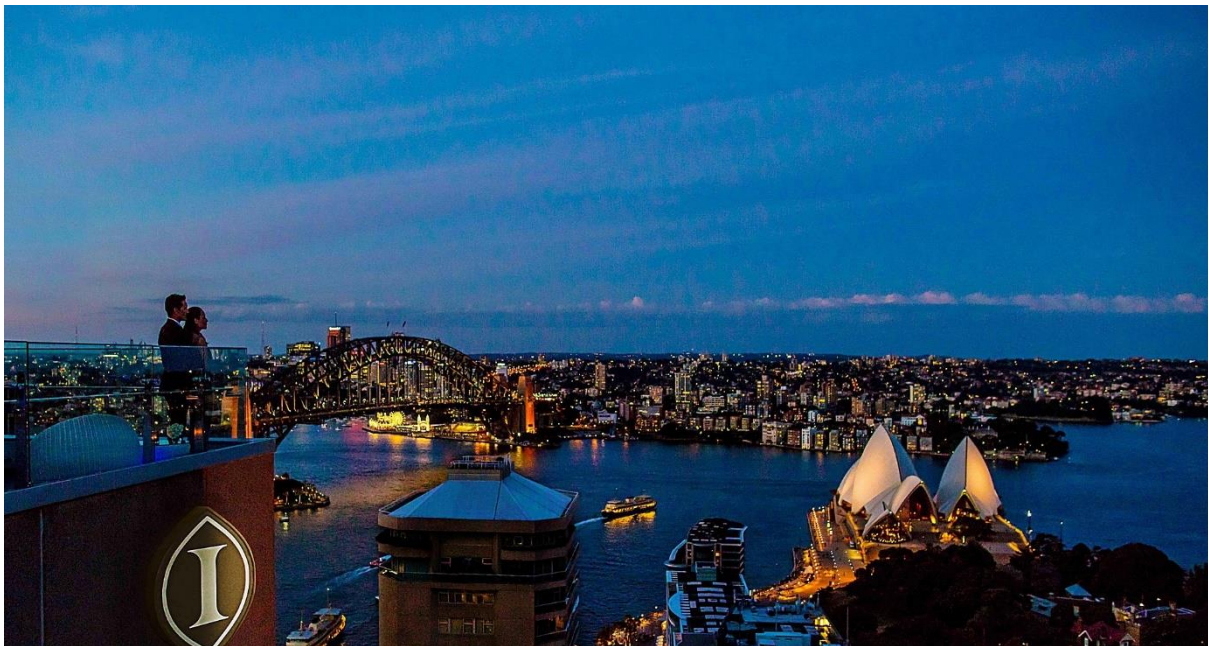


MULPHA HOTEL SYDNEY TRUST

# INTERCONTINENTAL HOTEL, SYDNEY LIGHTING IMPACT ASSESSMENT

JULY 2020



# Question today *Imagine tomorrow* Create for the future

InterContinental Hotel, Sydney  
Lighting Impact Assessment

Mulpha Hotel Sydney Trust

WSP  
Level 27, 680 George Street  
Sydney NSW 2000  
GPO Box 5394  
Sydney NSW 2001

Tel: +61 2 9272 5100  
Fax: +61 2 9272 5101  
wsp.com

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# 1 EXECUTIVE SUMMARY

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WSP has been engaged to provide a Lighting Impact Assessment Report for the Intercontinental Hotel, Sydney - Stage 2 (Hotel refurbishments and rooftop addition) as part of SSD-10454.

The purpose of this Report is to respond to the SEAR's requirement No. 5 Amenity to assess the lighting impacts associated with the proposal and provide a high-level overview of existing and proposed external lighting.

# 2 PROJECT BACKGROUND

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## 2.1 PROPOSAL DESCRIPTION

The proposal is a Stage 2 (Detailed) SSDA that seeks approval for:

- Various refurbishments to the Intercontinental Hotel tower.
- Alterations to the roof of the Intercontinental Hotel, including expansion of the club lounge and terrace – in compliance with the approved envelope under SSD 7693 (the Concept approval).

The proposed land use is ‘tourist and visitor accommodation’ (including ancillary uses), consistent with the existing use and what was considered/approved under the Concept approval.

From a staging perspective, no works will be undertaken to Transport House due to its sensitivity and requirement for more consideration, including a competitive design process. It is also noted that internal fit outs to hotel rooms has been progressed via a Complying Development Certificate (CDC) process.

