# Control of Obtrusive Effects of Outdoor Lighting

Stowe

# SYDNEY CONSTRUCTION DIVISION



Electrical & Communications Contractors Since 1910

10-12 Clyde Street. RYDALMERE NSW 2116

29 May 2019

#### RE: SYDNEY FOOTBALL STADIUM (SFS), MOORE PARK CONTROL OF OBTRUSIVE EFFECTS OF OUTDOOR LIGHTING

Outdoor lighting for the public domain and incorporated into the stadium itself will be selected and installed to effectively control unwanted obtrusive effects on surrounding properties in accordance with the principles given in the Australian Standards; AS 4282, Control of the obtrusive effects of outdoor lighting.

## Project site and usage conditions

The stadium will be bounded by the reinstated MP1 carpark to the west, the Sydney cricket ground to the south, fox studios to the east and abutting Moore Park road to the north. There are no existing residential properties at the immediate site boundaries. Screening by trees as part of the landscaping, will also contribute to limiting obtrusive lighting effects including glare.

The sporting venue is intended to operate for national and state football events – as well as adhoc sporting and concert functions – with an emphasis on weekends and weekend shoulders rather than mid-week nights. Maximum stadium lighting levels will occur during events providing live broadcasts with reduced lighting levels operating after events and up to curfew.

#### Car park and landscape lighting

Designed to AS/NZS 1158.3.1, Lighting for roads and public spaces, category as required for safe pedestrian and vehicle movement will comprise of pole mounted lighting with flat glass luminaires producing no light above the horizontal plane in accordance with the principles of AS 4282. Supplementary lighting may be provided at steps by means of lighting that is directed downwards so as to control obtrusive lighting above the horizontal plane in accordance with the guidelines given in AS 4282. Up lights will highlight certain trees and will be turned off after curfew hours as required in AS 4282.

#### Stadium sports lighting

Sports field lighting is required to meet stringent requirements for performance associated with high illuminance levels for colour television broadcasting, and to minimise shadowing and glare that adversely affect players. While AS4282 does not apply to sports lighting the following features of the equipment and installation will minimise obtrusive effects:

- LED spotlights, mounted around the roof perimeter and under a fabric roof, are pointed onto the playing surface such that no upward light passes the roof perimeter and no lighting being directed towards neighbouring properties.
- The maximum lighting levels will occur during night time sport event which are of low frequency with reduced levels in training mode.

#### STOWE AUSTRALIA PTY LTD ABN 27 002 556 603

www.stoweaustralia.com.au

Head Office ✓ 10-12 Clyde St Rydalmere NSW 2116 PO Box 6265 Silverwater NSW 1811 Ph: 02 9848 2111 Fax: 02 9898 0200

GOLD COAST BRISBANE ✓ CANBERRA MEI BOURNE ✓

NOWRA ✓

PENRITH ✓ PORT MACQUARIE

SYDNEY CBD ✓ WOLLONGONG ✓ TAREE \*



### Façade lighting

Narrow beam colour changing up lights providing accent lighting will be mounted on the building structure to provide feature lighting to the façade. In accordance with the guidelines given in AS4282 the lighting is contained by the roof so as to control the upward lighting into the night sky.

#### Conclusion

Stowe confirm the proposed lighting will meet the relevant Australian standards and is best practice for a development of this nature.

Sean Dawson

**Engineering Manager** 

**STOWE AUSTRALIA PTY. LTD.** 



Page 2 of 2