



Outdoor Sports Lighting Operating Guidelines

Version 1, July 2021



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Guideline Governance

Responsible Service / Department:

Open Space, Recreation and Community
Resilience

Adoption authorised:

Council

Date of adoption:

21 July 2021

Date effective from:

21 July 2021

Content Manager folder:

76/04/105

Content Manager file:

E105785/21

Endorsed CEO or ELT member or department manager to make and approve document editorial amendments:

CEO

Annual desktop review date:

31 July

Review date:

July 2023

Completion date:

July 2025

Version number:

1

Stakeholder review and engagement:

As required

Relevant Legislation:

NA

Associated Strategic Direction 1:

Inclusive Port Phillip

Associated instruments:

Sport and Recreation Strategy 2015-2024

City of Port Phillip Outdoor Sports Lighting Operating Guidelines

Supersedes

NA

Review history:

Name	Content Manager File Reference	Date	Description of Edits

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Purpose

The purpose of this document is to help guide Council Officer decision making and provide the community with clear information on the provision and allowable use of sports lighting in the municipality.

Outdoor sports lighting contributes to addressing the increasing demand for sports facilities with our increasing population but noting the shortage of supply as an inner metropolitan Council. Outdoor sports lighting contributes to increasing the hours of use of council sports grounds and courts, through increasing activation of these spaces in non-daylight hours.

Outcomes

1. Council has full control of its assets, by adopting a best practice approach to managing sports lighting
2. Clear and transparent management and prioritisation of requests for and to use sports lighting
3. Make our existing sports grounds work harder through extending hours of use with improved lighting to enhance passive surveillance, programming, licensing, agreements and consideration of different surface types to increase the carrying capacity to meet demands
4. Future-proof the City (for population growth and climate change) through appropriate innovation and best practice in sports lighting

Definitions

Term	Definition
CoPP, Council and City	Refer to the City of Port Phillip
Sport Ground / Field	An outdoor rectangular or oval shaped piece of land, with a natural or artificial turf surface, used predominantly for sport training and matches
Carrying Capacity	The amount of use a sports ground can withstand without significant wear and tear, typically expressed as hours per week
Lux	The International System of Units (SI) unit of illuminance, equal to one lumen per square metre. It is a measurement that indicates the brightness of lights
Correlated Colour Temperature (CCT)	The colour appearance of a white LED which is defined in degrees Kelvin (K)
Colour Rendering Index (CRI)	A scale from 0 to 100 percent indicating how accurate a "given" light source is at rendering colour when compared to an ideal or natural light source
Embodied Energy	The sum of all the energy required to produce any product, considered as if that energy was incorporated or 'embodied' in the product itself
Asset Lifecycle	The sequence of stages that an asset goes through during its useable life, including planning, acquisition, operation, maintenance and disposal
Open Space Character Classification	The classification given to each piece of open space in the City of Port Phillip based on the characteristics and the uses of the space <i>as per the Draft Public Space Strategy</i>
Light Spill	Light that falls outside of the area that is intended to be lit
Smart Infrastructure	Combining physical infrastructure with digital infrastructure to improve information provision and enable better and faster decision making

Scope

The Operating Guidelines apply to the provision and use of sports lighting at Council owned and managed outdoor sports grounds and outdoor multi-purpose sports courts. They are used by Officers to guide decision making and apply to all users of outdoor sports lighting, including sports clubs and the community. The guidelines do not apply to any other public space lighting in the City of Port Phillip.

Operating Guidelines

Context

Historically, sports ground lighting has been provided to winter season sports clubs for weeknight training purposes. However, it is important that Council is agile and responds to the changing needs of the community regarding sport, recreation and sports lighting provision. There is an opportunity to optimise sports ground utilisation, increase participation in organised sport and provide greater opportunities for passive recreation in the evenings, through the appropriate provision and management of sports lighting. Ensuring that sports ground lighting illuminates the entire surface area consistently provides a safer, more functional space, and can help maintain overall ground condition, by allowing use to be evenly distributed.