The proposal would increase the GFA of the Intercontinental Hotel tower by 250sqm. The proposal also provides a maximum height of building of RL 114.55 (consistent with the envelope approved under the Concept approval). The proposal also provides a maximum height of building of RL 114.55 (consistent with the envelope approved under the Concept approval). Existing Plantroom Parapet Height RL 114.55. Proposed additions will be consistent with approved envelope.

The proposal includes an assessment of the existing external lighting and proposed upgrades as part of the various refurbishments to the Tower, alterations to the roof, and expansion of the L32 Club Lounge and Terrace at the InterContinental Hotel.

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## 2.2 SITE DESCRIPTION

The InterContinental Hotel, Sydney (incorporating the former NSW Treasury Building) is located the Sydney CBD at 115-119 Macquarie Street. The property is bounded by Macquarie, Bridge, Phillip and Albert Streets (see Figure 1).

The property contains two interconnected buildings that comprise:

- The 32-storey Intercontinental Hotel tower, which is located on the corner of Phillip and Bridge Streets set above a podium.
- The State Heritage listed former NSW Treasury Building, which is located on the corner of Macquarie and Bridge Streets.

See Figure 1 below.



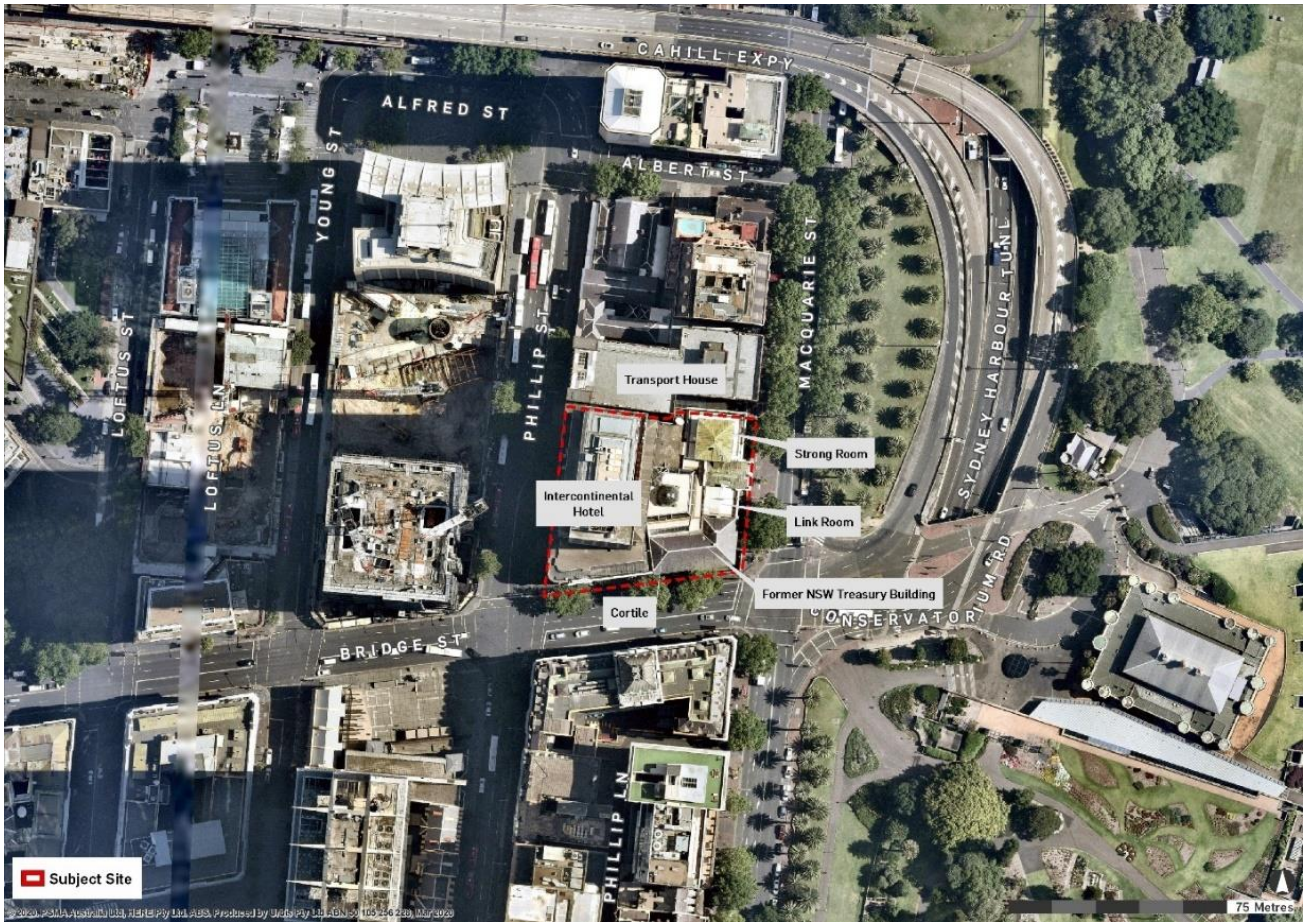


Figure 1- Location Map

# 3 EXISTING ENVIRONMENT

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## 3.1 INTRODUCTION

This Report includes a desktop review and visual assessment of the existing external lighting to inform a holistic view of the exterior illumination at the InterContinental Hotel, Sydney and as a base-line comparison for the proposed changes as part of SSD-10454.

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## 3.2 SCOPE AREAS

This lighting assessment addresses the following exterior areas as part of the proposal:

- Podium & Entries
  - Level 32 Club Lounge and Terrace
  - Exterior illuminated signage
- 

## 3.3 EXISTING EXTERIOR LIGHTING

A visual inspection of the current installed lighting was conducted during day-time and night-time on the 30<sup>th</sup> of June 2020 with observations as follows.

- The current installed exterior lighting is a combination of traditional and contemporary lighting technologies including LED, fluorescent and metal halide light sources
- The correlated colour temperature (CCT) of the lighting is warm white 2300K to 3000K typically.
- There is no existing façade lighting to the Hotel Tower with the exception of some blue lighting near the illuminated signage at the crown of the Hotel Tower. There are perimeter level floodlights on Bridge and Macquarie Streets highlighting the podium heritage façade elements.
- Bridge Street
  - o The exterior lighting includes a combination of wall mounted decorative lanterns, direct downlights and in-direct up-lights with a flood optic to highlight the sandstone detailing and finishes at low level. Luminaires are located at street and basement levels.
