ORANGE CITY COUNCIL

PLANNING & DEVELOPMENT COMMITTEE

ATTACHMENTS

2.7 – DRAFT REDMOND PLACE DCP

1 JULY 2025

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Part 1—Introduction

This chapter describes the desired future character and principal development controls that are intended to guide development within the Redmond Place Precinct.

1.1 Purpose and aims

This chapter provides specific controls for development on land within the Redmond Place Precinct (the "***precinct***"). It describes the place-based vision (the "***precinct vision***") and design controls that are intended to guide the development of the precinct in accordance with the following aims—

(a) support the realisation of the precinct vision,

(b) promote ongoing connecting with and caring for Country through place design and development,

(c) ensure good design at all scales,

(d) protect the City's drinking water catchment through appropriate land and water cycle management,

(e) support the provision of a diversity of affordable housing tenures and types,

(f) promote resilience against natural hazards and climate change,

(g) ensure the sustainable use of energy and resources,

(h) ensure buildings and places are universally accessible, healthy and inclusive, and

(i) ensure development responds to the precinct's historical, scenic and natural landscape settings.

1.2 Adoption and commencement

This chapter was adopted by Council on [DATE] and commences on [DATE].

1.3 Land to which this chapter applies

This chapter applies to land within the Redmond Place Precinct as shown in Figure 19.1 and comprising parent lots Lot 1 DP153167, Lot 6 DP1031236 and Lot 200 DP1288388.

1.4 Relationship to other controls

Unless otherwise stated, the provisions of the DCP other than those described in this chapter continue to apply to development on land to which this chapter applies. Where there is an inconsistency between the provisions of this chapter and any other provision of the DCP, the provisions of this chapter will prevail.

The following provisions of Chapter 7 the DCP ('Development in residential areas') do not apply to development on land within the Redmond Place Precinct—

- Part 7.2—Residential subdivision
- Part 7.3—Urban residential development
- Part 7.4—Defining neighbourhood character
- Part 7.5—Merit-based approach to residential development in Orange
- Part 7.7—Design elements for residential development streetscape
- Part 7.9—Shops and businesses in the urban residential zone

1.5 Terms used in this chapter

Terms used in this chapter generally have the meaning given to them in Part 9—Dictionary. Where there is an inconsistency between a definition included in this chapter and that of an applicable Act, statutory instrument or environmental planning instrument, the provisions of the Act, statutory instrument or environmental planning instrument prevail to the extent of their application to the development.

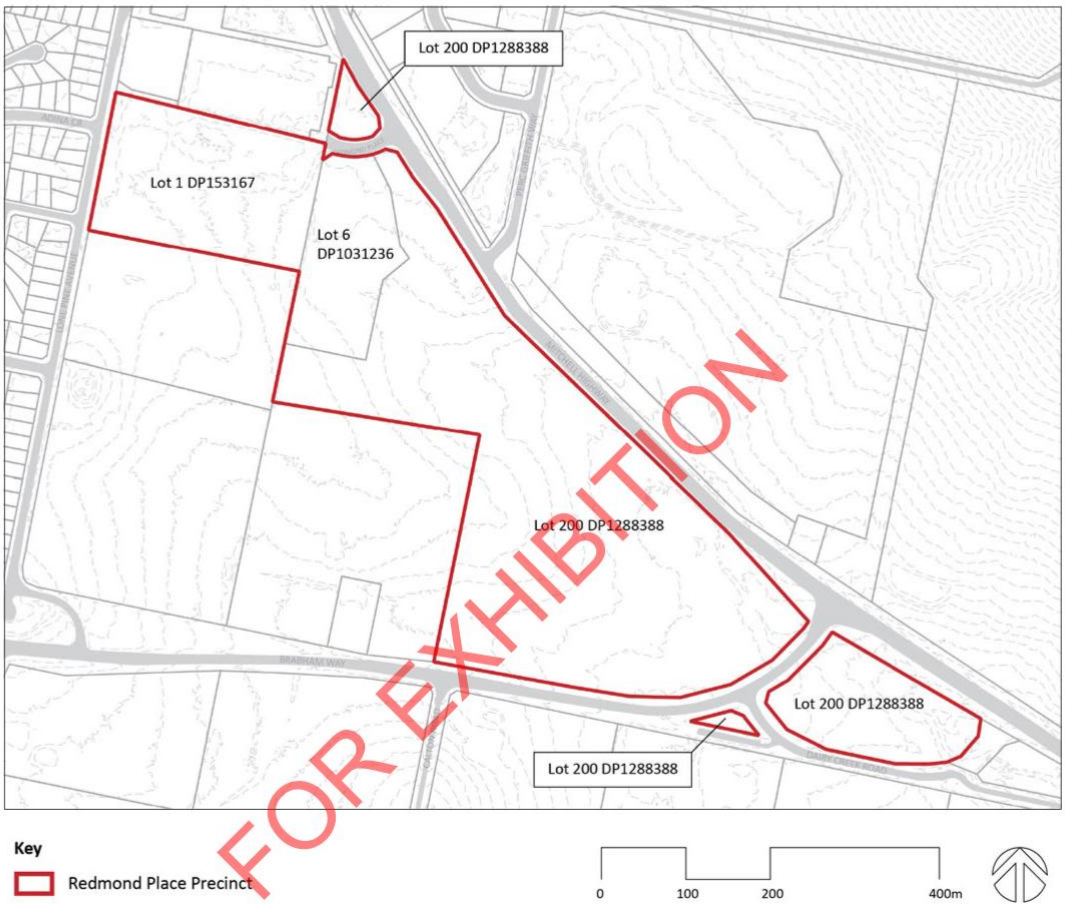


Figure 19.1 Land to which this chapter applies

Part 2—How to use the design controls

The precinct design controls adopt a performance-based approach to development control. This is founded on the principle that individual developments should achieve a good fit with their context while at the same time enabling flexibility and innovation in design.

2.1 Structure of this chapter

All developments are required to meet the requirements of the precinct design controls. These are provided in Parts 4, 5, 6, 7 and 8 of this chapter. Depending on the type of development proposed (eg, land subdivision, commercial use or residential building), different controls will apply. Figure 19.2 below describes the structure of the controls.

Where relevant, additional design requirements may be included in the schedules attached to this chapter (Schedules 19-A, 19-B, 19-C, 19-D and 19-E). In all cases, applicants are encouraged to talk to Council staff prior to lodgement in order to ensure they have addressed all of the controls that apply to their development.

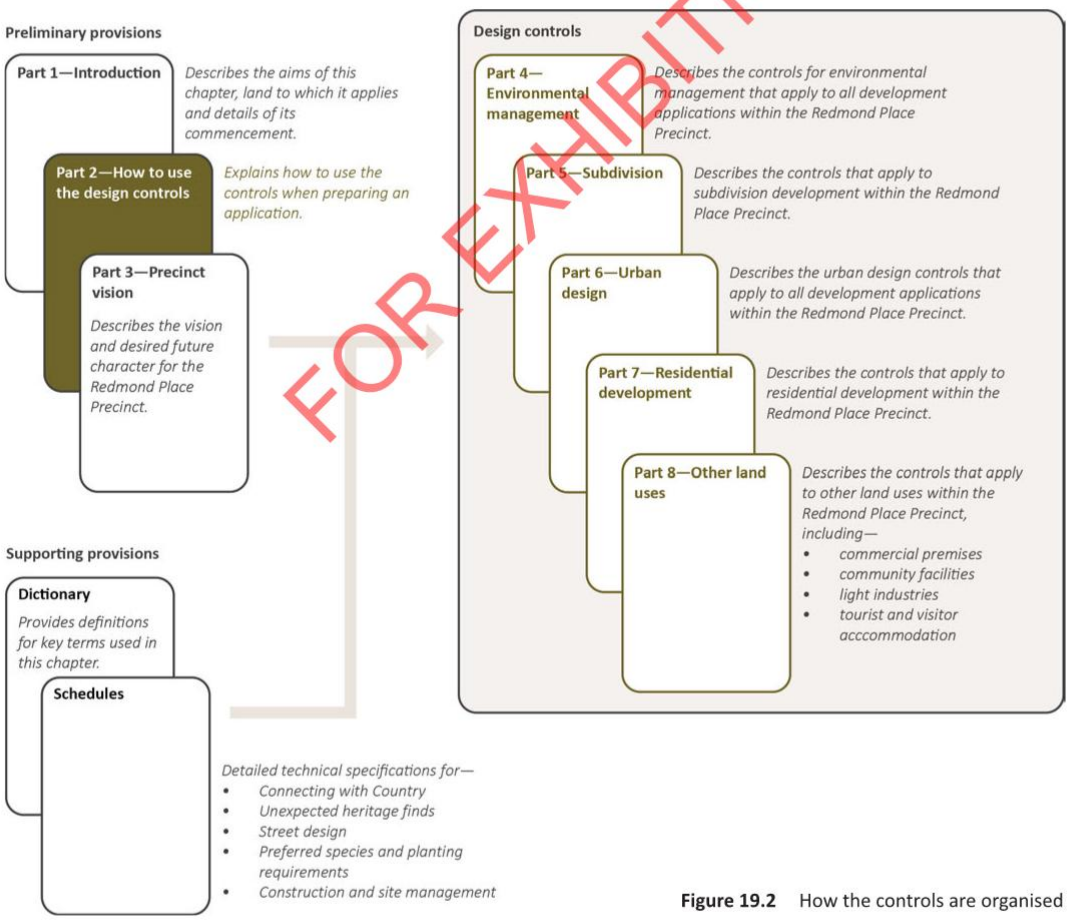


Figure 19.2 How the controls are organised

2.2 Using the design controls

The design controls described in Parts 4, 5, 6, 7 and 8 are organised according to a number of ***design elements***, each representing a discrete aspect of building and place design. Each design element contains the following—

- **Explanation**—Describes the scope and intent of the design element
- **Objectives**—Describe the outcomes intended to be achieved by development
- **Design criteria**—Describe the means by which development is deemed to meet the objectives
- **Diagrams and maps**—Illustrate how the design criteria are to be interpreted

In order to obtain development consent, a proposal is required to satisfy each of the objectives that apply to it. A proposal that does not meet the design criteria, or that seeks to adopt an alternative design solution, must demonstrate that it satisfies the objectives.

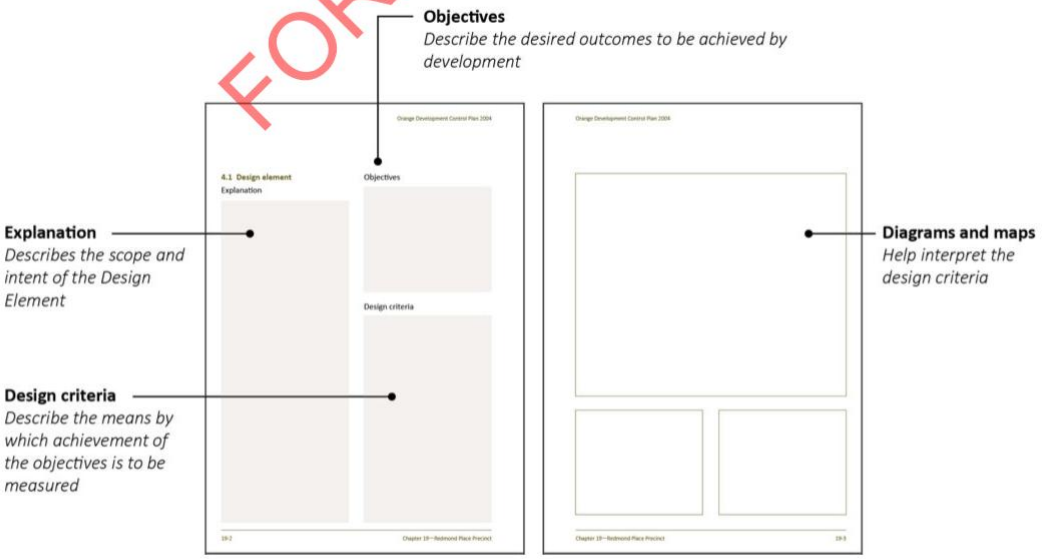


Figure 19.3 Typical design element features

Part 3—Precinct vision

The precinct vision describes the desired future character of the Redmond Place Precinct. It sets out the precinct vision statement, design principles, concept plan and important character elements that are intended to guide development within the precinct.

3.1 Vision statement and design principles

The precinct vision statement describes the guiding aspiration for the Redmond Place Precinct to develop over time as a sustainable, inclusive, safe and well-connected neighbourhood. The vision statement is accompanied by seven precinct design principles. These describe the 'whole of place' design outcomes that individual development proposals are required to support. The vision statement and precinct design principles are shown in Figure 19.4 below.

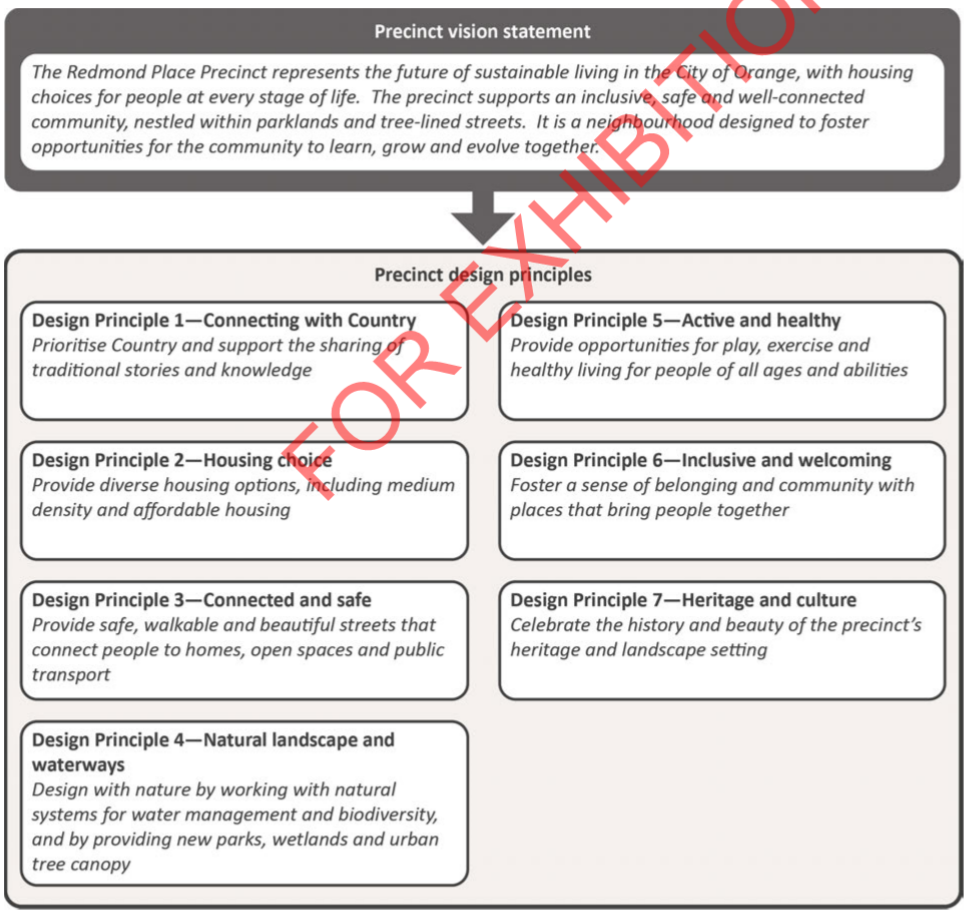


Figure 19.4 Precinct vision statement and design principles

3.2 Precinct concept plan

The precinct concept plan defines how the vision statement and design principles are to be realised in physical form. The plan incorporates the important character elements described in Part 3.3 below and defines the overall urban form, land use and movement network outcomes intended to be achieved as the Redmond Place Precinct develops over time.

Achieving consistency with the concept plan will ensure each development 'knows its place' within the precinct vision, achieves a good fit with neighbours and contributes to the building up of shared place qualities over time. The precinct concept plan is shown in Figure 19.5 below.

Figure 19.5 Precinct concept plan

3.3 Important character elements

The important character elements describe the essential place qualities that underpin the precinct vision. These comprise the fundamental building blocks of the Redmond Place Precinct's desired future character and are reflected in the precinct concept plan described in Part 3.2 above. Development is required to preserve and, where possible, enhance the important character elements in order to demonstrate that it achieves a good 'fit' with the precinct vision.

The important character elements for the Redmond Place Precinct are illustrated in the Important Character Elements Map shown in Figure 19.9 and are described on pages 19-12 and 19-13.

Note—

The precinct vision, concept plan and important character elements are informed by the key design themes and recommendations of the 'Redmond Place connecting with Country framework' prepared by consultant Balarinji on behalf of Landcom (May 2024). The framework is based on engagement with Elders and other locally connected members of the Aboriginal community and sets out measures for a Country-first approach to the design and delivery of buildings and spaces within the precinct. Implementation of the framework is a key means to ensuring opportunities to promote ongoing connecting with and caring for Country are woven into the built form and public domain fabric of the precinct.

A detailed description of the precinct design outcomes intended to guide implementation of the Redmond Place Connecting with Country Framework is included in Schedule 19-A attached to this chapter. These are supported by the design controls included in Design Element 6.1—Responding to Country.

Figure 19.6 Proposed wetland

Figure 19.7 Proposed Northern Park and Hangar

Figure 19.8 Typical street view (local street)

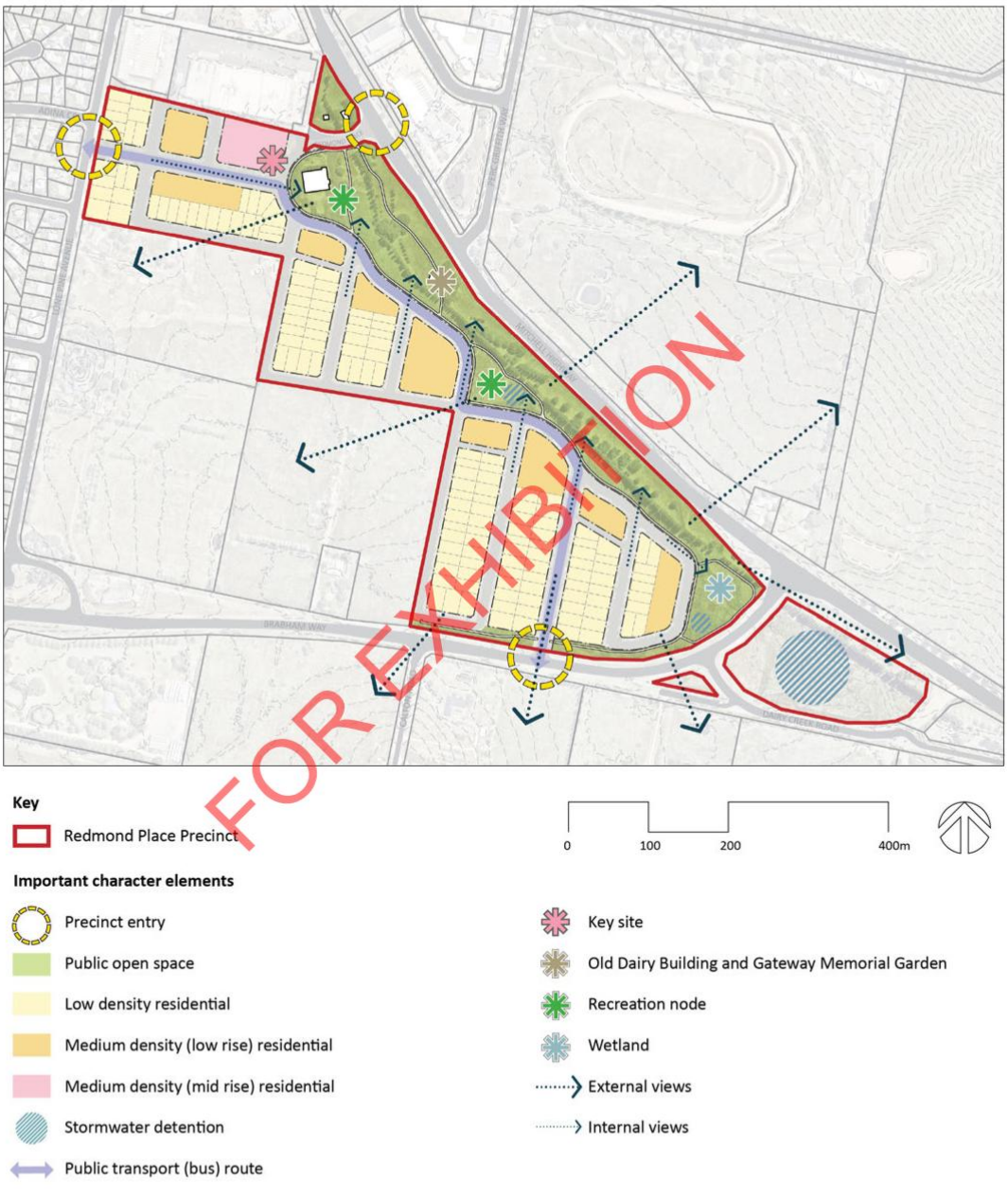


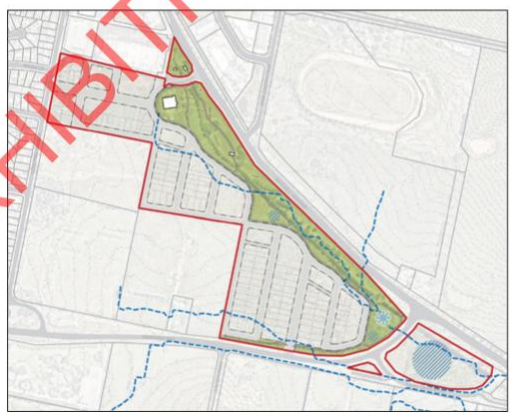
Figure 19.9 Redmond Place Precinct Important Character Elements Map

Cadastral pattern

- A permeable and fine grain pattern of street blocks stitches the precinct into the city's existing urban fabric and ensures streets and open spaces are scaled to pedestrians.
- The urban layout respects the historical cadastral pattern and defines clear edges between the precinct and neighbouring road reserves and land holdings.
- Street blocks are oriented to maximise accessibility to public open space and respond to topography by facilitating natural drainage to basins and wetlands.

Blue-green networks

- The existing Gateway Park and Memorial, Hangar and visitor park are incorporated into an expanded network of recreation, cultural, wetland and stormwater management spaces.
- The integration of blue and green networks supports natural groundwater recharge, landscape replenishment, biodiversity restoration and connecting with Country.
- The linear park, wetlands and generous street tree canopy provide a cooling influence in summer and enable passive solar access for buildings and public spaces in winter.

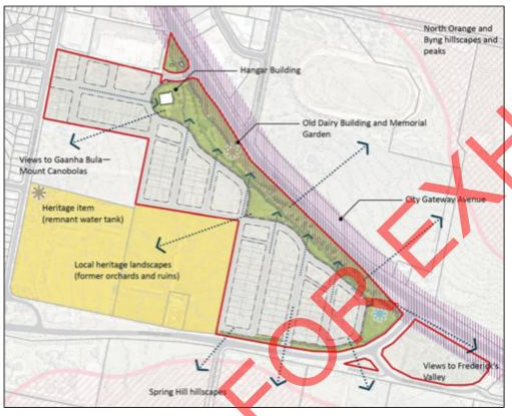


Street grid

- The street grid provides a legible and highly connected hierarchy of street types and route choices for vehicles and pedestrians.
- Street design and character reflects function in line with the precinct's street design standards.
- Street frontage to public open space ensures buildings positively address and gain amenity from the public space.
- Streets and verges provide opportunities for deep soil, urban tree canopy growth and rainwater infiltration and bioretention during rainfall events.

Land use and housing mix

- The precinct accommodates a compatible diversity of housing types and sizes, with medium density housing located along the park frontage and public transport spine to maximise amenity and convenience.
- Key sites provide the opportunity for mid-rise (4 storeys) apartment development, including provision for limited ground floor commercial uses to serve day-to-day local needs.
- A compact diversity of lot sizes, building forms and housing types provides visual richness and supports a sustainable social mix.



Views and landscape

- Street orientation supports legibility by enabling views towards local features and landmarks, including parks.
- Views of surrounding non-urban hillscapes and heritage landscapes are maintained as distinctive aspects of the precinct's sense of place.
- Views of Gaanha Bula—Mount Canobolas facilitate connecting with Country and are preserved through building design and massing.
- The City Gateway Avenue of parkland and trees is retained and embellished.

Public domain

- The public open space network incorporates recreation, cultural, education and ecological features—including play spaces, walking tracks and a wetland—that connect community and respond to a diversity of ages and needs.
- Public art, cultural spaces and interpretive signage support connecting with Country.
- The existing Visitor Park, Gateway Park and Memorial Garden are incorporated into an extended linear public open space network.
- Activation nodes—including key sites, the Hangar Building and recreation nodes—support public transport and promote active streets.

Additional information on the Gateway Park and Memorial

A notable feature of the Redmond Place Precinct is the existing Gateway Park and Memorial located along the precinct's Bathurst Road (Mitchell Highway) frontage. The park marks the visual entrance to the city and includes features that are of cultural and scenic importance to Orange. These include a remnant dairy building (known as "the Old Dairy Building") and trees that once formed part of a dairy and farmhouse located on the land. Interpretive signage describes the history of dairying in the area (as indicated by the naming of the nearby "Dairy Creek") and the role this played in the development of European agricultural industry within Orange and the nearby Frederick's Valley.

Near to the old dairy building is the Gateway Memorial plaque, garden and trees. These were dedicated on 9 February 1998 "in appreciation of all who served and all who contributed to the wars in all areas of conflict and at home". Today, the memorial tree planting is strikingly evidenced by the avenue of mature poplars that marks the eastern entry to the city of Orange along the southern side of the Mitchell Highway.

The memorial trees include 244 trees intended to represent each of the servicemen from the Orange District known to have been killed in war. These are complemented by additional trees intended to enhance the entrance to Orange from the Bathurst Road. In addition to the poplars, the trees planted Gateway Park include casuarinas, eucalypts, forest pansies, liquidambers, oaks and taxodiums.

The avenue of poplars is a special feature of the eastern entry to Orange and is to be retained as part of the Redmond Place Precinct's public open space network. In winter the deciduous poplars allow open views from the highway towards nearby heritage landscapes and surrounding rural hillscapes, including views towards Gaanha Bula—Mount Canobolas. These create an indelible visual connection between the mountain and the visitor's sense of arrival in Orange. In the warmer seasons the dense foliage of the poplars creates a memorable verdant wall defining the entry to the city.

Part 4—Environmental management

4.1 Land and soil resources

Explanation

The soil profile of a locality entails important implications for the management of land disturbance and erosion, the protection of groundwater sources, building construction standards and landscaping, including species selection for new planting.

The Redmond Place Precinct is located within the North Orange (SI5508no) soil landscape group. Soils in the North Orange group include Red Earths on upper slopes and shallow lithosols on crests and side slopes. Yellow Earths occur on lower slopes while Yellow Solodic Soils occur in drainage depressions. Preliminary analysis indicates that soils within the precinct are likely to be dominated by Yellow Earths.

Earthworks and land shaping, including excavation and the construction of retaining walls, present significant risks to land and soil stability if not properly managed. This applies at both the subdivision stage and the design and construction of buildings within resulting lots. Applications entailing significant earthworks are required to include a geotechnical investigation in order to determine the suitability and impacts of the proposal.

Note—

All excavation, fill or grading is to be undertaken in accordance with the requirements of the Orange City Council Subdivision and Development Code.

Applicants should also refer to the following provisions of the DCP—

- Chapter 2, Part 2.2—Soil resources
- Chapter 4, Part 4.3—Land shaping

Relevant Orange LEP 2011 clauses

Clause 7.1—Earthworks

Objectives

O1	Ensure development minimises the need for excavation and fill by responding to the natural landform.
O2	Ensure earthworks— (a) maintain the geological stability of the site and surrounding land, (b) do not have detrimental impacts on neighbouring properties or the public domain, (c) protect water quality within groundwater sources, and (d) employ sustainable excavation and fill practices.

Design criteria

D1	Subdivision design minimises the need for excavation and fill through appropriate road and lot layout. Level transitions between lots ensure lots step with the natural slope of the land in accordance with the preferred approach illustrated in Figure 19.10.
D2	Development limits the height of any retaining wall to a maximum height of 1 metre. Council may consider granting consent to retaining walls greater than 1 metre in height where— (a) there are exceptional circumstances due to the slope or geological character of the land, and (b) it is of the opinion that the proposed wall will not result in a detrimental impact on the amenity of any lot or the streetscape.
D3	The ground level (finished) of any site at its boundary to any public space (including any public road) is no more than 1 metre above the ground level (finished) of the public space.

D4 Any retaining wall—

(a) is separated from any other retaining wall or structural support by at least 2 metres, measured horizontally,

(b) is located at least 1 metre from any registered easement, sewer main or water main, and

(c) has adequate drainage lines connected to the existing stormwater drainage system for the site.

D5 Building design minimises the need for excavation and fill on sloping sites by splitting levels or otherwise stepping with the slope in accordance with the principles described in Figure 19.11.

D6 All earthworks are to be carried out in accordance with *AS 3798—Guidelines on earthworks for commercial and residential developments*.

D7 Any areas to be filled or regraded are clearly identified on the application drawings.

D8 Any fill imported to the site is to be free of building and other demolition waste, and only contain virgin excavated natural material (VENM) as defined in Part 3 of Schedule 1 to the *Protection of the Environment Operations Act 1997*. Where imported fill is used Council may require soil sampling for analysing chemical residue to be carried out on the fill material by an appropriately qualified person.

D9 Where fill is to be placed permanently, topsoil and vegetation must be removed down to a suitable sub-grade material prior to the placement of the fill. The topsoil is to be stockpiled for use in revegetation of the site.

D10 Development ensures—

(a) no ponding of water occurs on adjoining properties, and

(b) no overland flow paths or flood prone land are adversely affected

as a result of any filling or grading.

D11 Where development—

- entails a change in site levels of more than 0.6 metres,
- is located on land with a slope of 15% or greater, or
- is otherwise, in the opinion of Council, likely to entail detrimental impacts on the environment or neighbouring land,

the application is to include a geotechnical investigation prepared by a suitably qualified geotechnical engineer and providing details on—

(a) the existing character and quality of soils and geology within the site and neighbouring land,

(b) existing and proposed finished ground levels,

(c) any groundwater or waterways likely to be affected by the development,

(d) any potential impacts on flood risk or flood behaviour within the locality,

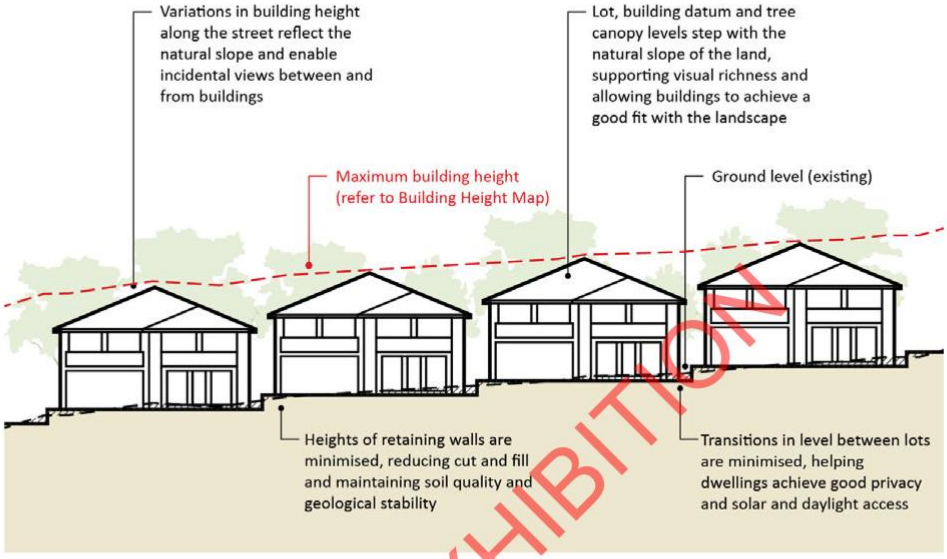
(e) any hazards, including naturally occurring asbestos or contaminated land, that are present,

(f) details of the height, structure and engineering design requirements of any retaining walls to be constructed,

(g) details on the source, quality and type of any fill material to be used

(h) the measures required to ensure development avoids any detrimental impact on any adjoining properties, overland flow paths or flood prone land.

Transition of lot levels—preferred approach



Transition of lot levels—undesirable approach

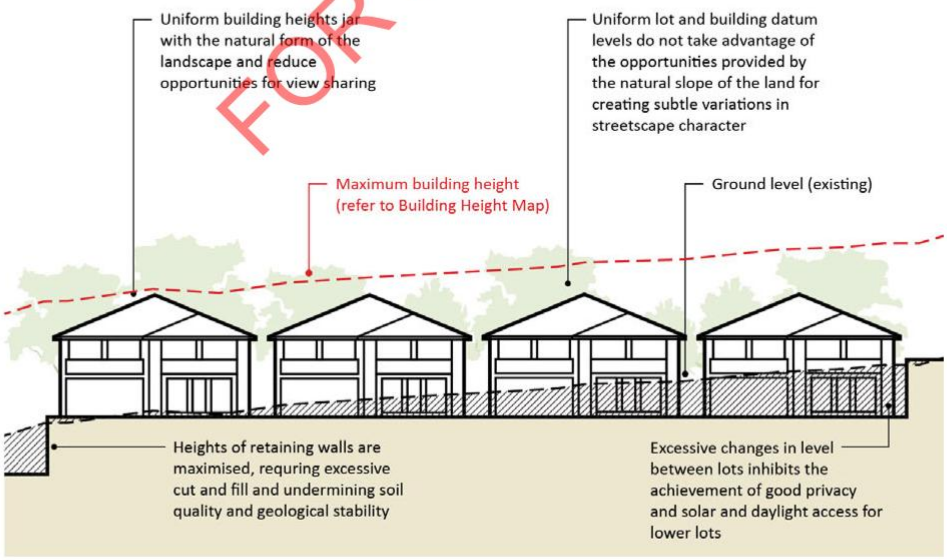


Figure 19.10 Comparison of subdivision development responding to landform (top) and undesirable land shaping (bottom)

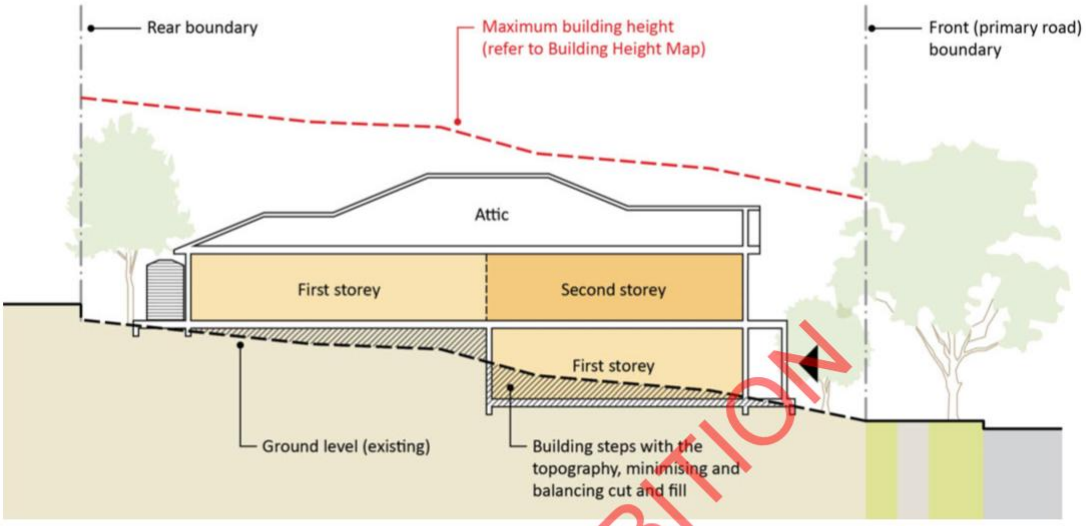


Figure 19.11 Building design principles for sloping sites

4.2 Groundwater

Explanation

This design element applies to development on land identified as "Groundwater Vulnerability" on the Orange LEP 2011 Groundwater Vulnerability Map. Land identified on the map relates to groundwater resources broadly considered to be at heightened risk of contamination from development due to the geological and hydrological characteristics of the land, including the relative shallowness of the water table and permeability of the ground surface.

Groundwater comprises water found below the land surface (see Dictionary). It plays an essential role in supporting the health and resilience of soils, landscapes and vegetation communities, including groundwater dependent ecosystems. Groundwater resources also support the City's overall water cycle by collecting and storing rainfall before allowing water to migrate through the earth to discharge into surface features such as springs, streams and wetlands.

Groundwater is a finite resource that is susceptible to depletion (through overuse) and contamination (through pollution). Where development entails the disruption to or extraction of water from a groundwater source, it may comprise an 'aquifer interference activity' requiring approval under the *Water Management Act 2000* and in accordance with the *NSW Aquifer Interference Policy*.

Groundwater within the precinct is predominantly identified as forming part of the Orange Basalt Groundwater Source (Orange Basalt Aquifer), with the eastern-most portions of the precinct comprising part of the larger Lachlan Fold Belt (MDB) Groundwater Source (Oakdale Formation Aquifer) (see Figure 19.12). These each comprise fractured rock groundwater systems forming part of the broader NSW Murray-Darling Basin Fractured Rock Water Resource. Groundwater within the Orange Basalt Aquifer is characterised as being of generally high risk of contamination while groundwater within the Oakdale Formation Aquifer is characterised as being of moderately high risk of contamination.

Objectives

O1	Maintain the health and hydrological functions of groundwater systems.
O3	Protect groundwater resources and groundwater dependent ecoysystems from contamination.

Design criteria

D1	Where development is likely to deplete or contaminate groundwater systems, the application is accompanied by a hydrogeological report prepared by a suitably qualified person and providing details of— (a) the extent and nature of any depletion or contamination, (b) the likely effects on groundwater dependent ecosystems, (c) the cumulative impact of the development on the hydrological functions and health of groundwater systems.
D3	Development allows natural replenishment and recharge of groundwater sources through the use of bioretention and filtration of runoff.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 2, Part 2.1—Soil quality

Relevant Orange LEP 2011 clauses

Clause 7.6—Groundwater vulnerability

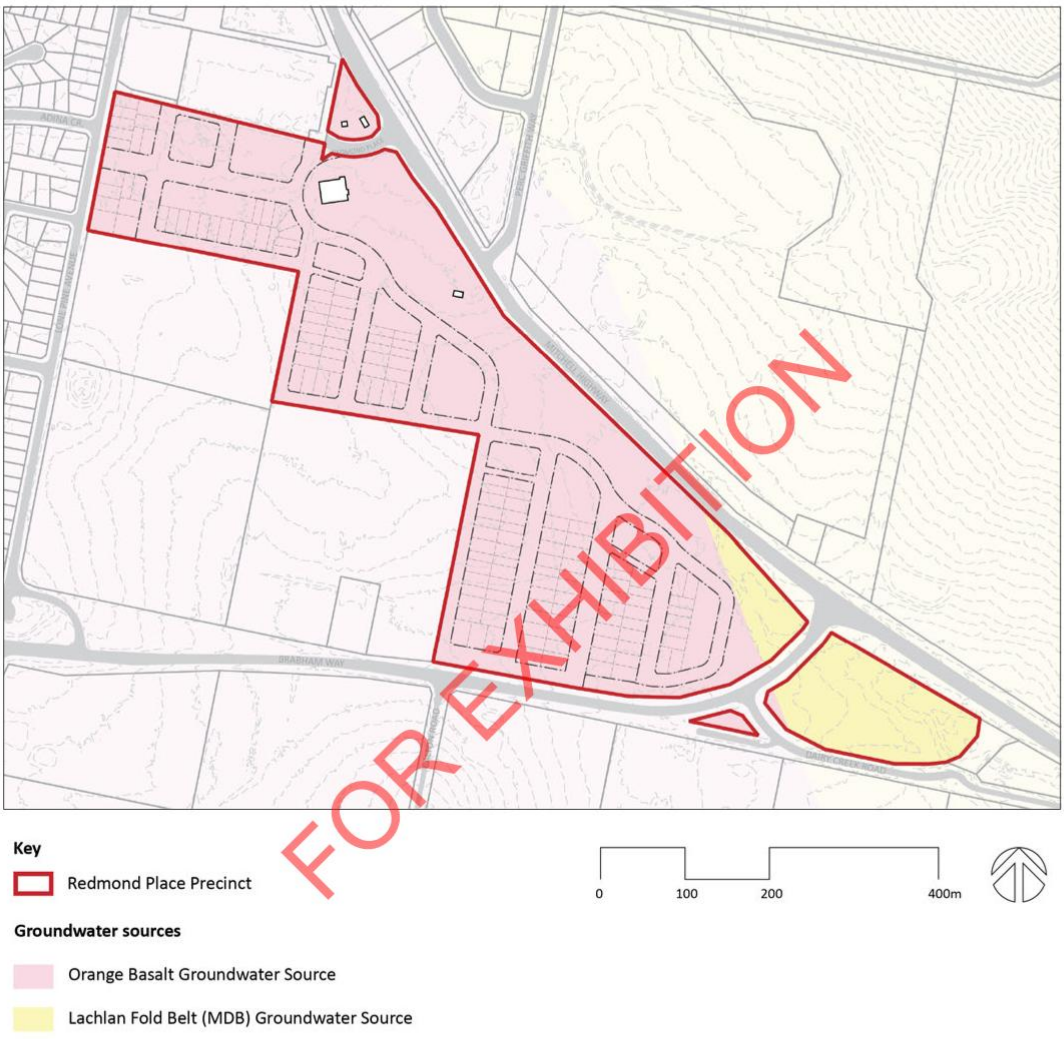


Figure 19.12 Redmond Place Precinct groundwater sources

4.3 Drinking water catchment

Explanation

This design element applies to development on land identified as "Drinking Water" on the Orange LEP 2011 Drinking Water Catchment Map.

