



ABN 48 612 666 172

Sydney | Brisbane | Melbourne

Level 23, 101 Miller St
North Sydney NSW 2060

PO Box 3
North Sydney NSW 2059
Ph (02) 94371000

22 April 2021

Health Infrastructure

1 Reserve Road,
ST LEONARDS, NSW, 2065

Attention: B. Ryan

Dear Bettisa,

CONSULTANT'S ADVICE

REVISION NO.: [D]

PROJECT NAME: Sydney Children's Hospital Stage 1 (SCH1) and Children's Comprehensive Cancer Centre (CCCC)
Lighting Strategy Report

PROJECT NUMBER: 200152

This consultant's advice outlines the external lighting strategy for Sydney Children's Hospital Stage 1 (SCH1) and Children's Comprehensive Cancer Centre (CCCC) and is intended to address the SSDA requirements for the development.

SUMMARY

The external lighting strategy across SCH1/CCCC will be designed to meet Australian Standards, Protecting People and Property (this is NSW Health Policy) and Health Infrastructure's standards. The external lighting strategy will enhance security and safety whilst balancing an engaging and sophisticated environment for the users of the building. A focus on useability and minimising maintenance shall also be incorporated in the design.

As a minimum, the external lighting shall follow the below design requirements:

- Lighting control systems are proposed to be IP based and to be designed to be able to interface with other buildings across the precinct for timing, switching, control and monitoring etc.
- Exterior lighting will be provided in accordance with NSW Health's policy manual, 'Protecting People and Property (noting that lighting will be connected to the generator supply and not the UPS), as well as compliance to AS1158 Category P3 –Pedestrian & Category 11b - Roads / AS4282. Lighting designs will achieve recommended light levels for safety and security, while allowing for full function of CCTV surveillance. Exterior lighting will be controlled by the introduction of a new PE cell and time clock.
- All external lighting will be connected to the generator supply.

PROJECT OVERVIEW

The purpose of this Report is to support the State Significant Development Application (SSD-10831778) for the SCH1/CCCC at Randwick Hospitals Campus (the project).

The Randwick Health and Innovation Precinct (RHIP) is one of the most comprehensive health innovation districts in Australia. While health care at RHIP has been evolving for over 160 years, the last five years has seen a strengthening of collaboration amongst a wide range of organisations in the precinct, including with government, universities and community.

The project seeks to strengthen the precinct as a world-class centre for health, research and education, driving cutting edge, compassionate and holistic healthcare and wellness programs for the local community and other residents of NSW. The project will deliver brand new, state-of-the-art paediatric health, medical research and education facilities and will assist to transform paediatric services and a key step in realising the vision for the RHIP.

SITE LOCATION

The project is located on the corner of High Street and Hospital Road, Randwick bounded by the CBD and South East Light Rail Services along High Street, existing Prince of Wales Hospital across Hospital Road, and UNSW Kensington Campus across Botany Street. The figure below shows the project site plan.

Hospital Road upgrade works is subject to a separate Planning Approval Pathway and does not form part of the current development application.



Figure 1: Aerial Photo of Indicative Site Area (Nearmaps, 20/01/2021)

