m	4.8m	4.8m
Alfresco's (minimum)	3m x 4m	4m x 5m	5m x 5m
Internal Storage	Linen Press	Linen Press + 2m^3	Linen Press + 6m^3

Table 5.2 – Dwelling Controls for the RU2, E4 and R5 Zones

Criteria	750 – ≤1,000 m^2	1,001 – ≤4,000 m^2	4,001 m^2 +
Primary Setback	5m	5-10m	10m
Side Setback	1.5m	3-5m	5m
Rear Setback	8m	10m	15m
Secondary Street Setback	3m	5m	10m
Maximum Site Coverage	50%	40%	20%
Minimum Landscaped Area	30%	40%	60%
Minimum Principal Private Open Space	50m^2	100m^2	150m^2
Minimum length of POS	5m	10m	10m
Garages and Car Parking	Minimum 2 car spaces		
	Two car garage permitted	Triple garages permitted on sites over 1,500 (third garage to be setback 1m behind double garage).	
Alfresco's (minimum)	6 x 6m		

5.2.2 Small Lot Housing in the R3 Medium Density Residential Zone

The following controls apply to small lot housing development in the R3 Medium Density Residential zone.

Objectives

a. Promote housing choice and affordability through the provision of innovative small lot housing which benefits from direct access to local amenity and public transport.
b. Deliver small lot housing which is site responsive and sensitive to natural and physical environments.
c. Encourage quality-designed small lot housing that makes a positive contribution to the streetscape and amenity of the neighbourhood.
d. Avoid homogenous designs and promote a genuine diversity of small lot housing.
e. Locate the smallest lots on collector roads and bus routes, around parks and close to community facilities.

Controls

1. Dwellings in the R3 Medium Density Residential zone shall comply with the requirements set out in Table 5.3 below.
2. Streets should be fronted with a diversity of housing types and architectural styles to create an attractive street character.
3. The primary street facade of a dwelling should address the street and must incorporate at least two of the following design features:
    a. entry feature or porch;
    b. awnings or other features over windows;
    c. balcony treatment to any first-floor element;
    d. recessing or projecting architectural elements;
    e. open verandah;
    f. bay windows or similar features; or
    g. Verandas, pergolas or similar features above garage doors.
4. At least 1 habitable window is to be provided to the front façade of the dwelling for lots with a frontage of less than 12m..
5. Corner lot development should emphasise the corner. The secondary street facade for a dwelling on a corner lot should address the street and must incorporate at least two of the above design features. Landscaping in the front setback on the Primary street frontage should also continue around into the secondary street frontage.
6. Applications for small lot housing must demonstrate opportunities for landscaping within the front and rear setback areas. The planting of at least two site tree should be provided as part of the application for the dwelling unless it can be sufficiently demonstrated that tree planting is not feasible due to other site constraints.
7. Modulation of the façade should be integral to the design of the building, rather than an unrelated attached element.
8. Eaves are to provide sun shading and protect windows and doors and provide aesthetic interest. Except for walls built to the boundary, eaves should have a minimum of 450mm overhang (measured to the fascia board). Council will consider alternative solutions to eaves so long as appropriate sun shading is provided to windows and display a high level of architectural merit.
9. Carports and garages are to be constructed of materials that complement the colour and finishes of the main dwelling.

10. Alfresco's are required to be within the building footprint/roofline and are to be demonstrated on the proposed floor plans. Dwellings that do not propose to construct an alfresco are required to demonstrate that an alfresco space is achievable in the future that does not encroach the rear setback.
11. For lots greater than 420m^2, at least 2 hours of direct sunlight is to be received to 50% of the PPOS area of the proposed dwelling between 9am and 3pm on 21 June.
12. Corner lot development should emphasise the corner. The secondary street facade for a dwelling on a corner lot should address the street and must incorporate at least two of the above design features. Landscaping in the front setback on the primary street frontage should also continue around into the secondary street frontage.

Table 5.3 – Dwelling Controls for the R3 zone

Criteria	Rear Loaded	300-<420 m^2
Setbacks (Min / m) to wall		
Primary Street	3m	3m
Articulation Encroachment Zone	1m	1m
Garage to Primary (Street)	N/A	4m
Side	Side A: 0 Side B: 900mm	900mm
Rear	0.5m (rear access garage)	4m (ground floor) 6m (first floor)
Secondary Street Frontage	3m	3m
Maximum Site Coverage	75%	65%
Upper Floor Area (UF:GF)	85%	80%
Minimum Landscaped Area	25%	25%
Minimum Principal Private Open Space (PPOS)	16m^2	20m^2
Minimum Width POS – directly accessible from internal living areas, can include alfresco's	4m	4m
Minimum No. of Car Parking Spaces	1 – 2 bedrooms = 1 car parking space 3+ bedrooms = 2 car parking spaces	
Maximum Garage Door Width	Subject to Merit Assessment	

5.2.3 Dwelling Height, Massing and Siting

Objectives

a. To ensure development is of a scale appropriate to protect residential amenity.
b. To ensure building heights achieve built form outcomes that reinforce quality urban and building design.

Controls

1. Dwellings must bea maximum of 2 storeys high. Council may permit a 3rd storey if it is satisfied that:
    a. the dwelling is located on a prominent street corner; and
    b. the dwelling is located adjacent to a neighbourhood or local centre, public recreation or drainage land, a golf course, or a riparian corridor; and
    c. the dwelling is located on land with a finished ground level slope equal to or greater than 15%, and is not likely to impact adversely on the existing or future amenity of any adjoining land on which residential development is permitted, having regard to overshadowing, visual impact and any impact on privacy; and
    d. is not a battle-axe allotment; and
    e. the third storey is within the roof line of the building (i.e. an attic).
2. All development is to comply with the maximum site coverage controls indicated in the relevant Tables 5.1-5.3.
3. Site coverage is the proportion of the lot covered by a dwelling house and the garage but does not include unenclosed balconies, driveways, verandas, porches, alfresco areas, garden sheds, etc.
4. The ground floor level shall be no greater than 1m above finished ground level.

5.2.4 Zero Lot Lines

1. The location of a zero-lot line is to be determined primarily by topography and should be on the low side of the lot to minimise water penetration and termite issues, they should be provided on lots with a frontage of less than 12.5m.
2. The maximum depth of a nominated zero lot line wall is 11m measured from the front building line of the dwelling. The zero lot wall lengths are to only consist of a garage and non-habitable area, or a tandem garage.
3. On all lots where a zero-lot line is permitted, the side of the allotment that may have a zero-lot alignment must be shown on the plan of subdivision.
4. Where a zero-lot line is nominated on an allotment on the subdivision plan, the adjoining (burdened) allotment is to include a 900mm easement for single storey zero-lot walls and a 1200mm easement for two storey zero-lot walls to enable servicing, construction and maintenance of the adjoining dwelling. No overhanging eaves, gutters or services (including rainwater tanks, hot water units, air-conditioning units or the like) of the dwelling on the benefitted lot will be permitted within the easement.

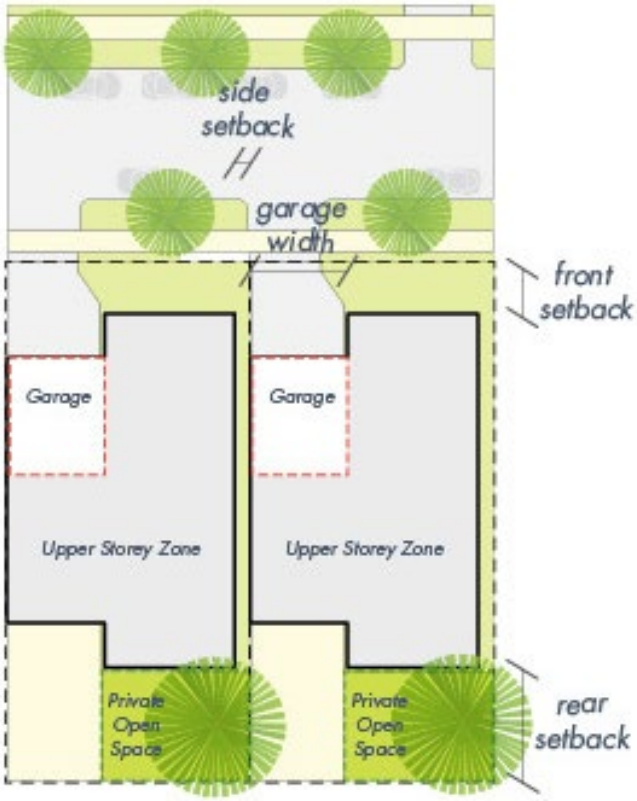


Figure 5.1 – Zero Lot Line Typology

5.2.5 Landscaped Area

Landscaped area is defined as an area of open space on the lot, at ground level, that is permeable and consists of soft landscaping, turf or planted areas and the like.