Land within the Redmond Place Precinct is located within the Suma Park Dam (Upper Summer Hill Creek) Drinking Water Catchment. Individual developments within the drinking water catchment are required to have a neutral or beneficial effect on the quality of water entering the dam. This recognises both the critical role played by the City of Orange's drinking water resources in securing the liveability and productivity of Orange as a regional city and the cumulative impact of development over time on the health and environmental integrity of the catchment.

The design controls for the Redmond Place Precinct also reflect the need to ensure an overall improvement in the quality of water entering the drinking water storage from the precinct. This is to be achieved by ensuring public stormwater management infrastructure is designed and constructed in a way that facilitates a reduction in pollutant loads leaving the precinct from their pre-development levels by at least 10%. This requirement is reflected in the stormwater management strategy described in Design Element 5.6—Stormwater management below.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 12—Rural environment protection zone
- Design Element 5.6—Stormwater management

For the purposes of determining whether the carrying out of the development would have a ***neutral or beneficial effect*** on water quality, the application should demonstrate that the development meets the principles and requirements of the ***NorBE Guideline***.

Objectives

O1	Protect the health and environmental integrity of the drinking water catchment.
O2	Preserve and improve the quality and quantity of water entering drinking water storages.

Design criteria

D1	Development demonstrates a neutral or beneficial effect on the quality of water entering drinking water storages.
D2	The public stormwater management network is designed to achieve a reduction in pollutant loads for total suspended solids, phosphorous and nitrogen of 10% from pre-development loads.
D2	Development minimises run-off volumes and allows replenishment and recharge of groundwater sources.
D3	All effluent is treated outside of the drinking water catchment.
D4	Public open space design ensures waterways are protected or enhanced.

Relevant Orange LEP 2011 clauses

Clause 7.7—Drinking water catchment

4.4 Flood planning

Explanation

Preliminary analysis indicates that land within the Redmond Place Precinct is subject to flood risk associated with the 1% AEP flood event. For the purposes of the DCP, this land is considered to be flood prone land. In order to ensure effective flood risk management, development on flood prone land is required to be undertaken in accordance with Council's flood planning controls as described in Chapter 4A—Flood affected land.

Where Council is of the opinion that development may be subject to or entail adverse impacts on flood risk, the application will be required to include a site-specific flood impact and risk assessment (or "***FIRA***"). A FIRA is required to—

(a) identify the flood risk management measures (or "***FRM measures***") required to be incorporated into the development,

(b) be undertaken in accordance with the NSW Government's *Flood Risk Management Manual* (the "***FRM Manual***") and its accompanying guidelines, and

(c) consider the effects of climate change on flood risk and behaviour.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 4A—Flood affected land

Relevant Orange LEP 2011 clauses

Clause 5.2—Flood planning

Clause 5.22—Special flood considerations

Objectives

O1	Minimise the impact of flooding to the natural environment and built-up areas.
O2	Avoid adverse or cumulative impacts on flood behaviour or the environment.
O3	Enable the safe and efficient evacuation of people in the event of a flood.
O2	Consider the impacts of climate change on flood risk and behaviour.

Design criteria

D1	Development on flood prone land is consistent with the objectives and requirements of Chapter 4A—Flood affected land.
D2	Development does not increase the risk of flood hazard on land outside of the precinct.
D3	Applications for development that, in the opinion of Council, is likely to be subject to flood risk or otherwise entail adverse impacts on flood risk are to be accompanied by a flood impact and risk assessment prepared in accordance with— • the DCP's objectives for flood affected land as described in Chapter 4A, and • the FRM Manual and accompanying guidelines. The assessment is to include details on— (a) the location and extent of any flood prone land, including any lots that may be liable to flood risk (pre- and post-development), (b) the impacts of the development on flood behaviour and risk, (c) the FRM measures required to manage flood risk, including consideration of the effects of climate change on flood frequency and behaviour.

4.5 Bush fire hazard

Explanation

Land within and adjoining the Redmond Place Precinct may comprise bush fire prone land. The precinct concept plan incorporates measures for the ongoing management of bush fire risk, including ***Asset Protection Zones*** (or "***APZs***") and perimeter roads, that are based on the intended urban form and layout of the precinct following completion of its various development stages. In addition to these measures, individual applications (including applications for the staged subdivision of land) may be required to demonstrate compliance with applicable bush fire safety provisions, including those of the *Rural Fires Act 1997* and *Planning for Bush Fire Protection*.

Note—

1. Applications for—
   (a) the subdivision of bush fire prone land that could lawfully be used for residential or rural residential purposes, or
   (b) development of bush fire prone land for a ***special fire protection purpose***

   are required to be supported by a ***bush fire safety authority*** obtained in accordance with section 100B of the *Rural Fires Act 1997*.
2. Asset Protection Zone (APZ) requirements for the Redmond Place Precinct are described in the Asset Protection Zone Map shown in Figure 19.13. These are based on the recommendations of the 'Strategic Bush Fire Study—Redmond Place' prepared on behalf of Landcom by Integrated Consulting, 1 July 2024 and reflect the bush fire risk management measures required to facilitate full development of the precinct in accordance with the precinct concept plan described in Part 3—Precinct vision. Applications for individual developments will be determined in accordance with the bush fire prone status of the land at the time of determination and may be required to incorporate APZs or other bush fire risk management measures in addition to those described in the Asset Protection Zone Map.

Objectives

O1	Protect life, property and the environment from bush fire.
O2	Discourage the establishment of incompatible land uses in bush fire prone areas.
O3	Encourage sound management of bush fire prone areas.

Design criteria

D1	Subdivision design— (a) complies with the requirements of any bush fire safety authority that may apply to the development, (b) is consistent with the requirements of *Planning for Bush Fire Protection*, and (c) enables the establishment and maintenance of the minimum Asset Protection Zone requirements and perimeter roads included in the precinct concept plan and as described in the Asset Protection Zone Map shown in Figure 19.13.
D2	Development for any special fire protection purpose is located outside of an applicable Asset Protection Zone.

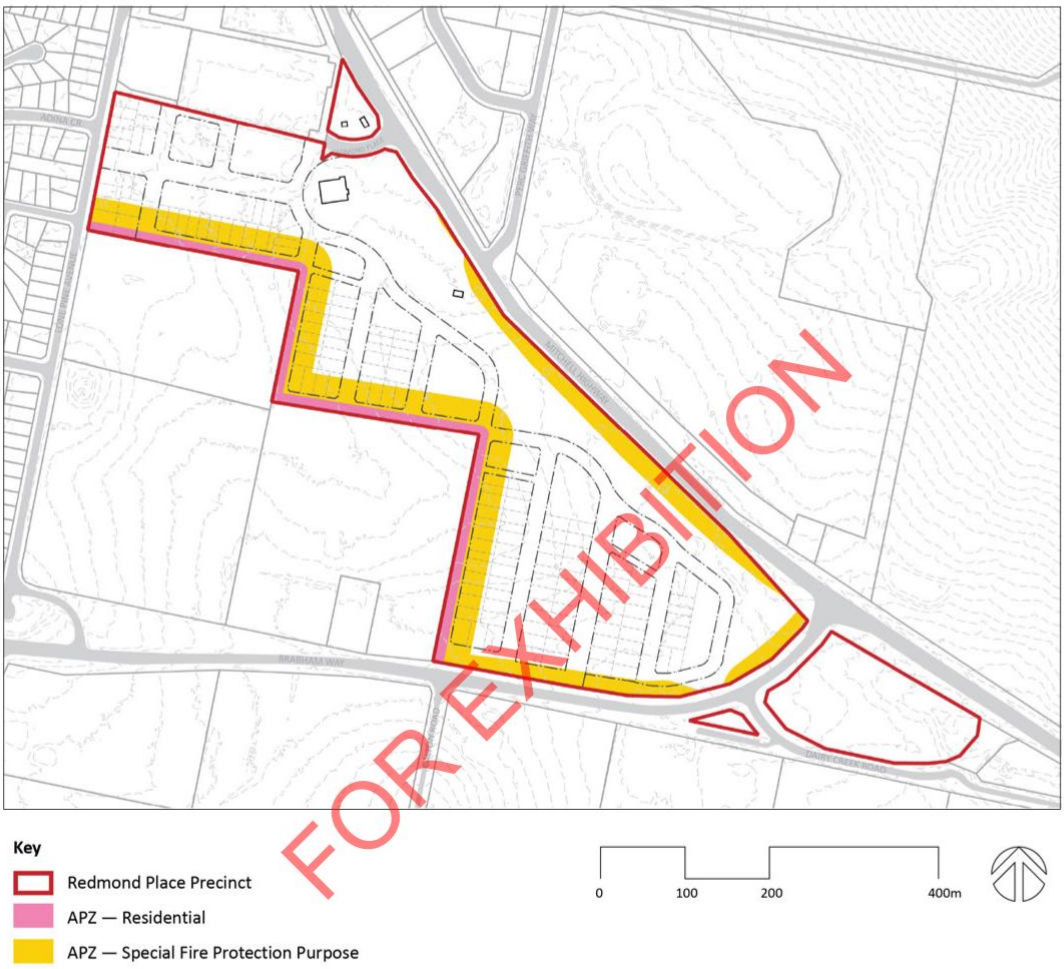


Figure 19.13 Redmond Place Precinct Asset Protection Zone Map

4.6 Vegetation management

Explanation

Native vegetation within the Redmond Place Precinct has been significantly diminished by past uses of the land, including grazing. Preliminary assessment of the biodiversity characteristics of the precinct has identified several isolated examples of native vegetation. These include three patches of Apple box (*Eucalyptus bridgesiana*) located within the Gateway Park, along with remnant grass and sedge species occurring within the low lying wet portion of the precinct's north-eastern corner comprising Tall sedge (*Carex appressa*), tussock (*Poa labillardierei*) and native rushes (*Juncus spp*). Native vegetation within the precinct has been broadly assigned to a single ***plant community type*** (PCT 3387—Central West Creekflat Grassy Woodland), which exists in both a remnant and derived form.

The restoration of biodiversity values within the precinct through the protection, restoration and enhancement of native vegetation is an important character element that is required to be supported by development. The rehabilitation of native habitats and ecosystems, including the establishment of a new wetland as part of the precinct's water cycle management strategy, also plays a central role in Connecting with Country outcomes for the precinct as described in Design Element 6.1—Responding to Country and Schedule 19-A.

Activities involving vegetation clearing within the precinct are subject to regulation in accordance with the DCP's tree preservation controls (Chapter 0, Part 0.4) and the provisions of *State Environmental Planning Policy (Biodiversity and Conservation)*, Chapter 2.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 0, Part 0.4—Former LEP matters ('Tree preservation')
- Chapter 2, Part 2.4—Flora and fauna, biodiversity
- Design Element 4.3—Responding to Country, 5.5—Stormwater management, 6.2—Local character, 6.6—Urban tree canopy and 6.8—Landscaping

Objectives

O1	Protect native vegetation and habitats, including local and regional habitat corridors and migration routes.
O3	Support the restoration and enhancement of biodiversity within the precinct.

Design criteria

D1	Development supports the protection and enhancement of biodiversity within the precinct by— (a) protecting, restoring and enhancing native vegetation, including supporting embellishment of locally represented plant community types, (b) achieving tree canopy and species targets for planting in streets and public spaces as described in Design Element 6.6—Urban tree canopy, (c) supporting the DCP's preferred plant species for planting on private land in accordance with the requirements of Design Element 6.8—Landscaping, (d) supporting the construction of a new wetland in accordance with the requirements of Design Element 4.3—Responding to Country and Design Element 5.5—Stormwater management.
D2	Existing tree planting within the Gateway Park is protected and enhanced as an important character element in accordance with the requirements of Design Element 6.2—Local character.

4.7 Waste management

Explanation

The minimisation and effective management of waste is essential to the overall functionality, appearance, amenity and environmental performance of developments. The appropriate handling of waste, including recycling and organic waste, is also a key step in achieving the principles of ecologically sustainable development, including through the avoidance of damage to the environment, optimising the life cycle and value of materials and resources, and supporting ***circular economy principles***.

Minimising waste is relevant to all stages of a development's life cycle, including demolition and site preparation, construction and occupation. Provision for convenient, efficient and safe waste storage and collection should inform building and site design from the earliest stages.

The storage of waste can have significant visual and other amenity impacts for building occupants and the public domain. Waste storage should be integrated with building and landscape design, and located away from sensitive areas such as building entries and habitable rooms.

Applications for developments that require on-site management of shared waste facilities are required to be accompanied by a Waste Management Plan prepared by a suitably qualified waste management expert. Where waste collection is required to occur on-site through a private waste service agreement, applications are required to include written evidence from the intended service provider that the proposed waste management provisions are consistent with its requirements.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 3, Part 3.4—Waste generation
- Design Element 4.7—Construction and site management

Objectives

O1 Ensure waste management—

(a) supports the circular economy principles,

(b) meets the needs of occupants,

(c) allows for ease of use by occupants,

(d) is integrated with building and landscape design, and

(e) enables the convenient, safe and efficient collection of waste by service providers.

O2 Minimise the visual and amenity impacts of waste management through the sensitive location and design of storage and collection areas.

Design criteria

General requirements

D1 Waste storage facilities—

(a) reflect the needs of occupants and users,

(b) are integrated into the design of buildings and sites,

(c) are located away from building entries and habitable rooms, and

(d) are screened and not readily visible from the street.

D2 Each dwelling is provided with a waste storage area that is—

(a) capable of accommodating a minimum of 3 waste bins (comprising 1 bin each for general waste, recycling waste and organic waste), and

(b) if located forward of the building line, integrated with the overall building and landscape design of the development.

Additional requirements for multi dwelling housing, residential flat buildings, shop top housing and community schemes

D3 Where waste storage is provided in a basement, a maximum ramp gradient of 1:6 is provided to the waste collection point.

D4 Where development entails the provision of shared waste storage or collection facilities, provision is made for—

(a) where organic waste bins are to be shared between occupants or residents—a communal storage area for organic waste bins,

(b) the temporary on-site collection day storage of waste bins in a location that is less than 10 metres from the street access.

Any communal waste storage area is to—

(a) be accessible to all occupants and residents without the need to traverse a private lot,

(b) be provided with water supply for cleaning, and

(c) comply with the requirements of D1 above.

D5 The application is accompanied by an Operational Waste Management Plan prepared in accordance with the requirements described in Schedule 19-E.

D6 Where on-site waste collection is required, the application is to include written confirmation from the intended waste service provider that the proposed means of servicing is compatible with its requirements.

D7 Where the development entails subdivision under the *Community Land Development Act 2021*, the details of any waste service agreement must be incorporated into the community management statement for the development.

Circular economy principles

A circular economy values resources by keeping products and materials in use for as long as possible. The benefits of a circular economy include—

- minimising the energy, land and other resources required for landfill,
- supporting economic productivity by minimising reliance on virgin materials,
- minimising the need for the long-distance transportation of products and materials,
- minimising pollution and environmental degradation associated with traditional means of waste disposal,
- stimulating opportunities for innovation and invention within the local economy.

Principles

For the purposes of this Design Element, the ***circular economy principles*** are—

- Principle 1—Replace raw materials with recycled products wherever possible
- Principle 2—Reduce demand for new landfill
- Principle 3—Minimise reliance on virgin materials
- Principle 4—Maximise the life cycle of products and materials through effective recycling and reuse
- Principle 5—Optimise the value of resources by supporting new technologies and innovation in the capture and reuse of products and materials
- Principle 6—Promote access to products and materials for re-use and recycling

4.8 Construction and site management

Explanation

Effective site management during the demolition and construction stages of development is required to ensure activities—

(a) protect the amenity of surrounding properties and public spaces,

(b) conform to relevant standards for public safety, work-site safety and risk management,

(c) employ sustainable re-use, recycling and waste management practices,

(d) avoid water quality, soil erosion and other environmental impacts,

(e) protect trees and other vegetation, and

(f) are consistent with the approved design quality outcomes for the development.

Depending on the scale and nature of the development, applicants may be required to prepare management plans to ensure the impacts of any demolition, excavation or construction work are appropriately managed. Types of plans that may be required include—

- a Construction Environmental Management Plan (CEMP),
- an Erosion and Sediment Control Plan (ESCP),
- a Soil and Water Management Plan (SWMP),
- a Construction Traffic Management Plan (CTMP),
- a Hazardous Substances Management Plan (HSMP).

Depending on the nature of the proposed development, Council may require these plans to be incorporated into a single CEMP. Additional details of Council's requirements for each type of plan are provided in Schedule 19-E.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 3, Part 3.4—Waste generation

Objectives

O1	Ensure the protection of site workers, the public and surrounding environment during site preparation, demolition and construction.
O2	Minimise the risk of soil erosion and sedimentation during demolition and construction.
O3	Ensure the health and environmental risks associated with hazardous materials are appropriately managed during demolition and construction work.
O4	Ensure site preparation, demolition and construction activities incorporate appropriate vegetation protection and rehabilitation measures.

Design criteria

D1 All demolition, excavation and construction activities are managed in accordance with the requirements of—

(a) Schedule 19F—Construction and site management,

(b) Council's Subdivision and Development Code,

(c) relevant standards and codes of practice including—

- *AS 2601:2001 The demolition of structures*,
- *AS 4970:2025 Protection of trees on development sites*,
- the SafeWork NSW *Code of Practice for Demolition Work*,
- the SafeWork NSW *Code of Practice for Construction Work*.

D2	Erosion and sediment control measures are in place to ensure site preparation, demolition and construction work— (d) avoids detrimental impacts on soil and ground stability, (e) avoids detrimental impacts on waterways, drinking water catchments, groundwater sources, vegetation and surrounding land, and (f) does not result in runoff carrying sediments or other pollutants leaving the site or entering the stormwater system.
D3	Demolition and construction works are to incorporate suitable dust and air quality control measures.
D4	Before any demolition or construction work commences, a hazardous materials audit of the site is to be prepared by an appropriately qualified person and a report of the audit results provided to Council. The report is to include details of the nature and location of each hazardous material identified.

Part 5—Subdivision

5.1 General requirements

Explanation

Good subdivision design establishes the basis for a sustainable and resilient urban pattern. Council's general requirements for subdivision within the Redmond Place Precinct are described below. Unless otherwise stated, these requirements do not apply to strata subdivision.

Lot types

The types of lot created by a subdivision will have important implications when applying the DCP's design controls for development within the Redmond Place Precinct. For the purposes of this chapter, a reference to a "lot" (other than a lot in relation to a strata scheme) includes a reference to the following lot types—

(a) standard lot

(b) corner lot

(c) rear lane lot

(d) integrated housing lot

(e) parallel road lot

(f) battle-axe lot

The characteristics of each lot type are described below (see 'Understanding lot type' on the following pages). Applicants should be mindful of the implications their preferred lot layout and mix may have on the application of the DCP's building envelope and site access controls. In all circumstances, applicants are encouraged to pursue a lot layout and mix that optimises the use of land and services, while supporting the DCP's objectives for desired future character and residential amenity.

Note that for the purposes of determining the lot type in accordance with this chapter, a ***lane*** is not considered to be a ***parallel road***.

Note—

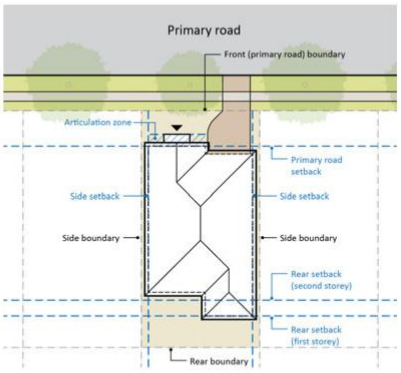
Applicants should also refer to the following provisions of the DCP—

- Chapter 5, Part 5.7—Subdivision

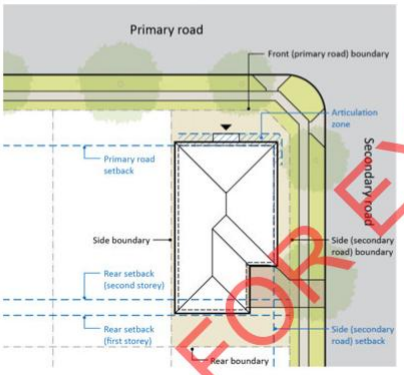
Objectives

O1	Ensure the subdivision pattern supports achievement of the precinct vision.
O2	Establish a pattern of street blocks, public open spaces and lots that—
	(a) promotes legibility, connectivity and accessibility across the precinct,
	(b) preserves and celebrates the natural attributes of the precinct, including its topography, geology and hydrology,
	(c) promotes a sense of place by emphasising public views of key sites, community amenities, recreation facilities and other landmarks,
	(d) supports urban heat management by facilitating the achievement of urban green space and tree canopy targets,
	(e) provides for the appropriate management of the interface between residential and non-urban land uses,
	(f) responds to natural hazards, including flood and bush fire risk, and
	(g) enables robustness and flexibility for the efficient and adaptive staging of development.

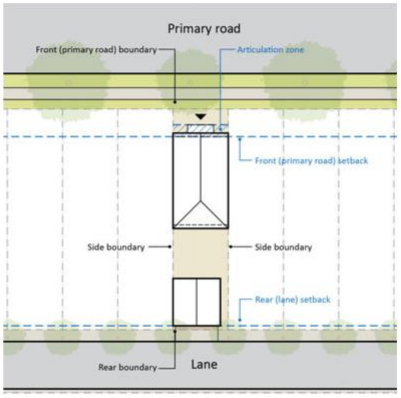
Understanding lot type



A ***standard lot*** is a lot that is not a battle-axe lot, a corner lot or a parallel road lot. In practice, this generally means a lot with frontage to a primary road and side boundaries shared with adjoining lots. Rear boundaries will usually either be shared with adjoining lots or a lane.



A ***corner lot*** means a lot that has two contiguous boundaries with a road or roads (other than a lane) that intersect at an angle of 135 degrees or less (whether or not the lot has any other boundaries with a road). The road to which the front of a dwelling house, or a main building, on the lot faces is referred to as a primary road. The remaining road that forms the lot's other (ie, side) boundary is referred to as a secondary road (see also Figure 19.14).



A ***rear lane lot*** is a lot that has vehicle access from either a lane or a private road created as association property within a community scheme. Rear lane lots are best suited for attached dwellings, semi-detached dwellings or multi dwelling housing (terraces), and where the primary road frontage of the lot is oriented towards a source of local amenity (such as a public park) or public transport corridor. Vehicle access to rear lane lots is required to be provided from the lane or private road adjoining the lot's rear boundary rather than from the primary road. Because lots typically front active streets with high pedestrian use, this provides the opportunity for buildings to have smaller primary road setbacks. Garages fronting the lane or private road also provide the opportunity for garage top dwellings (or 'Fonzie' flats) overlooking the lane.

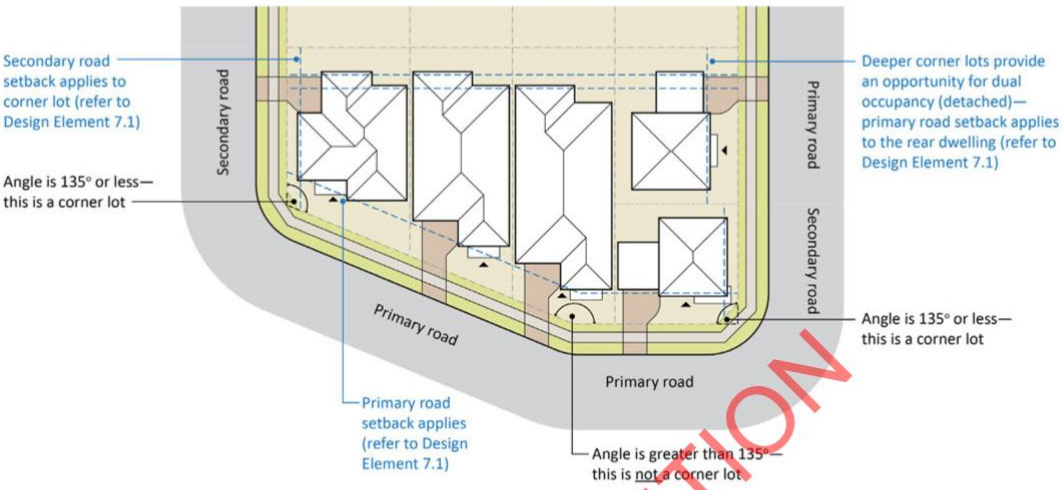
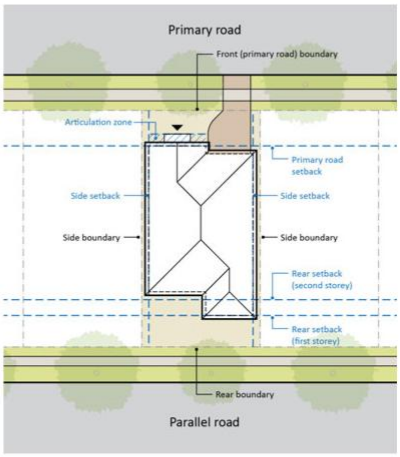
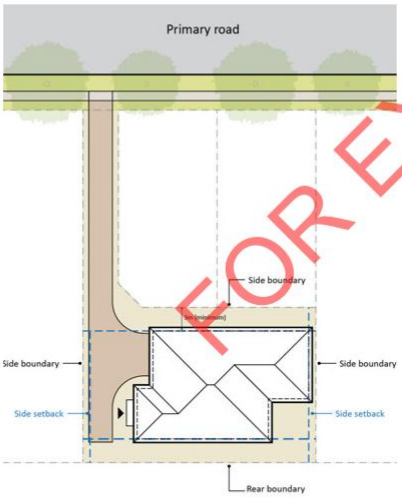


Figure 19.14 Corner lot characteristics

Integrated housing lots comprise larger lots set aside for the coordinated site planning, layout, internal subdivision and architectural design of residential development comprising three or more dwellings. Integrated housing lots are generally reserved for development comprising multi dwelling housing or residential flat buildings, but may also be used for development comprising a related group of dwellings and lots forming part of a community scheme. The generally larger size and dimensions of an integrated housing lot provide opportunities for innovative housing design and site layout, and are suitable for low to mid rise compact housing types such as multi dwelling housing (terraces), residential flat buildings or small lot villa home schemes.



A ***parallel road lot*** is a lot that has boundaries with two parallel roads, not including a lane. The road to which the front of a dwelling house, or a main building, on the lot faces is referred to as a primary road while the other road is referred to as a parallel road.



A ***battle-axe lot*** is a lot that has access to a primary road by an access laneway (or handle). Battle-axe lots are generally only appropriate in exceptional circumstances, such as where conventional vehicle access to a primary road is denied.

A battle-axe lot will have three side boundaries and a rear boundary. Because of the heightened likelihood of privacy and solar access impacts associated with this boundary configuration, battle-axe lots are required to have a minimum lot size of 450m² (excluding the area of the access handle) and a minimum width and depth of 12 metres.

Battle-axe lots are suitable only for single-storey buildings. Any building is required to be set back at least 3 metres from the side boundary closest to the primary road in order to protect the privacy and amenity of neighbouring dwellings. The rear setback will be determined by the circumstances of the lot. Where a battle-axe lot shares a rear boundary with other properties, a rear setback of 3 metres will apply. Where the rear boundary adjoins a public road (for example, a parallel road to which vehicle access is denied), primary road setbacks will apply (see Design Element 7.1 —Building height and setbacks).

Design criteria

General requirements

D1 Subdivision is consistent with the precinct concept plan, including in relation to—

(a) street block and lot layout,

(b) public open space network design and layout,

(c) provision for water cycle management infrastructure,

(d) street network design,

(e) distribution and location of lot sizes and residential densities.

D2 Street blocks are generally no more than 220 metres in length and 70 metres in depth. Blocks that are longer than 220 metres may be considered where pedestrian connectivity, stormwater management and traffic management objectives are met. In such cases, consideration should be given to the provision of a mid-block connection to ensure permeability for pedestrians.

D3 Street and block alignment supports legibility and wayfinding by emphasising public views of—

(a) public open space,

(b) key sites and buildings,

(c) community amenities and recreation facilities,

(d) the precinct's scenic landscape setting, including Gaanha Bula—Mount Canobolas and rural hillscapes.

D4 Lots are rectangular in shape. Where lots have a non-orthogonal shape, they are sized and oriented to enable development to meet all other relevant development controls and standards.

D5 Except as otherwise provided in this chapter, all lots (other than battle-axe lots) have the following minimum lot width—

- rear lane lots—4.5 metres
- other lots—7.5 metres

D6 Except as otherwise provided in this chapter, all lots have a minimum lot depth of 25 metres.

Vehicle access

D7 All lots have legal access to a public road.

D8 The widths and locations of driveway crossovers—

(a) provide for kerbside waste collection in accordance with the requirements of Design Element 4.7—Waste management, and

(b) enable efficient, safe and convenient access to waste bins by waste service providers.

D9 All driveway crossovers are to be designed and constructed in accordance with the requirements of the Orange City Council Subdivision and Development Code.

Corner lots

D10 Corner lots are designed to allow—

(a) vehicle access from the secondary road,

(b) for development comprising a dual occupancy—each dwelling to face a separate street.

Battle-axe lots

D11 The creation of battle-axe lots may be considered where—

- conventional frontage to a primary road is restricted or denied, or
- the lots front public open space.

In considering an application for the creation of a battle-axe lot, Council may take into account—

(a) the existing street and lot layout,

(b) physical constraints that inhibit the creation of other lot types,

(c) the likely impacts on the amenity of adjoining properties,

(d) the desired future character of the locality.

D12 Battle-axe lots have—

- a minimum area of 450m^2, and
- minimum dimensions of 12 metres,

excluding any access handle.

D13 Each battle-axe lot must have its own access handle with frontage to a public road.

D14 Except as provided by D13 below, access handles have—

- for access handles serving 1 dwelling only—a minimum access handle width of 4.5 metres and a minimum driveway width of 3 metres
- for access handles serving more than 1 dwelling—a minimum access handle width of 6 metres and a minimum driveway width of 4.5 metres
- a maximum length of 50 metres
- a corner splay with minimum dimensions of 3 metres by 3 metres

D13 Adjacent access handles may be shared between more than 1 lot where—

(a) the access handles in combination serve a maximum of 2 lots,

(b) each lot is burdened by a cross easement enabling reciprocal rights of way for the shared use of each lot's access handle,

(c) the minimum width of each access handle is 3 metres,

(d) the minimum shared driveway width is 4.5 metres, and

(e) adequate sight lines are available to enable safe vehicle and pedestrian movement.

D14 A maximum of 2 battle-axe lots is permitted to be located behind any other lot sharing the same primary road frontage.

5.2 Lot layout and orientation

Explanation

The layout and orientation of lots should respond to the climate of each place, including prevailing winds and breezes and solar orientation. Lot layout should also ensure each lot is capable of supporting its intended use. This includes consideration of the capacity of residential lots to support the dwelling layout and design requirements of Part 7—Residential development.

Note—

Lots to be used for residential accommodation must meet the minimum lot dimensions and lot size standards described in Design Element 7.3—Lot size and siting.

Objectives

O1 The layout and orientation of lots—

(a) respond to the local climate, including prevailing winds and breezes,

(b) are suitable for their intended land use, and

(c) optimise opportunities for passive solar design, energy efficiency and amenity.

Design criteria

D3 Lot orientation—

- optimises opportunities for passive solar design and good building orientation in relation to prevailing winds and breezes, and
- optimises opportunities for solar access to dwellings and principle private open space areas in accordance with the recommended lot orientation ranges shown in Figure 19.16.

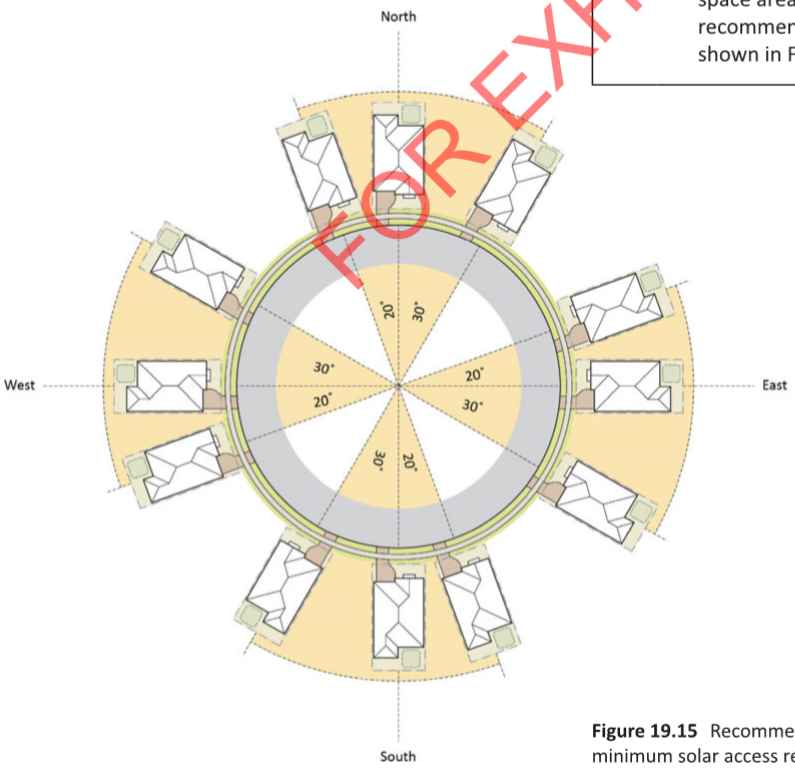


Figure 19.15 Recommended lot orientation for meeting minimum solar access requirements for private open space

5.3 Land use and density

Explanation

The distribution and mix of land uses and residential densities play a foundational role in determining a place's local character and livability. The DCP's requirements for land use and density support the precinct vision by—

- enabling a flexible and diverse range of housing types,
- locating higher density housing where this will be most accessible to public open space and amenities, best support public transport and encourage the activation of streets and public spaces,
- ensuring an appropriate transition between land uses, including those on adjoining non-urban land and transport routes.

The Land Use Map for the Redmond Place Precinct is shown in Figure 19.17. Subdivision is required to support the precinct vision by ensuring the layout and location of land uses and residential densities are consistent with the Land Use Map and the accompanying residential density categories described in Table 19.1.

Objectives

O1 Subdivision layout—

(a) ensures a flexible diversity of housing choices,

(b) supports medium density housing in suitable locations,

(c) ensures an appropriate transition between land uses and densities,

(d) provides for appropriate interfaces to major transport routes,

(e) supports the activation of streets and other public spaces, and

(f) enables flexibility for the economical and adaptive redevelopment of land over time.

Design criteria

D1 Subdivision design supports the distribution of land uses and residential densities described in Table 19.1 and the Land Use Map.

Table 19.1 Land use categories for the Redmond Place Precinct Land Use Map

Residential density category	Typical number of storeys	Indicative site density (dwellings per site area)	Typical residential accommodation types
Low density housing	1-2 storeys	<25 dwellings per hectare	• Dual occupancies • Dwelling houses • Secondary dwellings
Medium density (low rise) housing	1-2 storeys	50-75 dwellings per hectare	• Attached dwellings • Dual occupancies • Manor houses • Multi dwelling housing • Semi-detached dwellings
Medium density (mid rise) housing	3-4 storeys	>100 dwellings per hectare	• Residential flat buildings • Shop top housing

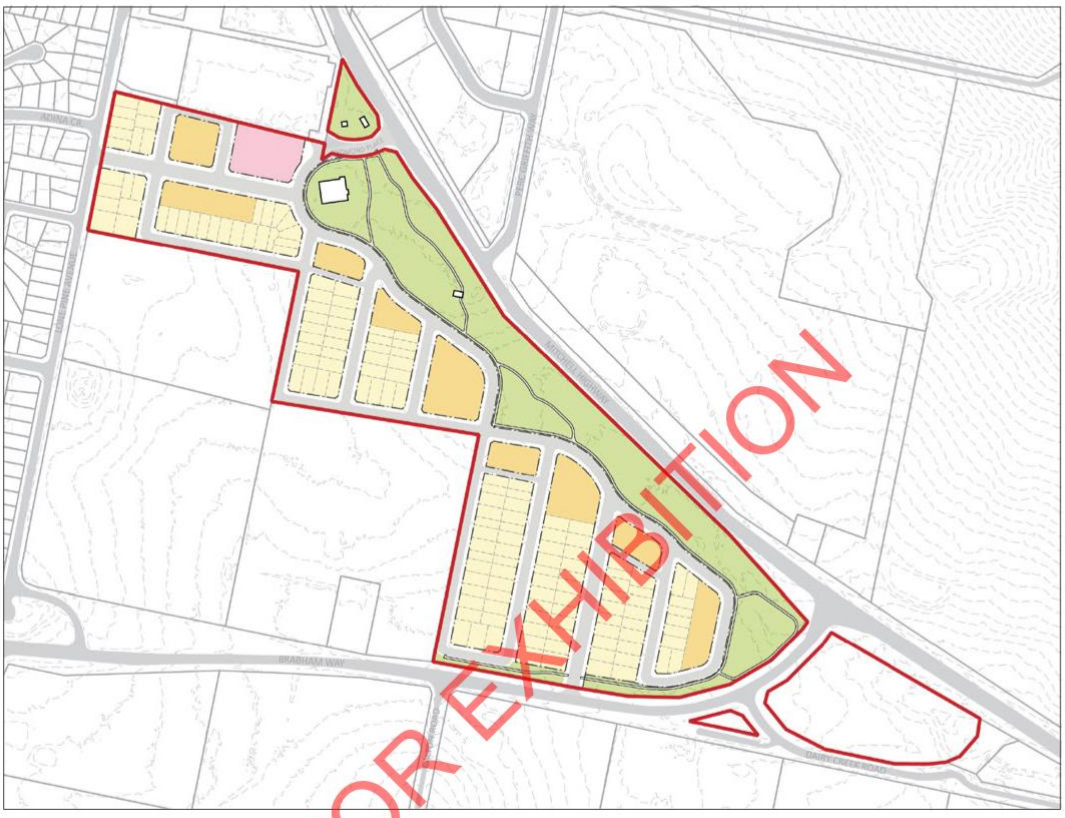


Figure 19.16 Redmond Place Precinct Land Use Map

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 0, Part 0.4—Former LEP matters ('Development along transport routes')
- Chapter 10, Part 10.3—Development along major transport routes

5.4 Street typology and grid

Explanation

The street grid serves as the principal movement network for people and vehicles. The various qualities of the street grid—including its connectivity, legibility, convenience and capacity to support a flexible diversity of route choices and travel modes—are key determinants of a place's overall liveability and capacity to accommodate a robust diversity of land uses and residential densities. At the same time, streets are vital social spaces that promote social interaction and a sense of place.

Streets also support the essential local infrastructure needed to make places attractive and functional, including public lighting, street trees and nature strips, footpaths and shared paths, stormwater management infrastructure (including bioretention facilities), on-street car parking, public signage and utilities.

The Street Grid Map for the Redmond Place Precinct is shown in Figure 19.18. Subdivision is required to support the development of the street typology and network described in the Street Grid Map and to ensure street design is consistent with the street design standards described in Schedule 19-C.

Note—

All roads are required to be designed and constructed in accordance with the engineering design and construction requirements of the Orange City Council Subdivision and Development Code.

Objectives

O1	Create an efficient, legible and safe street network and hierarchy.
O2	Ensure suitable buffers to and emergency access to and from adjoining bush fire prone land.