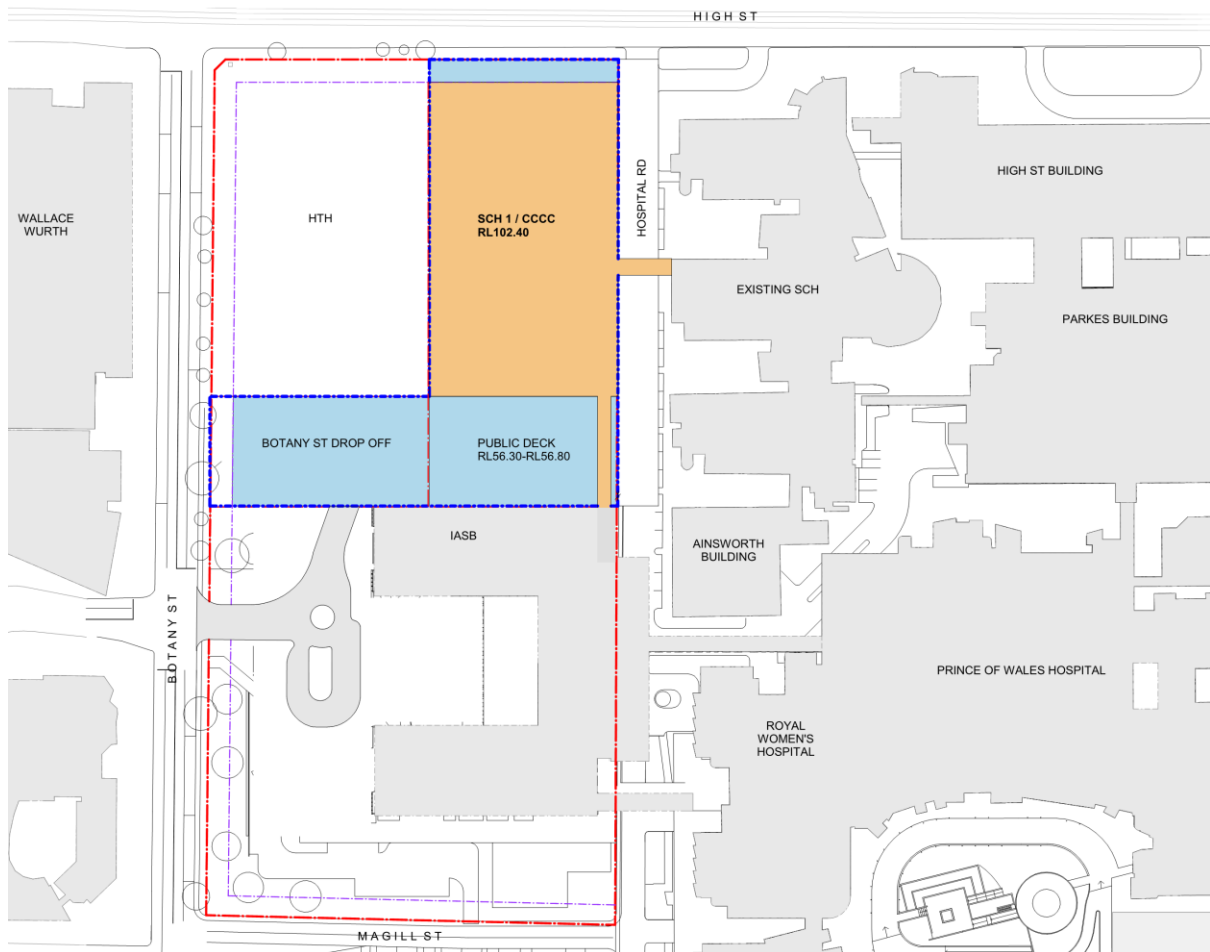


Figure 2: Indicative Site Plan

PROPOSED SITE DESCRIPTION

The project scope includes construction and operation of a new 9 storey building plus 2 basement levels and a plant room to provide:

- A new Emergency Department
- A new Intensive Care Unit
- Short Stay Unit
- Day and Inpatient CCCC oncology units
- Children's Comprehensive Cancer Centre
- Ambulance access, parking, back of house and loading dock services.
- Integration with the Prince of Wales Acute Services Building and Integrated Acute Services Building, both currently under construction
- Integration with the proposed Health Translation Hub (HTH) which is a facility being developed by UNSW for education, training and research
- Public domain and associated landscaping
- Utilities services and amplification works;
- Site preparation and Civil works

An indicative North / South section of the Project is provided below to show its relationship with the IASB development currently under construction.

SECRETARY'S ENVIRONMENT ASSESSMENT REQUIREMENTS

The Secretary's Environmental Assessment Requirements (SEARs) for the proposed development notes the following requirement to be addressed:

SEAR	COMMENT/REFERENCE
SSD-10831778 Item 4 - Environmental Amenity –	Provide: <ul style="list-style-type: none">An analysis of proposed lighting that identifies measures to reduce spill into the surrounding sensitive receivers

SUMMARY OF MITIGATION MEASURES

Based on the findings and recommendations of this report, the following measures are suggested to mitigate the identified impacts of the development:

MITIGATION MEASURE
All external lighting shall strictly comply with the requirements of AS4282 "Control of the obtrusive effect of outdoor lighting". All external lighting shall have glare control to reduce spill lighting and shall be specified with the appropriate cut off angles to control the lighting.

LIGHTING STRATEGY

BUILDING LIGHTING

External lighting shall be provided to the perimeter of the SCH1/CCCC in accordance with AS/NZ 1158, Protecting People and Property (this is NSW Health Policy) and Health Infrastructure's Standards. Entrances shall be illuminated through carefully detailed schemes that incorporate both internal and external sources. Appropriate categories of lighting shall be selected in accordance with guidelines set out in AS1158.

Building Perimeter lighting shall be controlled by an intelligent lighting control system that will interface with the other precinct partners. Controls such photo-electric cells and time clock control shall be provided.

PODIUM

External walkways across the podium will be illuminated to meet the requirements of AS/NZ 1158. It is proposed a mixture of pole top, bollard and wall mounted lighting shall be strategically placed and coordinated with the landscape architect to provide the required lighting levels and also provide specialist feature lighting where needed.

Category P3 shall be the overarching design requirement for this area and, where required to enhance prestige or security, localised higher categories shall be used.

Lighting across the podium shall be coordinated with the other precinct partners. This is to ensure unified changeover of the lighting and to optimize the overall lighting design.

Lighting shall be designed so that CCTV vision is clear and accurate, in accordance with the requirements of Protecting People and Property. CCTV cameras shall be incorporated within lighting structures where practical to reduce costs and provide a sensible design outcome.

Podium lighting shall be controlled by an intelligent lighting control system that will interface with the other precinct partners. Controls such photo-electric cells and time clock control shall be provided.

LOADING DOCK ENTRANCE

The loading dock entrance will be designed to meeting AS1680. Lighting levels shall be carefully selected so the transition between inside and out shall reduce eye strain and glare as far as practicable and to the requirements of AS1680.

The loading dock lighting will be controlled via time clock, photocell and manual override.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'B. Burrows', with a long horizontal stroke extending to the right.

Brenton Burrows CPEng MIEAust NER RPEQ

Director