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SYDNEY OPERA HOUSE LOWER CONCOURSE SHADE STRUCTURES, MINOR WORKS & USES

Heritage Impact Statement

1.0 BACKGROUND

Design 5 - Architects have been engaged by the Sydney Opera House Trust (SOHT) to prepare an assessment of the Heritage Impact (HIS) of the continued use of the Lower Concourse for food and beverage, retail, ticketing and tours, changes to the existing glazing line in Opera Bar and installation of new shade structures for Opera Bar and Opera Kitchen on the Lower Concourse, referred to in this report as:

1. Continued Use of Lower Concourse

Bars, cafes, retail and Welcome Centre

2. Minor Works - Proposed Change to Glazing Line in Opera Bar

The existing glazing to the north of Opera Bar and the existing Charcuterie (Meat and Cheese room) is proposed to be altered to connect the two spaces, extending the seating area internally for the existing main bar and make room for new back-of-house areas in the former Charcuterie serving area.

3. New Shade Structures for Opera Bar and Opera Kitchen

New shade structures are proposed for the exposed part of the uncovered seating area on the Lower Concourse for both Opera Bar and Opera Kitchen to replace the existing umbrellas to minimise visual clutter, achieve better services integration and improve weather protection and patron comfort.

Note: SEARS SSD 9794 refers to *Sydney Opera House Lower Concourse Shade Covers, Minor Works and Uses*. The term “shade cover” is not used to describe the proposed new umbrellas in this HIS, rather the term “shade structure” is used throughout the report.

A more detailed description of each proposal is given below in Section 4 of this report.

This HIS has been prepared by Jenny Snowdon (Heritage Specialist) and reviewed by Alan Croker (Director) of Design 5 – Architects. Alan has been advising the Sydney Opera House Trust on heritage

related issues since early 2004, and is the author of *Respecting The Vision, Sydney Opera House – a Conservation Management Plan*, Fourth Edition, SOHT July 2017 (referred to below as CMP 4th edition).

Background of the Lower Concourse and its associated uses

The Lower Concourse (also known as Lower Forecourt) was part of the NSW Government's Bicentennial project for the Forecourt and was completed in 1988. It was designed by the NSW Government Architects Office under Andrew Andersons and in association with Peter Hall, the original architect for the Stage III completion of the Opera House. The Lower Concourse was intended to address issues of undercover access as well as ancillary visitor services including food, beverage and retail in a manner which respected and enabled the uncluttered and open qualities of the Forecourt above.

Apart from providing undercover access, the food and beverage outlets Opera Bar and Opera Kitchen and their associated outdoor seating areas are major drawcards for tourists and residents alike, and are destinations in themselves for patrons to deliberately take in the environment and enjoyment of experiencing the Sydney Opera House from the water's edge.

2.0 SEARS REQUIREMENT

The requirements for a Heritage Impact Statement (HIS) with respect to this application are stated in Key Issue 4 of the Secretary's Environmental Assessment Requirements (SEARS) for Application No. SSD 9794, issued 21 December 2018.

This version of the SEARS requirements requested the following issues be addressed in this Heritage Impact Statement (HIS):

Key Issue 3 of the SEARS, concerning *Urban Design and Visual Impacts* is addressed in the EIS. Many of these issues also relate to heritage and are included in this HIS.

4. Heritage

- *Include a Heritage Impact Statement (HIS) prepared by a qualified Heritage Consultant. The HIS must identify and describe the characteristics and values that are likely to be impacted by the proposed development, with appropriate reference to relevant management plans.*
- *Address any impact to the heritage significance of the Sydney Opera House and its setting, including impacts to the world heritage buffer zone and/or Aboriginal, historic or archaeological significance.*
- *Include details of the building works and alterations to significant building fabric, structural members, services and spaces associated with the proposal. The impacts to users of the area must be clearly identified.*
- *Include a visual analysis of the proposed works, including before and after perspectives. The visual analysis shall also consider how the proposed shade structures impact on the wider visual setting and consistency in presentation of Sydney Cove from Daves Point, Campbell's Cove, West Circular Quay and further afield such as Kirribilli.*
- *Consider current and known future access requirements under the Building Code of Australia and the Disability Discrimination Act 1992 and assess the heritage impact of these requirements. Details of the minimal BCA and accessibility work to achieve regulatory compliance shall be provided.*
- *Discuss options that have been considered and assessed in order to demonstrate that the proposed works present the best option with minimal heritage impacts.*
- *Assess the proposal against the requirements of the following documents:*
 - *NSW Heritage Manual*
 - *Matters of National Environmental Significance Significant Impact Guidelines 1.1*
 - *Management Plan for the Sydney Opera House*
 - *Respecting the Vision: Sydney Opera House – A Conservation Management Plan (4th Edition)*
 - *Utzon Design Principles*
 - *Sydney Opera House Accessibility Masterplan 2015*
- *Include any technical data and other information used or needed to make a detailed assessment of the relevant impacts.*

3.0 BASIS OF ASSESSMENT

This Heritage Impact Statement (HIS) assesses the proposed new shade structures, minor works to the glazing and continuation of uses against the following documents:

- *Matters of National Environmental Significance – Significant Impact Guidelines 1.1*, EPBC Act 1999, Department of the Environment 2013
- *Respecting The Vision, Sydney Opera House – a Conservation Management Plan*, by Alan Croker. Fourth Edition, SOHT July 2017 (referred to below as CMP 4th edition)
- *Sydney Opera House, Utzon Design Principles*, SOHT May 2002 (referred to below as the UDP 2002)
- *SOH Accessibility Masterplan 2015*

The CMP 4th edition and the Accessibility Masterplan incorporate considerations of all heritage listings (World, National & State).

The *Management Plan for the Sydney Opera House* (prepared in 2005 as part of the bilateral agreement negotiations) references the CMP 3rd edition, (*Sydney Opera House, A Revised Plan for the Conservation of the Sydney Opera House and its Site*, by James Semple Kerr, third edition 2003) and the *Utzon Design Principles* and provides a framework for protection of the World and National Heritage values of the Sydney Opera House site and gives effect to the CMP. It was endorsed by the Heritage Division, Department of Planning & Environment (formerly the NSW Heritage Office). The Management Plan states that approval of actions in relation to the Sydney Opera House site may only be made in accordance with the Management Plan, which defers to the CMP 3rd edition for an assessment of heritage impact of proposals. Since this Bilateral Agreement was put in place, the CMP 4th edition has been formally endorsed by the Heritage Council of NSW on 2 August 2017, and now replaces the CMP 3rd edition. This heritage impact assessment uses the CMP 4th edition.

3.1 Methodology

This Heritage Impact Statement has been prepared in accordance with the principles and processes of the *Australia ICOMOS Burra Charter 2013*. The preparation of this Heritage Impact Statement also follows the process recommended in the NSW Heritage Manual, specifically the NSW Heritage Office guideline *Statements of Heritage Impact* (revised 2002), including consideration of alternative options and their impact.

3.2 Naming of spaces

The Lower Concourse has also been known as the Lower Forecourt. In this document, only the former is used.

3.3 Documents reviewed

The following documents describing the proposal have been provided by the Sydney Opera House and have been reviewed by the author:

- Proposal description in *Architectural Design Statement*, Project No:2466, Sydney Opera House Lower Concourse Improvements, Revision 03, H&E Architects, 31/07/2019;
- Architectural Drawings – *Sydney Opera House Lower Concourse Improvements*, Project No: 2466, H&E Architects, Development Application, 25/06/2019;
 - 2466_DA1-0001_RevF_190813_Title Sheet and Drawing List
 - 2466_DA1-0502_RevF_190814_Site Plan – Existing
 - 2466_DA1-0503_RevA_190814_Site Plan – Proposed
 - 2466_DA1-1100_RevE_190813_General Arrangement Plan - Lower Concourse - Existing & Demo
 - 2466_DA1-1101_RevF_190813_General Arrangement Plan - Lower Concourse – Proposed
 - 2466_DA1-1102_RevD_190626_General Arrangement Plan - Upper Concourse – Existing
 - 2466_DA1-1103_RevE_190730_General Arrangement Plan - Upper Concourse – Proposed
 - 2466_DA1-3100_RevE_190730_General Arrangement Elevation
 - 2466_DA1-3200_RevD_190626_Detail Plan - Opera Bar Glazing Line - Existing & Demo

2466_DA1-3202_RevD_190626_Detail Plan - Opera Bar Glazing Line – Proposed
 2466_DA1-3205_RevD_190626_Detail Elevation - Opera Bar Glazing
 2466_DA1-3220_RevE_190730_Detail Plan - Shade Structure
 2466_DA1-3221_RevE_190730_Shade Structure - Reflected Ceiling Plan
 2466_DA1-3225_RevD_190626_Detail Section - Shade Structure
 2466_DA1-3230_RevC_190626_Detail Elevation - Shade Structure
 2466_DA1-3231_RevC_190626_Detail Section - Shade Structure Services

- Sydney Opera House Lower Concourse Improvements, Visual Impact Study, Ver 3.0, H&E Architects, 07.2019
- 3D animation of the proposed new shade structures; 2466 190314 Enscape Video OPTION A-D, H&E Architects
- Consideration of alternative designs and options H&E Architects
Sydney Opera House Lower Concourse Improvements, Lower Concourse, Sydney Opera House, Bennelong Point, Sydney, DAP Presentation / Ver 2.0 / 06.2019, H&E Architects
- Email correspondence on design and feedback, Sydney Opera House Design Advisory Panel and H&E Architects

4.0 BRIEF DESCRIPTION OF PROPOSALS

The Lower Concourse Development Application includes a number of improvement works and uses. The various parts of this proposal are briefly described as follows:

4.1 Continued Use of Lower Concourse

As noted in the CMP 4th edition, *the Lower Concourse (1988) was designed to address issues of undercover access as well as ancillary visitor services including food, beverage and retail in a manner that respected and enabled the uncluttered and open qualities of the Forecourt above.* It provides a space for facilities such as food and beverage outlets, public lavatories and retail uses that support the primary function of the Opera House as a world-class performing arts centre in a discrete way. Since 1994 a series of long term contracts have been in place for the operation of the catering venues at the Sydney Opera House and in the Lower Concourse, with a more recent introduction of Opera Kitchen to the Lower Concourse and the refit of Opera Bar in 2014.

4.2 Minor Works - Proposed Change to Glazing Line in Opera Bar

The existing glazing line of the Opera Bar main bar area is proposed to be amended and extended to stretch further north to join with the existing Charcuterie across a current access door for back of house services. The existing Charcuterie will be incorporated into a new back of house area, including space for a new office, store and additional cool room. The proposed new glazing line runs concentric with the major arc of the Lower Concourse, reducing the existing protrusion that currently intrudes into the circulation space near the northern access stairs to the Forecourt.

The works proposed comprise the following:

- amend existing glazing line to extend further north and closer to the eastern wall of the Lower Concourse, incorporating presently external space outside the existing fire exit (which increases existing seating area for the main bar);
- remove and store one existing original louvered circular ceiling light close to existing fire exit;
- relocate existing fire exit including one of its bronze door leaves, currently dividing the Charcuterie from the Opera Bar main bar to new location further north;
- extend existing granite clad wall south of stairs to meet new fire door and clad new wall to match existing;
- reuse salvaged granite floor panels from external spaces and cut down to fit revised configuration;
- demolition of existing Charcuterie and conversion into new back-of-house facilities;
- internal Opera Bar fitout to match existing within revised space, (exempt works under *Site Specific Exemption 10 & 11 under the Heritage Act 1977*).

4.3 New Shade Structures for Opera Bar and Opera Kitchen

The existing umbrellas on the Lower Concourse have a deep profile that intrudes on views and have no provision to discreetly include the modern services that are required in the management of the outdoor food and beverage facilities at the Opera Bar. They are proposed to be replaced with a new design, that minimises clutter by integrating services, is less intrusive on views and maximises weather protection and patron comfort.

The changes are as follows:

- existing four umbrellas to northern part of uncovered area (outside Opera Kitchen) to be replaced with four new shade structures in similar configuration but of new design, covering the same area;
- central existing eight umbrellas over outdoor bar (Opera Bar) to be replaced in similar configuration but with new design;
- existing four umbrellas on southern part of uncovered Opera Bar area to be replaced in improved grouped configuration (square) with four shade structures of new design;
- translucent infill between grouped shade structure elements as indicated on plan to improve weather protection;
- stainless steel bird wire around edge of structures (similar to existing), stainless steel bird spikes to top of shade cloth canopy;
- shade structures to be fixed to concrete structure below granite flooring rather than to the granite, existing granite flooring to remain in situ;
- repair of existing granite flooring where fixings have been removed by neatly filling in holes with colour matched epoxy compound;
- proposed change of colour of the shade fabric at Opera Kitchen from intrusive off-white to match approved colour Dulux "Coconut Husk" as at Opera Bar;
- services to the underside of the shade fabric include: strip LED up-lighting, speakers with colour matched finish to Dulux "Coconut Husk", Infra-red electric heating, misting system and nozzles within framing;
- integrated services infrastructure to run under pavers;
- removal of acoustic barrier behind band stage on the uncovered part of the Lower Concourse at Opera Bar.

5.0 ISSUES & CONSIDERATION OF ALTERNATIVES

5.1 Background

As part of the design process for the proposed Lower Concourse improvements, H&E Architects explored a variety of alternative glazing alignments and shade structure designs and configurations.

The initial proposal for *SSD 7431* in 2016 included only the realignment of the glazing at Opera Bar, for which the design is included below in Figure 1.

A separate application was made for the shade structures in *SSD15_7430 – Lower Concourse Shade Cover Improvements, Sydney Opera House*. The design was submitted as follows in Figure 4.

These two DA's were withdrawn and have been refined and consolidated in the current proposal for *SSD 9794*, incorporating comments from the City of Sydney (discussed below) and Heritage Division as well as relevant stakeholders, the Sydney Opera House's heritage architect, Design Advisory Panel and Conservation Council.

5.2 Minor Works - Proposed Change to Glazing Line in Opera Bar

The main considerations were to achieve an improved pedestrian flow and sight lines to the stairs with the adjustment of the glazing line and removal of external clutter and seating in front of the fire exit between the main bar and Charcuterie.

This revised glazing line effectively increases the amount of indoor seating, which is always sought after, especially in winter.

