



COMMUNITY INFRASTRUCTURE STRATEGY:

SPORTS LIGHTING INFRASTRUCTURE



SPORTS LIGHTING INFRASTRUCTURE

The provision of quality sports lighting is integral when planning sport and recreational pursuits on City parks and reserves. Community sports lighting infrastructure allows reserves to be utilised safely for extended periods of time for training, match play and for recreational pursuits outside of the structured sporting environment. The typical provision includes four floodlight poles per playing field. Sports lighting has improved considerably over the last decade, with technology improving rapidly. These advancements, coupled with reviewed Australian Standards, has enabled better lighting with improved sustainability outcomes and reduced impacts to the community.

There are limited Regional, District and Neighbourhood active reserves within the City that are suitable to service projected increases in sports participation, sporting clubs and population growth. It is evident that increasing player participation across a number of active sports (i.e. football, soccer, cricket etc.) intensifies the demand on and utilisation of our active reserves and associated infrastructure. Contemporary sports lighting is one way in which the City can cater to the increased demand on our existing active reserves, by extending the play or utilisation time on each reserve beyond periods of daylight, with consideration of carrying capacity of the turf.

CURRENT DELIVERY

The City has 15 active sporting reserves, 14 of these provide basic sports lighting for local community sports activities. Five reserves have sports lighting sufficient to cater to amateur level club competition standards.

In addition to sports lighting on active reserves, a number of other City facilities include sports lighting as part of their tenancy arrangements, including bowling clubs and tennis clubs.

The City has a forward plan for the provision of code-standard sports lighting across its active reserves and has been proactively upgrading sports lighting for a number of years. The City has recently moved to a minimum 100 LUX provision as the base standard for its new sports lighting infrastructure.

Improved sports lighting across our active parks and reserves allows clubs to utilise public open spaces more safely and for longer periods of time. It also allows clubs to maximise their use of reserves and rotate high use areas, such as goal squares, more effectively thereby allowing damaged areas of turf more time to rest, and the City the ability to more effectively manage the reserve.

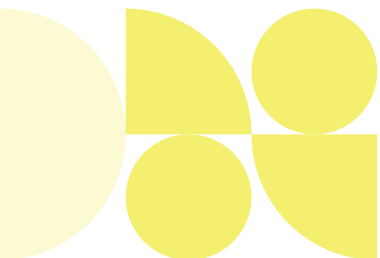
Summary of Active Sporting Reserves

Lux Levels	Number of Active sporting spaces - Total 16
Less than or equal to 50 LUX – training	11
100 LUX or above - competition	5