Objectives

a. To encourage the use of native flora species and low maintenance landscaping.
b. To contribute to effective stormwater management, management of micro-climate impacts and energy efficiency.
c. To ensure a balance between built and landscaped elements in residential areas.
d. To contribute towards the creation of attractive, tree-lined streetscapes where landscape elements are utilised to help articulate front façade.
e. To promote in-block tree planting where feasible to increase canopy cover and combat adverse urban heat island effects.

Controls

1. A landscaped plan is to be submitted with every application of development. (A landscape plan is not permitted for change of use, modifications not related to landscaping and where Council agrees unnecessary).

2. The Landscaped Plan is to illustrate spread of species, mature height and pot size, of plants and trees. The Landscape Plan is also required to demonstrate grass, impervious surfaces and bin location.
3. Artificial turf is not permitted.
4. The minimum soft landscaped area within any residential lot is to comply with the controls and principles in the relevant Tables 5.1 – 5.3.
5. At least 50% of the landscaped area required by Tables 5.1 –5.3 is to be behind the building line.
6. Surface water drainage shall be provided as necessary to prevent the accumulation of water.
7. Use of low flow watering devices is encouraged to avoid over watering. Low water demand drought resistant vegetation is to be used for the majority of landscaping, including native salt tolerant trees.
8. A minimum of two (2) trees must plantedwithin the front and/or rear setback. Tree species are to be a minimum pot size of 60L when planted and capable of growing between 4-6m in height at maturity.
9. Areas within 1.5m in width and depth are not considered within the parameters of a landscaped area and are not to be included in the landscaped area minimum size requirements.

5.2.6 Private Open Space

Objectives

a. To provide a high level of residential amenity with opportunities for outdoor recreation and relaxation.
b. To enhance the spatial quality, outlook, and usability of private open space.
c. To facilitate solar access to the living areas and private open spaces of the dwelling.

Controls

1. Each dwelling is to be provided with an area of Principal Private Open Space (PPOS) consistent with the requirements of the relevant Tables 5.1 – 5.3.
2. The location of PPOS is to be determined having regard to dwelling design, allotment orientation, adjoining dwellings, landscape features, topography.
3. The PPOS is required to be conveniently accessible from the main living area of a dwelling or alfresco and have a maximum gradient of 1:10. Where part or all of the PPOS is permitted as a semi- private patio, balcony or rooftop area, it must be directly accessible from a living area.
4. No private open space is to be provided at the front of the lot/dwelling.

5.2.7 Garages, Site Access and Parking

Objectives

a. To control the number, dimensions and location of vehicle access points.
b. To reduce the visual impact of garages, carports, and parking areas on the streetscape.
c. To provide safe, secure and convenient access to parking within garages, carports and parking areas, with casual surveillance of private driveways from dwellings and from the street.
d. To minimise conflict between pedestrians and vehicles at the junction of driveways and footpaths.
e. To provide convenient, functional and secure on-site parking for residents.

Controls

1. A minimum of one car parking space must be located behind the building façade line and shall be accessfrom primary street boundary.

Note: *A car space may include a garage, carport or other hard stand area constructed of materials suitable for car parking and access. The required car parking spaces specified above may be provided using a combination of these facilities, including use of the driveway (within the property boundary only) as a parking space.*

2. Driveways are to have the smallest configuration possible (particularly within the road verge) to serve the required parking facilities and vehicle turning movements and shall comply with AS2890.
3. Driveways are to have a minimum of 500mm landscaping on each side, particularly between the driveway and boundary.
4. To prevent parking over a public road verge, garages located on the secondary street frontage are to be setback either 2m or a minimum of 5.5m and integrated into the dwelling design. Garage setback from any secondary street boundary that is greater than 2m but less than 5.5m will not be accepted.

Note: *a 2m setback will not facilitate a car parking space.*

For front loaded garages:

1. Single garage doors should be a maximum of 3m wide and double garage doors should be a maximum of 6m wide. Exceptions to these requirements may be considered where an innovative design solution is demonstrated.
2. Minimum internal dimensions for a single garage are 3m wide x 5.5m deep and for a double garage 5.6m wide x 5.5m deep.
3. Garage doors are to be visually recessive through use of materials, colours, and overhangs such as second storey balconies.
4. Garage is to be setback a minimum 1m behind the front façade of the dwelling.
5. Triple garages are only permitted on lots with a minimum site area of 1,500m². The siting of triple garages is to have regard to the provisions in Table 5.2 and their design will be assessed on merit.

For garages accessed from a laneway or shared driveway:

1. Minimum garage door width of 2.4m (single) and 4.8m (double) is required.
2. Homogenous design of rear-loaded garages must be avoided through the incorporation of the following measures:
    a. Use of alternative colour schemes and materials to neighbouring properties.
    b. Offsets to side boundaries (i.e. between single and double rear loaded garages).
    c. Utilisation of garages and carports (i.e. single garage and single carport on lots over 4.5m in width).

5.2.8 Visual and Acoustic Privacy

Objectives

a. To site and design dwellings to meet user requirements for visual and acoustic privacy, while minimising the visual and acoustic impacts of development on adjoining properties.
b. To minimise the impact of noise of other non-residential uses such as parking and sport areas, restaurants and cafes and waste collection and goods deliveries.

Controls

1. Direct overlooking of main habitable areas and the private open spaces of adjoining dwellings should be minimised through building layout, window and balcony location and design, and the use of screening, including landscaping.
2. Living area windows with a direct sightline to principal private open space or to habitable room windows in an adjacent dwelling within 5 metres are to:
    a. be obscured by fencing, screens or landscaping, or
    b. be offset from the edge of one window to the edge of the other by a distance sufficient to limit views into the adjacent window; or
    c. have sill height of 1.5 metres above floor level; or
    d. have fixed obscure glazing in any part of the window below 1.5 metres above floor level.
3. Balconies are not permitted on the first floor of the side and/or rear portion of the dwelling except where the balcony faces a public road, or land zoned for public recreation.
4. The design of dwellings must minimise the opportunity for sound transmission through the building structure, with particular attention given to protecting bedrooms and living areas.
5. In attached and semi-detached 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.
6. No electrical, mechanical or hydraulic equipment or plant shall generate a noise level greater than 5dBA above background noise level measured at the property boundary during the hours 7.00am to 10.00pm and noise is not to exceed background levels during the hours 10.00pm to 7.00am.
7. Dwellings along sub-arterial or arterial roads or any other noise source, should be designed to minimise the impact of traffic noise, and where possible comply with the criteria in Table 5.4
8. The internal layout of residential buildings, window openings, the location of outdoor living areas (i.e. courtyards and balconies), and building plant should be designed to minimise noise impact and transmission.
9. Balconies are only permitted on facades where they are facing streets or open space. Upper floor balconies facing rear or side boundaries may be considered on their merits provided:
    a. appropriate privacy and amenity impacts to adjoining properties are addressed, and
    b. the balcony is setback a minimum of 8m from the rear boundary, and
    c. is a maximum floor area of 15m^2, and
    d. the balcony is to be unenclosed on three of the four sides.

Note: *Unenclosed balconies are defined as balconies that have a wall height of less than 1.4m (on three external faces), and incorporate materials that are predominately transparent. I.e. timber slats, glass.*

Table 5.4 – Noise Criteria for Residential Premises impacted by traffic noise

	Sleeping areas	Living areas
Naturally ventilated/ windows open to 5% of the floor area (Mechanical ventilation or air conditioning systems not operating)	LAeq 15 hours (day): 40dBA LAeq 9 hour (night): 35dBA	LAeq 15 hours (day): 45dBA LAeq 9 hour (night): 40dBA
Doors and windows shut (Mechanical ventilation or air conditioning systems are operating)	LAeq 15 hours (day): 43dBA LAeq 9 hour (night): 38dBA	LAeq 15 hours (day): 46dBA LAeq 9 hour (night): 43dBA

Notes: *These levels correspond to the combined measured level of external sources and the ventilation system operating normally. Where a naturally ventilated/windows open condition cannot be achieved, it is necessary to incorporate mechanical ventilation compliant with AS1668 and the Building Code of Australia. LAeq 1 hour noise levels shall be determined by taking as the second highest LAeq 1 hour over the day and night period for each day and arithmetically averaging the results over a week for each period (5 or 7 day week, whichever is highest).*

