



APPENDIX C

LANDSCAPE

REQUIREMENTS



Document Control

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1. DESIGN RESPONSIBILITIES AND OPEN SPACE CONTRIBUTION

Every development shall contribute 12.5% open space to the council. In certain circumstances, following agreement with council, this requirement can be made through monetary contribution. In the case of drainage reserves/ detention basins for stormwater management, up to 50% of their area may be credited towards the 12.5% open space requirement. These open spaces shall be designed and constructed to provide a useable and attractive open space and be landscaped to the satisfaction of Council.

Open space/ community land should in general, be designed to protect, incorporate, and enhance the existing natural character of the site. This includes consideration of the wider natural environment, both surrounding remnant vegetation and indigenous site conditions.

The landscape design must also provide accessible and equitable provision of open space to the community (refer to the City of Playford Open Space Guidelines 2018). The configuration of reserves and streetscapes should aim to be cohesive and consistent with the broader urban design of the city, both planned and existing.

In addition to this, the landscape design should:

- Demonstrate climate-positive design
- Demonstrate water-sensitive urban design (WSUD)
- Link open spaces to create green corridors
- Prevent crime through environmental design principles (CPTED)
- Be meaningful to the community
- Increase the biodiversity of both flora and fauna through the use of local indigenous plant species
- Encourage social interaction
- Promote health and wellbeing
- Require a low level of maintenance where possible
- Be financially sustainability

3. OVERARCHING DESIGN REQUIREMENTS

The developer must provide a landscape master plan to indicate the design intent and landscape qualities for streetscapes and public open space in new or renewal developments. Information in the masterplan should relate to the size, content and function of each area of open space. Each reserve shown in the master plan must comply with the following open space hierarchy (as detailed in the City of Playford Open Space Guidelines 2018).

Open Space Typologies

Reserve Hierarchy	Types of Reserve	Required Facilities
District Level Reserves (Minimum 3 hectares in size)	<ul style="list-style-type: none">- Sports fields- Reserve/ Park- Wetland- Natural bushland- MOSS Land- Civic Plaza- District Level Parks	<ul style="list-style-type: none">- Trees and landscaping- Irrigated grassed areas- Seating- Shelters (small groups)- BBQs- Pedestrian paths- Cycle paths- Play spaces- Recreation activity structures (e.g. basketball half court, exercise equipment, soccer goal)- Events space (for small events)- Specialised spaces (e.g. dog park)- Park lighting- Bins- Drinking fountains- Bicycle racks- Signage (reserve name sign, way finding, interpretive)- On-site car parking as recommended by Traffic land division guidelines- Public art

		<ul style="list-style-type: none"> - Public toilets - Wifi
Neighbourhood Level Reserves (0.5 – 1 hectare in size)	<ul style="list-style-type: none"> - Reserve/ Park - Civic Plaza - Sports field 	<ul style="list-style-type: none"> - Trees for shade - Irrigated grassed areas - Seating - Shelters (small groups) - Pathways - Play space - Other recreational structures (e.g. basketball half court) - Bins - Drinking fountain - BBQ - Reserve name sign - On-site car parking as recommended by Traffic land division guidelines
Local Level Reserves (0.2 – 0.5 hectares in size)	<ul style="list-style-type: none"> - Reserve/ Park 	<ul style="list-style-type: none"> - Trees for shade - Play space in larger and well-located parks - Paths in larger and well-located parks - Irrigated grassed area near activity spaces (other spaces may not be irrigated) - Seating - Bin - Shelter - Reserve name sign
Minor Level Reserves (Maximum 0.2 hectares in size)	<ul style="list-style-type: none"> - Reserve/ Park - Pedestrian walkway/ link - Pop-up/ Pocket Parks 	<p>No specific facilities are recommended; however, the following may be appropriate:</p> <ul style="list-style-type: none"> - Trees for shade - Seating - Paths where the reserve has a value as a pedestrian connection
Linear Open Space	<ul style="list-style-type: none"> - Open Space Corridor - Windbreak - Suburban Trail - Neighbourhood Link 	<ul style="list-style-type: none"> - Trees and landscaping - Pedestrian / cycle pathways - Seating - Shelters - Activity nodes (e.g. with irrigated grass, play space, picnic area, fitness equipment) - Drinking fountains - Bins - Public lighting - Signage (name of linear trail, wayfinding, distance markers) - On-site car parking as recommended by Traffic land division guidelines

Each road reserve shown in the master plan must demonstrate the intended verge treatment (e.g compacted fines or turf) and the number/types of trees.