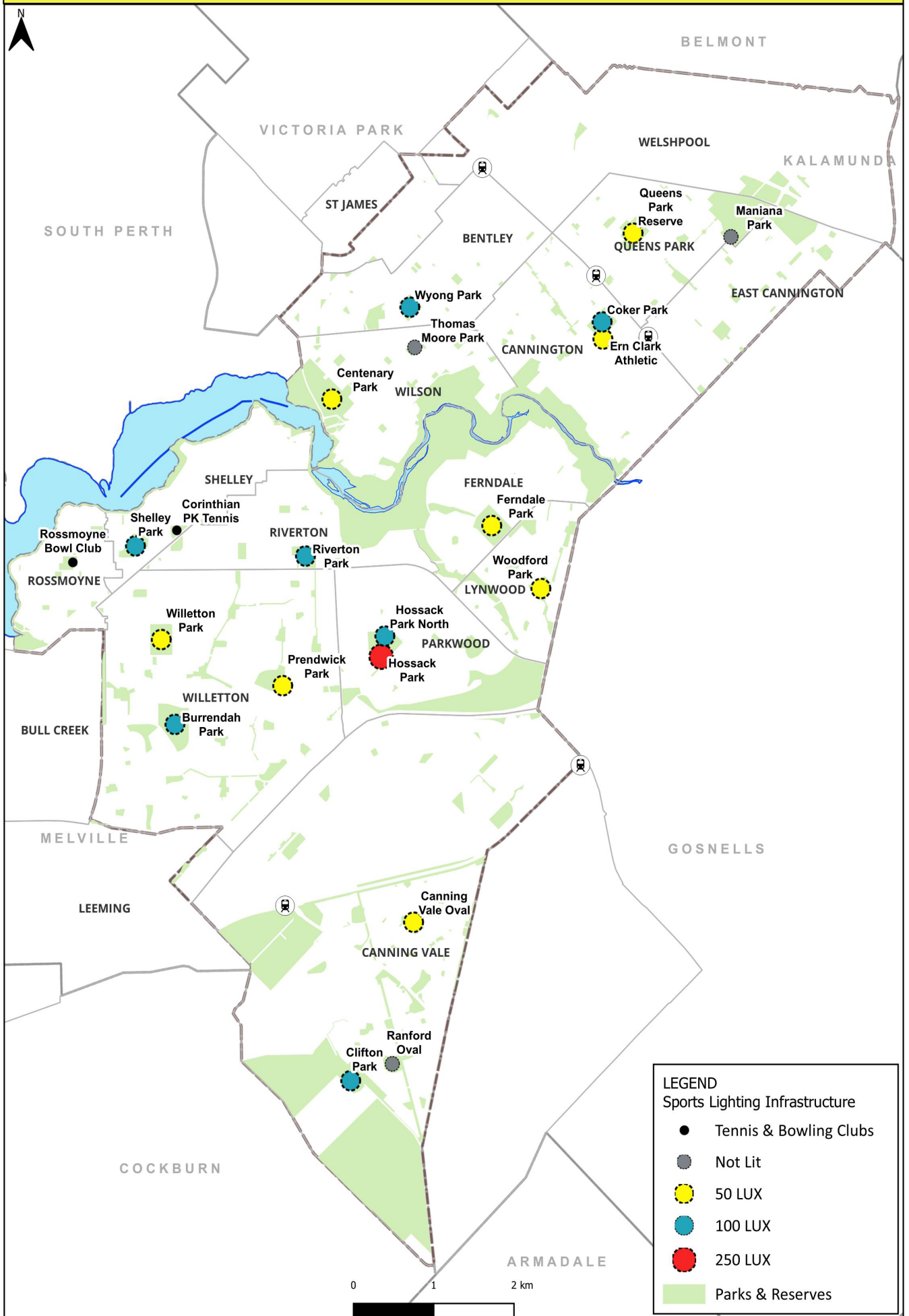
City of Canning Sports Lighting Sites

#	Reserve Name	Use	Pole #	LED Y/N	LUX LEVEL
1	Burrendah Reserve	Active Sports	14	Y	50/100 lux switchable
2	Centenary Park	Active Sports	2	N	≤ 50
3	Clifton Park	Active Sports	4	Y	100 (Installed by Club)
4	Coker Park	Active Sports	8	Y	50/100 lux switchable
4	Coker Park - Ern Clark Reserve	Active Sports	6	N	≤ 50
5	Ferndale Park	Active Sports	6	N	≤ 50
6	Hossack Reserve - North	Active Sports	3	N	50/100 lux switchable
6	Hossack Reserve - South	Active Sports	15	Y	300/150/50 lux switchable
7	Maniana Park	Active Sports	0	N/A	no lights
8	Prendwick Park	Active Sports	3	N	≤ 50

