

Armidale Dumaresq

Development Control Plan 2012

Section 4 Residential Development Controls

Chapter 4.3 Development in Rural and Environment Protection Zones

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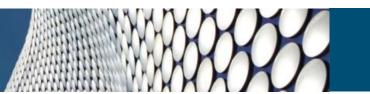
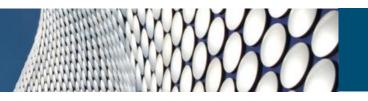
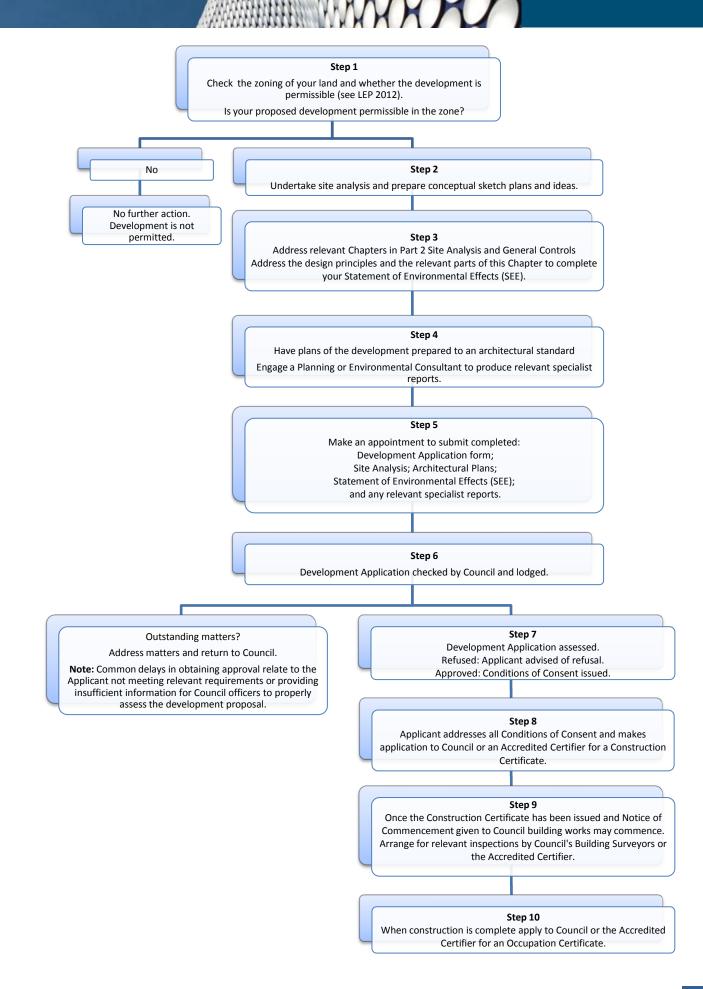


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Part 1 General provisions

1.1 Introduction

Armidale Dumaresq has an area of 4,235 square kilometres, of which over 75% is rural land. The sparsely settled rural areas are predominantly made up of larger holdings used for wool and beef production. There are also some intensive agricultural enterprises such as piggeries and horticulture.

Aside from agriculture, land uses on rural lands include forestry, mining, extractive industries and tourist accommodation. National Parks estate accounts for over 10% of Armidale Dumaresq. Most National Parks are located along the eastern parts of the Great Dividing Range and adjoin rural properties or State Forest estate.

Rural residential areas have developed on land surrounding Armidale, particularly since the 1980's, and generally comprise either residential estates within a rural setting or larger 'hobby' farms. Rural residential living has become increasingly popular, offering the benefits of a rural lifestyle while maintaining easy access to employment and social and cultural activities in Armidale. The rural residential zones in the LEP apply to land surrounding Armidale, extending up to 8 kilometres from the city boundary. The planning controls for rural residential development are largely based on the recommendations of the Armidale Dumaresq Rural Residential Study (EDGE Land Planning, November 2004).

Armidale is situated in the valley of Dumaresq Creek and is enclosed by hills and ridges covered by open woodland that create an attractive visual setting for the City and its immediate area.

Beyond Armidale lies a further series of prominent hills and ridges, including Mount Duval a visual landmark on the Armidale skyline. Other hills and ridges which have prominent scenic values when viewed from the approach roads to Armidale include Arthur's Seat and Knobs Hill to the south of the City and the ridge between Donald Road and Puddledock Road to the north east.