  - o There is a Hotel Entry at the corner of Bridge and Phillip Street with ceiling and entry portal recessed downlights.
- Macquarie Street
  - o The exterior lighting includes a combination of pillar mounted heritage decorative luminaires, entry arch-way suspended pendants and surface mounted luminaires and in-direct up-lights located at basement level at the corner of Macquarie and Philip Streets with a flood optic to highlight the sandstone detailing and finishes at low level.
- Phillip Street
  - o There is a Hotel Entry and Porte-cochere on Phillip Street. The general ambient lighting is provided via a combination of wall mounted decorative lanterns, suspended pendants, direct downlights and wall-washers. This is supplemented with low-level wall recessed asymmetric distribution wash-lights to the drive-way. There are also some decorative features with dedicated lighting to glazed elements, seating and ponds / planters.

- Downlights are ceiling recessed to one fire exit.
  - Surface mounted battens illuminate the entry and exit to the underground car-parking.
  - The exterior lighting is controlled via photo-cell sensor and time-clock to automatically switch on and off during the hours of darkness.
- 

## 3.4 ILLUMINATED SIGNAGE

There is illuminated signage of the InterContinental Hotel name and logo located at the crown of the Hotel Tower on the northern, eastern and western façades. There is some blue coloured lighting providing a back-light to the signage.



# 4 PROPOSED LIGHTING WORKS

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## 4.1 INTRODUCTION

The following section describes the proposed external lighting which forms part of Proposal and provides an assessment of the environmental impact of this lighting.

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## 4.2 SCOPE AREAS

This proposed lighting works include the following exterior areas and applications:

- Podium Entries
  - Level 32 Club Lounge and Terrace
  - Exterior illuminated signage
- 

## 4.3 DESIGN PARAMATERS

The proposed exterior lighting at the InterContinental Hotel, Sydney will be designed in accordance with the relevant standards and regulations including Australian Standards AS4282:2019 – Control of the Obtrusive Effects of Outdoor Lighting.

The proposed lighting will use high efficiency LED light sources or equivalent. The controls will be connected to a centralised BMS and allow for dimming to suit a range of ambient light levels from dusk to dawn.

When considered in the context of Sydney CBD skyline at night, it is anticipated that the proposed lighting will improve the appearance of the Hotel at night and be similar in intensity to that of surrounding illuminated city buildings.

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## 4.4 HOTEL PODIUM

The lighting to the Hotel entries at the corner of Bridge and Phillip Street and at the Porte-cochere on Phillip Street will be up-graded as part of this proposal. Other perimeter lighting to the podium does not form part of this DA and is not included in this assessment.