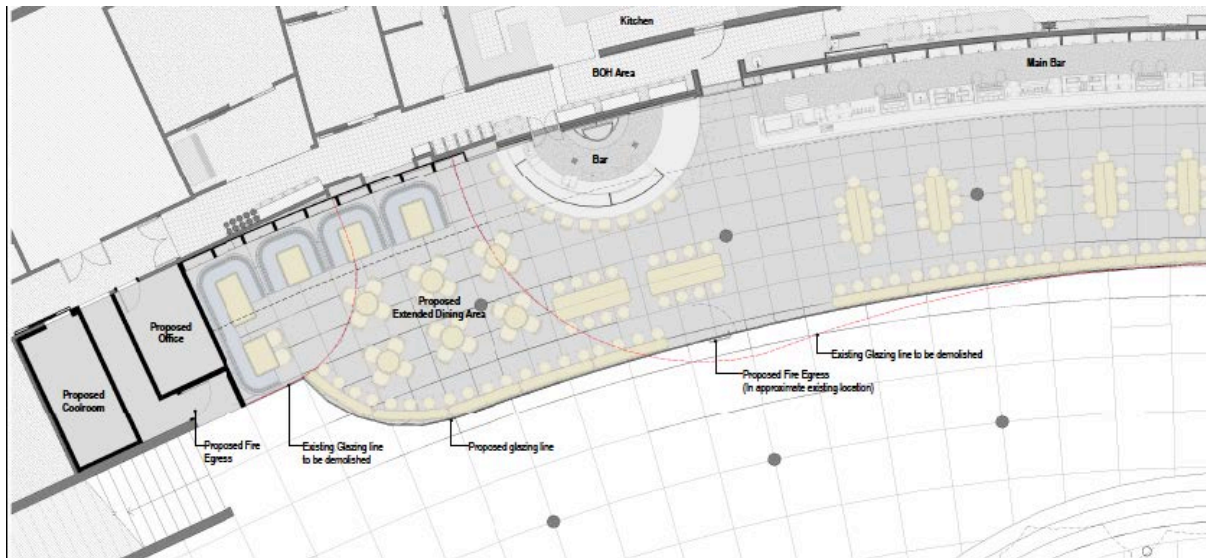


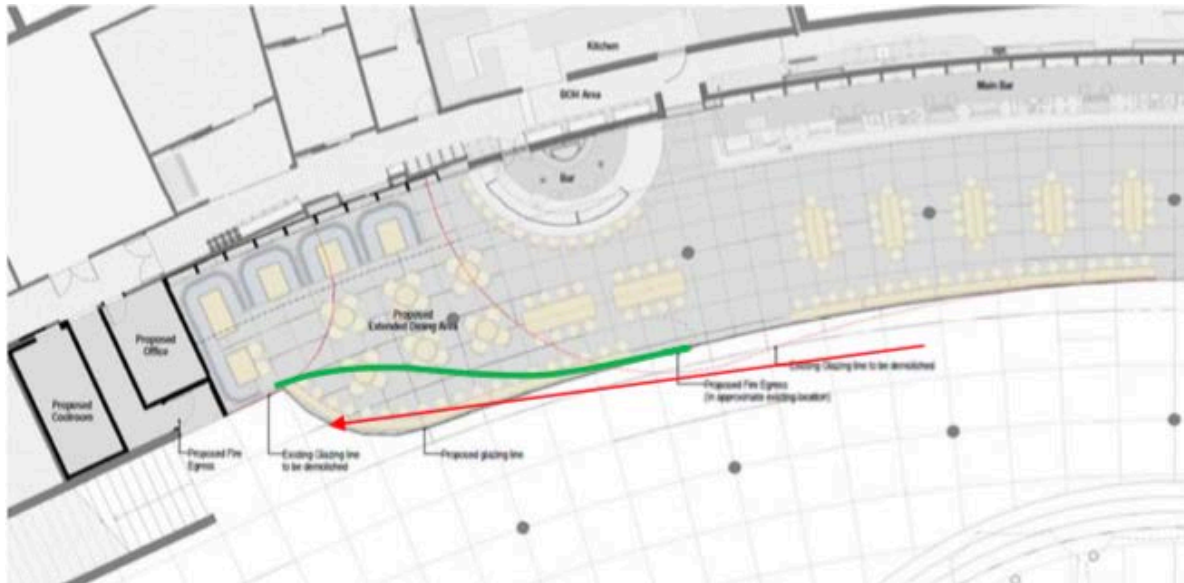
Figure 1: The plan above shows the design for the proposed glazing alignment as part of SSD 7431 which was withdrawn due to concerns for visual connectivity to the stairs to the Forecourt and reduced circulation space between the northern end of the glazing line and stairs. Source: H&E Architects

The City of Sydney (CoS) Department of Planning & Environment (*Objection Letter, City of Sydney Department of Planning & Environment, dated 7th April 2016*) objected to the previous DA submission for SSD 7431 in 2016 based on visitor appreciation and connectivity concerns. The reasons were as follows:

1. *The proposed realignment of the line of glazing to enlarge the restaurant space marginalises the lower concourse landing area and has an adverse impact upon the connectivity between the lower concourse and the main western forecourt of the Sydney Opera House as follows:*
 - a. *The extended enclosure reduces the line of sight for visitors to access the stairs that connect the lower concourse to the main broadwalk of the Opera House.*
 - b. *The extended enclosure impacts upon the ease in which visitors can access the stairs that connect the lower concourse to the main broadwalk of the Opera House.*
 - c. *The realignment privatises additional space on the lower concourse and disrupts the easy flow of pedestrians.*
2. *The realignment is contrary to the intent of the Conservation Management Plan (2003, 3rd Edition), Policy 3.3 that states that ‘Objects should only be permitted on the forecourt, lower forecourt sea wall path, broadwalk, podium deck and steps, if they do not interrupt or intrude upon the open and uncluttered character of the place, or if they are absolutely necessary for the safety of visitors.’*
3. *The realignment is inconsistent with the Planning Principles outlined within Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, specifically, Clauses 13(g) and 14(b), which call for the number of publicly accessible vantage points and public access to the Sydney Harbour foreshore to be increased, maintained and improved.*

CoS Recommendations

- *The proposal should be amended to avoid the additional privatisation of the lower concourse and to maintain sight lines and ease of access to the stairs connecting the lower concourse to the main broadwalk of the Opera House.*
- *The above could be achieved by redesigning the line of glazing to maintain sight lines and ease of access to the stairs connecting the lower concourse to the main broadwalk of the Opera House, by incorporating a concave curvature in lieu of the bulbous form proposed. This is illustrated in the figure below. (Attachment A in letter)*



Attachment A (referred to in *Objection Letter, City of Sydney Department of Planning & Environment, dated 7th April 2016* above) showing the “concave curvature in lieu of the bulbous form proposed” (green line) and the “sight lines” (red arrow).

Comment:

As seen in the mark ups in Figure 2 (below), four options (including the suggested layout from the City of Sydney) for the re-alignment of the glazing line were explored.

The concerns with regard to the line of sight to the stairs to the Forecourt and ease of access to the stairs have been addressed in the current application for SSD 9794 by pulling back the northern boundary of the glazing, allowing for increased circulation while also respecting the ‘space’ required by the mushroom column heads and the light fittings. It is important to note that electrical cabling to light fittings cannot be relocated and therefore the light positions are fixed. With this realignment as now proposed, one of the existing external louvered circular lights needs to be removed.

The concern over further privatisation of public space is discussed in Section 7.2 of this HIS and the lease or operational areas more broadly are recommended to be revised and amended.

The CMP 3rd edition was used by the City of Sydney to assess the proposal in 2016. Since the former submission was withdrawn the CMP 4th edition has been formally endorsed by the Heritage Council of NSW in 2017 and now replaces the CMP 3rd edition. The CMP 4th edition includes detailed policies and guidelines on the Lower Concourse and its use and a detailed assessment against these is included in Section 7.2 of this HIS.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 Clause 13 (g) states *the number of publicly accessible vantage points for viewing Sydney Harbour should be increased*. Clause 14 (b) states that *public access to and along the foreshore should be increased, maintained and improved, while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation*.

An increase of access points for viewing Sydney Harbour and along the foreshore is not proposed as part of this project. The SOH Accessibility Masterplan 2015 identifies issues and constraints with regard to access across the site including to the Lower Concourse. Compliance of this proposal with the SOH Accessibility Masterplan 2015 is provided in Section 12.0 of this HIS. Recommendations for maintaining and improving existing public access on the Lower Concourse are provided in Section 7.2 of this HIS.

It is our opinion that the selected proposal discussed in this HIS compliments the existing geometry and strengthens the clarity of the pedestrian circulation route on the Lower Concourse best and most appropriately.

The selected proposal for the re-alignment of the glazing line in relation to the former proposal and the existing alignment is provided below in Figure 3.

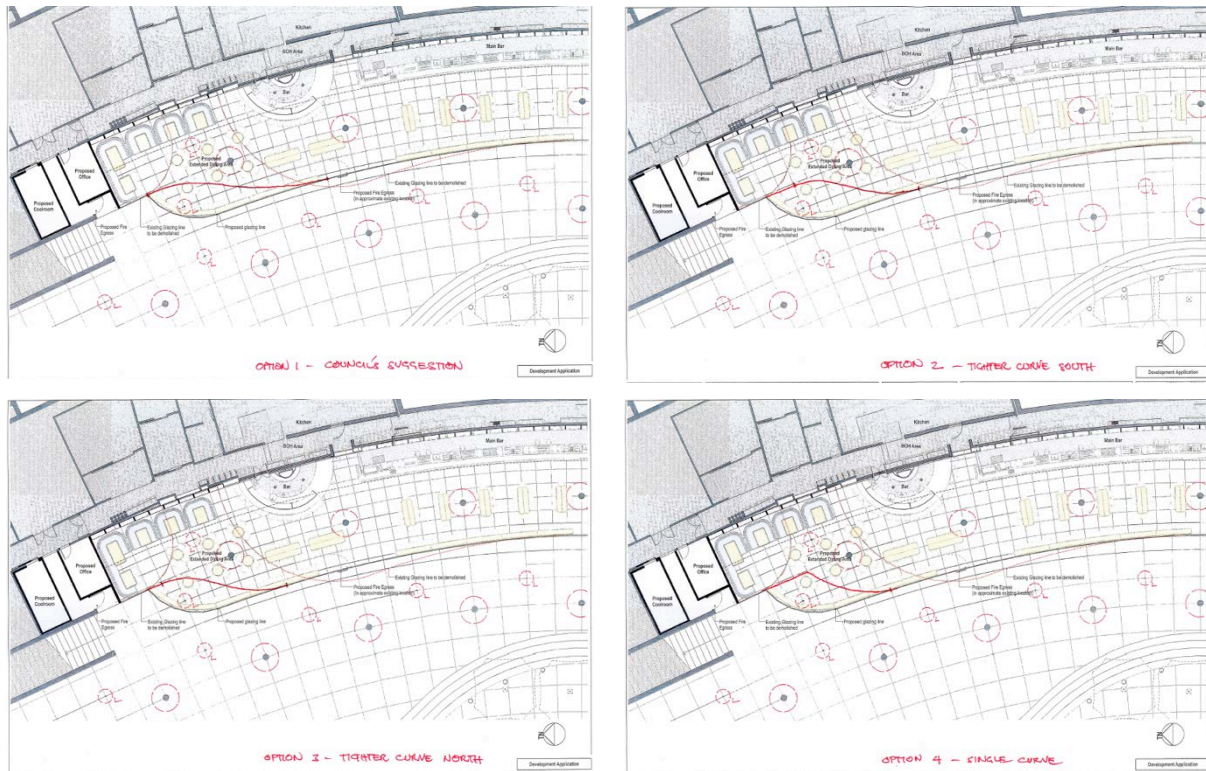


Figure 2: The options included above were explored in response to the detailed comments from the stakeholders and are commented on below. *Source: Design 5 Architects mark up of proposal*

2.0 GLAZING LINE

Proposed glazing line

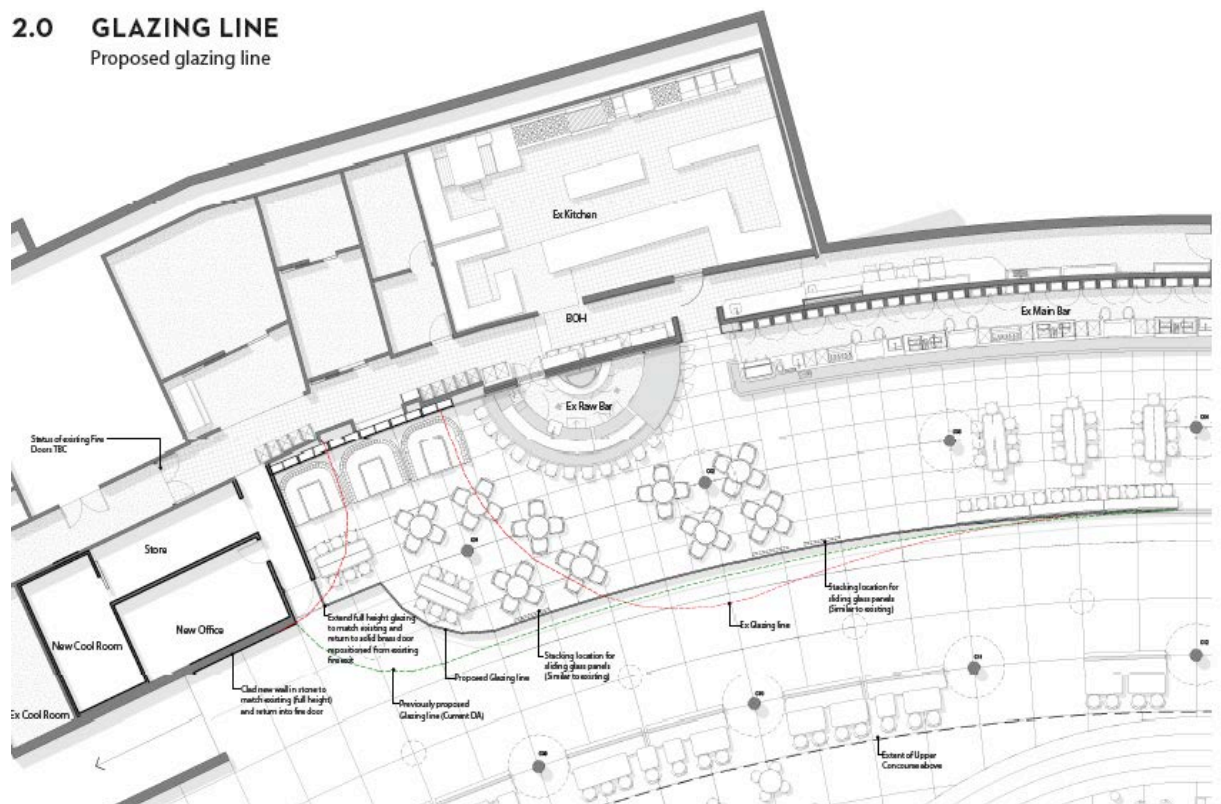


Figure 3: The proposed improved glazing line in this application with the previous proposal shown with a green dotted line and the existing glazing line shown in red dotted line. *Source: H&E Architects*

5.3 New Shade Structures for Opera Bar and Opera Kitchen

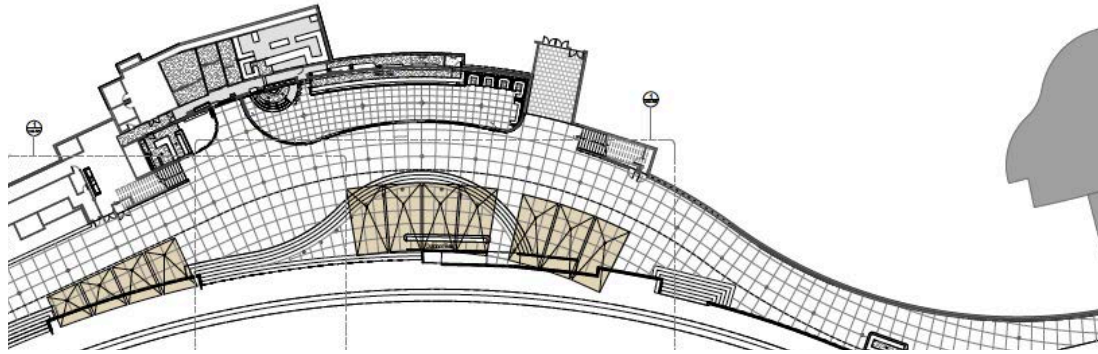


Figure 4: The configuration and design for the proposed shade structures shown in this plan were submitted as part of *SSD15_7430*, which was withdrawn. *Source: H&E Architects*

Since the proposal in *SSD15_7430* was withdrawn (Figure 4), four distinctly different options for the shade structures were explored (Figure 5), with the intention to increase visitor comfort, minimise visual clutter and develop a less visually intrusive design that would integrate better with the existing Sydney Opera House architecture.

Different sized umbrellas, configurations and shapes were considered, modelled and tested in views studies and in 3D animation for their potential visual impact on the Sydney Opera House and surrounds. These were presented to stakeholders, Design 5 Architects and the Sydney Opera House's Design Advisory Panel and Conservation Council for review and discussion.