Design criteria

D1	Public roads are designed in accordance with the Street Grid Map and street design standards described in Schedule 19-C.
D2	Road design speeds are self-explanatory, with design solutions (including threshold treatments, street tree planting and nature strips) clearly communicating slower speed environments.
D3	Intersections are designed to maximise ease of movement for pedestrians and cyclists and to slow vehicular traffic.
D4	Subdivision design provides for future public road connections to adjoining land.
D5	Public road design facilitates— (a) safe, efficient and convenient access to kerbside waste collection for waste service providers, (b) sufficient turning capacity for waste service vehicles to minimise the need for reversing or three-point turns.
D6	Where waste collection from a public open space requires waste service vehicles to park in the street, public road design ensures sufficient capacity (including, where necessary, the provision of parking bays) to minimise the likelihood of traffic flow congestion.

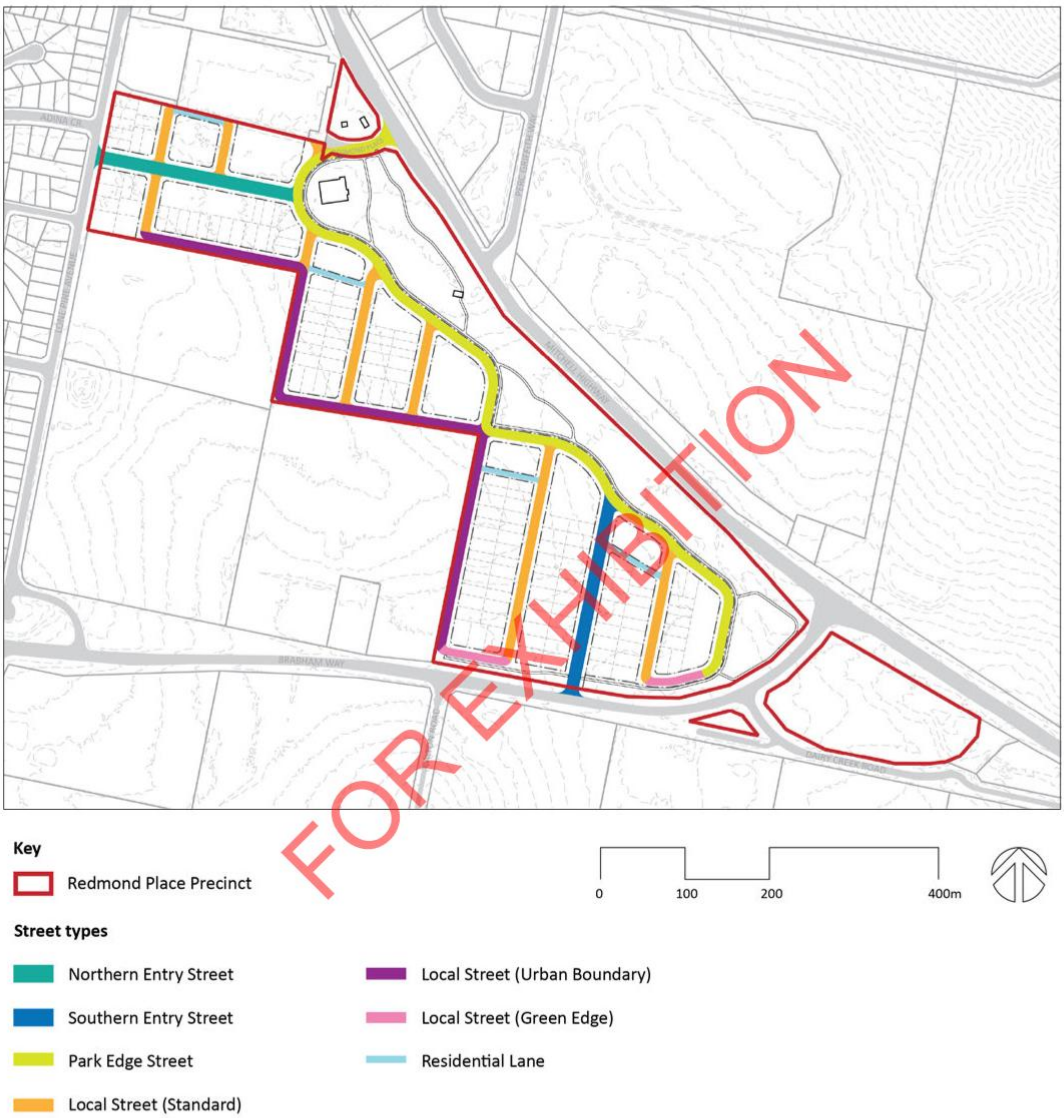


Figure 19.17 Redmond Place Precinct Street Grid Map

5.5 Active and public transport networks

Explanation

Subdivision is required to support the development of the precinct's intended active and public transport networks through the provision of footpaths and shared paths, walking trails and accompanying pedestrian and bicycle infrastructure. In addition, subdivision is required to support the viability of public transport by encouraging the development of active street environments and opportunities medium density housing in proximity to bus routes.

The Active Transport Map for the Redmond Place Precinct is shown in Figure 19.19.

Note—

All active transport infrastructure is required to be designed and constructed in accordance with the requirements of the Orange City Council Subdivision and Development Code.

Objectives

O1 Subdivision design—

(a) encourages cycling and pedestrian movement as sustainable alternatives to vehicular transport,

(b) ensures streets and public spaces are safe, comfortable, convenient and attractive for cyclists and pedestrians,

(c) supports the viability of public transport.

Design criteria

D1 Development supports the viability of public transport routes as described in the Active Transport Map by—

(a) ensuring the provision of opportunities for medium density housing (including through the provision of smaller residential lots and integrated housing lots) along and within proximity to any proposed public transport route,

(b) the provision of footpaths, shared paths, street trees, public lighting and other supporting pedestrian infrastructure in accordance with the Active Transport Map and the street design requirements referred to in Design Element 5.3—Street network.

D2 Development promotes the provision of healthy, safe and sustainable movement networks through the provision of an active transport network in accordance with that shown in the Active Transport Map.

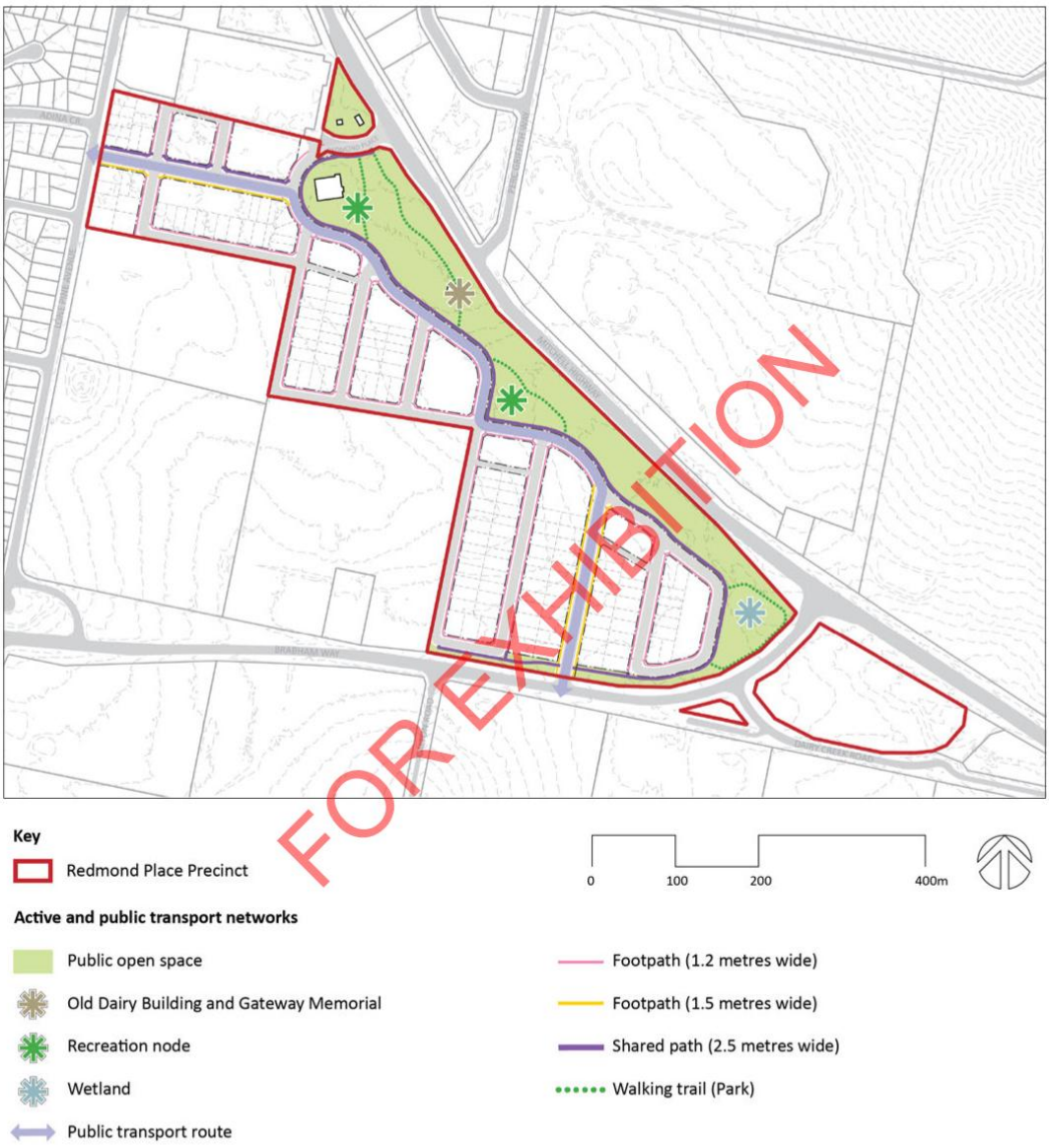


Figure 19.18 Redmond Place Precinct Active Transport Map

5.6 Public open space network

Explanation

The precinct vision provides for the extension and enhancement of public open space to meet the recreation needs of residents and visitors. The vision provides for the establishment of a linear public open space network incorporating the existing Hangar Building and Gateway Park and linking three new parks (a "Northern Park", "Central Park" and "Wetland Park") through a network of shared paths and walking trails.

The public open space network is intended to play a key role in sustainable water cycle management for the Redmond Place Precinct by incorporating and embellishing existing blue infrastructure, including overland flow paths, bioretention facilities, stormwater detention basins and a new wetland to assist in water quality management. The conservation and enhancement of native vegetation within the public open space area will promote rehabilitation of the precinct's biodiversity and support precinct design outcomes in line with the Redmond Place Connecting with Country Framework (as described in Schedule 19-A).

The Public Open Space Map for the Redmond Place Precinct is shown in Figure 19.20. Development is required to support the precinct vision by facilitating the public open space outcomes described in the map.

Note—

More detailed park design requirements, including those for the Northern Park and Central Park, are provided in Design Element 6.5—Public domain design.

Objectives

O1 Support the provision of a connected and integrated public open space and water cycle management network.

O2 Support connecting with Country by ensuring the public open space network—

(a) preserves and enhances waterways, ecosystems and landscapes,

(b) incorporates opportunities for public art and cultural interpretation.

O3 Ensure public open space—

(a) preserves and enhances existing public open space assets and features.

(b) is accessible to all users,

(c) enhances the visual entry to Orange,

(d) supports a diverse range of recreation, water cycle management and environmental functions, and

(e) meets the local recreation and amenity needs of precinct residents and visitors.

Design criteria

D1 Public open space is provided in accordance with the layout of spaces and facilities described in the Public Open Space Map.

D2 Existing parks and associated features, including the Gateway Park, Memorial Garden and tree planting, Old Dairy Building and Visitor Park, are preserved and integrated with the public open space network.

D3 Public open space is designed and delivered in accordance with the requirements of Design Element 6.5—Public domain design.

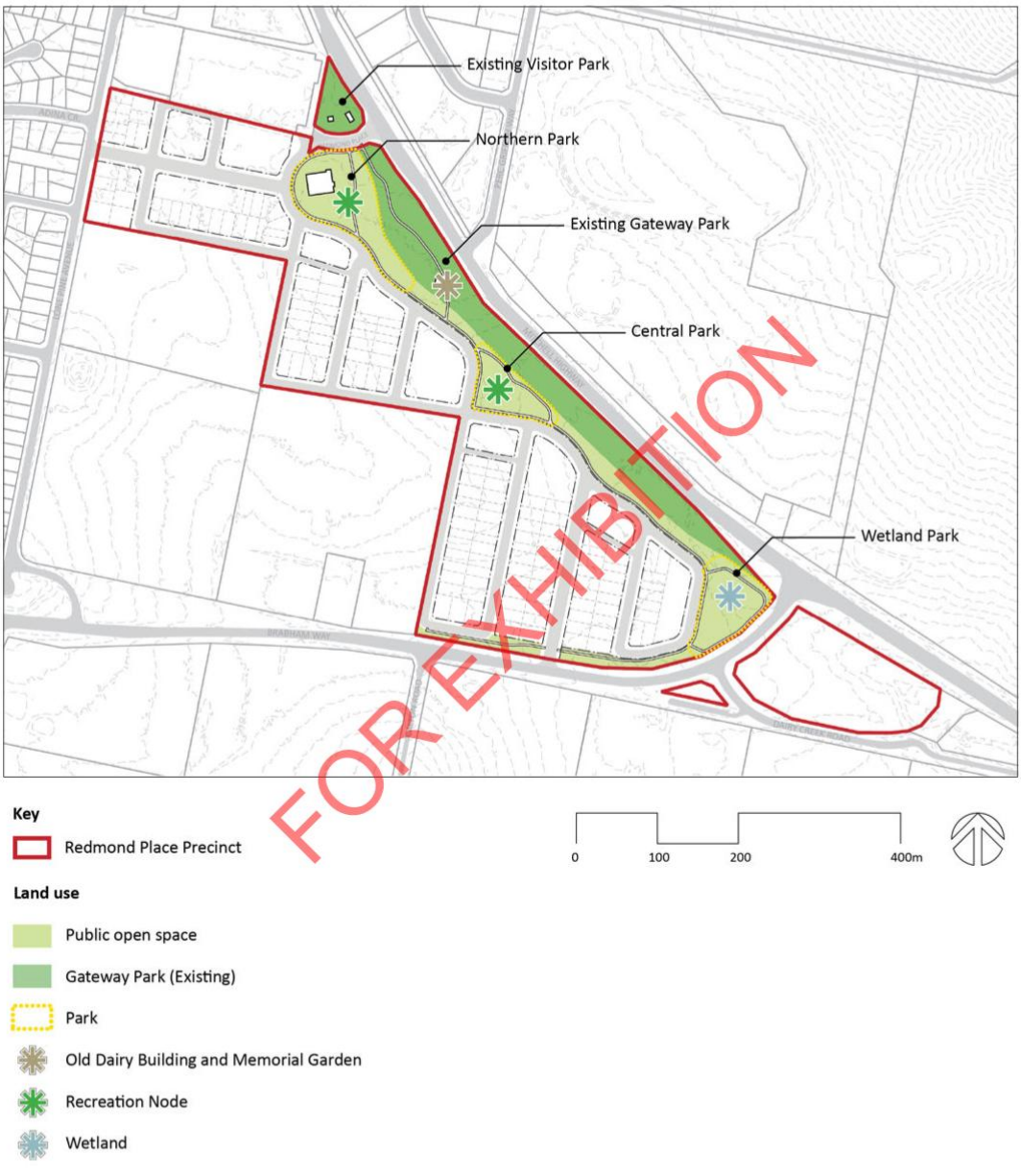


Figure 19.19 Redmond Place Precinct Public Open Space Map

5.7 Water cycle management

Explanation

Water cycle management refers to the holistic management of all aspects of a place's water cycle, including bioretention of rainwater and groundwater recharge, stormwater and flood risk management, and water collection and quality management. Sustainable water cycle management integrates natural water systems into the urban system, providing for the preservation of ecological processes and functions while supporting the amenity and water use requirements of each urban place.

The Water Cycle Management Map for the Redmond Place Precinct is shown in Figure 19.21. The map describes the desired precinct-wide water cycle management outcomes for the precinct. The water cycle management outcomes are intended to support—

- the integration of blue and green assets within the street grid and linear public open space network,
- urban heat management through the integrated provision of new green and blue public spaces,
- the achievement of groundwater management, water quality and flood planning outcomes for the precinct as described in Design Elements 4.2, 4.3 and 4.4,
- biodiversity conservation and enhancement outcomes as described in Design Elements 4.5, 6.6 and 6.7,
- connecting with Country and local character outcomes as described in Design Elements 6.1 and 6.2.

Note—

All stormwater management infrastructure is required to be designed and constructed in accordance with the requirements of the Orange City Council Subdivision and Development Code.

Relevant Orange LEP 2011 clauses

Clause 7.3—Stormwater management

Objectives

O1	Water cycle management— (a) supports urban heat management and water sensitive urban design outcomes at the precinct scale, (b) supports connecting with Country, (c) minimises and mitigates the adverse impacts of urban stormwater on land, biodiversity and receiving waters, (d) manages flood risk and ensures the safety of people, buildings and places, (e) controls and minimises the impact of runoff and soil erosion, (f) minimises reliance on public water resources by encouraging the reuse, recycling and harvesting of rainwater.
O2	Integrate water cycle management into the design and environmental functioning of streets and public open spaces.

Design criteria

D1	Development supports the precinct vision by facilitating water cycle management in accordance with the outcomes described in the Water Cycle Management Map and Table 19.2.
D2	Overland flow paths are incorporated into the public open space network.
D3	Development demonstrates the incorporation of water sensitive urban design measures, including bioretention facilities.
D4	The size and detailed location and design of any public water cycle management infrastructure will be required to be determined at the development application stage and in accordance with a water cycle management strategy for the development prepared by a suitably qualified engineer.

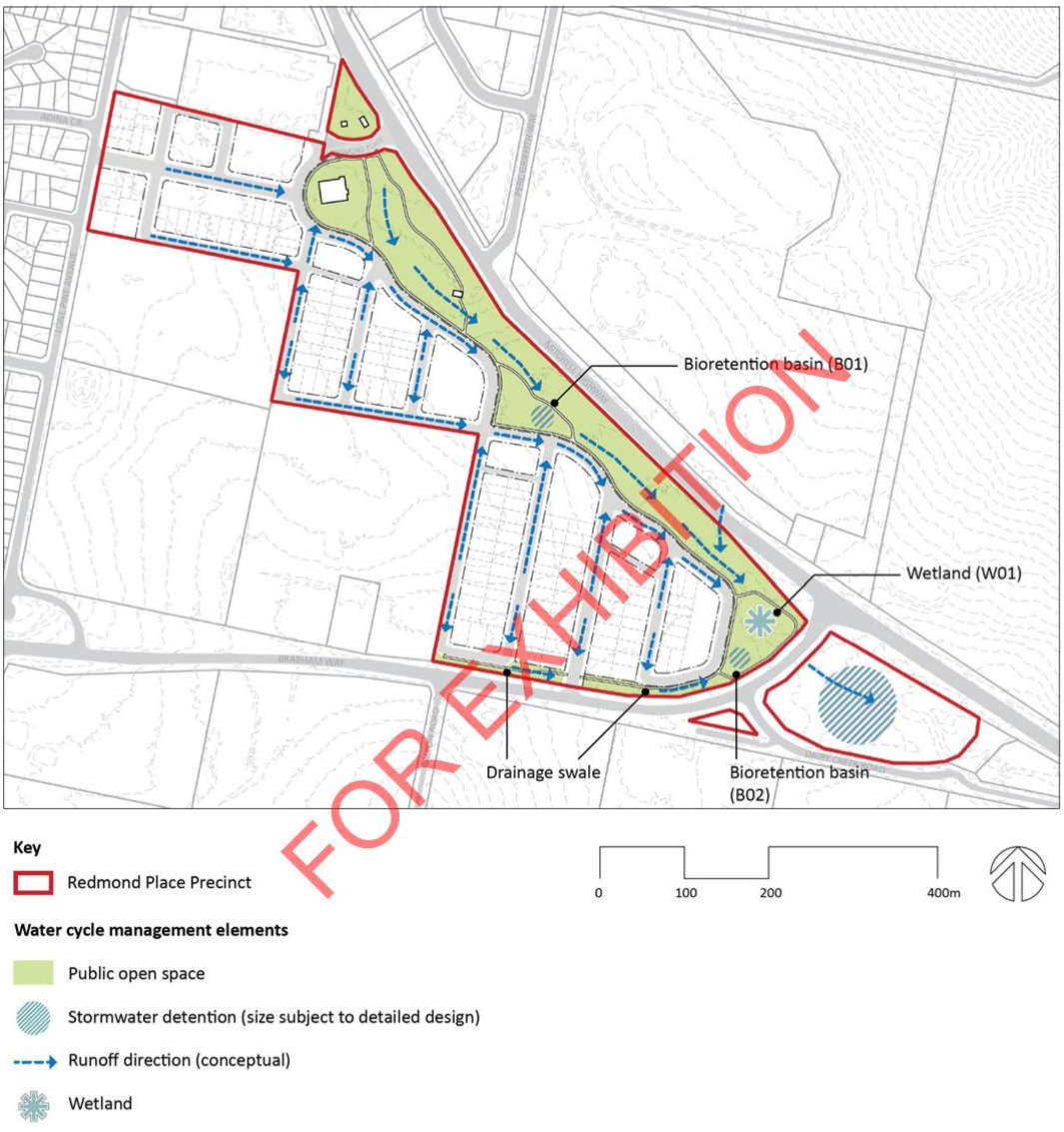


Figure 19.20 Redmond Place Precinct Water Cycle Management Map

5.8 Utilities and services

Explanation

The provision of essential services and public utility infrastructure is a key means of ensuring the development of a sustainable and resilient urban form. In order to ensure development within the Redmond Place Precinct is adequately serviced, it is important to consider both current and future needs at the subdivision stage. This includes consideration of the role played by services and utilities in determining the capacity of each place to adapt to changing needs over time, including those related to climate change, changes in population and the emergence of new technologies including smart infrastructure.

Where development is required under the Commonwealth *Telecommunications Act 1997* to ensure the provision of telecommunications facilities and fibre-ready facilities to new lots, a condition will be applied to the development consent requiring the installation of those facilities prior to the issuing of a subdivision certificate or subdivision works certificate.

Note—

All utilities and services are designed and constructed in accordance with the requirements of the Orange City Council Subdivision and Development Code. All utilities and services are designed and constructed in accordance with the requirements of the Orange City Council Subdivision and Development Code.

Relevant Orange LEP 2011 clauses

Clause 6.2—Public utility infrastructure

Clause 7.11—Essential services

Objectives

O1	Ensure land is adequately served by essential services and public utility infrastructure.
O2	Support urban resilience by ensuring the design and delivery of utilities and services— (a) considers the impacts of climate change, and (b) provides for new and emerging technologies.
O3	Ensure utilities and services are accessible and cost-effective to maintain.
O4	Minimise the adverse impacts of essential services and public utility infrastructure on the environment and public domain.

Design criteria

D1	Utilities and services— (a) are located underground wherever possible, (b) are integrated with the overall design of streets and public spaces, and (c) facilitate the DCP's tree canopy targets for streets and public spaces.
D2	Development provides for adequate lighting to streets and public spaces.
D3	Utilities and services are designed to accommodate— (a) technological advancements, including smart meters and other smart technology, and (b) augmentations in response to future increases in service demand.
D4	Provision is made for telecommunications and fibre-ready facilities to be installed to all lots.

5.9 Precinct staging

Explanation

Effective staging of subdivision works within the Redmond Place Precinct is an important means of ensuring—

- essential services and utilities are provided in a manner that is cost-effective and coordinated with the broader servicing needs of the City,
- residents and visitors are adequately supported by all services and public amenities relevant to their needs in a timely manner,
- the impacts of development on the surrounding environment are able to be effectively managed over time.

The Development Staging Map for the Redmond Place Precinct is shown in Figure 19.22. This indicates the stages intended to guide the coordinated sequencing of development within the precinct. Variations to these stages will be considered where the applicant can demonstrate that this is justified in accordance with the design criteria.

Note—

For the purposes of this chapter, a reference to ***public amenities*** includes a reference to public open space.

Relevant Orange LEP 2011 clauses

Clause 6.2—Public utility infrastructure

Clause 7.11—Essential services

Clause 7.16—Development in Redmond Place Precinct

Objectives

O1	Ensure development supports the economical and coordinated sequencing of essential services and public utility infrastructure.
O2	Ensure the timely and cost-effective delivery of essential services, public amenities and public utility infrastructure.

Design criteria

D1	Subdivision layout supports the economical and coordinated staging of development, including the timely and cost-effective delivery of essential services.
D2	Development is generally sequenced according the stages described on the Development Staging Map. Exceptions to this staging will be considered where the applicant has demonstrated that the proposed variation— (a) will not create any additional financial burden on any public authority or utility provider, (b) is consistent with any relevant water supply and sewerage servicing strategies, (c) will not result in any additional impacts on the environment or amenity of neighbouring properties, (d) will expedite the delivery of well located affordable housing, and (e) is consistent with the precinct vision and aims of this chapter.
D3	Development ensures all essential services, public amenities and public utility infrastructure, are provided for each development stage in a timely and coordinated manner.

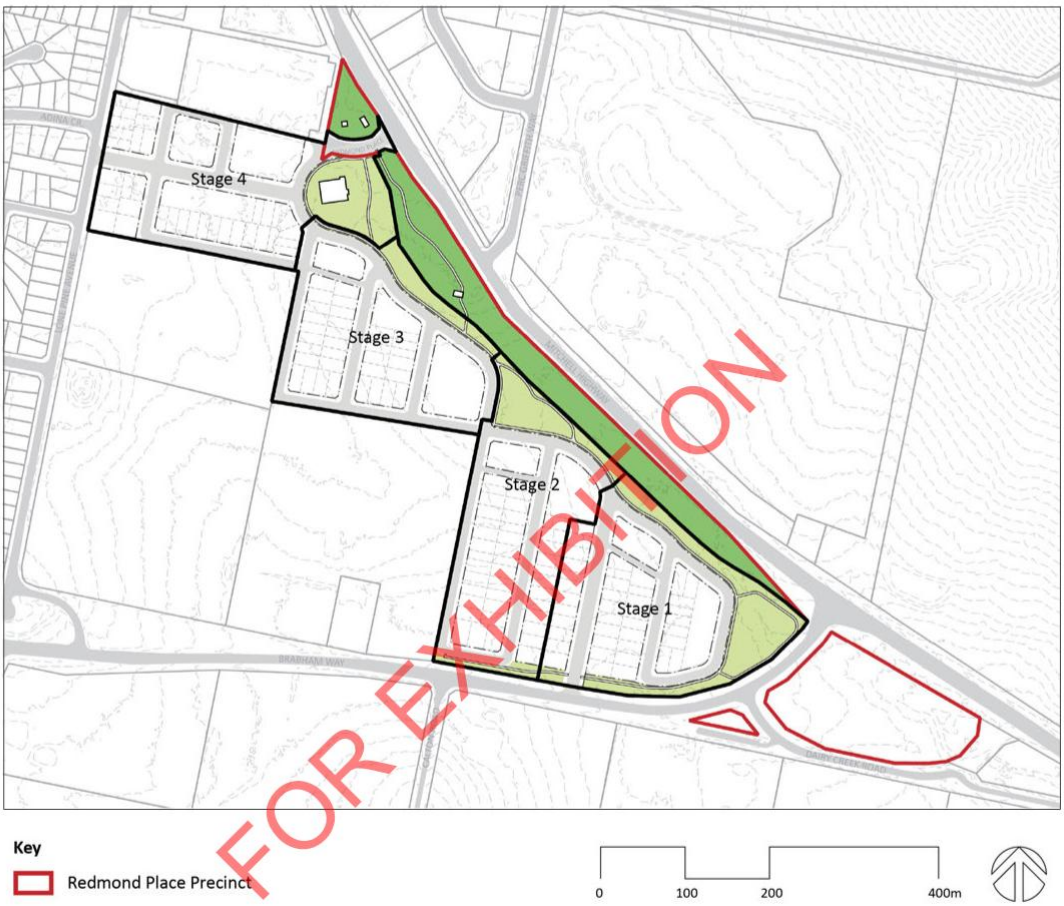


Figure 19.21 Redmond Place Precinct Development Staging Map

5.10 Affordable housing

Explanation

Land within the Redmond Place Precinct is located within the ***Redmond Place affordable housing area***. The Orange LEP 2011 sets requirements for the provision of affordable housing as part of the overall mix of dwellings developed within the affordable housing area.

Affordable housing refers to housing that is provided for and managed on behalf of people belonging to very low, low and moderate income households (see Dictionary). Affordable housing is usually provided in the form of affordable rental housing and priced so that tenants can afford to pay for housing while meeting other basic living costs such as food, clothing, transport, medical care and education. As a rule of thumb, housing is considered to be affordable if it costs less than 30% of gross household income.

In meeting the LEP's requirements, affordable housing is required to be managed by a ***registered community housing provider*** and must be rented to tenants at rents that do not exceed a benchmark of 30% of actual household income. Once established, any affordable housing is required to be maintained as affordable housing for a period of at least 15 years from the date of issue of the occupation certificate.

Note—

For the purposes of the DCP, a household is taken to be a very low, low or moderate income household if the household has a gross income within the following ranges of percentages of the median household income for the Rest of NSW Statistical Area—

- very low income household—less than 50%,
- low income household—50% or more but less than 80%,
- moderate income household—80% or more but no more than 120%.

Objectives

O1	Support social inclusion and housing affordability through the provision of well located affordable housing.

Design criteria

D1 Where subdivision will result in lots to be used for affordable housing in accordance with a relevant environmental planning instrument—

(a) all lots proposed to be reserved for affordable housing are clearly indicated on the subdivision plan, and

(b) a public positive covenant is registered against the title for any lot referred to in (a) above requiring the land to be reserved for affordable housing in accordance with the requirements of the environmental planning instrument.

D2 Development supports social inclusion by ensuring—

(a) a balanced and equitable distribution of affordable housing throughout the precinct,

(b) the provision for affordable housing through a diversity of housing sizes and types,

(c) the provision of affordable housing in locations that are well located relative to amenities, recreation facilities and public transport.

Relevant Orange LEP 2011 clauses

Clause 7.17—Affordable housing in certain areas in Redmond Place Precinct

Part 6—Urban design

6.1 Responding to Country

Explanation

Country is central to the identity and wellbeing of Aboriginal people and communities. The cultural practices of connecting with and caring for Country are also important means through which the storage, maintenance and transfer of traditional knowledge can take place.

Responding to Country is the starting point for good precinct design. It means recognising the importance of traditional ways of connecting with and caring for the land. It also means understanding the unique landscape, cultural and natural qualities of the precinct, and how these inform its 'place' as part of Country.

Where relevant, development is required to support the precinct design outcomes described in Schedule 19-A. The outcomes are not exhaustive and their preparation acknowledges that connecting with Country is an ongoing process based on engagement, listening and discovery over time. Applicants and designers are encouraged to build upon these outcomes including, where appropriate, further engagement with community and other relevant stakeholders in relation to key sites and public domain projects.

Note—

For the purposes of this chapter, the term ***Country*** is acknowledged as having a specific and special meaning for Aboriginal people. It includes Earth, Waters and Sky, and encompasses tangible and intangible aspects, knowledge and cultural practices, belonging and identity, wellbeing and relationships. People are part of Country (see Dictionary).

The DCP's controls recognise that the cultural practices of ***connecting with Country*** and ***caring for Country*** are important means of ensuring cultural health and wellbeing for Aboriginal people. The controls also acknowledge that these practices entail ***Indigenous cultural and intellectual property*** (or ***ICIP***) as recognised in international law. The protection of ICIP is recognised as an important requirement for development within the Redmond Place Precinct.

Objectives

O1	Precinct planning and design support the cultural safety, health and wellbeing of Aboriginal people by facilitating ongoing practices of connecting with Country.
O2	Development adopts a precautionary approach to the identification and protection of Aboriginal cultural heritage.

Design criteria

D1	Development supports the achievement of the connecting with Country precinct design outcomes described in Schedule 19-A, including where relevant— (a) the provision of public spaces and facilities for ongoing knowledge sharing and cultural education, (b) opportunities for public art and interpretation, (c) the restoration and healing of landscapes and water cycle systems, (d) establishment of a community garden, (e) the preservation and enhancement of public views of Ghaana Bula—Mount Canobolas, (f) any other measures that, following consultation with Aboriginal stakeholders, are considered by Council to support the key design themes.
D2	Where development entails consultation with Aboriginal stakeholders, it ensures appropriate measures are taken to— (g) ensure the cultural safety and wellbeing of stakeholders, and (h) protect the Indigenous cultural and intellectual property of stakeholders.
D3	In the event of any unanticipated find or unanticipated skeletal remains, site work complies with the unexpected finds protocol described in Schedule 19-B.

6.2 Local character

Explanation

The desired future character for the Redmond Place Precinct is expressed in the precinct vision and its supporting important character elements. These reflect the distinctive qualities and features that are intended to help mould the precinct's unique identity and sense of place. All development within the precinct is required to preserve and enhance the important character elements.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 3, Part 3.2—Scenic, landscape and urban areas
- Chapter 7, Part 7.1—Planning for residential areas
- Chapter 13, Part 13.4—Development in the vicinity of heritage items

Objectives

O1	Support the desired future character of the precinct.
O2	Acknowledge and respond to the precinct's unique heritage, natural and scenic landscape settings.

Design criteria

D1	Development preserves and enhances the important character elements described in Part 3—Precinct vision.
D2	The design of streets and public open spaces promotes visual connection to the precinct's heritage and scenic landscape settings by maintaining and enhancing public views of key landscapes, including— • Gaanha Bula—Mount Canobolas, • neighbouring heritage landscapes, • Frederick's Valley hillscapes, • North Orange and Byng hillscapes and peaks, and • Spring Hill hillscapes.
D3	Subdivision design maintains a visual and physical curtilage to adjoining heritage items and non-urban landscapes by ensuring public road frontages and associated positive street address is provided along any shared boundary with a neighbouring property.

6.3 Urban heat management

Explanation

The effects of long term climate change mean that the City of Orange faces rising temperatures and the increased likelihood of more extreme weather events, including heatwaves. The cumulative effects of these changes are experienced most acutely within urban environments due to the heightened impacts of solar heat reflection from buildings, roads and other hard surfaces and the relative absence of green landscapes required to absorb reflected heat. These effects entail significant implications for human health and comfort, demand for energy and water consumption, biodiversity conservation and the longevity of public infrastructure and utilities.

Effective urban heat management for the Redmond Place Precinct means integrating the green infrastructure required to absorb heat, such as tree canopies, green roofs, landscaped areas and public parks, into the precinct's overall urban design. It also means optimising the design of individual buildings and spaces, including the incorporation of cool roofs and cool landscapes, to minimise heat retention during warmer months ensure year-round thermal comfort.

Note—

Applications are required to provide a plan (or plans) illustrating all roof surface areas and associated SRI values or notation as green roofs or locations where solar panels are flat mounted. Council may also require applicants to provide roof product cut sheets to verify SRI performance.

Exceptions to the DCP's requirements for cool roofs and cool landscapes may be considered where—

(a) heritage conservation requirements preclude the use of cool building materials, or

(b) it can be demonstrated that excessive glare would be a problem.

Objectives

O1	Minimise the contribution of building and landscape materials to urban heat impacts.
O2	Promote urban cooling through the use of appropriate materials, colours and shading in landscapes.

Design criteria

D1	Roofs include a cool roof area equivalent in size to at least 75% of the total roof area across the site. When calculating the total roof area, the following are not included— (a) areas formed as green roofs, and (b) areas where solar or photovoltaic (PV) panels are flat mounted. Areas where solar or PV panels are not flat mounted are included in the total roof area.
D2	Materials with a high thermal mass, such as concrete, should be avoided as a roofing material where shade or other coverage is not provided, or where roofs are not light in colour.
D3	Where green roofs and green walls are proposed as a means of urban heat mitigation, a landscape plan and maintenance plan must be included in the application demonstrating consistency with the green roof and wall requirements.
D4	Materials for outdoor car parking spaces, driveways and other hard surfaces are consistent with the cool landscape requirements.
D5	Shading is provided to external walls and outdoor hard surfaces to limit their exposure to solar heat in warmer months while allowing solar access in cooler months.

Cool roof requirements

For the purposes of calculating the cool roof area in accordance with this design element, a roof may be considered to comprise a cool roof where—

(a) the roof is composed of external materials achieving the following minimum Solar Reflective Index (SRI) values—

(i) for roof pitches equal to or less than 15°—a minimum SRI value of 64 with a minimum 3-year manufacturer guarantee,

(ii) for roof pitches greater than 15°—a minimum SRI value of 34 with a minimum 3-year manufacturer guarantee,

(iii) for rooftop terraces—a minimum SRI value of 28 with a minimum 3-year manufacturer guarantee.

Green roof and wall requirements

Proposals for green roofs or walls must demonstrate the following—

(a) provision of irrigation and drainage sufficient to ensure sustained plant growth and health,

(b) safe useability of associated spaces,

(c) plant species selection appropriate to the climate and site conditions, including wind exposure and solar access,

(d) consistency with the DCP's controls for planting on structures as described in Design Element 6.7—Landscaping,

(e) provision for ongoing maintenance, including replacement of dead or dying plants.

Wherever possible, green roofs and walls should be designed to use rainwater, stormwater or recycled water for irrigation. Container gardens and pot plants are not considered to be green roofs for the purposes of the DCP's design controls.

Cool landscape requirements

Cool landscapes employ passive design to achieve outdoor thermal comfort during warmer months. As a general rule, cool landscapes aim to provide temperatures of no more than 27° on extreme heat days. Cool landscapes typically employ a combination of trees and other green infrastructure, waterways, green roofs and walls, shade devices and water cycle management facilities to achieve effective cooling.

Blue and green infrastructure

Water cycle management facilities employed in cool landscapes typically include bioretention facilities (rain gardens), wetlands and ponds. These capture rainwater and stormwater and store water in the landscape, both as a means of cooling and a way to support green infrastructure. Other water-based features may be incorporated, including fountains, misting fans or water play features to create cool zones in the landscape. As a general rule, water features should use only non-potable water.

Materials and hard surfaces

Outdoor car parking spaces, driveways and other hard surfaces may contribute to cool landscapes where they use—

(a) high albedo (ie, lightly coloured) materials where glare is not a constraint, shading is able to be provided and where there is potential for reflected heat to be absorbed by surrounding green infrastructure,

(b) medium coloured materials with high thermal emittance and/or permeable paving where shade is not provided.

Permeable paving should only be used where traffic loads are light and where there is an opportunity for rainfall to soak into soil below the pavement.

6.4 Urban tree canopy

Explanation

The urban tree canopy of a place refers to the combined tree canopy created by trees on both public and private land. The development and maintenance of a healthy urban tree canopy is an important means of—

- promoting biodiversity conservation,
- supporting urban heat management through the cooling of buildings and outdoor spaces, and
- supporting integrated water cycle management and groundwater recharge, including through the provision of deep soil zones, understorey planting and bioretention opportunities, and
- enhancing local character and the quality of streetscapes, and
- creating desirable and active public spaces.

Tree canopy coverage targets apply to all public road reserves, public open spaces and car parks (including private car parks) within the Redmond Place Precinct. These are intended to support the achievement of the precinct vision and the desired future character of streets and other public spaces. The targets also support achievement of Council's overall canopy coverage targets for the City of Orange as described by Council's adopted urban forest strategy ('Greening Orange—Our Urban Forest Strategy').

All tree planting on public land within the precinct is to be undertaken in accordance with the requirements described in Schedule 19-D. Applicants undertaking planting on private land should also refer to Design Element 6.9—Landscape design for

Note—

For the purposes of the DCP, ***tree canopy coverage*** means the proportion of the area of a given space or site that is covered by tree canopy, expressed as a percentage of the total area of the space or site area. In demonstrating that development has achieved the DCP's tree canopy coverage target, the calculation of tree canopy coverage should be based on the size that each tree may reasonably be expected to attain at maturity.

Objectives

O1	Establish a healthy urban tree canopy that— (a) supports the precinct vision, (b) supports biodiversity conservation and restoration, (c) facilitates urban heat management, (d) supports integrated water cycle management, (e) supports the development of healthy and active public spaces.

Design criteria

D1	Public roads achieve mature tree canopy coverage in accordance with the tree canopy coverage targets for each street type described in Schedule 19-C.
D2	Public spaces (excluding car parks, sports courts, playing fields and land used for bioretention or stormwater detention) achieve a minimum mature tree canopy coverage of 45%.
D3	All tree planting and species selection is undertaken in accordance with the requirements described in Schedule 19-D.
D4	Development maintains and where possible enhances the existing tree canopy. Where established trees are proposed to be removed, replacement planting should be capable of maintaining at least an equivalent extent of tree canopy coverage at maturity.
D5	Street tree species selection and placement ensures unfettered access to kerbside waste collection for waste service vehicles.

Figure 19.22 Orange's urban tree canopy is an important character element connecting the city to its landscape.

Figure 19.23 Example of mature street tree canopy within Orange's historical town grid.

