

Parks Facilities Strategy

2019



Executive Summary

The City of Armadale's Parks Facilities Strategy aims to strengthen the design, implementation and management of public open space and associated infrastructure.

Overview

The Park's Facilities Strategy is intended to address the diverse community needs and expectations through the appropriate provision of space, form and infrastructure ensuring parks and facilities are planned and allocated accordingly, whoever the provider, manager or deliverer of the facility service might be.

This document provides an assessment framework to guide the provision of public open space and infrastructure by establishing a hierarchy of parks based on their size, function and infrastructure, founded on existing City of Armadale provision and benchmarked externally.

The Parks Facilities Strategy aligns with the following actions in the City's Corporate Business Plan:

- 1.1.1 Provide opportunities to connect individuals to each other and the wider community
- 2.2.1 Deliver attractive and functional streetscapes, open spaces, City buildings and facilities
- 2.2.2 Protect and enhance the character of the City's spaces and places
- 2.2.3 Revitalise existing neighbourhoods whilst retaining the character of places

- 2.3.2 Ensure maintenance activities address required levels of service

The document should be read and used in conjunction with the City's Community Infrastructure Plan, relevant Developer Contribution Scheme reports and the following key external documents:

- Classification Framework for Public Open Space (Department of Sport and Recreation)
- Liveable Neighbourhoods (Western Australian Planning Commission)
- State Planning Policy 3.6 Development Contributions for Infrastructure (Western Australian Planning Commission)

The Parks Facilities Strategy, when used with these other documents, provides direction for the overall provision of parks; the scale of those parks, and the distribution and frequency with which various elements and functionalities as described in this document, should be included in parks designs.

This evidence based approach will help direct and maximise the use of current resources and funding, to meet the requirements of the community, now and into the future.



Parks Facilities Strategy

Contents

Introduction	6
Definitions	
Context	
Process	
Benchmarking	10
Classification System	
Existing Public Open Space Provision	
Existing Park Facilities Provision	
City of Armadale Standards	17
Typical Public Open Space	
Typical Facilities	
Analysis	36
Like for Like Comparison	
Facility Score	
Suburb Averages	
Improvements	42
Gaps for Consideration	
Park Improvement Plan	
A Note on Funding	
Conclusion	46

Draft

Date	Revision	Comments
2013	A	
2018	B	Revised JAM
2019	C	Issued for website



Introduction

The PFS has been prepared to contribute to the development of sustainable communities through the quality planning, design and construction of POS in the CoA.

Where POS was once considered primarily as a site for sport and recreation, POS is now expected to contribute to a range of recreation, sport and environmental functions. POS is required to provide spaces for sport, physical activity, children’s play, relaxation, social interaction, community facilities along with WSUD, conserving nature, provide wildlife corridors and enhance the visual amenity of the landscape.

The trend toward higher density development and decreasing private open space is placing new expectations on the role of POS, raising issues for local and regional planners, community facility managers, parks managers and others concerned with securing the sustainability of urban environments.

The creation and implementation of the PFS will guide the creation, implementation and management of sustainable POS by:

Informing the equitable provision of POS:

- This strategy provides guidance by establishing a hierarchy of parks based on their classification and function
- Informs a base line in which future POS is considered against existing provision
- The document provides a standardisation of infrastructure in association with the hierarchy and function of each individual park

Guiding the improvement of POS:

- Inform the provision of new infrastructure
- Inform the upgrade and renewal of existing infrastructure
- Provide a process to assess the appropriateness of infrastructure requests from the community

It is therefore important to set a baseline for consideration in the development of future residential estates and tracking population infill. This will determine gaps in physical provision of space, which can accelerate asset condition deterioration and increase renewal rates based on increased wear and tear.

Definitions

City of Armadale (CoA)

Parks Facility Strategy (PFS)

Department of Local Government, Sport and Cultural Industries (DLGSC)

Department of Water and Environmental Regulation (DWER).

West Australian Planning Commission (WAPC)

Classification Framework for Public Open Space (DLGSC Classification)

Parks Improvement Plan (PIP)

Disability and Access Inclusion Plan (DAIP)

Public Open Space (POS)

- Council owned or managed land used as public parks and reserves and usually zoned ‘Reserve for Recreation’ or ‘Reserve for Recreation and Drainage’

Water Sensitive Urban Design (WSUD)

- A land planning and engineering design approach which integrates the urban water cycle, including stormwater, groundwater and wastewater management and water supply, into urban design to minimise environmental degradation and improve aesthetic and recreational appeal

Crime Prevention through Environmental Design (CPTED)

- A multi-disciplinary approach to deterring criminal behaviour through environmental design



Context

The City is located on the urban fringe of the Perth Metropolitan Area and it is one of a number of outer metropolitan growth councils.

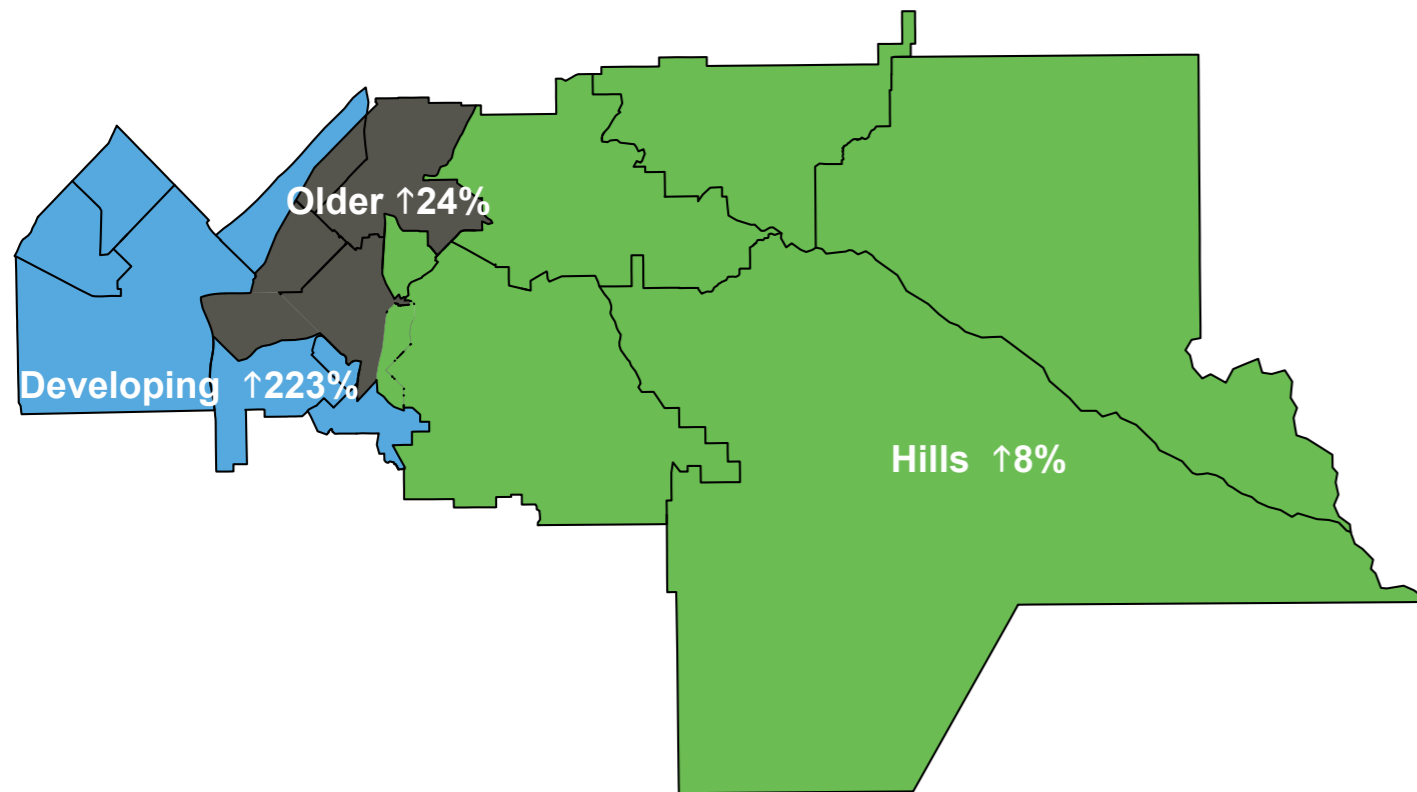
The City is experiencing sustained rapid growth. In 2016, the population was forecast to increase from 87,000 to 120,000 by 2026, reaching 145,000 by 2036.