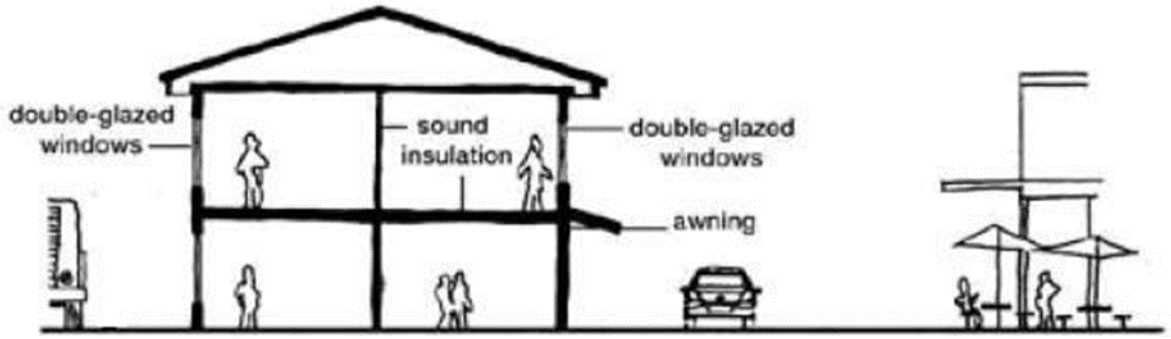


Figure 5.2 - Strategies for minimising noise transmission

10. For residential development adjoining sub-arterial and collector roads, where external traffic noise level limits will be exceeded at the façade of the residential dwelling nearest to the noise source, the development will be deemed to comply if:
    a. the principal private open space area of the residential premises complies with the relevant noise limit; and
    b. the internal noise levels identified in Table 5.4.
11. Architectural treatments are to be designed in accordance with AS3671 - Traffic Noise Intrusion Building Siting and Construction, the indoor sound criteria of AS2107 - Recommended Design Sound Levels and Reverberation Times for Building Interiors.

5.2.9 Fencing

Objectives

a. To ensure boundary fencing is of a high quality and does not detract from the streetscape,
b. To encourage the active use of front gardens through provision of a secure area,
c. To ensure that rear and side fencing will assist in providing privacy to private open space areas, and
d. To ensure that fence height, location and design will not affect traffic and pedestrian visibility at intersections.

Controls

1. Any fence forward of the building line to the primary street frontage or secondary side boundaries is to be a maximum of 1.2m high and with a predominantly open character. The design of the fence is also to integrate a letterbox.
2. Front fences and walls are not to impede safe sight lines for traffic.
3. Side and rear fences are to be a maximum of 1.8m high, where retaining walls are proposed they are to be integrated into the fencing height of 1.8m.
4. Boundary fencing not visible from the street is required to be a maximum of 1.8m high and must finish 6.5m from the front boundary and return to the side wall of the home, including an integrated side gate.
5. On corner lots or lots that have side boundaries adjoining open space, drainage or a road; the front fencing style and height is to be continued along the secondary street or open space/drainage land frontage to a minimum of 8.5m from the primary street boundaryg. Principles for corner lots are illustrated in Figure 5.4.
6. On corner lots and boundaries that adjoin open space, fencing is to be of a high quality material and finish. The design of the fencing is to permit casual surveillance of the public space by limiting fence height to 1.2m or by incorporating see through materials or have a transparency ratio of 3:1 transparent: solid for the portion of the fence above 1.2m high.
7. Pre-painted steel or timber paling or lapped/capped boundary fencing is not permitted adjacent to open space or drainage land or on front boundaries.
8. Fencing that adjoins mews or rear access ways is to permit casual surveillance.
9. Where there is a retaining wall on a front boundary of a lot the front fence should be setback 1m from the top of the retaining wall.
10. Consideration is to be given to potential overshadowing to adjoining properties where side and/or rear boundary fences are to be located on top of retaining walls on the respective boundary, where privacy is of concern Council may support an increase in fencing to 2.1m.

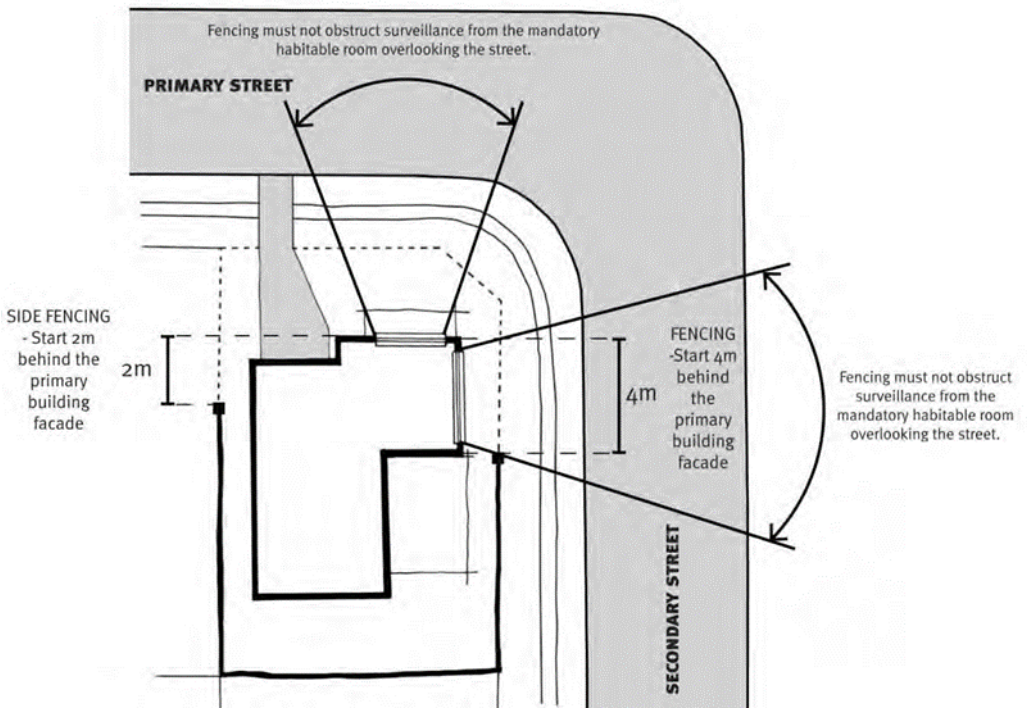


Figure 5.31 - Fencing design for corner lots

5.2.10 Cut, Fill and Retaining

Objectives

a. To ensure that retaining walls are structurally sound to achieve long term structural integrity.
b. To ensure slope stabilisation techniques are implemented to preserve and enhance the natural features and characteristics of the site and to maintain the long term structural integrity of any retaining wall.
c. To ensure that any retaining walls located on the property boundary have the appropriate written legal agreements in place i.e. easements to enable the access to repair and/or maintenance of retaining walls.
d. To ensure the retaining wall are located to minimise any potential stormwater, visual, amenity or overlooking impact on adjoining properties or on the public domain.
e. To guide the design and construction of low height and aesthetically pleasing retaining walls through the regulation of acceptable materials, colours and finishes.

5.2.10.1 Cut and Fill Controls

1. Any cut and fill works will require the submission of a Cut and Fill Management Plan that details the full extent, depth and volume of any cut, and fill proposed by the development. The plan shall show existing and proposed surface level contours, and depths categorised, at intervals no greater than 200mm.
2. Earthworks shall be undertaken to a maximum of 600mm excavation or fill from the natural ground level of the property. A variation may be considered on merit, should a detailed variation request be provided that has appropriate regard to topography,amenity,privacy etc/

3. Any excavation within the zone of influence of any structure requires a 'dilapidation report' prepared by suitably qualified person. This report is to demonstrate adequate measures are implemented to protect the integrity of the structure.
4. No filling shall be permitted within 2m of any property boundary unless sufficient details are submitted to Council illustrating how privacy, overshadowing, stormwater management and access issues have been addressed to Council's satisfaction.

5.2.10.2 Retaining Wall Controls

1. All retaining walls must be accurately identified on development application plans. Plans must include setbacks, heights, widths and materials used in any existing or proposed retaining walls that are to form part of any consent issued. Council will not accept notations on plans such as 'retaining wall to be done by owner'.
2. Any retaining wall exceeding 600mm shall be designed by a suitably qualified person. Retaining walls higher than 900mm shall be designed by a structural engineer with engineering specifications being submitted at the time the development application is lodged.
3. To limit the overall height impacts of retaining walls on sloping sites, terracing of retaining walls is required for retaining walls with a minimum height of 1m.
4. A 500mm wide planted landscaped strip must be provided between any terraced retaining walls.
5. Balustrading will be required in accordance with the Building Code of Australia, to ensure the safety of the public where the retaining wall adjoins a public place and where there is a change in level greater than 1m to the surface beneath.
6. Any retaining wall shall not adversely alter surface flows to ajoining private land.
7. Adequate provision must be made for the appropriate disposal of surface and subsurface drainage associated with the erection of retaining walls. The method of disposal must be approved by Council that may include:
   a. the connection of sub-surface drainage from the retaining wall to the street gutter, or
   b. disposal via properly constructed absorption trench/es on the property containing the retaining wall, or
   c. disposal via piped or channelled drainage easement/s, or
   d. other means as determined by Council.

