

Wyndham City Council

Landscape Development Levels of Service





About this document

The Wyndham City Council Development Levels of Service has been prepared by Wyndham City Council.

Wyndham City acknowledges the Kulin Nation peoples as the traditional owners of the land and pays respect to their elders past and present.



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Introduction

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1. Introduction

Wyndham is a large and fast-growing municipality in the west of metropolitan Melbourne. It is undergoing significant residential, commercial and industrial growth and development.

Public open space and streetscapes create a strong image and amenity for the city. It also provides social and economic value for Council and the community. These spaces contribute to Wyndham's liveability and community wellbeing through; a sense of place, the creation of passive and active recreation opportunities and through a safe pedestrian network.

Planning the design and embellishment of an open space network is complex and challenging, with many competing interests. The design of open space and streetscapes is critical to ensuring that Wyndham's network of open space and streetscapes is attractive, functional and cost effective to maintain.

The Wyndham Landscape Development Levels of Service recognise the challenging balance of utilisation of open space as a developer marketing tool for residential development projects and an appropriately embellished and affordable long-term network of open space and streetscapes for the Wyndham community.

The Wyndham Landscape Development Levels of Service inform the design and establishment of all Council and developer delivered public open space and streetscapes. These Landscape Development Levels of Service also consider the operational implications of embellishment from a maintenance and renewal perspective. Therefore, long term design is required that addresses a collective need across the municipality.

The Wyndham Open Space Strategy 2045 (WOSS) is Council's key strategic document informing the use and development of Council's Open Space to 2045.

The WOSS identifies the following vision:

"We will provide an accessible and well-connected Open Space network which contributes to the social interaction, health and wellbeing of our community and protection of our natural and cultural environment now and into the future."

Wyndham is committed to creating and delivering sustainable 'leading edge' smart city solutions that leverage the benefits of new technologies. Wyndham's Smart City Program is not 'business as usual,' it looks at how technology can be used to; innovate, find new solutions and create a better future for Wyndham where innovation and new technologies are embraced.

The following strategic documents influence the Landscape Development Levels of Service and inform provision of elements within the open space network:

- Wyndham Open Space Strategy 2045 (WOSS);
- Wyndham Sports Strategy 2045
- Wyndham 2040 Vision
- Wyndham Integrated Water Cycle Management Plan 2040
- Wyndham Environment and Sustainability Strategy 2016 2040
- Wyndham City Forest and Habitat Strategy 2017;
- Wyndham Play Space Strategy 2030;
- Wyndham Public Toilet Strategy (in development); and
- Wyndham Future City Strategy (in development).

The Wyndham Landscape Development Levels of Service are intended for use by both property developers and Council staff, including:

- Landscape Architects;
- Urban Designers; and
- Civil Engineers

This document does not waive the responsibility to satisfy the requirements of other authorities. It is the responsibility of developers and designers to meet requirements and gain approval of relevant authorities.

2. Scope of the Wyndham Landscape Development Levels of Service

The Wyndham Landscape Development Levels of Service outline the acceptable fair and networked level of embellishment for any public land development within Wyndham. These Levels of Service do not prescribe design outcomes for open space but illustrate Wyndham's intent for the level of embellishment for open space.

Wyndham encourages design innovation, provided the proposed design is appropriate for the hierarchy of the intended park and does not constitute an excessive financial and/or operational burden for the community and achieves Council's strategic objectives. Landscape designs should utilise simple things to provide a complex outcome rather than use complex things in a simple way.

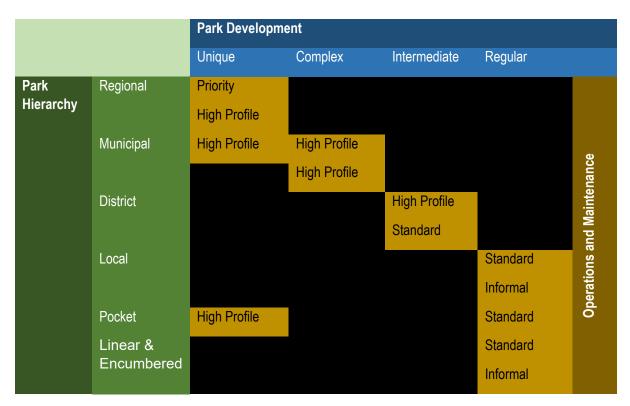


Table 1: Park Hierarchy, Development and Maintenance Standard relationship

Table 1 identifies the interrelationship between the Provision, Development and Operational Levels of Service.

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Provision - Levels of Service are primarily defined at the Precinct Structure Plan level where community development requirements are specified and spatially mapped including residential areas, parks, educational sites, commercial areas etc. These levels of service are further refined in the Wyndham Open Space Strategy.

Development - Levels of Service (this document) define the complexity of a park or open space and what level of sustainable embellishment is appropriate/allowable.

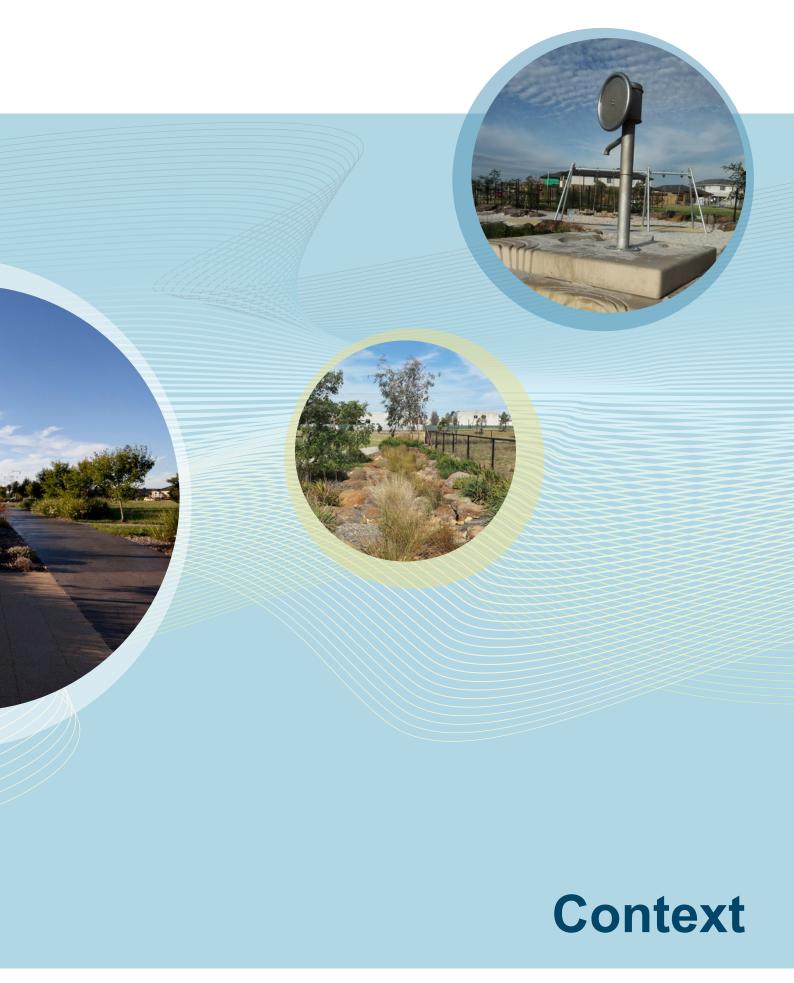
Operational - Levels of Service prescribe the standard of maintenance for the different park hierarchy classification and development levels. These standards are consistent whether services are provided in house or outsourced. Standards range from Informal to Priority and while tasks may be similar across all standards, the frequency of visit and tolerance regarding intervention rises from Informal to Priority.

The Landscape Development Levels of Service apply to the design and embellishment of all Council open space and streetscapes; whether Council or developer initiated. In the case of new residential subdivisions, compliance with these Levels of Service will result in a simplified and streamlined approval process.

Council reserves the right to refuse any development/ design proposal that it considers to be inappropriate or constitute over embellishment. Precedent from prior development will not constitute automatic grounds for approval of a proposal. All Council decision making relating to provision and embellishment of open space is based on current Council strategy and policy.

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3. Context

Wyndham is located on the western edge of Melbourne, between the metropolitan area and Geelong. The city covers an area of 542 Km2 including 27.4 Km of Port Phillip Bay foreshore. It is one of the fastest growing municipalities in Australia, with a population expected to increase from 241,900 in 2017 to exceed 445,000 people by 2045. The municipality is made up of people from a vast variety of nationalities. Wyndham has a rich history that encompasses Aboriginal and European cultural heritage and includes natural and built heritage assets. Understanding and incorporating these elements into our landscapes will ensure that Wyndham's heritage is preserved and appreciated into the future.