The Environment Protection Zones in Council's Local Environmental Plan (LEP) encompass elevated land which is both visually exposed to various vantage points and form an integral part of the skyline backdrop from these places. Whilst most of the land identified is clearly visible from different viewpoints within Armidale, hills and ridges which are visible as a skyline backdrop from the various approach roads to Armidale are also included to preserve the natural qualities of these elevated areas.

The Environment Protection Zones in the LEP are based on the scenic values of the land. However, the areas are predominantly covered by native vegetation and therefore may also have biodiversity values requiring conservation. Some of the areas identified in the Armidale Flora and Fauna Study (1996) as having actual or potential habitat value as well as several of the proposed fauna corridors identified in the Armidale Greening Plan (2003) lie within areas that have been identified as having scenic values. Consequently, the provisions for the Environment Protection Zones in the LEP and this Code seek to protect and enhance not only the scenic values but also native vegetation, fauna corridors and other wildlife habitat in these areas.

This chapter is to be read in conjunction with all relevant chapters in Section 2 Site Analysis and General Controls. All relevant matters relating to the development must be addressed in the development application, the SEE and on site analysis plans and site plans. The site analysis process may highlight the requirement for specialist reports to be undertaken.



1.2 Objectives

The objectives of this chapter are:

- O.1 To effectively manage the natural, environmental and cultural resources and values of rural land.
- O.2 To protect and enhance the natural and built environment by ensuring that proposed developments relate to site conditions.
- 0.3 To achieve visual integration and balance between natural and man made elements.
- O.4 To facilitate restoration of indigenous plant communities areas on the periphery of Armidale.
- O.5 To preserve and enhance the rural character and landscape values of the rural and rural residential areas.
- O.6 To conserve and enhance the visual and biodiversity values of the hills and ridges around Armidale whilst allowing carefully managed development to occur.
- 0.7 To reduce the potential for land use conflict in rural and rural residential areas.
- O.8 To provide for a range of land uses, services and facilities that are associated with a rural village.
- O.9 To promote businesses and neighbourhood activities that serve the needs of the local community.

1.3 Land to which this chapter applies

This chapter applies to land in LEP 2012 zoned:

RU1	Primary Production	E1	National Parks and Nature Reserves
RU3	Forestry	E3	Environmental Management
RU4	Primary Production Small Lots	E4	Environmental Living
RU5	Village		

1.4 Types of development to which this chapter applies

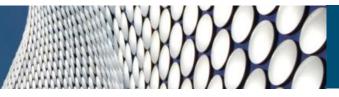
This chapter outlines the development controls for development in the Rural and Environment Protection Zones. The development controls focus on single dwellings, dual occupancy dwellings, alterations and additions to dwellings, and ancillary structures, being the most common type of development. In addition, this chapter also includes development standards for other types of development in these zones.

1.5 Addressing the guidelines in this chapter

The guidelines for development in rural and environmental protection zones are set out in this chapter. These are expressed in the form of objectives that need to be addressed for each development proposal. For each objective (O), 'acceptable solutions' (S) are provided which, if met, will ensure compliance. Alternative approaches may be proposed, provided these adequately address the relevant objectives and comply with legislation.

1.6 Developer contributions

Council may require, as a condition of development consent, that a financial contribution or dedication of land or provision of a material public benefit be made by a developer to provide for or upgrade



public services or facilities for which the development is likely to create a demand.

Developer contributions that apply to development in the rural and rural residential zones are contained within the Armidale Dumaresq Contributions Plan and the Armidale Dumaresq Water Supply and Sewerage Development Servicing Plan. Depending upon the likely demand for public services or facilities that a development proposal is likely to generate, Council may also require preparation of a specific Contributions Plan or enter into a Planning Agreement with the developer prior to determining a particular development proposal.