Development across the City has been undertaken over a number of decades and as such the suburbs can be summarised into three precincts with similar features, environmental conditions and development time frames:

- Developing Suburbs ~6,900ha
- Older Established Suburbs ~3,000ha
- The Hills ~ 46,000ha

Research has been undertaken by Forecast.id to predict the City's growth up to 2036. It is anticipated that the precincts are going to increase in population by the following percentages:

- Developing 223%
- Older Established 24%
- Hills 8%



Process

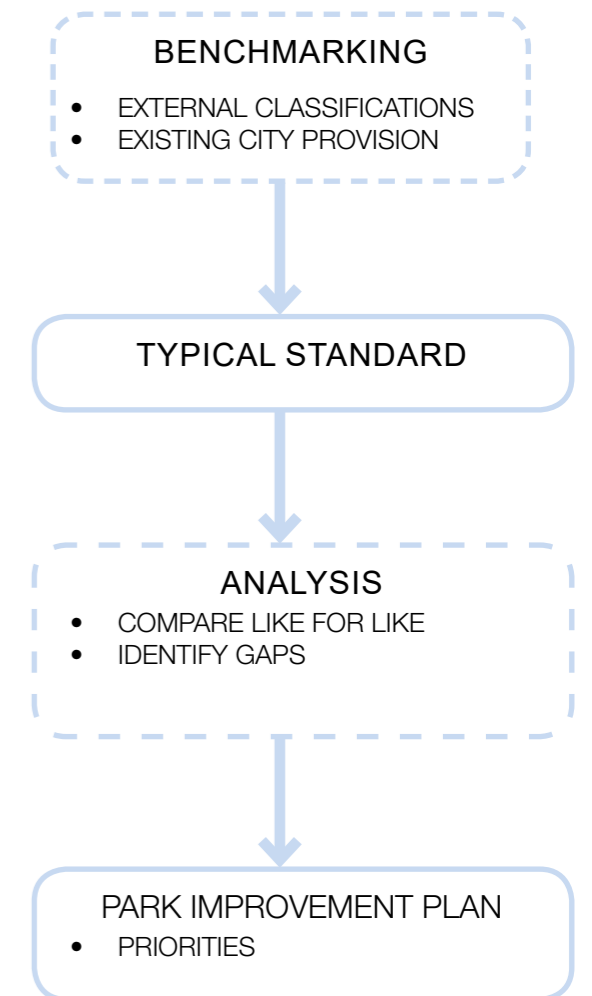
The PFS was first developed in 2013. The original document outlined the hierarchy of parks and infrastructure types and also identified a facility matrix to determine the most suitable facilities within each type of park.

The revised strategy provides an update on these key items in particular amending the hierarchy of POS to reflect state government acknowledged POS classifications and updating the facility matrix accordingly.

In developing the revised PFS, extensive desktop analysis was undertaken including:

- Comparing POS form and function across the City and against external Liveable Neighbourhood and DLGSC guidelines to determine a typical standard
- Comparing facilities across similar POS types to identify an average provision for each classification
- Comparing like for like across suburbs to identify gaps and prioritise improvements

This extensive desktop analysis has led to the development of an improvement plan to promote and prioritise the upgrade of POS.





Benchmarking

Classification System

The DLGSC has created a Classification Framework for POS (DLGSC Classification) which is being adopted into Liveable Neighbourhoods to guide the size and type of POS provided at the planning stage. The PFS adopts these classifications.

Under the DLGSC Classification Framework, parks are separated into park categories based on the size, intended function, provision of infrastructure and distance users have to travel to visit the site.

The standard park categories are as follows:

District Open Space (DOS)

DOS is principally designed to provide for organised formal sport and will generally include recreation space and some nature space. These areas serve several neighbourhoods, with players and visitors travelling from surrounding districts.

DOS can also have significant conservation and/or environmental features.

These spaces average 5ha to 15ha in size.

Neighbourhood Open Space (NOS)

NOS serves as the recreational and social focus of a greater community. NOS may include a combination of open parkland and bushland with activity spaces for casual play and informal sports.

These spaces average 1ha to 5ha in size.

In addition to the above categories, the City notes two additional classifications; Regional Open Space (ROS) and Public Access Way (PAW). These two classifications are noted below, however due to the variable form and function of these spaces, the classification has not been further expanded within the PFS.

Local Open Space (LOS)

LOS is small parklands that service the requirements of the residential population within the immediate area. Activities within LOS can include children's play, picnicking, dog walking and cycling.

These spaces average 0.4ha to 1ha in size.

Regional Open Space (ROS)

ROS includes recreation and organised sport spaces, as well as having significant conservation and/or environmental features. ROS provides substantial facilities for organised sport, play, social interaction and relaxation.

ROS serves one or more geographical regions and is likely to attract visitors from outside the immediate local government area.

ROS are highly specialised spaces.

Public Access Way (PAW)

It is acknowledged not all POS will fit into the DLGSC categories; in particular they do not cater for streetscapes, drainage corridors or public access ways. As such the City has noted an additional category Public Access Way.

It is also important to note the DLGSC guidelines are developed in consideration of parkland in areas of high population density. The City manages many parks within a diverse population density.

The primary function of an open space influences the range of facilities that could be provided. In general the primary functions comprise of :

Recreation Spaces

Provide a setting for informal play and physical activity, relaxation and social interaction. These spaces include open parklands, community gardens, corridor links, amenity spaces, community use facilities, civic commons and squares.*



Sports Spaces

Provide a setting for formal structured sporting activities. People attend sports spaces with the purpose of engaging in organised sporting activity, training/competition or viewing.*



Nature Spaces

Provide a setting where people can enjoy nearby nature and protect local biodiversity and natural area values. Nature spaces provide opportunity for low impact recreational activities such as walking, cycling, picnicking, playing and watching or exploring natural features. These areas include bushland, coastal areas, wetlands, geological and natural features.*



Some parks will feature one or all of these functions however usually one function will be dominant.

* As noted in the DLGSC Classification Framework for Public Open Space November 2012.