The landscape is characterised by large flat basalt plains interspersed with incised natural waterways and drainage lines. The plains include large wetlands and some of the most significant remnant grasslands in Australia. The Werribee River is a prominent natural landscape feature.

The plains sit on predominantly shallow soils over volcanic basalt bedrock. This is a challenging landscape and environment to establish landscape plants due to soils and climate.

Wyndham has three dominant soil types. In the north and far west is an area of volcanic rock (basalt) with low nutrient soils. To the east and the Point Cook region is an area of windblown silt overlying basalt and along the Werribee River Flood Plains and delta are alluvial sediment deposits. It is these deposits that offer the most favourable growing conditions.

Predominantly, the soils are alkaline and sodic in nature. This means that soils shrink, bake hard and crack heavily in summer and in wet conditions the soil swells and becomes waterlogged and boggy. Additionally, there is a salt layer in the soil 300-700mm below the surface. During earthmoving, care should be taken to separate 'top soil' from other soil layers to give all plants, including trees, the best opportunity for healthy growth.

Wyndham has a warm, dry, temperate climate, characterised by hot summers and cool, moist winters and spring. Over the last decade, average rainfall has declined from 538mm to 468mm per annum. By contrast, central Melbourne receives an average of 648mm per annum. Summer temperatures and environmental conditions are further impacted by hot northerly winds that blow across the open plains. This means that the cultivated landscape will be visually different to the central, eastern and southern greater Melbourne region. Vegetation needs to be matched to the climate and soils to ensure a sustainable outcome both for amenity and liveability.

Wyndham is large and diverse and includes; extensive urban residential growth areas, intensive agriculture at Werribee South, major retail precincts, the Werribee Park Tourism Precinct and a major industrial area in Laverton North. The municipality contains remnants of plains grassland that is significant on a national scale and important remnant vegetation along its rivers and creeks, notably the Werribee River. The growth of the municipality will be managed to preserve a balance between conservation, rural and urban areas and ensure that the municipality's heritage is retained.

The Victorian Planning Authority (VPA) is the statutory authority responsible for overseeing the preparation of all Precinct Structure Plans (PSP's) within Wyndham's growth area and advising the Minister for Planning for their approval. PSP's are high level master plans for whole communities. PSP's spatially arrange roads, shopping centres, schools, parks, housing, connections to transport and broadly address the complex issues of biodiversity, cultural heritage and infrastructure provision.

The WOSS is used to determine priorities for the planning, provision and development of open space throughout the municipality, incorporating existing and new growth open space.







WYNDHAM CITY COUNCIL LANDSCAPE DEVELOPMENT LEVELS OF SERVICE

4. Principles

The following extracts of the Wyndham 2040 Vision inform and influence the principles established within this document:

1. Our parks and open spaces will connect people with the outdoors and each other. They will be activated and inviting destinations for residents and visitors

Actions

- Improve the presentation of local parks and open space and activate commercial centres by creating public spaces that are enjoyed by people of all ages; and
- Increase tree cover on residential streets and on private and public land.
- 2. Our natural environment will be respected, preserved and protected Actions
 - Develop new approaches to delivering urban habitats, resulting in greater biodiversity across all areas of Wyndham; and
 - Highlight the Werribee River and other natural assets as leisure destinations.

The following principles guide the Landscape Development Levels of Service and are the foundation of landscape development in Wyndham. Any request to embellish open space or streetscapes beyond the detail outlined within this document will be considered with reference to these principles.



4.1. Equitable, Accessible and Networked

It is important for Wyndham to establish and maintain an open space network for both the hierarchy and amenity of parks. This ensures there is equitable distribution and park experience across the municipality. User groups or segments of the community should not be disadvantaged by the distribution of open space. A range of open space of varying size and function should be accessible to Wyndham's residents and visitors and wherever possible access to parks and streetscapes should be compliant with the Disability Discrimination Act.

WOSS – a network of fit for purpose Open Spaces that connects destinations and allows Wyndham residents to access, explore and enjoy their city regardless of location, age, ability or culture. It is important to ensure the equitable provision of Open Space opportunities for both genders commensurate with community demand.

4.2. Sustainability and Environment

Current and future environmental, social and economic sustainability are central elements to the provision and maintenance of open space and streetscapes.

Retaining and enhancing existing natural assets in open space design is essential for habitat connectivity and to build on natural capital.

Open space can play a key role in helping communities adapt to climate change, which can be influenced through landscape design.

Sustainability within an open space network involves appropriate land use and asset selection. Sustainability in asset selection, including soft landscaping, involves sustainable design and sourcing of materials, efficiency of maintenance and minimising ongoing resource use to optimise the longterm community benefits of public assets. A whole of life approach is required to ensure long term sustainability of the open space network.

Increasingly, private gardens are getting smaller. As a result, there is a greater reliance on public open space to appropriately provide for a range of community use and deliver suitable habitat for Wyndham's wildlife.

WOSS - planning, siting and development of open space that considers:

- Whole of life asset management across all areas of design, construction, maintenance and disposal;
- Climate change and adverse effects on the environment;
- Council's resource capacity in the future; and
- Changing community needs over time, demographics, leisure participation and leisure trends.



4.3. Quality, Safety and Enjoyment

The open space network must be of a suitable make up and quality to provide a high level of enjoyment for the Wyndham community and its visitors in accordance with the open space levels of service. Whole of life affordability means there is a balance between cost and quality that is managed through a tiered structure of open space experience. The quality of open space and streetscapes should foster civic pride and encourage use.

Public safety is a primary design criterion of open space and streetscapes. Designs should incorporate the principles of Crime Prevention Through Environmental Design (CPTED).

Council intends that local and district parks are activated/used from dawn till dusk, this protects local resident amenity. Provision of lighting and other facilities to activate local and district parks and open space outside of these times is not catered for.

Sporting reserves, municipal and regional parks will be used for differing purposes and a site use and safety plan will advise of the intended hours and frequency of use(s).

Provision of lighting to extend the activation period of a park/open space will not be permitted unless the open space is a direct connection to a public transport hub or major shopping precinct and the streetlight network does not provide adequate lighting for use of the footpath in the road reserve.

WOSS - siting, design and development of open space to maximise public safety, passive surveillance and security of assets.



4.4. Diversity and Flexibility

The open space network and municipal streetscapes shall provide neighbourhood character through a diverse range of experiences, opportunities and amenity. The neighbourhood character is influenced by the diversity of open space and will contribute to sense of place and uniqueness throughout the municipality.

Responding to community needs and localised issues will require a degree of flexibility when assessing designs and proposals against the Levels of Service. Where flexibility is warranted it will be assessed with consideration to the principles within this section of the Landscape Development Levels of Service. Council's Playspace Strategy provides guidance on distribution of play experiences.

4.5. Financial Sustainability

Wyndham is legally accountable to its community for the expenditure of public funds and future financial liabilities. All decisions must account for current and future financial impacts. It is important that designs for open space and streetscapes provide value for money and clearly outline operational costs. The provision, maintenance and renewal of open space must not constitute an onerous burden for the Wyndham community.

Council can provide guidance for annualised maintenance budgets and an annual depreciation figure for each hierarchy of park.

4.6. Integration

The integration of the open space network with other community functions shall be considered. Integration may encompass co-location of facilities, such as park amenities and sporting buildings in active open space, the inclusion of significant vegetation or encumbered land. Any integration is in addition to the Developer Contribution and the specified Provision Level of Service size for open space within a Precinct Structure Plan (PSP).

Provision of open space should be integrated with the urban and natural environment. Parcels of land that do not integrate well with the surrounding area and do not add value to the open space network will not be accepted as open space as part of the development approval process.







4.7. Partnership

Council is not the sole provider of open space within the municipality. Where appropriate, Council will engage with other authorities and agencies to seek opportunities to enhance the open space network in an affordable and accessible manner. These authorities and agencies include but are not limited to; Parks Victoria, Melbourne Water, Vic Roads, Vic Track, State and Federal Governments and local schools.

Any such partnership agreement will require implementation of an instrument that protects Council's investment in a site.

The **WOSS** includes the following actions:

- To identify partnership opportunities with relevant state government agencies and public land managers regarding the lease, use and development of public land for future regional/municipal active open spaces including connectivity and trail opportunities; and
- Work with the MPA and the Department of Education and Training to formalise the planning and use of active open spaces collocated within and adjacent to schools to better enable shared access and use by the community and schools.

This includes:

- Engaging with schools throughout the planning and design process for new school sites; and
- Engaging with schools where Council open space is proposed adjacent to school sites.

Open space quantities delivered through PSP's will not be reduced where community access to school sporting fields is achieved.