   Note: *All surface and sub-surface drainage must not discharge directly onto other adjoining properties unless a drainage easement has been created.*

5. Retaining walls are to be constructed from natural stone, coloured concrete sleepers and rendered or feature block walls/brick if consistent with dwelling materials. Treated pine sleepers are not permitted.
6. A retaining wall shall be restricted to a maximum height above or depth below existing natural ground level of no more than:
   a. 500mm where retaining walls are visible from the street frontage or a public open space; and
   b. 600mm at any distance up to 900mm setback from any side or rear boundary); or
   c. 1m, if the toe of the retaining wall or embankment is setback greater than 900mm from any side or rear boundary.

   Note: *Council may consider a variation to the abovementioned maximum height/depth of a retaining wall, in cases where the subject site is steeply sloping and the proposed retaining wall is setback more than 1m from any side or rear common property boundary. Additionally, appropriate structural design details and in some cases, terracing or landscape screening will be required.*

8. Any retaining wall or combined fence and retaining wall within the primary front setback must have a minimum setback of 450mm from the front property boundary.
9. Any retaining wall or combined fence and retaining wall within the primary front setback must not exceed a combined height of 1.2 metres from the existing natural ground level. The combined fence and retaining wall shall be restricted to an open style for at least 50 per cent of the upper 2/3 of the area of the fence and any brick or other solid portion of the fence above 600mm being not more than 250mm wide.
10. The height and design of any proposed fence on top of a retaining wall must be included in the consideration of the overall height of the fence and retaining wall.
11. Open window face type retaining walls must not be permitted within 1.5 metres of an adjoining property boundary. These include crib block and similar type walls that permit the free flow of solid material through the wall.
12. Any retaining wall proposed directly on or within 450mm from a side boundary (irrespective of being within the front or rear yard) must provide the written consent of the adjoining affected land owner at the time any development application is lodged with Council. The written consent should agree to not only the lodgement of the development application but to agree to the creation of any easements created over the land for the purpose of access and maintenance of the proposed retaining walls.

5.2.10.3 Basement Controls

1. Basement and Semi Basement garages may only be permitted whereby Council is satisfied of the following:
   a. There will be no adverse impacts on privacy and amenity to the neighbouring dwellings,
   b. No part of the basement protrudes more than 1m above the existing ground level,
   c. The allotment has a slope of no more than 3m with the front boundary being the lowest existing ground level (unless the rear setback adjoins open space), and
   d. The proposed development does not exceed more that two storeys above ground level at any time,
   e. Its sole purpose is for achieving but not exceeding Council's minimum car parking requirements, providing additional residential storage and/or for non-habitable purposes (i.e. home gym, workshop), and
   f. Has a maximum gross floor area of 45m^2 (not inclusive of staircase).

5.3 Additional Controls for Certain Dwelling Types

5.3.1 Attached Dwellings

Objectives

a. To ensure that the development of attached or abutting dwellings creates an architecturally consistent street character.

Controls

1. The maximum number of attached dwellings is six (6) in a set.
2. Attached Dwellings must not exceed site coverage stipulated where applicable in Tables 5.1 – 5.3.
3. Attached or abutting dwellings should have a pleasing rhythm and order when seen together as a group, rather than appear as a random arrangement of competing dwellings. Each dwelling should

benefit from the unified design of the whole form, a co-ordinated style and base colour palette. Individuality can be added as small details or accent colours, rather than strikingly different forms.

4. Garages for attached dwellings must be located and accessed from therear of the lot.

5.3.2 Secondary Dwellings, Studio Dwellings and Dual Occupancies

Controls for secondary dwellings, studio dwellings or dual occupancies are in part determined by whether the secondary, principal or dual occupancy dwelling is proposed at the time of the application or at some point in the future to be strata subdivided. A Strata subdivision creates the need for separate or common property dwelling entries, parking and open space to service each dwelling.

The controls that follow apply to all forms of secondary dwellings, studio dwellings and dual occupancies.

Objectives

a. To enable the development of a diversity of dwelling types which assists in contributing to the availability of affordable housing.
b. To promote innovative housing solutions that are compatible with the surrounding residential environment.
c. To ensure that the development is designed to complement the design of the principal dwelling and be subservient to the principal dwelling in terms of visual bulk and scale.
d. To minimise the impacts of development on the principal development and neighbouring properties with regards to view, privacy and overshadowing.
e. Ensure that room sizes within secondary dwellings are functional, of sufficient size and cater for the intended use of the secondary dwelling.
f. To provide casual surveillance to rear lanes.

5.3.2.1 Secondary dwellings and studio dwellings controls

1. Secondary dwellings and studio dwellings are to comply with the key controls in Table 5.5, and still address controls from Section 5 – Residential Development.
2. The principal and secondary dwelling (and all ancillary structures) must not exceed site coverage stipulated in Tables 5.1 – 5.3.
3. The maximum gross floor area of a secondary dwelling is 75m² and is to occupy a maximum of two bedrooms.
4. The maximum gross floor area of a studio dwelling is 45m² and is to occupy a maximum of one bedroom.
5. The finishes, materials and colours of the secondary dwelling or studio dwelling are to complement the principal dwelling in its construction features.
6. For secondary dwellings and studio dwellings, windows and private open spaces must not overlook the private open space of any adjacent dwellings including the principal dwelling. Windows that impact visual privacy shall have either have obscured glazing, be screened or have a minimum sill height of 1.5m above floor level.
7. Where the secondary or studio dwelling is built to a zero-lot line on a side boundary, windows are not to be located on the zero lot wall unless that wall adjoins a laneway, public road, public open space or drainage land.

8. Studio dwellings are to have balconies or living areas that overlook laneways for casual surveillance.
9. Rear garages with secondary or studio dwellings may have first level balconies facing the lane provided the balcony remains within the lot boundary. Where 2m deep, overhanging balconies for private open space requirements of studio dwellings are located along a lane, the application must demonstrate the garage setback below the balcony avoids creating negative space for illegally parked cars, trailers, bins etc.
10. Where a secondary or studio dwelling is built over a rear garage and separated from the upper levels of the principal dwelling, there must be a minimum separation of 5m between the upper floor rear façade of the principal dwelling and the secondary or studio dwelling.
11. Studio dwellings are to be located at the rear of the lot only where the lot has access from a rear lane or secondary street on a corner lot.
12. Studio dwellings must comply with separation controls nominated in Australian Standards and the National Construction Code.
13. Studio dwellings are not permitted where the principal dwelling is an attached dwelling, unless:
    a. the studio dwelling is located above a rear loaded garage; and
    b. the studio dwelling has direct access to a public road or laneway; and
    c. garbage and mail facilities are accessible by residents and by service vehicles.
14. Balconies of studio dwellings shall be recessed and screened so that the view lines are to the rear of the allotment and not to adjacent properties. Screening shall be provided by durable fixed privacy screens, minimum 1.8m in height as measured from finished floor level and a minimum of 75% obscured.

Table 5.5 – Controls for Secondary Dwellings and Studio Dwellings

Element	Secondary Dwelling	Studio Dwelling (strata)
On-site car parking	No additional car parking space required.	One additional dedicated on-site car parking space. Car parking space to be located behind building facade line of principal dwelling. Car parking space not to be in a stacked configuration.
Principal Private open space	No separate private open space required.	Balcony accessed directly from internal living area having minimum 8.0m² balcony with 2m minimum wifth accessed directly from internal living area.
Subdivision	Subdivision from principal dwelling not permitted.	Strata title subdivision only from the principal dwelling on the land

Element	Secondary Dwelling	Studio Dwelling (strata)
Access	A Clear line of access of minimum 900mm to street or laneways is to be provided to the Secondary Dwelling.	Access to be separate from the principal dwelling and is to front a public street, lane or shared private access way or Combined access for the principal dwelling and studio dwelling to be through communal land as shown on the strata plan.
Services and facilities	No separate services or facilities required.	Provision for separate services, such as waste collection, and an on-site garbage storage area so that bins are not visible from public street or laneway. Services are to be located on a street address that is able to be accessed by garbage collection and mail delivery services.

