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Subdivision design guidelines



Wagga Wagga town and the Murrumbidgee River

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These subdivision design guidelines outline the objectives for planning a subdivision within the precinct.

5.1 Planning your subdivision

These subdivision design guidelines ensure ordered and timely subdivision within the precinct and infrastructure is planned, designed and implemented in advance of need.

5.1 Planning your subdivision

This section provides the design objectives for planning your subdivision. This includes objectives for topography, environment, environmental hazards, design and landscaping, accessibility and infrastructure and services.

The design objectives should be applied to the context of the development proposal. Where a specific design objective cannot be met, then applicants should demonstrate how the proposed design of the development will achieve the relevant precinct design principles in Chapter 2.

5.1.1 Topography

The natural landform and setting contribute to a sense of place. Subdivision is responsive to the setting and natural site features, and established subdivision patterns.

The Bomen Business Park and the broader precinct enjoys a beautiful landscape setting, with rolling hills and fertile valleys. Nearby residents continue to enjoy a rural outlook and the precinct's rural setting continues to be a large part of the area's character. It is important that the design and landscape of the subdivision protects the rural outlook and the precinct's rural setting.



Topography objectives

- 01** Be responsive to and integrate with the natural terrain and topography, natural features such as drainage lines and waterways.
- 02** Avoid excessive earthworks and favours cutting of the land over filling of the land. Where practical site works to allotments should be undertaken as part of the subdivision.
- 03** Ensure adequate provision for drainage in relation to cut and fill practices.

5.1.2 Environment

Environmental values and constraints across the site include vegetation, biodiversity corridors, riparian corridors and cultural heritage, as shown in Chapter 8 – Mapping. These values and constraints should be considered and either avoided or appropriately incorporated into the subdivision design.



Environment objectives:

- 01** Development avoids impacts to Aboriginal cultural heritage and is undertaken in accordance with the precinct's Aboriginal Cultural Heritage Management Plan.
Note: Access to the precinct's Aboriginal Cultural Heritage Management Plan can be obtained from the corporation.
- 02** The design and layout of streets, lots, landscaping and infrastructure:
 - retains in place and integrates scarred trees, identified artifact sites and other indigenous cultural heritage places of importance within areas of environmental significance and green space that is publicly accessible
- considers the Wiradjuri planning principles provided in the master plan and the elements shown in Figure 6: Important considerations for the planning of Wiradjuri Country of the master plan
- incorporates storytelling and memory, such as interpretative signage.
- 03** Be responsive to areas of high value biodiversity and integrate precinct biodiversity and green corridors, riparian corridors and strategic revegetation sites.
- 04** Minimise the need for vegetation clearing.
- 05** Increase lot sizes where sites have a significant slope or site constraints.
- 06** Provide building envelopes on the subdivision plans that are responsive to the environmental values and constraints on the site.

5.1.3 Environmental hazards

This section applies to land subject to environmental hazards and conditions of flooding or bushfire as shown in Chapter 8 – Mapping and areas of contaminated land recorded on the Wagga Wagga City Council's Contaminated Lands Register. The design and construction of a subdivision should recognise, and be designed within, the environmental hazards of the site.



Environmental hazards objectives:

- 01** Avoid increasing the risks associated with natural hazards including bushfire and flooding.
- 02** Ensure subdivision for commercial or industrial purposes provides suitable building areas outside the 1% AEP event with climate change as shown in Map 8.3.
- 03** Subdivision layout does not result in isolation or create evacuation challenges for users. The issuing authority may require a site-based flood emergency response plan prepared by a suitably qualified person.
- 04** Minimise the risk to life, property and the environment in the event of a bushfire, including the lives of emergency services personnel and make adequate provision for access for emergency personnel, vehicles and equipment.
- 05** Lot sizes and dimensions can accommodate development and minimise risk to life and property from environmental hazards, including bushfires. Each lot created contains a suitable area for the development, including an appropriate asset protection zone to protect the property from the threat of bushfire.
- 06** Development on bushfire prone land to which these objectives apply comply with the requirements of:
 - Planning for Bush Fire Protection 2019 (or as updated); and
 - AS 3959:2009 (or as updated) – Construction of Buildings in Bush Fire Prone Areas or the NASH Standard for Steel Framed Construction in Bush Fire Prone Areas.

5.1.4 Design and landscaping

Subdivision design can influence the ability of future development to achieve good solar access. The orientation of lots can inform the preferred location of future buildings to maximise solar access on the lots.

Site landscaping should be informed by the site's natural features and landscape and, where possible, retain and protect existing areas of remnant vegetation. It should reflect the bioregion and vegetation typologies of the precinct and assist broader efforts to enhance habitat and biodiversity across the precinct in accordance with Chapter 3 – Precinct revegetation strategy.



Design and landscaping objectives:

- 01** Create a range and mix of allotment sizes that respond to site constraints and opportunities and avoid or minimise future land use conflicts.
- 02** Lot orientation, size and frontages should be suitable to accommodate water and energy efficient development, setbacks, landscaping, storage space, vehicle access and manoeuvring and parking.
- 03** Maximising lot orientation to take advantage of solar orientation in gaining thermal efficiencies. Where possible provide shade to the northerly and westerly elevations of buildings in summer and adequate solar access in winter.
- 04** Achieve good public domain outcomes through landscaping consistent with species lists included in Chapter 3 – Precinct revegetation strategy.
- 05** Where practical, integrate stormwater management measures within the design of landscaped areas.
- 06** Integrated water cycle management and water sensitive urban design principles should be incorporated including grassed vegetation swales, natural drainage corridors, sand filters, gross pollutant traps and constructed wetlands.