- Option A – larger individual rectangular structure
- Option B – larger individual rectangular structure with chamfered edges (octagonal)
- Option C – smaller individual square structure
- Option D – smaller individual square structure with chamfered edges (octagonal)

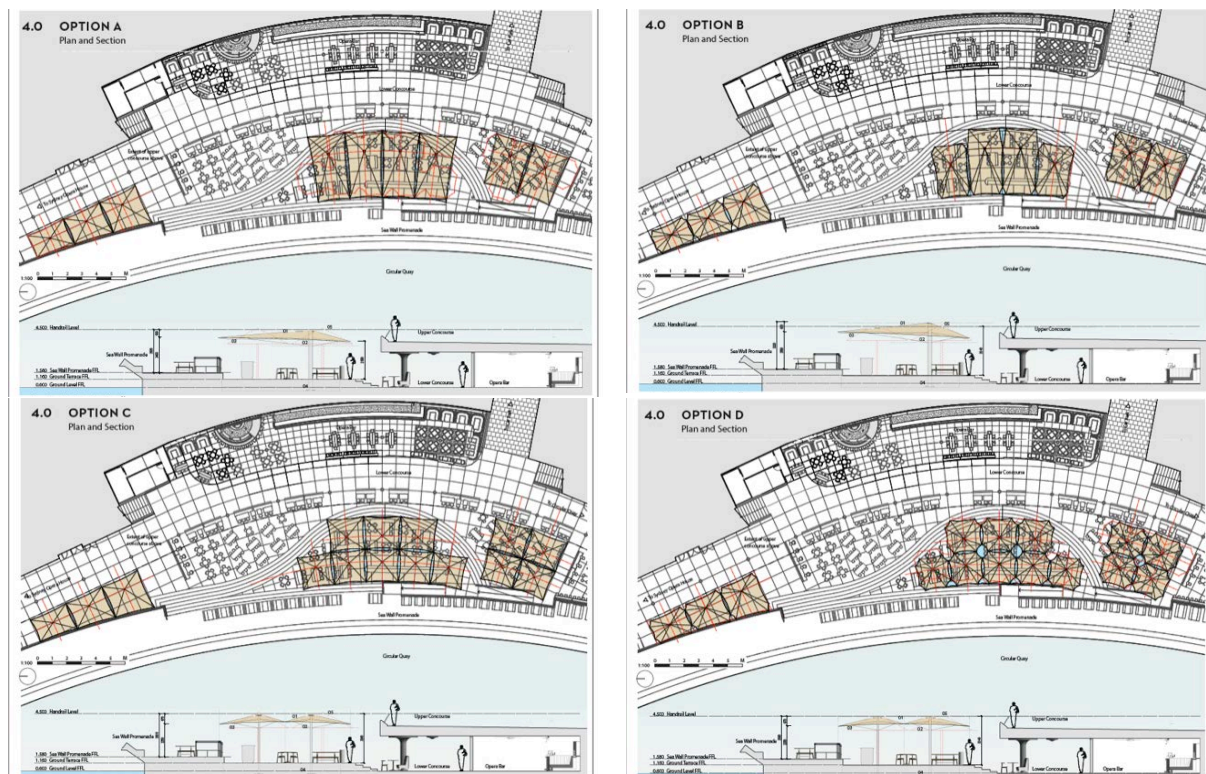


Figure 5: Provided above are the four shade structure options that were explored as part of the design process in response to the comments provided by the relevant stakeholders. They are discussed in further detail below. *Source: H&E Architects*

The proposed shade structures in this application are a revised design of Option C (Figure 6), which was considered the most appropriate option presented. Impacts on the heritage significance of the Sydney Opera House and its setting are assessed in this HIS.

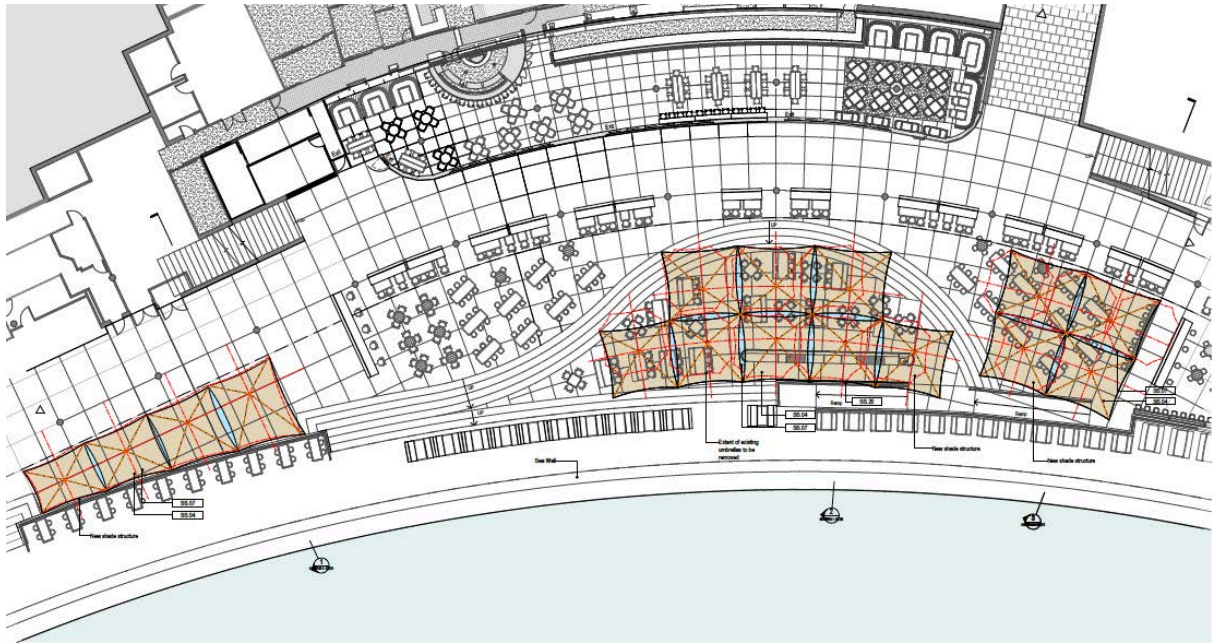


Figure 6: The above plan shows the proposed configuration that forms part of this SSD 9794 and is assessed in this HIS. The outline of the existing umbrellas is shown in red dotted outline over the new shade structures in this plan, refer to DA drawing set for better visibility of linework. *Source: H&E Architects*

6.0 HERITAGE LISTINGS & STATUTORY FRAMEWORK

6.1 Listings

The Sydney Opera House is listed on the following statutory registers:

- *World Heritage List (UNESCO), 2007*
- *National Heritage List (Australian Government), 2005*
- *State Heritage Register (NSW Government), 2003*
- *Sydney Local Environmental Plan 2012 (City of Sydney Council), 2000*

The Sydney Opera House is listed on the following non-statutory heritage registers:

- *National Register of Significant 20th Century Buildings (Australian Institute of Architects), 1990*
- *National Trust of Australia (NSW) Register, 1983*
- *Register of the National Estate (archived list with the Australian Heritage Council), 1980*

6.2 Statutory framework

Given the multiple heritage listings for the Sydney Opera House, the statutory framework for approvals for the Opera House is presently governed by the following legislation:

- Commonwealth: *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*
- State (Planning): *Environmental Planning and Assessment Act 1979 (EP&A Act)* and *State Environmental Planning Policy (State and Regional Development) 2011* and *State Environmental Planning Policy (State Significant Precincts) 2005*
- State (Planning): *Environmental Planning and Assessment Regulation 2000 (Regulation)*
- State (Planning): *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (REP)*
- State (Heritage): *Heritage Act 1977*

Commonwealth: *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*

- Part 3, Division 1, identifies Commonwealth requirements relating to World Heritage properties and National Heritage places. Sydney Opera House is inscribed on the World Heritage List and included on the National Heritage List.
- Approval must be obtained from the Commonwealth Minister for the Environment for actions that are likely to have a significant impact on matters of national environmental significance (including National and World Heritage listed properties and sites) under the EPBC Act. The *Significant Impact Guidelines* definition is important here:

A 'significant impact' is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts.
- Sydney Opera House should undertake a 'self-assessment' process to determine potential impacts of proposed actions and whether or not a referral to the Minister under the EPBC Act is required. The *Significant Impact Guidelines* definition of 'action' is important here:

'Action' is defined broadly in the EPBC Act and includes: a project, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things.

Actions include, but are not limited to: construction, expansion, alteration or demolition of buildings, structures, infrastructure or facilities;

Actions encompass site preparation and construction, operation and maintenance, and closure and completion stages of a project, as well as alterations or modifications to existing infrastructure.

An action may have both beneficial and adverse impacts on the environment, however only adverse impacts on matters of national environmental significance are relevant when determining whether approval is required under the EPBC Act.
- The Sydney Opera House site was subject to a bilateral agreement between the Australian Government and the State of New South Wales made in 2005 pursuant to Section 45 of the EPBC Act however this expired in 2010. Under the terms of that agreement (Clause 8.1), an action taken at the Sydney Opera House site would not require the approval of the Commonwealth Minister for the Environment, Heritage and the Arts where:

the taking of the action has been approved by the State of New South Wales or an agency of New South Wales in accordance with the Management Plan for the Sydney Opera House ...

State (Planning): *Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (State and Regional Development) 2011*

- All development on land identified as being within the Sydney Opera House site is designated as State significant development (SSD) (Schedule 2) that requires consent under the EP&A Act.
- The Minister for Planning is the consent authority for SSD.

State (Planning): *Environmental Planning and Assessment Regulation 2000 (Regulation)*

- Clause 288 of the Regulation requires the consent authority to take into consideration the *Management Plan for the Sydney Opera House* (which was prepared in 2005 as part of the bilateral agreement negotiations) in relation to development on the Sydney Opera House site. The Management Plan references the CMP 3rd edition and the Utzon Design Principles 2002.
- The Management Plan provides a framework for protection of the World and National Heritage values of the Sydney Opera House site and has been endorsed by the Heritage Division, Department of Planning (formerly the NSW Heritage Office).
- The Management Plan states that approval of actions in relation to the Sydney Opera House

site may only be made in accordance with the Management Plan, which defers to the CMP 3rd edition for an assessment of heritage impact of proposals.

State (Planning): Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (REP)

- The Opera House site falls within the Sydney Harbour Catchment area designated in the REP. It also is within the Foreshores and Waterways area and is designated as a Strategic Foreshore Site.
- The REP sets out a number of considerations that must be taken into account when submitting a DA (see clauses 13-15; Division 2 of Part 3 and Part 5 of the REP).

State (Heritage): Heritage Act 1977

- An approval from the Heritage Council under section 60 of the Heritage Act is required for development on the Sydney Opera House site. Where the development has been approved as SSD, the approval under section 60 of the Heritage Act cannot be refused by the Heritage Council.

The State Heritage Register listing for the Sydney Opera House includes a number of site specific exemptions. Of these, *Exemption No.10* and *Exemption No. 11* are relevant to the current proposals and are copied below:

10. All internal and external design and fitout of shops and restaurants on the lower concourse / lower forecourt, including changes in the size and fabric of elements such as walls, doorways and windows, where these changes have no adverse effect on fabric rated 'some', 'considerable' or 'exceptional' significance in the CMP and do not obstruct views identified as significant in the CMP.

11. All changes to the size and shape of shop spaces on the lower concourse / lower forecourt, including that of the tour office and visitor centre, where these have no adverse effect on fabric rated 'some', 'considerable' or 'exceptional' significance in the CMP and do not obstruct views identified as significant in the CMP.

Note the reference to fabric rated 'some', 'considerable' or 'exceptional' refers to the CMP 3rd edition which has been replaced by CMP 4th edition since the exemptions were gazetted.

In addition to the above Site Specific Exemptions, there are a suite of Standard Exemptions under Section 57(1) of the Heritage Act that apply to all State Heritage listed sites except where these are modified by the Site Specific Exemption. Relevant Standard Exemptions are copied below:

STANDARD EXEMPTION 6: *Development endorsed by the Heritage Council or Director-General*

1. *Minor development specifically identified as exempt development which does not materially impact on heritage significance, by a conservation policy or strategy within a conservation management plan which has been endorsed by the Heritage Council of NSW or by a conservation management strategy endorsed by the Director-General does not require approval under subsection 57(1) of the Act.*
2. *A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed development. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1, the Director-General shall notify the applicant.*

Guidelines

This standard exemption does not exempt development that is consistent with a conservation policy or strategy contained in an endorsed conservation management plan or interim conservation management strategy other than development that is specifically identified as exempt development in that conservation plan or strategy.

STANDARD EXEMPTION 7: *Minor Activities with little or no adverse impact on Heritage Significance*

1. *Anything which in the opinion of the Director-General is of a minor nature and will have little or no adverse impact on the heritage significance of the item does not require approval under subsection 57(1) of the Act.*
2. *A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed activity. If the Director-General is satisfied that the proposed activity meets the criteria set out in paragraph 1, the Director-General shall notify the applicant.*

Guidelines

This standard exemption has the potential to relate to a wide range of minor development. In determining whether a proposed development is minor the Director may have regard to the context of the particular heritage item such as its size and setting. For instance a development may be considered to be minor in the context of Prospect Reservoir's 1200ha curtilage whereas a similar proposal affecting an item on a smaller site may not be considered to be minor.

In order to assess whether a proposal has an adverse affect on heritage significance it is necessary to submit a clear and concise statement of the item's heritage significance and an assessment of whether a proposal impacts on that significance.

STANDARD EXEMPTION 8: *Non-Significant Fabric*

1. *The following development does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) have been met and the person proposing to undertake the development has received a notice advising that the Director-General is satisfied:*
 - (a) *the alteration of a building involving the construction or installation of new fabric or services or the removal of building fabric which will not adversely affect the heritage significance of the item.*
2. *A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed development. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1(a), the Director-General shall notify the applicant.*

Guidelines

In order to assess the level of significance of fabric it is necessary to submit a clear and concise statement of the item's heritage significance and to grade the fabric of the place in accordance with its association with or impact on that significance. It may not always be concluded that more recent fabric is of less or no heritage significance.

Discussion:

The application includes continued use of the Lower Concourse as a covered pedestrian approach and access, with functions supporting the primary use of the Sydney Opera House, and its world, national and state heritage values.

The proposal to adjust the alignment and fabric of the glass walls, associated granite paving, and the exterior / interior shape of the Opera Bar (adjustment of the glazing line), could be considered as exempt under the above-mentioned site-specific Exemptions 10 and 11. The resultant impacts on original fabric (bronze framed glazing and pink granite paving and wall panels) in the Lower Concourse will not be adverse, and will therefore comply with these site-specific exemptions.

The proposed new shade structures are replacing fabric and elements that generally comply with the CMP 4th edition apart from the colour of the umbrellas outside Opera Kitchen. However, there is no specific exemption that covers these and their configuration and locations are to be altered. This area is visible in prime views to and from the Opera House and therefore their impact on significance will have to be assessed against the policies and guidelines in the CMP 4th edition, the UDP and against the world, national and state criteria.

The Improvement works in the form of the new shade structures should therefore not be considered as exempt under this clause.

7.0 COMPLIANCE WITH RESPECTING THE VISION – SYDNEY OPERA HOUSE, A CONSERVATION MANAGEMENT PLAN (CMP 4TH EDITION)

The CMP 4th edition, endorsed by the NSW Heritage Council in August 2017, has been used as the basis for the assessment of heritage impacts on the Sydney Opera House, its surroundings and fabric affected by the proposal for change to the Opera Bar glazing and installation of new shade structures.

The CMP identifies and defines the significant values of the Sydney Opera House and then formulates policies framed to retain these values. The following discussion assesses the impact of the proposal in the same order as the CMP:

- Significant values,
- Overarching policies,
- Significant elements and components of the place, and
- Operational and management considerations.

7.1 CMP Section 3.1 STATEMENT OF SIGNIFICANCE Significant values – discussion of impact

The following Statement of Significance from CMP 4th edition summarises the significant values of the place (emphasis in bold type added as it relates to this assessment):

The Sydney Opera House is a masterpiece of 20th century architecture and a world renowned performing arts centre. It is universally valued for its unparalleled design, form and response to its setting; and its exceptional engineering achievements and technological innovations. It is an internationally recognised landmark, an architectural icon, a symbol of Sydney and Australia, and holds a unique place in the Australian psyche as a focus for national celebrations and events.

The design of the Sydney Opera House by Danish architect, Jørn Utzon, represents an extraordinary and inspired response to the peninsular setting in Sydney Harbour and the 1956 competition brief. Its spectacular quality as a monumental sculpture in the round, both by day and night, is enhanced by its relationship to the harbour and the city. The approach and arrival sequence, and the majestic quality of the public spaces, contained by powerful structural forms, provide an exceptional experience for users and visitors. Utzon's vision created a truly remarkable place, a structure that elevates and celebrates the human experience of the performing arts, as well as of the place itself. These attributes are true to the original design and continue to be credibly expressed.

The Sydney Opera House is a work of human creative genius; a daring and visionary experiment that has had a seminal and enduring influence on the emergent architecture of the late 20th century. This vision utilised the plastic arts (three-dimensional works or effects from sculpting, modelling and moulding), geometry and technology to create a structure at the leading edge of human endeavour, at the very edge of the possible. Utzon's original design concept, his emphasis on innovation and his unique approach to building, gave impetus to a collective creativity of architects, engineers and builders. He inspired others to strive for and achieve excellence, particularly at this site.

The high-quality completion of the work by Sydney architects Hall, Todd & Littlemore, the technical support given by the internationally renowned engineering firm of Ove Arup & Partners, and the inventive contractor M.R. Hornibrook, helped make Utzon's vision a reality. In its construction and fabric, the Sydney Opera House reflects the contemporary philosophy of assembling and creating refined forms from prefabricated components. The Sydney Opera House retains a very high level of authenticity.

At national, state and local levels, the site has significant associations with important past events, activities and uses in the site's evolution, including Aboriginal and European contact. Indigenous cultural values associated with the Sydney Opera House site relate to both tangible remains (for example, potential surviving middens or other physical relics) as well as intangible meanings, associations, stories, memories and histories. The site has been used for cultural exchange and performance since at least the 1790s and is associated with a major meeting area and place for ceremony and corroboree at the adjacent Farm Cove. Bennelong Point is a place of early contact between local Aboriginal people and European settlers and takes its name from Bennelong, a Wangal man whose hut was provided by the Europeans and located on the western side of the point. Other significant historical

associations include: defence (Governor Arthur Phillip's 1788 redoubt to convict architect Francis Greenway's Fort Macquarie, 1817–1901); picturesque planning (Governor Lachlan Macquarie to Utzon); and marine and urban transport and trade (overseas shipping and local ferry wharves, tram terminal and depot).