Existing POS Classification

The PFS has adopted the DLGSC Classification system and has grouped all existing POS accordingly.

The City currently maintains 365 individual parks, reserves or PAWs with various primary functions:

- 16 Regional Open Spaces
- 16 District Open Spaces
- 45 Neighbourhood Open Spaces
- 234 Local Open Spaces
- 54 Public Access Ways

Overall, Regional Open Space comprises the largest area to be maintained; followed by Local Open Space.

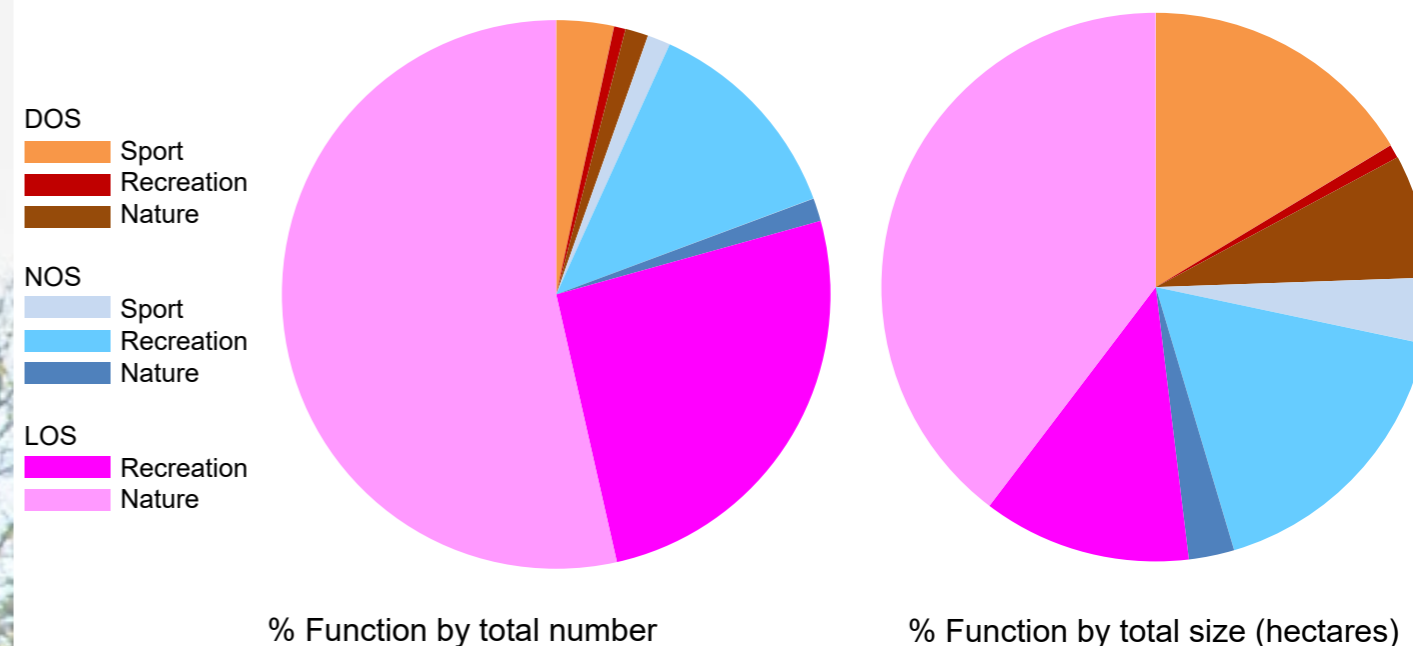
By function, the City currently manages 193 parks with a primary nature function, 17 sport spaces and 156 recreation spaces. Overall the 'nature' based function comprises the highest percentage of the total parks areas.

Comparison was also undertaken between suburbs for NOS, DOS and LOS, comparing POS type by size and per capita resident. By area DOS nature sites are the largest on average and LOS recreation the smallest.

It is important to note, due to the variance in historical town planning, surrounding environmental characteristics and population density, the distribution of POS within the CoA in regard to size and distribution can vary.

This comparison provides a guideline for the average POS, setting an average size and average ratio per resident and providing a basis to determine average provision of infrastructure per classification.

Average - Function



Average - Form and Allocation

	Function	DLSC size	CoA Average size	m2/Resident 2016	No. Residents per Park
DOS	Sport	5-15HA	8.4ha	9.5	8744
	Recreation		2.1ha	0.5	43719
	Nature		9.3ha	4.2	21859
NOS	Sport	1-5HA	5.0ha	2.3	21859
	Recreation		2.4ha	10.0	2363
	Nature		3.4ha	1.6	21859
LOS	Recreation	0.4-1HA	0.8ha	7.2	1150
	Nature		1.3ha	23.2	553



Existing Facilities Provision

A range of facilities are generally provided in a POS in order to enable the intended function. These facilities can vary from basic coverage of planting and turf, to specialist items such as BBQs, playgrounds and shade sails.

The development of facilities can be funded by Council capital allocation or grant funding, or by negotiation with developers at the development stage.

The following table demonstrates the percentage of parks which feature each facility in each classification. For example, 86% of NOS recreation sites feature playgrounds whilst 0% of DOS nature sites feature playgrounds.

Sporting or recreational classifications have the highest provision of facilities overall whilst nature classifications have the lowest provision of facilities overall.

This provides a baseline to develop a typical standard for each classification.

Average Facilities Provision %

	DOS			NOS			LOS		
	Sport	Recreation	Nature	Sport	Recreation	Nature	Recreation	Nature	
Pathways	90	100	25	100	95	100	86	41	
Bridges	0	50	0	0	38	50	22	9	
Signage	90	50	100	100	81	25	51	29	
Car Parking	100	50	25	100	57	50	28	11	
Access Control	100	100	100	100	89	100	66	47	
Lighting	90	100	0	75	51	50	21	4	
Play	80	100	0	100	86	25	42	1	
Bin	90	100	0	100	76	50	35	4	
Dog Bin	40	0	0	50	43	25	10	2	
Seating	100	100	50	100	86	75	57	15	
Shelter	70	100	25	75	59	25	19	1	
Public Toilet	30	100	0	75	8	0	0	0	
BBQ	50	50	0	0	41	0	11	1	
Drink Fountain	50	100	0	25	35	0	8	1	
Shade Sails	10	100	0	75	19	25	4	0	
Art	0	100	0	0	22	0	7	3	
Hard Courts	90	50	0	100	32	0	11	0	
Fitness	30	0	0	0	19	0	4	0	
Youth	0	0	0	50	5	0	0	0	
Community Garden	0	0	0	0	3	0	0	0	
Men's Shed	0	0	0	0	0	0	0	0	
Dog Park	10	0	0	0	0	0	0	0	
Irrigation	100	100	25	100	59	75	66	19	
Trees	100	100	100	100	97	100	95	97	
Planting	80	100	100	100	76	100	67	82	
Scheduled Sports	100	0	25	100	0	0	0	0	
Kickabout Turf	100	100	0	100	86	75	28	40	
WSUD	13	50	50	25	62	100	43	44	

This table demonstrates the percentage of parks which feature each facility in each classification.



CoA Standard

Typical Examples

The following section illustrates the typical CoA standard as determined through the benchmarking phase.