Verge treatments should be consistent across the development, apart from main boulevards and collector roads, which may have a higher level of treatment. In addition, consideration should be given to the verge treatment of surrounding residential areas.

One tree shall be provided per lot for the front verge and/ or more than one tree for a wider frontage lot where applicable. The height and canopy of the trees at full maturity must be considered for more than one tree to be accommodated.

Three trees shall be provided per corner lot/ side boundaries. The height and canopy of the trees at full maturity must achieve head-to-head canopy coverage. More than three trees to be planted where applicable to achieve head-to-head canopy coverage.

Deciduous tree species should be specified for streets with an east-west orientation, while evergreen tree species should be specified for streets with a north-south orientation.

All landscape plans and documentation must be prepared by a qualified Landscape Architect. Refer to the Australian Institute of Landscape Architects website for listings: [Home \(aila.org.au\)](http://www.aila.org.au)

Australian Standards and Reference Documents:

AS 1428 Design for Access and Mobility
AS 4685 Playground Equipment and Surfacing
AS 4422 Playground Surfacing Requirements & Test
AS 4970 Protection of Trees on Development Sites
AS 1547 On-Site Domestic Wastewater Management
AS 1158 Lighting for Roads and Public Spaces

City of Playford Open Space Guidelines 2018
City of Playford Technical Irrigation Specification
City of Playford Technical Lighting Specification
City of Playford Verge Landscaping and Maintenance Guidelines
City of Playford Urban Tree Strategy
City of Playford Landscape Technical Details: <https://www.playford.sa.gov.au/development/plans-and-guidelines/landscape-standard-details>

4. TREES

The City of Playford is committed to increasing the existing tree canopy across the city from 15% to 20% by 2045. This commitment involves the protection of existing trees as well as the planting of new trees, particularly within new developments.

Existing Trees

Every effort shall be made to ensure the retention of all existing trees within the development site to the reasonable satisfaction of the council. All trees shall be identified on the site survey.

Any existing tree with a trunk circumference of 2.0m or more measured at 1m above the ground, is regulated under the Development Regulations Act 1993 and, therefore, must be appropriately protected. In addition to this, trees with a trunk circumference of 3.0m or more are classified as 'significant' and may require higher levels of protection. [Please refer to Section 6A of the Development Regulations 1993 for the complete definition of significant trees]

For sites that may have regulated/significant trees (including trees outside the property boundary with a canopy overhanging the development land), a vegetation survey/report shall be undertaken by a qualified Arborist. The survey must provide the position of each regulated/significant tree as well as identify the following:

- Botanical species name
- Approximate height
- Approximate girth of the trunk
- Condition rating
- Estimated remaining lifespan
- Structural root zone (SRZ)
- Tree protection zone (TPZ)

Tree Protection Zones

The Tree Protection Zone (TPZ) is the critical zone of root extension from the tree trunk. It is calculated by multiplying the diameter of the tree trunk at 1.5 m above ground level by a factor of 10 (10DBH). A TPZ defines an area that must be left undisturbed during development to safeguard the ongoing health of the retained trees and prevent damage to their roots, trunks, and canopies. Once established, the TPZ will form part of the conditions/ easements placed upon the allotment, any future development, construction or demolition shall take into account the TPZ.

As part of the development assessment application, a site plan shall be lodged showing all Tree Protection Zones. A building envelope plan must also be provided to demonstrate that future development will not impact on the tree/ s.

All construction plans including earthworks, drainage and service drawings, shall show all regulated/significant trees and the TPZs.

Prior to any site demolition or construction, the following actions must be taken to establish the tree protection zones (in addition to any recommendations outlined in the arborist report:

- A drip irrigation system shall be established within the TPZ
- A 100mm layer of composted mulch shall be spread across the tree protection zone
- The 1.8m high temporary fence is to be installed around the TPZ boundary
- Signage shall be fixed to the fencing in a clearly visible manner. The signage shall identify the area as a Tree Protection Zone and indicate that no unauthorised access is allowed.

After development approval has been granted, but prior to any demolition or construction works, the Developer shall arrange a site inspection with Council's Landscape Architect.

The purpose of this inspection is to confirm that:

- All remedial pruning has been satisfactorily completed
- All TPZs have been satisfactorily established (see below)
- All recommendations from the arborist report relating to retained trees have been implemented satisfactorily.