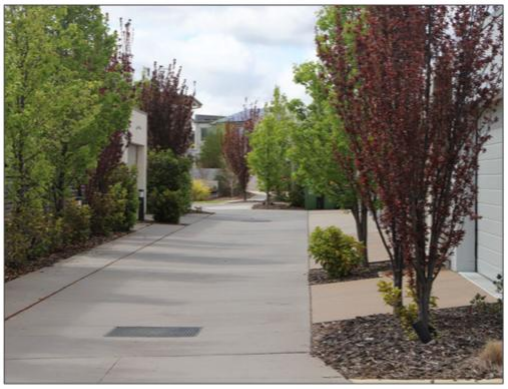


Figure 19.24 Example of well-considered on-site tree planting forming part of a community scheme.

D6	Where development— • is located on public land, or • otherwise includes a car park (or car parks) forming part of a strata scheme or community scheme, any car park that does not form part of a building or that is not otherwise covered by part of a building— (a) achieves a minimum tree canopy coverage of 30%, and (b) provides for trees to be planted at a rate of at least 1 tree per 7 car spaces (including any wash bays) to ensure an even distribution of tree canopy coverage.

6.5 Public domain design

Explanation

The public domain encompasses the variety of collectively-owned and publicly accessible elements —including parks, streets, footpaths, public buildings and community and recreation facilities—that together make up a place's combination of formal and informal settings for social gathering and interaction (see Dictionary).

The public domain of an urban place comprises the essential 'glue' holding together its overall urban form and providing the public setting within which private buildings and spaces can successfully coexist. Ensuring a well designed public realm is also relevant to the achievement of a wide diversity of environmental, cultural and social outcomes. In particular, the public domain of an urban place—

- contributes to its sense of coherence and community identity,
- enables efficient and safe movement networks,
- promotes social inclusion and cultural wellbeing through the provision of inclusive and accessible meeting spaces and shared facilities,
- contributes to urban heat management, biodiversity conservation and sustainable water cycle management,
- manages environmental risks, including flood risk and bush fire risk.

Note—

Council encourages any design processes for public buildings or spaces to be informed by engagement with community stakeholders, including Aboriginal stakeholders. Where considered relevant by Council, applications will need to be accompanied by a social needs assessment prepared by a suitably qualified social planner or equivalent expert.

Objectives

O1 The design and delivery of public buildings and spaces—

(a) respond to social needs,

(b) support public safety and accessibility,

(c) support cultural wellbeing and inclusiveness, and

(d) support the holistic achievement of the DCP's environmental management and urban design outcomes.

O2 The activation of public spaces is supported by—

(a) the use of smart technology,

(b) ensuring spaces are safe and universally accessible,

(c) the appropriate design and location of facilities and spaces in relation to surrounding land uses, and

(d) provision of public lighting.

O3 Ensure public domain infrastructure minimises reliance on non-renewable energy.

Design criteria

D1 Public open space design incorporates, preserves and enhances the existing features of the Visitor Park and Gateway Park, including—

- remnant tree planting and memorial poplars and tree arcs,
- the Memorial Garden, and
- the Old Dairy Building.

D2 The design and delivery of public spaces and buildings supports the holistic delivery of the precinct vision and the supporting provisions of the DCP, including in relation to—

(a) local character,

(b) connecting with Country and cultural wellbeing,

(c) public open space,

(d) safety and accessibility,

(e) wayfinding and legibility,

(f) land use and density,

(g) street and landscape design,

(h) active and public transport,

(i) urban heat management,

(j) bioretention, groundwater recharge and water quality management,

(k) flood and bush fire risk management,

(l) biodiversity conservation and vegetation management,

(m) urban tree canopy, and

(n) water sensitive urban design.

D3 Public space design provides for the incorporation of smart technologies, including in relation to—

(a) security,

(b) environmental monitoring,

(c) wayfinding, interpretation and education,

(d) community notice and public information,

(e) lighting,

(f) waste management,

(g) smart street and park furniture (including USB charging and Wi-Fi connectivity), and

(h) other relevant applications.

D4 The design and layout of public open space is generally in accordance with—

(a) for the Northern Park—the Northern Park Concept Plan as shown in Figure 19.26,

(b) for the Central Park—the Central Park Concept Plan as shown in Figure 19.27,

(c) for other public open spaces—the Precinct Plan as shown in Figure 19.5.

D5 The design and layout of streets and other public spaces promotes year-round user comfort, including provision for cool landscapes and shade in summer, solar access in winter and protection from adverse wind effects

D6 Any waste bins required to service public open space are located within 10 metres of the street to enable efficient and convenient access for waste service providers.

D2 Solar panels and solar light fittings are used for public lighting wherever possible.

D7 The provision of public furniture, facilities and amenities is relevant to meeting social needs. Where relevant, Council will require an application entailing the provision of public open space, recreation facilities, community facilities or other social infrastructure to be accompanied by a social needs assessment demonstrating that the proposal is in accordance with the social needs of the community. Any assessment is required to be prepared by an appropriately qualified social planner or equivalent expert.

Key

Redmond Place Precinct

0 20 50 100m

Key park elements

1. Existing Visitor Park
2. Hangar Building
3. Community garden
4. Gateway Park poplars and memorial tree planting
5. Open lawn
6. Shared path (2.5 metres wide)
7. Playground (ages 0-12)
8. Picnic shelter
9. Exercise station
10. Old Dairy Building and interpretive signage
11. Gateway Memorial Plaque and Garden

Figure 19.25 Northern Park Concept Plan

Key

Redmond Place Precinct

0 20 50 100m

Key park elements

1. Exercise station
2. Gateway Park poplars and memorial tree planting
3. Half basketball court
4. Sports practice wall and handball court
5. Youth play equipment
6. Open lawn and picnic shelters
7. Shared path (2.5 metres wide)
8. Bioretention basin

Figure 19.26 Central Park Concept Plan

6.6 Safety and accessibility

Explanation

The design of buildings and spaces is required to support the precinct vision by ensuring development promotes the Redmond Place Precinct as a safe, inclusive and walkable urban place. Key considerations include—

- supporting crime prevention by 'designing out' opportunities for antisocial behaviour,
- supporting social inclusion by 'designing in' opportunities for universal access and personal security,
- ensuring buildings and spaces are supported by suitable lighting, clear sightlines and connected travel routes,
- supporting legibility within the urban realm by clearly delineating the transition between public and private domains,
- supporting personal security within public spaces by promoting opportunities for passive surveillance,
- prioritising safety for pedestrians by minimising conflicts with vehicular traffic.

The vision for the Redmond Place Precinct to be both safe (Design Principle 3) and inclusive (Design Principle 6) is reflected in the DCP's requirement for public spaces and buildings to demonstrate that they are universally accessible to all people, regardless of age, circumstances or ability.

Applicants are also required to consider public safety and security risks by ensuring applications consider the DCP's crime prevention through environmental design (CPTED) principles. The CPTED principles are described at the end of this design element.

Objectives

O1	Ensure public buildings and spaces are universally accessible.
O2	Ensure the design of buildings and spaces optimises public safety and minimises the risk of crime.
O3	Ensure the use of outdoor lighting in public spaces— (a) supports the safety and accessibility of spaces at all times of the day, and (b) protects the amenity of surrounding land and residences.

Design criteria

Universal access

D1	Public buildings and spaces are accessible to all members of the community, regardless of age, gender or ability.
D2	Public buildings ensure the provision of at grade access for all ground floor uses.
D3	Paths, ramps, steps and lifts for public buildings and spaces comply with *AS 1428:2009 Design for access and mobility*.

Surveillance and crime prevention

D4	The design of buildings and places minimises the risk of crime by supporting the CPTED principles, including through— (a) the provision of opportunities for active and passive surveillance, (b) managing and controlling access to high risk areas, (c) clearly defining the transition between public and private realms, and (d) ensuring materials support ongoing maintenance.

D5 The edges of public open spaces are framed by streets and accompanying positive address by lots and buildings.

D6 Where Council considers the development to entail potential crime risk, the application is required to include a Safer by Design Audit prepared by a suitably qualified person that addresses—

(a) the nature of any crime risks relevant to the development and locality,

(b) the strategies to be employed to manage crime risks, and

(c) any other matters raised by NSW Police.

Outdoor lighting

D7 Public lighting—

(a) is provided for all streets, key pedestrian routes and public spaces,

(b) permits passive surveillance, including facial recognition at the pedestrian scale,

(c) supports wayfinding by highlighting key features of the public domain,

(d) enhances safety at vehicle and pedestrian conflict points,

(e) is coordinated with street tree planting, and

(f) employs a range of lighting types suited to their intended functions and locations, including poles, bollards, wall-mounted lights, strip lighting and feature lighting.

D8 Areas used for night-time activities, including the Hangar Building, are supported by appropriate lighting.

D9 Light spill to surrounding properties is minimised by ensuring outdoor lighting is designed and installed in accordance with *AS 4282:2023 Control of the obtrusive effects of outdoor lighting*.

CPTED principles

The CPTED principles are described below.

Principle 1—Surveillance

Provide for a diversity of active and passive surveillance opportunities—

- supporting the visibility of public spaces and ensuring clear sightlines between public and private areas,
- ensuring adequate lighting for public areas,
- ensuring landscape design avoids providing offenders with places to hide or entrap victims.

Principle 2—Access control

Encourage the social use of public spaces by—

- supporting legibility and wayfinding,
- ensuring public spaces are attractive accessible for social gathering,
- providing restrictions or barriers to high risk areas during low visitation times.

Principle 3—Territorial management

Support community ownership of public spaces by—

- encouraging a sense of community ownership and belonging,
- providing clearly discernible transitions between public and private spaces,
- providing clear design cues for the intended use of spaces and facilities.

Principle 4—Space management

Ensure public spaces are appropriately utilised and cared for by—

- maintaining spaces to ensure they are attractive, well maintained and well used,
- incorporating materials and finishes that are cost-effective and easy to clean, repair and replace,
- encouraging an inclusive diversity of activities and social events.

6.7 Landscape design

Explanation

The DCP's landscape design controls apply to development on both public and private land. Landscaping is an important means of ensuring buildings and outdoor spaces contribute to the desired future character for the Redmond Place Precinct in line with the precinct vision. Good landscape design is also a key means of—

- ensuring outdoor spaces are healthy, stimulating, comfortable and enjoyable,
- ensuring public safety and promoting social inclusion, and
- supporting sustainable environmental outcomes through the appropriate selection of materials and plant species.

Objectives

O1 Ensure landscape design—

(a) supports the precinct vision,

(b) responds to its context, including surrounding buildings and their uses,

(c) promotes urban heat management,

(d) promotes connecting with Country,

(e) provides for the public safety and universal accessibility of users,

(f) promotes the sustainable use of resources in design, construction and operation,

(g) responds to flood and bush fire risk.

O2 Plant species selection promotes biodiversity and creates habitats for local fauna and ecological communities.

O2 Ensure the provision of deep soil to support healthy plant growth, bioretention and groundwater recharge.

Design criteria

General requirements

D1 Landscape design supports—

(a) the cool landscape requirements described in Design Element 6.3—Urban heat management,

(b) water sensitive urban design through the provision of deep soil, bioretention and water quality management,

(c) vegetation management and biodiversity conservation in accordance with the requirements of Design Element 4.6—Vegetation management, and

(d) effective flood risk management in accordance with the requirements of Design Element 4.4—Flood planning.

D2 Plant species are selected—

(a) in accordance with the preferred species lists included in Schedule 19-D, and

(b) to suit the local climate and other site conditions, including consideration of—

- seasonal temperatures, winds and rainfall,
- drought and wind tolerance,
- seasonal changes in solar access,
- substrate depth and soil type.

D3 Planting on private land (other than lawns) incorporates at least 50% native species.

D4 Landscaping on land subject to bush fire risk is designed and managed in accordance with the bush fire risk and requirements of *Planning for Bush Fire Protection*.

D5 Sustainable design principles are used in the selection of materials and design. This includes the use of recycled materials, low-maintenance native plants, and energy-efficient lighting.

D6 Applications for development (other than for the purposes of a dwelling house or secondary dwelling, an ancillary structure, a swimming pool or internal alterations and additions to an existing building) are accompanied by a Landscape Plan prepared by a landscape architect and providing details of—

(c) the qualifications and registration of the landscape architect,

(d) the location, species and condition of any existing trees located on the site, including any trees to be removed,

(e) the location, dimensions and size of any deep soil area (or areas),

(f) the location, dimensions and design of all landscaped areas (including above ground landscaped areas),

(g) the planting layout and schedule describing the location and type of proposed plant species (including common and scientific names, pot sizes, expected height and width at maturity and soil depth and planting requirements),

(h) proposed materials and surface treatments of all paths, paved areas and structures to be incorporated into the landscape design,

(i) the location of any stormwater management or bioretention facilities,

(j) finished surface levels (existing and proposed),

(k) the location and design of any retaining walls or fences,

(l) any lighting to be incorporated into the landscape design, and

(m) a maintenance schedule for new planting.

Deep soil zones

D7 Deep soil zones are provided in accordance with the minimum dimensions and areas described in Table 19.2.

D8 Deep soil zones are located to—

(a) ensure the retention of existing trees,

(b) allow for the development of healthy root systems,

(c) promote the retention of water in the landscape and the natural recharge of groundwater sources.

Planting on structures

D9 Where development includes planting on structure, structures are reinforced for additional saturated soil weight.

D10 Minimum soil volumes, depths and areas are provided in accordance with Table 19.3.

D11 Structures designed to accommodate green roofs and green walls are integrated into the overall building design (including building facades).

Additional requirements for streets and public spaces

D12 Planting on public land achieves the following minimum proportions of native species—

- for public road reserves—30% of all trees and understorey planting,
- for public open space—70% of trees of all trees and understorey planting.

D13 Street verges are turfed with Council approved species, consistent with the preferred species described in Schedule 19-D.

D14 Bioretention basins and wetlands are landscaped with endemic species to create habitats for birds, mammals and micro fauna.

Table 19.2 Minimum deep soil zone requirements

Lot size	Minimum dimension of deep soil zone	Minimum area of deep soil (percentage of lot size)
<650m²	Not applicable	7%
650m²-1,500m²	3 metres	
>1,500m²	6 metres	

Note—

Where deep soil zones within a site are not contiguous, each individual deep soil zone must achieve the minimum dimension described in column 2.

Table 19.3 Minimum soil requirements for planting on structure

Plant type	Minimum soil volume	Minimum soil depth	Minimum horizontal dimension
Large tree	150m³	1,200mm	10 metres
Medium tree	35m³	1,000mm	6 metres
Small tree	9m³	800mm	3.5 metres
Shrub	Not applicable	500mm	Not applicable
Ground cover	Not applicable	300mm	Not applicable
Turf	Not applicable	200mm	Not applicable

Note—

Refer to Schedule 19-D for definitions of tree sizes.

Figure 19.27 Example of a bioretention facility and street verge planting suited to Orange's Central Tablelands landscape and cool temperate climate.

6.8 Water sensitive urban design

Explanation

Water sensitive urban design (or ***WSUD***) refers to the design approaches that integrate the sustainable management of the natural water cycle into the design of buildings and places. The DCP's WSUD controls apply to development on both public and private land, and promote the application of WSUD as a means of—

- ensuring stormwater management and landscape design at the site scale are integrated with and support desired water quality, flood risk management and water cycle management outcomes at the precinct scale,
- reducing the cost and environmental impacts of stormwater management infrastructure at the precinct and site scales,
- encouraging the retention of water in the landscape as a means of supporting an holistic diversity of complementary place outcomes, including those for the management of natural waterways, groundwater recharge, biodiversity conservation, urban heat management, tree canopy growth, amenity and landscape regeneration.

WSUD employs a combination of landscape-based and low-intrusive technology-based stormwater and water quality management measures that broadly emulate the natural water cycle of an urban place by capturing, retaining and reusing water in the landscape. Typical measures include—

- bioretention facilities (or "raingardens") and basins,
- wetlands and sediment ponds,
- vegetated swales and biodiversity corridors, and
- rainwater tanks.

Wherever possible, applicants are encouraged to adopt WSUD approaches when meeting Council's requirements for landscape design and stormwater management. In all cases, WSUD approaches should be integrated with and support any applicable stormwater management requirements of the Orange City Council Subdivision and Development Code.

Objectives

O1 Support the natural retention of water in the landscape as a means of enabling—

(a) connecting with Country through the restoration of waterways and landscapes,

(b) natural groundwater recharge and water quality management,

(c) urban heat management through the provision of cool landscapes, and

(d) healthy urban tree canopy growth.

O2 Minimise the cost and adverse impacts of stormwater management infrastructure.

O3 Ensure on-site stormwater management and landscape design is integrated with desired flood risk, water quality and water cycle management outcomes at the precinct scale.

Design criteria

D1 Development incorporates water sensitive urban design measures, including where relevant—

(a) permeable materials for paths and hardstand areas,

(b) deep soil zones,

(c) on-site retention and reuse of rainwater, including through the use of rainwater tanks,

(d) bioretention facilities and basins,

(e) wetlands,

(f) sediment ponds,

(g) swales.

Note—

Applicants should also refer to the following provisions of the DCP—

- Chapter 2, Part 2.1—Water quality ('Stormwater and drainage issues')

6.9 Legibility and wayfinding

Explanation

Legibility refers to the combined qualities by which an urban place communicates its layout and the location of sites and activities within it. The more legible a place is, the easier it will be for people to understand where they are and how best to navigate their way to where they need to be.

The DCP's controls support wayfinding and legibility within the Redmond Place Precinct by establishing requirements for—

(a) place naming, public art and cultural interpretation, including consideration of the connecting with Country precinct design outcomes described in Schedule 19A,

(b) supporting the development of land use and urban form opportunities, features and sites, including key landmarks and public views identified on the Key Landmarks and Views Map, and

(c) the design and location of public signage and wayfinding infrastructure.

Public signage and wayfinding are key means of supporting legibility within the Redmond Place Precinct. For the purposes of this chapter, public signage and wayfinding infrastructure includes—

- street signs,
- vehicle and pedestrian directional signs,
- public information signs,
- identification signs for public places and destinations,
- trail markers and directional signs,
- interpretive signage, including the sharing of cultural and heritage information, and
- operational signage, including the communication of regulatory information for key spaces and facilities.

The Key Landmarks and Views Map for the Redmond Place Precinct is shown in Figure 19.29. Public signage and wayfinding infrastructure should work with and, where relevant, support the local landmarks and views described in the map.

Objectives

O1 Ensure the design of public signage and wayfinding infrastructure—

(a) supports a cohesive precinct character and sense of identity,

(b) is accessible to a diverse range of audiences, ages and abilities,

(c) is integrated with the local context and environment,

(d) supports the formation of safe and accessible movement networks, and

(e) supports the formation of inclusive and memorable places and public spaces.

O2 Ensure the design of buildings, streets and public spaces supports a high level of local legibility.

Design criteria

D1 All public signage and wayfinding infrastructure is designed and delivered in accordance with Council's adopted wayfinding strategy and signage style guidelines.

D2 Legibility and wayfinding are supported by public domain design, including the incorporation of language, public views, public art and lighting and interpretive signage supporting the connecting with Country precinct design outcomes.

D3 The design and delivery of public signage and wayfinding infrastructure—

(a) is integrated with the design of streets and public open spaces,

(b) promotes local legibility by supporting key landmarks and views as shown on the Key Landmarks and Views Map.

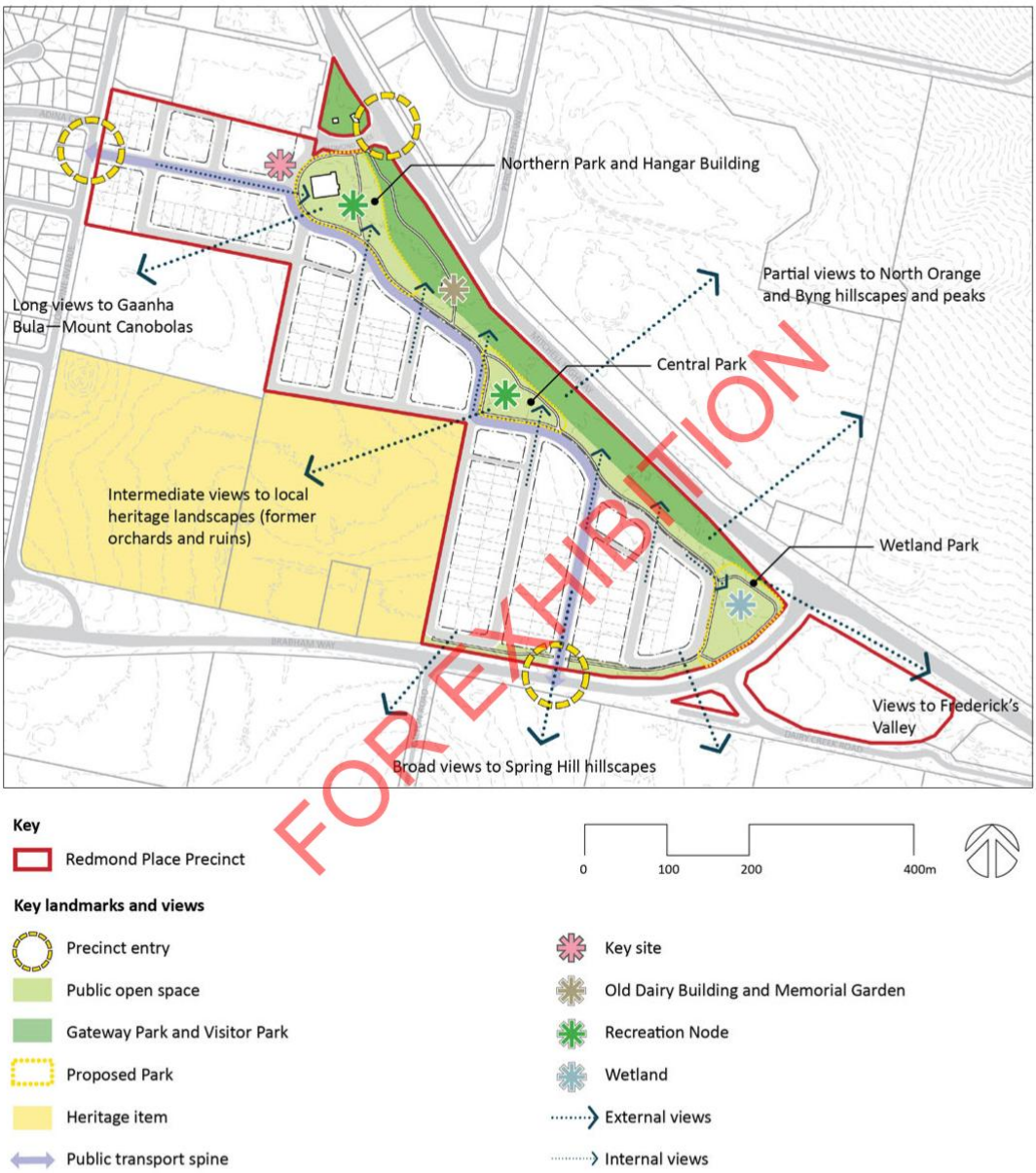


Figure 19.28 Redmond Place Precinct Key Landmarks and Views Map

6.10 Key sites

Explanation

This Design Element applies to development on land identified as a "key site" on the Key Sites Map. The Key Sites Map for the Redmond Place Precinct is shown in Figure 19.29.

Key sites comprise sites with special land use, urban form and architectural characteristics. Key sites within the Redmond Place Precinct are shown as "A" on the Key Sites Map.

Key sites are identified as comprising local nodes suitable for medium density (mid rise) housing, including residential flat buildings and shop top housing, and mixed use (residential and commercial) uses. The relatively taller (mid rise) building heights permitted on key sites provide the basis for buildings to function as local landmarks, assisting wayfinding and contributing to the desired future character of the precinct. Key sites are also identified as being suitable for mixed use development through the integration of ground floor commercial uses where this will help to activate the street space, support public transport and promote the social use of nearby public open spaces.

Development on key sites is required to demonstrate that the siting, form and layout of buildings and spaces are consistent with the Building Envelope and Site Plan for each site as shown in Figures 19.31, 19.32, 19.33 and 19.34.

Note—

For the purposes of the DCP—

- ***active frontage*** refers to a site frontage at ground floor level that attracts and promotes pedestrian traffic within the adjoining street or public space. This may be achieved through the provision of ground floor uses (such as commercial uses) or the provision of building or dwelling entries at the site frontage, or a combination of these (see Dictionary).
- ***mid rise*** refers to buildings not more than 4 storeys in height (see Dictionary).

Objectives

O1	Identify key sites suitable for medium density (mid rise) housing and mixed use (residential and commercial) development.
O2	Facilitate the provision of affordable housing to meet local housing needs.
O3	Enhance local character, legibility and wayfinding by— (a) reinforcing the built form edge to prominent street intersections, and (b) providing for well-designed mid rise buildings at identified nodes.
O4	Support safe and active streets and public spaces by ensuring building design— (a) supports active frontages at ground floor level, and (b) provides upper floors with positive street address.

Design criteria

D1	The siting, form and layout of development is consistent with the Building Envelope and Site Plan for each site as described in Figures 19.30 and 19.31, including in relation to— (a) building height (number of storeys) and location, (b) deep soil zones and communal open space, (c) vehicle access, (d) setbacks and articulation zones.
D2	Development has a maximum site coverage of 60%, excluding any unenclosed area of communal open space at podium (first floor) level.
D3	Buildings address prominent corners and ensure dwellings have positive address to the street.

Figure 19.29 Redmond Place Precinct Key Sites Map

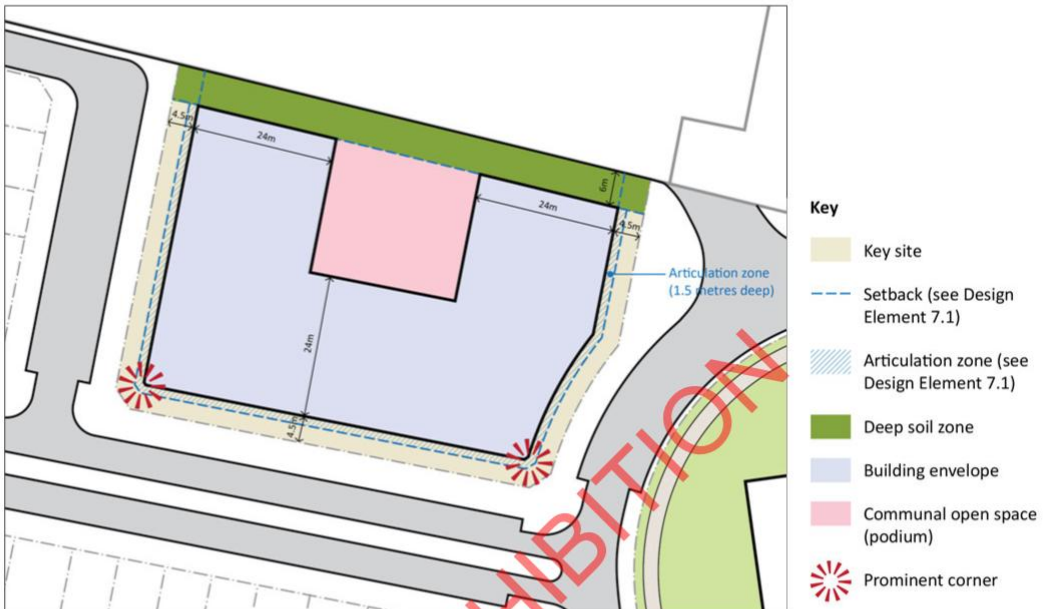


Figure 19.30 Site A—Site Layout Plan

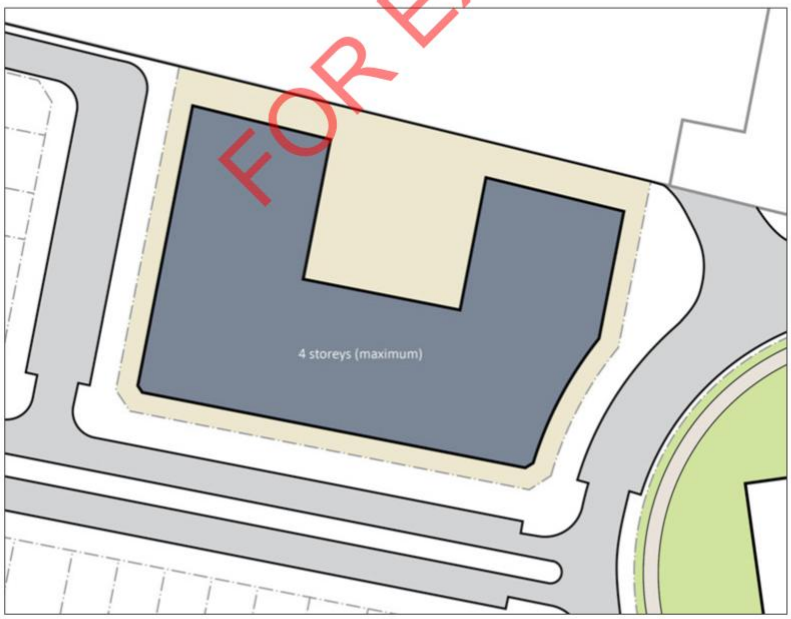


Figure 19.31 Site A—Building Height Plan (maximum number of storeys)

Part 7—Residential development

7.1 Building height and setbacks

Explanation

The DCP's building height and setback controls define the maximum building envelope in which buildings may be located. The controls are an important means of ensuring development achieves a good fit with its neighbours and wider setting in terms of visual bulk, height and scale. The controls also assist in ensuring development does not impede the ability of neighbouring dwellings to meet the DCP's requirements for residential amenity, including those for solar access and visual and acoustic privacy.

It is important to note that the building height and setback controls do not in and of themselves define the allowable floor space or building size for a given site. In all cases, individual developments are required to demonstrate that they also meet the DCP's other requirements, including those for site coverage, private open space, landscaped area and visual appearance.

Applicants should refer to Figures 19.32 and 19.33 below when interpreting the DCP's building height and setback controls.

Building height

The DCP uses two measures to determine the allowable height for each development—

(a) the maximum building height as measured in metres above ground level (existing), and

(b) the maximum number of storeys allowed within a building.

These measures play distinct though complementary roles in establishing the desired scale and form of buildings. The maximum building height (as measured in metres) ensures the allowable height of each building is consistent with the scale of other buildings and the desired future character of the locality. The maximum number of storeys refers to the internal division of a building into separate habitable floors. By placing limits on the number of storeys that may be achieved, the DCP's controls encourage buildings to step with the slope of each site and minimise the amount of cut and fill required.

The Building Height Map for the Redmond Place Precinct is shown in Figure 19.38.

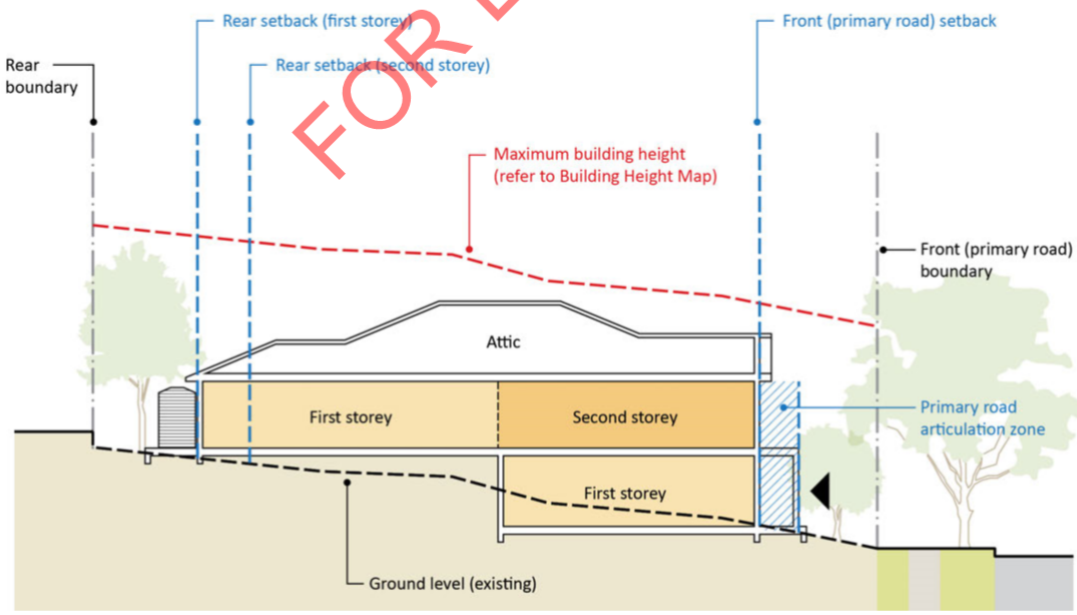


Figure 19.32 How to interpret the building height and setback controls (side elevation)

Setbacks

Setbacks include street, side and rear setbacks. These are measured as distance in metres from the applicable lot boundary and establish the building line (or main outer face of the building) for each lot.

Figures 19.34, 19.35 and 19.36 illustrate the application of the DCP's setback controls to a variety of lot and development types. Applicants should refer to these figures when interpreting the DCP's setback controls.

Street setbacks

Street setbacks establish the building line for each lot along each of its public road frontages. Street setbacks play an important role in defining the three-dimensional proportions and scale of each street, ensuring these are consistent with the intended character and function of the street. Street setbacks also ensure provision is made for vehicle access, gardens and landscaped areas that contribute to the character and function of streets.

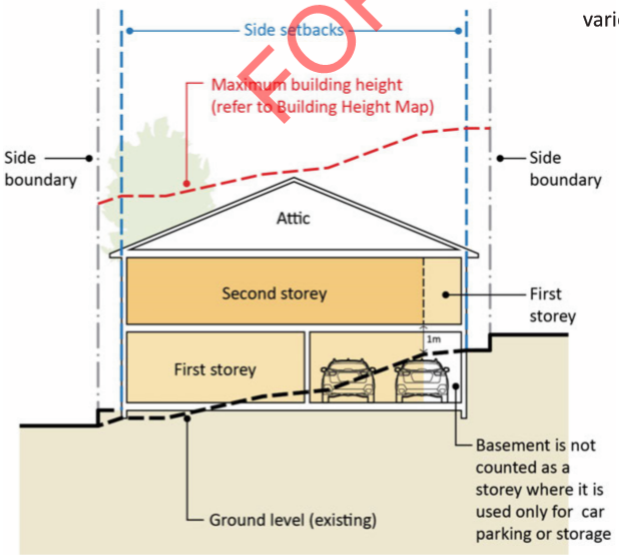
Street setbacks include primary road setbacks, secondary road setbacks, parallel road setbacks and rear lane setbacks (see Dictionary).

Side and rear setbacks

Side and rear setbacks ensure each development maintains minimum solar access, private open space and privacy requirements for both the development and neighbouring properties. Side and rear setbacks also play an important role in establishing the rhythm of buildings and relieving spaces within the streetscape, and in ensuring minimum standards are met for site servicing, including maintenance and fire fighting access. In addition to meeting the DCP's setback controls, developments are also required to meet the site coverage controls described in Design Element 7.3—Site coverage.

Articulation zones

The DCP's primary road and secondary road setbacks provide flexibility for certain building façade elements to be located forward of the building line. This enables buildings to accentuate façade elements that contribute to the human scale and visual richness of the streetscape. To this end, the controls establish primary road and secondary road ***articulation zones*** that allow building elements—including entry features and porticos, awnings, eaves, balconies, decks, pergolas, terraces, verandahs, window boxes and bay windows—to be located between the street and the building line. The proportion of the building facade that is allowed to be used for these elements varies according to the lot width.



Note—

Under the Orange LEP 2011, ***storey*** means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include—

(a) a space that contains only a lift shaft, stairway or meter room, or

(b) a mezzanine, or

(c) an attic.

For the purposes of determining the permitted number of storeys in accordance with this chapter, a ***basement*** is not considered to be a storey to the extent that it is used only for car parking or storage.

Figure 19.33 How to interpret the building height and setback controls (front elevation)

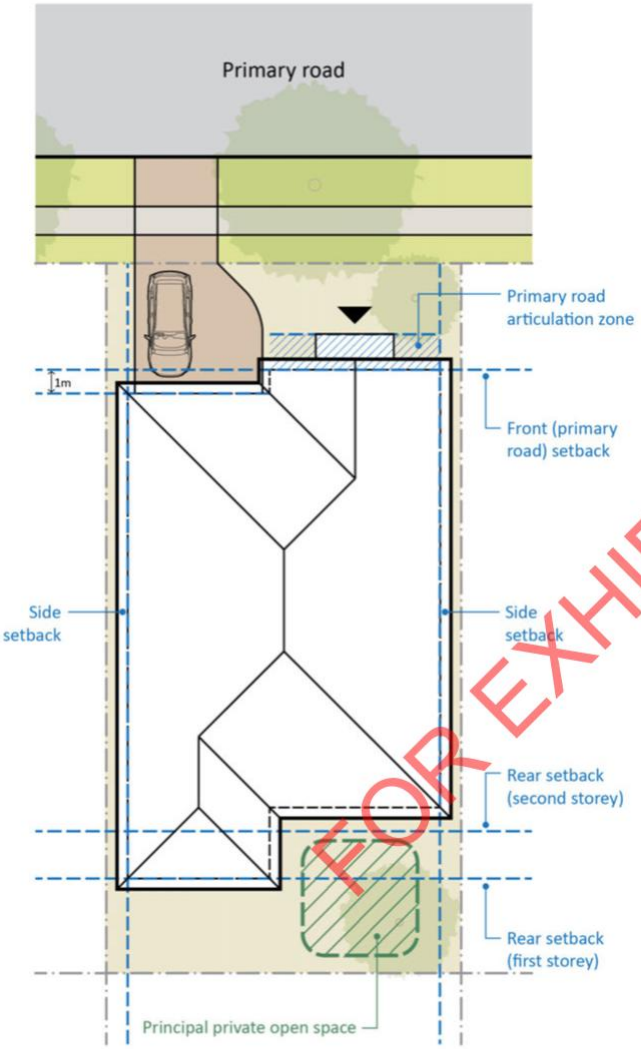


Figure 19.34 Setbacks and articulation zone for a dwelling house on a standard lot

Note—

1. For the purposes of this chapter, eaves, gutters and fascias (other than in relation to a ***zero lot line wall***) are allowed to extend up to 450mm forward of any street, side or rear setback.
2. Additional setbacks for certain types of ***detached development***, including swimming pools and garden sheds, are described in Design Element 7.16—Pools and detached development.