The following section features:

- Visual representations of each of the classifications demonstrating typical size, form and associated infrastructure
- Standard specification of each facility item
- The Facilities Matrix, which is a summary table of the infrastructure typically included, excluded or considered on a case by case basis

The typical size stated is the average size within the City of Armadale.

DOS - Typical Recreation

Typical CoA Size: 2.1Ha
Typical CoA Form: Square

Typically includes:

1. Extensive playground node
2. Extensive picnic node
3. Off street carparking
4. Public toilets
5. Irrigation, kick-about turf and trees
6. Lighting
7. Shade sails

Can include:

8. Youth
9. Community garden
10. Men's shed
11. Dog park
12. Fitness





DOS - Typical Sport

Typical CoA Size: 8.4Ha

CoA Preferred Size: 10.7Ha

Typical CoA Form: Square or Rectangular

Typically includes:

1. A 4.8Ha flat turf area which allows for either 2 x senior size AFL or 2 x senior size soccer fields with minimum floodlighting to a training standard for the predominant sport
2. Large playground node
3. Large picnic node
4. Extensive off street carparking
5. Sporting pavilion with two change rooms per sporting field and public toilets
6. Irrigation, kick-about turf and trees
7. Fitness

Can include:

8. Shade structures
9. Youth spaces
10. Community garden
11. Men's shed
12. Dog park



DOS - Typical Nature

Typical CoA Size: 9.3Ha

Typical CoA Form: As per natural land

Typically includes:

1. Off street carparking
2. Access control
3. Signage
4. Seating

Can include:

5. Water sensitive urban design
6. Bridge/board-walks





NOS -Typical Sport

Typical CoA Size: 5.0Ha
 CoA Preferred Size: 6.6Ha
 Typical CoA Form: Square or Rectangular

Typically includes:

1. A 2.9Ha flat turf area which allows for either soccer or senior AFL
2. Playground node
3. Picnic node
4. Off street carparking
5. Irrigation, kick-about turf and trees
6. Fitness

7. Lighting - minimum floodlighting to a training standard for the predominant sport
8. Sporting pavilion with two change rooms per sporting field

Can include:

9. Youth spaces
10. Community garden
11. Men's shed
12. Dog park
13. Public toilet



NOS -Typical Recreation

Typical CoA Size: 2.4Ha
 Typical CoA Form: Square

Typically includes:

1. Large playground node
2. Large picnic node
3. Road side carparking
4. Irrigation, kick-about turf and trees

Can include:

5. Shade structures
6. Youth spaces
7. Fitness
8. Off street carparking
9. Public toilet



NOS -Typical Nature

Typical CoA Size: 3.4Ha
 Typical CoA Form: As per natural land

Typically includes:

1. Pathways
2. Access control
3. Signage
4. Seating
5. Trees and planting

Can include:

6. Water sensitive urban design
7. Bridges





LOS - Typical Recreation

Typical CoA Size: 0.8Ha
 Typical Form: Square

Typically includes:

1. Pathways
2. Access control
3. Playground node
4. Seating node
5. Irrigation, kick-about turf and trees

Can include:

6. Bridges



LOS - Typical Nature

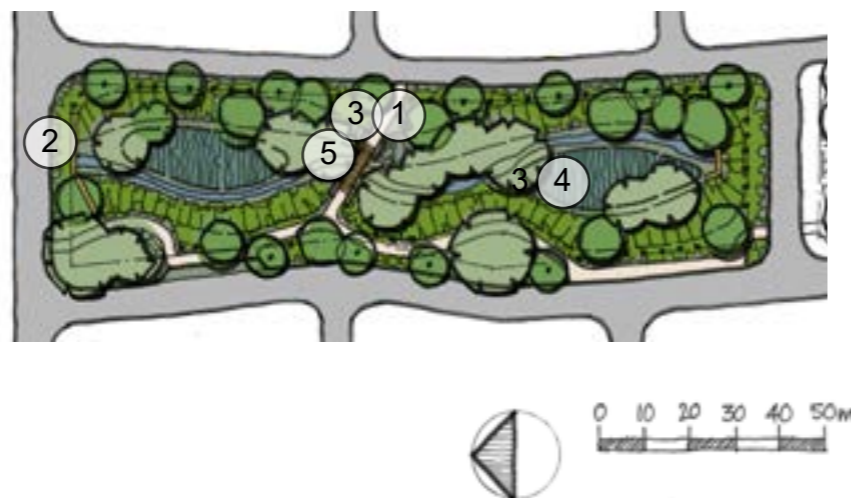
Typical CoA Size: 1.3Ha
 Typical Form: Linear

Typically includes:

1. Pathways
2. Access control
3. Seating
4. Trees and planting

Can include:

5. Water sensitive urban design
6. Bridges



Facilities - Typical

The following pages outline the facilities which are currently featured or considered within the City's parks and identifies parameters to be considered accordingly.

Pathways

Pathways serve the purpose of providing a safe passageway for pedestrians, park users, cyclists and residents. They allow people to move throughout the POS and can connect with other neighbourhood facilities including schools, playgrounds and transport.

Pathways can also serve as boundaries between turf and environmentally sensitive areas.

Paths provide disability access and are age and family friendly. This allows POS to be available for all users, in line with the City's Disability and Access Inclusion Plan (DAIP).

Specifications for pathways include the following:

- Concrete, unit paving or asphalt to Australian Standards for Design for Access and Mobility
- Material of the pathway should consider the predominate use - running, cycling etc
- Conform to the City's minimum standard footpath detail, available on the City's website- <https://www.armadale.wa.gov.au/standard-drawings>

Pedestrian Bridges and Boardwalks

Pedestrian bridges are incorporated into the landscape to provide a physical link between pathways, where waterways or sensitive bushland pose an obstacle for continued access.

Bridges and boardwalks are a high value asset item and the provision of bridges shall be conditional within local and neighbourhood POS, located only where alternative pathways cannot physically be provided.

Specifications for bridges include the following:

- Utilise timber alternatives such as composite or concrete decking
- Structural support shall be concrete piles, no metal or timber work below the 1:5yr top of water level
- Local hardwood timber will be considered within handrails and as a structural timber
- Meet Australian Standards for Design for Access and Mobility
- Building Code of Australia
- Provide a kick rail or balustrade as per Building Code of Australia requirements



Signage

Signage can serve several different functions including but not limited to; park identification signs, facility identification signs, directional signs, wayfinding signs, information signs, interpretative signs and regulatory and safety signs.

Signage shall provide clear, effective information and direction for people to find their way around, encouraging learning experiences and communicating park policies and rules.

Specifications for signage include the following:

- Signage shall conform to the City's corporate style guide, available on request
- Signage may require City of Armadale Planning Approval. Contact the City of Armadale to ascertain requirements associated with signage approval

Transport

Car park design shall be undertaken by a suitably qualified engineer with early input from a landscape architect to ensure there is a coordinated approach with the site layout.

Trees are an essential component of any carpark design and shall be considered early in the design process. Trees provide long term shade and assist in reducing the harsh visual impact often associated with carparks.

The carpark design shall also include a consideration of drainage requirements, including connections into stormwater and water sensitive urban design requirements.

Specifications for carparking include the following:

- Meet Australian Standards for parking facilities
- Meet Australian Standards for Design for Access and Mobility (latest edition)
- Parallel parking – 1 tree per 3 parallel bays, runs of parallel bays greater than 3 will generally not be supported
- Standard off-street parking area – 1 tree per 4 bays is required (this may be increased depending on the design of the carpark)
- Sporting POS requires a minimum 1 car bay per 4 senior players

Bike parking should be considered in all parks to encourage people to arrive by bike.