### 4.4.1 HOTEL ENTRY (CNR BRIDGE & PHILLIP STREET)

The upgraded lighting to the Bridge and Phillip Street Entry will include a glowing oculus and discrete cove lighting to enhance the architectural form. The lighting to Level 7 above the Entry is via internal illumination through translucent glass for a subtle glowing lantern effect.

The proposed lighting will be improvement on the installed lighting in terms of light quality and control. It will be of a similar intensity to the installed lighting and will be warm white, dimmable and localised to the covered entry area, thereby minimising impact.

It is anticipated that the proposed Hotel Entry lighting at the corner of Bridge and Phillip Street will have minimal impact on the surrounding environment.

### 4.4.2 HOTEL ENTRY (PHILLIP STREET PORTE-COCHERE)

The proposed lighting to the Porte-cochere Entry will include new ceiling recessed downlights, new feature pendants and soft and hard landscaping integrated lighting.

The proposed lighting will be improvement on the installed lighting in terms of light quality and control. It will be of a similar intensity to the installed lighting and will be warm white or static colour, dimmable and localised to the covered entry area, thereby minimising impact.

It is anticipated that the proposed the Porte-cochere Entry lighting at Phillip Street will have minimal on the surrounding environment.

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## 4.5 HOTEL TOWER

### 4.5.1 LEVEL 32 CLUB LOUNGE AND TERRACE

The lighting at the proposed Level 32 Club Lounge and Terrace will predominantly be provided via the internal Club Lounge lighting. Any exterior Terrace lighting will be localised with a controlled light distribution to maximise unobstructed views outward. The lighting will be warm white and dimmable, utilising LED light sources or equivalent.

The proposed lighting at the Level 32 Club Lounge and Terrace will be an improvement on the installed lighting in terms of light quality and control. It will be of a similar intensity to the installed lighting and will be warm white or static colour, dimmable and localised to the Terrace, thereby minimising impact.

Adjustable up-lights will be added to the under-side of the proposed Level 32 floor extension to highlight the architectural form on the western side of the Tower. These up-lights will be fully shielded, adjustable and dimmable to control the light distribution and minimise upward light spill. This façade lighting will be designed in accordance with AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting to cause no significant adverse lighting effect.

It is anticipated that the proposed lighting at the Level 32 Club Lounge and Terrace will have minimal environmental impact.

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## 4.6 ILLUMINATED SIGNAGE

As part of the Hotel refurbishment, there is proposal to adjust / replace some existing signage and provide additional illuminated signage at the InterContinental Hotel, Sydney

The proposed illuminated signage will be static and dimmable for flexible control of luminance levels to suit a range of ambient light levels from dark of night to fully sunlit conditions. The proposed illuminated signage will be designed in accordance with industry best practise and relevant guidelines to minimise environmental impacts.

### 4.6.1 HOTEL TOWER SIGNAGE

The illuminated signage at the crown of the Hotel Tower on the northern and eastern sides will be retained. The proposed Level 32 architectural floor extension may impact the current illuminated signage located on the western side of the Tower. This revised / new illuminated signage will be of a similar style to the existing signage and it is therefore considered that the environmental impact will be low. The blue back-lighting will either be retained or up-graded for a light effect similar to the existing signage. It is considered that the environmental impact of these changes will be low.

### 4.6.2 HOTEL PODIUM SIGNAGE

There are two new illuminated signs of the InterContinental Hotel name and logo proposed at the Hotel Entry located at the corner of Bridge and Phillip Streets and above the entry to the Porte-cochere on Phillip Street. This replaces the existing sign which is not illuminated. This new illuminated signage will utilise LED light sources to back-light the name and logo for a floating / halo effect. It is considered that the environmental impact of this signage will be low.

# 5 CONCLUSIONS

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An assessment of the existing and proposed external lighting at The InterContinental Hotel, Sydney as part of SSD-10454 has been conducted. The proposed external lighting to the InterContinental Hotel will be:

- Integrated with the architecture
- Dimmable, and responsive to ambient light conditions and curfew hours
- Single colour and static

When considered in the context of the Sydney CBD at night it is anticipated that the lighting impact will be limited.

The proposed external lighting at The InterContinental Hotel, Sydney will comply with the relevant Australian Standards including AS 4282:2019 Control of the obtrusive effects of outdoor lighting and will have acceptable impact on the surrounding environment.