

Architectural Design Statement

Proposal

Sydney Opera House Opera Bar Refurbishment Stage 2 – Amendments to Opera Bar Restaurant Area

Location

Opera Bar on the Lower Concourse, Sydney Opera House, Bennelong Point, Sydney, New South Wales

Applicant

Sydney Opera House

Consent Authority

Department of Planning

Project #

2268

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Where a matter is deemed to be of significant importance to the assessment of this application and doubt exists in regard to the information contained herein it may be necessary to conduct further analysis or assessment.

History of revision and amendment

This SOEE has been revised and amended as follows:

Rev	Date	Description	By
01	17/01/16	Preliminary DRAFT Issue for information, comment & coordination	GC
02	25/01/16	Development Application Issue: Incorporating various amendments following review of the previous DRAFT issue.	GC

Preamble

This Design Statement has been prepared to support an Environmental Impact Statement (EIS) in relation to proposed amendments to the Lower Concourse Restaurant Area, commonly known as “Opera Bar” on the Lower Concourse of the Sydney Opera House.

“Urban design and visual impacts” were identified as a principle issue of consideration in relation to this application. This Design Statement has been prepared to outline the proposals consideration of and response to these issues.

This statement has been prepared on behalf of the Sydney Opera House, in consultation with the stakeholder tenants (Opera Bar), and reflects the current architectural design and all associated consultant coordination at the time of the preparation of this statement.

This statement has been prepared by Glenn Cunningham, Director of Humphrey & Edwards, Registered Architect # 6415.

Methodology

Reference is made to the following relevant documents:

- Kerr, James Semple, *Sydney Opera House, A Revised Plan for the conservations of the Sydney Opera House and its Site*, 2003 (3rd Edition). As endorsed by the NSW Heritage Council.
- *Sydney Opera House, Utzon Design Principles*, May 2002

This proposal recognises the core objectives of the Sydney Opera House Trust being to:

- Safeguard the cultural significance of the SOH and precinct for future generations and
- Maximise the functional performance of the SOH as a performing arts centre

Unless otherwise stated photography included in this report was taken by Ben Guthrie Photography and all graphics, architectural drawing and details have been prepared by Humphrey & Edwards.

Site and location

The Sydney Opera House is located at the norther end of the Sydney CBD, on the tip of Bennelong Point.

Bennelong Point rests between Sydney Cove to the west and Farm Cove to the east.

The Opera Bar site specifically is located on the Lower Concourse to the south-west of the main Opera House.

Figure 1 indicates the relative location of the site in the greater context of Sydney, circular Quay and the Opera House precinct.

Lower Concourse, is located below and to the western side of the Upper Concourse.

In combination the Lower and Upper Concourses provide the main pedestrian access to the site from Circular Quay.

The Lower Concourse provides undercover access between the Opera House and the underground car park.

The Lower Concourse includes undercroft areas which house food and beverage operators and this area is well known as a hospitality venue and identified with the Opera House and its precinct.

There are adjacent walkways and internal and external seating areas.

The Lower Concourse is accessed from the Underground Car Park and a number of flights of stairs that connect to the Upper Concourse.

The concourse itself was laid in solid sawn Calca granite slabs. Linear and radial geometries combine and are ever-present in the paving pattern. This pattern establishes a grid across the site that coordinates with the structural grid and is reflected in the existing paving and cladding patterns. The geometry was arranged “to respond to the powerful horizontal element of the [Opera House podium] steps” (Hall, SOH, 65) and to compliment the composition of arcs and lineal elements which symbolise the general design of the Opera House.

Significant material elements include:

- Large sawn Calca granite pavers
- Granite cladding and internal flooring
- Precast concrete
- Concrete mushroom columns that support the upper concourse over
- Faceted full height semi-frameless glazed walls
- Bronze doors, louvres, balustrades, hardware and the like



Figure 1: Site Location Plan (SIX Viewer, with annotations by the Author)



Figure 2: View of the Sydney Opera House from near the base of the northern Sydney Harbour Bridge Pylon.



Figure 3: View of the Sydney Opera House from across Circular Quay.

Overview of the proposal

The Sydney Opera House is an icon of Australia that is recognised globally. It provides a world class performing arts venue and is considered a masterpiece of late modern architecture.

The hospitality precinct that is housed in the lower concourse supports the function of the SOH. This precinct provides essential hospitality facilities for patrons of the Sydney Opera House and the public in general. Venues such as the Opera Bar are renowned for the quality of their offer and the

experience they facilitate. The SOH and their operators are committed to improving the experience for their visitors to the site whilst maintaining its cultural significance.