Open Space Hierarchy

5. Open Space Hierarchy

An open space hierarchy defines terminology that can be universally used to describe open spaces and their functions. It provides the framework to assist the planning, provision and analysis of open space and can assist in determining potential future needs and requirements. It can also be used as an asset management tool to assist the management and maintenance of open space 'types'.

The Wyndham Open Space Strategy identifies that open space within Wyndham covers a range of scales, functions and catchments. It classifies open space according to landscape types and park hierarchy.

Council has classified its open space into the following types:

Passive Open Spaces - informal and unstructured recreation, (refer park hierarchy and Table 1)

Active Open Space - formal and structured sport, (refer park hierarchy and Table 1)

Conservation Open Spaces - are those areas of the open space network that have a primary purpose of protecting and/or improving recognised biodiversity, habitat or heritage values. Heritage values include recognised Indigenous and non-Indigenous values. Some heritage values are also protected within passive open spaces.

These spaces add amenity and diversity to the open space network and can provide the community with opportunities to appreciate and learn about heritage and conservation values.

Public access to conservation spaces is likely to be managed and controlled depending on the significance of the values.

Conservation areas do not count toward the quantity of public open space delivered through developer contributions.





Landscape Amenity Open Spaces - are small areas managed to protect and improve landmarks, signage points, natural features, views, vegetation buffers or other areas with landscape amenity value. While these open spaces have limited opportunities for recreational use by the community they serve an important role in protecting Wyndham's natural character and providing general landscape amenity.

Encumbered Open Spaces - are areas of land unsuitable for urban development that may be integrated into the open space network. They include areas that have the primary function of drainage, flood protection and mitigation, wetland protection, and coastal buffers.

- Land may also be encumbered because of utility and service requirements such as pipelines, pylons and overhead wires, and flight paths. Integration into the open space network is usually at the discretion of Council.
- Encumbered land is generally not suitable for active open space due to the incompatible nature of sports ground developments with drainage and flood mitigation functions. In Wyndham, much of the linear open space network is located on encumbered land. This includes walking and cycling paths located on floodplains and stormwater buffers around waterways/ wetlands or along railway corridors.

The WOSS identifies the following open space park hierarchy:

Pocket/Node -Incidental small parks that serve the immediate surrounding streets. In newly planned areas they are in medium to high density residential areas, town centres and adjacent waterways. These parks provide for a variety of recreation activities and social settings and cater mainly for frequent, short duration visits by residents and workers from the surrounding walkable vicinity. In established areas, development patterns have resulted in the provision of pocket parks within normal residential areas. These parks are provided according to development pattern and therefore have no specific distribution and are in addition to passive/active open space provision.

for landscape diversity and amenity.

value and provide for landscape diversity and amenity.

Parks that serve a neighbourhood. These generally provide for multiple informal recreation activities catering for a range of age groups and are generally located within 400 metres of 95% of dwellings. Local parks cater mainly for frequent, short duration visits by residents from the surrounding walkable neighbourhoods. Local parks generally do not cater for formal sporting activities. Where sporting use occurs (active recreation local reserve), it is for junior sport or training. Table 2 (overleaf) highlights the different benchmarks between passive parks and active reserves. These parks may also protect natural and heritage values and provide

Parks that serve a collection of adjacent neighbourhoods. These may provide for active sport and/or passive activities and are generally located within 1 kilometre of 95% of dwellings. District parks may also protect sites of natural and heritage

Parks that serve the municipal population and attract people from within the municipality. Municipal passive parks have a higher level of facilities and

playgrounds, encouraging longer stays. Municipal open spaces have a 'municipal-

Local -

District -

Municipal -

wide' catchment and may be located anywhere in the municipality. There are often multiple 'municipal' level active and passive parks throughout the municipality as they provide for different experiences and or sports.

Regional -

Parks that serve the broader regional population, including people who live within the municipality and those from adjacent municipalities. Regional passive parks may also serve to protect and enhance environmental values in the regional context. These areas are typically managed by Parks Victoria or other state government agencies rather than Council. Where regional parks are used as active open space they may include sporting facilities that facilitate regional level competition. Regional active open spaces have a 'regional-wide' catchment and may be located anywhere in the municipality or broader region.

WYNDHAM CITY COUNCIL 26 LANDSCAPE DEVELOPMENT LEVELS OF SERVICE Table 2 outlines the typical size and catchment of parks/reserves within the open space hierarchy and highlights variances between passive and active recreation reserves.

Function/Hierarchy	Quantity	Size/Purpose	Catchment
	(ha/1000 pop)		(access from up to)
Passive Recreation			
Pocket Park	1.0ha/1000	<0.5ha	No standard
	Collectively		
Local Park		0.5 – 1.0ha	400m
District Park		1.0 2.5ha	1000m
Municipal Park		2.5ha +	No standard
Regional Park		As designated	No standard
Active Recreation			
Local Reserve	1.5ha/1000 people	Junior competition and training	1000m
District Reserve		District competition – top 5 sport	1000m
Municipal Reserve	0.5ha/1000 people	District competition – minority sport	No standard
Regional Reserve		Regional competition	No standard
Other			
Conservation	N/A	Protection	N/A
Linear Paths/Trails		Recreation	1000m
Encumbered		Protection	N/A
Landscape Amenity		Amenity	N/A

Table 2: Wyndham Open Space Benchmarks





Park Embellishment Standards

6. Park Embellishment Standards

Park embellishment standards are identified in the Landscape Development Levels of Service Embellishment Matrix (Appendix 1). The matrix establishes the maximum embellishment levels for each type of park in the hierarchy and informs what Council and developers may include in open space.

The purpose of these standards is to ensure appropriate development of open space that meets community needs and is sustainable into the future. Longer periods of maintenance apply where a level of embellishment beyond what Council would normally consider is requested and approved. Indicative costs for maximum levels of embellishment are shown below. NOTE: these figures exclude the cost of bulk earthworks and site preparation.

Pocket Park ≤ \$50,000 Local Park ≤ \$500,000 District Park ≤ \$1,200,000 Municipal Park ≤ \$4,500,000 Regional Park ≥ \$4,500,000

All works undertaken to design and embellish parks must be done so in accordance with the appropriate Australian Standards and/or Building Code. The embellishment thresholds do not include specific projects to achieve broader Council objectives such as passive irrigation or stormwater harvesting.

Information Sheets for embellishment are located in Appendix 2. These include indicative spatial layout information for the hierarchy of parks and playgrounds, and embellishment standards.



6.1. Earthworks and Drainage

Earthworks and drainage systems are required to be developed to maximise on-site retention and infiltration of stormwater and where applicable irrigation water. This is to prevent any adverse impacts to existing and new wetlands, watercourses and water bodies.

The following criteria applies to new open space landscape works and renewal/upgrade of existing Open Space:

- Management of soil on development sites. Site soils must be appropriately managed to protect areas where planting will occur. The site soils natural profile must be retained in these areas or where disturbance is unavoidable the site must be remediated to reflect the natural soil layers. In addition, all planted areas must have a minimum topsoil depth of 200mm;
 - Spoil from development must not be used to create open space, naturestrips or other areas where establishment of vegetation is required;
 - Where site soils are being remediated to support vegetation establishment, appropriate quantities of Gypsum and compost must be worked into the soil;
 - Where a site is adjacent to a natural aquatic system, the earthwork design will provide for storm water to be managed within the sites stormwater drainage system. Drainage discharge directly into a natural system is not permitted; Earthwork design is to incorporate features and functions

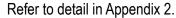
of the sites topography and natural drainage system wherever possible and maximise onsite retention and infiltration of storm water and irrigation;

- Gradients for grass areas shall be equal to or flatter than 1:6 and equal to or flatter than 1:4 for planted areas;
- Run off from hardstand areas shall drain to adjacent landscape areas and infiltrate across the landscape;
- All drainage infrastructure is to be clearly identified and form part of the detailed landscape plans; and
- Proposed water bodies that do not serve a drainage function will not be permitted.

6.2. Paving

Paving is to be designed and installed to provide safe, accessible and convenient pedestrian circulation and ensure access for maintenance. It may be considered in situations where surfaces such as turf would perform poorly due to excessive wear.