The Sydney Opera House has an almost mythological status as a cultural icon (then and now) arising from all the above, from the high public interest in its protracted and controversial development, and from its power to attract performers, patrons and visitors on a national and international level. As Australia's pre-eminent performing arts centre, it has the ability to encourage and inspire the pursuit of excellence and innovation in those who use it or are associated with it: all are inspired to achieve an outcome 'worthy of the Sydney Opera House'.

The inscription of the Sydney Opera House on the World Heritage List in 2007 recognises its Outstanding Universal Value.

Those values noted above in bold type are relevant to the proposed changes to the Lower Concourse. Taking each of them separately, the following comments are made:

The Sydney Opera House is a masterpiece of 20th century architecture and a world renowned performing arts centre. It is universally valued for its unparalleled design, form and response to its setting;

Comment:

The improvements to the Lower Concourse will have no impact on the fabric and design of the Sydney Opera House as a masterpiece of 20th century architecture. The proposed shade structures will have a positive impact on the setting with their shallower profile and finer design, the removal of the intrusive clutter. Functionality, accessibility and visitor comfort will be improved on the Lower Concourse. The combined tangible and intangible impacts will be positive on the function and status of the Sydney Opera House as an internationally recognised performing arts centre.

Its spectacular quality as a monumental sculpture in the round, both by day and night, is enhanced by its relationship to the harbour and the city. The approach and arrival sequence, and the majestic quality of the public spaces, contained by powerful structural forms, provide an exceptional experience for users and visitors. Utzon's vision created a truly remarkable place, a structure that elevates and celebrates the human experience of the performing arts, as well as of the place itself.

Comment:

The Lower Concourse Improvements should have no adverse impacts on the Sydney Opera House's spectacular quality as a monumental sculpture in the round. The Lower Concourse is set below the Forecourt and the proposed changes to the alignment of the glazing is set well back and therefore out of any views towards the Opera House.

The proposed shade structures are in the same location as the current structures but are improved in their design, configuration and colour to appear more recessive when viewed against the granite panels of the Lower Concourse and Forecourt. Their visual impact will be reduced by their design and materials. The colour chosen is one of the approved colours from the Sydney Opera House approved colour palette outlined in the Sydney Opera House Outdoor Event Guide. The proposed structures will not adversely impact on the Sydney Opera Houses' relationship to the harbour and the city.

The experience of approach to the Opera House along the covered Lower Concourse will be improved with the proposed glazing alignment, providing better visual flow and circulation. Improved amenity, functionality and visitor comfort should provide an improved experience for users and visitors to the site.

The encroachment of furniture and food and beverage activities onto the main pedestrian paths is a concern and is discussed in Section 7.2 of this report. These threaten the original design of this concourse as a covered access for patrons.

The Sydney Opera House has an almost mythological status as a cultural icon (then and now) arising from all the above, from the high public interest in its protracted and controversial development, and from its power to attract performers, patrons and visitors on a national and international level.

Comment:

The comments made above about other aspects of the Statement of Significance and impacts on the State Heritage Criteria apply equally here.

The Lower Concourse provides sheltered access to the Sydney Opera House below the western edge of the Forecourt, connecting East Circular Quay with the Covered Concourse and parking station and incorporates food, beverage, retail outlets, the Welcome Centre and lavatories. All of these support the primary function of the Sydney Opera House as a world-renowned centre for the performing arts. Visitors to performances often use the services provided before and after the shows.

As food and beverage outlets, Opera Bar, Opera Kitchen and their associated outdoor seating areas are major drawcards for tourists and residents alike, and are destinations in themselves for patrons to deliberately take in the environment and enjoyment of experiencing the Sydney Opera House from the water's edge.

The Lower Concourse Improvements will ensure the Opera House maintains its status as a cultural icon and is available and accessible to a much broader public. Improvements to one of the major supporting uses and functions of the site should enhance its reputation at both a national and international level and *its power to attract artists, patrons and visitors on a national and international level.*

7.2 Compliance with CMP policies (CMP Section 4)

It is clear from the Statement of Significance in the CMP 4th edition that the Sydney Opera House derives its significance primarily from its form (design, structure and construction), function and setting. These three components are interdependent and as each of them is crucial to this significance then each must be maintained to the highest level. These are discussed below within the framework of relevant discussion, policies and Tolerance for Change tables from the CMP 4th edition.

7.2.1 Overarching policies (CMP Sections 4.1 – 4.4)

7.2.1.1 CMP Section 4.1 THE PRIMACY OF JØRN UTZON'S VISION

Policy 1.1 – Protecting Utzon's masterpiece

All work on the Sydney Opera House must be carried out within the framework of the Utzon Design Principles published in 2002 and in accordance with this CMP.

Comment:

A more detailed assessment of the proposal against the *Utzon Design Principles* is included in section 11 of this report.

In summary, the proposed Improvements to the Lower Concourse have been designed and will be carried out within the framework of *Utzon's Design Principles* and will not diminish the Utzon character and majesty of this space.

Policy 1.2 – Utzon concepts (relevant concepts bolded below)

The following elements and qualities of the building are essential to Utzon's concept for the place and must be retained in accordance with the Utzon Design Principles and this CMP:

- a. **the visually free-standing sculptural form of the building in its setting as a counterpoint to the city, unobstructed by adjacent objects or structures;***
- b. **the geometry and configuration of the three groups of shell roof structures and their tiled cladding;***

- c. *the orientation and relationship between the three shell roof groupings, the Podium and platform below;*
- d. *the open and uncluttered relationship between the Forecourt, Monumental Steps, Podium and Broadwalks;*
- e. *the visually open relationship between the Podium and its setting, including the Bennelong Restaurant and foyers encircling the auditoria;*
- f. ***the sequence and intended qualities of approach and arrival spaces and experiences;***
- g. ***the natural palette of materials for exterior and related interior spaces;***
- h. ***the building's architecture, both externally and internally, formed by the honest expression of structure and materials;***
- i. *the supporting structural systems throughout the building and their integrity as a reinforced concrete structure;*
- j. ***the utilisation of prefabricated components, strictly controlled in regard to geometry and quality, assembled to create structure, elements and spaces of the desired form;***
- k. ***harmony and uniformity resulting from application of a strict geometrical order and consistent forms;***
- l. *containing all the processes of theatre and performance preparation out of public sight and within the Podium;*
- m. *the interdependence of structure, form and fabric with function, all focused on enhancing the intellectual and emotional response of patrons, performers and visitors;*
- n. ***the primary function of the Sydney Opera House as a cultural venue that inspires and presents work of the highest quality in the performing arts.***

Comment:

The visually open relationship of the Sydney Opera House as a free-standing sculptural form in its setting as a counterpoint to the city will not be affected. The shade structures are in almost the same position as the existing umbrellas and retain the same distance from the Forecourt parapet. The height and profile of these structures is no higher than the bronze railing and no lower than the granite parapet panels. This ensures views to and from the Opera House will remain as open as possible as well as being a slight improvement on the existing.

The sequence and intended qualities of approach and arrival spaces and experiences are not adversely affected by the Lower Concourse Improvements. The Lower Concourse does provide a covered approach to the Opera House and the change to the alignment of the glazing at Opera Bar will improve traffic flow as well as visibility to the south of the stairs to the Forecourt. These are considered positive impacts on this approach sequence.

No change to the building's architecture is proposed, neither externally, nor internally. The structure and materials of the original design are retained, respected will not be obscured by the proposal.

No change to the natural palette of materials for exterior and related interior spaces is proposed. The existing pink granite panels outside the existing Charcuterie that will become part of the back of house space for Opera Bar will be salvaged and reused externally for the proposed extension to the main internal bar area. The finish of the proposed shade structures is Dulux "Coconut Husk" which is part of the approved colour palette outlined in the Sydney Opera House Outdoor Event Guide and matches the natural palette of materials.

The proposed materials and structures are honestly expressed and without artifice, consistent with this policy.

The proposed changes to the glazing wall as well as the shade structures are both elements that utilise prefabricated components, standardised production and design and deliver an outcome that conforms with this policy in regard to geometry and quality.

The proposed changes to the Lower Concourse, an important supporting facility to the Sydney Opera House, will provide improved visitor circulation and access as well as increased comfort and a less cluttered overall space, therefore enhancing the reputation of the Opera House as a performing arts centre.

The ongoing use of the Lower Concourse as a covered approach and for retail, ticketing, food and beverage is consistent with the original design intent of this facility to support the primary function of the place as a performing arts centre.

Further improvements in the pedestrian approach paths could be made with the adjustment of lease or operational boundaries when the opportunity arises.

The improvement works are in accordance with Utzon's concepts and this policy.

7.2.1.2 CMP Section 4.2 IMPORTANCE OF SETTING

Policy 2.1 – Landmark qualities

The status of the Sydney Opera House as an internationally acclaimed landmark arises directly from its freestanding sculptural form and silhouette, its siting, and open relationship with its setting when viewed from all angles and approaches. These must be protected for present and future generations in accordance with the Utzon Design Principles and this CMP.

Comment:

The proposed change to the glazing on the Lower Concourse will not have an adverse impact on the landmark qualities of the Sydney Opera House as Opera Bar and the associated glazing is located under the Forecourt, out of views to and from the Opera House.

The proposed shade structures however will be visible in views to and from the Sydney Opera House as they are located on the uncovered part of the Lower Concourse adjacent to and parallel with the edge of the Forecourt and railing. The location remains essentially the same as the current location of the umbrellas but is proposed to be improved with a better configuration, covering a marginally larger usable area (approx. 16%) with less clutter and services and one less umbrella in the northern section of the affected space.

The proposed shade structures will not impact on the freestanding sculptural form and silhouette of the building as the Lower Concourse is set distinctly under the open Forecourt and elevated Podium. There will be a positive impact on views when compared to the existing umbrellas. This is further enhanced with the specified colour Dulux "Coconut Husk", chosen to appear more recessive when seen against the pink granite panels.

Policy 2.3 – Protect setting

In addition to Policy 2.2, all agencies involved in assessing, planning or overseeing development proposals on or near Bennelong Point and nearby peninsulas and bays must give consideration to the creation, retention and recovery of the following views and vistas to and from the Sydney Opera House:

– Unencumbered exposure to the harbour on three sides, permitting views to the Opera House from all approaches and angles in 3 dimensions, and from neighbouring ridges and headlands, including:

- the waters of the harbour;*
- Dawes Point;*
- Millers Point;*
- Observatory Hill;*
- Mrs Macquarie's Point;*
- Garden Island;*
- Fort Denison;*
- Bradley's Head;*
- Cremorne Point;*
- Kurraba Point;*
- Kirribilli;*
- Milson's Point;*

- *McMahon's Point;*
 - *city buildings; and*
 - *the Harbour Bridge*
- *open relationship with the Bennelong Precinct including the Botanic Gardens and the sandstone face of the Tarpeian Wall;*
- *vistas, progressively or suddenly enlarging to views, from The Rocks, the northern end of Circular Quay, East Circular Quay, Macquarie Street, the Botanic Gardens and the harbour.*

No development should compete with or diminish the prominence and distinctiveness of the form and silhouette of Sydney Opera House to these views and vistas. These objectives should be progressively incorporated into any relevant development strategies.

Comment:

The proposed new shade structures are the only part of the proposal that is visible in views and vistas to and from the Opera House. These views will be retained with the proposed shade structures being in almost the same location as the existing umbrellas.

There will be a positive impact on the views to the Opera House from all approaches and angles in 3 dimensions as well as from neighbouring ridges and headlands with the improved profile and colour being more recessive when viewed against the granite parapet of the Forecourt. They will not diminish the prominence and distinctiveness of the form and silhouette of the Sydney Opera House.

Views over the harbour and to the city will be marginally improved with better visibility from within the Lower Concourse and less clutter within the shade structures themselves. The remainder of the uncovered area will be retained as an open space, devoid of further shade structures.

The new shade structures should retain the distance to the parapet over and be no closer than the existing shade structures.

7.2.1.3 CMP Section 4.3 PROTECTING THE VALUES

Policy 3.2 – Primary use as performing arts centre

The Sydney Opera House must continue its primary use as a nationally significant performing arts centre and its importance as a tourist attraction be recognised. The building, its site and its setting must not accommodate, or be altered to accommodate, uses or events that will vitiate its significance, character or primary use.

A co-ordinated long-term plan for the use of spaces across the whole site must be implemented and periodically reviewed to address the above. This should be in the form of a comprehensive framework, such as the Strategic Building Plan 2001, with sufficient detail to understand the implications for every space.

Comment:

Improvements to the functionality, access and comfort of the catering outlets, an important supporting facility to the performing arts centre, is likely to support the value of the place as Sydney's most popular tourist destination, a place to meet, socialise and experience the building, site and its setting.

The ongoing use of the Lower Concourse as a covered approach, for retail, food and beverage is consistent with the original design intent of this facility to support the primary function of the place. These uses as well as the tours and ticketing facilities have become so popular that the main circulation spaces and pathways are often difficult to navigate. Refer to the discussion in regard to CMP Sections 4.6.7 and 4.6.8.

To improve compliance with policy 3.2, the use of the spaces within the Lower Concourse need to be monitored and managed to avoid encroachments into the public passageways.

It is important that noise generated by activities on the Lower Concourse does not detract from ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

The proposed improvements for the Lower Concourse will not threaten or adversely impact the use or significance of the Sydney Opera House as Australia's pre-eminent performing arts centre.

7.2.1.4 CMP Section 4.4 UTZON, HALL & THE APPROACH TO CHANGE

CMP Section 4.4.6 Hall's Interiors

Policy 4.8 – Approach to change – Hall elements

Any adaptation or modest functional improvement, as described in Policy 4.4, to elements or interiors designed by Hall must retain or recover the character of his original design regimes with their coordinated detailing.

Comment:

Hall's work includes the Lower Concourse completed in 1988. The proposed improvements to the Lower Concourse recognises and respects the design concepts, contribution and value of Peter Hall's work. This proposal does not include any changes that could result in fragmentation of Hall's original design concepts.

The continued use of the Lower Concourse as a covered pedestrian approach with retail, ticketing, tours and food and beverage will not impact on the Hall regime of this facility. However clutter must be minimised and Hall's signature mushroom columns not obscured. Refer to discussion on Policy 7.17.

CMP Section 4.4.12 Significance, tolerance and opportunities for change

Policy 4.11 – Significance, tolerance and opportunities for change

All elements of the Sydney Opera House are to be maintained, used and managed in accordance with their relative level of significance, defined in Section 3.3 Summary Schedule of Levels of Significance, and the identified tolerance and opportunities for change for their component parts.

Policy 4.12 – Levels of Significance – general policy (relevant extract only):

The following general policy statements have been formulated to guide changes and works at the place and may be supplemented by more detailed policies for each element, and guidance for change on each component in the Tolerance for Change and Opportunities for Change tables in this CMP. The levels of significance refer to Section 3.3, Summary Schedule of Levels of Significance, and are to be considered as part of this policy.

A Exceptional significance:

Alteration of grade A elements is not permitted unless otherwise mentioned in Section 4 of this CMP.

Maintenance, preservation and repair are permitted to ensure their ongoing function and to retain significance.

It is essential that the original design intent of the element is retained and respected.

B High significance:

Alteration of grade B elements is permissible only when this is necessary in order to retain or strengthen a grade A element or function, unless otherwise mentioned in Section 4 of this CMP.

It is essential that the original design intent of the element is retained or respected.

Broadly the elements and areas listed below (following the main headings in the *Summary schedule of levels of significance* in Section 3.3 of the CMP 4th edition) will be potentially affected to varying degrees by the proposed works.

<i>Element</i>	<i>Level of significance</i>
Sydney Opera House generally	A
<ul style="list-style-type: none"> - Its form and fabric as an iconic architectural sculpture in the round in its harbour and urban setting; - Its context and setting; - It's function as a world-renowned centre for the performing arts; - Original concept of sequential experiences on arrival, entry and circulation; - Its complete assemblage comprising flat open Forecourt and Broadwalk surrounding a massive pink granite clad podium, with Monumental Steps ascending from Forecourt, supporting 3 groupings of soaring curved, ribbed concrete shells, white ceramic tiled roof shells, and their associated structural systems of unpainted folded, cranked and post-tensioned concrete beams and ribs. - Planning hierarchy – front-of-house / back-of-house / support services – which manifests itself externally, internally, horizontally and vertically. 	
Exterior	
<ul style="list-style-type: none"> • Lower Concourse - Sheltered access to Sydney Opera House below western edge of Forecourt, connecting East Circular Quay with Covered Concourse and parking station, incorporating food, beverage and retail outlets, lavatories. 	B

Significance rankings are taken from the CMP 4th edition and are as follows:

- A – Exceptional significance
- B – High significance
- C - Some significance
- D - Little significance
- Int – Intrusive element

Potential impacts on each element arising from the change of the existing glazing and new shade structures are complex, affecting both tangible and intangible aspects / values of the place. They cannot be considered in isolation.