Council does not currently have measures in place to appropriately monitor the usage of sports lights or provide regulation over the times they are used. The operational control of sports lights (i.e. turning them on and off at the required times) is entrusted to sports clubs on site each night at training. There have been instances where sports ground lights have been left on or used without permission, resulting in complaints from residents, unauthorised ground use, unnecessary energy use and increased utility costs.

The guidelines below aim to inform decision making for the provision and use of sports lighting, achieve the four key outcomes (listed above) and align with Council's strategic objectives for the community in the Council Plan 2021-31, the Sport and Recreation Strategy 2015-2024 and Public Space Strategy anticipated endorsement December 2021.

City of Port Phillip Outdoor Sports Lighting Operating Guidelines

Guidelines

Sports lighting provision	
Best Practice Lighting Technology	<p>The City of Port Phillip is striving for and implementing best practice in sports lighting and where possible will utilise 'Smart' infrastructure and new technologies that enable:</p> <ul style="list-style-type: none"> • Brightness variability and dimmable lights to allow the appropriate brightness to be attained for different uses (e.g. increased brightness for night matches and reduced brightness for training and passive recreation) • Isolation of light poles (e.g. to activate the number of light poles required for an activity, rather than all poles) • Zoning (to allow for different areas to be lit at varying brightness and at different times) • Remote monitoring and control
Lux Levels	<p>Council will provide a minimum standard of 100 lux which facilitates training and competition for many sports at a community level:</p> <ul style="list-style-type: none"> • Higher lux levels may be considered for sports and locations where it is required in line with Australian Standards and / or Sporting Association requirements. Co-funding and partnerships may be required to achieve this outcome • Council will not fund broadcast standard lighting
Environmental Sustainability	<p>Sustainability standards, in line with Council's Sustainable Public Lighting Guidelines, will be incorporated into the design and operation of sports lighting including:</p> <ul style="list-style-type: none"> • Energy efficiency (including LED globes) • Control and dimming • Light colour temperature (Correlated colour temperature (CCT) and Colour rendering index (CRI)) • Appropriate light spill and glare (Australian Standards) • Low embodied energy, long life materials and end-of-life disposal
Authority and Responsibility	<p>Council is responsible for and has authority over sports lighting for the grounds and courts it owns or manages. This includes:</p> <ul style="list-style-type: none"> • Installation of new sports lighting and major renewal projects, including all permits, designs, procurement and associated costs • Audits and maintenance of lights and poles • Community consultation related to lighting improvements • Lighting installation and utilisation decisions at all Council owned or managed sports grounds and courts this includes decisions related to exclusive use sports facilities such as bowling greens and tennis courts in the City of Port Phillip.
Installation and Upgrade Priority	<p>Council Officers will assess requests for new or upgraded sports lighting based on both an asset condition assessment and site use/demand assessment. Council will have a schedule of works, detailing priority of lighting improvements, which will take into consideration the following factors:</p> <ul style="list-style-type: none"> • Council priorities • Budget allocation • Asset lifecycle