- Paths and or paved areas shall be constructed to provide for all abilities access and mobility;
- Shared use paths are to be constructed with a minimum effective pavement width of 2500mm, except for regional trails which have an effective pavement width of 3000mm;
- Paths including shared use paths shall have a lateral clearance of 600mm between any fixed object and the edge of the path, except for where paths join a building or other structure. Note: regional shared paths shall have a lateral clearance of 1000mm;
- Paths constructed within open space shall be constructed to not inhibit the use of the open space, in particular 'kick about' spaces. Where an open space is bordered by roads, paths should be constructed within the road reserve adjacent to the naturestrip and link to park facilities;
- Pedestrian paths constructed within open space shall be a minimum width of 1500mm and meet DDA requirements;
- Where a path leads from the road/footpath network to open space, pram ramps/connections are required to ensure accessibility;
- Mixed media paths and hardstands including oxide treatments, exposed aggregate, and multiple unit paver styles should be minimised and used strategically in design. Paths shall be fit for purpose, cost effective and minimise maintenance complexity. A maximum of two path treatments may be considered for Local and District parks and a maximum of three path treatments may be considered for Municipal and Regional parks. Though continuity within a park is preferred;
- Where a concrete footing for a path is required, it must not extend beyond the surface area of the paving;
- Permeable pavement is encouraged in suitable locations;
- Gravel paths may be proposed in appropriate locations with consideration to gradient of the land and impacts from storm water run-off. These paths must be edged to maximise path longevity and minimise maintenance requirements, treated pine edging is preferred. Gravel paths are not permitted as a primary path in parks/open space but may be considered as secondary paths, subject to consideration of the above points; and



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6.3. Irrigation

In general, irrigation systems are not encouraged in passive open space. Where irrigation systems are provided it is primarily for landscape establishment. Alternate water supply to potable water is desirable, provided that the source is of appropriate quality and reliability. Council landscapes should be designed to be resilient without reliance on water supplies beyond natural rainfall and not present a maintenance risk into the future.

A developer is not to commit Council to a water contract without explicit prior consent from Council.

In some circumstances Council may consider permanent irrigation systems as part of a landscape proposal for District, Municipal and Regional Open Space. Irrigation systems will be approved in sportsground development and renewal projects. Where appropriate, storm water harvesting and reuse will be encouraged in accordance with Council's Integrated Water Cycle Management Plan. Wherever possible potable water shall be the secondary water source. Passive irrigation systems are encouraged. Irrigation systems will not be approved in nature strips.

Where an irrigation system is approved for installation it must adhere to the following criteria:

- Irrigation systems shall be designed to be consistent with other Council irrigation systems and be able to be connected to Council's central irrigation control system;
- Irrigation systems shall be designed to allow for connection to more than one water source. Where recycled water is available, this shall be the primary water source;
- Irrigation system designs shall be submitted with landscape drawings and documentation for assessment and approval prior to landscaping works; and
- Garden bed irrigation systems shall consist of drip irrigation (under mulch) and lawn irrigation systems shall consist of below ground pop up irrigation.



6.4. Play Spaces

Play spaces are to be proposed and designed in accordance with Council's Play Space Strategy. Council seeks to provide a diverse range of constructed, informal and natural play opportunities that are aligned to a park's status in the open space hierarchy. Play spaces shall be designed to maximise accessibility and accessible elements. Public safety, Occupational Health and Safety and on-going maintenance and affordability are important elements that Council will consider in reviewing a play space proposal. The costs of play space provision and maintenance are to be incorporated within depreciation schedules and annual maintenance plans.

Council recognises the marketing potential of play spaces for developers and seeks to achieve a balance that offers land development marketing, consideration of the long term financial impacts of maintenance and replacement for Council and the community's needs. Play space embellishment proposals must be consistent with the hierarchy of park for which they are being proposed. Over embellishment of play spaces and associated development will not be approved.

Council does not support purpose built play spaces in every local park. Approval regarding the provision of purpose built playspaces will be based on assessment of need and the location of other nearby facilities. The ongoing maintenance and replacement costs of such facilities will be a consideration in approval determination.

Proposed play spaces must consider and address the following:

- The age appropriateness and level/quantity of play opportunities shall be in accordance with Council's Play Space Strategy and relate to the hierarchical classification and function of the site;
- Play spaces shall complement others provided within the same precinct/region ensuring an even spread of opportunities and ability challenges;
- Play elements shall be in one general area for ease of carer supervision;
- Play elements shall not be located within 20 metres of private property.
- Where play elements are located within 20 metres of busy roads or water bodies appropriate fencing will be required. The fence is not to enclose the play space but to provide a barrier in a direct line between the play space and the road/water body;
- In accordance with the Play Space Strategy, one fully fenced play space will be permitted in each planning district;

- All play equipment, fall zones and soft fall must comply with relevant Australian Standards and soft fall must be contained within a concrete/rock edge. Timber edging will not be approved;
- Design of play spaces must provide a variety of development opportunities for social and physical skills i.e. climbing, balancing, hiding, spinning, fixed structures etc. An analysis outlining the proposed development opportunities shall accompany a development proposal. The provision of non-equipment play opportunities is required in accordance with the Play Space Strategy;
- Playground equipment and/or structures may require building and/ or engineering certification;
- Natural landscape elements should be retained and incorporated into play space design wherever possible to create nature based play opportunities. Landscapes may be developed to facilitate nature play;
- All play spaces shall be accessible through provision of an appropriate paved surface. This is not to be interpreted as all play elements need to be fully accessible;
- Provision of fully fenced all abilities playgrounds shall be at the sole discretion of Council;
- Shade provision Use of trees for provision of shade for playspaces in local parks is required. Consideration should be given to establishing fast growing tree species that will, over time be replaced by more desirable species that may be slower growing. Shade structures/sails will be considered in addition to trees for parks and play spaces of District level or above. An important consideration in providing shade structures is the ambient temperature of the play area and the radiant heat generated by rubber or other artificial soft fall surface;
- Play space design should incorporate nearby shaded seating to facilitate carer supervision; and
 - Equipment should incorporate use of sustainable and recycled materials wherever possible. Material sourcing information is to be included in the design approval process.

Any proposed custom designed play equipment shall be at Council's sole discretion and will require an approved safety audit, detailed maintenance requirements, whole of life cost estimates including replacement, engineering certification and building permit where appropriate. If approved, these elements may trigger an increased maintenance period of up to five (5) years for the entire park. Refer to Appendix 2 for indicative playground design.





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6.5. Incidental Skate Elements

This section refers to incidental skate elements. Refer Wyndham City's Skate Strategy for "Good Design principles" relating to skate park designs and information. Formalised skate parks are an embellishment that may occur in Council's Active Open Space network, they are not considered appropriate within the Passive Open Space network. Any design with the ability for continuous skate flow or gathering and formal spectating will be deemed a Skate Park and must be developed in line with the Wyndham Skate BMX and Bike Strategy 2013 in land classified as Active Open Space. Incidental skate elements may be located within a park, subject to consideration to local "skate routes" between skate parks, transport hubs, schools, retail precincts or recreational hubs.

These elements are not defined as long stay features, allowing for beginner to intermediate skill development. Elements are to be used for individual tricks or short transitions and allow for a more street style skate experience. As these are transitional spaces and not destination spaces, safety is the users responsibility and these incidental elements do not trigger safety signage installation.

Elements may often serve multiple purposes. Where this is the case materials need to be considered for longevity and reduction of damage to ensure the asset can function as designed. Incidental spaces may be made up of one to three small elements such as a mini ramp, rail and seating walls which all need to be set out to current industry standards with appropriate run offs (6m) and clearances from obstacles. General concrete finishes should be applied to areas around the obstacle that allow for skating and comply with Australian slip resistance standards.

Skate Elements must be designed by a suitably qualified skate designer within the design process. At Practical completion, a skate designer/consultant must certify that the elements are fit for purpose and that appropriate safety standards have been demonstrated.

6.6. Recreation Elements

Formally provided recreation elements are not suitable in all parks, some elements may be considered in local parks while others are more suited to district parks and above, refer to Table 3 below. The size of a park and other nearby facilities (including provision in schools) will influence what, if any recreation elements can be included, over and above the possible inclusion of a purpose built playspace. Recreation elements are well suited to active open space reserves and will be considered in such situations subject to available space and other nearby similar facilities.

Appendix 5 discusses spatial details and related information for the provision of elements listed in Table 3.

Recreation Element	Local Park	District Park (and above)
Kickabout	\checkmark	\checkmark
Social team sport		\checkmark
Hard Stand unstructured games	\checkmark	\checkmark
Multi-sport Hard Court (full size)		\checkmark
Hard court (half court)	\checkmark	\checkmark
Giant Park Games (chess)		\checkmark
Table Tennis		\checkmark
Hit up walls		\checkmark

Table 3: Recreation elements that may be considered in local and district (and above) parks

6.7. Water play

It is acknowledged that water play elements can add value to a playspace. Water play will be considered at Council's sole discretion and will not be considered for local, linear or pocket parks. To be considered, any proposed water play features must be scaled appropriately to the park and be sustainable. Sustainability is to be demonstrated through total annual water consumption and the ongoing operation, maintenance and renewal costs so as not to place an onerous burden on Council and the community. Additionally, any design must identify how the water play elements will function/be utilised if water restrictions are enforced.