Part 2 Building design and external appearance

Objectives

- O.1 To ensure buildings blend, rather than contrast, with the existing and planned scenic values of the locality.
- O.2 To ensure design and siting of buildings provides adequate privacy and minimises overshadowing and overlooking for residents and other dwellings in the locality.
- O.3 To maximise solar access and passive heating and cooling principles to buildings and private open space.
- 0.4 To encourage design that responds to the topographical features of the site.
- S.1 The design of the building and slope of the roof are to reflect the topography of the site (eg. split level houses can be an appropriate design on sloping sites) to minimise the need for cut and fill associated with dwellings, landscape and driveway construction.
- S.2 Natural colours that blend with the colours of surrounding land and vegetation and are nonreflective shall be used for external building materials and other structures. Zincalume, white or silver coloured materials are not to be used as external materials for buildings and other structures, including above ground water storage tanks in the E3 and/or E4 zones.
- S.3 Buildings should be orientated for optimum sunlight to living rooms, ideally with living rooms to the north (living rooms include lounge, family, kitchen and dining rooms).
- S.4 Main living areas should open directly onto the private open space via large door openings, to allow adequate sunlight, natural light and ventilation into the house.
- S.5 Buildings should be designed to create cross ventilation, with well considered placement of windows to draw breezes through the house.

Part 3 Building height, bulk and scale

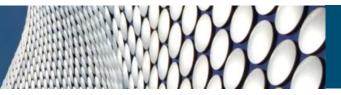
Objectives

O.1 To ensure that the height, bulk and scale of new buildings does not make them prominent in the landscape.

3.1 Maximum height of dwellings and outbuildings

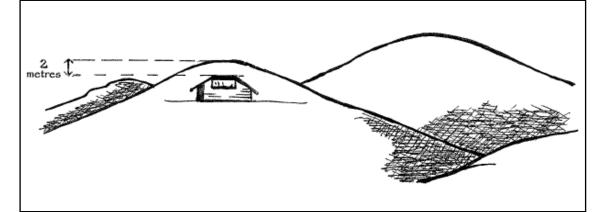
3.1.1 Building heights in the RU1, RU3 and RU4 zones

- S.1 The height of a dwelling house, or the alterations and additions to an existing dwelling house must not exceed 10 metres from existing ground level to the highest point on the building roof.
- S.2 The height of an outbuilding or the alterations and additions to an existing outbuilding on a lot in the RU1 or RU3 zone must not exceed 12 metres from existing ground level to the highest point on the building roof.
- S.3 The height of an outbuilding or the alterations and additions to an existing outbuilding on a lot in the RU4 zone must not exceed 10 metres from existing ground level to the highest



point on the building roof.

S.4 The highest point of a dwelling house or outbuilding referred to above must be at least 2m below the highest ridgeline of the hill on which the building is proposed to be erected.



Note: Existing ground level is measured vertically from the ground to the highest point on the roof line.

3.1.2 Building heights in the RU5 zone

- S.5 The height of a dwelling house, or the alterations and additions to an existing dwelling house must not exceed 8.5 metres from existing ground level to the highest point on the building roof.
- S.6 The height of an outbuilding or the alterations and additions to an existing outbuilding on a lot must not exceed 7 metres from existing ground level to the highest point on the building roof.

3.1.3 Building heights in the E1, E3 and E4 zones

- S.7 The height of a dwelling house, or the alterations and additions to an existing dwelling house must not exceed 8.5 metres from existing ground level to the highest point on the building roof.
- S.8 The height of an outbuilding or the alterations and additions to an existing outbuilding on a lot must not exceed 7 metres from existing ground level to the highest point on the building roof.
- S.9 The highest point of a dwelling house or outbuilding referred to above must be at least 2m below the highest ridgeline of the hill on which the building is proposed to be erected.

Part 4 Building setbacks

Objectives

- 0.1 To ensure adequate separation is provided between dwellings and agricultural or other activities likely to cause land use conflict.
- 0.2 To protect the privacy of residents.
- 0.3 To protect residents from the impact of noise and dust from nearby public roads.
- 0.4 To reduce risks from potential fires in adjacent unmanaged vegetation.
- 0.5 To promote consistent and attractive streetscapes in village areas.
- O.6 To protect electricity infrastructure and reduce the risks associated with construction near overhead electricity lines.



4.1 Front facade setbacks in all zones

- S.1 The front façade setback of any new dwelling in the RU4, E3 and E4 zones is to be a minimum of 20 metres from any public road.
- S.2 The front façade setback of any new dwelling in the RU1, RU3 and E1 zones is to be a minimum of 40 metres from any public road.
- S.3 A greater front façade setback may be required for land adjoining a classified road, if the noise assessment determines that this is necessary (see Chapter 2.7 Noise).
- S.4 If any new dwelling is proposed to be constructed less than 50 metres from the boundary of an unsealed public road, the road shall be upgraded to a bitumen sealed road for a minimum distance of 100 metres.