Access Management

Access management endeavours to ensure that parks are conserved for community usage and not impacted by prohibited access (e.g. cars, motorbikes or other motorised vehicles and activities).

Access management is often a requirement within WAPC approvals for POS within new developments. In the case of existing facilities, the City assesses access management on a case by case basis.

Specifications for access management include the following:

- Bollards (composite or painted timber) or post and rail or other suitable fence types around the perimeter of all POS
- Maintenance access with a concrete crossover and boom gate (or removable bollards) shall generally be provided at agreed access points
- Conservation fencing around the perimeter of POS with a nature function
- 1.2m high chain-link fencing around the perimeter of POS with a sporting function
- POS may not be fenced or bollarded where emergency access is required for fire management
- Access control needs to be considered for emergency or event applications, ensuring allowance for a safe route

Lighting

Lighting provides a safer environment for park users and also allows for extended use of sporting facilities, particularly during the winter months.

Lighting within POS areas shall be considered on a case by case basis as it is not always necessary to provide POS usage beyond daylight hours.

Specifications for Lighting include the following:

- Within recreational POS or public access ways lights shall be installed on poles with preference given to the use of sustainable and vandal proof lighting to Australian Standards for passive lighting
- Within District and Regional Sporting POS, lights shall be designed in accordance to Australian Standard LUX requirements for varying sports training standards



Playgrounds

Playgrounds should be relevant to the intended function and classification of the park. For example, ROS and DOS areas may feature a range of challenging play spaces, targeting all age groups and abilities, whereas NOS and LOS areas may feature a smaller playground reflective of the requirements of the local area.

Specifications for playground include the following:

- Equipment to be located within one general area
- Seating and connecting pathways to be adjacent to each playground
- Shade options including natural (trees/greenstock) and constructed options (shade sail and shelters)
- Playground design and softfall shall be compliant with Australian Standards; softfall shall be pinebark mulch, rubber or white washed sand with a hardscape edge (e.g. pathway or kerbing)
- Disability inclusion and sensory play shall be considered for all playgrounds
- A diverse range of play opportunities which cater for a range of interactive activities including climbing, balancing etc
- A diverse range of play styles including nature play or structured play (nature play is defined as loose parts play and modifiable environments)

Bins

Rubbish bins are considered on a case by case basis and are to be located in areas that are heavily frequented by picnickers, in association with BBQ facilities or other functions which may generate a significant amount of waste.

Specifications for bins include the following:

- 120L or 240L plastic wheelie style bins are preferable
- Bins shall be enclosed in a metal bin enclosure where practicable
- Located on a concrete hard-stand or equal
- Alternative metal bin types will be considered where they fit into the local theme.

Dog Bins

Dog bins will be considered for installation on a site by site basis and/or as driven by community needs from time to time.

Dog bins are installed in dedicated dog exercise areas. Dog waste bags can be attached to general waste bins within NOS or DOS sites where dogs are permitted to access the park.

Specifications for bins include the following:

- 120L or 240L plastic wheelie style bins are preferable
- Bins shall be enclosed in a metal bin enclosure where practicable
- Located on a concrete hard-stand or equal
- Alternative metal bin types will be considered where they fit into the local theme
- Bins shall be located where they can be easily accessed by maintenance staff
- Dog waste disposal bags shall be stored in a metal dispenser mounted on to bin pole or separate pole

Seating

Strategically placed park seating may be placed in areas within the POS for quiet contemplation, viewing or as a gathering space. Seats also provide space to eat within a picnic or shelter node as well as a convenient resting point near playground areas to allow for supervision.

Seating is generally considered for use in parks adjacent to active and passive play areas and along paths. The majority of public open spaces shall include seating.

Specifications for types of seating include the following:

- All seating is to be constructed of steel, aluminium, timber or composite
- Seating shall be installed with above or below ground fixings where possible, on a concrete hard stand
- Seating shall have armrests and backrests to accommodate DAIP requirements
- Style of the seating can vary greatly and will be chosen in order to best suit the intended function within the POS, with consistency within one area preferable



Shelter

Shelter structures generally provide shade from the sun and protection from inclement weather. Shelters will generally be considered within NOS or DOS where practicable.

Specifications for types of shelters include the following:

- All shelters shall be constructed of steel or aluminium (the City's preference is for the steel to be galvanised then powder-coated)
- Shelters shall be set on a hard-stand pad (e.g. unit paving or insitu concrete)
- Shelters shall be installed with below ground fixings where possible
- Shelters shall be structurally certified by an accredited engineer and will require City of Armadale Building Approval prior to installation

Public Toilets

The City will consider installing public toilets in DOS sites in areas which have BBQ facilities, extensive recreation spaces or sites of frequent public sporting activity which invite a longer stay.

The City has a Public Toilet Strategy which further guides the design and implementation of public toilets.

- When considering toilets for parks or in response to a community request, the City will refer to the City of Armadale Public Toilet Strategy 2013



BBQ

The City may consider installing BBQs in NOS or DOS sites adjacent to community recreation spaces such as kick-about or playground facilities. BBQs are preferably co-located with other functions as a focused node for family or community gatherings.

Specifications for BBQs include the following:

- Electric, consisting of either brick or aluminium panels
- Either single or double cooktop
- Located on a concrete hard-stand or equal
- Generally located in conjunction with a bin, picnic area and drink fountain
- Accessibility to be considered
- The inclusion of a water supply with a vandal proof tap may be required to facilitate cleaning of the area

Drink Fountain

The City will consider installing drink fountains in areas that are adjacent to BBQs and picnic hubs, sporting spaces and dog parks.

Specifications for drink fountains include the following:

- Constructed of either steel or aluminium
- Drink fountains are to be designed and located so that they are accessible to people of all abilities
- A dog bowl attachment is preferred (the bowl shall be tilt-able in order to prevent sitting water in the dog bowl)
- Drainage is to be considered (either a soak well or a connection to an outlet)
- Drink fountains to be installed on a hardstand
- Drink fountains to consider providing bottle filling stations

Shade Sail

Strategically placed shade sails provide shelter from the sun. In exposed open spaces, the City will consider the installation of shade sails to provide shade to playgrounds, picnic spaces or amphitheatres.

Specifications for shade sails include the following:

- Metal poles shall be used
- Shade sails should provide a high level of UVR protection
- All free standing structures greater than 1000mm high shall require structural certification by an accredited engineer
- Building approval is to be issued by the City prior to installation
- The lowest point of the shade sail should be installed at 2.5m above the tallest part of the equipment installed underneath

Art

The City has a Public Art Strategy which further guides the design and installation of art in public spaces.