5.3.2.2 Dual occupancies controls

1. Dual occupancies are to comply with the controls in Section 5 – Residential Controls, except where the controls in this control differ, in which case the controls in this section take precedence.
2. Dual Occupancies must not exceed site coverage stipulated in Tables 5.1 – 5.3 and are to be calculated as prior to subdivision (existing lot).
3. The design of both dwellings in a dual occupancy development is to be consistent in finishes, materials and colours however, should differentiate on construction façade features.
4. Dual occupancy development is not permitted on a lot that contains an attached dwelling, or on a battle-axe lot.
5. Part of the dual occupancy dwelling may be permitted at the rear of the lot (i.e. behind thedwelling that has frontage to a principal street, whether attached or detached to that dwelling) only where:
   a. each dwelling has direct pedestrian and vehicle access to a public road, and
   b. garbage and mail facilities are accessible by service vehicles and by the occupants of the dwellings.
6. Where the dual occupancy dwellings are to be strata subdivided:
   a. private open space is to be provided for each dwelling in accordance with the relevant controls in Tables 5.1 –5.3, or
   b. shared private open space is to be provided equivalent to 15% of the site area and shown as communal space on the strata plan, and a minimum area of private open space of 10m² with a minimum dimension of 2.5m is to be provided for each dwelling.
7. The minimum landscaped area on a lot containing a dual occupancy development is to be 25% of the site area.
8. Where practical for front loaded driveway access, shared driveway crossings of the nature strip are to be provided to service both dwellings.
9. Dual Occupancy development in large lot, rural and environmental zones must ensure that the dwellings are physically attached by way of a common wall under the same roofline and have the general appearance of a single dwelling-house (rather than two individual dwellings) when viewed

from the primary street frontage. Structures such as carports, breezeways, pergolas, covered awnings and the like are not acceptable as a mode of attachment.

5.3.3 Multi Dwelling Housing

Objectives

a. To ensure that the design of multi-dwelling housing is consistent with the character of residential areas within the Precinct.
b. To ensure the quality of multi-dwelling housing is of a high quality and contributes to the amenity of residents.

Controls

1. Multi-dwelling housing sites are to have direct frontage to a public road (i.e. not on battle-axe lots) and are encouraged on corner sites.
2. Multi-dwelling housing is to consider dwelling design, adjoining dwellings, landscape features, street trees, vehicle crossovers and the lot orientation.
3. Multi-dwelling housing is to comply with the controls in Table 5.6 and Section 5 – Residential Controls. Where the controls from Tables 5.1 – 5.3 differ, the below controls in Table 5.6 take precedence.

Table 5.6 – Controls for Secondary Dwellings and Studio Dwellings

Element	Controls
Site coverage (maximum)	50%
Landscaped area (minimum)	30% of site area
Principal Private open space (PPOS)	Min 16m² with minimum dimension of 3m per dwelling. 10m² per dwelling if provided as balcony or rooftop with a minimum dimension of 2.5m.
Front setback (minimum)	4.5m to building façade line; 1.0m to articulation encroachment zone
Corner lots secondary street setback (min)	2m
Side setback (minimum)	Ground floor 0.9m. Upper floor 0.9m
Rear setback (minimum)	4m (excluding rear lane garages) 0.5m to rear lane (garages)
Internal building separation distance (minimum)	5m (unless dwellings are attached by a common wall)

Car parking spaces	1 car parking space per dwelling, plus 0.5 spaces per 3 or more bedroom dwelling, plus 1 visitor space per 5 dwellings. Car parking spaces to be located behind building line or garages fronting the street mustbe set back a minimum of 1m from the building setback. Basement car parking arrangements must be provided for larger multi-dwelling housing developments (i.e. over 10 dwellings).
Garages and car parking dimensions (minimum)	Minimum dimension of a covered car parking space must be: 3m x 5.5m The minimum dimension of an uncovered car parking space must be: 2.5m x 5.2m Aisle widths must comply with AS 2890.1 1-2 bedroom dwellings will provide a minimum of 1 car space. 3 bedroom or more dwellings must provide at least 2 car spaces.

5.4 Other development in residential areas

5.4.1 Exhibition Homes and Exhibition Villages

Objectives

a. To ensure that exhibition homes and exhibition villages operate with minimal impact on surrounding residential areas, and
b. To ensure that exhibition homes and exhibition villages operate for a limited time after which they revert to a conventional residential environment.

Controls

1. Any subdivision of land shall be in accordance with the requirements of Part 5 – Residential Development.
2. Any development application for an exhibition home is to have two sets of plans submitted. A set detailing the proposed development for the purpose of an exhibition home, and a second set shall detail the reinstated function of a dwelling following the cessation of the exhibition home. (This is to include any driveway, security lighting, signage, landscaping, fencing and garage change.)
3. Once the exhibition home has ceased,any garages that have been used as a sales office is to be reinstated as a functioning garage with an appropriate garage door and associated driveway, prior to the release of an occupation certificate of the dwelling for residential purposes.
4. Any proposed street within an exhibition village may be held as one lot within the development until the cessation of the operation of the exhibition village. Subdivision and dedication of roads to Council must be completed prior to the use of dwellings for residential accommodation.
5. Exhibition villages should be located on collector roads or as close to collector roads as possible, with vehicle access from a collector road.
6. Exhibition homes/exhibition villages are not permitted:
   a. where access is from a street with a carriageway width of less than 9.0 metres.
   b. on streets which are cul-de-sacs.

7. Internal streets may be closed out of hours of operation only where the streets are not yet dedicated as public roads.
8. Exhibition homes must be provided with off-street parking for patrons in Table 5.7 below. This parking may be provided at the individual exhibition homes or at a centralised car park.

Table 5.7 – Controls for Exhibition Homes and car parking spaces

Number of Exhibition Homes	Number of Car Parking Spaces
1-5	3 per exhibition home
6-10	15 +2 exhibition homes over 5
11 or more	25 + 1 per exhibition homes over 10

9. Where a central parking area is provided it must:
   a. comply with Council's requirements for public car parking,
   b. be located within 200m of all exhibition homes by a continuous pedestrian pathway, and
   c. have an adaptable or intended use after the exhibition village ceases operation.
10. Where parking is provided at an individual exhibition home it must be constructed and finished in a way that will give the appearance of a private driveway or parking spot when the exhibition village concludes.
11. The hours of operation shall be limited to 8am to 6pm each day. During the operation of an exhibition home/exhibition village additional measures to maintain the privacy of adjoining residential development may be required.
12. Security lighting shall be provided in such a way to minimise any adverse impact on adjoining residential areas.
13. The operation of the exhibition village (including the use of designated off-street car parks) shall not cause offensive noise or affect the acoustic amenity of adjoining residents.
14. All works affecting public roads, including new driveways, access roads and intersection works are to be in accordance with the requirements of this DCP and the relevant Council's Engineering Design for Development (Guide).
15. Waste disposal facilities are required to be located adjacent to the driveway entrance of the site. Any structure involving waste disposal facilities shall be located as follows:
   a. setback one metre from the primary street setbackstreet,
   b. landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape, and
   c. not be located adjacent to an adjoining residential property.
16. Details of proposed signage are to be submitted with the Development Application for an exhibition village or home. Types of exhibition identification signs must be limited to:
   a. one pole/pylon sign having maximum dimensions of 3.5 (h) x 1.2 (w) per exhibition home.
   b. two wall signs having a maximum area of $1m^2$ per sign per exhibition home.
   c. signage is to be located wholly within the property boundary.

5.4.2 Childcare Centres

Objectives

a. To enable the provision of child care centres to address the needs of the local workforce within the zone.
b. To ensure the surrounding environment is acceptable for child care centres.