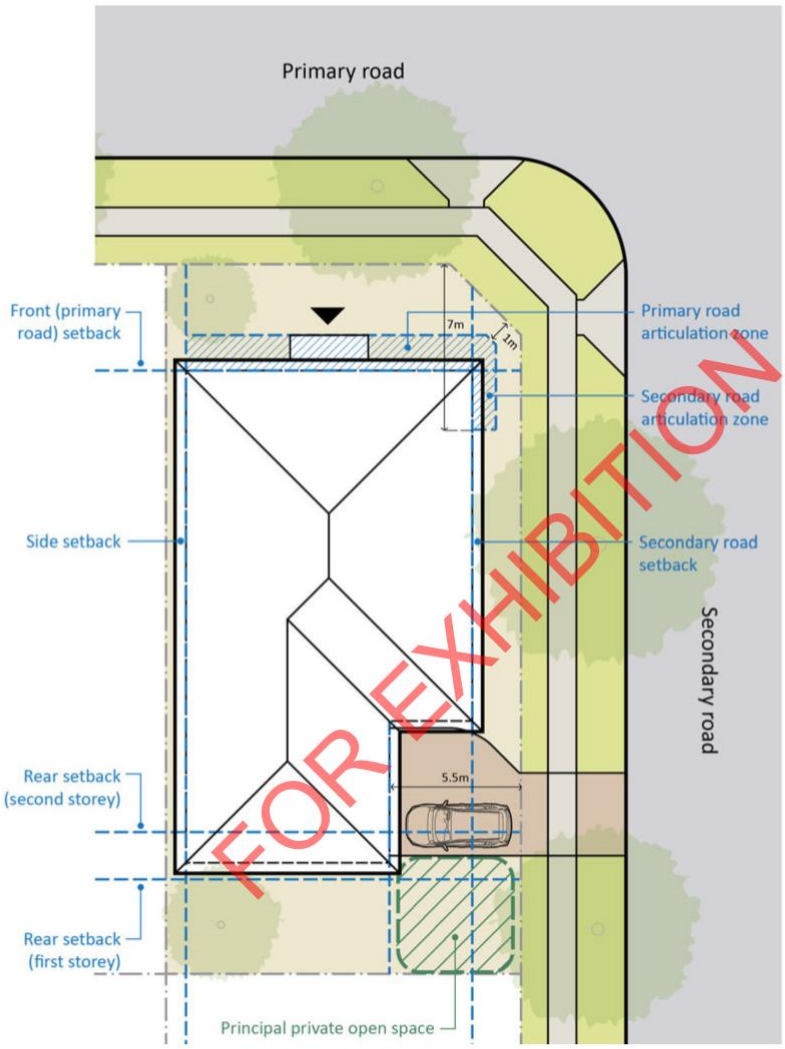


Figure 19.35 Setbacks and articulation zones for a dwelling house on a corner lot

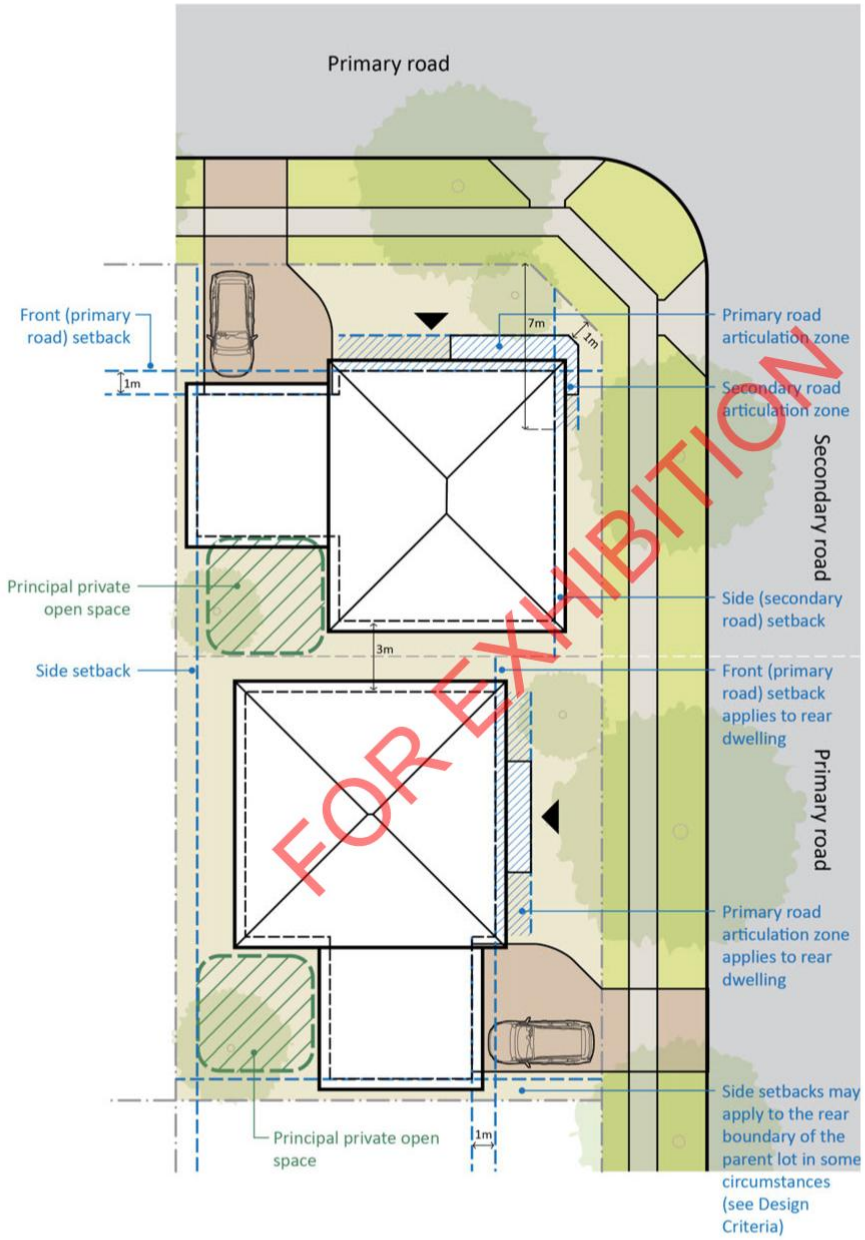


Figure 19.36 Setbacks and articulation zones for a dual occupancy (detached) on a corner lot

Objectives

O1 Building heights and setbacks ensure the scale and massing of development—

(a) are consistent with the desired future character of the locality,

(b) achieve a good fit with neighbours,

(c) contribute to cohesive and desirable streetscapes,

(d) respond to the natural landform and minimise the need for excavation and fill,

(e) enable a transition in building heights in response to varying urban character and function, and

(f) protect the amenity of neighbouring properties and public spaces, with particular regard to visual bulk, scale, overshadowing, privacy and views.

Design criteria

Building height

D1 The height of any building does not exceed the maximum height shown for the land on the Building Height Map.

D2 The number of storeys in any building does not exceed—

- for development on a Key Site—the number of storeys shown on the applicable Building Height Plan (maximum number of storeys) in Design Element 6.10
- for other development—2 storeys

Primary road setbacks

D3 Development has a minimum setback from any primary road of—

- for development on a Key Site—the minimum setback shown on the applicable Site Layout Plan in Design Element 6.10
- for other development that is located on a rear lane lot—3.5 metres
- for all other development—4.5 metres

Secondary road setbacks

D4 Development has a minimum setback from any secondary road of—

- for development on a Key Site—the minimum setback shown on the applicable Site Layout Plan in Design Element 6.10
- for other development on lots that are 900m² or less in size—2 metres
- for other development on lots that are greater than 900m² in size—3 metres

Side setbacks

D5 Development has a minimum setback from any side boundary (other than a secondary road boundary) of—

- for development on a Key Site—the minimum setback shown on the applicable Site Layout Plan in Design Element 6.10
- for other development—the minimum setback described in Table 19.4 in relation to the width of the lot

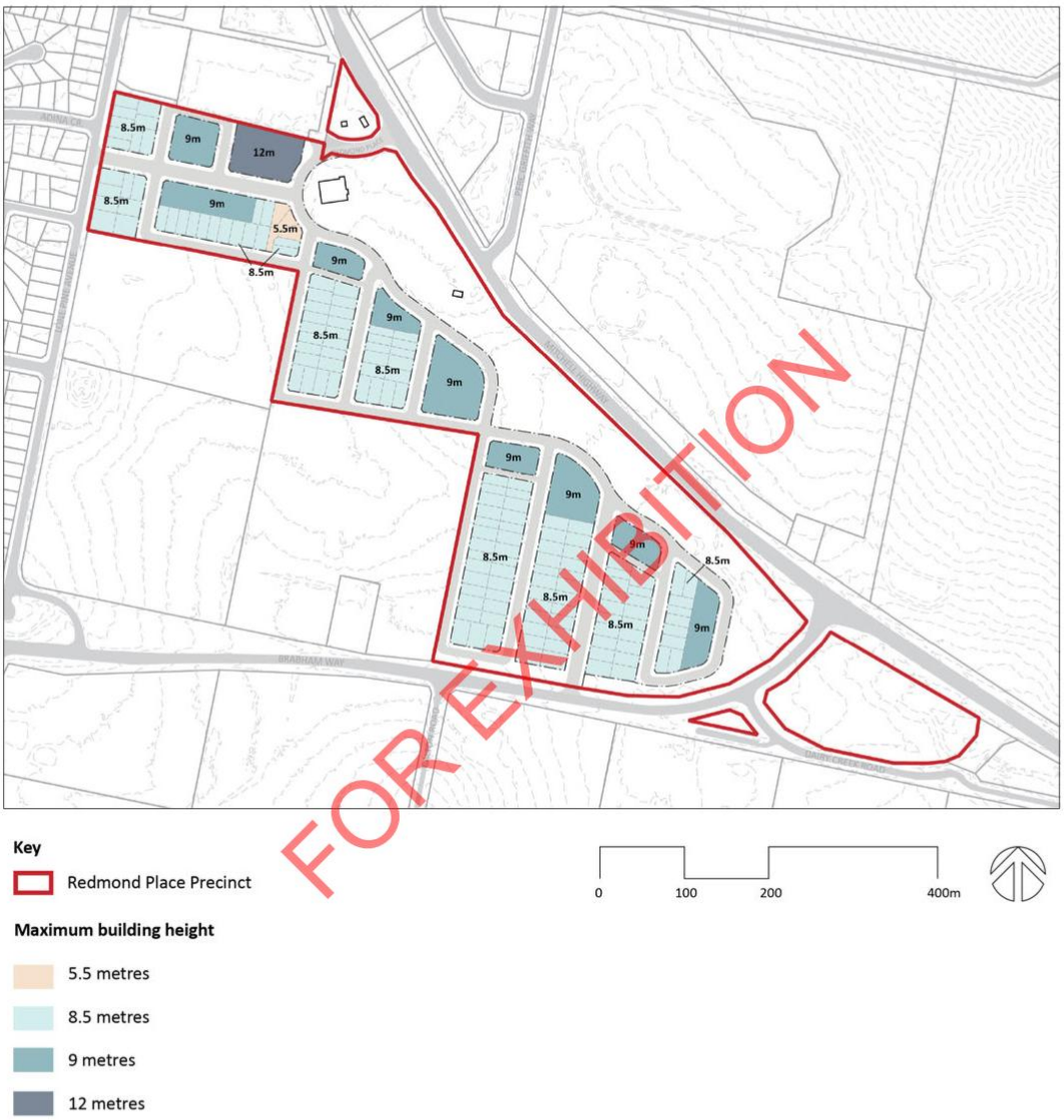


Figure 19.37 Redmond Place Precinct Building Height Map

Table 19.4 Minimum side setbacks for residential accommodation

Lot width	Minimum side setbacks			
	Ground floor		Upper levels	
	Side A	Side B	Side A	Side B
Development other than attached dwellings, multi dwelling housing, residential flat buildings or shop top housing				
9 metres or less	0 metres (or 0.9 metres if not zero lot line)	0.9 metres	0 metres (or 0.9 metres if not zero lot line)	1.2 metres
Greater than 9 metres but less than or equal to 15 metres	0 metres (or 0.9 metres if not zero lot line)	0.9 metres	1.2 metres	1.2 metres
Greater than 15 metres	0.9 metres	0.9 metres	1.5 metres	1.5 metres
Attached dwellings				
All lot widths	0 metres	0 metres (or 0.9 metres on detached side)	0 metres	0 metres (or 1.2 metres on detached side)
Multi dwelling housing				
All lot widths	0.9 metres	0.9 metres	1.2 metres	1.2 metres
Residential flat buildings and shop top housing				
All lot widths	3 metres	3 metres	6 metres	6 metres

Rear setbacks

D6 Development has a minimum setback from any rear boundary of—

- for development on a Key Site—the setback shown on the applicable Site Layout Plan in Design Element 6.10
- for development on a rear lane lot (other than development on a key site)—0.5 metres
- for all other development—
  - where the height of the building is 4.5 metres or less—4 metres
  - where the height of the building is more than 4.5 metres—6 metres

D7 Where development comprises—

(a) a dual occupancy (detached) on a corner lot,

(b) the rear dwelling is oriented to the street as shown in Figure 19.36, and

(c) the development is consistent with the objectives,

the side setbacks described in D5 above may apply in relation to the rear boundary of the parent lot.

Garage and carport setbacks

D8 Garages, carports and car parks comply with the public road setbacks described in Design Element 7.7—Access, circulation and parking.

Articulation zones

D9 Buildings may have—

- a primary road articulation zone that extends up to 1.5 metres forward of the primary road setback required in D3, and
- a secondary road articulation zone that extends up to 1 metre forward of the secondary road setback referred to in D4.

D10 The following elements may be located in an articulation zone—

(a) an entry feature or portico,

(b) a balcony, deck, pergola, terrace or verandah,

(c) a window box treatment,

(d) a bay window,

(e) an awning, external blind or canopy,

(f) any other building element that in the opinion of Council provides visual interest to the elevation.

D11 Any articulation zone—

(a) is located between the outer side walls of the part of the building located on or closest to the road,

(b) extends no higher than the underside of the eaves of the part of the building located on or closest to the road, and

(c) is not located in front of any driveway, garage or carport.

D12 Any articulation zone is located no less than—

- where the permitted primary road setback is 4.5 metres—3 metres from the primary road boundary
- where the permitted primary road setback is 3.5 metres—2 metres from the primary road boundary
- 1 metre from the secondary road boundary

D13 Any secondary road articulation zone—

(a) extends no more than 7 metres from the primary road frontage,

(b) is located at least 1 metre from any lot boundary,

(c) is consistent with the configuration for corner lots described in Figure 19.35.

D14 The maximum total area of all building elements in the articulation zone must not comprise more than—

- for lots that are 9 metres or less in width—70% of the area of the articulation zone
- for lots that are more than 9 metres in width—50% of the area of the articulation zone

when viewed from above

D15 Any element located within the articulation zone described in D4 is to—

(a) be attached to the building,

(b) not impede vehicle or pedestrian access to the building, and

(c) be visually consistent with the overall form, materials and proportions of the building façade.

7.2 Zero lot line development

Explanation

For lots that are less than 15 metres wide, dwelling houses may be designed so that they are located on or close to a side boundary. This is referred to as ***zero lot line development***. For the purposes of this chapter, a development comprises zero lot line development where it incorporates a dwelling house with a wall (or walls) located on or less than 450mm from a side boundary.

For the purposes of the DCP's controls, a wall located on the side boundary as part of a zero lot line development is referred to as the "***zero lot line wall***". The boundary to which the zero lot line wall relates is referred to as the "***zero lot line boundary***". A zero lot line development may have only one zero lot line boundary.

Because of the need to enable maintenance and servicing of dwellings that are built to the boundary, zero lot line development will be permitted only where the applicant has demonstrated the creation of an easement burdening the adjoining land parcel and enabling access for 'access, maintenance and construction' of the zero lot line wall from that land parcel. The required width of the easement will vary according to the number of storeys to which the zero lot line wall relates. Single story buildings will require a 900mm wide easement while buildings that are two storeys in height will require a 1200mm wide easement (see Figure 19.38). The maximum height of any zero lot line wall is 5.7 metres above ground level (existing).

Objectives

O1 To facilitate the efficient use of smaller lots through zero lot line development where—

(a) it is suitable to the location,

(b) the amenity of the lot and neighbouring properties is not compromised, and

(c) adequate legal access to adjoining land is reserved for the maintenance and repair of buildings built to the boundary.

Design criteria

D1 A zero lot line development may be permitted where—

(a) the development has only one zero lot line boundary,

(b) the lot on which the zero lot line development is to be located—

- is not a battle-axe lot, and
- has a lot width of no more than 15 metres,

(c) the side boundary to which the zero lot line wall relates is not shared with a road reserve, public space or land that is not otherwise zoned as R1 General Residential, and

(d) an easement for 'access, maintenance and construction' of the zero lot line wall has been registered against the title of the property to which the zero lot line wall abuts.

D2 The combined length of zero lot line walls for any zero lot line development does not exceed—

- 40% of the depth of the building, or
- 11 metres,

whichever is the greater.

D3 Where provision for zero lot line development is proposed as part of a subdivision of land, the affected lots and boundaries are shown on the subdivision plan submitted as part of the application.

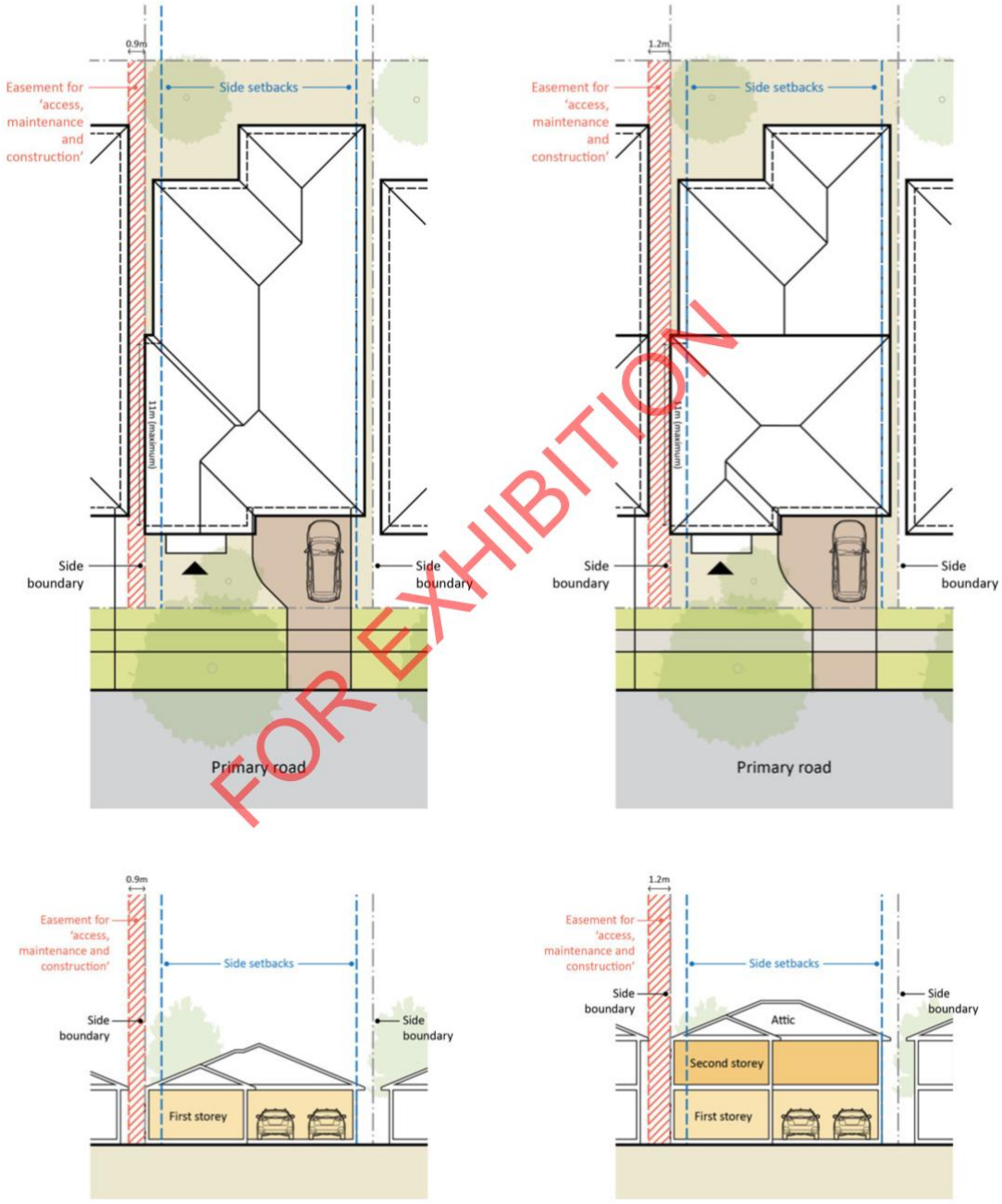


Figure 19.38 Easement requirements for zero lot line development (plans and primary road elevations)

7.3 Building siting and lot size

Explanation

The DCP establishes minimum lot sizes for residential accommodation entailing more than one dwelling on a lot. This is to ensure more compact types of development achieve a good fit with their site and neighbours, with sufficient site areas to enable good streetscape and residential amenity outcomes.

The DCP's controls also provide design criteria to guide the siting and orientation of dwellings within a lot. Orientation refers to the position of a building and its internal spaces in relation to the site, street and the layout of neighbouring buildings and spaces. It also refers to the siting of buildings and internal spaces in relation to significant views or climate factors such as prevailing winds and sunlight. Achieving good siting and orientation is fundamental to supporting the DCP's objectives for local character and residential amenity, including in relation to public domain interface, visual appearance, solar and daylight access, natural ventilation and visual and acoustic privacy.

Table 19.5 Minimum lot size requirements for residential accommodation

Use	Minimum lot size
Dual occupancy (attached)	400m²
Dual occupancy (detached)	600m²
Manor house	600m²
Multi dwelling housing (other than terraces)	1,200m²
Multi dwelling housing (terraces)	600m²
Residential flat building (other than manor house)	2,400m²
Shop top housing	2,400m²

Objectives

O1 Ensure the size and dimensions of residential lots—

(a) are consistent with the intended land use for each lot,

(b) enable practical and efficient site planning and building design,

(c) support a diversity of affordable housing types.

O2 Ensure the siting and orientation of buildings—

(a) supports residential amenity,

(b) is consistent with the desired future character of the locality, and

(c) supports the activation of streets and public spaces.

Design criteria

D1 Development is to be located on a lot with an area equal to or greater than the area specified for the proposed use in Table 19.5.

D2 Building design minimises the need for excavation and fill by responding to the natural slope of the site in accordance with the requirements of Design Element 4.1—Land and soil resources.

D3 Where development comprises multi dwelling housing (other than multi dwelling housing (terraces)) or a dual occupancy—

(a) dwellings are located at least 3 metres from each other, and

(b) if located on a corner lot—ensure each street frontage (other than a rear lane or parallel road) is addressed by 1 or more dwellings.

D4 Buildings are generally oriented at 90 degrees to the side boundary to ensure efficient site layout.

7.4 Site coverage

Explanation

Site coverage is the proportion (measured as a percentage) of a site area covered by buildings. By setting a maximum site coverage, the DCP's controls determine the allowable size of the building footprint for each site. This is used to ensure the scale of development is consistent with the dimensions and size of the site and the desired future character of the locality. By governing the balance of built forms and open spaces across each site's ground plane, the site coverage controls also help to ensure developments provide a suitable combination of deep soil zones, private open spaces and landscaped areas.

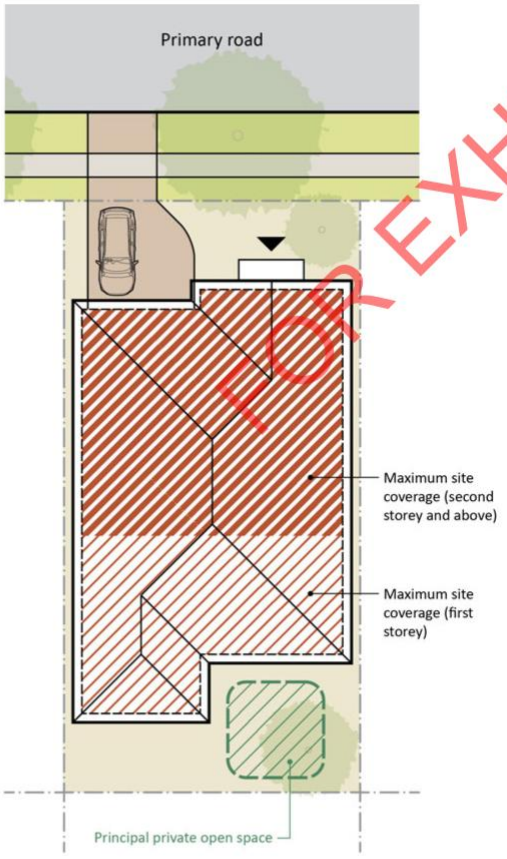


Figure 19.39 How to interpret the site coverage controls

Objectives

O1 Ensure building size and form—

(a) is consistent with the desired future character and landscape setting of the locality,

(b) is compatible with the size and dimensions of each site,

(c) achieves a suitable balance between built and landscape elements,

(d) supports the provision of deep soil zones, private and communal open space and opportunities for water sensitive urban design at ground level,

(e) supports the achievement of good levels of amenity within each site and the public realm.

Design criteria

D1 Development ensures the site coverage at ground level (finished) for all buildings on a lot is no more than—

- for development on a key site—the maximum site coverage described in Design Element 6.10—Key sites
- for development on other land comprising a dwelling house—60%
- for other development on lots 375m^2 or less in area—60%
- for other development on lots greater than 375m^2 in area—50%

D2 The proportion of the lot area covered by storeys located above the first storey does not exceed—

- for lots 375m^2 or less in area—45%
- for lots greater than 375m^2 in area—35%

D4 The area of any basement—

(a) is located within the footprint formed by the first storey of the building, and

(b) is not more than 40% of the area of the lot.

7.5 Site landscaping

Explanation

Site landscaping is an important means of ensuring buildings achieve a good fit with their local context and streetscape. Site landscaping also provides amenity for dwellings, and supports the achievement of urban cooling, biodiversity conservation, water sensitive urban design and urban tree canopy outcomes at the site scale.

Landscaped area

Each development is required to provide a minimum landscaped area. A ***landscaped area*** means a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area. It includes any deep soil zone provided on the site.

Landscape located above podiums and roofs does not count towards the landscaped area.

Deep soil zones

Larger developments, including multi dwelling housing, residential flat buildings and shop top housing, are required to include minimum areas of deep soil within the site. Deep soil supports tree growth and assists bioretention and groundwater recharge by being connected vertically to the soil system and groundwater below.

Planting on structure

Planting on structure can be used to enhance the landscape design of a development. This comprises landscaping located on or attached to a building or structure, such as on a podium or roof. Where planting on structure is proposed as part of a development's landscape design, it is required to be accompanied by a maintenance plan that demonstrates that the proposed planting can be easily maintained and kept in good health.

All landscaping, including the provision of any planting on structure or deep soil zone, must meet the requirements of Design Element 6.7—Landscape design.

Objectives

O1 Provide for on-site landscaping that—

(a) complements buildings and enhances streetscapes,

(b) supports the amenity of dwellings,

(c) supports urban heat management, biodiversity conservation and tree canopy coverage, and

(d) provides for bioretention and infiltration of rainwater.

Design criteria

Landscaped area

D1 Development includes a minimum landscaped area of—

- for multi dwelling housing, a residential flat building or shop top housing—30% of the lot area
- for other development on lots 225m² or less in area—15% of the lot area
- for other development on lots greater than 225m² in area—25% of the lot area

D2 At least 50% of any primary road or secondary road setback area comprises soft landscaped area.

Landscape design

D3 Landscape design, including any planting on structure and the provision of deep soil zones, meets the requirements of Design Element 6.7—Landscape design.

7.6 Public domain interface

Explanation

The public domain interface is the transitional area between a building, its adjoining private or communal open space at the street edge and the public domain. This interface contributes to the quality and character of the street. Planting and landscape design, along with well-designed fencing, can add visual richness and contribute to the amenity and attractiveness of the street. By contrast, long, high blank walls and fences will generally detract from the visual quality of the street and reduce opportunities for passive surveillance. As such, these are not supported.

Key elements to consider in the design of the public domain interface include—

- building and dwelling entries,
- terraces and balconies,
- fences and walls,
- changes in level,
- the location of utilities and services,
- planting and landscaping, including tree planting.

The design and use of these elements can significantly influence the safety and security of residents, opportunities for social interaction and the visual attractiveness of the development.

Objectives

O1 Ensure the design and location of development—

(a) complement the desired future character of the street and locality,

(b) promote the activation of streets and public spaces, and

(c) add visual richness to the street.

Design criteria

Building and dwelling address

D1 Dwellings and buildings are oriented towards the street, with entries visible from the street.

D2 Direct access is provided between the street frontage and any ground floor dwelling or building entries.

D3 Each dwelling has at least 1 habitable room that overlooks the street.

D4 Where development comprises a residential flat building or shop top housing, building entries are located to activate the street and are clearly visible from the street.

Front fences and walls

D5 Front fences—

(a) have a maximum average height above ground level (existing) of 1.2 metres,

(b) are visually permeable, with no more than 50% of the allowable fence area comprising solid material,

(c) are consistent in character with other front fences in the street and locality, and

(d) are not constructed of solid metal panels or unfinished timber palings.

D6 Retaining walls higher than 0.6 metres above ground level (existing) may be located within the primary road setback where they are softened by planting for a minimum depth of 0.6 metres on the low side of the wall.

7.7 Access, circulation and parking

Explanation

Council's general requirements for off-street car parking are provided in Chapter 15—Car parking. The controls provided in this Design Element apply in addition to those requirements.

The provision of off-street parking should be integrated with the overall design of the development. In particular, the location of driveways and the design of internal circulation within the lot should be considered from the earliest stages of site planning. This is in order to ensure development can successfully meet the DCP's requirements for residential amenity and building design while at the same time achieving an efficient and functional on-site car parking outcome.

Garages, carports and car park entries typically require expanses of void or garage doors that can be visually intrusive. To avoid dominating the streetscape, garages, carports and car park entries should be limited in width and located behind the building line. Windows, dwelling entries and other elements of the façade that promote a human scale to the building's appearance should be the dominant visual features within the streetscape, with garages, carports and car park entries appearing as recessed (or secondary) elements.

In some limited circumstances, such as on steeply sloping sites, basement car parking may be required. In these cases, applications should seek to minimise the extent of excavation required and ensure basement levels and entries are appropriately integrated into the overall design of the building.

The provision of adequate bicycle parking as part of each development is promote in order to encourage active transport and reduce reliance on car use.

Note—

On-site car parking and vehicle circulation must be provided in accordance with the requirements of Chapter 15—Car parking and the Orange City Council

Objectives

O1	On-site car parking and vehicle circulation is located and designed to—
	(a) ensure vehicle access and car parking do not dominate the street frontage,
	(b) enable the efficient and convenient use of on-site car parking, and
	(c) be universally accessible.
O2	Encourage active transport by ensuring adequate bicycle parking for residents and visitors.
O3	Minimise the streetscape, urban heat and water quality impacts of on-site car parking and vehicle circulation.

Design criteria

General requirements

D1	Each dwelling is to have at least 1 covered car parking space.
D2	Garages, carports and car park entries—
	(d) are integrated into the building design,
	(e) complement the balance and proportion of elements in the main building façade,
	(f) are visually recessive from the main building façade through use of materials, colours and building design, and
	(g) comprise materials that complement the colour and finishes of the main building.
D3	Where development is located on a rear lane lot, vehicle access is to be provided from the lane.

D4 Where development is located on a corner lot (other than a rear lane lot), vehicle access is to be provided from the road—

(a) where it will have the least impact on the public domain, including any street trees, and

(b) where it will best suit the achievement of the DCP's requirements for dwelling design and layout, including requirements for privacy, sunlight access, private open space and landscaped area.

D5 Any garage, carport or car park entry (other than on a rear lane lot) is located—

- at least 5.5 metres from any primary road, secondary road or parallel road boundary, or
- 1 metre behind the building line

whichever is the greater distance.

D6 Any garage, carport or car park entry on a rear lane lot is located at least 0.5 metres from the rear (lane) boundary.

D7 The maximum width of any garage door, carport or car park entry is—

- no more than 50% of the width of the building, or
- 6 metres,

whichever is the lesser width.

D8 The maximum height of any garage door or car port is 2.4 metres.

Driveway location and design

D9 Driveways are located at least 1 metre from the side boundary.

D10 Driveways are located and designed to—

(a) minimise the number of driveways in the street, including by being paired where possible,

(a) protect public domain elements, including street trees and street lights, and

(b) maximise the availability of on-street parking.

Where a driveway is adjacent to a street tree, it is located outside of the drip zone or otherwise incorporates measures to protect the tree in accordance with a report prepared by a qualified arborist.

D11 Driveways are a maximum width at the lot boundary of—

- for a driveway serving multi dwelling housing, a residential flat building or shop top housing—6 metres
- for all other development—3.5 metres

D12 Driveways have the smallest width and configuration possible (particularly within the road verge) to serve the required car parking and ensure compliance with *AS/NZS 2890.1:2004 Off-street car parking*.

Basement car parking

D13 Basement car parking does not protrude more than 1 metre above ground level (finished) except at the entrance to the car park.

D14 The maximum height of any basement car park entry is 2.7 metres.

D15 Natural ventilation is provided to any basement car park.

Communal car parking (multi dwelling housing, residential flat buildings and shop top housing)

D16 On-site car parking for residential flat buildings or shop top housing is—

(a) consolidated into a single location,

(b) located in a basement or otherwise behind the main building and to the rear of the lot.

D17 Where development entails the provision of outdoor communal car parking—

(a) car spaces are located to maximise accessibility and convenience for residents and visitors,

(b) car parking is located behind any dwellings fronting the street or otherwise at least 5.5 metres from any primary road, secondary road or parallel road boundary, and

(c) the design of car parking supports the relevant requirements of Design Element 6.3—Urban heat management and Design Element 6.4—Urban tree canopy.

Bicycle parking

D18 Where development comprises a residential flat building or shop top housing containing more than 4 dwellings, communal bicycle storage is provided at the rate of 1 bicycle space for every 5 dwellings.

D19 Where bicycle parking is provided in a basement, it is—

(a) located on the uppermost level of the basement and with access to the building lobby,

(b) located close to entry and exit points, and

(c) positioned to avoid conflict with car and service vehicle circulation.

7.8 Visual appearance and roof form

Explanation

The form and visual appearance of a building are key elements defining its contribution to the visual richness and aesthetic character of the street and locality.

Building form and visual appearance are distinct though complementary aspects of a building's presence and 'fit' within its wider setting. While the overall form of a building, including its roof form, defines its volume and silhouette when viewed against the street's skyline, the composition and articulation of the building's facade adds depth and texture that help to add visual interest and provide the building with a sense of human scale.

Objectives

O1	Ensure buildings— (a) contribute to the visual richness and desired future character of the street and locality, (b) achieve a human scale through the articulation and composition of building facades.

Design criteria

D1	Building services (including include garbage rooms, mailboxes, fire hydrant boosters, electrical substations, downpipes, plant rooms and satellite or communications structures) are integrated into the overall design and appearance of the building.
D2	Building facades are broken up physically and visually, through the use of articulation and varied materiality.
D3	The external arrangement of facade elements, including balconies, coarselines and articulation zone elements, clearly relates to the internal arrangement of building storeys, internal rooms and functions.
D4	Buildings more than 2 storeys in height clearly express a discernible base, middle and top.
D5	Development comprising a dual occupancy, attached dwellings, semi-detached dwellings, multi dwelling housing, a residential flat building or shop top housing uses a coordinated material and colour palette.
D6	Skylights and ventilation systems are integrated into the roof design.

7.9 Solar and daylight access

Explanation

When interpreting the DCP's solar and daylight access requirements, it is important to understand the different roles of solar access and daylight access. ***Solar access*** refers to a building or space's access to sunlight (ie, direct beam radiation from the sun). Its primary role is to determine a building or space's capacity to respond naturally to the local climate without the need for mechanical heating or cooling. In this regard, the DCP's design controls set minimum solar access requirements that enable year-round enjoyment of outdoor private open spaces and allow dwellings to achieve an acceptable level of passive solar warming in winter.

Daylight access consists of access to both sky light (diffuse light from the sky) and sunlight. It is an important determinant of the overall liveability and amenity of a building or space, but not necessarily its energy performance or passive thermal capacity. The DCP's design controls ensure habitable spaces and rooms achieve acceptable levels of daylight access suited to their function and likely use. Developments are required to achieve the DCP's requirements for both solar access and daylight access.

Objectives

O1	Optimise the amenity and passive thermal performance of open spaces and habitable rooms by ensuring they receive adequate solar and daylight access.

Design criteria

Daylight access

D1	Each habitable room includes at least 1 window to allow daylight access.
D2	No part of any habitable room is located more than 8 metres from a window.
D3	No part of a kitchen work surface is located more than 6 metres from a window or skylight.

Sunlight access

D4 For development comprising multi dwelling housing (terraces), a residential flat building or shop top housing—

(a) 75% of dwellings receive at least 3 hours of direct sunlight to 1m² of a living room window or principal private open space between 9am and 3pm on 21 June of, and

(b) a maximum of 15% of dwellings receive no direct sunlight access between 9am and 3pm on 21 June.

D5 For development other than multi dwelling housing (terraces), a residential flat building or shop top housing—

(c) each dwelling receives at least 2 hours of direct sunlight to 1m² of a living room window between 9am and 3pm on 21 June, and

(d) at least 40% of each principal private open space receives at least 3 hours of direct sunlight between 9am and 3pm on 21 June.

D5 Sunlight access to any active communal open space forming part of a strata or community scheme meets the relevant requirements of Design Element 7.16—Communal areas and open space.

Neighbouring properties

D6 Development ensures any neighbouring dwellings—

- achieve at least the minimum sunlight access referred to in D4 and D5 above, or
- where the dwelling does not currently achieve the minimum solar access—does not further reduce solar access to the dwelling.

7.10 Natural ventilation

Explanation

Natural ventilation is the movement of sufficient volumes of fresh air through a dwelling or building to create a comfortable indoor environment. Natural ventilation allows buildings to respond to the local climate and reduce the need for mechanical ventilation and air conditioning.

Natural cross ventilation is able to be achieved when a building has more than one aspect with direct exposure to prevailing winds. The internal layout of rooms and spaces, combined with the sizes and locations of windows and other openings, will determine the ability of a dwelling or building to be cross ventilated. Key measures to achieve this include—

- ensuring buildings and dwellings are oriented to capture and use prevailing breezes,
- limiting the depth of buildings and dwellings to maximise ventilation and airflow,
- optimising the number, placement, variety and size of operable windows,
- incorporating open plan dwelling layouts, and
- increasing ceiling heights to optimise natural airflow.

Objectives

O1	Promote indoor amenity and comfort while minimising the need for mechanical ventilation.

Design criteria

D1	Each habitable room is able to be naturally ventilated through the inclusion of at least 1 operable window.
D2	Windows to habitable rooms have an openable area equal to at least 5% of the floor area of the room.
D3	Balconies and outdoor spaces are located and designed to facilitate natural airflow into internal living spaces.
D4	Development for the purposes of multi dwelling housing (terraces), a residential flat building or shop top housing— (a) ensures at least 60% of dwellings are naturally cross ventilated, and (b) limits dwelling depths to ensure effective cross or natural ventilation to all dwellings.
D5	In cross-through dwellings, the combined area of external window and door openings on one side of the dwelling (inlet side) should be approximately equal to the combined area of external window and door openings on the opposite side of the dwelling (outlet side).
D6	Single aspect dwellings facilitate natural ventilation by limiting the depth of each dwelling to— (c) for a dwelling with an open plan layout—8 metres, (d) for other dwellings—6 metres

7.11 Ceiling height

Explanation

Ceiling height is measured from the finished floor level to the finished ceiling level. The height of a ceiling affects the amenity of a dwelling and the perception of space. Ceiling height is also directly linked to a dwelling's ability to achieve natural ventilation and daylight access.

The minimum ceiling height for dwellings is 2.4 metres. The incorporation of ceiling heights higher than the minimum required height is encouraged where this will help to enhance solar access, day lighting, natural ventilation and spatial quality for internal living areas.

Higher ground floor ceiling heights for development on key sites are required in order to enable the incorporation of ground floor commercial premises, either as part of the initial development or through a future change of use.

Objectives

O1 Ceiling heights—

(a) support natural ventilation, daylight access and spatial quality for habitable rooms, and

(b) support flexibility of use and ground floor active frontages on key sites.

Design criteria

D1 Development on key sites enables the use of ground floors for commercial premises by incorporating a minimum ceiling height of 3.3 metres to at least 250m² of the ground floor area.

D2 Except as provided by D1 above, development incorporates the following minimum ceiling heights—

- ground floor habitable rooms—2.7 metres
- upper level living rooms—2.7 metres
- upper level habitable rooms (other than living rooms)—2.4 metres
- attics—1.8 metres at the edge of the room

7.12 Dwelling size and layout

Explanation

The layout of a dwelling establishes the function, arrangement, location and size of rooms. It also establishes the relationships between the dwelling's various internal spaces, including the circulation between rooms and the levels of amenity and privacy available in each.

Flexible dwelling layout and design allows buildings to accommodate a diverse range of lifestyle needs, including diverse household structures, live-work housing arrangements and future changes in use.

Universal design

Universal design refers to design that enables people to continue living in the same home as they age or as their lifestyle and mobility changes. It ensures dwellings are able to be adapted for the changing needs of residents over time. The incorporation of universal design helps to ensure the availability of a robust, flexible housing stock that is able to meet the diverse needs of a wide variety of age groups.

The DCP's controls refer to the rating levels published in Livable Housing Australia's *Liveable Housing Design Guideline*.

Objectives

O1	Dwellings have sufficient area to ensure the layout of rooms is functional, well organised and provides a high level of amenity.
O2	Ensure dwelling design supports a flexible diversity of household types and resident needs.

Design criteria

Dwelling and room sizes

D1 Development comprising multi dwelling housing, a residential flat building or shop top housing incorporates a diverse mix of dwelling types and sizes that comply with the following minimum floor areas—

- studio dwelling—35m^2
- 1 bedroom dwelling—65m^2
- 2 bedroom dwelling—90m^2
- 3 bedroom dwelling—115m^2

D2 Bedrooms have a minimum length and width of 3 metres, excluding wardrobe space.

D3 Living rooms or lounge rooms have a minimum length and width of 4 metres, excluding fixtures.

D4 Combined living and dining rooms have a minimum area of 24m^2.

Universal design

D5 Where development comprises multi dwelling housing, a residential flat building or shop top housing, at least 30% of all dwellings incorporate the *Livable Housing Design Guideline*'s Silver Level universal design features.

D6 Where development comprises—

(a) an attached dwelling,

(b) a dual occupancy,

(c) a dwelling house,

(d) a secondary dwelling, or

(e) a semi-detached dwelling,

each dwelling incorporate the *Livable Housing Design Guideline*'s Silver Level universal design features.