Where a water play element is approved for installation, the developer is required to provide Council with a detailed operations and maintenance manual that incorporates water hygiene requirements and take on an extended maintenance period for the park it is within.



<u>Automated Waterplay</u> – A proposal to install an automated water play element must include a detailed whole of life maintenance and renewal schedule. Water play proposals involving pump stations and purification processes will be critically analysed especially in the context of water scarcity and ongoing operational requirements. If approved, an extended maintenance period of up to 5 years in total for the entire park (not just the water play element) will be a condition of the approval.

Council will look at opportunities for automated water play to be co-located with Aquatic Centres.

<u>Hand Operated Waterplay</u> – Proposal for installation of hand operated gravity fed waterplay will be considered but must address/ resolve drainage/water pooling issues and minimise water wastage whilst addressing potential hygiene issues.



6.8. Fitness Equipment

Fitness equipment will only be considered in Municipal, Regional, Linear and District Active Open Space that is associated with a broader trail network or perimeter path. Fitness equipment may be dispersed at appropriate distances throughout a trail or clustered in one location and ensure a range of activities are catered for. Where fitness equipment is installed, it shall consist of proprietary items and include a maintenance and renewal cost schedule. Fitness equipment should consist of fixed elements with a minimum of moving parts.

6.9. Dog off Lead Areas (fenced and unfenced)

Dog off lead areas will only be considered for establishment in district, municipal, regional open space and linear parks. Given consideration of the need and the locations other such facilities within the municipality.

Dog off lead areas shall not be located adjacent to natural waterbodies/ waterways or wildlife habitat areas. Where a dog off lead area is provided, rubbish bin(s) will be required to be installed.

Dog litter bags will be approved/provided in all fully fenced dog off lead areas and must meet Council requirements. Clear signage to Council specifications is to be installed identifying the extent of an off-lead area.

Dog off lead areas are provided in three forms: 1) unfenced and time unrestricted; 2) unfenced and time restricted; and 3) fenced and time unrestricted. Provision of dog off lead areas shall generally be based on a catchment of 2 Kilometres.

A future dog off lead strategy will inform provision and form (1-3), dimensions and design elements. NOTE: Dog off lead areas are required to be gazetted.



6.10. Structures

Structures within open space must be functional and enhance the use of the space whilst managing risk and safety issues and provide for cost effective maintenance. Where appropriate, a building permit will be required. Proposed structures must consider and address the following:

Structural elements such as boardwalks, bridges, decking/ viewing areas, pergolas and arbours etc. shall be constructed of highly durable and low maintenance materials, such as; steel, composite recycled timber/ plastic or masonry products. Note, timber handrails/ top of balustrade may be considered. In general, timber products will not be approved by Council. Should timber products be approved they must be Forest Stewardship Council (FSC) certified;

- A minimum clearance height of 2400mm is required between the finished ground/paved surface and the lowest part of an overhead structure;
- Shade structures/sails will be considered in addition to trees for parks and play spaces of District level or above. Shade structures may be considered for social areas and play spaces;
- All structures are required to have hard surfacing on the ground extending a minimum of 600mm beyond the eave line;
- Wherever possible, structures should be proprietary items;
- Council will consider custom designed structures. For parks of district hierarchy and above. Such structures must be designed to Council satisfaction and utilise standardised materials and construction methods;
- Bridges, boardwalks and viewing platforms will not be approved unless associated with a natural or drainage water body, conservation area or to make an area trafficable over challenging terrain. An assessment of environmental impact will be required as part of the application process;
- Estate entry signage/statements are not to be located within open space and if approved are to be located on private property. Council will not be responsible for any ongoing maintenance and renewal of such items; and
- Refer to detail in Appendix 2.



6.11. Sculptures/Public Art/Landscape Features

Council's Public Art & Collections Policy governs all requests for public art installations in open space with the land managers approval.

Council's approach is to enable and facilitate meaningful and conceptually appropriate public artworks. This involves working in partnership with developers to commission art works that are complementary to the local environment and relevant to the locality. Council's involvement in developing the artwork brief and selection of the work is the best pathway to ensure acceptance into Council's collection.

Architectural statements and elements associated with play spaces and open space that do not serve a functional purpose and are not commissioned public artworks are considered "design features" and are therefore discouraged.

Where public art is permitted, proposals must consider the following;

- The scale of the element must be complimentary to the local environment and must not constitute a safety or risk hazard;
- Any proposal must be accompanied by a detailed maintenance/ care manual and cost schedule and where appropriate renewal costs:
- Appropriate engineering certification and where applicable building certification: and
- Any proposal will be assessed on merit.

6.12. Rubbish Bins

Rubbish bins are not provided in every park. The overarching principal is similar a National Park where waste is removed by users on leaving the park. Larger parks that suit longer stays such as District, Municipal and Regional parks where facilities such as BBQ's, picnic facilities and public toilets are located will have the provision of bins. A proposal to locate bins within a pocket or local park must be supported by a demand analysis.

Where rubbish bins are provided the following must be considered and addressed:

- Rubbish bins shall be 120 Lt recycled plastic bins (Red lids for landfill waste and Yellow lids for recycling). Note, Wyndham does not currently have provision for the collection of recyclables within the open space network;
- Impact to operational costs;
- Where approved, bins are to be in a metal framed bin surround and be located to be accessible to people of all abilities; and
- Refer to detail in Appendix 2.

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6.13. Bollards/Fencing

Bollards and fencing should only be considered where safety is an identified issue or where vehicle access needs to be restricted. Fencing/Bollards will be considered for approval in the following situations:

- Where fencing is adjacent to water bodies, or playspaces and busy roads;
- To protect a conservation area, natural habitat or trees;
- Where a playground is situated within 15 metres of a major road. In such situations the fence is only to be installed between the playground and the road, not around the entirety of the playground. Note, a designated all abilities playground may be fully fenced (these play spaces are at Council's sole discretion). In accordance with the Play Space Strategy, one fully fenced play space will be permitted in each planning district;
- Bollards shall be located in garden beds or set into a gravel or paved edge that extends a minimum of 3\00mm beyond the bollards. They shall not be designed to be in grass/turf areas;
- Bollards shall be made from composite material, recycled plastic or FSC timber and be sized at 150mm x 150mm and must not exceed 900mm above finished ground level; and
- Refer to detail in Appendix 2.

6.14. Furniture

Furniture contributes significantly to the useability of open space and plays an active role in encouraging residents and visitors to utilise Wyndham's network of open space. Proposed furniture must consider and address the following:

- All furniture is to be constructed of either steel, aluminium, recycled plastic, composite timber/recycled plastic, repurposed timber or FSC timber;
- All seats, tables, and benches shall be set in a hard stand/paved area and accommodate wheelchair access;
- As a guide, local parks may have up to a maximum of 3 bench seats and 1 picnic table, District parks and above may have more than these limits based on landscape design and anticipated demand;
- Drinking fountains shall be included adjacent to play spaces and can be considered for other areas of open space. Drinking fountains shall be combination units including bubbler, bottle refill and animal bowl. They shall; be wheelchair accessible positioned on accessible pathways, include appropriate drainage and be installed with an isolating valve in a valve box near the drinking fountain; and
- Furniture shall be selected from Councils Suite of Furniture Manual, refer to Appendix 3.



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6.15. Smart Technology

Smart Technology has the ability to enhance the amenity and useability of open space. Established technology innovation in public places/open space such as public Wi-Fi and smart furniture is being joined by a myriad of sensors and other technology that has the potential to allow council to gain an increasingly detailed, real-time picture of the use of Wyndham's open space network.

Any proposed smart technology must consider the following:

- Benefits from the use of smart technology for user experience and Council must be clearly articulated;
- Demonstrated interoperability of technologies is provided to ensure connection to Council platforms and efficiency of city operations. Council can advise on preferred proprietary models;
- Smart technology proposals must demonstrate that appropriate level of cyber security controls and protections in place;
- All ongoing management and maintenance costs must be identified and disclosed;
- The collection and provision of any data must be aggregated and de-identified; and
- Demonstration that all relevant standards and policies have been adhered to.

Requests for smart and digital technology installation are governed by all related policies such as public art, cctv and signage.

There are recommended smart technology solutions that can be applied or has been utilised in various locations across the city, examples include internetenabled bins/bbqs/facilities, drainage sensors, environment sensors (air/water/ temperature), asset tracking, lighting and infrastructure sensors. Maintenance of technology installations is via agreement.



NOTE: Photo of Solar trees located at Werribee Open Range Zoo.



