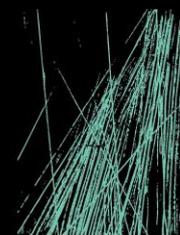


ELECTRICAL REPORT

**EXTERNAL LIGHTING STRATEGY**  
**SUTHERLAND HOSPITAL OPERATING THEATRE EXPANSION**



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## LIGHTING STRATEGY

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The external lighting design for this project will comply with AS4282-1997<sup>1</sup> with regard to limiting the spill of external lighting into neighbouring areas. In particular;

- the light through a vertical plane on the boundary of residences on Kareena Rd will be less than 4lx and
- the luminous intensity of luminaires in the direction of the Kareena Rd residents will be less than 2500cd and
- the threshold increment for vehicles on Kareena Rd will be kept to less than 20%

Lighting will also be provided to address the requirements of NSW Health's Protecting People and Property Policy 2013 – both beneath the building (in the trafficable under-croft area beneath the new building) and to the building perimeter. Sufficient lighting is of particular importance for the under-croft area which will readily become a safety concern if not sufficiently lit. Lighting levels will be sufficient for the operation of CCTV cameras in this zone. It is proposed to light this area to 80lx (recommended for intermittent use areas within a building in AS1680.1). This is significantly more than the 7 lux required by P1 category<sup>2</sup> of AS1158.3.1:2005 – Lighting for roads and public spaces.

All external lighting will be controlled by a photoelectric cell and an on/off/auto switch to allow for light maintenance when necessary.

All external lighting will be LED, 4000°K, with no up-light component (except to for illuminated signage, if required at a later stage).

It was advised by the Landscape Architects (Arcadia) that the plant species specified in the under-croft area can survive in very low levels of light thus the and thus no plant growth lighting is implemented.

Lighting to the existing car park area will be reconfigured to accommodate the new lift shaft / entry point.

It was advised that no illuminated signage is specified at this stage.

Façade wall lighting is proposed only around the lifts and lobby area.

Note that reflected light is not covered by the Obtrusive lighting standard, yet reflected light from beneath the under-croft stands the highest chance of irritating the neighbouring residents.

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<sup>1</sup> Control of the obtrusive effects of outdoor lighting

<sup>2</sup> For pedestrian pathways through parks and the like