7.13 Private open space

Explanation

Private open spaces are outdoor areas provided for the private use and enjoyment of a dwelling's residents. Depending on the nature of the development, private open space may be provided in the form of a ground level space or above ground in the form of a balcony or terrace.

Each dwelling is required to have access to its own principal private open space.

The provision of private open space is an important means of ensuring the liveability of a dwelling. Spaces should be located and designed to function as an extension of the dwelling's internal living spaces. This includes ensuring spaces are sufficiently sized and located to accommodate a diversity of outdoor recreation and living functions, including outdoor dining and children's play. At the same time, spaces should ensure privacy for residents and neighbours, should be accessible to all residents and should be suitable for year-round use with good solar access.

Objectives

O1	Ensure dwellings provide a high level of residential amenity with opportunities for outdoor recreation.

Design criteria

D1 Each dwelling is provided with a principal private open space that achieves the minimum dimensions described in Tables 19.6 and 19.7.

D2 The principal private open space is—

(a) subject to D3 below, located behind the primary road setback,

(b) clearly delineated for the private use of the dwelling's residents,

(c) accessible from a living area of the dwelling,

(d) capable of functioning as an extension of the dwelling for outdoor living, entertainment and recreation, and

(e) located to—

- take advantage of views and outlook,
- provide visual and acoustic privacy, and
- achieve sunlight access and optimise year-round use.

D3 The principal private open space may be located in the primary road setback where this will allow favourable solar access to the space and will not have a negative impact on the streetscape.

D4 Where balconies are provided, these—

(a) are integrated into the design of the building,

(b) incorporate solid or partially solid balustrades, and

(c) are oriented to the street or rear of the dwelling.

Table 19.6 Minimum principal private open space requirements for residential accommodation (other than residential flat buildings and shop top housing)

Use	Lot size	Principal private open space (per dwelling)	
		Minimum area	Minimum dimensions
Dwelling house, attached dwelling or semi-detached dwelling	225m² or less	16m²	3m x 3m
	more than 225m²	25m²	5m x 5m
Dual occupancy (attached)	All lot sizes	16m²	3m x 3m
Dual occupancy (detached)	All lot sizes	25m²	5m x 5m
Multi dwelling housing (other than terraces)	All lot sizes	25m²	5m x 5m
Multi dwelling housing (terraces)	All lot sizes	16m²	3m x 3m

Table 19.7 Minimum principal private open space requirements for residential flat buildings and shop top housing

Use	Dwelling size	Principal private open space (per dwelling)	
		Minimum area	Minimum depth
Residential flat building or shop top housing	Studio apartment	4m²	2m
	1 bedroom	8m²	2m
	2 bedrooms	10m²	2m
	3 or more bedrooms	12m²	2.4m

7.14 Visual and acoustic privacy

Explanation

Privacy is a major determinant of the ability of residents to enjoy their home. Each dwelling is required to provide a minimum level of visual and acoustic privacy for its residents. At the same time, new developments are required to protect and respond to the privacy of adjoining properties.

Visual privacy

Visual privacy allows residents to use their internal living areas and private open spaces without being overlooked. The DCP's controls seek to ensure adequate visual privacy is provided to all habitable rooms and principal private open spaces. The need for visual privacy should be considered in the layout and design of each development. Key considerations in this regard include—

- the orientation and layout of dwellings,
- the slope of the site and any changes in ground level between properties that may give rise to overlooking, and
- the location of windows and openings, including separation distances from neighbouring dwellings and private open spaces.

In some circumstances, additional measures such as privacy screens may be required to help ensure privacy for residents.

Acoustic privacy

Provision for acoustic privacy entails minimising sound transmission between dwellings and between the external and internal spaces of a dwelling. Design considerations for acoustic privacy are particularly important for development entailing multiple dwellings within the same building, a mix of residential and non-residential uses or the location of dwellings in proximity to a noise source such as an air conditioning unit, swimming pool pump or major road.

Objectives

O1	Ensure visual and acoustic privacy for residents and neighbours.

Design criteria

Visual privacy

D1	Direct overlooking of habitable room windows and principal private open spaces of adjoining dwellings is avoided through building layout, window and open space location and design, and the use of privacy screening and landscaping.
D2	Living rooms and principal private open spaces are oriented to the front or rear of each dwelling.
D3	Balconies, terraces and other forms of elevated private open space are located and, where necessary, screened to avoid overlooking of any habitable room windows or principal private open spaces of other dwellings.

D4 Where development proposes a habitable room window to be located—

(a) on a floor with a finished floor level that is 1.5 metres or more above ground level (existing), and

(b) within 9 metres of a habitable room window or principal private open space of another dwelling

visual privacy is ensured by—

- offsetting the window's position to avoid direct views of the other dwelling's window or principal private open space,
- providing the window with a sill height of at least 1.5 metres above the finished floor level,
- using fixed opaque or frosted glazing in the window below 1.5 metres above the finished floor level, or
- using privacy screening.

Acoustic privacy

D5 The design of dwellings minimises the opportunity for sound transmission through the building structure, with particular attention given to protecting bedrooms and living areas. Development should ensure—

(a) bedrooms of one dwelling do not share common walls with the living room or garage of another dwelling,

(b) bedrooms are located at least 3 metres from any noise source, such as a shared driveway, service area, plant room, active communal open space, common circulation space or the parking area or garage of another dwelling, and

(c) shared walls and floors are appropriately insulated to minimise sound transmission.

7.15 Pools and detached development

Explanation

Detached development consists of buildings and other structures that support the amenity and functionality of a dwelling, but that are detached from and structurally independent of any dwelling on a lot.

Detached development comprises structures that are generally low in height and small in scale. It may include structures such as garden sheds, detached studios, cabanas, swimming pools and cubby houses. In larger developments, such as multi dwelling housing or residential flat buildings, it may include communal recreational facilities.

Detached development must be located at least 900mm from other buildings on the lot. Structures are required to be located with care to avoid noise or overshadowing impacts on neighbouring properties, and to ensure they are integrated into the overall landscape design of the development.

Note—

In some cases, detached development may comprise ***exempt development***. Applicants should refer to Part 2 of the Codes SEPP to determine whether a structure requires development consent.

Objectives

O1 Detached development is located and designed to—

(a) minimise visual and acoustic privacy impacts,

(b) maintain solar and daylight access for neighbouring dwellings, and

(c) avoid visual impacts on the streetscape.

Design criteria

General requirements

D1 Detached development is located at least 900mm from any other building on the lot.

D2 Detached development (other than a swimming pool, spa pool, fence or boundary wall) has a maximum height above ground level (existing) of 4.5 metres.

D3 Studios have a maximum floor area of 36m^2.

D4 The maximum floor level of any detached deck, patio, pergola or terrace that is located less than 0.9 metres from the lot boundary is 0.6 metres above ground level (existing).

Side setbacks (detached development)

D5 Detached development (other than a swimming pool, spa pool or fence) has a minimum setback from any side boundary of—

- for development on lots that are 18 metres or less in width—0.9 metres
- for all other development—1.5 metres

Rear setbacks (detached development

D6 Detached development (other than a garage on a rear lane lot, swimming pool, spa pool or fence) has a minimum setback from any rear boundary of 0.9 metres.

Fences and walls

D7 Front fences and walls meet the applicable design criteria described in Design Element 7.6—Public domain interface.

D8 Side and rear fences—

(a) are not located forward of the primary road setback, and

(b) have a maximum average height above ground level (existing) of 1.8 metres.

Swimming pools and spa pools

D9 Swimming pools and spa pools have a maximum height above ground level (existing) of—

- at the water line—1.2 metres
- at the top of the coping—1.4 metres
- where the coping is more than 300mm wide—0.6 metres

D10 Swimming pools and spa pools are located—

- to the rear of the main building on a lot and out of view of the street,
- at least 1 metre from any lot boundary.

D11 Any swimming pool pump is located in a sound-proof enclosure.

7.16 Communal areas and open space

Explanation

Communal areas comprise circulation areas and open spaces that are collectively owned and managed on behalf of the members of a strata scheme or community scheme. Communal areas and open spaces can be internal or external, and can comprise spaces for circulation, amenities and recreation.

For the purposes of this chapter, communal open space is considered to be "active" when it has been designed to foster recreation and social use by residents of the development. This may include seating and other gathering areas, play facilities and open spaces suitable for recreation. Areas that are used solely for the purposes of ornamental planting or other uses that preclude people gathering in the space are not considered to be active for the purposes of the controls.

Objectives

O1 Communal open space is designed to—
- (a) enhance residential amenity,
- (b) ensure safety,
- (c) optimise connectivity to dwellings, and
- (d) promote social interaction between residents.

O2 Communal circulation spaces achieve good amenity with adequate access to daylight and ventilation.

Design criteria

Communal open space

D1 Development for residential flat buildings or shop top housing includes at least 1 area of active communal open space that—
- (a) is at least 5% of the site area in size,
- (b) has a minimum dimension of 3 metres, and
- (c) has a maximum grade of 1:50.

D2 Development for multi dwelling housing (other than terraces) comprising more than 10 dwellings includes at least one area of active communal open space that—
- (a) is at least 5% of the site area in size,
- (b) has a minimum dimension of 8 metres, and
- (c) has a maximum grade of 1:50.

D3 Active communal open spaces are visible from habitable rooms and private open space while maintaining visual privacy for dwellings.

D4 Active communal open space is located at least 3 metres from any habitable room of a dwelling on the lot.

D5 Active communal open space receives at least 2 hours of direct sunlight to 50% of the required area between 9am and 3pm on 21 June.

Communal areas

D6 Where development for multi dwelling housing includes an internal access road—
- (a) dwellings located adjacent to the lot's street frontage face towards the street,
- (b) other dwellings face the access road, with dwelling entries clearly visible from the road.

D7 Communal areas are adequately lit to ensure convenient wayfinding and safety.

D8 Common circulation above ground is provided with natural daylight and ventilation.

Part 8—Other land uses

8.1 Commercial premises

Explanation

Specific types of retail premises, including kiosks, markets, neighbourhood shops and food and drink premises, are permissible with consent on certain land within the Redmond Place Precinct. The DCP encourages the integration of retail premises where these will serve the day-to-day needs of precinct residents and visitors and where the proposed use will support residential amenity and local character.

Where possible, retail premises (other than markets) are encouraged to be located at ground level as part of a mixed use development on a key site. This is to encourage the activation of streets and public spaces at key nodes, supporting wayfinding and public safety and optimising the accessibility of local retail premises.

In considering applications for commercial premises, Council will take into account the potential cumulative impacts of the development on the viability of existing employment land, including land zoned as E1 Local Centre or E2 Commercial Centre.

Relevant Orange LEP 2011 clauses

Clause 2.5—Additional permitted uses for particular land

Clause 5.4—Controls relating to miscellaneous permissible uses

Note—

1. Applications for outdoor dining entailing the use of public space must meet the requirements of Council's adopted Strategic Policy ST107—Outdoor Dining Areas.
2. Applicants should refer to Design Element 8.6—Advertising and signage for additional guidance on the design and placement of any signage or advertising structure that may accompany a proposal for commercial premises within the Redmond Place Precinct.
3. Applicants should refer to Design Element 8.7—Temporary uses and events for additional guidance on the operation of markets within the Redmond Place Precinct.

Objectives

O1 Support the provision of local commercial premises in appropriate locations to meet the local convenience needs of precinct residents.

O2 Ensure the design and location of commercial premises—

(a) support the precinct vision,

(b) support the continued viability of existing centres, and

(c) promote the activation of streets and public spaces.

Design criteria

Retail premises (other than markets)

D1 Retail premises—

(a) are designed and located to—

- serve the local convenience needs of precinct residents, and
- maintain the viability of land zoned as E1 Local Centre or E2 Commercial Centre,

(b) are not located above ground floor level,

(c) promote active street frontages, and

(d) where possible, are located on a key site.

D2 Shutters to street frontages—

(a) comprise open grill or transparent materials, and

(b) are at least 50% transparent.

D3 All on-site car parking, loading and servicing—

(a) are provided behind the main building and to the rear of the lot, and

(b) meet the requirements of Chapter 15—Car parking.

8.2 Community facilities and uses

Explanation

This Design Element applies to development for the purposes of—

(a) community facilities,

(b) early education and care facilities,

(c) health consulting rooms,

(d) information and education facilities,

(e) places of public worship,

(f) respite day care centres, or

(g) veterinary hospitals

on land within the Redmond Place Precinct.

Applications for these uses will generally be assessed according to the merits of the proposal. However, all development will be required to ensure it protects residential amenity and supports the desired future character of the locality.

Note—

Applications for health consulting rooms within Zone R1 General Residential are subject to the requirements of Chapter 7, Part 7.8—Health consulting rooms.

Objectives

O1	Ensure community facilities and other supporting uses—
	(a) support the precinct vision,
	(b) protect the amenity of dwellings and public spaces,
	(c) support the activation of streets and public spaces,
	(d) are consistent with the public domain design requirements.

Design criteria

D1	Development is designed and located to—
	(a) maintain the predominantly residential character and built form scale of streets and localities,
	(b) minimise traffic generation and impacts, and
	(c) ensure dwellings and other sensitive land uses are adequately protected from—
	• overshadowing and privacy impacts,
	• light spillage, and
	• noise and odour pollution.
D2	All on-site car parking, loading and servicing—
	(a) are provided behind the main building line and to the rear of the lot, and
	(b) meet the requirements of Chapter 15—Car parking.

8.3 Additional permitted uses—Hangar Building and surrounds

Explanation

A limited diversity of additional uses, including artisan food and drink industries, creative industries, function centres and markets, are permissible with consent on certain land within the Redmond Place Precinct. This applies to land identified as "Item 7" on the Orange LEP 2011's Additional Permitted Uses Map.

Note—

Applications for outdoor dining entailing the use of public space must meet the requirements of Council's adopted Strategic Policy ST107—Outdoor Dining Areas.

Relevant Orange LEP 2011 clauses

Clause 2.5—Additional permitted uses for particular land

Objectives

O1 Ensure the use and operation of the Hangar Building and surrounds—

(a) support the precinct vision,

(b) protect the amenity of dwellings and public spaces,

(c) support the activation of streets and public spaces,

(d) are consistent with the public domain design requirements.

Design criteria

D1 Development is designed and located to—

(a) support the public use of adjoining streets, parks and public spaces,

(b) minimise traffic generation and impacts, and

(c) ensure dwellings and other sensitive land uses are adequately protected from—

- overshadowing and privacy impacts,
- light spillage, and
- noise and odour pollution.

D2 All on-site car parking, loading and servicing—

(a) are provided behind the main building line and to the rear of the lot, and

(b) meet the requirements of Chapter 15—Car parking.

8.4 Tourist and visitor accommodation

Explanation

Specific types of tourist and visitor accommodation, including backpacker's accommodation, bed and breakfast accommodation and serviced apartments, are permissible with consent on certain land within the Redmond Place Precinct. The DCP's controls seek to ensure proposals for tourist and visitor accommodation achieve a good fit with their residential context and neighbouring properties. The controls also seek to promote the long term facilitation of housing affordability by ensuring buildings and spaces can easily be adapted for residential accommodation through a future change of use.

Note—

1. Applications for bed and breakfast accommodation within Zone R1 General Residential are subject to the requirements of Chapter 7, Part 7.12—Use of dwelling for bed and breakfast accommodation.
2. Applicants should refer to Design Element 8.6—Advertising and signage for additional guidance on the design and placement of any signage or advertising structure that may accompany a proposal for tourist and visitor accommodation within the Redmond Place Precinct.

Objectives

O1 Ensure tourist and visitor accommodation—

(a) supports the precinct vision, and

(b) promotes the activation of streets and public spaces, and

(c) protects the amenity of dwellings and public spaces.

O2 Support housing affordability by ensuring development is designed to provide for the efficient change in use of buildings for residential accommodation.

Design criteria

D1 Development is designed and located to—

(a) maintain the predominantly residential character and built form scale of streets and localities,

(b) minimise traffic generation and impacts, and

(c) ensure dwellings and other sensitive land uses are adequately protected from—

- overshadowing and privacy impacts,
- light spillage, and
- noise and odour pollution.

D2 All on-site car parking, loading and servicing—

(a) are provided behind the main building line and to the rear of the lot, and

(b) meet the requirements of Chapter 15—Car parking.

D3 Building design and site layout facilitates the adaptive change of use of buildings and spaces for residential accommodation in a manner that minimises the need for demolition or new construction.

8.5 Urban agriculture

Explanation

This Design Element applies to development for the purposes of agriculture, including ***aquaculture*** and ***bee keeping***, on land within the Redmond Place Precinct.

Applications for aquaculture or bee keeping will generally be assessed according to the merits of the proposal. However, all agricultural activities will be required to ensure they protect residential amenity and comply with relevant policies and industry codes of practice.

Aquaculture

Aquaculture includes pond-based, tank-based and oyster aquaculture. All proposals for aquaculture must comply with the requirements of the Orange LEP 2011, including those prescribed in Schedule 6 of the LEP.

Bee keeping

For the purposes of the DCP, bee keeping refers to the keeping and breeding of bees for commercial purposes. The keeping of bees is a "registrable dealing" under section 153 of the *Biosecurity Act 2015*. This means that any person seeking to keep European honey bees (*Apis mellifera*) in NSW must obtain a Certificate of Registration from the NSW Department of Primary Industries (DPI).

Where bees are kept for personal use and are not kept or bred for commercial purposes, development consent is not required. However, people intending to keep bee hives on their property as a hobby or for domestic use are still required to obtain a 'recreational' Certificate of Registration from DPI.

The *Biosecurity Regulation 2017* (Part 2, Division 4, Subdivision 1 'Bees') prescribes minimum requirements to be met when setting up and operating registered bee hives in NSW. In addition, DPI requires all bee keepers to adhere to the *Australian Honey Bee Industry Biosecurity Code of Practice* as a condition of registration.

Objectives

O1	Ensure the design and operation of agriculture— (a) are consistent with the desired future character of the locality, and (b) protect the amenity of dwellings and public spaces.
O2	Ensure bee keeping demonstrates best practice for biosecurity, bee health and hive management.

Design criteria

D1	Applications for bee keeping demonstrate compliance with the bee keeping design and operation requirements of the *Biodiversity Regulation 2017* and the *Australian Honey Bee Industry Biosecurity Code of Practice*.

Note—

Those seeking to keep bee hives for non-commercial purposes are advised to consult the DPI's 'Backyard Beekeeping' (DPI Primefact 894, 2nd edition, May 2019) for additional guidance on backyard bee keeping.

Relevant Orange LEP 2011 clauses

Clause 5.19—Pond-based, tank-based and oyster aquaculture

8.6 Advertising and signage

Explanation

This Design Element applies to development for the purposes of advertising or signage on land within the Redmond Place Precinct.

Signs and advertising structures should employ good siting and design to ensure they contribute to the desired future character of each locality. The DCP's controls seek to ensure advertising and signage is appropriately located and protects the important character elements of the Redmond Place Precinct.

Building signage is permitted to be placed only on the ground floor of buildings and must be located under any street awning that may be attached to the building. Illuminated signs, including LED signs, are not permitted.

Objectives

O1 Ensure advertising and signage—

(a) are consistent with the desired future character of the locality,

(b) are suitably located and integrated with building appearance,

(c) ensure public safety, and

(d) protect the amenity of dwellings and public spaces.

Design criteria

General requirements

D1 Except as provided by D4 below, development—

(a) comprises no more than 1 sign per business or tenancy,

(b) is wall -mounted and affixed to the building,

(c) is not located above the ground floor level of the building,

(d) has a maximum display area of—

- for a light industry—1m^2,
- for all other development—0.75m^2,

(e) is integrated into the design of the building façade, and

(f) is not illuminated or backlit.

D2 Where a building or site contains multiple businesses or tenancies, a coordinated approach for all signs is required.

D3 The colours used in any sign or advertising structure complement the external colours and finishes of the host building. Corporate branding and colours are limited only to the sign or advertising structure, and are not applied the external surface of the host building.

Additional requirements for commercial development

D4 Signage for commercial development—

(a) comprises no more than 1 top hamper sign or wall sign and 1 under awning sign per business or tenancy,

(b) has a maximum display area of—

- for an under awning sign—1.25m^2
- for other signage—a combined area comprising no more than 15% of the ground floor shopfront elevation to the street

8.7 Temporary uses and events

Explanation

This Design Element applies to development for the purposes of temporary uses, including public events and markets, on land within the Redmond Place Precinct. Applications for temporary uses or events will generally be assessed according to the merits of the proposal. However, in certain circumstances Council policies and other types of approval may be required.

Note—

Applications for events on public land must meet the requirements of Council's adopted Strategic Policy ST142—Events on Council owned/managed land.

Objectives

O1 Ensure temporary uses and events—

(a) support the precinct vision,

(b) protect the amenity of dwellings and public spaces, and

(c) are supported by adequate risk management and planning.

Design criteria

D1 Sites are sufficiently sized and located to incorporate—

(a) adequate area for the proposed use, ancillary structures and customers,

(b) vehicle access and car parking to cater for the anticipated demand, and

(c) amenities to cater for the anticipated demand.

D2 Existing buildings incorporate fire safety measures appropriate for the proposed use.

D3 Development ensures dwellings and other sensitive land uses are adequately protected from—

(a) light spillage, and

(b) noise and odour pollution.

D5 Development (including markets) is supported by a management plan that addresses—

- the location, site area, date(s) and hours of operation of the proposed use or event,
- any licences or local approvals required,
- the location and size of any stalls, stages or other temporary structures,
- traffic management and on-site car parking,
- the provision of power, services, toilets and amenities,
- waste collection and management,
- site impacts and site protection and restoration measures,
- work, health and safety planning,
- contingency planning (including wet weather planning) and
- risk management, including crowd and emergency management.

Dictionary

9.1 Consistency with legislation and instruments

The Dictionary includes terms that may also be defined in applicable Act, statutory instrument or environmental planning instrument (EPI). Where there is an inconsistency between the DCP's definitions and those of an applicable Act, statutory instrument or EPI, the provisions of the Act, statutory instrument or EPI prevail.

9.2 Acronyms

ACHAR	Aboriginal cultural heritage assessment report
AEP	annual exceedance probability
AHIP	Aboriginal heritage impact permit
APZ	Asset Protection Zone
BFPL	bush fire prone land
BFPM	bush fire protection measure
BFSA	bush fire safety authority
CEMP	construction environmental management plan
Codes SEPP	State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
CPTED	Crime Prevention Through Environmental Design
CTMP	construction traffic management plan
CWMP	construction waste management plan
DCP	development control plan
EM	emergency management
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPI	environmental planning instrument
ESCP	erosion and sediment control plan
EV	electric vehicle
EVDB	electric vehicle distribution board
EVRC	electric vehicle ready connection
FIRA	flood impact and risk assessment
FRM	flood risk management
Housing SEPP	State Environmental Planning Policy (Housing) 2021
LEP	local environmental plan
LOF	local overland flooding
MUSIC	Model for Urban Stormwater Improvement Conceptualisation
NorBE	neutral or beneficial effect
NP&W Act	*National Parks and Wildlife Act 1974*
OWMP	operational waste management plan
Orange DCP 2004	Orange Development Control Plan 2004
Orange LEP 2011	Orange Local Environmental Plan 2011
PMF	probable maximum flood
PMP	probable maximum precipitation
SFPP	special fire protection purpose
SWMP	soil and water management plan
WCMP	water cycle management plan
WSUD	water sensitive urban design

9.3 Definitions

A

Aboriginal cultural heritage assessment report (or ***ACHAR***) means a cultural heritage assessment report referred to in clause 61 of the *National Parks and Wildlife Regulation 2019*.

Aboriginal heritage impact permit (or ***AHIP***) means a permit issued under Division 2 of Part 6 of the *National Parks and Wildlife Act 1974*.

Aboriginal object has the same meaning as in the Orange LEP 2011.

Aboriginal person has the same meaning as in the *Aboriginal Land Rights Act 1983* and Aboriginal people has a corresponding meaning.

Aboriginal remains has the same meaning as in the *National Parks and Wildlife Act 1974*.

abutting, in relation to a building or structure, means touching but not attached to another building or structure.

active frontage means a site frontage at ground floor level that attracts and promotes pedestrian traffic within the adjoining street or public space. This may be achieved through the provision of ground floor uses (such as commercial uses) or the provision of building or dwelling entries at the site frontage, or a combination of these.

active transport means transport that does not rely on registered vehicles (eg, walking and cycling).

adaptable housing means housing that is designed and built to accommodate future changes to suit occupants with mobility impairment or life-cycle needs, as governed by *Australian Standard AS 4299—Adaptable housing*.

affordable housing has the same meaning as in the EP&A Act.

affordable housing area means the Redmond Place affordable housing area.

ageing in place refers to people's ability to remain living in their home or neighbourhood as they age. Designing for ageing in place aims to ensure buildings and places are adaptable and universally accessible and encourage social connection and inclusion for people of all ages.

agriculture has the same meaning as in the Orange LEP 2011.

AHO Design Guidelines NSW means the document entitled *AHO Design Guidelines NSW* published by the Aboriginal Housing Office and dated January 2020.

ancillary development means any of the following—

(a) access ramp,

(b) awning, blind or canopy,

(c) balcony, deck, patio, pergola, terrace or verandah that is attached to a dwelling,

(d) cabana, cubby house, fernery, garden shed, gazebo or greenhouse,

(e) carport,

(f) detached studio,

(g) driveway or hard stand space,

(h) fence,

(i) garage,

(j) garbage bin store enclosure,

(k) outbuilding,

(l) pathway or paving,

(m) rainwater tank (above ground),

(n) retaining wall,

(o) screen,

(p) shade structure,

(q) shed,

(r) swimming pool or spa pool, and

(s) child-resistant barrier.

Apartment Design Guide has the same meaning as in *State Environmental Planning Policy (Housing) 2021*.

aquaculture has the same meaning as in the Orange LEP 2011.

architect means a design practitioner registered under the Design and Building Practitioners Act 2020 in the design practitioner—architectural class.

articulation zone means a primary road articulation zone or secondary road articulation zone.

Asset Protection Zone (or ***APZ***) has the same

meaning as in *Planning for Bush Fire Protection*.

association property has the same meaning as in the *Community Land Development Act 2021*.

B

balcony means a balustraded platform (not being an enclosed room or area) attached to and with access from an upper floor level of a building.

baluster means a vertical member supporting a handrail or coping (see also ***balastrade***).

balustrade means a series or row of balusters.

base, in relation to a building or structure, means the lower part of the building or structure when presented for external view (see ***base, middle and top*** of a building).

base, middle and top of a building refers to the vertical tripartite arrangement of principal horizontal elements within a building's external presentation. Within urban contexts, buildings demonstrate 'good manners' to the street where they have a clearly defined base that relates to pedestrians at ground level. The middle section of the building provides visual interest and helps to define the street edge, while the top section crowns (or 'finishes') the building like a hat. The breakup of buildings into three distinct sections enables buildings to—

(t) respond to established streetscape qualities and enable visual continuity with traditional architectural forms (for example, through the continuation of historical built form datums),

(u) be scaled appropriately by enabling taller buildings to be scaled to pedestrians at street level, and

(v) contribute to the visual richness and amenity of streets by enabling compatible variations in materiality and form within the streetscape.

battle-axe lot means a lot that is partially located behind another lot and that has access to a public road by an access laneway (or handle) that runs beside the side boundary of an adjoining lot.

bioretention facility (or ***raingarden***) means a landscaped depression and that utilises soil media, mulch and vegetation to store, slow and treat stormwater runoff by allowing it to be filtered through a specified soil profile. Bioretention facilities are a form of water sensitive urban design.

Blue Book (see ***Managing Urban Stormwater: Soils and Construction—Volume 1***).

boundary wall means a wall that has a setback of 150mm or less from the side or rear boundary of a lot.

building element means—

(a) an entry feature or portico,

(b) a balcony, deck, pergola, terrace or verandah,

(c) a window box treatment,

(d) a bay window or similar feature,

(e) an awning or other feature over a window,

(f) a sun shading feature,

(g) an eave,

(h) an access ramp.

building envelope means the three-dimensional space that limits the extent of a building on a lot. The allowable building envelope is defined by the combination of the maximum building height and minimum front, side and rear building setbacks applying to the lot.

building height (or ***height of building***) has the same meaning as in the Orange LEP 2011.

building line (or ***setback***) has the same meaning as in the Orange LEP 2011.

bush fire has the same meaning as in *Planning for Bush Fire Protection*.

bush fire prone land (or ***BFPL***) has the same meaning as in *Planning for Bush Fire Protection*.

bush fire protection measures (or ***BFPMs***) has the same meaning as in *Planning for Bush Fire Protection*.

bush fire risk has the same meaning as in *Planning for Bush Fire Protection*.

bush fire safety authority (or ***BFSA***) means a bush fire safety authority issued by the Commissioner of the NSW Rural Fire Service in accordance with section 100B of the *Rural Fires Act 1997*.

C

cadastral pattern means the subdivision pattern of a locality at ground level that defines a locality's street

block and lot layout.

carport means a roofed structure for the shelter of motor vehicles that has 2 or more sides open and not less than one-third of its perimeter open.

catchment means the area of land draining to a specific location. It includes the catchment of the primary waterway as well as any tributary streams and flow paths.

circular economy principles means the circular economy principles described in Design Element 4.5—Waste management.

City means the City of Orange local government area.

clear to the sky means open to sky, or a roofing material that has 90 per cent light transmission.

Codes SEPP means *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

collector street (or ***collector road***) means a major collector street or a minor collector street.

common wall means a wall that is common to adjoining buildings other than a separating wall.

communal open space means outdoor space located within a site at ground level or on a structure and that is within common ownership and provided for the recreational use of residents of the development. Communal open space may be accessible to the public, or only to residents of the development.

community housing has the same meaning as in the *Community Housing Providers National Law (NSW)*.

community housing provider (or ***CHP***) has the same meaning as in the *Community Housing Providers (Adoption of National Law) Act 2012* (see also ***registered community housing provider***).

community scheme has the same meaning as in the *Community Land Development Act 2021*.

Connecting with Country Good Practice Guidance means the document entitled *Connecting with Country: Good Practice Guidance on how to Respond to Country in the Planning, Design and Delivery of Built Environment Projects in NSW* published by Government Architect New South Wales (NSW Department of Planning and Environment) and dated November 2023 (or any superseding and equivalent edition or publication).

construction certificate means a construction certificate referred to in section 6.4 of the EP&A Act.

context (or ***local context***) means the combination of physical, social, cultural, economic, environmental and geographic circumstances within which a building or place is situated. Context applies at multiple scales and includes the urban structure, landscape, townscape and streetscape qualities of a site's setting.

contiguous deep soil means deep soil that is connected horizontally through an unbroken sequence within and between property boundaries.

cool roof area means the area of the total roof area that meets the cool roof requirements. Cool roofs are designed to reflect solar heat while at the same time cooling themselves by efficiently emitting any solar heat that has been absorbed.

cool roof requirements mean the cool roof requirements described in Design Element 6.5—Urban heat management.

corner apartment means a cross ventilating apartment on one level with aspects at least 90 degrees apart. Corner apartments are commonly located at the outermost corners of residential flat buildings.

corner lot means a lot that has two contiguous boundaries with a road or roads (other than a lane) that intersect at an angle of 135 degrees or less (whether or not the lot has any other boundaries with a road).

Council means Orange City Council.

Country has a specific and special meaning for Aboriginal people. For the purposes of this chapter, Country includes Earth, Waters and Sky. It encompasses tangible and intangible aspects, knowledge and cultural practices, belonging and identity, wellbeing and relationships. People are part of Country.

courtyard means an open space at ground level or on a structure (podium or roof) that is open to the sky, formed by the building and enclosed on three or more sides.

covenant means a formal agreement or promise that is registered on the title of a parcel of land (see also ***public positive covenant***).

crossover means the paved accessway between the carriageway of a street and a lot.

cross-over apartment means a cross-ventilating apartment with two opposite aspects and with a change in level between one side of the building and the other.

cross-through apartment means a cross-ventilating apartment on one level with two opposite aspects.

cross-ventilating apartment means an apartment that enjoys natural cross-ventilation. For an apartment to be considered cross-ventilated, the majority of the primary living space and n-1 bedrooms (where n is the number of bedrooms) must be positioned so as to benefit from a cross-ventilation path.

D

daylight consists of both sky light (diffuse light from the sky) and sunlight.

dB(A) means decibels of the 'A-scale', a set frequency-weighted scale of noise that allows for lack of sensitivity of the ear to sound at very high and very low frequencies.

deep soil means a soft landscaped area used for growing trees and other plants that is open to the sky and connected vertically to the soil system and groundwater system below. Deep soil is—

(a) unimpeded by buildings or structures (with the exception of minor structures) above or below ground,

(b) provides opportunities for groundwater infiltration and canopy trees, and

(c) does not include basement car parks, services, swimming pools, tennis courts or impervious surfaces.

Note—

For the purposes of calculating the area of deep soil, minor structures include—

(a) essential services infrastructure (such as stormwater pipes) with a maximum diameter of 300mm, and

(b) landscape structures (such as lightweight fences, light poles or seating) requiring one or more footings each with a maximum size of 300mm by 300mm in cross-section.

deep soil zone means an area of deep soil reserved for soft landscaping (including tree planting) and groundwater recharge within a site.

design practitioner has the same meaning as in the *Design and Building Practitioners Act 2020*.

desired future character means the local character that is to be achieved for a given locality or precinct, including its intended natural, aesthetic, cultural and sensory qualities. The desired future character for the Redmond Place Precinct is defined by the precinct vision and its supporting precinct concept plan and key character elements.

detached development means ancillary development that is located apart from and structurally independent of any building on the same lot of land.

detached studio (see ***studio***).

development control plan (or ***DCP***) means a development control plan made, or taken to have been made, under Division 3.6 of the EP&A Act and in force.

drainage swale (see ***swale***).

drinking water catchment means land identified as "Drinking Water" on the Drinking Water Catchment Map.

Drinking Water Catchment Map means the Orange LEP 2011 Drinking Water Catchment Map.

dual aspect apartment means a cross-ventilating apartment that has at least two major external walls facing in different directions, including corner, cross-over and cross-through apartments.

E

easement means a legal right or restriction burdening land and benefiting either another parcel of land or a public authority. An easement is created either by a dealing registered in accordance with the *Real Property Act 1900* or by inclusion in a section 88B instrument lodged with a new deposited plan.

electric vehicle (or ***EV***) means a motorised vehicle powered by electricity rather than liquid fuels.

electric vehicle charging unit (or ***EV charging unit***) has the same meaning as in *State Environmental Planning Policy (Transport and Infrastructure) 2021*.

electric vehicle distribution board (or ***EVDB***) means

a charging control system connected to the main switchboard of a building or development designed to enable the installation of an EV charger (or chargers).

electric vehicle ready (or ***EV ready***) means a building or place in which an electric vehicle ready connection is provided.

electric vehicle ready connection (or ***EVRC***) means a circuit provided in an electric vehicle distribution board (EVDB) to enable easy future installation of cabling from an EV charger to the EV distribution board. An EVRC includes the provision of a cable tray and dedicated spare 32A circuit within the EVDB).

environmental planning instrument (or ***EPI***) means an environmental planning instrument (including a SEPP or LEP but not including a DCP) made, or taken to have been made, under Part 3 of the EP&A Act and in force.

excavation permit means an excavation permit referred to in section 139 of the *Heritage Act 1977*.

extreme heat day means a day in which the maximum air temperature exceeds 40°C.

F

facade (or ***building facade***) means the external face of a building, generally the principal face, facing a street or other public space.

flood (or ***flooding***) means a natural phenomenon that occurs when water covers land that is normally dry. It may result from coastal inundation (excluding tsunamis) or catchment flooding, or a combination of both.

flood hazard means a flood that has the potential to cause harm or conditions with the potential to result in loss of life, injury and economic loss.

flood impact and risk assessment (or ***FIRA***) means a study to assess flood behaviour, constraints and risk, understand off-site flood impacts on property and the community resulting from the development, and flood risk to the development and its users. A FIRA is required to be prepared by a suitably qualified engineer experienced in hydrological and hydraulic analysis for flood risk management.

flood prone land means land susceptible to flooding by the probable maximum flood (PMF) event. Flood prone land is also known as the floodplain, flood liable land and flood affected land.

flood risk means risk based on the consideration of the consequences of the full range of flood behaviour on communities and their social settings, and the natural and built environment.

flood risk management (or ***FRM***) means the management of flood risk to communities.

Flood Risk Management Manual (or ***FRM Manual***) means the *Flood Risk Management Manual*, ISBN 978-1-923076-17-4, published by the NSW Government in June 2023 (or any superseding and equivalent edition or publication).

flood risk management measures (or ***FRM measures***) means measures that can reduce flood risk. FRM measures may include flood risk management, flood mitigation, emergency management and land-use planning measures.

floor area, in relation to detached development, means the area of the development measured from the finished surface of any—

- in relation to a building—the external walls measured at a height of 1.4 metres above the floor, or
- in relation to an open space—any bounding walls, balustrades or handrails or the edge of any hard surface.

Fonzi flat (see ***garage top dwelling***).

form (or ***building form***) refers to the overall shape, volume and arrangement of the parts of a building, structure, or ensemble.

front boundary (see ***primary road boundary***).

FRM Manual (see ***Flood Risk Management Manual***).

FRM measures (see ***flood risk management measures***).

G

garage top dwelling means a dwelling located above a private garage that is not associated with that dwelling and includes any internal entry stair serving the garage top dwelling. Garage top dwellings are also referred to as 'Fonzi flats'.

green infrastructure means the network of green spaces, natural systems, and semi-natural systems

that supports sustainable communities and includes waterways, bushland, tree canopy and green ground cover, parks and open spaces.

green roof means a roof surface that supports the growth of vegetation, comprised of a waterproofing membrane, drainage layer, organic growing medium (eg, soil) and vegetation. Green roofs can be classified as either extensive or intensive, depending on the depth of substrate used and the level of maintenance required. Intensive green roofs are generally greater than 300mm deep and are designed as accessible landscaped spaces with pathways and other features. Extensive green roofs are generally less than 300mm deep and are generally not trafficable (see also cool roof).

green wall means a wall with fixtures to facilitate climbing plants. It can also be a cladding structure with growing media to facilitate plant growth.

gross floor area has the same meaning as in the Orange LEP 2011.

ground level (existing) has the same meaning as in the Orange LEP 2011.

ground level (finished) has the same meaning as in the Orange LEP 2011.

groundwater means water located below the land surface.

Groundwater Vulnerability Map means the Orange LEP 2011 Groundwater Vulnerability Map.

H

height of building (see ***building height***).

Housing SEPP means *State Environmental Planning Policy (Housing) 2021*.

human scale, in relation to a streetscape or the public realm, is where the built form is scaled for, and relatable to, a typical pedestrian perspective.

I

impermeable surface means a surface that does not allow rainwater to infiltrate to the soil, such as roofs, roads, paved parking areas and paved courtyards.

impervious area means an area of impermeable surface (excluding swimming pools and porous paving).

important character elements describe the characteristics of a locality or precinct that development is required to preserve and enhance. The important character elements for the Redmond Place Precinct are described in Part 3—Precinct vision.

Indigenous cultural and intellectual property (or ***ICIP***) refers to the rights that Aboriginal people have to protect their cultural heritage, traditional knowledges and cultural expressions.

infiltration, in relation to drainage, means the practice of discharging drainage water to the ground subsurface.

L

landscape architect means—

(a) a registered landscape architect member of the Australian Institute of Landscape Architects, or

(b) a person with at least 8 years' experience in landscape design.

landscape plan means a plan prepared by a landscape architect describing the extent, type and location of proposed landscaping and planting, including any landscaped area (or areas).

landscaped area has the same meaning as in the Orange LEP 2011.

lane means a public road, with a width greater than 3m but less than 7m, that is used primarily for access to the rear of premises, and includes a nightsoil lane.

local environmental plan (or ***LEP***) means a local environmental plan made in accordance with Division 3.4 of the EP&A Act.

Livable Housing Design Guidelines (or ***LHDG***) means the document entitled *Livable Housing Design Guidelines*, 4th edition, published by Livable Housing Australia and dated 2017 (or any superseding and equivalent edition or publication).

local character means the combined natural, aesthetic, cultural and sensory qualities of a locality, including its scenic landscape, townscape and streetscape qualities (see also ***desired future character***).

local overland flooding (or ***LOF***) means inundation by local run-off on its way to a waterway, rather

than overbank flow from a waterway (see also ***mainstream flooding***).

lot includes a lot resulting from the subdivision of land under the *Community Land Development Act 2021* but does not include any lot resulting from the subdivision of land under the *Strata Schemes Development Act 2015* (see also ***strata lot***).

lot depth means the horizontal distance between the lot's primary and rear boundaries or, in the case of a battle-axe lot, between the

lot width means the width of the lot measured at the building line.

low rise building refers to a building not more than 2 storeys in height.