The TPZ must be protected from all development works (including construction and demolition). For example, the following activities are specifically prohibited within any TPZ

- excavation or filling;
- stockpiling of soil or rubble;
- storage of materials, machinery or site buildings etc;
- mixing and/ or disposal of cement, chemicals or other substances.

Any works that needs to be undertaken within a TPZ shall be under the direction of a suitably qualified arborist and to the satisfaction of Council's Landscape Architect.

All irrigation, mulch, fencing and signage shall remain in place and be maintained until all works are completed and have been handed over to council.

The City of Playford does not encourage the removal of trees. However, if it is deemed necessary, permission may be granted to remove a regulated tree following discussion with council. In these circumstances, compensation in the form of additional tree planting will be requested. For the removal of trees under the Development Act 1993, a "significant tree application" is required to be lodged with Council through the PLANSA portal (https://plan.sa.gov.au/our_planning_system/programs_and_initiatives/significant_and_regulated_trees).

New Trees

As outlined in the 'Overarching Design Requirements' section, it is a requirement that trees are planted in the verge space of all road reserves and in all public open space. [Landscape Standard Details · City of Playford](#)

The following points shall be considered (where applicable) during the detailed design documentation phase:

- One tree shall be provided per lot for the front verge and/ or more than one tree for a wider frontage lot where applicable. The height and canopy of the trees at full maturity must be considered for more than one tree to be accommodated.
- Three trees shall be provided per corner lot/ side boundaries. The height and canopy of the trees at full maturity must achieve head-to-head canopy coverage. More than three trees to be planted where applicable to achieve head-to-head canopy coverage.
- Where possible, deciduous tree species should be specified for streets with an east-west orientation, while evergreen tree species should be specified for streets with a north-south orientation.
- Trees to be central in verge unless otherwise agreed with council at planting set out on site.
- Where a tree is located within 1.0m of hard surface such as footpaths, kerb or SEP. 600mm deep root barrier to be installed 1.5m on either side of the centre of tree.

- Side fence lines with trees to have root barriers house side of tree (3m wide x 0.9m deep)
- Tree species planted adjacent to high-voltage power lines must be in line with the SAPN-approved tree species list
- Street trees shall be bunted with orange mesh bunting where dwellings are under construction as per the CoP standard tree details (noted on plan/construction details)
- The predicted size of mature trees should be annotated on landscape drawings.
- Trees species alongside fence lines to have an appropriately sized canopy that does not encroach into adjacent properties
- Tree species shall be appropriate to the area and align with adjacent development stages
- **Street trees are to be located the following distances from built infrastructure unless otherwise discussed**
 - Driveways - minimum 1m, preferably greater
 - Services and Service lines (including water, sewage, comms and electrical) - as per utility requirements
 - Stormwater gully pits, side entry pits, pipes, culverts and headwalls - minimum 2m
 - Bus Stops - pedestrian and vehicle line of site to be clear in the direction of oncoming traffic and signage to be visible (considering the trees full mature size)
 - Intersections - pedestrian and vehicle line of site to be clear
 - Street Lights - minimum of 5m (dependent on light pole selection and tree species)
 - Powerlines - as per SAPN tree species guidelines
 - Street Signs - minimum of 2m from street signs (dependent on tree species and line of sight)
- Tree species in reserves should primarily be local indigenous species, including larger trees that are not suitable for planting in verges.
- All tree stock is to be approved by council.
- Tree details shall align with council's LA standard details which can be found on the council website ([Landscape Standard Details · City of Playford](#)).

5. UNDERSTOREY PLANTING AND SURFACE TREATMENT

All open spaces/reserves (including road reserves) are to be specified with appropriate organic/inorganic surface treatments. Depending on the purpose of the open space and the desired aesthetic outcome, these surface treatments may include but are not limited to the following: understorey planting, turf, rubble, mulch, paving, concrete, and bitumen.

Where understorey planting is being incorporated, a diverse range of plant species should be selected, including primarily local indigenous species. All understorey planting is to be irrigated unless otherwise agreed upon with council. The following document provides some guidance on appropriate species for the Adelaide Plains which includes the Playford City Council area: https://data.environment.sa.gov.au/Content/Publications/Forests_Woodlands_Ad_Plains_1836.pdf

The following points shall be considered (where applicable) during the detailed design documentation phase:

- Verge treatment for side boundaries can be compacted fines or gravel (14mm and below).
- Surface treatment for maintenance access areas is to be compacted fines, crushed stones or similar.
- Reserve areas less than 1.0m in width between boundary and footpath to have a surface treatment of 50mm gravel mulch.
- Median strips and roundabouts to have a surface treatment of compacted fines or planted bed with gravel mulch (5 – 7mm)
- Turf areas shall be designed for ride-on mowers and consideration is to be given to access, slope and acute angles.
- Irrigated turf verges will only be supported are along main boulevards and connector roads.
- If hydroseed is being used, note that there must be a minimum of 85% kikuyu coverage by Final Completion. If this is not achieved within the specified timeframe, Final Completion will be delayed until the coverage has been achieved.
- Hydroseed to be installed at an appropriate time of the year and may require supplementary watering to establish.
- All plant stock is to be approved by the council.
- Consideration is to be given to the full potential height and size of selected plant species at maturity so that plants do not encroach over/onto pathways, roads and property boundaries (shown on plan). Plant height should not be an obstruction to lines of sight.
- Where property fence lines are adjacent to a reserve, and the proposed plantings **will** exceed the height of the existing fence at full maturity, a 1m gap is to be kept between fence and reserve planting to allow for maintenance access. Surface treatment in this area should be compacted fines, crushed stones or similar.
- Timber edging should not be specified. Rather, composite recycled plastic edging with star droppers or cast-in-situ concrete edging is to be used.

6. FURNITURE AND PLAY EQUIPMENT

For most types of open space, various types of furniture and play equipment will be required to meet the open space guidelines. The following points shall be considered (where applicable) during the detailed design documentation phase:

- All drink fountains to be DDA compliant, with dog bowl, bottle re-filler and drainage as per AS1547.2012
- Drink fountain water source and water line to be shown on the plan
- A QCV to be located near BBQ areas and at dog parks
- BBQs to have the access plate on the outside of the BBQ rather than underneath
- BBQs to be installed with a programmable timer.
- Playgrounds shall cater for a range of age groups as per the open space guidelines. In addition, playgrounds shall include some inclusive/accessible equipment.
- Playground design must comply with AS4685.1:2021, including the fall zone areas and surface treatments
- Accessible playground elements to be installed within a rubber soft-fall zone directly abutting an accessible footpath.
- Playgrounds are to be located at least 15m away from roads, permanent water bodies or steep declines. If closer than 15m, fencing/buffer options must be provided.
- All play equipment and park furniture to be specified with anti-vandal bolts/screws
- Timber logs / stepping stones intended for recreational use should have bitumen paint protection on the underside continuing to between 50 – 100mm above the finished surface level.
- All park furniture, where practical, to be DDA approved i.e Tables, BBQ and seats
- Seats to have a concert area for wheelchairs
- Furniture is to be with timber-alternative materials, including steel and aluminium.
- Bins are to be 240L and have a fire-retardant enclosure (wheelie bin must be provided by the developer)
- Reserve signage shall comply with CoP signage strategy

7. IRRIGATION, SERVICES AND LIGHTING

Irrigation and electrical documentation are to be provided to the council for review. All irrigation designs must comply with the City of Playford Irrigation Technical Specification, and all lighting plans must comply with the City of Playford Technical Lighting Guidelines.

All electrical and irrigation bills will be borne by the developer/ s during the maintenance period.

8. GENERAL MAINTENANCE

During the design and development of each stage, the developer is responsible for weed management and the upkeep of all open space which will be vested to the council. This includes maintaining neat and tidy verges as well as protecting new and existing trees. Any identified plants declared under the Landscape South Australia Act 2019, must be appropriately controlled/removed. All proclaimed/ invasive weeds need to be removed during civil and landscape maintenance/ defects liability period to council's satisfaction.

<https://pir.sa.gov.au/biosecurity/weeds/controlling-weeds>

Quarterly maintenance site meeting with contractor is required through the maintenance period post practical completion.

In addition to this, the following points shall be considered during the detailed design documentation phase:

- Maintenance access to reserves/creek lines/swales and basins to be clearly shown on plans.
- Footpaths required for maintenance vehicle access to be detailed as trafficable.
- All turf areas shall be accessible for maintenance vehicles and obstacle-free. Minimum clearance of 1500mm to be provided for a ride-on mower access.
- Maintenance staff safety to be considered through adequate space for maintenance around areas adjacent to roads.

CONTACT

Contact Name

Contact Phone Number

CALL

(08) 8256 0333

VISIT

Playford Civic Centre
10 Playford Boulevard
Elizabeth SA 5112

Stretton Centre
307 Peachey Road
Munno Para SA 5115

POST

12 Bishopstone Road
Davoren Park SA 5113

EMAIL

playford@playford.sa.gov.au