#	Reserve Name	Use	Pole #	LED Y/N	LUX LEVEL
9	Queens Park Reserve (Harry Turner)	Active Sports	4	N	≤ 50
10	Riverton Reserve	Active Sports	4	Y	100 lux
11	Shelley Park	Active Sports	8	N	100 lux
13	Willetton Park	Active Sports	6	N	≤ 50
14	Woodford Park	Active Sports	4	N	≤ 50
15	Wyong Park	Active Sports	4	Y	250/150/50 lux switchable
Education Department Land - shared use agreement					
18	Ranford Reserve	Active Sports	0		
19	Canning Vale Reserve	Active Sports	8	N	≤ 50
Other Sports Lighting Across the City					
1	Burrendah Reserve	Willetton Tennis Club, Lease	8	N	No measurement available
2	Burrendah Reserve	Willetton Bowling Club - Lease	6	N	No measurement available
3	N/A	Corinthian Park Tennis Club - Lease	15	Y	No measurement available
4	Chapman Reserve	Tennis Courts	9	Y	No measurement available
5	Whaleback Park	Whaleback Tennis Courts	8	N	No measurement available
6	Ranford Reserve	Tennis courts	0	N/A	No measurement available
7	Ferndale Park	Hockey 1/4 field	2	Y	No measurement available
8	Shelley Park	Netball courts	8	N	No measurement available
9	Rossmoyne Bowling Club	Lawn Bowls	8	N	No measurement available
10	Wyong Park	Cricket nets	4	Y	400 LUX



SPORTS LIGHTING INFRASTRUCTURE



CASE STUDIES

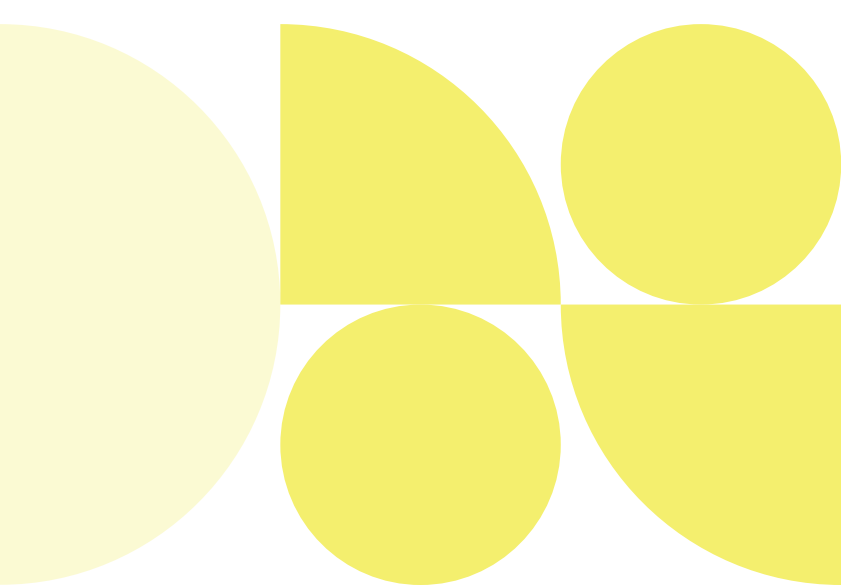


Installed lighting at Burrendah Park, Willetton

BURRENDAH PARK, WILLETTON

Burrendah Park is a large district park that features three sports ovals and caters to a diverse range of users. Recent upgrades have improved the sports lighting infrastructure across all three ovals, meeting suitable levels for both training and match play.

The park now has quality lighting for training and match play. These lights will also enhance the overall lighting for the community's unstructured pursuits like walking, running and dog walking .



CASE STUDIES



Installed lighting at Hossack Park, Parkwood

HOSSACK PARK, PARKWOOD

Hossack Park serves as the home venue for two sporting codes soccer and softball, with a split-level layout that sees year-round activity. The park's sports lighting has recently undergone an upgrade, reaching the City's highest standard.

The upper level is now lit to softball-specific lighting at 300 LUX, and plans are in place to upgrade the lower level to 100 LUX, switchable to 50 LUX for training. Low LUX levels for unstructured activities outside of sporting hours are also included in both the upper and lower areas.

INDUSTRY PROVISION RATES AND BENCHMARKING

Sports lighting across the state is being delivered at a higher standard to cater for additional use, changing trends, and increased expectations around safety. The table below outlines the Australian Standards associated with each of the major sports. These standards were last reviewed in 2021.

Parks and Leisure Australia, Western Australia (PLA WA) recommends that generic open space for the provision of grassed sporting infrastructure be flexibly used to incorporate seasonal use. This includes the provision of a minimum standard of sports lighting to a training standard.