As part of this on going commitment to improve facilities it is proposed to:

- Relocate the existing Fire Escape which presently divides the Charcuterie from the Opera Bar;
- Reconstruct the glazing line concentric with the major arc of the Lower Concourse. This will remove the existing pinch point along the pedestrian flow path between the existing glazing line and the outer mushroom columns; and
- Reclaim the redundant external area outside of the existing Fire Escape and redeploy it as part of the Opera Bar internal Dining Room.

The aesthetic impact of the proposal when viewed external will be practically imperceptible. And the proposal has no impact on significant views to and from the Opera House and its precinct other than from within the extended Dining Area itself.

Importantly the proposal improves pedestrian flow by removing the existing pinch point between the existing glazing line and mushroom columns whilst rationalising the flow via the existing adjacent stair to the Upper Concourse.

This will result in a more effective and balanced Opera Bar Dining area allowing Opera Bar to greatly improve its internal Dining offer.

This concept and design development of this proposal has been undertaken in recognition of the design principles established by Utzon.

A complete assessment of the proposal is provided following with a comparative commentary of the differences between the existing and proposed structures.

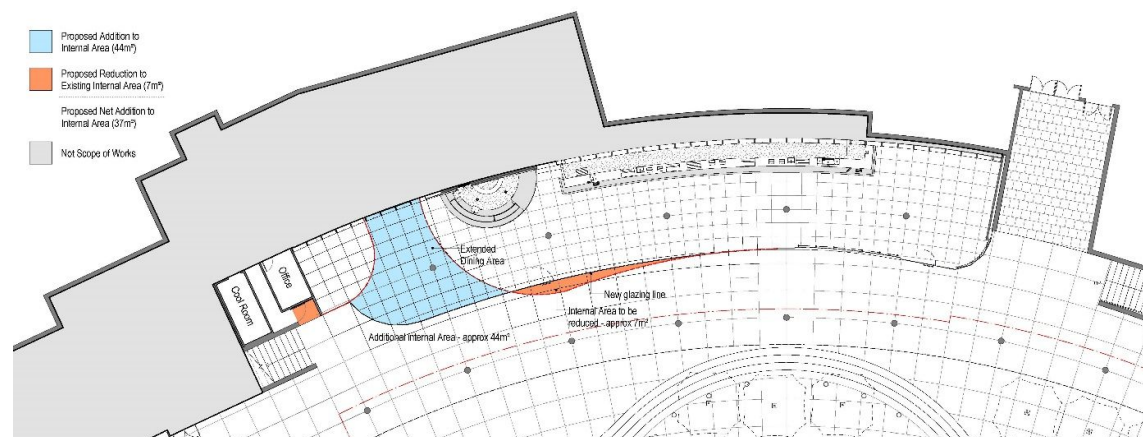


Figure 4: Proposed area analysis

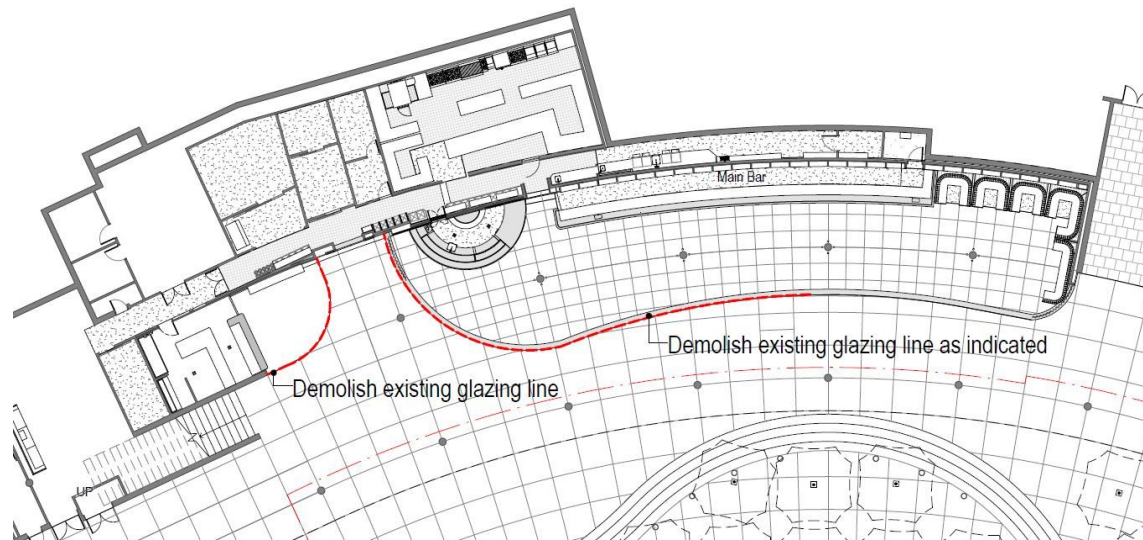


Figure 5: Existing glazing line and internal dining area configuration

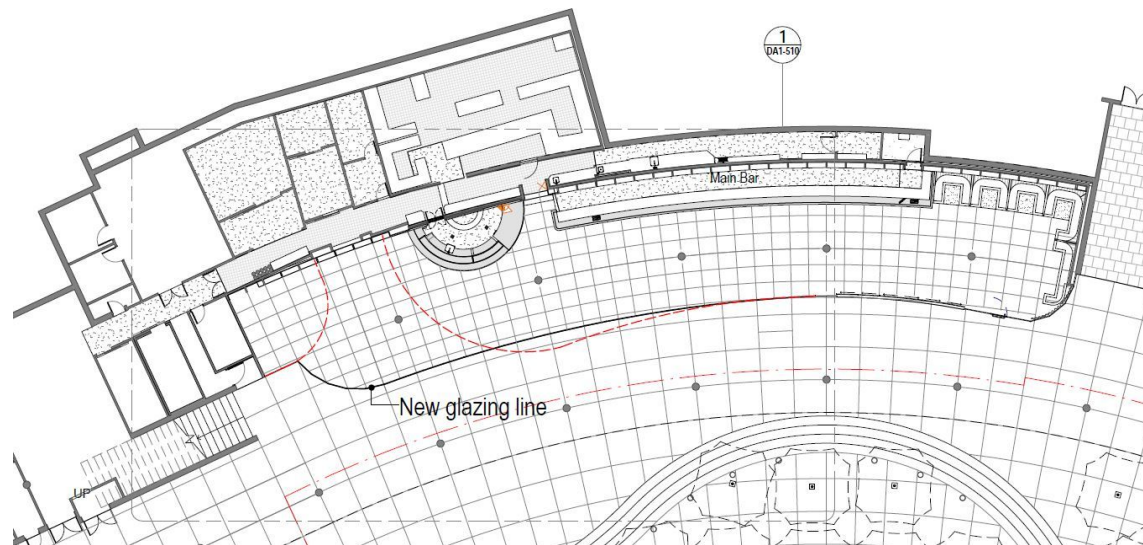


Figure 6: Proposed glazing line and internal dining area configuration



Figure 7: Existing glazing alignment viewed heading south along the pedestrian concourse



Figure 8: Proposed glazing alignment viewed heading south along the pedestrian concourse

Consideration of Alternatives

As part of the development of the proposed amendments to the Lower Concourse restaurant area a variety of potential alternative glazing alignments were explored in order to determine the alignment with the least impact on pedestrian flow and the best aesthetic balance.

The view on approach from the pedestrian circulation area is where this modification is experienced most prevalently. Figure 7 and Figure 8 illustrate the impact of this modification. It is clear on review