- Refer to the City of Armadale Art Strategy 2016 for further detail



Hardcourts

Hardcourts within open parkland provide an opportunity to engage the community in active outdoor play and provide space for a number of sporting pursuits within one resource. Hard courts could include:

- Tennis courts/badminton
- Multi-court
- Basketball/netball
- Cricket nets
- Hit-up walls
- Table tennis
- 5-a-side soccer
- Access for people with disabilities and all age groups shall be considered when selecting equipment

Specifications for hard courts include the following:

- The surface may vary depending on intended usage (surface options include insitu poured concrete, asphalt, plexi-pave or similar, the surface shall be hardwearing)
- Where line markings for different sports are installed to provide maximum play value, the line marking shall be in accordance with the DLGSC Dimensions Guide for Playing Areas
- Equipment such as nets/rings etc may vary, however all elements are required to be fixed (not removable) and this needs to be considered throughout the design process

Fitness

Exercise space and fitness equipment promotes a sense of well-being. It encourages a healthy and active lifestyle for residents within the community.

Exercise spaces are permitted in DOS sites and will be considered for conditional inclusion in NOS and LOS sites.

Specifications for exercise spaces includes the following:

- Equipment shall be installed as per manufacturers' specifications, including any required fall zone and associated fall zone material
- The City's preference is for static rather than moveable exercise equipment be installed



12+ Youth Activity Spaces

Youth spaces include local facilities that provide a setting where young people, between the ages of 12 and 25, can engage within a safe positive social environment, recreate and develop new skills.

Youth spaces can stand alone as independent spaces young people can access, engage with and recreate, though can also be activated with a range of youth oriented programmes, workshops, events and activities. Some traditional examples of youth spaces within POS include but are not limited to skate parks, parkour spaces and pump tracks. Youth spaces evolve over time to cater for the community's needs.

The placement of youth spaces within the City shall allow for passive surveillance and should consider the surrounding environment, as well as servicing requirements (e.g. power and water, car parking and access). Youth spaces can vary in scale and should be installed within parks reflective of the function and classification of the park. For example, ROS and DOS areas may feature a destination youth space where transport links and additional facilities such as carparking, lighting and toilets are critical. NOS and LOS parks may feature a combination of small, informal elements, such as skateable paths, which provide an engaging local space with the expectation of a shorter visitation timeframe.

In particular, the following criteria should be considered when planning for youth spaces:

- Youth spaces require the direct buy-in by the end users and the best examples of youth spaces are usually spaces which have been designed and located through extensive end user engagement (a co-design process is

integral to determine community interest and predict community use post creation)

- Youth activity spaces would typically be associated with other asset types including but not limited to drink fountains, shade/shelter, passive seating and landscaped areas, and would support and promote connectivity to surrounding areas
- Space is particularly important; sufficient space would need to be available for the proposed facility, fall zones, hangout viewing areas or separation zones to hazards such as roads, buffering noise pollution

Considerations regarding the location of youth spaces include:

- Within easy walking distance of public transport
- Easy access to roads and car parking
- Passive surveillance in-line with CPTED principles and nearby active spaces such as schools, playgrounds, shops or sporting pavilions
- Sufficient physical space
- Separation from residential areas for noise complaints
- Easy access or sight-lines to other facilities such as toilets, picnic areas, water, shade and shelter
- Within proximity to other youth facilities, to allow friends to participate in various activities within one precinct
- Located on cycle network
- Lighting for safety, perception of safety and accessibility for optimal facility use

It is critical that young people feel a sense of ownership of the space to ensure the space is used effectively and for its intended purpose.



Community Garden

A community garden is defined as land cultivated collectively by a community-led group for the purposes of food production and recreational gardening.

Community garden provision will be driven by community needs.

Considerations regarding the location of community gardens include:

- Sufficient physical space
- Separation from residential areas for noise and pest complaints
- Provision of other facilities such as power, carparking, public transport, toilets, storage and shelter
- Provision of water for irrigation
- Orientation for sunlight, wind and existing soil conditions or topography
- Safety and security

Community gardens require direct buy-in by the end users. When considering requests for community gardens, the City will refer to the Council Policy COMD 9 – Community Gardens and the associated Management Practice, as well as the 'Community Gardens Toolkit' document.

Men's Shed

Men's Sheds are a social enterprise that creates value within the community. They focus on improving men's health and wellbeing through building programs that achieve desired health outcomes. They are a place for men to socialise and be actively involved in the community.

Considerations regarding the location of Men's Sheds include:

- Sufficient physical space
- Separation from residential areas for noise complaints
- Provision of other facilities such as carparking, public transport, toilets, storage and water
- Safety and security

Men's Sheds are typically not suited to be located within parklands and given their specific requirements, community infrastructure sites are more suitable for this purpose.



Off Leash Dog Facilities

Off leash dog facilities provide a safe exercise area for off leash play and social interaction.

The placement of dog parks shall allow for passive surveillance and should consider the surrounding environment, including noise pollution, pedestrian connectivity, car parking and access. As such, off leash dog facilities are mostly suitable for larger recreation spaces.

In particular, the following criteria should be considered for off leash dog facilities:

- Minimum size – varies on the size and location (an overall size of 3,000m² should be considered the minimum, excl. parking)
- Car parking – this varies depending on the existing site parking conditions and the anticipated size of the off leash dog facility
- The site should contain three separate 1.6m high fenced dog areas, with double gated entry per area (the type of fencing for each area should be customised to cater for smaller or larger dogs)
- Maintenance access gates to the perimeter for each area and between the separate areas are to be provided
- Pedestrian access gates between the separate areas are to be provided
- Double ‘air-lock’ style gates are to be provided at the entrance of each area
- Signage for education and information purposes are to be installed
- Dog agility elements should be considered
- Shade should be provided by trees and/or shade sails
- Provide a minimum of one per each zone
 - Drink fountain with tilting dog bowl
 - Bin with dog bag dispenser
 - Seating

- The location of the required elements is to be considered from a maintenance and usability perspective
- Irrigated turf is to be provided
- Variable surfaces such as grass, paving, sand and mulch only areas for dog play and tactile simulation should also be included

Irrigation

Irrigation supports the health and longevity of trees, shrubs and turf and is vital given our hot summer and dry climate.

Irrigation may be installed in all open space areas as required, excluding streetscapes and nature reserves, which may be installed on a conditional or temporary basis. All requests for irrigation shall be considered against the City’s local water sub-area operating strategy, availability of a ‘fit for purpose’ non-potable or potable water source as approved by DWER.

The City will not approve dry parks within new residential areas without evidence of extensive exploration into irrigation options.

- Irrigation shall be sourced from a sustainable source
- Specifications for irrigation design and installation include the following:
 - *City of Armadale - Standard Specification Irrigation System Design and Installation*
 - *City of Armadale - Standard Specification for Bore, Pumps Headworks and Electrical Cubicles*

Trees

Trees comprise a part of the landscape. They provide shade from the sun and reduce the heat island effect by lowering air temperature and increasing humidity.

Given the importance of trees within the landscape, they are permitted to be installed throughout all different classifications of parks within the City. Trees are strategically designed into a landscape to complement the aesthetics of the existing area, while taking into consideration the requirements of the local community.

Exotic and native trees will be considered in the landscape depending on their appropriateness for the associated park function.

All bio-retention areas, rain gardens, living streams, basins, etc require over story tree planting to assist in the protection of the younger lower planting below and to increase the water uptake when the appropriate tree species is selected.

Trees are required to be installed in all car parking areas if possible and within areas of parallel parking. Trees may require root barriers to protect against damage to kerbs or roads.

The City will consider any tree proposed within public open space areas as tree selection is specific to a site and a standard list may prohibit biodiversity. There is a complex list of street trees within the City’s Urban Forest Strategy. Refer to this document for additional information.