Australian Standards AS 2560.2:2021

	Training (Ball and Physical Training)	Club Competition and Match Practice	Semi professional
AFL and Soccer	50 LUX	100 LUX	200 LUX
Cricket	100 LUX	200 LUX	300 LUX
Softball	300 LUX	300 LUX	750 LUX
Baseball	300 LUX	500 LUX	750 LUX
Hockey	200 LUX	300 LUX	300 LUX
Lawn Bowls	100 LUX	100 LUX	200 LUX
Tennis	250 LUX	250 LUX	750 LUX

*softball/baseball figure are infield only

A review of the lighting provision standards of nearby Local Government Authorities (LGAs) shows a fairly consistent approach to the upgrading of sporting lights and implementing new provisions to Australian Standards for large ball training (Ball and Physical Training). This is in line with safety recommendations, access to grants, and state sporting association requirements.

Other LGA Lighting Provision Standards

LGA	Approach To Floodlights	Comments
City of South Perth	Support and fund to a large ball training (Ball and Physical Training)	Requests for higher than training standards club contribution required to fund the difference
City of Armadale	Support and fund large ball training (Ball and Physical Training)	Requests for higher than training standards external funding required to cover the difference
City of Melville	Generally Support and fund to a large ball training (Ball and Physical Training)	
City of Stirling	Supply up to a max of 100 LUX	

TRENDS

Sports lighting generally aims to improve the provision of lighting for all active sporting reserves utilized by Clubs. Common trends include:

- An overall increase in the quality of sports lighting provision, in alignment with relevant Australian Standards.
- Greater understanding of the management of sports clubs by LGAs, leading to greater access to sports lighting controls for sports club.
- A recognition of the increased need for additional lighting, due to changing family/social structures, a move away from structured sports for ad-hoc physical activity, and changing work habits resulting in an increased need to be able to safely utilise these spaces early in the morning or late in the evening.
- An increasing demand for evening training and competition.
- Increasing infrastructure requirements from state sporting associations, especially for soccer at premier league levels (NPL).
- The introduction of improved lighting technology, including light-emitting diode (LED) lights. These are capable of reducing energy consumption, have an increased lifespan, decreased maintenance requirements, greater control over light brightness, and decreased light spill and glare

THE FUTURE

In line with the recent changes to Australian Standards for sports lighting, increasing usage trends, changing technology and a general desire to support active healthy lifestyles and safe community participation across a range of active and passive sports and activities, the City will continue to upgrade and improve sports lighting across the City to a minimum large ball, competition and match practice standard (100 LUX).

The provision of sports lighting is highly focussed on sports during the winter sporting season as the daylight hours are significantly reduced and sports lighting is required for safe play. This means that the highest users of sports lighting are football and soccer (large balls sports).

As such, there is a need to consider the installation of club competition and match practice standard lighting for large ball sports on active sports reserves across the City, in accordance with the Australian Standard. Sports lighting above 100 LUX may be considered on a case-by case-basis, where sporting codes lighting standards are above 100 LUX. However, this is on an as needs basis and where it is supported by a robust needs assessment, with external financial contributions required.

Floodlighting provision, replacement and maintenance on leased sports spaces, such as Bowling Clubs and Tennis Clubs, are determined by lease agreements. Those sporting clubs and their associated facilities operating under a lease agreement on land under the City's care and control may consider applying for relevant grant funding towards their project costs. However, this must be done in collaboration with the City and in response to identified need and the development of a business case.

It should be noted that current grant provisions (namely the Department of Local Government Sport and Industries' Club Night Lights Program), requires the relevant local government to contribute a third of the required funding. As such, the City will need to consider such projects on an as needs basis, and will only contribute towards sports lighting to Australian Standards for large ball sports (i.e. amateur level - 100 LUX). This approach is considered fair and reasonable, with the more exclusive nature of leased clubs and their sports lighting. Leased clubs have increased revenue generation opportunities and there is a decreased benefit to the community when compared to active sports reserves.