4.2 Front facade setbacks in the RU5 zone

- S.5 The front façade setback of any new dwelling, dual occupancy or the alterations and additions to an existing dwelling house is to be a minimum of 4.5 metres from any public road.
- S.6 The front façade of any outbuilding is to be setback a minimum of 1 metre behind the front façade of the associated dwelling.
- S.7 If any new dwelling is proposed to be constructed less than 50 metres from the boundary of an unsealed public road, the road shall be upgraded to a bitumen sealed road for a minimum distance of 100 metres.

4.3 Side and rear setbacks

- S.8 The wall of any new building or alterations and additions to an existing building shall be setback a minimum of 10 metres from a side boundary.
- S.9 The wall of any new building or alterations and additions to an existing building shall be setback a minimum of 15 metres from the rear boundary.
- S.10 Greater setbacks from side and rear boundaries may be necessary to avoid potential nuisance from existing activities on adjoining property, such as dust, spray drift or odour.
- 4.4 Setbacks from overhead electricity supply mains
- S.11 Buildings must not be erected under existing overhead electricity supply mains. The minimum clearance measured horizontally from the vertical alignment of any overhead electricity supply conductor to the nearest part of the building shall be 15 metres. This requirement does not apply to an insulated overhead service which provides the electricity supply for the building.

4.5 Setbacks from unmanaged vegetation

- S.12 Where land is not identified as bushfire prone, but is adjacent to unmanaged vegetation, a 10m asset protection zone is to be maintained in accordance with the requirements of the *NSW Rural Fire Service's publication Standards for Asset Protection Zones..*
- S.13 Where an asset protection zone is required and cannot be provided between the proposed development and any unmanaged vegetation, additional fire protection measures shall be required, and may include:
 - a) Installation of a 1.8 metre high fence made of non-combustible materials between the development and any unmanaged vegetation. The bottom of the fence is to be in direct contact with the finished ground level or plinth; and

b) Flooring systems (including frame, supporting posts, columns, stumps, piers and poles), windows, external doors, vents, weepholes, eaves, verandahs and decks being constructed in accordance with the requirements for Level 1 construction in the current Australian Standards (*AS 3959- Construction of buildings in bushfire-prone areas*).

All developments on land that is designated as bush fire prone must meet the requirements of *Planning for Bush Fire Protection 2006* and *AS3959 Construction of buildings in bushfire-prone areas*.

Part 5 Landscaping in the E3 and E4 zones

Objectives

- O.1 To facilitate restoration and protection of indigenous plant communities areas on the periphery of Armidale.
- O.2 To ensure that landscaping of the site is carried out in a way that acknowledges and reinforces the scenic and biodiversity values of the land, including enhancement of habitat corridors.
- O.3 To provide benefits to residents by locating new landscaping for increased privacy, wind and sun protection, a pleasant outlook as well as attracting wildlife.
- S.1 A landscaping plan is to be provided for all development on land within the E3 and/or E4 zones, other than alterations and additions to an existing dwelling.
- S.2 Driveways are to be tree-lined in order to reduce the prominence of the work and to screen the passage of motor vehicles.
- S.3 New plantings of native vegetation are to be provided to screen or reduce the visual impact of rural structures, such as large sheds and shade houses, when viewed from public roads or nearby dwellings.
- S.4 The landscape plan is to include details of the location and scientific and common names of new plantings and vegetation to be removed within the building envelope and for access roads.
- S.5 The landscaping plan is to include the location, type and materials of proposed fences on the property, including those that may be erected to protect native vegetation identified as being of significance in the flora and fauna assessment.
- S.6 Landscaping is to retain or improve connectivity with habitat on adjoining property.
- S.7 New plantings should be indigenous species, except where specific recommendations have been made for new plantings in the relevant flora and fauna assessment.

Part 6 Fences

Objectives

- O.1 To provide for fencing that is compatible with the rural landscape and scenic qualities of prominent hills and ridgelines.
- O.2 To allow fencing that is suitable for a variety of activities permitted in rural and environment protection zones.
- O.3 To ensure that fencing in areas of identified ecological significance is of a style that does not inhibit the movement of native wildlife.
- 0.4

6.1 Fences in the RU1, RU3, RU4, E1, E3 and E4 zones

S.1 Fencing shall be open form (wire, post and rail or similar). Post and rail fences are to remain

natural timber or are to be painted or stained with colours which blend with the surrounding landform or vegetation.