The first sentence in the Statement of Significance in CMP 4th edition sums up the tension between the Opera House's tangible values that include the fabric of the building, and intangible values, including its original use and purpose, and the human experience of this:

The Sydney Opera House is a masterpiece of 20th century architecture and a world-renowned performing arts centre. Refer to discussion above.

Potential impacts on both tangible and intangible values are discussed below in the context of the relevant conservation policies contained in CMP 4th edition. At the end of each discussion section the *Tolerance for Change* table from the CMP 4th edition sets out the components of each element with comments on the potential impacts arising from the current proposal. Any issues identified in the *Opportunities for Change* tables are also discussed.

Comment Sydney Opera House Generally:

The Sydney Opera House generally is grade A – Exceptional significance. The proposed change of the glazing line and new shade structures will require only very minor changes or alteration (either temporary or permanent) to the form and fabric at the Opera House itself. These changes will not impact on its context or setting or it's function as a world-renowned centre for the performing arts. There should be no impact on the original concept of sequential experiences.

The public circulation within the Lower Concourse will be slightly improved as the change of the glazing line improves the visibility and circulation in the public passageway. The proposed adjustment extends the internal seating area of Opera Bar into a currently underutilised space in front of the existing fire exit, allowing removal of external clutter.

The proposed new shade structures replace the cluttered design of the current umbrellas to better respond to the site, views, circulation, public comfort and to better incorporate existing services. The proposal will therefore have no long-term impact on the exceptionally significant Sydney Opera House generally.

The continued use of the Lower Concourse as the only covered approach for patrons and visitors with ancillary food and beverage, ticketing, tours and retail facilities, supports the primary use of the Opera House as a performing arts centre. The food and beverage outlets and their associated outdoor seating areas are major drawcards for tourists and residents alike, and are destinations in themselves for patrons to deliberately take in the environment and enjoyment of experiencing the Sydney Opera House from the water's edge.

Comment Lower Concourse:

The Lower Concourse is grade B – High Significance. The adjustment of the glazing line will require changes to the pink granite floor and wall panels on the Lower Concourse surrounding the existing Charcuterie. It is proposed to salvage the granite floor panels in order to minimise these impacts, cut down and relay them in affected external areas following the existing geometry. New granite wall panels will be required for the extension of the wall adjacent to the stair up to the Forecourt. All of these panels date from the original construction in 1988 and were chosen to match those on the Broadwalks and Podium. The enclosure of the Charcuterie is to become part of back of house facilities and will no longer be visible to the general public. One leaf of the original bronze fire doors that currently sit between the Charcuterie and existing glazing line of the main bar is proposed to be reused in its new exit location.

The existing louvered circular lights are an important part of Peter Hall's original design for this covered walkway and one of these (located close to the existing bronze fire doors) will be removed as it will no longer be in an external area. It is proposed that this fitting will be carefully stored and used for maintenance of the remaining original fittings.

The existing shade structures are currently bolted into the granite paving panels on the uncovered part of the Lower Concourse. The granite pavers will be lifted temporarily to allow fixing of the new structures to the concrete structure below. The paving will be neatly cut around the shade structure columns, providing consistent clearance. All service connections are proposed to run under the pavers. There will be very little adverse impact on the fabric of the uncovered part of the Lower Concourse.

7.2.2 The site & its fabric (CMP Sections 4.5 – 4.15)

7.2.2.1 CMP Section 4.6 EVENTS & USES EXTERNALLY

CMP Section 4.6.1 Events and uses generally

Policy 6.3 Commercial leases and other uses

Commercial lessees and other operators across the site, including food and beverage, must be made aware of their responsibilities to retain, respect and protect the significant values of the place including its fabric.

No infrastructure, furniture or use should encroach onto or otherwise obstruct free use of public pedestrian routes. This includes the sheltered walkway and the waterside raised walkway on the Lower Concourse.

Comment:

Parts of the food and beverage operations on the Lower Concourse have in the past encroached on and restricted the use of pedestrian paths.

Although a supporting facility of the Sydney Opera House as a performing arts venue, it is of utmost importance that these uses do not diminish the Sydney Opera Houses' significance, character or

primary use by encroachment on important public circulation spaces on the Lower Concourse.

It is recommended to monitor, carefully manage, and if necessary adjust any infrastructure or furniture layouts that form part of these uses, in order to minimise encroachment on public access routes (the sheltered walkway and raised walkway along the sea wall). All commercial lessees and other operators across the site are to be made aware of their responsibilities to accord with this policy.

CMP Section 4.6.3 Shelter

Policy 6.6 Shelter on Podium and Lower Concourse

No umbrellas or other forms of shelter or tall objects, either temporary or permanent, should be placed on:

- *any external areas of the Podium platform itself;*
- *the roof of the Colonnade;*
- *any areas of the raised waterside walkway on the Lower Concourse.*

Comment:

New shade structures are proposed to replace the existing umbrellas on the uncovered part of the Lower Concourse adjacent the parapet of the Forecourt. The new shade structures should retain the distance to the parapet over and be no closer than the existing shade structures. No umbrellas are proposed on the raised waterside walkway on the Lower Concourse.

CMP Section 4.6.7 Lower Concourse – Use

Comment:

There is no relevant policy in this section, however it is noted in the CMP 4th edition that food and beverage outlets “*have, in the past encroached on and restricted the use of pedestrian paths*”. The adjustment of the glazing line at Opera Bar is considered a positive impact to address some of these issues.

Other venues including Opera Kitchen present with similar pinch points along the pathway and careful management and a review of furniture and infrastructure layouts is recommended in order to retain and strengthen unencumbered public circulation space on the Lower Concourse.

It is important that noise generated by activities on the Lower Concourse does not detract from ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

CMP Section 4.6.8 Exterior furniture

Policy 6.8 Exterior furniture and objects

Design, selection and quality of exterior furniture, signage and other objects, including temporary installations and events, on any external area including the Covered (Vehicle) Concourse must:

- *be appropriate for the Sydney Opera House standard of excellence;*
- *not use white or off-white, except for lettering on signage;*
- *avoid high reflectivity and harsh tonal contrasts with the natural palette of external materials;*
- *not use materials or fixings that will stain, degrade or otherwise impact on significant fabric;*

External furniture and objects must be kept to a minimum and none should obscure the base of the roof shells, glass walls, structure of the Western Colonnade, or the base of the Podium.

Comment:

The comments regarding encroachments of use addressed above for *CMP Section 4.6.7* apply here.

The proposed new shade structures have been purposefully designed to embrace the Sydney Opera House standard of excellence and be more in line with the architectural qualities of the site. Dulux “Coconut Husk” has been specified as the colour for the shade cloth and is one of the colours from the approved colour palette for structures at the Sydney Opera House as outlined in the Sydney Opera House Outdoor Event Guide. It will not contrast with the natural palette of the external materials. The columns and structure will remain as stainless steel, as they are now. No highly reflective materials or harsh tonal contrasts are proposed. The materials and fixings used for the new shade structures should not stain, degrade or impact on any significant fabric of the Lower Concourse and must be maintained and monitored accordingly.

The shade structures are proposed to be sited on the uncovered part of the Lower Concourse, in almost the same position as the existing shade structures. The existing northern group of umbrellas adjacent to Opera Kitchen currently comprise of 4 structures. The new design places four shade structures in the same location, with each individual shade structure being slightly wider than the existing. The stepped higher part of the uncovered Lower Concourse currently has eight umbrellas and the proposed number and configuration remain unchanged. The southern group of umbrellas currently comprise four structures, three of which are located adjacent the curve of the parapet with one single umbrella to the west. A new squarer configuration of four umbrellas of the new design is proposed in this location, improving cover over the level areas.

The new shade structures should retain the distance to the parapet over and be no closer than the existing shade structures.

The proposal addresses clutter by minimising the number of supports within each shade structure, integrating services and improving the grouped layout, whilst achieving maximum comfort through a slightly bigger individual width and finer profile. This also results in a more symmetrical and geometric layout.

The design is understood to be sufficiently durable and appropriate standard for permanent outdoor umbrellas in this environment.

The *Tolerance for Change* table for the *Exterior furniture* from the CMP 4th edition is included below. The added right-hand column provides further assessment of the proposal:

element: Exterior furniture significance ranking refer to particular element Furniture and fittings on Forecourt, Broadwalk and concourses dating from 1973 to 2010 selected components:	Tolerance for Change 1 = Low tolerance 2 = Moderate tolerance 3 = High tolerance				Further Considerations	Assessment / impact of proposal
	Form	Fabric	Function	Location		
3 bronze drinking fountains on Broadwalk (1973) – one on SW corner missing	2	2	2	2	Part of the original Hall-designed outdoor furniture and preferably should remain in situ. Could be moved or redesigned in same material to retain function	Not affected by proposal.
Bronze painted (originally white) fibreglass seating on Broadwalk (1973)	2	2	2	2	Elegant and discreet 1973 furniture worthy of retention now colour has been resolved. Location towards perimeter of Broadwalk is important.	Not affected by proposal.
Bronze painted (originally white) fibreglass benches (1973 originals)	3	3	2	3	Simple inoffensive form, and part of original suite of furniture. Preferable to keep at least one on site.	Not affected by proposal.

Polycarbonate ball light fittings on numbered bronze posts around Broadwalk (Hall's Balls) (1973)	2	2	1	2	Important Hall design component. Could be modified in accordance with Policy 14.5. Refer also to TfC for Covered Concourse.	Not affected by proposal.
Polycarbonate ball light fittings on bronze-painted steel standards around perimeter of Forecourt (Hall's Balls)	2	3	1	2	Installed 1988 to copy originals, and used throughout adjacent foreshore. Could be modified in accordance with Policy 14.5.	Not affected by proposal.
Plaque for Matthew Flinders, north-west skirting panels (1974)	2	3	2	1	Marks the point from which Flinders measured the Australian coastline. Fits comfortably with seawall parapet and should be retained.	Not affected by proposal.
Bronze painted steel crash bollards, protecting projecting hoods over openings in Podium (c.1990s)	3	3	2	2	Generally used to keep vehicles away from projecting hoods. If possible, the bollards should be redesigned, removed or a less intrusive barrier introduced.	Not affected by proposal.
Granite bollards (c.1980s-1990s)	2	3	2	2	Material and colour sit well in space. Important function but those close to Podium stairs are intrusive and should be removed.	Not affected by proposal.
Dark steel, stainless steel and timber furniture within Western Colonnade area	3	3	2	3	Colour and materials compatible but clutter space. Refer to Section 4.6 <i>Events and uses externally</i> .	Not affected by proposal.
Tall black poster and sign pylons on Broadwalks and Podium (1973 concept but executed to a substantially modified design in 1993)	3	3	2	3	Redesign to be more elegant, less heavy and with finer manufacture and finish, retaining scale. Bronze colour preferred. Security cameras to be incorporated within unit.	Not affected by proposal.
Single information pylon (2015) at south end of Forecourt	2	2	1	2	Important function. Pylon to be kept simple, elegant and without clutter. Incorporate camera within structure if possible.	Not affected by proposal.
Non-white outdoor furniture on Lower Concourse level, where not obstructing pedestrian paths	3	3	2	3	Stainless steel frames and timber surfaces are supported. Design should be elegant, simple and non-intrusive, with a consistent 'family' of designs applied across the site.	Not affected by proposal.
Portable external coffee and food bars around Forecourt	3	3	2	3	These are now largely removed. If used they should be kept to a minimum and as unintrusive as possible. Siting, size of footprint, design quality, colour, materials and food offering are most important considerations – refer to Policy 6.8, and discussion and policies in Section 4.6 <i>Events and uses externally</i> .	Not affected by proposal.

Bronze painted steel bollards at western and eastern ends of Covered (Vehicle) Concourse	Intrusive	Visually intrusive – if retention is required, they should be improved with finer design to extent possible given security requirements.	Not affected by proposal.
Portable galvanised or painted steel signage, display panels, and pylons, with weighted bases (sometimes referred to as rust buckets)	Intrusive	These have proliferated in recent years and constitute unnecessary and intrusive clutter. They intrude on views and frequently stain the paving.	Not affected by proposal.
Painted steel display panels used for occasional outside exhibitions – usually bolted to the paving	Intrusive	Fixing methods have resulted in loss of original bronze paving screws and damaged paving. Panels block views across the Broadwalk.	Not affected by proposal.
Off-white umbrellas and shade structures on all Broadwalks, Forecourt and Lower Concourse	Intrusive	Where these are located in accordance with other policies, they should be recovered in darker fabric in accordance with Policy 6.8. Where not in accordance with other policies, they should be removed.	The proposed new shade structures are proposed to be covered in Dulux “Coconut Husk” coloured shade cloth, which has already been tested and does not contrast with the natural palette of the external finishes. Positive impact.
Any furniture, shade structure, display / signage stand or heater unit that intrudes onto pedestrian or other access paths, or otherwise intrudes into important views	Intrusive	Modify, re-arrange or remove offending components to achieve compliance with this CMP.	An improved configuration and clutter minimisation by integration of services is proposed with the new design of the shading structures. Positive impact. To varying degrees, the layout and activities of the Opera Bar and Opera Kitchen currently intrude onto pedestrian paths in the public passageway and along the sea wall. These operational areas need to be adjusted and the location of set up monitored. Review and modification of these layouts is therefore recommended.
Potted plants, including those used as screens or dividers	Intrusive	Plants are inappropriate anywhere on the site as per Policy 6.9. Screens or dividers should be discouraged to retain openness of site and avoid clutter.	Not affected by proposal.
Square, bronze painted waste bin enclosures, including those with coloured signage	Intrusive	Design, size and placement to comply with Policy 6.8 and Section 4.6.8. Design quality could be improved and made SOH specific.	Not affected by proposal.

Opportunities for Change (OfC) table for the Exterior Furniture:

Explore Opportunities – Box Office Foyer	Comment	Response of proposal
Items listed as intrusive in TfC table above are opportunities for change. Additional opportunities listed below.	Generally, all changes must comply with the <i>Utzon Design Principles</i> and CMP, and may be subject to statutory approval.	
Exterior furniture generally	All exterior furniture and related signage, etc. should be redesigned as site-specific, related 'kit of parts' above.	Beyond scope of this project.
Signage pylons on Broadwalks and Podium – revised design	Potential to break up large signage elements into smaller, more elegant units and reduce visual heaviness. Refer to 'kit of parts' above.	Not part of this proposal.
Waste bin enclosures – revised design	Potential to design more elegant and site-specific bin enclosures. Refer to 'kit of parts' above.	Not part of this proposal.
Outdoor furniture – revised design	Potential to design and develop an elegant suite of furniture elements specific to the site. Refer to 'kit of parts' above.	Not part of this proposal.
Improved barrier / control fencing	Design and develop finer and more appropriate barrier control fencing than the present 'bike-rack' design for use across the site as and when required. Storage / stacking when not in use should be out of public view.	Not part of this proposal.
New shade devices	Design new shade / umbrella devices for use where required, of subdued and darker colour – not light or white. This could be a specific SOH design and included in the 'kit of parts'.	New shade structures are part of the Improvement works to the Lower Concourse and issues noted previously have been considered in their design. The specified colour is Dulux "Coconut Husk" a more subdued darker colour that does not contrast with the natural palette of the external materials.

7.2.2.2 CMP Section 4.7 CONSERVING THE EXTERIOR

CMP Section 4.7.7 Lower Concourse

Policy 7.17 Fitouts in Lower Concourse

Individual tenancy fitouts and associated furniture and other objects in this area must:

- *accord with the Utzon Design Principles and sit comfortably with the hierarchy and palette of natural exterior materials used in the public spaces adjacent;*
- *retain and respect the Hall regime in accordance with Policy 4.8;*
- *retain the open outdoor character of the space and not intrude into or distract from views to and from the Sydney Opera House;*
- *not enclose in any way the open space and colonnaded area outside the line of existing enclosure defined by the continuous fronts;*
- *not attach to or obscure the unpainted mushroom columns;*
- *not attach to, obscure or visually interrupt the continuous sweep of the parapet spandrel to the Forecourt above;*
- *not compete with or visually fragment the consistent and unified regime of finishes and lighting;*
- *avoid white, off-white or black, or highly reflective surfaces; and*
- *not encroach on or otherwise restrict the pedestrian walkway area between the mushroom columns and the east wall, or along the seawall.*

Comment:

The compliance with the UDP of proposed improvements to the Lower Concourse are discussed in detail elsewhere in this report. Please refer to comment on Policy 1.1 and Policy 1.2 as well as Section 11 for further information.