M

Managing Urban Stormwater: Soils and Construction—Volume 1 means the document entitled *Managing Urban Stormwater: Soils and Construction—Volume 1*, 4th edition (ISBN 0-9752030-3-7) published by Landcom and dated March 2004 (or any superseding and equivalent edition or publication) (also referred to as the "***Blue Book***").

manor house has the same meaning as in the Codes SEPP.

massing means the combined bulk, scale and volume of a building (or group of buildings).

medium density (low rise) housing means a low rise building (or number of buildings) comprising attached dwellings, semi-detached dwellings, dual occupancies, manor houses or multi dwelling housing.

medium density (mid rise) housing means a mid rise building (or number of buildings) comprising residential flat buildings or shop top housing.

mid rise building refers to a building not more than 4 storeys in height.

midwinter means 21 June (winter solstice), when the sun is lowest in the sky.

multi dwelling housing (terraces) has the same meaning as in the Codes SEPP.

N

National Rental Affordability Scheme has the same meaning as in the *National Rental Affordability Scheme Act 2008* of the Commonwealth.

natural cross ventilation means natural ventilation that allows fresh air to flow into and through a room (or suite of rooms) by exploiting the difference between positive pressure on the windward side of the building and negative pressure on the leeward side of the building via windows at either side. In order to enable effective cross ventilation, the connection between these windows must provide a clear, unobstructed air flow path. For a dwelling to be considered cross-ventilated, the majority of the primary living space and n-1 bedrooms (where n is the number of bedrooms) must be on a ventilation path.

natural ventilation refers to the movement of outdoor air (or 'fresh air') into a room (or suite of rooms). Sustainable design practice incorporates natural ventilation (often in the form of natural cross ventilation) as a means of mitigating the effects of heat gain within buildings and reducing the need for mechanical ventilation and air conditioning to achieve healthy levels of human thermal comfort during warmer months.

net zero ready development means a development that—

(a) has high energy performance,

(b) is electric vehicle ready,

(c) is capable of achieving net zero operational emissions, and

(d) is either all-electric or 'all-electric ready' (ie, capable of becoming all-electric and not reliant on-site fuel sources).

Net zero ready development requires sufficient physical space and electrical power to the meter board, and all relevant sections of buildings must be ready for current or future adoption of electric heating, ventilation and air conditioning (HVAC), induction cooking (if relevant) and electric hot water systems.

NorBE Guideline means the document entitled *Neutral or Beneficial Effect on Water Quality Assessment Guideline 2022* published by WaterNSW and dated October 2022 (or any superseding and equivalent edition or publication).

NSW Implementation Plan for Closing the Gap means the document entitled *2022-2024 NSW Implementation Plan for Closing the Gap* published by Aboriginal Affairs NSW and dated August 2022.

O

occupation certificate means an occupation certificate issued in accordance with Part 6 of the EP&A Act.

open space means geographical space that is open to the sky and has no buildings or other structures located within it.

operable screening device means a sliding, folding or retractable element on a building or structure designed to provide shade, privacy and protection from natural elements.

Orange City Council Subdivision and Development Code means the Orange City Council Subdivision and Development Code as adopted by Council at the time the application is made.

Orange DCP 2004 means the Orange Development Control Plan 2004, as amended.

Orange LEP 2011 means Orange Local Environmental Plan 2011.

overland flow means an area of land as defined in a flood study which constitutes secondary flow path of floodwaters and in which flood hazard conditions occur, as shown on the DCP's Flood Planning Map.

P

parallel road means, in the case of a lot that has boundaries with parallel roads, the road that is not the primary road.

parallel road boundary means the property boundary which is common with the parallel road to which the lot has frontage.

parallel road lot means a lot that has boundaries with 2 parallel roads, not including a lane.

passive solar design means design that takes advantage of climatic conditions to maintain a comfortable temperature range for the occupants of a building or place in a manner that minimises reliance on non-renewable sources of energy.

passive surveillance (or ***informal surveillance***) means the ability to casually observe an area to enhance the level of security. Informal surveillance does not include formal surveillance or security systems, but is synonymous with the urban design concept of 'eyes on the street' through the everyday use and observation of communal or public spaces as a means of supporting general safety and security.

PCT classification system means the system of classifying native vegetation approved by the NSW Plant Community Type Control Panel and described in the BioNet Vegetation Classification.

pitch (or ***roof pitch***) refers to the slope of a roof.

Planning for Bush Fire Protection means the document entitled *Planning for Bush Fire Protection* (ISBN 978-0-646-99126-9) published by the NSW Rural Fire Service in co-operation with the NSW Department of Planning, Industry and Environment and dated November 2019 (or any superseding and equivalent edition or publication).

plant community type (or ***PCT***) means a NSW plant community type identified using the PCT classification system.

planting on structure means soft landscaping that is impeded by, or relies upon, a building or structure.

podium means the base or lower portion of a building upon which taller (eg, tower) elements are positioned.

porch means an exterior appendage to a building, comprising a covered approach or vestibule to a doorway.

practitioner has the same meaning as in the *Design and Building Practitioners Act 2020*.

primary frontage, in relation to a property boundary, means the boundary to which the front of a main building on a lot faces or is proposed to face.

primary road means the road to which the front of a dwelling, or a main building, on a lot faces or is proposed to face, and includes any road that intersects with that road at an angle of more than 135 degrees and with which the dwelling or main building has contiguous boundaries.

primary road articulation zone means an area of a lot forward of the building line within which building elements are permitted to be located.

primary road boundary (or ***front boundary***) means

the property boundary which is common with the primary road to which the lot has frontage (or, for battle-axe lots, the boundary closest to the primary road, excluding the access laneway).

primary road building line (or ***primary road setback***) means the building line as measured in relation to the primary road boundary.

primary road setback (see ***primary road building line***).

principal private open space means an area of private open space that is directly accessible from, and adjacent to, a habitable room in the dwelling, other than a bedroom. The principal private open space is usually the largest consolidated area of private open space within a development.

principal usable part of communal open space means a consolidated part of the communal open space within a development that is designed as the primary focus of recreational activity and social interaction.

private road means a road other than a public road.

probable maximum flood (or ***PMF***) means the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation (PMP), and where applicable, snow melt, coupled with the worst flood-producing catchment conditions.

probable maximum precipitation (or ***PMP***) means the greatest depth of precipitation for a given duration meteorologically possible over a given size storm area at a particular location at a particular time of the year, with no allowance made for long-term climatic trends.

professional engineer has the same meaning as in the *Design and Building Practitioners Act 2020*.

public domain (or ***public realm***) refers to the combination of sites, buildings, spaces and settings that together comprise the collectively owned and publicly accessible part of a place. It includes public spaces, public buildings, streets, pathways, rights-of-way, parks, waterways and other public elements that are accessible to the public.

public housing has the same meaning as in the *Housing Act 2001*.

public land has the same meaning as in the *Local Government Act 1993*.

public open space means publicly accessible land (not including private open space or communal open space) that has been reserved for the purpose of sport, recreation, amenity, the preservation of natural environments and/or the provision of green space.

public positive covenant has the same meaning as in the *Conveyancing Act 1919*.

Note—

Public positive covenants are made under section 88E of the *Conveyancing Act 1919* and are also referred to as "***88E instruments***".

public road has the same meaning as in the *Roads Act 1993*.

public space means land that is publicly accessible (including public open space and public road reserves) and vested in a public authority.

Q

qualified designer means a person registered as an architect under the *Architects Act 2003*.

R

raingarden (see ***bioretention facility***).

rear boundary means the property boundary that is furthest from and opposite to the lot's primary frontage.

Redmond Place affordable housing area has the same meaning as in clause 7.17 of the Orange LEP 2011.

registered community housing provider (or ***registered CHP***) has the same meaning as in the *Community Housing Providers (Adoption of National Law) Act 2012*.

relic has the same meaning as in the *Heritage Act 1977*.

residential apartment development has the same meaning as in Chapter 4 of the Housing SEPP.

Rest of NSW Statistical Area means the area that the Australian Bureau of Statistics determines from time to time to be the Rest of NSW—Greater Capital City Statistical Area.

road has the same meaning as in the Orange LEP 2011.

road reserve means the land set aside for a road and accompanying verge.

roof means the top weatherproof construction of a building or structure.

runoff means the amount of rainfall that ends up as streamflow, also known as rainfall excess.

S

secondary road means, in the case of a corner lot, the road that is not a primary road, parallel road or lane.

secondary road articulation zone means an area of a corner lot forward of the secondary road setback within which building elements are permitted to be located.

secondary road boundary means the property boundary which is common with the secondary road to which the lot has frontage.

secondary road building line (or ***secondary road setback***) means the building line as measured in relation to the primary road boundary.

secondary road setback (see ***secondary road building line***).

section 88B instrument means an instrument that forms part of a deposited plan lodged with the Registrar-General and which upon registration creates an easement, profit à prende, restriction on the use of land or positive covenant in accordance with section 88B of the *Conveyancing Act 1919*.

setback area means the area between the building line and the relevant boundary of the lot.

shared electric vehicle connection (or ***shared EV connection***) means a minimum level 2 40A fast charger and power supply to a parking space connected to an electric vehicle distribution board.

shared path means a paved area in a verge or public reserve specifically designed for the shared movement of pedestrians and cyclists. Shared paths have a minimum width of 2.5 metres.

shared zone means a road or network of roads where the carriageway is able to be shared safely by vehicles and pedestrians. The maximum speed limit for vehicles within any shared zone is 10km/hour.

side boundary means a property boundary other than a front or rear boundary of a site.

site means the land on which development is or is to be carried out.

site area has the same meaning as in the Orange LEP 2011.

site coverage has the same meaning as in the Orange LEP 2011.

small tree is a tree that is 6-8m high, up to 4m canopy spread at maturity.

solar access refers to the ability of a building, open space or solar collector to receive direct sunlight without obstruction from other buildings or impediments (not including trees).

solar heat means radiant heat contained in the full spectrum of sunlight.

spa pool has the meaning as in the *Swimming Pools Act 1992*.

special fire protection purpose (or ***SFPP***) has the same meaning as in section 100B of the *Rural Fires Act 1997*.

storey has the same meaning as in the Orange LEP 2011.

strata lot means a lot resulting from the subdivision of land under the *Strata Schemes Development Act 2015*.

strata scheme has the same meaning as in the *Strata Schemes Development Act 2015*.

strata subdivision means subdivision by the following, within the meaning of the *Strata Schemes Development Act 2015*—

(a) a strata plan,

(b) a strata plan of consolidation,

(c) a strata plan of subdivision.

street means a public road and associated verge located within an urban setting and functioning as a shared space for the movement of pedestrians, cyclists and vehicles.

street awning means a predominantly horizontal structure that projects over a footway from the host building to provide weather protection for

pedestrians.

street block means a space bounded by road reserves within an urban area's cadastral pattern and in which land can be divided into individual lots. Street blocks are the basic building block of an area's urban form.

street wall buildings means buildings that are grouped and built to a consistent alignment to define a street edge, generally with no setback at the street frontage.

streetscape means the collective appearance and visual quality and character of all buildings, structures, open spaces, vegetation, surfaces, materials, urban fabric and the like visible at ground level within a street or public road.

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—

(a) is established in conjunction with a dwelling house, and

(b) is on the same lot of land as the dwelling house, and

(c) is separate from the dwelling house, and

(d) is not used as a separate dwelling house, and

(e) does not contain any cooking facilities.

studio apartment means an apartment consisting of one habitable room that combines kitchen, living and sleeping space.

subdivision certificate has the meaning prescribed by section 6.4 of the EP&A Act.

subdivision works certificate has the meaning prescribed by section 6.4 of the EP&A Act.

swale (or ***drainage swale***) means linear, depressed vegetated channel that collects and transfers stormwater. Depending on their intended stormwater management function, swales can be vegetated with grass or more dense groundcover.

swimming pool has the meaning as in the *Swimming Pools Act 1992*.

T

terrace means an outdoor area, usually paved and unroofed, that is connected to an apartment and accessible from at least one room. A terrace may be on-grade or on a structure (podium or roof).

top, in relation to a building, means (see building base, middle and top).

top hamper sign means a business identification sign installed above a display window or attached to the transom of a doorway.

total roof area means the combined area of roofs within a site.

tree means a long-lived woody perennial plant greater than (or usually greater than) 3 metres in height with one or relatively few main stems or trunks.

tree canopy means the layer of leaves, branches and stems or trunks of a tree (or group of trees) that provide coverage of the ground when viewed from above.

tree canopy coverage means the proportion of the area of a site or other nominated space that is covered by tree canopy.

tree planting rate means the minimum number of trees required to be provided in a given area of deep soil.

U

under awning sign means a business identification sign suspended below the awning of a building.

universal design (or ***adaptable design***) means design that enables people to carry on their everyday lives by ensuring buildings, dwellings, outdoor spaces and places are able to adapt to accommodate people with varying needs, including young children, elderly people and people with a disability.

urban heat (or ***urban heat island effect***) refers to the cumulative effect of conditions within an urban area that contribute to higher ambient temperatures, including—

(a) the prevalence of hard and dark surfaces and materials, including those used for roads, car parks, pavements, roofs and external walls, that absorb, store and reflect solar heat,

(b) activities that generate heat, including waste air from mechanical cooling systems, and

(c) reductions in green infrastructure, including

urban tree canopy and other green cover, resulting from development.

urban tree canopy means the combined tree canopy of an urban area. It includes trees on both public and private land (see also ***tree canopy***).

V

verandah means an open area attached to a building, with a roof supported by the building on one side and posts or columns on the other.

verge (or ***nature strip***) means that part of the road reserve between the carriageway and the boundary of adjacent lots (or other limit to the road reserve). The verge may accommodate public utilities, footpaths, stormwater flows, street lighting poles and planting.

virgin excavated natural material (or ***VENM***) has the same meaning as in Schedule 1 of the *Protection of the Environment Operations Act 1997*.

W

wall sign means a business identification sign that is flat-mounted or painted on the exterior wall of a building.

water sensitive urban design (or ***WSUD***) means urban, landscape and site design that prioritises the sustainable use and reuse of water resources. WSUD incorporates techniques such as raingardens, constructed wetlands, bioretention infrastructure and swales, aiming to improve the ability of urban environments to capture, treat and re-use rainwater and stormwater before it has the chance to enter creeks and rivers.

wheelchair access, in relation to 2 points, means a continuous path of travel between the points that may be negotiated by a person using a wheelchair.

Z

zero lot line development means a dwelling house that is constructed with one of its external walls located 450mm or less from a side boundary of the lot.

Schedule 19-A—Connecting with Country precinct design outcomes

Overview

This schedule describes the precinct design outcomes that development is required to support in order to demonstrate consistency with Design Principle 1—Connecting with Country. A key purpose of the precinct design outcomes is to ensure development within the Redmond Place Precinct—

(a) supports cultural and environmental sustainability by taking a Country-centred approach to the planning, design and delivery of buildings and spaces, and

(b) responds to the key design themes and recommendations of the 'Redmond Place Connecting with Country Framework' prepared by Balarinji on behalf of Landcom (May 2024).

It should be noted that while the precinct design outcomes are intended to accurately reflect the recommendations of the Redmond Place Connecting with Country Framework, they focus only on those measures identified by the framework that fall within the scope of the DCP. Wherever possible, applicants are encouraged to consider the full scope of measures and ideas identified in the framework when preparing their proposal.

Precinct design outcomes

The precinct design outcomes are described in Figure 19.41 and the accompanying table. These are organised according to the key design themes identified by the Redmond Place Connecting with Country Framework. Where relevant, development is required to support the precinct design outcomes. While the outcomes are holistic in scope, their preparation acknowledges that designing for Country is ongoing process based on community engagement, listening and discovery over time. Applicants and designers are encouraged to build upon the precinct design outcomes including, where appropriate, further engagement with community and relevant stakeholders. Additional resources that may assist applicants and designers in determining culturally-responsive processes and design outcomes for their project are listed in the 'Further reading' section at the end of this schedule.

Figure 19.40 Redmond Place Connecting with Country Framework—Key design themes

Figure 19.41 Redmond Place Precinct—Connecting with Country precinct design outcomes (Note—Precinct design outcomes for 'Theme A—Safe and accessible housing' apply generally across the precinct)

Connecting with Country Precinct design outcomes

Key Design Theme		Orange DCP 2004 Chapter 19—Precinct Design Outcomes
Theme A—Safe and accessible housing *"Safe and accessible housing for Aboriginal and Torres Strait Islander People was identified as a priority by consultation participants in Orange. Community highlighted that when Aboriginal and Torres Strait Islander People have access to secure housing, they are able to thrive in other areas of their lives, including education, employment, health, personal relationships and cultural practice.* *Housing is a holistic issue and community members emphasised the opportunity available to project team to accomplish a variety of positive outcomes for Aboriginal and Torres Strait Islander People living in Orange, as well as the community's willingness to collaborate to achieve success.* *Participants talked to the specific needs of their community, stating the importance of a variety of dwelling types, the ability to personalise one's space, accessibility and designing within the systems of Country.."* Source: Redmond Place Connecting with Country Framework ('Key design themes and recommendations')	A1	Ensure housing is culturally responsive Precinct planning and design supports the provision of secure, appropriate and affordable housing for Aboriginal people including in relation to— • ensuring street block and lot layout provides opportunities for a diverse mix of tenures and housing providers, including community housing providers, and • supporting the adoption of culturally responsive housing design principles, including those described in the AHO Design Guidelines NSW.
		Note— The AHO Design Guidelines NSW establish benchmarks and design principles to guide the culturally responsive design of housing for Aboriginal people. The guidelines acknowledge the importance of good housing design in ensuring cultural sustainability for Aboriginal people, along with the differing requirements that may apply due to regional variations in climate zone, remoteness from services and traditional customs, language and laws. While the guidelines are primarily intended to apply to AHO-led housing projects, for the purposes of the DCP they are considered to provide a useful introduction to the range of considerations that may be relevant for designers and housing providers when devising culturally responsive housing outcomes for Aboriginal people.
	A2	Diverse housing options Precinct planning and design provides for a diversity of housing types over time, including provision for a mix of single parent households, multi-generation households, elderly people, young families and couples.
	A3	Accessibility Housing is designed to be universally accessible and caters to the access needs of elderly people and people with a disability.

Key Design Theme	Orange DCP 2004 Chapter 19—Precinct Design Outcomes	
	A4	Ability to personalise Housing design enables opportunities to— • 'bring the outside in' and enable flexible transition between outdoor and indoor spaces, • contribute to a shared atmosphere while enabling residents to customise their own gardens and spaces, • provide for communal gathering areas, and • provide safe places for young people to foster independence while remaining supervised.
	A5	Consider the systems of Country Buildings and spaces are designed with the systems of Country in mind, including consideration of— • Orange's climate zone (Zone 7—Cool temperate), • skylights, windows and courtyards to capture the warmth of the sun in cooler months, • natural ventilation (including natural cross ventilation) to enable breezes to move through spaces in warmer months, and • use of exterior shade or shutters and external colours and materials that provide insulation or reflect heat in warmer months.

Key Design Theme	Orange DCP 2004 Chapter 19—Precinct Design Outcomes	
Theme B—Creating community *"Creating a strong sense of community in a new housing development promotes well-being, cooperation, and a feeling of belonging. It's an essential aspect of building thriving neighborhoods where residents feel truly at home.* *For Indigenous people, Country is what provides belonging and purpose. The project team is in a position to value add to Redmond Place by designing with Country and incorporating cultural values into its function.* *This can be done through creating spaces for cultural practice, ensuring ongoing programming, partnering with community organisations and integrating Indigenous design elements into public amenities.* *This will increase a sense wellbeing amongst residents, fostering trust, ownership, connection and cooperations."* Source: Redmond Place Connecting with Country Framework ('Key design themes and recommendations')	B1	Community centre Precinct planning and design provides for the potential inclusion of a community centre by retaining the Hangar building and incorporating it into the public park network. Development of the community centre includes consideration of traditional design approaches such as— • drawing inspiration from traditional Wiradjuri structures such as gunyahs, and • including contemporary interpretations of yarning circles. The community centre provides for a combination of indoor and outdoor spaces in order to accommodate the varying seasons and enable year-round use.
		Note— In relation to a potential community centre for the precinct, the Redmond Place Connecting with Country Framework notes that a structure enabling views to the sky would assist storytelling and the transfer of knowledge regarding Sky Country, a great source of pride for community members.
	B2	Youth and play spaces The public open space network provides a variety of shared spaces and facilities throughout the precinct, including facilities catering for children, young people and families. This should include provision for sports facilities and play spaces.
	B3	Community amenities Public open spaces are provided with amenities such as shade structures and seating areas that enable socialising and community gathering in outdoor spaces. Public open space design provides for a yarning circle to be used for cultural teachings.

Key Design Theme		Orange DCP 2004 Chapter 19—Precinct Design Outcomes
		Note— As identified in the Redmond Place Connecting with Country Framework, the yarning circle will be an important place for Elders to pass down knowledge, including the meaning behind yarning circles and their role in traditional systems of governance.
	B4	Lighting Lighting is designed to ensure safety throughout the precinct. This should be accompanied by footpaths and other measures to ensure a safe environment for walking. Public open space design should consider the use of lighting as a feature, including in relation to the interpretation of traditional stories.
		Note— The Redmond Place Connecting with Country Framework notes that members of the community are incredibly proud of their cultural sky stories. In this respect, the different constellations and their associated stories could be incorporated into the ground plane lighting within the precinct's public open space network.

Key Design Theme		Orange DCP 2004 Chapter 19—Precinct Design Outcomes
Theme C—Restoring resource places *"Water is life. It is not just an environmental landmark but an important part of Country, culture and community.* *The Redmond Place development site is fortunate to include naturally occurring wetland spaces and underground streams.* *Prior to colonisation, these areas would have been teeming with life, providing rich habitat for a variety of plants and animals and offering abundance of resources to nearby Wiradjuri people or other groups travelling through Country for ceremony.* *Water and its associated resources are a unique point of difference for Redmond Place. Water could be assigned value, celebrated and managed accordingly. Endemic planting could be utilised to foster traditional ecosystems, supporting the revitalisation of cultural practice through women's and healing spaces, support for Indigenous businesses and contemporary food production."* Source: Redmond Place Connecting with Country Framework ('Key design themes and recommendations')	C1	Endemic planting Plant species are consistent with those listed in the preferred species list for planting within the precinct (Schedule 19-2). Where possible, plants should be endemic to Wiradjuri Country and be suited to the soil types evident within the precinct.
	C2	Celebrate water on site Public spaces incorporate measures to celebrate water, including— • provision for informal connection to water, and • use of wetland areas as cultural teaching spaces. Landscaping of public spaces incorporates endemic species to help manage runoff, give clean water back to Country and provide aesthetic beauty.
	C3	Community gardens Precinct planning and design enables opportunities to establish a community garden (or gardens). Provision is made within the public open space network to establish a bush food garden.
		Note— The establishment of a bush food garden is identified by the Redmond Place Connecting with Country Framework as a means of supporting community health and wellbeing, along with education and the passing down of knowledge regarding the various meanings and uses of traditional plants.
	C4	Tangible cultural heritage Consideration should be given to the potential presence of cultural heritage items that are not currently visible on the surface.
		Note— Refer to Part 6 and Schedule 19-B in this chapter for the DCP's controls relating to unexpected heritage finds within the Redmond Place Precinct.

Key Design Theme		Orange DCP 2004 Chapter 19—Precinct Design Outcomes
Theme D—Gaanha Bula *"For Aboriginal and Torres Strait Islander peoples, heritage is not limited to old buildings, but it is an integral part of their identity. Significant landscape features, such as Gaanha-bula or Mount Canobolas, reflect thousands of years of continuous connection with Country and everything within it. Physical features, stone tools, rock engravings and oral histories associated with Gaanha-bula provide evidence of its cultural values. These include the site being a men's initiation area, corroboree ground, ceremony and camp site.* *The Wiradjuri name, Gaanha-bula, translates to 'two shoulders', reflecting the two prominent peaks, Old Man Canobolas and Young Man Canobolas. The dreaming of Gaanha-bula involves three feuding brothers and the consequences of breaking lore [Yindyamarra]. Mount Canobolas remains spiritually significant today, with traditional practices like fire burns and possum fur cloak-making reflecting an ongoing connection to Gaanha-bula, and the land around it."* Source: Redmond Place Connecting with Country Framework ('Key design themes and recommendations')	D1	<u>Sightlines</u> Development maintains sightlines toward Gaanha Bula—Mount Canobolas from public spaces. Public open space includes provision for the use of viewing portals or seating arrangements to highlight views and support interpretation. Development enables the sharing of sightlines and views between properties.
	D2	<u>Telling the Gaanha Bula story</u> Public space includes provision for interpretive signage and other features to tell the story of Gaanha Bula—Mount Canobolas and explain its role as a men's dreaming and initiation site. Interpretive signage should be used to explain the meaning of any design measures taken to ensure place design is culturally responsive. The use of infrastructure supporting augmented reality presents an opportunity to collaborate with the Wiradjuri Elder and provide them with an opportunity to tell the story themselves.
		Note— In the preparation of the Redmond Place Connecting with Country Framework, a Wiradjuri Elder has given permission for the story of Gaanha Bula to be respectfully incorporated into the precinct's public open space network. The story is about two brothers, Gaanha Bula—Mount Canobolas and Wahluu (Mount Panorama) who fought with each other over a woman. The framework notes that there is an opportunity to represent the story's ties to Gaanha Bula, Wahluu and a third brother in the story (represented by Mount Macquarie) in a ground map. This would orientate users in the landscape and provide a means of educating people on the large scale of Aboriginal dreaming stories.
	D3	<u>Men's cultural track</u> Public open space design should consider the precinct's links to a men's cultural track that travelled through Orange and the broader landscape.

Key Design Theme	Orange DCP 2004 Chapter 19—Precinct Design Outcomes	
		Note— The Redmond Place Connecting with Country Framework notes that there is an opportunity to map this track in partnership with community, with knowledge returned to them and represented in design through shade structures, walking paths, ground treatments and patterns and precinct layout.
Theme E— Shared identity *"Aboriginal identity encompasses not only individual self-awareness but also collective memory, ancestral connections, and a rich tapestry of traditions.* *Language is one of these traditions. By preserving and revitalising Aboriginal languages, we honor their wisdom and connection to place.* *Key figures, such as elders, leaders, and activists deserve celebration through monuments and public art. These visual markers challenge dominant narratives and promote healing.* *Representation matters, and incorporating Aboriginal identity into street names and public spaces fosters understanding and inclusivity. It reshapes our urban landscape, inviting all community members to appreciate the richness of Wiradjuri culture and contribute to a more empathetic society."* Source: Redmond Place Connecting with Country Framework ('Key design themes and recommendations')	E1	Language Wiradjuri language is incorporated into street signs and wayfinding. Endemic plants used in public spaces are accompanied with educational signage.
		Note— Measures might also include the use of QR codes that describe each plant's use, traditional name and pronunciation (noting that Country has missed the sound of language, and that it is powerful to have a Traditional Custodian speak it aloud and then repeated by new learners).
	E2	Key figures Public open space design incorporates measures to acknowledge and celebrate key figures and events that are important to the local Aboriginal community.
		Note— The Redmond Place Connecting with Country Framework notes that participants were enthusiastic about celebrating key figures and leaders from the Aboriginal community, both past and present. Murals were suggested as a way of creating beautiful places that would remain graffiti due to community ownership and respect for the families living there. Elders acknowledged that the celebration of their achievements would encourage respect from younger generations and provide them with something to aspire to.

Key Design Theme	Orange DCP 2004 Chapter 19—Precinct Design Outcomes	
	E3	Yuranigh Public open space design incorporates measures to acknowledge and educate people on the life and historical role of Yuranigh as an important cultural figure. Potential measures may include a lighting installation that reflects the unique cultural heritage values of Yuranigh's grave.
		Note— Yuranigh was an Aboriginal man from the Molong district who accompanied Sir Thomas Mitchell on his expedition from Boree to Central Queensland in 1846. In his diary, Mitchell described Yuranigh as his "guide, counsellor and friend" and praised his ability to locate water and promote diplomacy between expedition members and local Aboriginal people whose lands they passed through. The Redmond Place Connecting with Country Framework records that Yuranigh is remembered as a significant Wiradjuri leader, but one whose actions influenced the dispossession of other Aboriginal peoples. His grave is located near Molong and is reserved as an historic site under the *National Parks and Wildlife Act 1974*. It is the only known example of an historical grave site that combines European and traditional Aboriginal burial practices. The Redmond Place Connecting with Country Framework notes that Yuranigh's burial site and the practice of carved trees that it incorporates are incredibly unique to the Orange district and Wiradjuri Country more generally. The project team from Balarinji "*was especially honoured to walk Country with a Wiradjuri Knowledge Holder. They took us to Yuranigh's grave and showed us how the scar trees surrounding Yuranigh's burial site were closing over, explaining 'When the scar closes up, that means the spirit goes back up to the great river in the sky*'". The framework suggests that the form of scar trees can be used to inspire public art pieces within the Redmond Place Precinct, referencing Yuranigh's nearby grave site. Respectful promotion of the story could be used to raise cultural awareness and create a multifaceted sense of identity for residents. This could take the form of a scar tree that glows from its scar at night (contributing to curated public space lighting and a feeling of safety), but that also provides a landmark within the Redmond Place development. The installation could be central to a gathering place and be utilised for cultural teaching.

Key Design Theme	Orange DCP 2004 Chapter 19—Precinct Design Outcomes	
	E4	The Aboriginal resettlement scheme (1972-1986) Public open space design considers the following measures— • an education plaque on the resettlement scheme, • referencing Robertson Park and the resettlement scheme as part of a community centre, • incorporating the Blackman's Swamp narrative into the wetlands space.
		Note— The Aboriginal Family Resettlement Scheme was administered by the NSW Government between 1972 and 1986. It aimed to assist Aboriginal families in western NSW by encouraging them to relocate to larger regional centres like Orange. As a result, Orange today is home to Aboriginal people from various areas of western NSW. The Redmond Place Connecting with Country Framework notes that this is a significant component of Orange's contemporary history and has contributed to the stories of many Elders living in Orange today. In the preparation of the framework, a stakeholder spoke of meeting other Aboriginal people in Robertson Park in the early years of the resettlement scheme, with the park being a place "where community would come together". The historical associations between the resettlement scheme and Robertson Park are also recounted in the 'Orange Aboriginal heritage report' (NTSCOPR 2012—see 'Further reading' below). The Redmond Place Connecting with Country Framework also notes that prior to European colonisation Blackmans Swamp Creek ran through the area now known as Orange, including the area that forms Robertson Park. The framework suggests that this historical association "could be celebrated in the design of Redmond Place, continuing this beautiful tradition for generations to come".

Further Reading

NSW Government Publications

Aboriginal Housing Office 2020, 'AHO Design Guidelines NSW', January

Carrington, B. and Young, P. 2011, Aboriginal Heritage and Wellbeing, NSW Department of Climate Change and Water, February

Government Architect New South Wales 2023, Connecting with Country: Good Practice Guidance on how to Respond to Country in the Planning, Design and Delivery of Built Environment Projects in NSW, November

NSW Department of Planning, Housing and Infrastructure 2024, Indigenous Cultural and Intellectual Property Protocol, October

Orange City Council Resources

Balarinji 2024, 'Redmond Place Connecting with Country Framework', anonymised report prepared on behalf of Landcom, May

Hughes Trueman Ludlow 1986, 'Orange City Council Heritage Study', Volumes 1 and 2, report prepared for Orange City Council, November

NTSCORP 2012, 'Orange Aboriginal Heritage Report', report prepared for Orange City Council, June

Orange Regional Museum 2022, Mulaa Giilang: Wiradjuri Stories of the Night Sky, booklet accompanying exhibition held 6 August—30 October 2022, prepared in collaboration with local Wiradjuri Elders, knowledge holders, artists and creatives

OzArk Environment & Heritage 2024, 'Archaeological Technical Report—Proposed Rezoning and Subdivision: Redmond Place, Orange', report prepared for Landcom, May

Other Publications

Cumston, Z., Fletcher, M. and Head, L. 2022, *First Knowledges: Plants*, Thames & Hudson, Port Melbourne, ISBN 978-1-760-76187-5

Memmott, P. 2022, *Gunyah Goondie + Wurley: The Aboriginal Architecture of Australia*, Thames & Hudson, Port Melbourne, ISBN 978-1-760-76251-3

Noon, K. and De Napoli, K. 2022, *First Knowledges: Astronomy*, Thames & Hudson, Port Melbourne, ISBN 978-1-760-76216-2

Page, A. and Memmott, P. 2021, *First Knowledges: Design*, Thames & Hudson, Port Melbourne, ISBN 978-1-760-76140-0

Schedule 19-B—Unexpected heritage finds protocol

Overview

Even where appropriate site investigations and due diligence have been undertaken as part of the development application process, there may still be a risk that previously unrecorded objects of heritage significance ("***unexpected heritage finds***") will be encountered during site works and construction. Unexpected heritage finds may comprise—

- Aboriginal objects,
- relics, and
- human remains.

The protocol described below is to be followed where unexpected heritage finds are encountered during site works or construction. The protocol—

(a) provides a precautionary approach to managing the risk of harm to unexpected heritage finds, and

(b) assists landowners, applicants and site workers to comply with their statutory obligations under the *Heritage Act 1977* and *National Parks and Wildlife Act 1974* (the "NP&W Act").

Aboriginal objects

Aboriginal objects are protected under the NP&W Act and comprise deposits, artefacts or other material that are related to the historical habitation of the land by Aboriginal people. Objects may be composed of stone (eg, artefacts, rock engravings), plants (eg, culturally scarred trees) or animal remains (eg, if showing signs of modification such as smoothing or use).

Section 86 of the NP&W Act sets out the circumstances in which it is an offence by law to either harm or desecrate and Aboriginal object. In general, work that has the potential to harm or desecrate an Aboriginal object may only be undertaken where the work—

- is done in accordance with an ***Aboriginal heritage impact permit*** (or "***AHIP***") issued under Division 2 of Part 6 of the NP&W Act, or
- otherwise meets the criteria for a defence against prosecution set out in section 87 of the NP&W Act.

Under clause 61 of the *National Parks and Wildlife Regulation 2019*, an application for an AHIP must be accompanied by an ***Aboriginal cultural heritage assessment report*** (or "***ACHAR***"). Any ACHAR is required to be prepared by a suitably qualified person in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (NSW Office of Environment & Heritage, April 2011).

Archaeological sites and relics

Relics are protected under Part 6, Division 9 of the *Heritage Act 1977* and comprise deposits, artefacts, objects or other material that are generally of non-Aboriginal heritage significance. The fragmented distribution and smaller size of many relics means that they are often encountered as unexpected heritage finds during subdivision and construction works.

The place in which a relic is found is considered to be an ***archaeological site*** for the purposes of the Orange LEP 2011.

Development activities on land either known to contain or suspected of containing a relic will generally require an ***excavation permit*** to be issued by the Heritage Council of NSW. Section 139 of the *Heritage Act 1977* requires that, subject to certain exemptions under subsections 139 (3) and (4) of the Act, that a person must not disturb or excavate any land—

- where the person knows or has reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit, or
- on which the person has discovered or exposed a relic except in accordance with an excavation permit.

Human remains

Human remains may also be uncovered while on site. Depending on their age and circumstances, these may be subject to protection requirements under the NP&W Act or *Heritage Act 1977*. In all cases, work on the site must cease immediately and the remains and their location reported to the NSW Police as soon as possible.

Where death is suspected to have occurred within the last 100 years, the remains will be subject to coronial jurisdiction under the *Coroners Act 2009*. Section 35 of the Act requires such remains to be reported as soon as possible to a police officer, coroner or assistant coroner.

Where the remains are suspected of being more than 100 years old, they are subject to protection under the NP&W Act and *Heritage Act 1977*. If the remains are suspected of comprising ***Aboriginal remains***, they are subject to protection as potential Aboriginal objects under the NP&W Act. If the remains are suspected of belonging to a non-Aboriginal person, they are subject to protection as potential relics under the *Heritage Act 1977*. In either case, the person responsible for the site is required to follow the steps described in the protocol below.

Note—

The protocol does not apply to the legal discovery and/or disturbance of an Aboriginal object or relic resulting from an investigation undertaken in accordance with—

(a) the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* published by the NSW Department of Environment, Climate Change and Water, September 2010 (or equivalent superseding edition or publication),

(b) an Aboriginal heritage impact permit (AHIP),

(c) an approval issued under the *Heritage Act 1977*.

Protocol

The key steps that are required to be followed are described below. For the purposes of the protocol, the "***responsible person***" means the person (or persons) responsible for site and the work being undertaken at any given time during the process.

Step 1—Discovery of Aboriginal objects or relics

If an Aboriginal object or relic (or potential Aboriginal object or relic) is discovered, the responsible person must—

(a) ensure work in the area of the discovery ceases immediately,

(b) ensure no further harm to the object or relic,

(c) secure the location to avoid further harm to the object or relic,

(d) notify Heritage NSW as soon as practical (Telephone (02) 9873 8500 / Email heritagemailbox@environment.nsw.gov.au), providing details of the Aboriginal object or relic and its location, and

(e) ensure no work in the area of the discovery recommences until authorised in writing by Heritage NSW.

Step 2—Discovery of human remains

If human remains are unexpectedly encountered, the responsible person must in all cases—

(a) ensure no one touches the remains,

(b) stop work in the location immediately,

(c) note the location, including GPS coordinates if possible,

(d) take photos of the remains and the surrounding area,

(e) report the remains to NSW Police as soon as possible (either call Crime Stoppers on 1800 333 000 or report online at https://nsw.crimestoppers.com.au).

Step 3—Discovery of human remains more than 100 years old

If the remains are suspected of being more than 100 years old, the responsible person must in addition to the above—

(a) notify Heritage NSW as soon as practical (Telephone (02) 9873 8500 / Email heritagemailbox@environment.nsw.gov.au), providing details of the remains and their location,

(b) secure the location to prevent unauthorised access, and

(c) not recommence any work at the location unless authorised in writing by Heritage NSW.

Step 4—Site management during investigations

The responsible person is to cooperate with the appropriate authorities and relevant Aboriginal community representatives to facilitate—

(a) the recording and assessment of the find,

(b) the fulfilment of any legal constraints arising from the find, including complying with Heritage NSW directions, and

(c) the development and implementation of appropriate management strategies, including consultation with stakeholders and the assessment of the significance of the find.

Step 5— Recommencement of work

Where the find is determined to be an Aboriginal object, recommencement of work in the area of the find can only occur in accordance with any consequential legal requirements and after gaining written approval from Heritage NSW (normally an Aboriginal Heritage Impact Permit).

Schedule 19-C—Street design standards

Overview

This schedule describes the DCP's design standards for public roads (or "***streets***") within the Redmond Place Precinct. The street design standards are tailored to the unique requirements of the precinct vision and are consistent with the requirements of the Orange Subdivision and Development Code ('2.3 Design Standards'). Application of the standards will ensure street design is consistent with the requirements of the Code while supporting the achievement of the precinct's desired future character, particularly in relation to—

- streetscape and local character,
- urban tree canopy,
- public space design,
- land use and urban form,
- traffic function and safety,
- public and active transport networks.

What are streets?

Streets comprise public roads and associated infrastructure (such as verges, footpaths, trees and lighting) that, together with the public open space network, form the essential building blocks of an urban place's public domain. For the purposes of this schedule, private roads—such as shared access roads created as part of a community or strata scheme—are not considered to be streets and are subject to separate design requirements under the Orange Subdivision and Development Code (see Dictionary for definitions).

Role of the street grid

The street network (or "***street grid***") of an urban place plays a defining role in shaping its overall form and function. In the first instance, the layout and hierarchy of streets determines the permeability of a place's block pattern and the intensity of route choices available to drivers and pedestrians. Within the grid, streets are structured according to an hierarchy based on their relative accessibility and movement network function. Those streets that are most connected (and therefore central to the largest number of potential route choices) will be required to accommodate higher order traffic, pedestrian and public transport functions. In turn, these "active streets" support finer grain lot patterns offering opportunities for higher density, more compact housing types, helping to reinforce the distinct character of each street while optimising the amenity and social benefits gained from its fixed infrastructure.

The street grid also supports the essential environmental functions of each place, with urban tree canopies and bioretention infrastructure playing an essential role in water cycle management, biodiversity conservation and urban heat management. At the same time, the visual and sensory qualities of streets play a dominant role in defining our interpretation of a place's character and sense of identity. In short, streets matter in multiple ways and therefore require an inclusive and holistic approach to design that reflects their diversity of functions and users.

Precinct street network

The concept plan for the Redmond Place Precinct is based on an hierarchical network of street types, each representing a distinct though complementary combination of roles in terms of traffic function and public domain character. The required street network for the precinct is described in the Street Grid Map shown in Figure 19.18.