- S.2 A stock proof fence is to be provided to all road frontages and public open space areas.
- S.3 Fencing along property boundaries is not to be metal panel fencing (of any height).
- S.4 Stock proof fencing may also be required to protect any areas of significant vegetation (particularly in zones E3 and E4).
- S.5 Where land is identified to be habitat for native fauna (eg koalas), fencing is to be of a style that does not inhibit movement within the site or the areas of habitat on adjoining properties.

6.2 Fences in the RU5 zone

- S.6 A front fence and any associated retaining wall must be located within the front setback area.
- S.7 Front fences shall be:
 - a) up to 1.2m above existing ground level, or up to 1.5m high if more than 50% transparent;
 - any brick or other solid portion of the fence above 600mm should not be more than
 250mm wide and the remaining fence must be of open design.
- S.8 On corner lots the front fence style and height should continue around the corner to the secondary street to a point level with the front facade of the dwelling.
- S.9 Side fences on a corner lot are to be tapered from the height of the front boundary fence to a maximum height of 1.8m at the point level with the front facade of the dwelling.

6.3 Gates and entrance structures

S.10 Entrance gates and/or structures along road frontages shall be constructed using materials and designs that are in keeping with a rural landscape.

Part 7 Vehicle access and driveways

Objectives

- 0.1 To ensure all development has legal and properly constructed access.
- O.2 To minimise the extent of private access arrangements over adjoining land (e.g. rights-ofcarriageway).
- O.3 To ensure that the standard of public roads is sufficient for traffic likely to be generated by a development.
- O.4 To minimise future costs to the community associated with road improvement and maintenance.
- O.5 To ensure property access is located with safe sight distances on public roads.
- O.6 To ensure that internal access roads are sited to minimise impacts on the environment and are constructed to a standard suitable to provide safe access for residents, employees and emergency services.

7.1 Access

Land upon which a development is to be carried out must have legal and properly constructed access. Depending on the circumstances, the following options are available for providing access:

- Public Road as defined under the Roads Act 1993
- Construction and dedication of a Crown Road as a Council public road



- Right-of-Carriageway
- Undedicated Roads (eg Ministerial or Forestry Road)

The circumstances under which the above options are acceptable to Council, as well as the requirements for each option, are provided below.

7.1.1 Public road

- S.1 Land having frontage to an existing dedicated Public Road that is maintained by Council for the purpose of a public road may obtain access from the road, subject to compliance with the Driveways section below. Where the development is for a new dwelling, dual occupancy or the alterations and additions to an existing dwelling house or dual occupancy, improvements to the existing public road will not be required.
- S.2 If any new dwelling is proposed to be constructed less than 50 metres from the boundary of an unsealed public road, the road shall be upgraded to a bitumen sealed road for a minimum distance of 100 metres.
- S.3 Developments expected to generate significant traffic may require existing public roads to be upgraded to a suitable and safe standard for the use.
- S.4 Where the lot or holding on which the development is proposed to be carried out has frontage to an existing Public Road that is unconstructed or is not maintained by Council for the purpose of a public road, the full cost of upgrading that road to Council's specification is to be borne by the developer. Council's minimum standard for new rural roads is specified in the table below:

Table 1: Minimum road access standards

All road construction shall comply with the requirements of Council's Engineering Code, and the relevant Australian Standards and Austroads Guidelines.

LEP Zone	Minimum Road Standard
RU1, RU3, RU4 and E1	Single lane gravel road nearest Council maintained and constructed public road.
E3 and E4	Single lane sealed road to nearest sealed Council maintained and constructed public road.
RU5	Half width construction of a two lane sealed road.

7.1.2 Construction and dedication of a Crown Road as a Council Public Road

- S.5 Where access is proposed via a Crown Road, the road is to be constructed by the developer to Council's Engineering Code specifications and dedicated as a Council public road.
- S.6 The applicant is to provide written agreement from the responsible authority (currently NSW Crown Lands) for the use of the Crown Road for access.

7.1.3 Right-of-Carriageway

- S.7 Access by right-of-carriageway is not encouraged and will only be permitted in cases where no other practical alternative exists.
- S.8 The right-of-carriageway shall only serve one lot or holding and must not be located on a lot containing an existing right-of-carriageway.
- S.9 The right-of-carriageway shall have a width of not less than 20 metres.