that the proposal compliments the existing geometry and strengthens the clarity of the pedestrian circulation route under the concourse and along the glazing line.

Various combinations of concentric and tangential arcs were considered. All of which varied only slightly. But the proposal presented was ultimately considered the most appropriate.

Summary of key design aspects of the proposal

The following table provides a summary of the key design aspects of the proposal with, where applicable, a comparison with the existing:

Design consideration	Existing	Proposed
Materials and finishes	<p>The key elements of the building fabric associated with this part of the building includes:</p> <ul style="list-style-type: none"> • Granite paving • Granite cladding • Frameless glazing • Timber joinery fitout (from the Stage 1 internal refurbishment) including the curved timber dowel bulkhead, joinery back wall and banquette seating. 	<p>The proposal will utilise identical finishes to those existing. From a material and finishes point of view the completed amendments should be practically imperceptible from the existing.</p> <p>The internal Dining Area fitout is intended to be almost a mirror image of the fitout recently completed at the existing southern end of the internal area as part of Stage 1 of the recent Opera Bar refurbishment.</p> <p>Detail and material finish will be of a high standard commensurate with that expected of a World Heritage listed site.</p>
Air-conditioning and mechanical services	Existing air conditioning services are reticulated through the curved timber dowel bulkhead.	The air-conditioning service will be extended to serve the new internal area through the curved timber dowel bulkhead in the same manner as existing.
Lighting	<p>The existing internal lighting environment is established utilising a variety of methods, which are scene controlled to achieve a variety of lighting moods to suit operational circumstances throughout the day.</p> <p>The internal lighting was upgraded as part of the Stage 1 interior refurbishment.</p> <p>The existing lighting configuration does not present any glare or light spill issues.</p>	<p>The proposed internal lighting design is intended to reflect that of the existing.</p> <p>Accordingly the proposal will not produce any issues related to glare or light spill.</p>