Planting

Plantings can provide food and shelter for local fauna within the area. They are also aesthetically pleasing and create a sense of place within the landscape. Planting may also provide a nutrient stripping function in areas for water treatment.

Shrub planting will be considered for all landscape classifications.

Specifications for planting include the following:

- Soil shall be amended where required, to ensure the planting medium is of a high standard
- Mulch shall be chipped pine bark mulch to Australian Standards (site mulch not accepted) and is to be a minimum of 75mm deep
- Plants shall be sourced from an accredited plant nursery and planted as per standard horticultural practices



Scheduled Sports

Active turf spaces or dedicated sporting infrastructure for scheduled sports will be predominantly installed in NOS, DOS and ROS for the purpose of providing playing spaces for local sporting clubs. In some cases these facilities will be co-located with adjacent Department of Education sites and a dedicated Shared Use Agreement will be required.

Scheduled sports can include, but are not limited to:

- Active turf playing fields for cricket, soccer, AFL or baseball, including associated infrastructure such as goals, training nets, wickets and protective wicket matting
- Tennis, basketball or netball hardcourts

Specifications for active turf fields include:

- City of Armadale Specification for the Design and Installation of Sports Ovals and Surrounds
- City of Armadale Active Public Open Space guidelines (currently in draft format)
- Grass type to be C4 warm season kikuyu 'Village Green'

Kick-about space

Area of turf for passive and active informal uses provide the community with opportunities for unscheduled recreation. This may range from two people kicking a soccer ball to a social game of soccer.

Specifications for kick-about turf should meet the following criteria:

- Irrigated
- Located above the 1:5 top water level
- Minimum clear width 20m by 20m
- Vehicle accessible for ongoing maintenance
- Cluster tree placements and bollards in nearby garden beds out of turf areas to reduce maintenance
- Turf to be kikuyu grass or equal approved variety

Water Sensitive Urban Design (WSUD)

WSUD involves planning and designing urban areas in order to manage and make use of runoff from rainfall events. The water may discharge into rain gardens, bio-retention basins, overland flow or conveyance swales.

Site specific soil amendment and site specific planting is required for each WSUD area to ensure there is sufficient water nutrient management. These elements form part of a broader drainage function and need to be considered from a drainage function along with nutrient stripping function.

- Refer to the City's Water Resource Management for Land Development Position Paper for further information

Facilities Matrix

The Facilities Matrix is a visual representation of the average provision of infrastructure per POS type and function, as currently provided within the City.

POS Classification	Size Ha	Facilities																								
		Access Control	Lighting	Play	Bin	Dog Bin	Seating	Shelter	Public Toilet	BBQ	Drink Fountain	Shade Sails	Art	Hard Courts	Fitness	Youth	Community Garden	Men's Shed	Dog Park	Irrigation	Trees	Planting	Scheduled Sports	Kick-about	WSUD	
DOS	8.4	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NOS	Recreation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Nature	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
LOS	Recreation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Nature	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Y - Yes usually included
 N - Not usually included
 C - On site by site basis



Analysis

Like for Like Comparison

The following section compares existing POS infrastructure against the average as determined through the benchmarking phase to identify potential gaps.

The following section features:

- A facilities assessment, where a value is applied to the type of facility to generate an overall park facilities score for each category
- A facilities score assessment summary which provides a summary of the facilities within each suburb, highlighting suburbs with a lower facility score
- Discusses identified gaps in areas where the provision of additional facilities could be considered





Facilities Score

The facilities assessment template applies a number value to the type of facility to generate an overall park facilities score.

The Score

A score has been determined for each type of facility. This score will vary by the classification of POS the facility may be located in. The score varies by the average provision of the facility in each classification and the typical installation, maintenance and renewal costs.

For example, a footpath is generally included in all POS classifications and is an economical inclusion, therefore it is generally given a score of 1 in all classifications.

A drink fountain is a specialist item and is costly to install, renew and maintain. Therefore it is given a higher maximum score in the classification it would usually be considered acceptable.

Should a facility be deemed a conditional inclusion for the POS Classification, a maximum score of 1 would be applied.

Should a facility be deemed inappropriate for the POS classification, a score of 0 would be applied (i.e. a grass kick-about space within a dedicated nature reserve).

The Assessment

This provides a basis to compare like for like across the City, identify facility gaps in individual parks and highlight overall suburbs where the provision of facilities could be increased.

Facilities Assessment Template

POS Classification	Pathways	Bridges	Signage	Car Parking	Access Control	Lighting	Play	Bin	Dog Bin	Seating	Shelter	Public Toilet	BBQ	Drink Fountain	Shade Sails	Art	Hard Courts	Fitness	Youth	Community Garden	Men's Shed	Dog Park	Irrigation	Trees	Planting	Scheduled Sports	Passive Turf	WSUD	100%						Max Score	Percentage
																													120	106	18	93	76	19		
DOS Sport	1	1	1	10	1	10	10	1	1	1	10	10	10	10	5	1	5	1	1	1	1	1	1	5	5	10	5	1	120							
DOS Recreation	1	1	1	10	1	10	10	1	1	1	10	10	10	10	5	1	5	1	1	1	1	1	10	5	5	0	5	1	106							
DOS Nature	1	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	1	18							
NOS Sport	1	1	1	10	1	10	10	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	10	5	5	10	5	1	93							
NOS Recreation	1	1	1	1	1	1	10	1	1	1	10	1	10	10	5	1	5	1	1	1	1	0	0	5	5	0	5	1	76							
NOS Nature	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	1	19							
LOS Recreation	1	1	1	1	1	0	10	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	5	5	0	5	1	45								
LOS Nature	1	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	1	17								



Suburb Averages

Every park within the City has been assessed utilising the same facilities assessment template.

These scores have been converted to a percentage and summarised to create an average suburb profile per POS classification.

Anomalies

It should be noted that not all parks fit the classifications perfectly and this has led to some facility scores that could be considered a misrepresentation.

Some parks are specialist spaces and the function does not always fit the standard description or facility provision the score is based on.

Whilst the assessment template provides an average for the comparison between parks, there will always be a need to consider facilities on a site by site basis.

For example, Palomino Park is a specialist sporting space for horse riding and does not fit the standard description for a District Sporting POS. Other example spaces that do not fit the standard description are Karragullen Hall or Bedforddale Hall as their primary function is a community building rather than a neighbourhood parkland setting. The strategy is not intended to address community buildings and associated infrastructure, these will be addressed through a separate master planning exercise.

Facilities Average by Suburb

POS Classification	Suburb																	
	Average	Harrisdale	Para Waters	Hilbert	Forrestdale	Champion Lakes	Haynes	Brookdale	Wungong	Seville Grove	Camillo	Armadale	Kelmscott	Mt Nasura	Mt Richon	Bedforddale	Roleystone	Karragullen
Sport	62%	93%			45%	31%*				54%		61%	68%				80%	54%
Recreation	78%		87%									70%						
Nature	76%								78%				76%					
Sport	65%												71%					47%
Recreation	56%	89%	72%							47%	63%	66%	54%	28%			53%	8%*
Nature	89%	89%								95%	84%							
Recreation	55%	77%	62%			79%		57%		56%	43%	42%	42%	49%	31%			38%*
Nature	60%	79%	79%	65%	65%	88%		35%	53%	47%	76%	36%	66%	57%	55%	65%		53%

- Within 25% +/- of average
- Below average
- Above average
- Not Applicable

*Includes parks that could be considered an anomaly



Improvements

Gaps for Consideration

As noted in the previous section, some POS classifications within certain suburbs may have a below average provision when compared like for like to other suburbs. Anomalies and site by site issues must be taken into consideration however it is evident that some suburbs generally have an overall below average provision.