7.1.4 Undedicated roads

Undedicated roads are roads that are not dedicated as Council or Crown Roads and include Forestry Roads, Rural Lands Protection Board reserves and Ministerial Roads.

S.10	The applicant is to provide written agreement from the responsible authority for the use of the road for access.						
7.2	Driveways						
S.11	Provision of an adequate all weather access will generally require gravelling from the road shoulder to the boundary and in most cases will require the provision of a piped gutter crossing in accordance with Council's Engineering Code.						
S.12	Where the land adjoins an existing sealed public road, the driveway shall be sealed from the road shoulder to the boundary.						
S.13	The driveway shall be located so as to minimise earthworks and removal of vegetation in the road reserve.						
S.14	Entrances shall be limited to one per lot unless approved otherwise by Council. The relocation of an existing entrance may require the complete removal of the existing entrance.						
S.15	Direct access to a classified road will not be permitted where another practical option exists.						
S.16	Any new driveway on a classified road shall be located and constructed in accordance with the requirements of the relevant road authority.						
S.17	Any new driveway on a local road shall have safe intersection sight distance in accordance with Table 3.2 of <i>Austroads 2010</i> . The minimum required sight distances are specified below:						
	Design Speed	Minimum Safe Intersection Sight Distance					
	40 km/h	73 metres					
	50 km/h	97 metres					
	60 km/h	123 metres					
	70 km/h	151 metres					
	80 km/h	181 metres					

7.3 Internal access roads

90 km/h

100 km/h

S.18 Internal access roads shall be designed to avoid the need for large areas of cut and fill or the removal of significant native vegetation.

214 metres

248 metres

- S.19 Internal access roads shall not have a grade exceeding 15%, unless it is proposed to be constructed and sealed by the Applicant, in which case the grade must not exceed 20%.
- S.20 Internal access roads shall be constructed to provide all weather access to provide safe access for residents, employees and emergency services.
- S.21 Internal access roads shall avoid crossing waterways, particularly major creeks/rivers. Any

bridges and pavements shall be capable of carrying a load of 15 tonnes with load ratings to be clearly indicated on the structure.

- S.22 To reduce their visual impact, internal access roads are to follow contours wherever practicable and in the E3 and E4 zones are to be landscaped (refer to Part 9 Landscaping).
- S.23 Internal access roads shall have a minimum carriageway width of 4 metres and a minimum vertical clearance of 4 metres. Curves shall have a minimum inner radius of 6 metres and a minimum distance of 6 metres between inner and outer curves.
- S.24 For dwellings where the furthest external part of the proposed dwelling is greater than 70 metres (unobstructed) to the nearest hydrant, a loop road around the dwelling or a turning circle with minimum 12 metre outer radius shall be provided.
- S.25 Internal access roads shall not be located on prominent hilltops or ridgelines.

Part 8 Utility infrastructure

Objectives

- O.1 To ensure that land within Council's Development Servicing Plan for Water and Sewerage is provided with services in accordance with that Plan.
- O.2 To ensure internal services are positioned for effective use of land and access by servicing authorities.
- O.3 To ensure that all development has adequate water supply to meet domestic/commercial, and fire fighting demands.
- O.4 To ensure that satisfactory provision is made for the safe and nuisance free disposal of effluent.
- 0.5 To ensure that an adequate electricity supply is available for the intended use.

8.1 Water supply

- S.1 Development (other than alterations and additions to an existing dwelling) on land in the 'Water DSP Development Area' in Council's Development Servicing Plan for Water and Sewerage must connect to Council's reticulated water supply if the land is located within 225 metres of an existing water main.
- S.2 Development (other than alterations and additions to an existing dwelling) on land in the 'Water DSP Development Area' in Council's Development Servicing Plan for Water and Sewerage that is greater than 225 metres from an existing water main must connect to Council's reticulated water supply, except where the applicant can justify, to Council's satisfaction, that a reticulated supply is not required based on the criteria below:
 - a) the type and scale of the development relative to its proximity to the existing reticulated water supply system.
 - b) the sequence of infrastructure provision identified under the Development Servicing Plan for Water and Sewerage relative to the proposed development.
 - c) potential future development of nearby land, including type and timing of development(s).
 - d) the ability of on-site water supply to provide for domestic/commercial demands and a reliable fire fighting reserve.
 - e) the economic feasibility of connection to a reticulated water supply compared to providing on-site water storage. A cost benefit analysis is to be submitted, including the total cost to install, run and maintain an on-site water supply system compared to the cost of providing reticulated water supply over a substantial period being 20 years.