The colour proposed for the new shade structures is Dulux “Coconut Husk”, a previously tested and approved colour from the Sydney Opera House colour palette outlined in the Sydney Opera House Outdoor Event Guide that does not contrast with the palette of natural materials used in the public spaces. No change of materials is proposed as part of the adjustment of the Opera Bar glazing line and enclosure of the existing Charcuterie and where possible existing glass and bronze components will be salvaged and reused. One of the existing bronze fire exit doors will be relocated to the new position. Existing pink granite floor panels will be salvaged with many cut down and reused in the revised configuration thus minimizing the need for new matching panels. Minor works to the extended internal bar fitout are proposed to match all existing and previously approved finishes. White, off-white or black, or highly reflective surfaces other than the glazing are not proposed.

One of the existing louvered circular lights (an important part of Peter Hall’s original design) will be removed as it will no longer be in an external area. It is proposed that this fitting will be carefully stored and used for maintenance of the remaining original fittings.

The proposed shade structures are in almost the same location as the existing umbrellas. Due to their improved shape, they are able to shade a marginally greater area without enclosing the open space or compromising the character of the uncovered part of the Lower Concourse. Views to and from the Opera House should be marginally improved with better visibility from within the Lower Concourse and less clutter within the shade structures themselves. The remainder of the uncovered area must be retained as an open space, devoid of further shade structures.

There will be a positive impact of the adjustment of the glazing line in terms of improving sight lines along the pedestrian path and removing clutter from the area near the base of the Forecourt steps. The proposed new glazing line follows the curve of the Forecourt above lending a more fluid design for circulation. No attachments are proposed to either the mushroom columns or the continuous sweep of the parapet spandrel to the Forecourt above.

Part of the existing public space between the Charcuterie and main bar area will now be enclosed as an extension to the main bar seating area. This area is directly in front of a fire exit from the existing back of house spaces. It is presently not part of the Opera Bar or Opera Kitchen lease area but is being used as a seating area by Opera Bar, creating clutter in this busy pedestrian area. The lease area may need to be revised and amended for the works to proceed. Consultant advice confirms the fire exit can be relocated further north. Incorporating this space and creating improved visual harmony and fluidity is considered a positive outcome.

It is recognised that the food and beverage outlets in this location are important support functions for the primary use of the Sydney Opera House as a performing arts centre. Nevertheless, this use should not adversely encroach on or restrict the important pedestrian routes within the Lower Concourse or on the seawall. Therefore a review of these areas is recommended in particular with regards to the management and layout of furniture and seating along the mushroom columns on the covered public passageway and along the sea wall to maintain circulation and the open character of the space.

The *Tolerance for Change* table for the *Lower Concourse* from the CMP 4th edition is included below. The added right-hand column provides further assessment of the proposal:

element: Lower Concourse significance ranking B Sheltered access to Sydney Opera House below western edge of Forecourt, connecting East Circular Quay with Covered Concourse and parking station, incorporating food and beverage outlets and lavatories selected components:	Tolerance for Change 1 = Low tolerance 2 = Moderate tolerance 3 = High tolerance				Further Considerations	Assessment / impact of proposal
	Form	Fabric	Function	Location		
Seawall incorporating wave guard, and continuous precast granite seating and footpath clear of a obstructions	1	1	1	1	Form and configuration of seawall wave guard is important. Unobstructed pathway is important for visitor amenity and safety. Refer to discussion in Sections 4.7.7 and 4.7.10.	Not affected by proposal.
Paving, steps and walls of solid granite	2	2	1	2	Materials and their surface finish are successful and worth retaining. Refer to discussion in Section 4.7.7.	Not affected by proposal.
Seawall parapet of reconstituted pink granite incorporating seating bench	2	1	1	2	Materials and finish are consistent with Broadwalks and worth retaining. Refer to discussion and policies in Section 4.7.7.	Not affected by proposal.
Seawall footpath of granite setts	3	2	1	2	Material may require reappraisal to match repaved Forecourt, as same issues apply here. Refer to discussion and policies in Section 4.7.6. Refer to <i>Opportunities for Change</i> table.	Not affected by proposal.
Open bronze rail system to parapet edge of Forecourt revised to Jan Utzon design (completed 2010)	2	1	1	1	Bronze rail system to be considered for application in a modified form across other parts of the site. Refer to discussion and policies in Section 4.7.9.	Not affected by proposal.
Unpainted and unobscured concrete 'mushroom' columns	1	1	1	2	Unpainted finish and clarity of columns are important as structural expression is consistent with <i>Utzon Design Principles</i> . Care required to ensure that portable signage, furniture and other elements do not obscure or clutter these columns. Refer to discussion and policies in Sections 4.6.7, 4.6.8 and 4.7.7.	Not affected by proposal.
Louvered circular ceiling lights	1	2	1	1	Retain as part of the original design regime by Hall (1988). Specially designed to provide spread of light with limited ceiling height. Refurbished 2005 with improved deflectors and stronger bulbs. Recessed fittings are not possible due to structure of slab. Refer to Policy 4.8 in Section 4.4.6.	One of these will be removed as the glass wall realignment will enclose an existing external space. This fitting should be carefully stored and used for any future maintenance or repair of the remaining fittings.
Bronze-framed poster vitrines and doors	3	2	2	2	Use of bronze is important to maintain consistent use of	Not affected by proposal.

					metals externally across the site. Configuration can change.	
Concept of commercial outlets (such as food and retail), lavatories, connecting passage to parking station, and escalators to Covered Concourse and East Circular Quay	2	2	1	2	Covered access passage for public is important. Ideal location for food and beverage, but must not obstruct undercover pedestrian passage or pathway at seawall. Vertical transport to Forecourt level at north and south ends essential. Refer to discussion in Section 4.6.7.	Covered access and visitor comfort are proposed to be improved as part of this proposal. This report also recommends potential further improvements. Positive impact.
Visitor / welcome centre	3	3	2	2	Function is important but preferred in a location that does not encourage visitors to avoid principal approach via Forecourt and Monumental Steps.	Not affected by proposal.
Lavatories	3	3	1	3	Materials, particularly at entries, to be consistent with external materials palette.	Not affected by proposal.
Entry to Opera House carpark	3	2	1	3	Materials palette, colours and finishes should be consistent with Lower Concourse.	Not affected by proposal.
Floodlight pylon for the west surface of the Concert Hall and restaurant shells	2	3	1	2	One of a set of 3 pylons on this side. Coloured dark bronze to be as discreet as possible. Location determined by form of seawall.	Not affected by proposal.
Group of umbrellas, tables and chairs, and stainless steel bollards including on upper level adjacent to seawall – only where not obstructing pedestrian paths	3	3	2	2	Essential that these elements do not intrude into, or detract from key view lines across and from Forecourt. Colour, form, location and storage are important considerations. These elements must not protrude above parapet line or impede views to the roof shells from seawall walkway. Unobstructed public access and egress must be maintained. Refer to discussion and policies in Section 4.5, 4.6 and 4.7.7.	Proposed shade structures have been designed to comply with this. Loose and fixed structures currently intrude into the passageway and on the seawall walkway. Review of the use and furniture placement is recommended to reduce encroachment. Review and management of lease or operational areas is recommended when the opportunity arises.
Any furniture, shade structure, display / signage stand or barrier that intrudes onto undercover or other pedestrian paths, including along seawall walkway, or otherwise intrudes into or impedes important views	Intrusive				Modify, rearrange or remove offending components to achieve compliance with this CMP.	See above.

Opportunities for Change (OfC) table for the Lower Concourse:

Explore Opportunities – Lower Concourse	Comment	Response of proposal
Items listed as intrusive in TfC table above are opportunities for change. Additional opportunities listed below.	Generally, all changes must comply with the Utzon Design Principles and CMP, and may be subject to statutory approval.	
Revise lease boundaries and furniture layouts	Any changes or adjustments should improve free flow of pedestrians on main route and along seawall and reduce intrusive clutter. Refer to Section 4.6.7.	Review of the use and furniture placement is recommended to reduce encroachment. Review and management of lease or operational areas is recommended when the opportunity arises.
Extend service and support functions under Forecourt	Refer to Sections 4.4.10, 4.7.6 and 4.7.7.	Not part of this proposal.
Revised entry from East Circular Quay	Consider extending covered access to sheltered / colonnaded path on East Circular Quay.	Not part of this proposal.
Smoother paving to ramp and raised seawall walk for improved accessibility and safety	Consider replacing rough granite setts with sawn finish to match Forecourt but with lower reflectivity.	Not part of this proposal.
Revised wall finishes	Reduce polish / reflectivity on granite wall panels to better align with Utzon's intended hierarchy of approach spaces and associated finishes.	Not part of this proposal.

7.2.3 Operations & Management (CMP Sections 4.16 – 4.20)

7.2.3.1 CMP Section 4.18 CARE OF THE FABRIC & HOUSEKEEPING

CMP Section 4.18.8 Treatment of intrusive items

Policy 18.17 – Removal of intrusive items

Items identified as intrusive should be removed or altered in accordance with the guidelines in the Tolerance and Opportunities for Change tables in Sections 4.6 to 4.10 of this CMP.

Priorities and a time-based program for the removal or modification of intrusive items must be established and incorporated into any program of works.

Comment:

The off-white fabric on the umbrellas outside Opera Kitchen on the Lower Concourse have been identified as intrusive in the CMP 4th edition. All proposed new shade structures are of a darker colour (Coconut Husk). They have been designed to be more recessive in appearance and to minimise clutter in this space.

Any furniture or other object that encroaches onto pedestrian paths and into public space must be modified, rearranged or removed to maintain circulation and the open character of the Lower Concourse. It is recommended that existing lease or operational areas be reviewed and revised when the opportunity arises to comply with this CMP.

7.2.3.2 CMP Section 4.20 MANAGING THE PROCESS OF CHANGE

CMP Section 4.20.1 Use and compatibility

Policy 20.1 Change of use of spaces

Proposed changes of use of any internal or external space should only be considered where they satisfy the following criteria:

- they relate to and support the primary use of the building and site as a performing arts centre;
- proposed use and location does not weaken, confuse or threaten original (1973) functional relationships;
- changes must have minimal impact on significant fabric and fitout;
- change is consistent with coordinated planning for the whole site in accordance with Policy 3.2.

A co-ordinated long-term plan for the use of spaces across the whole site should be prepared to guide the above.

Likewise, the selection and operation of commercial leases should support the primary function of the Sydney Opera House. Commercial imperatives must not conflict with or endanger the primary use of the place as a performing arts centre, or its presentation as a masterpiece of human creative genius.

In some instances, the expectations of lessees conflict with the ability of the available space to accommodate them. This puts strain on adjacent spaces and services, on management and, in some cases (such as the Lower Concourse), on the space available for the free passage of patrons and visitors. This can inhibit appreciation of the place and its primary use, and potentially impact on its significance.

The responsibility for drafting, implementing and monitoring leases lies with Sydney Opera House management and it is essential that they ensure lessees and hirers understand the significance and primary purpose of the Opera House. This should provide some interest or incentive for lessees and hirers to treat the place with care and respect, and would assist Opera House staff in their management.

Policy 20.2 Unacceptable uses

Uses are unacceptable if they:

- dilute or impede the primary use of the place as a performing arts centre;
- impair or invalidate the original concept of the designers of those elements of the place that are assessed as being of exceptional or high significance;
- degrade the character and quality of fabric, spaces and relationships;
- are likely to cause excessive wear and tear or disfigurement of significant fabric;
- encroach on public access routes, or otherwise impede the use, experience and appreciation of public spaces; and
- require alterations, additions and facilities that may result in any of the above.

Comment:

It is proposed to continue the existing uses (food and beverage, retail, ticketing and tours) on the Lower Concourse. These uses are considered appropriate and compatible with the values of the Sydney Opera House and do not conflict with the primary use of the place as a performing art centre or its presentation as a masterpiece of human creative genius. However, it is essential that encroachments onto the main public thoroughfares are avoided, as such encroachments risk endangering the acceptability of these uses.

It is our conclusion that the proposed improvements to the Lower Concourse are appropriate and acceptable and respect, support and strengthen the primary use of the site as a performing arts centre.

The adjustment of the glazing line and minimisation of clutter associated with the new shade structures improve the visual clarity and openness in the Lower Concourse.

It is important that noise generated by activities on the Lower Concourse does not detract from the ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

The proposed improvements do not endanger or diminish Utzon's original concepts or those elements designed by Hall. The proposal will not degrade the character and quality of fabric or space of the Lower Concourse.

Policy 20.3 Lease and Hire agreements

All lease and hire agreements on the Sydney Opera House site must be:

- *developed in accordance with this CMP and the Utzon Design Principles, and in conjunction with heritage advice;*
- *clear that the lessee or hirer is responsible for damage and adverse impacts; and*
- *regularly monitored and audited for compliance by relevant management teams / portfolio within Sydney Opera House in consultation with Building portfolio.*

Where problems arise or breaches occur, corrective actions must be taken.

All lessees and hirers are to be inducted about the significance and sensitivity of the Opera House and its site:

- *during the tender process;*
- *at the commencement of their contract; and*
- *at regular intervals as required to keep their management and staff informed.*

Comment:

Continue to regularly monitor compliance with lease conditions. Review and revise lease or operational areas when the opportunity arises. Reduce encroachment of objects on public walkways and significant structural elements such as the mushroom columns.

CMP Section 4.20.5 The Burra Charter

Policy 20.9 Burra Charter

All conservation (including maintenance and repair), future changes and development at the Sydney Opera House should be carried out in accordance with the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter) as revised in 2013 or later, including its associated Practice Notes and the Code on the Ethics of Co-existence.

Comment:

All decisions thus far relating to the Improvement works on the Lower Concourse in this application have been in accordance with Burra Charter principles and processes. This should continue to the completion of the project.

7.3 Conclusion re CMP compliance

The Lower Concourse provides sheltered access to the Sydney Opera House below the western edge of the Forecourt, connecting East Circular Quay with the Covered Concourse and parking station and incorporates food, beverage, retail outlets, the Welcome Centre and lavatories. All of these support the primary function of the Sydney Opera House as a world-renowned centre for the performing arts. Visitors to performances often use the services provided before and after the shows.

There is high demand for sheltered seating due to the popularity of the setting and the existing space is restricted by the narrow overhanging edge of the Forecourt above. The proposed improvements respond positively to these constraints by reducing clutter and the visual impact on the character of the Lower Concourse.

The improvement works proposed in this application will involve minor but acceptable changes to the Opera Bar glazing line, associated granite paving and replacement of the shade structures on the Lower Concourse. These changes will have a positive impact on the functionality and circulation of the passageway adjacent to the stair to the Forecourt.

Hall's design intent and palette of materials and the quality and character of the Lower Concourse with its open uncovered spaces will be retained and respected. The removed original louvered circular light fitting will be stored and used for future maintenance and repair of other fittings.

The proposed improvement works comply with the policies and guidelines in the CMP 4th edition.

The impacts of this proposal are considered positive, however the following conditions are recommended:

Conditions:

1. Sydney Opera House to review existing lease and operational areas, including furniture and infrastructure placement, and where necessary revise them when the opportunity arises to minimise encroachments onto public walkways and circulation spaces and retain the intended open and uncluttered character of the Lower Concourse. Any revisions and ongoing management are to be in accordance with the CMP policies, (the edition current at the time).

8.0 IMPACT ON STATE HERITAGE VALUES

8.1 State Heritage Register criteria

The Sydney Opera House is listed on the SHR for meeting all its listing criteria (a)-(g). The values of the Sydney Opera House that meet the SHR criteria are set out in full in the NSW Heritage Database, available online at:

<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5054880>

The extracts from the SHR values, under each of the criteria below, summarise and draw attention to those aspects of significance that are relevant to the assessment of heritage impact of existing uses, the proposed change to the Opera Bar glazing line and new shade structures in the Lower Concourse. Design 5's assessment of heritage impact is summarised at the end of this section.

SHR criterion a) Historical significance

An item is important in the course, or pattern, of NSW's cultural or natural history.

Relevant key values from SHR values:

- "... a modern architectural masterpiece, recognised internationally as a symbol of Sydney and Australia, ..."