In addition, some of the suburbs noted will face an increasing population through new development or infill residential housing. Research has been undertaken by Forecast.id to predict the City's growth up to 2036. It is anticipated that the suburbs may increase in population by the following percentages:

- 1170% Haynes
- 972% Hilbert
- 401% Forrestdale
- 264% Champion Lakes
- 118% Piara Waters
- 46% Brookdale/Wungong
- 34% Harrisdale
- 28% Armadale
- 27% Camillo
- 27% Kelmscott
- 14% Seville Grove
- 9% Bedforddale/Ashendon
- 9% Roleystone/Karragullen/Lesley
- 7% Mount Nasura/Mount Richon

Many of the developing suburbs such as Haynes and Hilbert will have additional POS provided under the subdivision process to meet the community demand. However in existing suburbs such as Kelmscott and Armadale, the provision of additional POS will not be possible due to a lack of available space.

Therefore in addition to the below average provision, population growth and density has also been a considered factor in developing the following improvement plan.



Park Improvement Plan

In order to further consider the POS requiring improvements, all existing POS were subject to additional assessment according to specific criteria and weighting as outlined below.

Criterion One - Facility Score

Under the analysis section, each park was given a facility score, derived through comparison to similar parks. The lower the facility score, the higher the criterion score.

Criterion Two - Need

This criterion considers the estimated population increase predicted over the next 15 years and the implications this will have on existing POS. It also considers the overall suburb facility score, comparing the level of facilities and similar POS provided within the area, to give an estimate of need.

Criterion Three - Availability of Funding

This criterion considers what funding is currently available to undertake improvement works, with priority given to projects which have existing funding opportunities.

A Note on Funding

The PIP takes into consideration existing approved or potential funding sources such as Capital or Renewal funds, POS Strategy funds, Cash-in-Lieu, Grants or Developer Contribution Plan funds.

It is important to note these funding streams are only potential sources and each funding source may require a separate approval process.

Criterion Four - Asset Condition

This criterion considers the existing asset condition noting the life, condition and functionality of the assets provided. Should the assets be fit for purpose and in good condition, then a low criterion score is applied.

Assessments for all the parks can be found in the appendix.

Key projects have been identified and form the key elements of the Park Improvement Plan (PIP).

Each of the key projects will be subject to detailed analysis and design as well as social planning mechanisms to ensure that the focus is centred on community use.

The next stage of the PIP will be to create an operational implementation plan to map out the proposed improvement works, timeframe and review the cost and funding sources.

Park Improvement Plan - Top 25

Park Name	Scores 1-5					Asset Condition	Total Score, Max 20	Weighted Scores					Potential Funding Sources				
	Facility Score	Need	Availability of Funding					Facility Score	Need	Availability of Funding			POS Strategy	POS Cash In Lieu	Capital	Grants	DCP
			1. Significant (80-100)	2. Above Average (60-80)	3. Average (50-60)					4. Minor (25-50)	5. Low (0-25)	1. Nil					
William and Alfred Street Reserve	4	2	4	4	4	4	14	24	12	8	24	68.00	10	✓	✓	✓	
Harber Park	4	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Flematt Park	5	4	5	5	5	5	19	30	24	10	30	94.00	1	✓	✓	✓	
Ashworth Park	4	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Ashworth Park 2	4	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Tuckle Park (part)	4	3	3	3	3	3	13	24	18	6	18	66.00	24	✓	✓	✓	
Barry Road Reserve	4	3	3	3	3	3	13	24	18	6	18	66.00	24	✓	✓	✓	
Corondale Park (Part)	4	3	3	3	3	3	13	24	18	6	18	66.00	24	✓	✓	✓	
Corondale Park (Lemond Way)	5	3	3	3	3	4	15	30	18	6	24	78.00	3	✓	✓	✓	
Unnamed Park (Lemond Way)	4	4	4	4	4	2	13	24	24	6	12	66.00	24	✓	✓	✓	
Morgan Park	4	4	4	4	4	4	15	12	24	10	24	70.00	9	✓	✓	✓	
Memorial Park	2	4	5	4	4	4	14	18	24	8	18	68.00	10	✓	✓	✓	
Minawarra Park	3	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Wilcanna Toongabbie park	4	4	1	1	1	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Dawson Reserve	4	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Pelham Reserve	5	4	4	4	4	3	13	30	24	2	18	74.00	7	✓	✓	✓	
Alderson park	4	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Bavich Reserve	5	4	4	4	4	4	13	30	24	0	24	78.00	3	✓	✓	✓	
Dameham Park	4	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
George Foster Reserve	4	4	4	4	4	3	12	24	24	2	18	68.00	10	✓	✓	✓	
Clements Park	5	4	4	4	4	3	13	30	24	2	18	74.00	7	✓	✓	✓	
Robin Park	5	4	4	4	4	2	14	30	24	2	24	80.00	2	✓	✓	✓	
Mogo Park	5	4	4	4	4	2	12	30	24	2	12	68.00	10	✓	✓	✓	
Migrant Park	5	3	3	3	3	3	16	30	18	10	18	76.00	5	✓	✓	✓	
Erica Street Park	5	3	3	3	3	4	16	24	18	10	24	76.00	5	✓	✓	✓	
Gemsara Park	5	3	3	3	3	3	12	30	18	2	18	68.00	10	✓	✓	✓	
Tredale Park	5	2	2	2	2	3	13	24	18	6	18	66.00	24	✓	✓	✓	
Colberia Park	5	2	2	2	2	3	13	30	12	6	18	66.00	24	✓	✓	✓	
Woodcroft Park	5	2	2	2	2	3	13	30	12	6	18	66.00	24	✓	✓	✓	
Woodcroft Hall	4	3	3	3	3	4	12	24	18	8	24	68.00	10	✓	✓	✓	
BenBacula Park	3	3	4	4	4	4	12	18	18	8	24	68.00	10	✓	✓	✓	
Tredale Park	4	3	4	4	4	4	15	24	18	8	24	74.00	7	✓	✓	✓	



Conclusion

The Parks Facilities Strategy has identified how the City's POS could be created, developed and renewed over the next 15 years. The document has set a standard for parks within the City providing definitive guidance for developers, staff and Council.

The strategy has determined 25 key projects which will be reviewed on an annual basis to determine the most appropriate funding source and applicable project at the time.

Recommendations

	Recommendation	Responsibility
1	Adopt the standard POS outlined in this strategy as a guideline for future development	CoA, State Government, Developers
2	Adopt the standard facility provision as outlined in this strategy as a guideline for future development and park improvements	CoA, State Government, Developers
3	Adopt the PIP and develop operational implementation plan. Note the priorities when considering future capital budgets, POS Strategy funds, Cash-in-Lieu, Grants or Developer Contribution Plan funds.	CoA



Appendix

Appendix A - Park Base Information	50
Appendix B - Full Assessment List PIP	55

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