5.1.5 Stormwater and drainage

Industrial sites have high impervious area ratios which result in greater runoff volumes. Consider existing downstream drainage systems and their capacity to receive the changed runoff volumes and patterns from the site, while maintaining existing flows to support habitats.



Stormwater and drainage objectives:

- 01** Provide stormwater detention facilities to capture rainwater and surface runoff to ensure post development flows do not exceed pre-development flows, for storm events up to and including the 1% AEP.
- 02** All new and existing roads have collector pits and an underground pipe system to carry water to the discharge point for each lot. Interallotment drainage will also be required to collect drainage from higher lots and avoid uncontrolled discharge onto lower lying properties.
- 03** Lots are designed to allow for appropriate stormwater management by either kerb and gutter or swale drainage.
- 04** Stormwater runoff from public areas is to be treated through communal water sensitive urban design measures to ensure water pollution is avoided and contribute to the following precinct-wide pollution load reduction targets:
 - Total Suspended Solids (TSS) by 80%
 - Total Phosphorus (TP) by 60%
 - Total Nitrogen (TN) by 45%
 - Gross pollutants by 90%.

5.1.6 Accessibility

Good subdivision offers connectivity and has a legible hierarchy of roads and through routes. Roads should offer a choice of routes for pedestrian and vehicles, and integrate to adjoining streets, neighbourhoods and local facilities or shops with minimal use of dead-end and cul-de-sac roads.



Accessibility objectives:

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| <p>01 Local roads should connect to the broader precinct road network. Local roads are designed and constructed in accordance with the table in section 4.2 in Chapter 4 – Infrastructure (Roads).</p> <p>The issuing authority may require a traffic impact assessment prepared by a suitably qualified person which considers impacts of the proposal in terms of the design and location of the road/s, and the likely nature, volume or frequency of traffic generated by the development.</p> <p>02 Provide all lots with safe, legal and practical vehicle access and manoeuvring areas for the largest design vehicle anticipated to require access to the subdivision and individual lots including emergency service vehicles.</p> <p>03 Minimise the number of lots created that do not have substantial frontage / direct access to a public road.</p> <p>05 The internal road pattern facilitates ‘through-roads’ with cul-de-sacs avoided unless dictated by topography or other constraints.</p> <p>06 Services corridor must be easily accessible as required by Chapter 4 – Infrastructure.</p> | <p>07 Integrate shared use paths and public transport stops at appropriate locations.</p> <p>08 Road reserves, road carriage way, road verges and shared paths are sized and designed to the relevant road function in accordance with Chapter 4 – Infrastructure (Roads) and “Guide for Traffic Generating Development”, Roads and Traffic Authority of NSW, October 2002.</p> <p>09 Roadside vegetation is provided within road verges in accordance with Chapter 3 – Precinct revegetation strategy.</p> <p>Alternate species for roadside vegetation within a development can be accommodated if it can be demonstrated that alternate species:</p> <ul style="list-style-type: none"> • are native to the area; and • have similar water consumption and drought tolerance characteristics to the equivalent vegetation type set out within |
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5.1.7 Infrastructure and services

Figure 5 identifies the location of infrastructure corridors to integrate with movement corridors and linkages and, in conjunction with topographical constraints, achieve appropriate complementary subdivision design.



Infrastructure and services objectives:

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| <p>01 Protect and maintain existing major infrastructure (i.e. electricity and gas) through easements.</p> <p>02 A services corridor of approximately 10 metres width accommodated between the kerb and boundary to allow for the following underground services, as appropriate to the proposed development:</p> <ul style="list-style-type: none"> • gravity and pressure sewer mains • recycled water main • medium pressure gas pipe • water main • provision for future telecommunications • provision for future hydrogen • spare space in the corridor for unknown future pipes / conduits • provision for a circular economy easement. <p>03 Services corridor must be easily accessible as required by Chapter 4 – Infrastructure.</p> <p>04 The developer shall be responsible for providing utilities and services connections to allotments including:</p> <ul style="list-style-type: none"> • water • wastewater • electrical | <ul style="list-style-type: none"> • gas • telecommunications. <p>Note: The relevant utility suppliers should be consulted at the earliest possible time in relation to providing utilities and service connections to allotments. The following suppliers maintain or supply electricity, gas and water to Wagga Wagga:</p> <ul style="list-style-type: none"> • electricity supply – Essential Energy • gas supply – APA Group • water supply – Riverina Water. <p>Note: Council should be consulted on connections to utility services including for sewerage, drainage and approval under section 68 of the <i>Local Government Act 1993</i>. The process for seeking approval from the Council should commence at the earliest possible time and should run in parallel with the Activation Precinct Certification process where possible.</p> <p>05 Stormwater infrastructure includes on-site measures that form part of the precinct stormwater strategy provided in Chapter 4 – Infrastructure.</p> <p>06 The location of infrastructure does not adversely impact existing site conditions.</p> |
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