Within the network, streets are organised according to a regular grid that is scaled to pedestrians and that provides both permeability and a robust variety of street block dimensions suitable for a wide diversity of lot sizes, housing types and site densities. The orientation of the grid reflects the geometry of the historical cadastral pattern, overland drainage lines and slope. Opportunities for legibility at the local scale are provided, including sightlines toward the linear park, memorial avenue of poplars, landmarks and key sites.

Precinct street typology

The characteristics of each street type to be applied in the Redmond Place Precinct are summarised in Table 19.2 below. These should be read in conjunction with the accompanying street cross-sections and plans fro each street type.

The ***Northern Entry Street*** and ***Southern Entry Street*** provide the precinct's principal connections to the city's existing road network. These connect the precinct to the city's established public road network and are formed as well-shaded green corridors with dense tree canopies. These streets define the key entries to the precinct, providing direct, linear sightlines to the linear park.

The ***Park Edge Street*** connects the precinct to Bathurst Road and incorporates the existing Redmond Place road reserve. It forms a continuous movement corridor forming the edge of the linear park. The geometry of the Park Edge Street responds to the natural topography of the landscape and the location of existing features, including the existing Gateway Park and natural drainage lines within the precinct's lower portions.

Together with the Northern and Southern entry streets, the Park Edge Street forms the principal framework of the precinct's street grid. Together, these streets accommodate higher order (collector) traffic functions and the precinct's public transport spine. They also support finer grain lot patterns and higher density housing types accompanied by higher intensities of street activation and pedestrian use.

Local streets complete the grid and serve a robust range of localised traffic and pedestrian movement needs. Depending on their location, local streets are categorised as "***standard***", "***urban boundary***" or "***green edge***", with these categories reflecting differences in the interfaces and boundary conditions of each type. Local streets are predominantly oriented north-south, providing direct sightlines and access to the linear park.

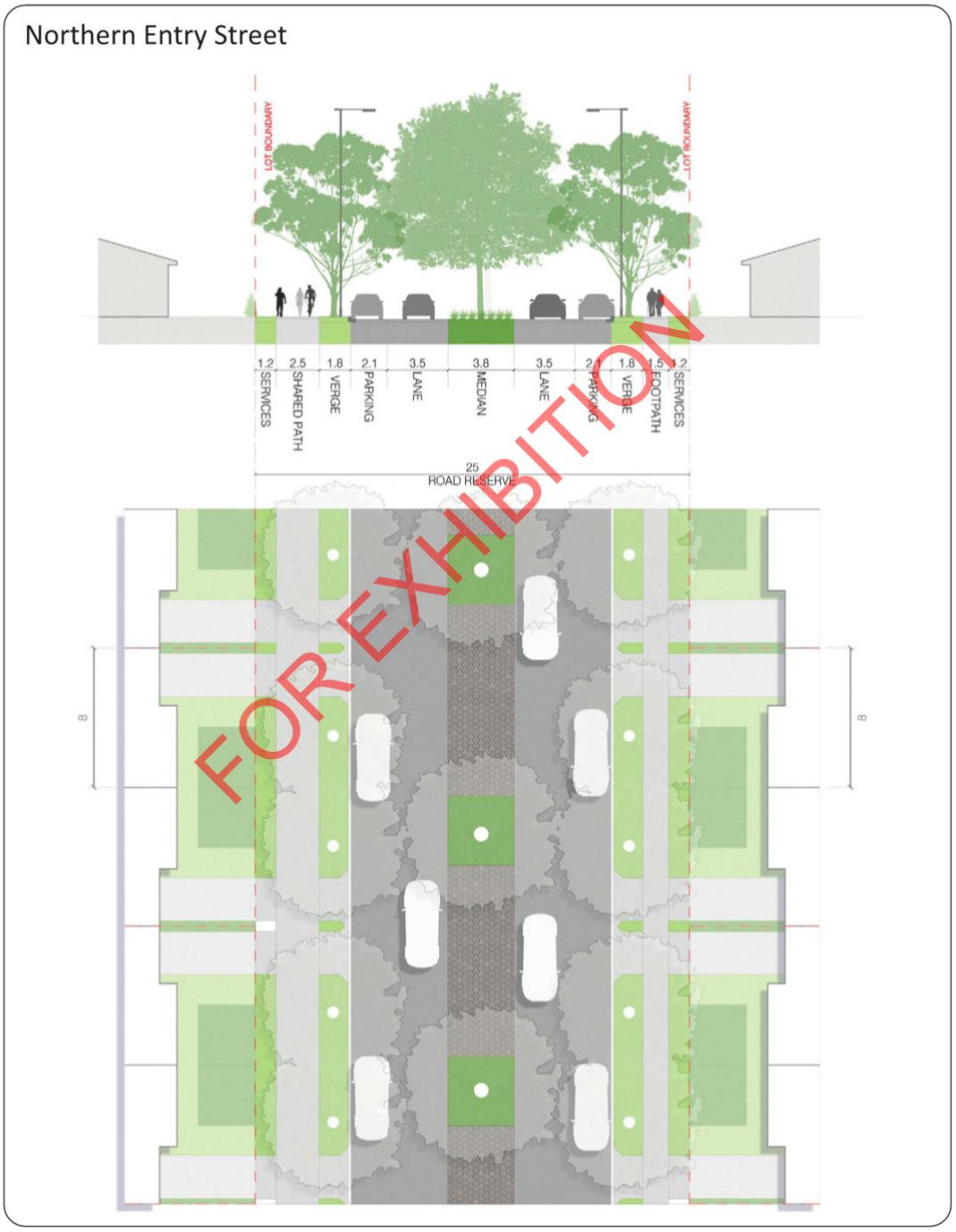
Residential lanes complement the other streets. These enable higher density housing by facilitating rear loading of lots and dwellings.

Footpaths and shared paths are to be provided on all streets except for residential lanes, which function as low speed (10km/hour) shared environments. Bioretention facilities, deep soil zones and street tree planting are to be accommodated within verges and medians. Shade from street trees will support the creation of a comfortable walking and cycling environment while providing protection from wind and separation from traffic.

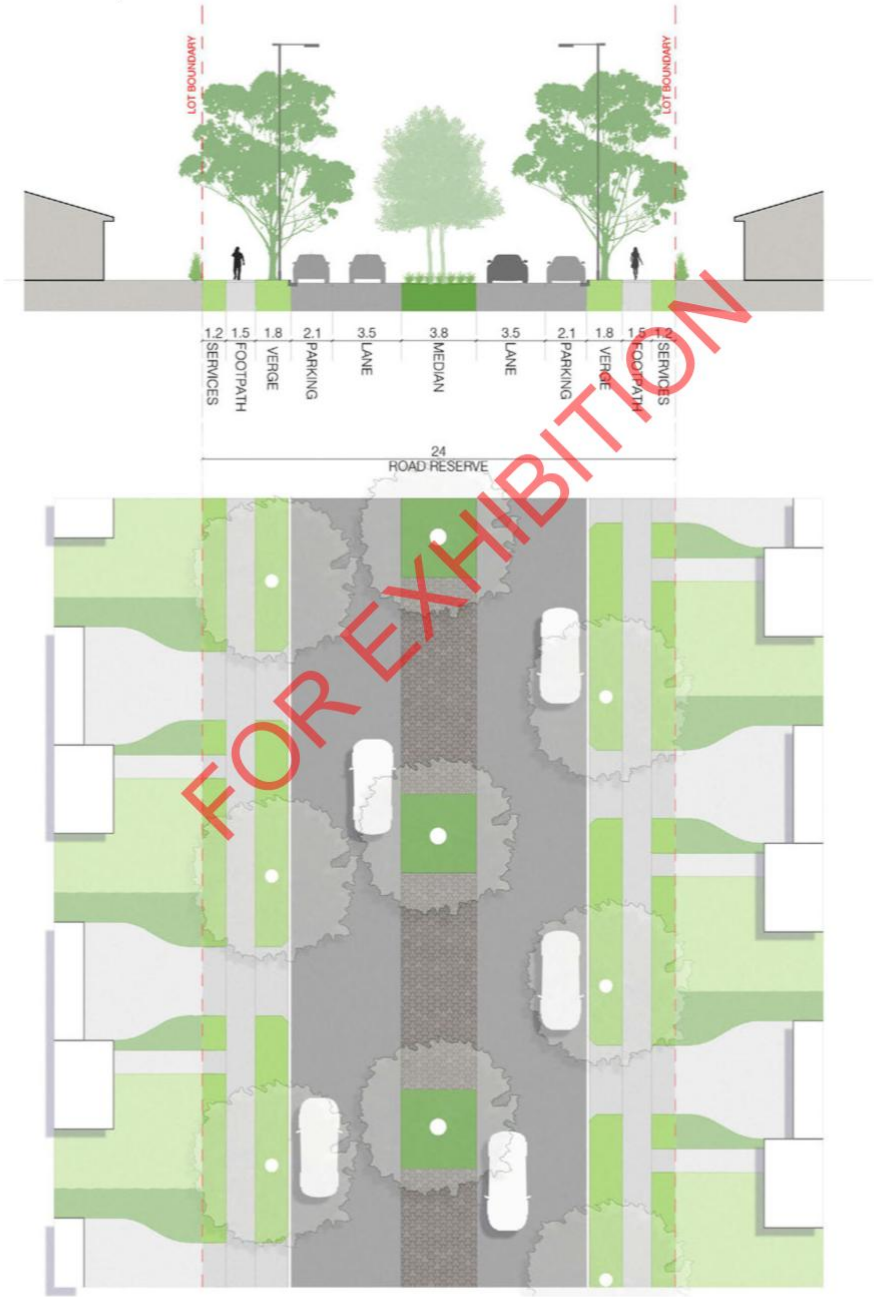
Table 19.9 Redmond Place Precinct street typology—summary of requirements

Street Type	Description	Road Reserve Width	Carriageway Width	Verge Width	Footpath Width	Tree Canopy Coverage Target
Northern Entry Street	Connects the precinct to Lone Pine Avenue. Entry statement elements are incorporated, including a median strip and provision for large tree canopies. Accommodates public transport (bus) routes. Wider footpaths (including a 2.5m shared path along one side) serve higher order pedestrian functions.	25m	15m (2 x 5.6m plus 3.8m median)	5.5m (Side A) 4.5m (Side B)	2.5m (Side A) 1.5m (Side B)	70%
Southern Entry Street	Connects the precinct to Brabham Way. Entry statement elements are incorporated, including a median strip provision for large tree canopies. Accommodates public transport (bus) routes. Wider footpaths serve higher order pedestrian functions.	24m	15m (2 x 5.6m plus 3.8m median)	4.5m (Both Sides)	1.5m (Both Sides)	70%
Park Edge Street	Connects the precinct to Bathurst Road and defines the formal public edge to the linear park. Accommodates public transport (bus) routes.	16.4m	11m	0.9m (Side A) 4.5m (Side B)	N/A (Side A) 1.2m (Side B)	40%
Local Street (Standard)	Serves local access and circulation needs for vehicles and pedestrians. Verges support water cycle management and urban tree canopy growth.	20m	11m	4.5m (Both Sides)	1.2m (Both Sides)	45%
Local Street (Urban Boundary)	Single-loaded local street that defines the precinct's boundary to neighbouring non-urban land. Carriageway width is determined in accordance with Planning for Bush Fire Protection and provides for emergency vehicle access and evacuation in the event of bush fire.	15.5m	10.1m	0.9m (Side A) 4.5m (Side B)	N/A (Side A) 1.2m (Side B)	30%
Local Street (Green Edge)	Single-loaded local street that borders an overland drainage corridor and defines the precinct's southern edges to Brabham Way.	17.9m	9.3m	1.6m (Side A) 4.5m (Side B)	N/A (Side A) 1.2m (Side B)	40%
Residential Lane	Provide rear loading and access to higher density residential lots. May feature above garage secondary dwellings (ie, 'Fonzi flats') addressing the lane.	8m	6m	1.5m (Side A) 0.5m (Side B)	N/A (Both Sides)	15%

Northern Entry Street

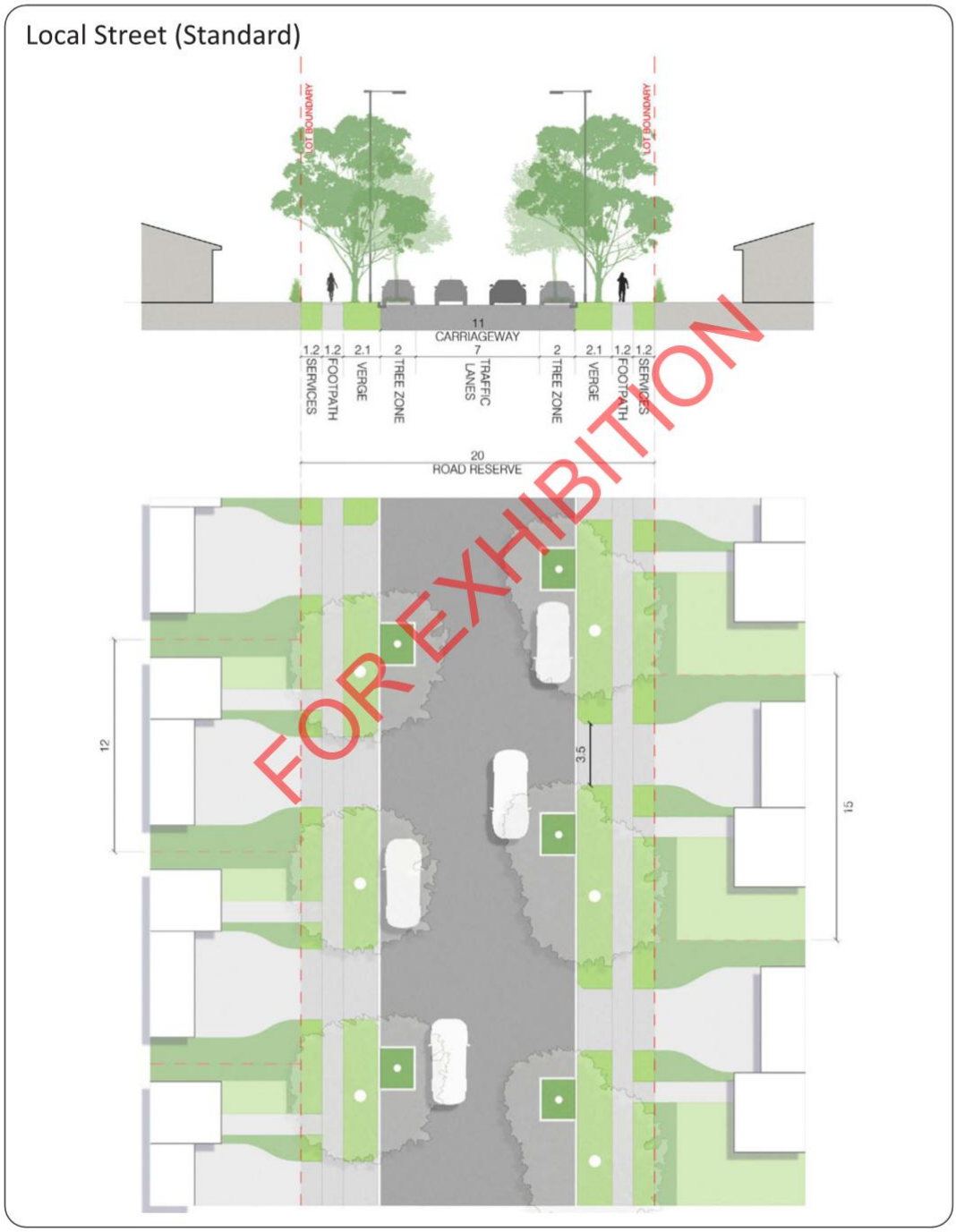


Southern Entry Street

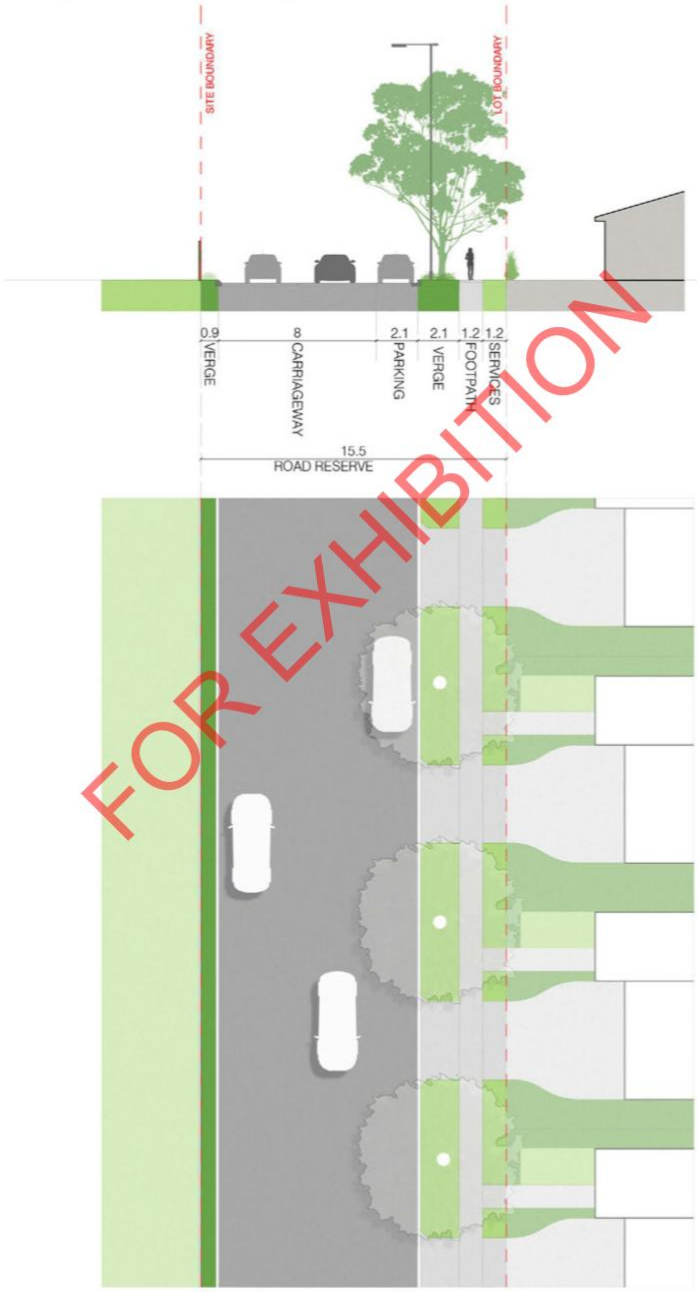


Park Edge Street

Local Street (Standard)



Local Street (Urban Boundary)



Local Street (Green Edge)

Residential Lane

Schedule 19-D—Preferred species and planting requirements

Overview

This schedule sets out the DCP's requirements and preferred species for the planting of trees and other vegetation on land within the Redmond Place Precinct. The requirements are intended to guide the embellishment of the precinct's public domain, in particular public open spaces and streets, and the selection of locally appropriate species for the embellishment of landscape areas within private properties.

The targeted planting of trees and other vegetation within the Redmond Place Precinct is a key means of achieving the precinct vision. In particular, the planting of trees and other vegetation is fundamental to—

- promoting connecting with Country (Design Principle 1—Connecting with Country),
- providing visual amenity and fostering local character (Design Principle 3—Connected and safe, Design Principle 6—Inclusive and welcoming and Design Principle 7—Heritage and culture),
- restoring natural systems and soil health, enabling water sensitive urban design and increasing biodiversity (Design Principle 4—Natural landscape and waterways), and
- providing shade and cool spaces for urban heat management and thermal comfort (Design Principle 5—Active and healthy).

Trees and other vegetation within the Redmond Place Precinct

The lists of preferred species provided below are designed to complement and enhance the street tree planting strategy and pallet area recommendations of the 'Orange Street Tree Master Plan' (July 2012) while ensuring landscape design incorporates plant species that are suitable to the desired future character of the Redmond Place Precinct. The lists respond to a combination of factors, including the precinct's climate and geology, its role as a prominent visual gateway to Orange, the presence of existing trees and the precinct's unique historical, cultural and scenic landscape settings.

To foster a strong connection to place, the lists of preferred species describe a combination of locally endemic species intended to reflect the precinct's natural setting and exotic species that provide vibrant seasonal colour variations in support of Orange's identity as the 'Colour City'.

Trees

Street tree species that are prioritised include a mix of native and exotic species selected for qualities including scale, form, shade potential and ability to foster a distinctive sense of place within the street environment.

Tree species prioritised for parks and other public open spaces comprise a mix of large endemic trees for scale and shade, smaller endemic evergreen shade trees and selective use of exotic deciduous trees for accent.

Trees species identified as suitable for private land incorporate a mix of small to medium size trees, with a variety of origins and shapes that may be adapted to suit the specific circumstances of each site.

Understorey planting

Endemic species that are representative of locally represented plant community types are to be used for bioretention basins and wetland areas as they are ideally suited to the local microclimate, create habitat for birds and microfauna and do not require significant fertiliser inputs. Planting may include a selection of wetland edge vegetation, such as wildflowers, sedges, rushes and shrubs. The root systems of these plants are particularly beneficial as they enhance infiltration, maintain or augment soil permeability, provide moisture redistribution, take up excess nutrients and sustain diverse microbial populations involved in biofiltration.

Understorey planting in other parts of the precinct should be selected to enhance the vibrancy and amenity of the public domain through their flowers and foliage. Shrub and ground cover planting should also aim to provide habitat for local birds and insects that contribute to the precinct's biodiversity.

Tree selection and management

The selection and management of public trees should be undertaken in accordance with the measures described in the Orange Street Tree Master Plan's provisions for 'Selecting and planting street trees' and 'Management strategies'.

Lists of preferred species

The lists of preferred tree species for public open spaces, streets and private land within the Redmond Place Precinct are provided on the following pages. While the lists provide important upfront guidance on species selection, Council will consider the inclusion of other cultivars and species where these are demonstrated to assist in achieving the precinct vision.

Indicative sizes are provided to help guide species selection, particularly in relation to meeting any tree canopy targets that may apply. These are based on the typology of "small", "medium" and "large" trees described in Table 19.X below.

It should be noted that the DCP's design controls require at least 30% of all street tree planting and 70% of all other public domain planting (both trees and understorey) to comprise native species.

Table 19.10 Indicative tree sizes

Tree Size	Height	Spread (Crown Diameter)
Large	>12m	>8m
Medium	8-12m	4-8m
Small	<8m	<4m

Note—

Height and spread dimensions indicate sizes that each type of tree may typically be expected to attain at full maturity, subject to healthy planting and growing conditions.

Note—

1. Prior to its clearing for agricultural use, land within the Redmond Place Precinct is most likely to have been home to the Southern Tableland Grassy Box Woodland (PCT3376) and Central Tableland Clay Apple Box Grassy Forest (PCT3366) vegetation communities (Source: NSW State Vegetation Type Map (Pre-clearing), version C2.0.M2.1, November 2024).
2. The trees and memorial garden located in the Gateway Park are significant visual and cultural features of Orange's landscape. The precinct concept plan provides for the conservation and enhancement of the established trees and features within the Gateway Park. This is reflected in the design concepts for the Northern Park and Central Park (Part 6) and the priority species list for trees and other vegetation on public land provided in Table 19.X below (see also 'Additional information on the Gateway Park and Memorial' in Part 2—Precinct vision).

List of preferred tree species—Parks and other public open spaces

Scientific Name	Common Name	Species Origin	Size
Acacia elata	Cedar Wattle	Native	Large
Acer platanoides	Norway Maple	Exotic	Large
Acer platanoides 'Crimson King'	Purple Norway Maple	Exotic	Medium
Aesculus hippocastanum	Horse Chestnut	Exotic	Large
Calocedrus decurrens	Incense Cedar	Exotic	Large
*Casuarina glauca**	Swamp She Oak	Native	Medium
Cedrus deodara	Deodar Cedar	Exotic	Large
*Cercis canadensis**	Forest Pansy	Exotic	Small
*Cupressus sempervirens 'Stricta'**	Tuscan Cypress	Exotic	Medium
*Eucalyptus melliodora**	Yellow Box	Native	Large
*Eucalyptus pauciflora**	Snow Gum	Native	Large
*Eucalyptus viminalis**	Manna Gum	Native	Large
Fagus sylvatica	European Beech	Exotic	Large
Juglans nigra	Black Walnut	Exotic	Small
Juniperus virginiana	Eastern Red Cedar	Exotic	Large
*Liquidambar styraciflua**	Liquidambar	Exotic	Large
Liriodendron tulipifera	Tulip Tree	Exotic	Large
Magnolia x soulangeana	Saucer Magnolia	Exotic	Small
Melaleuca decora	White Feather Honey Myrtle	Native	Small
Melaleuca linariifolia	Snow in Summer	Native	Small
Picea abies	Norway Spruce	Exotic	Large
Picea pungens	Colarado Spruce / Blue Spruce	Exotic	Large
*Populus simonii**	Simon's Poplar	Exotic	Large
Prunus x amygdalo-persica	Almond-Peach	Exotic	Small
*Quercus coccinea**	Scarlet Oak	Exotic	Medium
*Quercus ilex**	Holm Oak	Exotic	Large
*Quercus palustris**	Pin Oak	Exotic	Large
*Quercus robur**	English Oak	Exotic	Large

Scientific Name	Common Name	Species Origin	Size
Sequoia sempervirens	Coastal Redwood	Exotic	Large
Thuja occidentalis	Northern White-cedar	Exotic	Large
Tilia x europaea	European Lime / Common Lime	Exotic	Large
* Indicates species established as part of the existing Gateway Park tree planting.			

List of preferred tree species—Streets

Scientific Name	Common Name	Species Origin	Size
Acer buergerianum	Trident Maple	Exotic	Small
Acer palmatum	Japanese Maple	Exotic	Small
Acer platanoides	Norway Maple	Exotic	Large
Acer platanoides 'Crimson King'	Purple Norway Maple	Exotic	Medium
Acer platanoides 'Crimson Sentry'	Upright Purple Norway Maple	Exotic	Small
Acer rubrum	Red Maple	Exotic	Medium
Acer saccharinum	Silver Maple	Exotic	Medium
Acer x freemanii	Autumn Blaze Maple	Exotic	Medium
Callistemon citrinus	Crimson Bottlebrush	Native	Small
Callistemon salignus	White Bottlebrush	Native	Small
Callistemon viminalis	Weeping Bottlebrush	Native	Small
Eucalyptus bridgesiana	Apple Box	Native	Large
Eucalyptus cineria	Argyle Apple	Native	Medium
Eucalyptus crebra	Narrow Leaved Iron Bark	Native	Large
Eucalyptus sideroxylon	Mugga Ironbark	Native	Large
Fraxinus americana	White Ash	Exotic	Medium
Fraxinus excelsior 'Aurea'	Golden Ash	Exotic	Small
Fraxinus x 'Raywoodii'	Claret Ash	Exotic	Medium
Hakea salicifolia	Willow-leaved Hakea	Native	Small
Lagerstroemia indica	Crepe Myrtle	Exotic	Small
Liquidambar styraciflua	Liquidambar	Exotic	Large
Liriodendron tulipifera	Tulip Tree	Exotic	Large

Scientific Name	Common Name	Species Origin	Size
Livistonia australis	Cabbage-tree Palm	Native	Large
Malus tschonoskii	Pillar Crabapple	Exotic	Small
Parrotia persica	Persian Ironwood Tree	Exotic	Medium
Pistacia chinensis	Chinese Pistachio	Exotic	Small
Populus simonii	Simon's Poplar	Exotic	Large
Prunus persica	Peach	Exotic	Small
Pyrus calleryana 'Cleveland Select'	Cleveland Select Pear / Chanticleer Pear	Exotic	Medium
Quercus coccinea	Scarlet Oak	Exotic	Large
Quercus palustris	Pin Oak	Exotic	Large
Quercus robur 'Fastigiata'	Cypress Oak	Exotic	Large
Tilia cordata	Small Leafed Lime	Exotic	Medium
Tilia x europaea	Lime Tree	Exotic	Large
Ulmus parvifolia	Chinese Weeping Elm	Exotic	Medium
Zelkova serrata	Japanese Zelkova / Japanese Elm	Exotic	Medium

List of preferred species—Private landscaped areas

Scientific Name	Common Name	Species Origin	Size	Form
Acer buergerianum	Trident Maple	Exotic	Small	Small dome
Acer negundo violaceum	Violet Twig Box Elder	Exotic	Medium	Rounded
Acer palmatum	Japanese Maple	Exotic	Small	Globe
Acer platanoides 'Crimson Sentry'	Upright Purple Norway Maple	Exotic	Small	Broadly columnar
Acer rubrum	Red Maple	Exotic	Medium	Medium dome
Acer saccharinum	Silver Maple	Exotic	Medium	Upright vase
Acer x freemanii	Autumn Blaze Maple	Exotic	Medium	Oval to rounded
Betula nigra 'Dura Heat'	River Birch	Exotic	Medium	Pyramidal
Callistemon citrinus	Crimson Bottlebrush	Native	Small	Broad dome
Callistemon salignus	White Bottlebrush	Native	Small	Broad dome
Callistemon viminalis	Weeping Bottlebrush	Native	Small	Oval to rounded
Eucalyptus cineria	Argyle Apple	Native	Medium	Rounded

Scientific Name	Common Name	Species Origin	Size	Form
Fraxinus americana	White Ash	Exotic	Medium	Medium Oval
Fraxinus excelsior 'Aurea'	Golden Ash	Exotic	Small	Globe
Fraxinus x 'Raywoodii'	Claret Ash	Exotic	Medium	Oval to rounded
Gleditsia triacanthos inermis 'Sunburst'	Sunburst Honey Locust	Exotic	Small	Broad mushroom
Hakea salicifolia	Willow-leaved Hakea	Native	Small	Columnar to strongly upright
Koelreuteria paniculata	Golden Rain Tree	Exotic	Medium	Broad dome
Lagerstroemia indica	Crepe Myrtle	Exotic	Small	Upright vase
Malus tschonoskii	Pillar Crabapple	Exotic	Small	Narrow oval to pyramidal
Parrotia persica	Persian Ironwood Tree	Exotic	Medium	Small dome
Pistacia chinensis	Chinese Pistachio	Exotic	Small	Rounded
Prunus persica	Peach	Exotic	Small	Oval dome
Pyrus calleryana	Callery Pear	Exotic	Medium	Pyramidal
Pyrus calleryana 'Capital'	Capital Callery Pear	Exotic	Medium	Columnar to strongly upright
Sapium sebiferum	Chinese Tallow Tree	Exotic	Small	Round crown
Tilia cordata	Small Leafed Lime	Exotic	Medium	Medium dome
Ulmus glabra 'Lutescens'	Golden Elm	Exotic	Medium	Broad dome
Ulmus parvifolia	Chinese Weeping Elm	Exotic	Medium	Broad dome
Zelkova serrata	Japanese Zelkova / Japanese Elm	Exotic	Medium	Vase

Schedule 19-E—Waste management plan requirements

Overview

Depending on the nature of the development, the following types of waste management plan may be required to be submitted to Council for its approval—

- a Construction Waste Management Plan (CWMP)
- an Operational Waste Management Plan (OWMP)

Construction Waste Management Plans

A CWMP is required where development entails—

(a) demolition,

(b) construction of a new building (or buildings),

(c) alterations and additions to an existing building,

(d) vegetation clearing, or

(e) any other work that will result in waste generation.

A CWMP must demonstrate that suitable waste storage, recycling and litter control measures will be in place for all stages of the proposed work. A CWMP may be incorporated into a Construction Environmental Management Plan (CEMP) where this is required in accordance with Schedule 19-F.

Operational Waste Management Plans

An OWMP is required where development entails—

- multi dwelling housing, a residential flat building, shop top housing or a community scheme requiring the provision of shared waste storage and collection facilities, or
- any other development requiring the ongoing management of waste storage and collection above and beyond domestic waste collection.

An OWMP must be prepared in accordance with the DCP's waste management controls and demonstrate that suitable on-site waste management, storage and collection will be provided throughout the life of the development.

Council's CWMP and OWMP requirements are described below.

CWMP requirements

All CWMPs are required to be prepared in accordance with—

- the NSW Environment Protection Authority's Waste Classification Guidelines, and
- Council's waste management development controls.

The CWMP should include details on the following—

(a) the name and contact details of who is responsible for the plan and management of the waste on site,

(b) the name and contact details of the person(s) removing waste,

(c) a description of each different waste type and an estimate of the and quantity of each waste type expected to be produced,

(d) how each waste type will be managed on site and off site, including whether the waste is expected to be reused, recycled or sent to landfill,

(e) where any on site management of waste will occur, such as for consolidation and collection,

(f) how each waste type will be characterised and classified for waste management and transport,

(g) where each waste type is intended to be transported for disposal or other fate,

(h) how the quantity of each waste type will be measured and recorded,

(i) how each waste movement will be tracked,

(j) contingencies including to managing unexpected finds, such as asbestos,

(k) details of any trade waste agreement that may be required.

A copy of the CWMP must be kept on-site at all times while work approved under the development consent is being carried out.

OWMP requirements

All OWMPs are required to be prepared in accordance with Council's waste management development controls.

The OWMP should include details on the following—

(a) the location of all permanent and temporary waste storage or collection areas to be provided on site,

(b) the number, type and size of waste bins to be accommodated on site (including those for general waste, recycling waste and organic waste),

(c) the terms of any waste service agreement made with a waste service provider.

Depending on the nature of the development to which the OWMP relates, the plan must be submitted to Council for its approval prior to the issue of any subdivision certificate or occupation certificate for the development.

Schedule 19-F—Construction and site management requirements

Overview

Depending on the scale and nature of the development, applicants may be required to prepare management plans to ensure the impacts of any demolition or construction work are appropriately managed. Types of plans that may be required include—

(a) a Construction Environmental Management Plan (CEMP),

(b) an Erosion and Sediment Control Plan (ESCP),

(c) a Soil and Water Management Plan (SWMP),

(d) a Construction Traffic Management Plan (CTMP),

(e) a Hazardous Substances Management Plan (HSMP).

This schedule describes Council's requirements for each of these plans. In all cases, site preparation, demolition and construction works are required to be undertaken in accordance with—

- relevant Australian Standards,
- Landcom's *Managing Urban Stormwater: Soils and Construction—Volume 1* (the 'Blue Book'),
- the NSW Department of Planning and Environment's *Minimum Requirements for Building Site Groundwater Investigations and Reporting* (October 2022, ISBN 978-1-76058-419-1),
- relevant SafeWork NSW codes of practice, including the *Code of Practice—Construction Work*, *Code of Practice—Demolition Work* and *Code of Practice—Excavation Work*, and
- the Orange City Council Subdivision and Development Code.

Construction environmental management plans

A Construction Environmental Management Plan (or CEMP) will be required where development involves site preparation, demolition and construction work likely to result in significant environmental impacts or risks to public safety. A CEMP will typically be required where development entails—

- the demolition or construction of multiple buildings or building storeys,
- substantial excavation or other earthworks,
- work located in proximity to one or more property boundaries,
- construction traffic or movement of materials requiring the controlled management of site access and vehicle circulation, including the preparation of a Construction Traffic Management Plan (CTMP),
- risks to public safety or amenity (for example, through noise or dust), or
- otherwise entails work that, in the opinion of Council, requires the coordinated management of impacts and risks to ensure worksite and public safety and minimise impacts on the environment or surrounding properties.

CEMP requirements

All CEMPs are required to be prepared by a suitably qualified person in accordance with Council's Subdivision and Development Code and any relevant Australian Standards. Depending on the scale and nature of the development, a CEMP may be required to include details on the following—

(a) the location and materials for protective fencing and hoardings on the perimeter of the site,

(b) the location of dedicated washdown areas (located away from drainage lines, stormwater drains and water bodies),

(c) provisions for public safety,

(d) pedestrian and vehicular site access points and construction activity zones,

(e) construction traffic management measures including—

(i) proposed truck movements to and from the site,

(ii) estimated frequency of truck movements, and

(iii) measures to ensure pedestrian safety near the site,

(f) any bulk earthworks to be carried out,

(g) the location of site storage areas and sheds,

(h) the equipment used to carry out works,

(i) the location of a garbage container with a tight-fitting lid,

(j) dust, noise and vibration control measures,

(k) details of chemical storage and management,

(l) the location of temporary toilets,

(m) the protective measures for the preservation of trees on the site and in adjoining public areas including measures in accordance with—

(i) AS 4970—Protection of trees on development sites,

(ii) any applicable development control plan,

(iii) an arborist's report approved as part of the development consent,

(n) relevant conditions of consent, procedures and protocols that apply to the protection of cultural heritage during site preparation, demolition and construction activities, including Council's unexpected heritage finds protocol.

A copy of the construction site management plan must be kept on-site at all times while work is being carried out.

Erosion, water and sediment control

Section 120 of the *Protection of the Environment Operations Act 1997* makes it an offence to pollute waters. If sediment from your construction site is not well managed and runs off the site and into surrounding stormwater drains or waterways, you may face fines or prosecution. To prevent this, development projects should employ suitable soil and erosion control measures, including, where required, measures applied in accordance with an approved Erosion and Sediment Control Plan (ESCP) or Soil and Water Management Plan (SWMP). These will typically be required as a condition of development consent.

Separate approval will be required from Council for any proposals to discharge stormwater, seepage water or groundwater from a construction site into Council's stormwater drainage system. Council may require water quality testing of the discharged water by an appropriately qualified environmental consultant.

Council's erosion and water control plan requirements are described in Table 19.3 below. These apply in addition to any CEMP requirements that may apply to the development.

ESCP and SWMP requirements

Council's requirements for erosion, water and sediment control are described in Table 19.3 below.

Table 19.11 Redmond Place Precinct erosion and sediment control plan requirements

Site area	Type of plan required	Plan specifications
250m² or smaller	Erosion and Sediment Control Plan (ESCP) is required where— (a) the area of disturbance is on or within 10 metres of land mapped as— • "High Biodiversity Sensitivity" or "Moderate Biodiversity Sensitivity" on the Orange LEP 2011 Terrestrial Biodiversity Map, • "Sensitive Waterways" on the Orange LEP 2011 Watercourse Map, • "Protected Area" on the Orange LEP 2011 Slope Constraint Area Map, (b) the site has steep topography or has been subject to significant erosion or past disturbance, or (c) the development entails cut or fill of more than 600mm below or above ground level (existing).	As per the *Guidelines for Erosion and Sediment Control on Building Sites* published by the NSW Department of Planning, Housing and Infrastructure, October 2024.
Larger than 250m² but smaller than 2,500m²	Erosion and Sediment Control Plan (ESCP)	As per the *Guidelines for Erosion and Sediment Control on Building Sites* published by the NSW Department of Planning, Housing and Infrastructure, October 2024.
Larger than 2,500m²	Soil and Water Management Plan (SWMP)	As per *Managing Urban Stormwater: Soils and Construction—Volume 1* (the 'Blue Book') and the Orange City Council Subdivision and Development Code.

Construction traffic management

In some cases, demolition and construction works will not be permitted to commence until a Construction Traffic Management Plan (CTMP) has been submitted to and approved by Council. A CTMP is a coordinating document used to ensure demolition and construction works do not adversely impact on the public domain or vehicular and pedestrian movements in an area. A CTMP is generally required where one or more of the following apply—

(a) Works are for larger scale or more complex projects likely to generate significant construction traffic or requiring a diversity of trip purposes and origins (ie, multiple sub-contractors or suppliers) and vehicle types to be accommodated within the site,

(b) The work requires the transport of dangerous goods or hazardous materials,

(c) Site access is to be provided from a classified, arterial or collector road, or from a local street that, due to the nature of pedestrian and vehicle traffic using the street, requires ongoing traffic management measures in order to maintain public safety and traffic flow,

(d) The work requires the temporary closure of a footpath or public road, or otherwise requires ongoing pedestrian or vehicle traffic management measures to operate within the public domain,

(e) The site is constrained by limited access requiring coordination of vehicle manoeuvring and access,

(f) The site is in the vicinity of other construction projects entailing, or

(g) Any other case where Council considers that a CTMP should be provided due to the traffic characteristics of the locality and the likely traffic impacts of the demolition or construction activity.

A CTMP can be a standalone document or form part of a CEMP.

Hazardous substances management

Where hazardous materials are identified on site, a Hazardous Substances Management Plan (HSMP) is required to be submitted for Council for its approval. The HSMP is to be prepared by an appropriately qualified person in accordance with—

- *AS 2601:2001 The demolition of structures*, and
- the SafeWork NSW *Code of Practice for Demolition Work*.

The HSMP is to provide details of—

(a) the nature, location and quantity of each hazardous material,

(b) the proposed method of controlling or removing each hazard,

(c) the methods of monitoring exposure limits for each hazard, and

(d) the proposed handling, storage and disposal procedures for each hazard, including the location of approved landfill or storage facilities to be used.