Controls

1. A child care centre located on an allotment of land that is accessed from a main road will not be supported.
2. Any application for a childcare centre must refer to Council's DCP (Volume 1 Part 8 of the Campbelltown (Sustainable City) Development Control Plan 2015) for controls that are applicable to the development.
3. Child care centres are to be designed in accordance with the *State Environmental Planning Policy (Educational Establishments and Child Care Facilities)* 2017 and the NSW Child Care Planning Guideline, August 2017

APPENDICES

APPENDICES

Appendix A. Glossary

Note: *definitions for terms are also included in the Dictionary contained within the relevant Environmental Planning Instrument (EPI), and in the event of any inconsistency, the definition in the SEPP's takes precedence over the definitions in this DCP.*

"**Abutting Dwelling"** means a building containing one dwelling, on a single block of land that is designed and constructed on a zero lot line immediately adjacent to another dwelling on a different lot that is also built to the zero lot line and is structurally independent of any other dwelling. See **Figure 5.32 Below.**

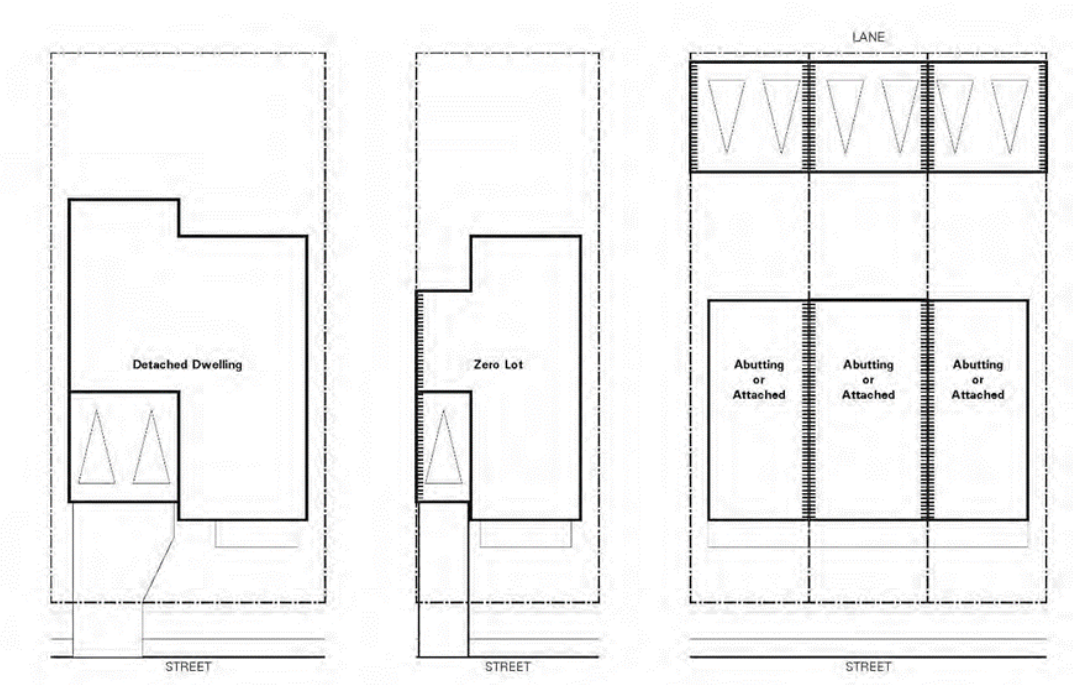


Figure 5.32 - Detached, zero lot line, abutting and attached dwellings

"Access Streets and Laneways" means to provide local residential access to a small number of dwellings and serve a shared vehicular-pedestrian-cyclist use.

Note: *They are intended to encourage a safe, low vehicle speed environment in which the residential function is dominant. Access streets function at the lowest level of the road hierarchy. They generally have development on one side and are located along drainage or open space reserves or along access-denied roads. The construction and dedication of access streets is the sole responsibility of the developer.*

"Articulation zone" includes verandahs, porches, awnings, shading devices, bay windows, pergolas and the like. A carport is not included aspart of the articulation zone.

"Active Frontages" means one or a combination of the following:

- entrance to retail;
- shop front;
- glazed entries to commercial and residential lobbies;
- café or restaurant if accompanied by an entry from the street;
- active office uses, such as reception, if visible from the street; and
- public building if accompanied by an entry.

"Attic" means a room within the main roof space of a building that has a 1.5m minimum wall height at edge of the room, a minimum 30-degree ceiling slope and does not incorporate or access a balcony.

"Attached dwellings" means comprise three (3) or more dwellings located on separate allotments that are joined by at least one common wall.

"Arterial roads" means major roads that carry the majority of inter-regional traffic. Vehicular access from adjacent land is denied ensuring both the efficiency of the road and the safety of road users.

"Building footprint" means the area of land measured at finished ground level that is enclosed by the external walls of a building.

"Collector roads" means roads marked as Collector Roads in figure Section 4.5. They are the main internal roads that carry local traffic through the residential neighbourhoods to the sub-arterial and arterial roads, and provide access to major attractors within the precinct such as retail, commercial and educational facilities.

"**Detached Dwelling**" means a building containing one dwelling, located on one allotment of land that is not attached to any other dwelling. **See Figure 5.33 below.**

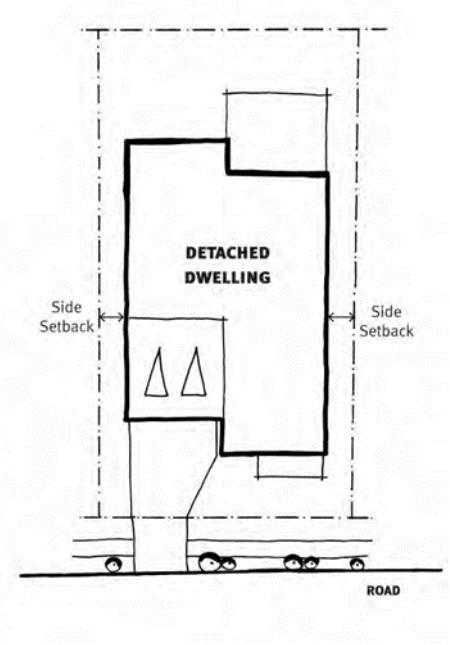


Figure 5.33 - Detached Dwelling

"Detached Studio" means a habitable building that is used for purposes ancillary to a dwelling house, such as a home office, entertainment area, art studio, or guest room and:

is established in conjunction with a dwelling, and

- is on the same lot of land as the dwelling house, and
- is separate from the dwelling house, and
- is not used as a separate domicile, and
- Does not contain any cooking facilities.

"Dual Occupancy" comprises two dwellings on a single allotment of land. The dwellings may be attached to each other or separate and detached.

Dual occupancy housing includes:

- the alteration or addition to an existing dwelling-house erected on an allotment so as to create two dwellings;
- the erection of another detached dwelling-house in addition to one already erected on an allotment, but only if not more than two dwellings will be created as a result of the development being carried out;
- The erection of a single building containing two dwellings on one allotment.
- The erection of two detached dwellings located on one allotment. The dwelling may or may not be strata subdivided. See Figure 5.34 below.