Comment:

The continued use of and improvements to the 1988 Lower Concourse, will not have any adverse visual and functional impacts on the significant architectural qualities of the Opera House or the ability of the Opera House to be recognised as a modern architectural masterpiece.

SHR criterion b) Associative significance

An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history.

Relevant key values from SHR values:

- none relevant

Comment:

There are no significant associative values from the SHR listing that are impacted by this proposal.

SHR criterion c) Aesthetic significance

An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.

Relevant key values from SHR values:

- "... exceptional aesthetic significance because of its quality as a monumental sculpture in the round, both day and night, and because of the appropriateness of its design to its setting and

the picturesque quality of the setting.”

- “Its public spaces and promenades have a majestic quality endowed by powerful structural forms and enhanced by vistas to the harbour and the city.”

Comment:

The proposed change to the glazing line of the Opera Bar on the Lower Concourse has no negative impact on the Lower Concourse’s High significance. The pink granite used on the Lower Concourse was chosen to match the Broadwalks and Podium and it is proposed to retain it for external areas, salvaging and altering panels from areas to be enclosed to suit the revised configuration.

Aesthetically the changes to the alignment follow the existing curvature of the floor panels of the Lower Concourse and allow for improved visitor circulation and visibility along the space. The proposal will not have any adverse impacts on the setting of the Opera House or its ability to be read as a monumental sculpture in the round.

The removal and storage of one of Peter Hall’s original louvered circular lights will not diminish the aesthetic qualities or character of this space.

Any internal works of the extension of the dining area fitout, air-conditioning and lighting will match the existing finishes and materials within the Opera Bar and should be practically imperceptible visually and aesthetically.

The majestic quality of the powerful structural forms, referred to in the criteria applies to the major public spaces above the Forecourt but they are relevant here when considering the mushroom columns. The proposed glazing realignment respects the space around the visually powerful ‘mushroom’ heads to the columns and retains and possibly strengthens the visual power of their curved alignment. The new glazing alignment will enable removal of the present visual clutter at the base of the stairs to the Forecourt. The proposed change to the glazing alignment will have no impact on the vistas to or from the harbour and the city.

While acknowledging that any permanent shade structure on the uncovered part of the Lower Concourse will have some visual impacts on the exceptional aesthetic significance of the Sydney Opera House as a monumental sculpture in the round, the overall impacts of the proposed structures will be less than the existing as a result of their reduced depth and finer design. With regard to visitor comfort and minimisation of clutter, the impacts will be positive. The colour, configuration and shape have been designed to minimise negative impacts as much as possible and are considered more elegant compared to the existing shade structures. The chosen colour Dulux ‘Coconut Husk’ is one of the colours from the Sydney Opera House approved colour palette as outlined in the Sydney Opera House Outdoor Event Guide. Furthermore the new shade structures will not feature the currently displayed intrusive branding and logo on the fabric, minimising distractions.

SHR criterion d) Social significance

An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.

Relevant key values from SHR values:

- “... an internationally recognised symbol of Sydney, one of Australia's leading tourist attractions and a focal point for community events. It is also widely admired by Sydneysiders, and can be seen to contribute importantly to the sense of place in the Sydney CBD.”
- “As a world-class performing arts centre, the Sydney Opera House has enhanced the cultural vitality of the nation. It has also hosted many “everyday” cultural activities as well as providing free public access to its harbour-side Broadwalk.”
- “Of the 85,000 people estimated to visit each week in 2003, about a quarter came for performance-related reasons while the rest came to experience the building and its environment. In offering this remarkable accessibility to a broad public, Sydney Opera House can be seen to be fulfilling Cahill's hope that it would be “a monument to democratic nationhood”.”

Comment:

The Lower Concourse provides sheltered access to the Sydney Opera House below the western edge of the Forecourt, connecting East Circular Quay with the Covered Concourse and parking station and

incorporates food, beverage, retail outlets, the Welcome Centre and lavatories. All of these support the primary function of the Sydney Opera House as a world-renowned centre for the performing arts. Visitors to performances often use the services provided before and after the shows. As food and beverage outlets, Opera Bar, Opera Kitchen and their associated outdoor seating areas are major drawcards for tourists and residents alike, and destinations in themselves for patrons to take in the environment and enjoyment of experiencing the Sydney Opera House from the water's edge.

The Lower Concourse improvements concerned with providing better circulation along the undercover walkway and increased seating and back of house facilities within the Opera Bar in a currently underutilised space contribute to a more positive experience of the space and along with the new shade structures will continue to provide enhanced visitor comfort.

A space for socialising, the existing Lower Concourse activities and facilities contribute to the cultural vitality of the city and the improvements proposed should enhance the experience of the Opera House as an internationally recognised symbol of Sydney.

It is important that noise generated by activities on the Lower Concourse does not detract from ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

As demand and popularity increases, the continued use of the Lower Concourse for food and beverage outlets, as well as tours and ticketing must ensure that potential adverse impacts on the primary purpose of the space for public circulation are avoided. The food and beverage outlets in particular have encroached on and restricted the use of sections of the pedestrian paths. Careful management is needed to avoid this and some lease or operational areas may need future clarification and adjustment when the opportunity arises. Such adjustments should follow the recommendations in Section 7.2 of this HIS.

SHR criterion e) Research potential

An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.

Relevant key values from SHR values:

- none relevant

Comment:

There are no significant research potential values from the SHR listing impacted by this proposal.

SHR criterion f) Rarity

An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history.

Relevant key values from SHR values:

- "The Sydney Opera House has significance for its rarity as a twentieth century architectural masterpiece sited on a prominent peninsular in Sydney Harbour."
- "It is an exceptional landscape (and seascape) monument because of its quality as a sculpture in the round, both day and night, and because of the appropriateness of its design to its setting and the picturesque quality of the setting."
- "It is also unique in so far as it has become an internationally recognised symbol of Sydney and Australia, which is also widely admired by local citizens."

Comment:

The ability of the Sydney Opera House, (as an exceptional architectural monument in response to its harbour setting and its quality as a sculpture in the round), to attract visitors and performers from all over the world will be enhanced with the Lower Concourse improvement works by the improved amenity, accessibility and patron comfort offered by the proposed works.

SHR criterion g) Representativeness

An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments.

Relevant key values from SHR values:

- "It is outstanding because of its innovative design appropriate both to its entertainment functions and to its harbour-side setting, and because of the esteem in which it is held in Australia and internationally."
- "As an icon of modern architecture it combines an expressive, sculptural freedom of form with the precise technology of the machine age."

Comment:

The ability of the Sydney Opera House to attract visitors and performers from all over the world should be enhanced by these works. Supporting functions in the Lower Concourse need to reflect the outstanding and innovative design standards of the Opera House itself by providing appropriate amenity, functionality, accessibility, patron comfort and public engagement. The improved experience of these facilities should enhance the Opera House's esteem.

8.2 Summary assessment of heritage impact on State Heritage values

In summary, the continuing existing uses and proposed improvements on the Lower Concourse will have no adverse impacts on the significant architectural or aesthetic qualities of the Opera House. Accessibility and visitor circulation will be improved as part of the adjustment of the glazing line on the Lower Concourse, eliminating the narrowing that is presently impacting the flow of visitors and visibility of the stairs to the Forecourt along the walkway. Other pinch points and encroachment resulting from existing lease boundaries may still impact on the unobstructed flow of circulation. Therefore careful management and a future review of the lease or operational areas are recommended in order to continue to retain the primary use of the Lower Concourse as a public circulation space.

It is important that noise generated by activities on the Lower Concourse does not detract from ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

There will be some impacts on original fabric in the Lower Concourse as part of the works, where the bronze framed glazing and pink granite panels are affected and one ceiling light is removed. These impacts are minimised by reusing glazing elements and large granite panels from the current configuration. Material not used will be retained for future repairs and maintenance elsewhere. There should be no adverse impact on the aesthetic quality of the space with regard to fabric.

The aesthetic quality of the structural forms on the Lower Concourse, namely the mushroom columns are currently in part isolated or encroached upon. These qualities will be improved by incorporating the isolated column (01) into the enclosed area and improving the adjacent circulation space. The adjustment of the glazing to more closely follow the curved paving alignment will have a positive impact on visibility within the space and how it is perceived and used.

The visual impacts of the new shade structures should be positively improved by using the approved colour Dulux 'Coconut Husk' as well as not branding the new shade structures with oversized logos.

The improved simplicity and alignment of the new shade structures, their slimmer profile and the minimisation of clutter and services should improve how they are perceived in views from and to the Sydney Opera House, as well as from within the Lower Concourse itself. The new shade structures should retain the distance to the parapet over and be no closer than the existing shade structures.

The impact of the existing uses are considered acceptable and appropriate for supporting functions to achieve a high level of visitor comfort that will maintain the Opera House's status as a world-class performing arts centre, attracting the wider community and enhancing the nation's cultural vitality.

9.0 IMPACT ON NATIONAL HERITAGE VALUES

9.1 National Heritage Values – Summary Statement of Significance

The Sydney Opera House was included on the National Heritage List in July 2005 (Listing No. 105738). The National Heritage values of the Sydney Opera House are protected under the Australian Government's Environment Protection and Biodiversity Act 1999.

The following is the Summary Statement of Significance of the National Heritage values of the Sydney Opera House. *Emphasis added* on aspects of significance relevant to the assessment of heritage impact of the works in this current application.

The Sydney Opera House, constructed between 1957 and 1973, is a masterpiece of modern architectural design, engineering and construction technology in Australia. It exhibits the creative genius of its designer, the Danish architect Jørn Utzon and the contributions to its successful completion by the engineering firm Ove Arup and Partners, the building contractors M.R. Hornibrook, and the architects Hall, Todd and Littlemore. It is an exceptional creative and technical achievement in the national history of building design and construction in Australia.

Since its completion the Sydney Opera House has attracted world wide acclaim for its distinctive design, enhanced by its prominent location on Bennelong Point within a superb harbour setting. With its soaring white roof shells set above a massive podium, the Sydney Opera House is a monumental urban sculpture, internationally acclaimed as an architectural icon of the twentieth century. Its many national and international awards reflect its pivotal place in the national story of creative and technical achievement in Australia. The challenges involved in executing Utzon's design inspired innovative technical and creative solutions that were groundbreaking in the history of architectural design and building construction in Australia, particularly the roof shells that were based on the geometry of the sphere and demonstrated the extraordinary creative potential of the assembly of prefabricated, repeated components.

The interior spaces also reflect the creative genius of Utzon and his successors, Todd, Hall and Littlemore, who completed the building after Utzon's departure from the project in 1966.

The Sydney Opera House is the most widely recognised building in Australia, and is cherished as a national icon and world-class performing arts centre. It represents an enduring symbol of modern Sydney and Australia, both nationally and internationally, reflecting changing social attitudes towards Australian cultural life in the decades after World War II. The Sydney Opera House has played a seminal role in the development of Australia's performing arts, enhancing the cultural vitality of the nation. It continually attracts nationally and internationally acclaimed performers, and is a mecca for visitors from around Australia and overseas.

The peninsula on which the Sydney Opera House now stands has a special association with Bennelong, an Aboriginal man who became a prominent and influential figure in the early colony and played a significant role in mediating interactions between Aboriginal people and early settlers.

Comment:

The National Heritage values of the Sydney Opera House are primarily related to Jørn Utzon's and Peter Hall's outstanding design of the building, its recognition as a national icon, and the venue being a cherished performing arts centre.

The proposed improvement works to the Lower Concourse will not have any adverse impacts on the distinctive design of the Lower Concourse by Peter Hall. The proposed change to the glazing line at Opera Bar will more closely follow the curved paving alignment in the public thoroughfare and will have a positive impact on the circulation and how the space is perceived. No new materials or design language are proposed. The works associated with the glazing realignment and internal extension of Opera Bar are well set back under the Forecourt and will not have any adverse impacts on the prominent location, superb harbour setting or monumental urban sculpture.

The new shade structures on the Lower Concourse are of a height, scale and colour such that should not dominate the monumental sculptural nature of the Opera House, as defined by its soaring white roof shells set above the Podium. They will improve the visual impacts compared to the higher pitched existing umbrellas and remove clutter associated with existing services and structures. Visitor comfort and amenity should be enhanced, maintaining the attraction of the food and beverage outlets

as a destination and supporting facility to the Opera House to visitors from Australia and overseas.

The Improvement Works to the Lower Concourse will strengthen the ability of the Opera House to attract performers, patrons and visitors, both nationally and internationally and will help sustain the iconic international standing of this world-class performing-arts venue.

See the more detailed listed values of the place under each of the individual National Heritage criterion below. Design 5's assessment of heritage impact is summarised at the end of that section.

9.2 National Heritage criteria

The Sydney Opera House is registered on the National Heritage List for meeting its listing criteria A, B, E, F, G and H.

The values of the Sydney Opera House that meet the National Heritage criteria are set out in full in Appendix B of the CMP 4th edition and also in the listing of the Sydney Opera House on the National Heritage List, available at <http://www.deh.gov.au/cgi-bin/ahdb/search.pl>

The extracts from the National Heritage values, under each of the criteria below, summarise and draw attention to those aspects of significance that are relevant to the assessment of heritage impact of this suite of projects. Design 5's assessment of heritage impact is summarised at the end of this section.

NHL criterion (a) Events, Processes

The place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history.

Relevant key values from National Heritage values:

- "a monumental sculpture in the round, and its inspired design solution in response to its prominent setting on Bennelong Point in Sydney Harbour"

Comment:

The proposed works in this proposal retain and respect the sculptural qualities of the Opera House and will have a potentially positive impact on its setting.

NHL criterion (b) Rarity

The place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.

Relevant key values from National Heritage values:

- "the Sydney Opera House is a cultural icon"
- "distinctive sail-like concrete shell roofs standing boldly upon a massive granite-faced platform, located prominently on the Sydney Harbour foreshore"

Comment:

The proposed continuation and management of existing uses and improvement works will not have any adverse impacts on these values and will potentially enhance the visitor experience at the Sydney Opera House, supporting the primary use of the Sydney Opera House as a performing arts centre.

NHL criterion (e) Aesthetic characteristics

The place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Relevant key values from National Heritage values:

- "Its landmark qualities are enhanced by the building's juxtaposition with Sydney Harbour, its relationship with the Sydney Harbour Bridge, the garden landscape of Bennelong Ridge, the sandstone cliff face of Tarpeian Rock, and the vistas and views to and from The Rocks, Circular Quay, East Circular Quay, Macquarie Street, the Botanic Gardens and the harbour"
- "The building's ability to emotionally move people and invoke a strong aesthetic response is enhanced by the experience of approaching, entering and moving around the building and surrounds. The public promenades including the Forecourt, Broadwalk, and podium platform

and steps contribute to the majestic qualities of the place. The large forecourt and sweeping podium steps prepare the visitor for the majestic quality...”

Comment:

The proposed shade structures will have a positive impact on views towards the Opera House, which are enhanced by the design, scale, height and colour of the new elements. The new structures should be recessive against the granite parapet of the Forecourt, provide improved amenity and patron comfort and not have an adverse impact on the landmark qualities of the Sydney Opera House.

The proposed minor works to the glazing line at Opera Bar will enhance the experience of approaching the building via the undercover pedestrian walkway on the Lower Concourse by providing improved access, visual harmony and less clutter.

NHL criterion (f) Creative or technical achievement

The place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period.

Relevant key values from National Heritage values:

- “finished in natural materials, textures and colours”
- “the creation of sensory experiences to bring pleasure to the building’s users, particularly the experience of approaching”
- “It epitomizes the extraordinary creative potential of the assembly of prefabricated, repeated components”

Comment:

The proposed materials, form and colour of the proposed shade structures have been sensitively designed in accordance with Utzon’s design principles and to respect the existing material palette.

The experience and pleasure of approaching the building via the Lower Concourse will be enhanced with the improved circulation along the covered walkway and glazing realignment at Opera Bar.

The shade structures and glazing panels forming part of the works proposed in this application both rely on the prefabrication and assembly of repeated components.

As such the proposed Lower Concourse Improvement works will retain and respect these values.

NHL criterion (g) Social value

The place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

Relevant key values from National Heritage values:

- “building’s role as a cultural icon is also derived from the numerous performances conducted there (100,000 since 1973), and the place’s role as a focal point for community events. The Sydney Opera House is a mecca for both Australian and international visitors to Sydney, attracting over 100 million visitors since the opening in 1973.”

Comment:

The proposed works included in this application will strengthen the Sydney Opera House’s role as a cultural icon accessible to all, and potentially enhance its ability to attract both national and international visitors with the improvement of the undercover Lower Concourse approach and its supporting catering outlets that have become a destination in themselves.