Design consideration	Existing	Proposed
Acoustic performance	<p>The existing bulkhead, new joinery elements and banquettes are designed to be acoustically absorptive.</p> <p>The internal acoustic environment is appropriate for the operational use.</p> <p>Internal noise levels do not contribute to acoustic spill.</p>	<p>The proposed acoustic design will be identical to the existing and is expected to perform similarly.</p>
Context	<p>The context is established by the flowing modern form of the existing structure, the proximity to the harbour and the greater development that defines Circular Quay which includes most notably the Ferry Terminal, Cahill Expressway, Harbour Bridge and Opera House.</p> <p>The existing glazing line has no impact on the greater context and little on the finer context.</p>	<p>Despite the modified alignment and increased internal dining area the proposed glazing line has no impact on the greater context and similarly insignificant impact on the finer established context.</p>
Scale	<p>The existing internal dining area is disproportionally limited to about 330m² of a venue of 1,830m² in total.</p>	<p>By reference to it can be seen that the proposal will extend the internal dining area by about 37m² nett. This will assist to improve dining options for patrons particularly in inclement weather.</p>
Form	<p>By reference to Figure 5 and Figure 6 the existing and proposed glazing alignments can be compared.</p> <p>The existing glazing line establishes complimentary curves and arcs essentially focussed around an existing Fire Escape.</p> <p>The existing glazing alignment also constrains the width of the pedestrian passage at one point along the Opera Bar frontage.</p>	<p>The proposal relocates the Fire Escape a short distance to the north of its existing location. The existing glazing alignment is characterised by sweeping arcs which flank the existing Fire Escape and essentially draw attention to it.</p> <p>The relocated Fire Escape will be much less prominent in its proposed location and configuration and more consistent with other utilitarian doors, grilles and the like that are located along this alignment.</p> <p>The new glazing line is concentric with the great arc of the concourse maintaining pedestrian passage width throughout and eliminating the existing bottleneck.</p>

Design consideration	Existing	Proposed
		<p>The aesthetic impact of the proposal when viewed external will be practically imperceptible. And the proposal has no impact on significant views to and from the Opera House and its precinct other than from within the extended Dining Area itself.</p> <p>Importantly the proposal improves pedestrian flow by removing the existing pinch point between the existing glazing line and mushroom columns. This is achieved whilst rationalising the pedestrian flow via the existing adjacent stair to the Upper Concourse.</p>
Resource, energy and water efficiency		<p>The approach to resource, energy and water efficiency will remain largely as existing.</p> <p>There will be a marginal impact on building services and such impact will be insignificant in the grand scheme of the operation of the Opera House.</p>
Safety and security	No detrimental impact.	No detrimental impact.
Aesthetics	Refer to “Form” above	Refer to “Form” above
Visual impact		<p>The view on approach from the pedestrian circulation area is where this modification is experienced most prevalently. Figure 7 and Figure 8 illustrate the impact of this modification. It is clear on review that the proposal compliments the existing geometry and strengthens the clarity of the pedestrian circulation route under the concourse and along the glazing line.</p> <p>The aesthetic impact of the proposal when viewed external will be practically imperceptible. And the proposal has no impact on significant views to and from the Opera House and its precinct other than from within the extended Dining Area itself.</p>

Response to the Utzon Design Principles

The following section discusses the relevant Utzon Principal Objectives and Fundamental Design Principles.

Principle Objectives

The following section explores the proposal's consideration of relevant Utzon Principal Design Objectives.

Keep the approach, the openness and fluidity of movement

The proposed works effectively replace an existing glazing alignment that exhibits “openness and fluidity of movement” with a new glazing line which responds similarly with “openness and fluidity of movement”. The new glazing alignment provides the added benefits of establishing an improved internal dining experience whilst removing a bottleneck in the pedestrian flow around the Lower Concourse.

New structures close to Sydney Opera House diminish its role as icon/ landmark

This requirement primarily relates to obscuring views to and from the Sydney Opera House itself. In this instance the proposal does not obscure any views to and or across the site from any public vantage point and the Sydney Opera House and as such does not impact on this criteria.

Solidity of base is important

The proposed works effectively replace an existing element of very minimal impact with another of similarly minimal impact but improved functional performance. The proposed glazing alignment will not detract from the solidity of the base and, in this regard, is substantially similar to the existing glazing alignment.