- S.3 Where the development will not be connected to Council's reticulated water supply, it will be required to have not less than 70,000 litres of domestic water storage per dwelling. Although not specifically required by Council, it is recommended that landowners consider providing a greater storage capacity.
- S.4 In addition to the minimum quantities of domestic water storage required above, a dedicated reserve for fire fighting purposes of not less than 20,000 litres shall be provided. This may be reduced to 10,000 litres for development in the RU5 zone on land having an area of less than 1 hectare. For development on bush fire prone land as identified on Council's Bush Fire Prone Land Map certified by the Rural Fire Service, additional storage capacity may be required.
- S.5 The dedicated fire fighting water supply tank shall:
 - a) include a 65mm Storz fitting and ball or gate valve, or if the tank is in ground, it shall be fitted with a 200mm x 200mm child proof access hole.
 - b) provide for fire fighting appliances (i.e. trucks and tankers) to gain access to within 4 metres of the tank.
 - c) include a minimum 3kW (5hp) petrol, diesel or generator powered pump, including appropriate fittings.
- S.6 Water supply and fire fighting measures for development other than residential development will be assessed on its merits in each case having regard to the above objectives.

8.2 Sewerage systems

- S.7 Development (other than alterations and additions to an existing dwelling) on land within the 'Sewer DSP Development Area' in Council's Development Servicing Plan for Water and Sewerage must connect to Council's reticulated sewerage system if the land is located within 75 metres of an existing sewer main.
- S.8 Development (other than alterations and additions to an existing dwelling) on land within the 'Sewer DSP Development Area' in Council's Development Servicing Plan for Water and Sewerage that is greater than 75 metres from an existing sewer main must connect to Council's reticulated sewerage system, except where the applicant can justify, to Council's satisfaction, that connection to Council's sewerage system is not required based on the criteria below:
 - a) The proposed on-site sewerage management system(s) must be able to demonstrate that it can satisfy Council's Policy POL 225 Regulatory: Local Approvals Policy On-site Waste Water Systems.
 - b) The case for on-site waste management is consistent with the type and scale of the development relative to its proximity to the existing reticulated sewerage system.
 - c) The sequence of infrastructure provision identified under the Servicing Plan relative to the proposed development.
 - d) The case for on-site waste management considers potential future development of nearby land, including type and timing of development(s).
 - e) A case for on-site waste management is consistent with and accounts for future development on the subject land with respect to the area of the land parcels, type of development and sensitivity of the environment.
 - f) The economic feasibility of connection to Council's sewer compared to providing an on-site sewerage management system. A cost benefit analysis is to be submitted, including the total cost to install, run and maintain an on-site system compared to the



cost of connecting to the sewer over a substantial period being 20 years.

S.9 On all other land on-site effluent disposal is acceptable subject to satisfying Council's Policy POL 225 – Regulatory: Local Approvals Policy - On-site Waste Water Systems.

8.3 Stormwater drainage

S.10 Stormwater drainage systems are to be designed in accordance with Chapter 2.7 Floodplain Protection and Stormwater Drainage.

8.4 Electricity supply

S.11 Electricity supply requirements are outlined in Chapter 2.1 Site Analysis.

8.5 Solar panels and solar heat pumps

- S.12 Location and installation of all solar panels and solar heat pumps must comply with the provisions of the *State Environmental Planning Policy (Infrastructure) 2007.*
- S.13 Where solar panels are installed on a heritage item, they must be designed and located in accordance with the 'Solar and Wind Energy Installations' provisions in Chapter 2.4 European Heritage. These heritage provisions provide information on the materials, colour, height and streetscape considerations for solar installations.

Part 9 Earthworks

S.1 Where earthworks are required, including excavation, fill, retaining walls, batters and geotechnical investigations (including soil, slip and spring activity), the relevant provisions in *LEP 2012* Clause 6.1 Earthworks and Chapter 2.6 – Earthworks and Geotechnical Assessment must be applied.

Part 10 Open fireplaces

- 0.1 To protect the amenity and air quality of the region.
- S.1 Open fire places are not permitted in any zone.

Part 11 Definitions

For definitions of terms used in this chapter, see the LEP 2012 Dictionary.