PROVISION STANDARDS

City of Canning Sport Lighting Provision Standards

Lighting Levels	Location	Funding Source
100 LUX	All active sporting reserves	City/Grant
Above 100 LUX	May be considered case by case on as needs basis	City/Club/Grant

CONSULTATION FINDINGS

This Type received 13 responses, with 12 from a suburb within the City. Of these, 9 are currently using this type of infrastructure. All strategic directions and recommendations proposed were supported.

Summary of Consultation	
Survey Questions	Results
Surveys Completed	7
From a suburb within the City of Canning	7
Already using Sports Lighting in Canning	7
Addition consultation activities specific for this Type	Youth Consultant Network Workshop Cultural Ambassadors Huddle

Survey Response Results

	Support	Neutral	Oppose
Strategic Direction 1 - The City will provide and maintain sports lighting to active sporting reserves across the City in a planned manner as its financial capacity allows to a minimum of 100 LUX - large ball (Club Competition and Match Practice) standards in accordance with Australian Standards.	5	0	2
Strategic Direction 2 - The City supports lighting of other leased facilities and sport types over 100 LUX where need is demonstrated but will restrict funding to the provision of 100 LUX. The gap will be funded by the requested club, leased facility holder or externally funded.	4	1	2
Strategic Direction 3 - When planning new sports lighting consideration will be given to active structured sports as well as passive recreational uses by the community, including, for example, dog walking.	4	2	1
Recommendation 1 - Maintain a rolling 4 Year Sports Lighting Plan, prioritised using the Community Infrastructure Strategy Multicriteria Assessment Process.	6	1	0
Recommendation 2 - Undertake a review of the Fees and Charges associated with usage of sports lighting within the City in response to the lower operating costs and increased control over LED lighting.	7	0	0

KEY THEMES

Improvements: All comments are supportive of improvements and maintaining the sports lighting across the City.

Improved Access: Some respondents (3) expressed the need for improved lighting access across all sports and raised concerns over the focus on certain sports, advocating for better lighting across all sports, siting lux levels suitable for cricket as their example.

Unstructured recreation lighting: There was also 3 responses relating to the want for improved lighting outside of structured sports.

Costs: There was a comment regarding the fees suggesting that there is a need to consider reduced costs to help alleviate financial pressures on local sports clubs.

KEY FINDINGS

There were very high levels of support by respondents to the Strategic Directions and Recommendations.

Current Cricket Reserves: Although the number of cricket reserves in the City meet population demands, cricket clubs face a shortage of space to expand due to high demand, with most reserves heavily booked during the summer season. Adding sports lighting to cricket venues would help to expand playing capacity into the evenings, enabling more matches and practice sessions after daylight hours.

WA Cricket Infrastructure Strategy: The 2019-28 WA Cricket Infrastructure Strategy emphasises expanding facilities to accommodate population growth and changing needs. A key priority is increasing the number of playing fields and improving floodlighting.

Feedback associated with usage costs, access and unstructured lighting are addressed within Recommendation 2, and Strategic Direction 3.

CONSULTATION RECOMMENDATIONS

1. No changes to the Strategic Directions
2. No changes to the Recommendations

STRATEGIC DIRECTION



The City will provide and maintain sports lighting to active sporting reserves across the City in a planned manner as its financial capacity allows to a minimum of 100 LUX - large ball (Club Competition and Match Practice) standards in accordance with Australian Standards.



The City supports lighting of other leased facilities and sport types over 100 LUX where need is demonstrated but will restrict funding to the provision of 100 LUX. The gap will be funded by the requested club, leased facility holder or externally funded.



When planning new sports lighting consideration will be given to active structured sports as well as passive recreational uses by the community, including, for example, dog walking.

RECOMMENDATIONS



Maintain a rolling 4 Year Sports Lighting Plan, prioritised using the Community Infrastructure Strategy Multicriteria Assessment Process.



Undertake a review of the Fees and Charges associated with usage of sports lighting within the City in response to the lower operating costs and increased control over LED lighting.