City of Port Phillip **Outdoor Sports Lighting Operating Guidelines**

	<ul style="list-style-type: none"> • Current and future use (including consideration of Australian Standards and Sporting Association requirements) • Timing of other capital works at the site • Community impact and benefits 				
Sports lighting use					
Types of Use	<p>Council will endeavour to facilitate multiple groups to use sports grounds and courts in non-daylight hours by providing and activating sports lighting.</p> <p>This may include but is not limited to:</p>				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 50%;">Organised use</th> <th style="text-align: left; width: 50%;">Informal use</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Field sport training • Field sport matches • Recreation participation programs • Fitness training • Events </td> <td> <ul style="list-style-type: none"> • Passive recreation • Unstructured physical activity • Dog walking </td> </tr> </tbody> </table>	Organised use	Informal use	<ul style="list-style-type: none"> • Field sport training • Field sport matches • Recreation participation programs • Fitness training • Events 	<ul style="list-style-type: none"> • Passive recreation • Unstructured physical activity • Dog walking
	Organised use	Informal use			
<ul style="list-style-type: none"> • Field sport training • Field sport matches • Recreation participation programs • Fitness training • Events 	<ul style="list-style-type: none"> • Passive recreation • Unstructured physical activity • Dog walking 				
<p>Hierarchy of usage types will be influenced by the open space classifications attributed to the specific ground/court in Councils Public Space Strategy</p>					
Schedule of Use	<p>Outdoor sports lights will be operational all year round but will be subject to reviews and approvals as required from officers. Council officers will be able to review and under discretion deny access to lights through a programming and allocations lens as required or if needed.</p> <p>Sports lights cannot be used after 9pm</p> <ul style="list-style-type: none"> • Some grounds/courts may have an earlier curfew time depending on the impact to neighbouring properties and surrounds • Council Officers will consider the suitability of other times of operation for sports lights for reasons including (but not limited to): <ul style="list-style-type: none"> - Participant and community safety - Early morning use of sports grounds and courts - Timers will be installed and set (Cost to Council) - Lights for informal recreation will only occur outside of formal use 				
Night Sports Competition	<p>Council Officers will consider night competition where the sports lighting meets the Australian Standards and / or Sporting Association requirements for that sport and will also assess the appropriateness of the site considering:</p> <ul style="list-style-type: none"> • Impact on neighbouring properties, including: light spill, game noise, traffic and parking • Carrying capacity of the ground 				
Utility Costs	<p>User groups with allocations to sports grounds and courts will be required to pay a sport light usage fee for their allocation period, as agreed with Council, which will include utility costs. Lights activated for informal and passive recreation including dog walking will occur utility costs absorbed by Council.</p>				
Maintenance	<p>Maintenance cost components are covered through fees and charges seasonally. Maintenance is undertaken as per maintenance schedules stipulated in user agreements</p>				
Other considerations					
Ground Carrying Capacity	<p>Sports ground lighting must be considered in conjunction with other measures to meet increasing demand for sports ground use to ensure the ground surface can cope with additional hours of evening/night time use, including:</p>				

- Ground surface type
- Ground maintenance practices

How the Guidelines Contribute to Achieving the Desired Outcomes

Outcome 1: Ensuring Council has full control of its assets, by adopting a best practice approach to managing lighting assets

Council owns or acts as the Committee of Management for many sports grounds and courts in the municipality, including the assets on the land (with the notable exception of grounds in Albert Park Reserve and on private or school land). Council is required to maintain control over these assets and prescribe how they are used. This means that Council is both responsible for and has authority over sports lighting:

- Council is responsible for the installation of new sports lighting, renewal projects, and the maintenance of all infrastructure (including lights, poles and lighting audits)
- Council is the final authority on all sports lighting decisions. This includes:
 - Permits and approval of any works, including proposed installation or upgrades of lighting by sports clubs, who have allocated budget or have received external funding (such as State Government grants)
 - The types and times of use

Council aims to upgrade sports lighting (in accordance with the installation and upgrade schedule) so the operation of sports lights, including timing and brightness, can be monitored and controlled remotely. This enables Council to be agile in adapting to participation trends, addressing key issues such as safety and responding to emerging trends, including technology and shared use of space.

In the more immediate future Council will employ simple measures to (i) monitor electricity usage at all grounds and courts so user groups can be charged accurately and (ii) Install programmed lighting timers, so sports lights either automatically turn on and off at the programmed times or sports lights can only be activated during the programmed time of operation and will shut off at required time.

Outcome 2 and 3: 'Clear and transparent management of requests for and to use sports lighting' and 'Optimal utilisation of sports grounds and courts. Make our existing sports grounds work harder through extending hours of use with improved lighting to enhance passive surveillance, programming, licensing, agreements and consideration of different surface types to increase the carrying capacity to meet demands.'

There is increasing demand for the use of sports grounds in the City of Port Phillip. Participation in organised field sports, particularly traditional winter sports such as soccer and football, is growing. There are also increasing requests for sports grounds and courts to be lit in the evening for safe recreational use, including for dog walking and unstructured physical activity.