It is important that noise generated by activities on the Lower Concourse does not detract from ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is

considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

It is recommended to monitor and maintain any infrastructure or loose furniture that forms part of this use and review and adjust the lease or operational areas in the longer term to strengthen the overall experience and appreciation of public spaces as well as minimise encroachment on public access routes in order to eliminate any negative impacts on the primary role of the Lower Concourse.

NHL criterion (h) Significant people

The place has outstanding heritage value to the nation because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.

Relevant key values from National Heritage values:

- "The Sydney Opera House is directly associated with Jørn Utzon"
- "The peninsula on which the Sydney Opera House now stands has a special association with Bennelong"

Comment:

Although not specifically mentioned under this criteria, Peter Hall played an important role in the design of the Lower Concourse. His work and palette of materials is retained and respected in this proposal. The works proposed in this application will not affect these associations.

9.3 Summary assessment of heritage impact on National Heritage values

The proposed improvements to the Lower Concourse recognise and respect the design concepts, contribution and value of Utzon's and Peter Hall's work. This proposal does not include any changes that could result in fragmentation of Hall's original design concepts for the Lower Concourse.

The continued use of the Lower Concourse as a covered pedestrian approach with retail, ticketing, tours, and food and beverage will not impact on the Hall regime of this facility.

The minor works to the glazing at Opera Bar proposed in this application will enhance and strengthen the covered southern approach to the Sydney Opera House via the Lower Concourse.

Visual impacts from the proposed shade structures will be positive when compared to the existing umbrellas and will have less impact in views to and from the Opera House. The proposed new structures have an improved design with slimmer profile and better services integration, minimising visual clutter. The colour and form are designed to be more recessive when viewed against the granite parapet of the Forecourt.

These impacts are considered to have a positive impact on the National Heritage values and will enhance amenity, accessibility and patron comfort. They are necessary for the operation of the food and beverage, retail and ticketing outlets in this space, important ancillary functions supporting the Opera House as a world-class performing arts venue.

It is important that noise generated by activities on the Lower Concourse does not detract from ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

It is recommended to monitor and maintain any infrastructure or loose furniture that forms part of these uses and review and adjust lease or operational areas in the longer term to strengthen the overall experience and appreciation of public spaces as well as minimise encroachment on public access routes, particularly as the only covered pedestrian access route to the Opera House.

9.4 Summary assessment of heritage impact on National Heritage values according to the National Heritage significant impact criteria

The *Significant impact criteria* for a National Heritage place, as stated in the *Significant Impact Guidelines* are as follows:

An action is likely to have a significant impact on the National Heritage values of a National Heritage place if there is a real chance or possibility that it will cause:

- *one or more of the National Heritage values to be lost*
- *one or more of the National Heritage values to be degraded or damaged, or*
- *one or more of the National Heritage values to be notably altered, modified, obscured or diminished.*

Comment:

The above assessment concludes that none of the National Heritage values of the Sydney Opera House will be lost, degraded, damaged, altered, modified, obscured or diminished through either the continuing use of the Lower Concourse for food and beverage, retail, ticketing and tours, or the proposed improvement works.

It is therefore not considered to be a ‘controlled action’ under the *EPBC Act* and as such a referral to the Commonwealth Minister for the Environment with regard to impacts on World and National Heritage values is not required.

However, as the full proposal is located within the SHR listed boundary for the Sydney Opera House, and parts of it cannot be considered to be exempt from approval under the site-specific exemptions, an approval under the *NSW Heritage Act, 1977* is required.

10.0 IMPACT ON WORLD HERITAGE VALUES

In 2007, the Sydney Opera House was inscribed on UNESCO’s World Heritage List (WHL) for its Outstanding Universal Value (OUV) and as a “masterpiece of human creative genius” under criterion (i) of the Operational guidelines for the implementation of the World Heritage Convention.

The World Heritage List inscription for the Sydney Opera House is included below. The highlighted text draws attention to those aspects of significance that are relevant to the assessment of heritage impact for the proposed Lower Concourse improvement works.

Outstanding Universal Values

The Sydney Opera House constitutes a masterpiece of 20th century architecture.

Its significance is based on its unparalleled design and construction; its exceptional engineering achievements and technological innovation and its position as a world-famous icon of architecture. It is a daring and visionary experiment that has had an enduring influence on the emergent architecture of the late 20th century. Utzon’s original design concept and his unique approach to building gave impetus to a collective creativity of architects, engineers and builders. Ove Arup’s engineering achievements helped make Utzon’s vision a reality. The design represents an extraordinary interpretation and response to the setting in Sydney Harbour. The Sydney Opera House is also of outstanding universal value for its achievements in structural engineering and building technology. The building is a great artistic monument and an icon, accessible to society at large.

Criterion (i)

*The Sydney Opera House is a great architectural work of the 20th century. It represents multiple strands of creativity, both in architectural form and structural design, **a great urban sculpture carefully set in a remarkable waterscape and a world famous iconic building.** All elements necessary to express the values of the Sydney Opera House are included within the boundaries of the nominated area and buffer zone. This ensures the complete representation of its significance **as an architectural object of great beauty in its waterscape setting.** The Sydney Opera House continues to perform its function as a world-class performing arts centre. The Conservation Plan specifies the need to balance the roles of the building as an architectural monument and as a state of the art performing centre, thus retaining its authenticity of use and function. Attention given to retaining the building’s authenticity culminated with the Conservation Plan and the Utzon Design Principles.*

10.1 Summary assessment of impact on World Heritage values according to the World Heritage significant impact criteria

The *Significant impact criteria* stated in the *Significant Impact Guidelines* are as follows:

An action is likely to have a significant impact on the World Heritage values of a declared World Heritage property if there is a real chance or possibility that it will cause:

- *one or more of the World Heritage values to be lost*
- *one or more of the World Heritage values to be degraded or damaged, or*
- *one or more of the World Heritage values to be notably altered, modified, obscured or diminished.*

Comment:

The proposed Lower Concourse Improvement works are located within the boundaries of the World Heritage listing of the Sydney Opera House. The minor works at Opera Bar, including the adjustment of the glazing line and internal venue fitout are not visible in views to and from the Opera House. The new shade structures however, will be seen as part of the uncovered part of the Lower Concourse in views from across the harbour towards the Opera House, on approach from Circular Quay as well as looking over the Lower Concourse from the Forecourt towards the water. These shade structures will replace the existing umbrellas in the same location but with a finer profile and simplified structure to minimise impacts in views by aligning with key horizontal lines such as the bronze railing and granite parapet of the western perimeter of the Forecourt. Their design, colour and materials will not dominate the significant presentation of the Opera House as a monumental sculpture set within a waterscape setting. The new shade structures should retain the distance to the parapet over and be no closer than the existing shade structures.

The continuation of existing uses on the Lower Concourse and proposed improvement works will not cause the World Heritage values of the Sydney Opera House to be lost, degraded or damaged, notably altered, modified, obscured or diminished.

It is therefore not considered to be a 'controlled action' under the *EPBC Act* and as such a referral to the Commonwealth Minister for the Environment with regard to impacts on World and National Heritage values is not required.

However, as the full proposal is located within the SHR listed boundary for the Sydney Opera House, and parts of it cannot be considered to be exempt from approval under the site-specific exemptions, an approval under the *NSW Heritage Act, 1977* is required.

11.0 COMPLIANCE WITH THE UTZON DESIGN PRINCIPLES

The *Utzon Design Principles* (UDP 2002) provide important guidance on the intended role of particular spaces and elements and on how they should be treated in the future. Relevant quotes from the UDP are provided and commented on below.

When you build a building like the Opera House it is like an oil painting by one of the Masters where every time you add a brush stroke it should enhance the total painting, as soon as you put something wrong in this painting, a wrong colour, a wrong shape, then the total image is of a lesser value than it would have been if the same artist had been allowed to complete the picture. (UDP Page 39)

Comment:

Utzon and Hall were both of the opinion that modifications or changes are possible to address functional demands if done with caution and careful consideration as well as respect for the character created by the original designers. It becomes clear from the above statement that small incremental changes together can have a negative effect on the quality and integrity of the place. Although the works are of a relatively minor nature and present very little negative impact, they need to be viewed in relation to a grander scheme and managed accordingly. Considering this larger total image, the impacts will be positive.

Keep the approach, the openness and fluidity of movement

"One of the great features of the Opera House is the approach, the openness, the fluidity of people's movements through the house, and once you clutter this you have a problem." (UDP Page 49)

Beautiful experience/oriented in Harbour

"...People have a beautiful experience entering and walking up the stairs and entering the auditoria, while they are all the time oriented in the beautiful harbour and have the views of the spectacular Sydney Harbour setting." (UDP Page 59)

Buildings and surroundings

"It is the interplay between the building and its surroundings... that is important." (UDP Page 70)

Comment:

The proposed changes to the glazing line at Opera Bar improve the sense of openness and fluidity allowing visitors to visually experience the full width of the main walkway in the Lower Concourse free from clutter. Patrons inside the main bar area will continue to be connected with the passageway and uncovered part of the Lower Concourse that looks out over the harbour and city.

The replacement of the existing umbrellas with finer profiled and less intrusive shade structures, will reduce their impact on views to and from the Sydney Opera House itself. They will be visible in views, however the flat and low profile of the design is in line with the parapet and railing of the Forecourt above and with use of the recessive colour, Dulux "Coconut Husk" complies with the approved palette in the Sydney Opera House Outdoor Event Guide. There will be no adverse impact on the setting of the Sydney Opera House.

To maintain the approach, openness and fluidity of pedestrian movement, it is recommended to review and adjust the layout of furniture and infrastructure associated with existing uses. In the longer term this will strengthen the overall experience and appreciation of public spaces as well as minimise encroachment on public access routes such as the sheltered walkway and raised walkway along the sea wall.

Expression of elements, produced industrially

"The exteriors of the building stand as an expression for something basic in the concept - the idea of dividing the various parts up into equal components, which can be produced industrially and afterwards put together to form a structure of the desired form." (UDP Page 72)

Colour in harmony geometric concept

"By using this same form we have harmony and uniformity throughout giving the intrinsic whole to the building." (UDP Page 73)

Modular coordination/ standardisation

"According to our way of working the glass panels were to be of equal size, facilitating production." (UDP Page 74)

Under control by strict geometry

"...the only way to attack the ...major parts of the building would be to bring them under control by a strict geometry and then divide them into uniform components, which can be produced by machine under strict control both as regards dimensions and quality." (UDP Page 75)

Comment:

The proposed Improvement works to the Lower Concourse use standard elements that follow the existing geometry and materials. Both the glazing and umbrellas are made up of individual components that can be modified in a variety of different shapes and forms to create a desired outcome.

The form of the glazing relates to the established geometry of the site, i.e. the granite cladding and paving and follows the curve of the Lower Concourse, providing for a more harmonious visual experience of the space.

Natures colours

"In my project for the Sydney Opera House I had what you would call nature's colours on the exterior" That was the general idea-concrete, granite and ceramics. (UDP Page 80)

Practical glare

"I agree (white outdoor furniture is wrong because only the sails should be white). Because white is no good for outdoor furniture as my eyes can't tolerate white when I eat." (UDP Page 81)

Comment:

The off-white covering on the umbrellas on the Lower Concourse were identified as intrusive items in the CMP 4th edition and were recommended to be recovered in a different colour to appear more recessive when seen against the natural colours of the granite cladding of the Forecourt. Those umbrellas in front of Opera Bar have already been recovered in Dulux "Coconut Husk", one of the tested and approved colours outlined in the Sydney Opera House Outdoor Event Guide.

12.0 COMPLIANCE WITH THE SOH ACCESSIBILITY MASTERPLAN 2015

The Lower Concourse is one of the precinct areas assessed in the Accessibility Masterplan 2015 (AMP). Accessibility to not only the primary theatres and venues but also the supporting facilities such as the food and beverage outlets on the Lower Concourse is critical to ensure the ongoing overall function and compliance of the Sydney Opera House as a world-class performing arts centre.

The Accessibility Masterplan predominantly focuses on the pedestrian approaches to entrance points with regard to the Lower Concourse, including ramp and escalator/lift access to and from the Lower Concourse.

One of the issues identified for the Lower Concourse in the AMP is the obstruction of clear access paths of travel and congestion with patrons/pedestrians due to the popularity of the food and beverage outlets in this space. The proposed adjustments of the glazing line at Opera Bar should address some of these issues by removing the current pinch point between the glazing and mushroom column, providing a wider, less cluttered and more visibly clear path to the stairs leading to the Forecourt.

Another issue identified was the furniture layout at Opera Bar currently blocking the access way between the base of the Opera Bar ramp and the weather-protected area of the Lower Concourse. This was recommended to be adjusted with the removal of some of the furniture to provide clear access. Furniture plans shown in this application indicate this issue is addressed.

Loose furniture, infrastructure and structures must not encroach and restrict the use of pedestrian paths especially when they are part of an identified accessible path. It is recommended to review the lease and operational areas to retain the intended public circulation space on the Lower Concourse and monitor and maintain any infrastructure or loose furniture that form part of its use.

13.0 CONCLUSION & RECOMMENDATIONS

13.1 Improvement Works

The impacts of the improvements are considered positive to the cultural heritage values of the Opera House. Decisions made during the final design phase were based on the consideration of alternatives that received feedback from the Sydney Opera House Heritage Architect, Design Advisory Panel, City of Sydney Council and the OEH.

The proposed replacement of existing umbrellas with new shade structures of a finer design and profile will have a positive visual impact. There will be no intrusive logo on the shade structure cloth.

The colour of the cloth for all shade structures will be Dulux "Coconut Husk" which is an approved colour outlined in the Sydney Opera House Outdoor Event Guide. The height and profile of these structures is no higher than the bronze railing and no lower than the granite parapet panels. The new shade structures should retain the distance to the parapet over and be no closer than the existing

shade structures. This ensures views to and from the Opera House will remain as open as possible as well as being a slight improvement on the existing. The incorporation of services within the shade structure minimises visual clutter in this open space.

The Lower Concourse is the only sheltered entry and exit point for patrons and visitors to the Sydney Opera House and unobstructed crowd flow must be maintained. The adjustment of the glazing line at Opera Bar will improve the circulation at one of the critical points near the steps up to the Forecourt as well as enhance the visual quality of the space, responding more to the established geometry of this part of the site. The existing pink granite panels outside the existing Charcuterie will be salvaged and reused externally for the proposed extension to the main internal bar area. The removed original light fitting, will be retained for future repairs and maintenance elsewhere.

13.2 General Use and Operation

The placement of infrastructure and loose furniture has been identified in the past as another factor that impacts on the crowd flow. The existing lease area plans for Opera Bar and Opera Kitchen show furniture can be placed forward of the centreline of the mushroom columns at the edge of the passageway. This present lease and operational alignment encroaches into public space and must be reviewed and re-aligned when the opportunity arises to comply with the CMP 4th edition. A clear public accessway must be maintained at all times and be planned and managed accordingly.

All tables and seating next to the sea wall must also be reviewed when the opportunity arises, in order to maintain a public thoroughfare on this walkway.

It is important that noise generated by activities on the Lower Concourse does not detract from ambience of the Forecourt above, particularly for patrons arriving and departing a performance. The proposed removal of the acoustic barrier behind the band stage on the uncovered part of the Lower Concourse at Opera Bar will have negligible impact on noise generated from the existing uses. The noise report commissioned for this DA titled *Sydney Opera House, Lower Concourse DA, Operational and Construction Noise Impact Assessment* confirms that removal of this acoustic barrier will only marginally increase noise, i.e. by up to 1dBA. Identified as an intrusive item, the removal of this barrier is considered a positive impact on the setting and therefore values of the Sydney Opera House by removing clutter from the Lower Concourse. Compliance with the noise limits will still be achieved.

The proposed improvements and continued use of the Lower Concourse for food and beverage, retail and service facilities supporting the primary function of the Sydney Opera House as a performing arts centre as well as its values as an architectural icon and heritage site is commended. Compliance with the CMP 4th edition and the Utzon Design Principles are essential.

The impacts of this proposal are considered positive, however the following condition is recommended:

Condition:

1. Sydney Opera House to review existing lease and operational areas, including furniture and infrastructure placement, and where necessary revise them when the opportunity arises to minimise encroachments onto public walkways and circulation spaces and retain the intended open and uncluttered character of the Lower Concourse. Any revisions and ongoing management are to be in accordance with the CMP policies, (the edition current at the time).

It is our conclusion that the works proposed in this application and the continued use of the Lower Concourse for food and beverage, retail, ticketing and tours will result in no adverse heritage impacts. They will have a positive impact on the State, National and World Heritage values, comply with the CMP 4th edition and the UDP and are therefore supported with the above recommended condition.



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Design 5 – Architects Pty Ltd

29th January 2020