Need to adjust to changing standards

The proposal recognises the opportunity to improve the amenity of the internal dining experience for patrons.

Modifications made progressively

The proposal is relatively minor in scope and is part of a larger project of progressive improvement of the hospitality facilities.

Fundamental Design Principles

Inspiration from nature

The Utzon Design Principles identify a variety of key concepts. Those that could be considered relevant to this proposal include:

- Organic beauty
- Natures colours

The form of the glazing line relates to the established geometry of this part of the site and is concentric with the major arc which characterises the form of the Lower Concourse. In this regard the “organic beauty” of the original design is maintained.

Material and finish will be identical to the existing materials and finishes including colour and texture. Accordingly the proposed works will remain true to the concept of “nature’s colours”.

Human Experience

The Utzon Design Principles identify a variety of key concepts that relate to the “human experience”. Those that could be considered relevant to this proposal include:

- Emotional response, functionalism and human expression
- Beautiful experience/oriented
- Being in another world
- Consideration of details like doors
- Harbour
- Festive mood

These characteristics are referenced by Utzon to describe aspects of the “human experience” which are identified as being fundamental to the experience of the place and enhanced through the design of the Opera House.

Subsequent development is expected to respect this consideration of the “human experience” achieved by the design of the Opera House.

The proposed alterations to the glazing line in no way diminish the “human experience” of the Opera House but moreover sustain the relevance of these characteristics.

The building as sculpture

The Utzon Design Principles identify a variety of key concepts in regard to the building being considered as a “sculpture”. Those that could be considered relevant to this proposal include:

- Iconic presence
- Free in Sydney Harbour
- Large sculptural building seen from all sides
- Sculpture of dynamic forms
- Experience
- Shell forms to suit functions
- Acoustic shape determined by sound and how audience would see it

The proposed works are relatively minor in nature and will have no detrimental impact on the ability to interpret the Opera House as a free standing sculpture standing apart from other buildings and structures that surround it.

The existing glazing alignment is located on the Lower Concourse and defines the passage of under-cover approach from Circular Quay and the Opera House Car Park. The proposed modifications have no detrimental impact on the experience of the Opera House on approach via the Lower concourse and do not deter from the experience of the Opera House as “sculpture”.

Orientation and movement

The Utzon Design Principles identify a variety of key concepts in relation to “orientation and movement”. Those that could be considered relevant to this proposal include:

- Oriented in harbour setting
- Simple, easily understood tour

- Podium headland influence
- Walk in open up to entering auditoria

The proposal respects these principals and does not compete with the Opera House in its approach to these criteria. Accordingly the proposed works will have no detrimental impact in this regard.

Additive architectural elements

The Utzon Design Principles identify a variety of key concepts in relation to “additive architectural elements”. Those that could be considered relevant to this proposal include:

Those that could be considered relevant to this proposal include:

- 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.” (3)

- Reference to nature

“Or you see it in various cross sections of nature’s elements - if you cut across an onion you see the different layers.” (2)

- Geometry

“The wall cladding elements are nominally 4’ wide and of varying lengths to 30’... over doors, windows and ventilation openings, there are special elements forming hoods for sun and weather protection. There are other variations of the basic element type forming sills, jambs, parapets, and stair balustrades.”

The proposal reflects Utzon’s principal of “additive architectural elements” which is evidenced by the response to structure, form, geometry, etc outlined elsewhere in this assessment.

Additive architectural elements: Geometry

The Utzon Design Principles identify a variety of key concepts in relation to “additive architectural elements” and specifically in regard to “geometry”. Those that could be considered relevant to this proposal include:

- Common geometric determinant
- Under control by strict geometry
- Surfaces comprehended because of geometric order
- Simple living geometric forms

The area is of a radial geometric arrangement characterised by large sweeping curves. The geometric arrangement is reflected in the paving, cladding and exiting glazing alignment.

The proposed glazing alignment is substantially similar to the exiting and responds to the established geometry.

In essence the proposed alignment is more consistent with the established geometry, echoing the established major arc and eliminating an existing pinch-point in the pedestrian flow between the glazing line and the outer mushroom columns.

Conclusion

The design response is the result of considerable effort to maximise the potential of the project whilst maintaining the integrity of the site and the experience of the Opera House.

The proposed works are minor in scope and insignificant in impact.

Accordingly the proposed glazing realignment does not compete with nor contradict Utzon's grand vision in any way. On the contrary the proposed modification of the glazing alignment improves pedestrian flow and the quality of the internal dining experience. This is considered to be more consistent with the design standard associated with the Sydney Opera House and precinct.

This proposal is presented as a welcome and appropriate improvement.