Signage – Place Naming, Way Finding and Interpretative

7. Signage – Place Naming, Way Finding and Interpretative



7.1. Place Naming

Wyndham's current park naming practice is to name the park after the adjoining street. The 79 Victorian municipal councils are the state's primary naming authorities; however, a number of government departments, government authorities and private organisations also hold this role.

Where a new park/reserve is provided by a developer, the developer is responsible for the supply and installation of park signage consistent with Wyndham's park signage style and corporate signage guidelines. Signage of the park carrying the developers name or marketing name for the subdivision will not be approved.

7.2. Way Finding

Way finding signage may be considered in large scale subdivisions. The provision of way finding signage will be considered on merit and subject to the following:

- Any proposed signage must be branded with the Wyndham City Council logo and no other logo or commercial advertising;
- Where a trail exists, or is being partly delivered by a developer i.e. Bay Trail, Federation Trail, individual 'branding' by a developer will not be considered. The trail must be branded by its broader name. However, signage depicting 'Bay' Trail (for example) at (subdivision name) may be considered, this may assist with wayfinding;
- The design of proposed signage must relate to the local character and amenity and be of an appropriate scale; and
- Must consider the principles of these guidelines, being; Equitable, Accessible and Networked; Sustainability and Environment; Quality, Safety and Enjoyment; Diversity and Flexibility; Financial Sustainability; Integration; and Partnership.

7.3. Interpretive

Interpretive signage will only be considered in situations where there are cultural, historical or ecological values that contribute to the open space and such signage will enhance the visitor experience. The provision of interpretive signage will be considered on merit and subject to the following:

- Any proposed signage must be branded with the Wyndham City Council logo and contain no other logo or commercial advertising;
- The design of proposed signage must relate to the local character and amenity, be of an appropriate scale and be complementary to other Wyndham interpretive signage. Interpretive signage must be designed to add value to the park experience and not dominate the visual amenity; and

• Must consider the principles of these guidelines, being; Equitable, Accessible and Networked; Sustainability and Environment; Quality, Safety and Enjoyment; Diversity and Flexibility; Financial Sustainability; Integration; and Partnership.





Public Toilets, Barbeques and Lighting

8. Public Toilets

8.1. General

Council allows public toilets in some parks, this assists in extending the length of stay in open space and enhances user experience at long stay parks. Public toilets have a high cost of provision, maintenance and renewal/replacement. Public toilets are suited to parks supporting a long stay and will only be considered in some District, Municipal and Regional parks. Public toilets will not be approved in Local Parks.

- Where public toilets are provided, 2x ambulant unisex cubicles is the standard. Large Municipal and Regional parks may contain additional toilets as negotiated and subject to intended use of the park.
- Where public toilets are provided in Active Open Space, they should be constructed as part of the pavillion with external access.

The provision of new public toilets will be considered on merit and subject to the following:

- Council's Public Toilet Strategy (in development) and proximity to other public toilet facilities (existing and planned), including those associated with commercial and community facilities;
- Park usage demand analysis and length of stay expectation; including target demographic of the park; and
 - Must consider the principles of these guidelines, being; Equitable, Accessible and Networked; Sustainability and Environment; Quality, Safety and Enjoyment; Diversity and Flexibility; Financial Sustainability; Integration; and Partnership.

9. Barbeques

9.1. General

Barbeques can be underutilised and have high maintenance costs. Barbeques will only be considered in District, Municipal and Regional parks that contain facilities to support a long stay and subject to the following:

- Proximity to other barbeque facilities;
- Park usage demand analysis and length of stay expectation;
- All barbeques must be accessible and installed on hardstand, either adjacent to
 or under shelter. <u>Note:</u> Barbeques must be positioned so they do not form a
 climbing structure enabling access to the roof of a shelter and enable ease of
 access between other facilities for wheelchairs/ strollers etc;
- Barbeques may be single or double hot plate and should be positioned to facilitate social connection;
- Barbeques shall be selected from Councils Suite of Furniture Manual, refer to Appendix 3; and
- Must consider the principles of these guidelines, being; Equitable, Accessible and Networked; Sustainability and Environment; Quality, Safety and Enjoyment; Diversity and Flexibility; Financial Sustainability; Integration; and Partnership.

10. Lighting

10.1. General

In general, lighting in open space is not supported, (refer Wyndham Sustainable Public Lighting Policy Guidelines).

Lighting (except for active sports facilities including associated car parks) shall only be considered in open space where the open space forms part of a thoroughfare to a public transport node or shopping precinct and where the street light network does not meet the required lighting provision.

Where lighting is provided it shall comply with the relevant Australian Standard for the purpose of the lighting. Lighting shall not contribute to extending use of a park beyond normal daylight/ intended use hours in residential areas. Lighting near natural habitats or waterbodies will not be approved without prior assessment and mitigation of environmental impacts.





11. Vegetation

11.1. General

These provisions ensure that landscape planting; complements any naturally occurring flora, has low water use requirements, has low on-going maintenance costs and provides a safe and aesthetic environment for users of the open space and road networks. Vegetation in parks establishes character and can be used to provide variation and colour and enhance the parks feeling of 'welcomeness'.

Where appropriate, native species plantings to promote habitat connectivity should be considered in line with the City Forest and Habitat Strategy.

11.2. Soil Management

A soil test and analysis shall be undertaken and a report presented to Council prior to establishment of vegetation to ensure that the soil properties will sustain successful establishment and longevity of the proposed vegetation and that the soil contains no contamination. Where identified by the soil test, appropriate amelioration of the site/planting area must be undertaken. The site must be re-tested following amelioration and the results presented to Council for approval prior to any planting.

A minimum top soil depth of 200mm is required where vegetation is to be established.

Note: This applies to all areas where vegetation is to be established in open space and streetscapes. Handover to Council will not be achieved where a developer has failed to undertake soil testing, analysis and subsequent amelioration where required.

On development/construction sites, soil shall be managed to separate top soil from sub soil. Care must be taken to ensure that in-situ ground conditions are replicated when profiling the disturbed soil to finished levels. For example, top soil is not to be placed beneath subsoils.







Shrub and Groundcover Planting

12. Shrub and Groundcover Planting

General

- Retention and enhancement of naturally occurring indigenous vegetation is a priority and is governed by legislation;
- All proposed plant species require approval by Wyndham City Council, either by selection from an indicative species list or at Council's sole discretion;
- All proposed plant species shall be selected based on low water need/suitability to thrive in Wyndham and minimal on-going maintenance requirements. The use of local indigenous species is required in areas adjacent to natural areas and conservation reserves. Proposed garden beds containing high maintenance plants will not be approved, except by agreement in Council nominated Municipal, Regional Parks or Activity Centres;
- Planting design and species selection shall ensure that sightlines for motorists are not impeded and VicRoads height requirements of 450mm or lower are achieved;
- Planting within public access ways (trees excepted) shall consist of low shrubs or groundcovers (below 600mm in height) to ensure passive surveillance over the length of the access way;
- Shrubs and groundcovers shall be planted greater than 600mm away from a path or driveway;
- Planting shall be undertaken during May September, unless otherwise approved by Council and subject to an approved watering plan; and
- All planted beds shall be mulched at a depth of 75mm with an approved mulch and be maintained at that depth.

12.1. Shrubs and Groundcovers in Parks and Open Space

- All garden beds in public parks shall be edged, appropriate treatments include treated pine, concrete or similar and spaded edges;
- Mass planted mulched beds in drainage reserves do not require installation of a hard edge;
- Garden beds and/or mass planted areas shall be designed to allow easy passage between beds and other objects for a ride on mower with a 1800mm cutting deck;
- Structure of massed plantings will generally have low plants to the edges and taller plants to the rear or middle;
- Planted garden beds may facilitate nature based play and planting structure should reflect smaller plants at the front and larger plants in the centre;
- The structure of planting shall consider CPTED principles with regard to passive surveillance; and
- Refer to detail in Appendix 2.

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12.2. Shrubs and Groundcovers in Nature Strips

- Unless otherwise approved, nature strips shall be planted with a suitable turf species;
- Nature strips may, by approval be planted with other species of plants. In this case, proposals must be consistent with the Wyndham Nature Strip Landscaping Guidelines and the City Forest and Habitat Strategy;
- Ongoing maintenance of nature strips is the responsibility of the adjacent land owner or occupant; and
- Refer to detail in Appendix 2.

12.3. Shrubs and Groundcovers in Median Strips

- Operational activities such as mowing require traffic management if the median strip is less than 3000mm in width. This adds significant cost to the maintenance activity and creates traffic congestion.
 Median strips in new developments are to be greater than 3000mm in width.
- Mass planting shall be approved at Council's sole discretion.
 Where approved, a setback of 500mm from the back of kerb and 500mm from a pedestrian crossing or road intersection will be required;
- Plants must have a maximum height at maturity of 450mm (trees excepted); and
- Refer to detail in Appendix 2.