With a finite number of sports grounds and courts, and limited opportunities to purchase land for new public space, Council needs to explore how to maximise the use of existing grounds and courts, while taking into consideration surface condition, sustainability and impact on surrounding amenity. This may include exploring non-traditional timeslots for sports competition, including

nighttime and early mornings and using sports lighting effectively and efficiently to accommodate a variety of users.

It is important to note that natural turf sports grounds have a finite number of hours they can be used each week while still maintaining good ground condition. If grounds are already at capacity during daylight hours, sports ground lighting alone will not relieve participation growth pressures. While lighting that illuminates all parts of the ground evenly is important for safety, as well as enabling multi-use to ensure certain parts of the ground do not wear out more quickly than others, sports lighting provision needs to be considered alongside measures to increase the carrying capacity and extend the usable hours of the ground (see CoPP Sports Surface Guidelines 2021)

Outcome 4: Future-proof the City (for population growth and climate change) through appropriate innovation and best practice in sports lighting

Council is committed to future-proofing the City of Port Phillip and providing infrastructure that allows agility with future decision making. This includes considering 'Smart' infrastructure - an option that is being embraced by organisations and Councils around the country as a feasible future solution. Smart infrastructure is the result of combining physical infrastructure with digital infrastructure to improve information provision to the asset owner and enable better, faster and cheaper decision making and operation of assets. The type of lighting for new installations and major renewals will consider best practice in smart infrastructure, lighting design that combines pointed LED preventing light spill to surrounding properties, which reduces the amenity impact to local residents and sustainability as detailed in the guidelines.

Council sports grounds and courts are predominantly used for sports training in the evenings and amateur games on the weekend during daylight hours. However, Council aims to install lighting infrastructure that can facilitate broader use in the future, including night competition and lighting for passive recreation. This includes designing, installing, controlling and maintaining lights in accordance with the relevant Australian Standards and requirements for different sports (listed below). For traditional winter sports, such as soccer and football, the required average for amateur games is 100 Lux across the playing area, which is the minimum standard Council aims to provide. Council may provide sports lighting that is capable of producing higher than 100 lux, if additional funding is available, and if deemed appropriate considering the impacts on amenity, costs of installation, operating and maintenance and other items mentioned in the guidelines. This may be considered for grounds used by sports that require higher lux lighting (such as cricket, baseball and lacrosse) and for users who can demonstrate the need for higher lux lighting. However, the full lux capacity will only be utilised at the required times, with dimmable and zoning functions implemented for other uses.

User groups with allocations to sports grounds and courts will be required to contribute to the cost of lighting usage and maintenance to encourage lights to be used appropriately and not more than necessary and ensure maintenance costs are not a barrier to preserving the life of the lighting assets.

Relevant Policy, Regulations or Legislation

Australian Standard for Sports Field Lighting:

- Australian Standards 2560 Sports Lighting
 - AS 2560.1 Part 1: General Principles
 - AS 2560.2.3 - Part 2.3: Specific Applications - Lighting for football (all codes)
 - AS 2560.2.4 - Part 2.4: Specific Applications - Lighting for outdoor netball and basketball
 - AS 2560.2.6 - Part 2.6: Specific Applications - Baseball and softball
 - AS 2560.2.7 - Part 2.7: Specific Applications - Outdoor Hockey
- Australian Standards 4282 - Control of the obtrusive effects of outdoor lighting
- IESANZ Lighting Guideline Series LG-4.01 Sports Lighting Cricket
- Australian Standards 3000:2018: Electrical installations

State Sporting Associations Guidelines:

- Community Sporting Facility Lighting Guide; for Australian Rules Football, Football (Soccer) and Netball (Victorian State Government, Department of Planning and Community Development)
- Guidance Note 04 floodlighting (Cricket Australia)

City of Port Phillip Documents:

- Sustainable Public Lighting Guidelines
- Public Space Strategy 2021 (Due for endorsement December 2021)
- Sport and Recreation Strategy 2015-2024
- City of Port Phillip Sport Surfaces Guidelines 2021-2025

Attachments

Nil