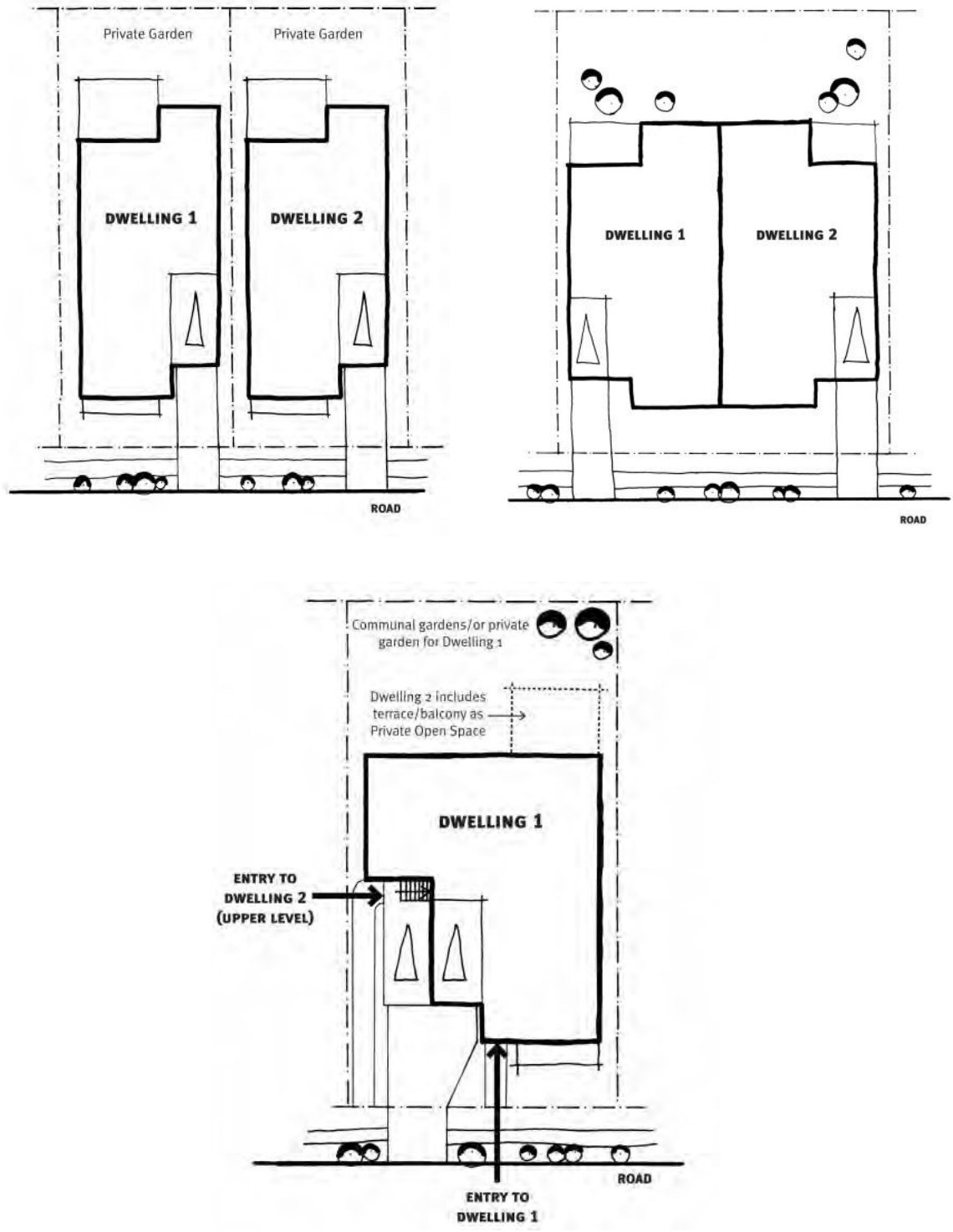


Figure 5.34 - Dual Occupancy Dwellings – detached; attached; two storeys

"Flood Planning Levels (FPLs)" means the combinations of flood levels (derived from significant historical flood events or floods of specific AEPs) and freeboards selected for floodplain risk management purposes, as determined by management studies and incorporated in management plans.

"Flood Planning Area" means the area of land below the FPL and thus subject to flood related development controls. The concept of flood planning area generally supersedes the 'flood liable land" concept in the 1986 Manual. Flood Prone Land is land susceptible to flooding by the PMF event. Flood Prone Land is synonymous with flood liable land.

"Floor Area" means the sum of the areas of each storey of a dwelling (including but ot limited to secondary dwelling and dual occupancy etc) and any carport, garage, balcony, deck, patio, pergola, terrace or veranda measured at a height of 1.4m above each floor level that is within the outer face of:

- the external walls of the dwelling house, and
- the walls of the carport, garage, balcony, deck, patio, pergola, terrace or veranda

But does not include the following –

- any part of an awning, blind or canopy that is outside the outer wall of a building,
- the eaves.

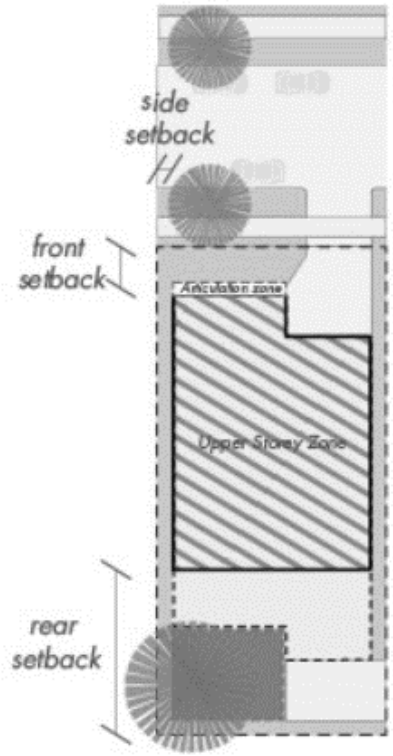


Figure 5.35 - Floor Area

"Habitable room" means any room or area used for domestic activities, including living, dining, family, lounge, bedrooms, study, kitchen, sun room, home entertainment room, alfresco room and play room.

"Non-habitable" means any room spaces of a specialised nature not occupied frequently or for extended periods, including bathrooms, toilets, pantries, walk-in wardrobes, corridors, lobbies, photographic darkrooms and clothes drying rooms.

"Landscaped area" means any part of a site, at ground level, that is permeable and consists of soft landscaping, turf or planted areas and the like. It does not include artificial turf, driveways, parking areas, hard paved drying yards or other service areas, swimming pools, tennis courts, undercroft areas, roofed areas (excluding eaves less than 450mm to fascia board), outdoor rooms, balconies, rooftop gardens, terraces, decks, verandahs and the like.

"Manor House" means a 2-storey building containing 4 dwellings, where:

- each storey contains 2 dwellings, and
- each dwelling is located on its own lot of land (being a lot within a lot within a strata scheme or community title scheme), and
- access to each dwelling is provided through a common or individual entry at ground level, but does not include a residential flat building or multi-dwelling housing.

"Outbuilding" means any of the following:

- balcony, deck, patio, pergola, terrace or veranda detached from a dwelling,
- cabana, gazebo, cubby house, garden shed, greenhouse, shed
- carport, detached garage,
- shade structure that is detached from dwelling,
- detached studio.

"Outdoor room" means an 'alfresco room' that is a semi enclosed space (at least 1 side open) located adjacent to a living/dining/kitchen area of a dwelling that is located within the main roof line of a dwelling.

"Pervious area" means the parts of the site where water is able to permeate the soil, and does not include any areas that are paved, roofed or otherwise covered with impervious materials.

"Principal dwelling" means the largest dwelling house on a lot, measured by gross floor area.

"Principal private open space" means the portion of private open space which is conveniently accessible from an internal living area of the dwelling, and which receives the required amount of solar access.

"Private open space" means the portion of private land which serves as an extension of the dwelling living area to provide space for relaxation, dining, entertainment and recreation. It includes an outdoor room.

"Riparian Corridor" means the riparian protection area as shown on the Riparian Protection Areas map within the applicable EPI.

"Secondary Dwellings" means dwellings that are located on the same parcel of land as another dwelling, but are separate to the principal dwelling, have a separate access and have a maximum internal floor area.

Note: *Secondary dwellings must form a part of the DA submission for the main dwelling and can not be strata subdivided. A studio dwelling that has its own separate access and parking can be strata subdivided at the time of DA approval or after the dwelling has been established.*

Types of secondary dwellings:

- *on grade studio unit (at ground level – See **Figures 5.36 – 5.37 Below**) within the principle dwelling lot. This is only permitted within detached dwelling lots;*
- *above garage (See **Figures 5.38 – 5.39 Below**). This is only permitted on lots that have garages with rear access.*

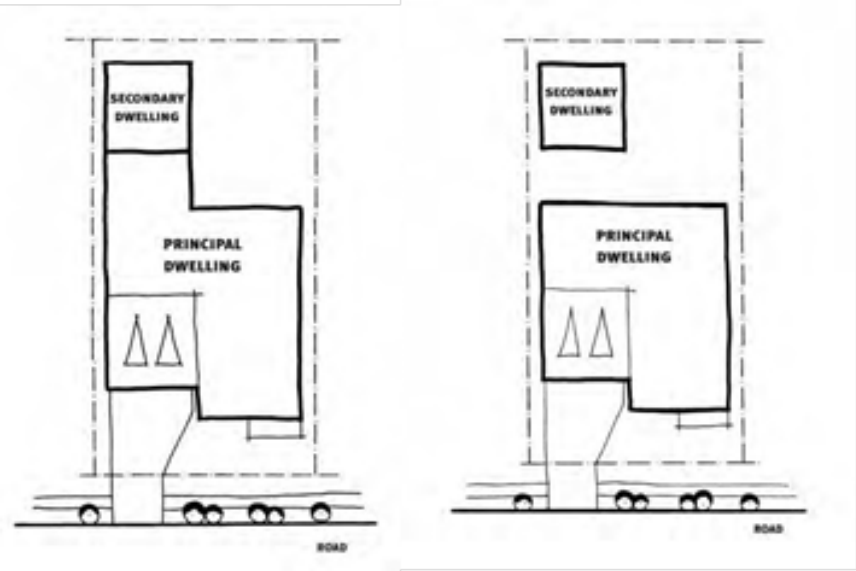


Figure 5.36 - Secondary Dwelling (at Ground Level)