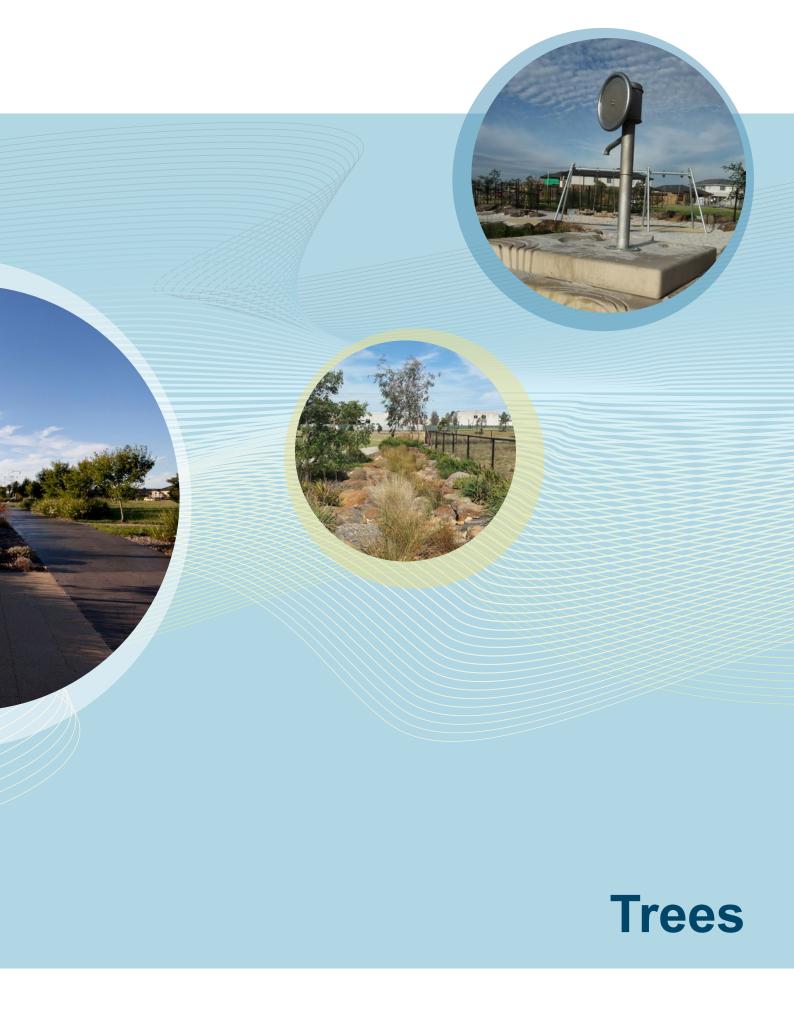
12.4. Shrubs and Groundcovers in Roundabouts

- Species selection and location of plants shall ensure motorist views through the roundabout in all directions are not obstructed;
- Finished level of soil and mulch must not exceed back of kerb height;
- Plants must have a maximum height at maturity of 450mm (trees excepted);
- Planting must be set back 1200mm from the back of kerb/ roundabout edge to provide separation between vehicles and maintenance staff; and
- Refer to detail in Appendix 2.









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13. Trees

Trees planted in streets and parks should reflect local character and conditions and provide aesthetic streetscapes, parks and public amenity. Species selection will consider how the species contributes to provision of shade, improved micro-climate and landscape amenity whilst minimising interference (now and into the future) with lighting, paving or other public and private infrastructure. The Wyndham City Forest and Habitat Strategy informs tree selection for all Council managed land.

Wyndham's Significant Tree Register, the Wyndham Planning Scheme and approved Precinct Structure Plans and Development Plans identify existing trees that are required to be retained. Existing trees are to be retained as a priority and proposed designs must demonstrate how existing trees have been incorporated and will be protected throughout development.

General

- Tree selection shall be in accordance with the Wyndham City Forest and Habitat Strategy;
- Tree planting in parks (excluding conservation reserves and natural habitats) must deliver 25% potential canopy cover within the park;
- Street and Park trees shall be supplied at a minimum height of 1.5 metres (unless otherwise approved) with the calliper and container size reflecting the height of the tree, the tree must be self-supporting in accordance with AS2303 -15 Accepting Tree Stock for Landscape Use. Mass planting of trees in other areas i.e. drainage reserves may be tube stock, planted in accordance with Wyndham's Tree Planting Specification.
- Developers must provide evidence that they have placed orders for the tree species approved in the landscape design one year prior to intended subdivision planting and that the supplier is able to produce stock meeting AS2303-15 Accepting Tree Stock for Landscape Use;
- Tree planting in roads managed by VicRoads shall comply with VicRoads standards; and
- Refer to Appendix 2 Indicative Tree List.



The table below identifies the minimum required distance that trees may be planted from various types of infrastructure

Location	Minimum distance of infrastructure from trees
Naturestrip	Midpoint between kerb and footpath (species specific in identified locations) minimum width 750mm
	2500mm from crossover
	2000mm from power pole/light pole (subject to species selection)
	1500mm from service assets, and legal point of discharge
	2000mm from fire plugs
	2000mm from fire hydrant
	10000mm (minimum) from cross streets, refer to Austroads Guide
Median Strip	1200mm from kerb
	2500mm from pedestrian crossing tree selection to maintain sight lines
	10000mm (minimum) from cross streets, refer to Austroads Guide
Roundabout	2500mm from back of kerb centrally located single stem tree(s) by agreement
Parks	3000mm tree to tree (except copses and mass planted/mulched areas)
	3000mm from garden beds when not located in garden bed
	1200mm from paths
	3000mm from structures
	2500mm from crossover
	3000mm from park lighting
	3000mm from private property boundary

Table 4: Minimum distance of infrastructure from trees



13.1. Trees in Parks

- Where trees are located within grassed areas the spacing between the mulched beds of trees shall be 3000mm and the area mulched at a depth of 75mm;
- Where mature trees are to be retained in open space as part of an urban development, proposed buildings or structures shall be greater than 3000mmm from the existing tree(s) or structural root zone (whichever is the greater);
- Tree planting must deliver 25% potential canopy cover within the park;
- Trees shall be planted in mulched beds in accordance with the following: The tree planting site is to be sprayed with herbicide to control weeds/ grass in a 2 metre radius from the tree trunk (centre of intended hole); The planting hole is to be dug 3 times the width of the rootball with the sides and base of the hole broken up; 500 grams of Gypsum is to be added to each tree hole and lightly incorporated with excavated soils; The base of the hole is to be lightly compacted to prevent settling; Following planting a 100mm depth of compost material complying with AS4454 Composts, Soil Conditioners and Mulches is to be spread in a 2 metre radius from the tree trunk/water well; 100mm of aged mulch is to be added on top of the compost and water applied to the entire area; The total depth of compost and mulch is not to exceed the height of the water well. Note: Where trees are planted in proximity closer than 3 metre centres the compost/mulch area is to be combined into one area. A minimum of 3 metres is to be maintained between each composted/mulched area;
- Refer to table 4 regarding minimum distances to other infrastructure; and
- Refer to detail in Appendix 2.

13.2. Trees in Nature Strips

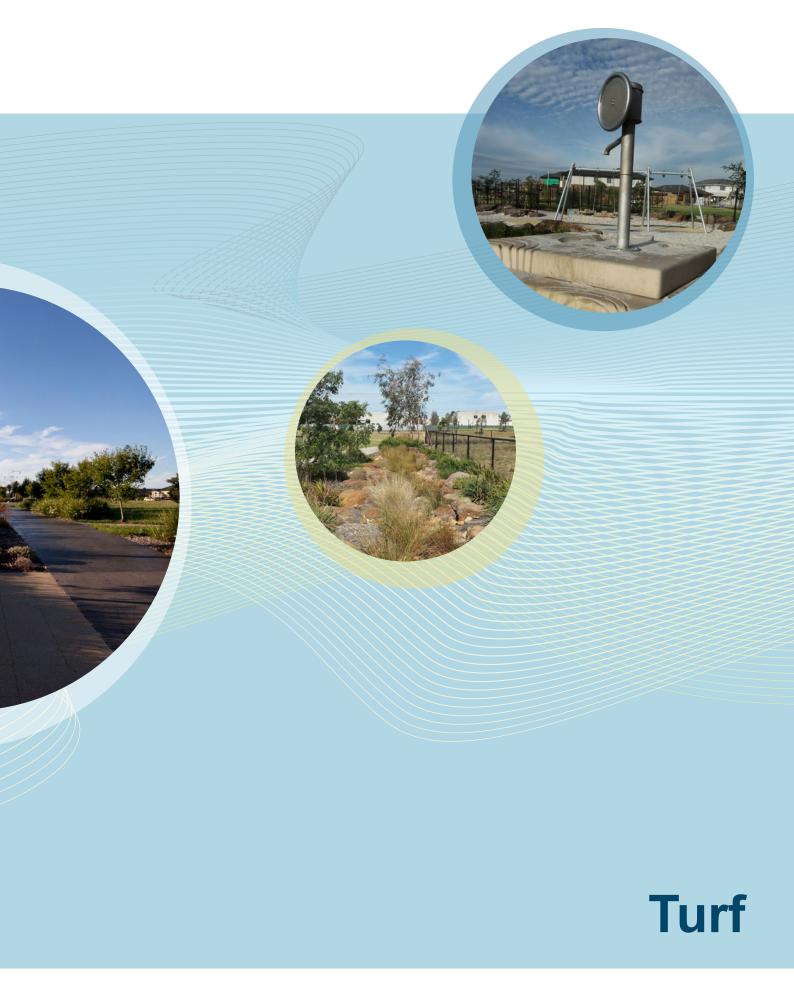
- Generally, each property/residence will have at least 1 street tree planted adjacent to it in accordance with the minimum distances identified Table 4 above and as the location of service utilities allows;
- Tree planting on corner properties will not impede line of sight for motorists entering or leaving the intersection;
- Planting on major arterial roads shall align with Councils Avenues and Boulevards Plan (refer to the City Forest and Habitat Strategy and VicRoads Requirements);
- Residents and/or tenants are not permitted to supply and plant trees in nature strips;
- Tree planting must deliver 25% potential canopy cover within the nature strip;
- · Refer to Table 4 regarding minimum distances to other infrastructure; and
- Refer to detail in Appendix 2.

13.3. Trees in Median Strips and Roundabouts

- Trees planted in medians with flush or roll over kerbs shall be individually protected by bollards or other approved method;
- Tree planting must deliver 25% potential canopy cover within the median strip;
- Trees in Roundabouts, one single stem high canopy centrally located tree may be permissible;
- Refer to above table for minimum distances to infrastructure; and
- Refer to detail in Appendix 2.







14. Turf

The intent of the Landscape Development Levels of Service is to ensure that areas of turf are provided in appropriate locations that are useable to the community and compliment the landscape design. Turf areas should be designed for cost effective maintenance and avoid any small and/or hard to access areas that are difficult or time consuming to maintain.

Proposed turf areas must consider and address the following:

14.1. Lawn Turf

- Designs shall provide for areas to be accessible by a ride on mower with an 1800 metre cutting deck and allow for a 3000m turning circle around trees, furniture or other structures;
- Gradients shall be equal to or flatter than 1:6;
- Where grade differences in lawn areas are proposed, the change in grade shall be achieved through mounding/sloping with a gradient equal to or flatter than 1:6 to ensure ease of maintenance and a surface suitable for mowing. Any proposed grade changes must either be a natural slope or utilise a retaining wall with appropriate barriers and access points. The use of structural elements that are not a formalised retaining wall, to create mounding will not be approved;
- Turf areas shall be bordered by road and or garden kerb/edge, paths or other approved solid material;
- Except for sportsgrounds and high profile/nominated sites (as determined by Council) areas of turf in open space will be irrigated at Council's sole discretion;
- Pennisetum cladestinum (Kikuyu) is the preferred turf species for open space parks and naturestrips. Stentaphrum secundatum (Buffalo, soft leaf varieties) may also be considered, particularly in shaded areas. Turf may be established either through installation of sod or sprigs (NOTE: Proposals to establish turf areas with seed will not be approved); and
- *Cynodon dactylon* (Couch) varieties are the preferred turf species for sportsgrounds. Establishment of turf for sportsgrounds must be through the installation of sod which may be required to be washed (site specific).



14.2. Artificial Turf

Artificial turf is only suitable in association with sportsground development. This may be either for the playing surface (subject to consideration and approval from Council) or for adjacent to coach's boxes and sportsground entry points.

Artificial turf will not be considered in any other public open space application due to maintenance, management and vandalism issues. Proposed sportsground artificial turf areas must consider and address the following:

• All sportsground installations must be in accordance with all manufacturers specifications.







Conservation Areas

15. Conservation Areas

General

Identified conservation areas must be protected from any development and or construction activities. These sites must be fenced to prohibit access by construction/unauthorised individuals for the duration of the construction activities.

Conservation areas are to be considered as integrated community assets and where appropriate should include interpretative signage and boardwalks/fencing that protects natural/conservation areas whilst allowing a suitable level of community access. Lighting near conservation areas is not permitted without an approved environmental impact assessment and subject to Council's sole discretion.

Any activities within a conservation area must be undertaken in accordance with established Wyndham conservation work practices and only with prior approval of an agreed Site Action Plan which includes detailed plant species requirements for any revegetation works.



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Waterbodies, Wetlands and Bio-retention Systems

16. Waterbodies, Wetlands and Bio-retention Systems

General

Council aims to develop and maintain landscapes that are sustainable and appropriately designed for the geological and climatic conditions of Melbourne's greater west. Therefore, waterbodies that are aesthetic in nature and do not serve a drainage/flood mitigation purpose will not be approved.

Wetlands and bio-retention systems must be designed, constructed and maintained to established Council and Melbourne Water standards.









Maintenance

17. Maintenance

An intent of the Landscape Development Levels of Service is to provide for the development and evaluation of maintenance programs and costs and ensure that any initial maintenance issues are addressed prior to handover to Council.

17.1. General

- A detailed maintenance program (including maintenance costs and renewal schedule/costs) shall be submitted for review and approval by Council as part of the Subdivisions approvals process.
- Maintenance requirements will vary in parks depending on the hierarchy of the park and areas within a park. For example, a Municipal park may have areas maintained at different specifications that range from High Profile to Standard to Informal. Alternately the entire park may be maintained at the specification for High Profile.

Most parks will be maintained at a 'Standard' service level which equates to 17 service visits per annum for horticultural and asset maintenance. More frequent visits are required for litter collection/ pick up and public toilet and barbeque cleaning (if provided). Note: Intervention levels from the maintenance specification take precedent over the number of service visits.

Developers are required to work with Council to determine service level areas for a park prior to gaining approval for landscape plans.

Levels of embellishment and maintenance intervention are key drivers of ongoing costs to Council. Decisions regarding embellishment and cost implications need to be established with an open space network overview and not simply a park by park piecemeal approach.

17.2. Maintenance Period to Handover

 A developer delivering streetscapes and open space is required to maintain the landscape from its initiation until handover. This will include a two-year period from the date of formal Practical Completion to handover. In some circumstances, as noted in this document, an embellishment may trigger an extended maintenance period. This is due to increased maintenance demand and/or risk of failure. In the case of any embellishments required to have an extended maintenance period, the entire area of open space that the feature is within is to be maintained for the extended period. An extended period of maintenance will be negotiated during the approvals stage;

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- At a minimum, all maintenance must be undertaken in accordance with the Wyndham Service Level Agreement for Open Space Maintenance;
- At Practical Completion, an appropriate Council officer must be present and will establish the handover date to Council and dates for quarterly maintenance inspections;
- Quarterly inspection of the open space area and associated infrastructure is to be undertaken by the developer and Council staff throughout the maintenance period to ensure design integrity is maintained and that the open space is functional and fit for purpose;
- The developer is responsible for taking and circulating inspection minutes (electronic copy) to Council within 5 working days of each inspection.
- At successful handover all retained bond monies will be returned to the developer;
- In the case of a failed inspection at handover, the developer is liable for additional inspection fees at Council's standard rate;
- In the event that handover is not achieved, the developer will be required to remedy all outstanding actions in an agreed timeframe prior to retained bond monies being returned. Should these matters not be addressed by the developer, the retained bond monies may be used by Council to make good the landscape.
- All asset data must be provided at handover in the Ospec format; and
- Where Council is the developer an inspection at the commencement and conclusion (two inspections) of the maintenance and establishment period of the project shall be conducted and involve the project manager and an appropriate operational officer.







On-going Maintenance / Renewal

18. On-going Maintenance /Renewal

From handover, Council shall be responsible for on-going maintenance (delivered either by in house staff or contractor resources) and maintained to the agreed operational level of service.

Three years after completion of a new park or major upgrade of an existing park (and every three years thereafter) a review of the parks current status and presentation against the design intent of the park is to be undertaken.

Any gaps between design intent and current presentation must be addressed as a maintenance/ renewal requirement. In addition, the review of the design intent should also consider current uses and users of the open space. If appropriate, recommendations should be made for a design review, that may lead to subsequent works to reflect the changed use/needs of the park.

The three-yearly review shall incorporate an asset condition report for asset planning purposes.





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