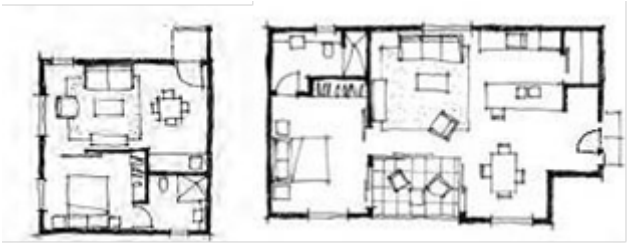


Figure 5.37 - Indicative Example of a Secondary Dwelling – on Ground Level

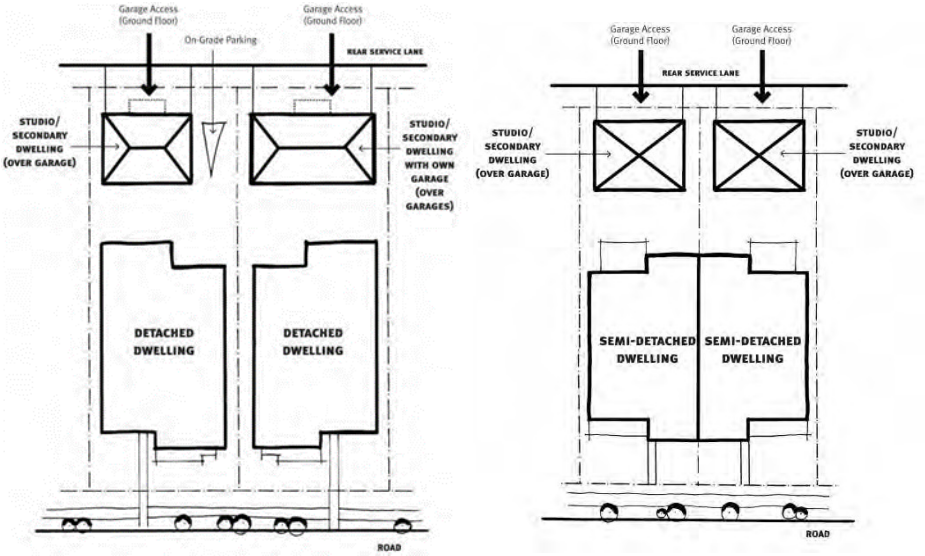


Figure 5.38 - Secondary or Studio Dwellings (above garages)

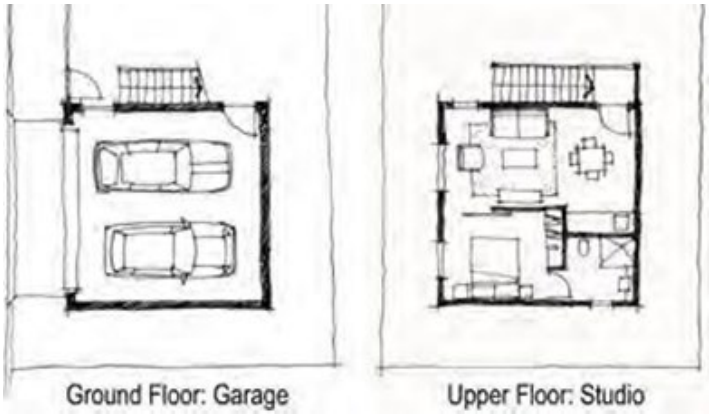


Figure 5.39 - Indicative example of a secondary dwelling above a garage

"Semi-detached dwellings" means two dwellings that share one common wall. The external appearance should have continuance of material and style, so the two dwellings combine to appear as one large dwelling. Refer to Figure 5.40 Below.

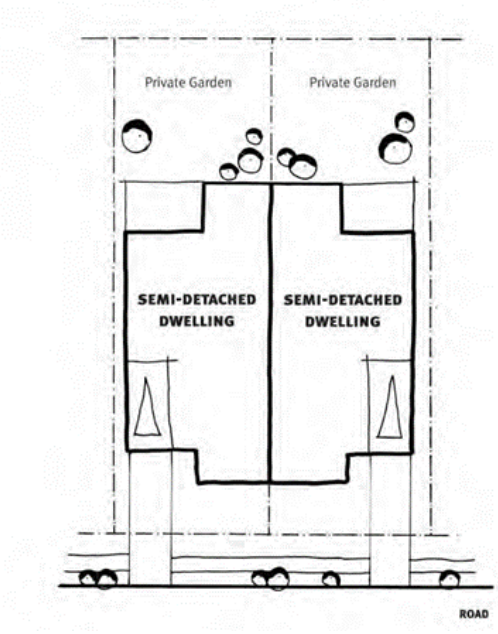


Figure 5.40 - Semi-Detached Dwelling

"Site coverage" means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement (that is not above existing ground level),
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- eaves,
- unenclosed balconies, decks, alfresco, pergola and the like

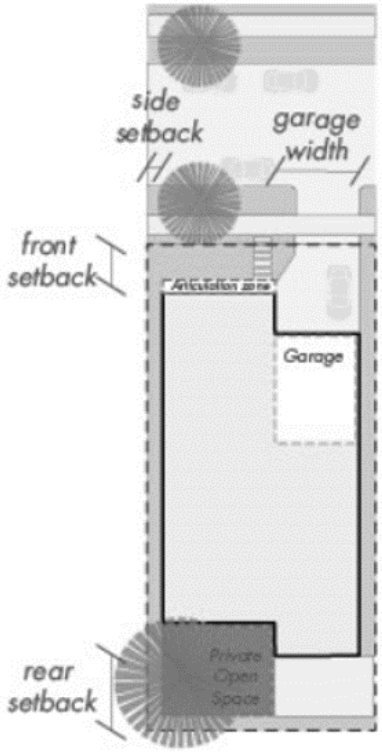


Figure 5.41 - Site Coverage

"Studio Dwelling" means a dwelling that:

a. is established in conjunction with another dwelling (the ***principal dwelling***), and

b. is on its own lot of land, and

c. is erected above a garage that is on the same lot of land as the principal dwelling, whether the garage is attached to, or separate from, the principle dwelling.

But does not include a semi-detached dwelling.

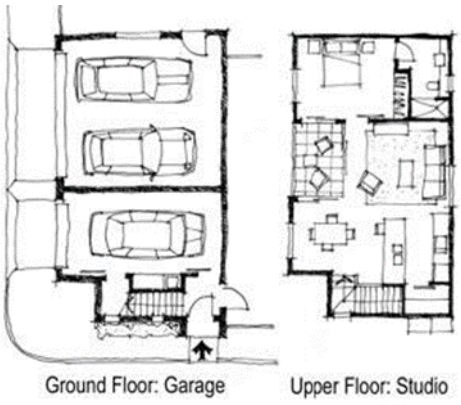


Figure 5.42 - Indicative example of a studio dwelling above a garage

"Town Centre Streets" means roads marked as Town Centre Boulevard in the relevant Section 4.5.

Note: *They are specially designed to create a pleasant and comfortable pedestrian environment. Amenity and safety is to be maintained through wide shaded footpaths, traffic calming measures and pedestrian crossings.*

"Walking Distance" means typically 400m or a 5-minute walk from a local destination or bus stop, or 800m or a 10 minute walk from a train station.

"**Zero Lot Line Dwelling"** is a building containing one dwelling, located on a single block of land, which is constructed with an exterior wall on one of its side boundaries but is not attached or abutting to any other dwelling.

Appendix B. Riparian Protection Area Control

1.0 Introduction

This Riparian Area within Stage 1 immediately adjoins the riparian corridor to the south separated by, and benefitting from, the Spring Farm Parkway. This area is characterised by the vegetation communities and native habitats found naturally along Howes Creek. The riparian corridor connects the community with healthy, natural recreation opportunities.

Approximately 540 residents (160- 200 dwellings) within a slightly lower density environment will benefit from close proximity to natural amenity and daily conveniences. This is the most diverse of the precincts delivering larger lots on slope, through to medium density product along the centrally located Green Spine and local parks. Key workers and affordable housing can be accommodated near the convergence of Spring Farm Parkway and the Green Spine.

A diverse mix of passive and active recreation spaces include district level play areas, walking and cycling trails and places to observe nature. Bridges, walkways and lookouts connect the areas of amenity whilst controlling access to water bodies, ensuring preservation of the natural environment.

This precinct provides critical north/south connectivity for pedestrians and cyclists. The Green Spine and Spring Farm Parkway park to riparian underpass create safe, attractive movement corridors celebrating the natural feature of this precinct. A commitment to best practice riparian corridor management will envisage the implementation of a vegetated buffer to protect, restore and maintain ecological functions.

1.1 Land to which these Controls Apply

This Appendix applies to the land that contains, or is adjacent to, a riparian corridor, as defined in this DCP.

1.2 Controls

Applications are to refer to the Guidelines for Riparian Corridors prepared by the NSW Office of Water, July 2012. These guidelines contain the outcomes and requirements for development on land containing a riparian protection area in the South West Growth Centre Precincts, to which the Menangle Park DCP applies.