



19 November 2019

Mr Anthony Witherdin
Director - Key Sites Assessments
Department of Planning, Industry and Environment

Attention: Mr Karl Fetterplace

Dear Mr Witherdin

Response to Submissions (RtS) – Sydney Opera House DA 43-2-2004 MOD 5

This RtS has been prepared by the Sydney Opera House (SOH) in response to comments and issues raised by Heritage NSW and the Department of Planning, Industry and Environment (DPIE) on the proposed Tours Immersive Digital Experience (TIDE) modification application.

Appendices A & B contain a comprehensive response to the issues raised.

Since lodging the modification report in support of this application on 20 September 2019, SOH has progressed the design. This has resulted in two key changes to the proposal, being:

- the removal of the fire curtain in Bennelong Passage; and
- an update to the overall capacity for the TIDE space from 70 to 100 persons, based on the *SOH TIDE Fire Engineering Report Revision B*, prepared by ARUP and dated 1 November 2019.

If you have any questions about the RtS please contact Kerry Hamann on 02 9250 7505 or email khamann@sydneyoperahouse.com

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ian Cashen'.

Ian Cashen
Executive Director, Building, Safety and Security

Appendix A – response to issues

Relocation of storage (requested by both DPIE and NSW Heritage)

- *The Department requires that you provide further details as to where the current back-of-house facilities are proposed to be located and assess any consequential impacts that may arise.*
- *Details should be provided indicating where the current facilities are proposed to be relocated to ensure any impacts from the relocation can be appropriately assessed.*

The reuse of the current back-of-house storage space to facilitate TIDE has been enabled by moving some items offsite and rethinking existing food and beverage storage areas to ensure they are being used more efficiently.

Trippas White Group (TWG) currently uses the proposed TIDE space as a culinary store, office and cool room. SOH is proposing to relocate TWG from Area 2 to an existing storage space at Area 1 (see **Figure 1**), off Central Passage.

TWG holds the contract for several SOH food and beverage venues. These internal venues include:

- Portside restaurant (located in the Western Foyers)
- Theatre Bars and functions in the Northern and Southern Foyers of the Concert Hall and Joan Sutherland Theatre;
- The Lounge (located in the Entry Foyer);
- Utzon Room;
- Yallamundi Rooms (new Function Centre and associated kitchen and service/storage areas).

TWG has been consulted on the relocation and is supportive. Area 1 will allow for more efficient operations, being centrally located and closer in proximity to the Yallamundi Rooms and kitchen, and the theatre bars, which are a core part of their operation.

Minor fit out works such as installing shelving within Area 1 will ensure there is adequate storage for TWG. The Heritage Impact Statement (HIS) prepared for the TIDE proposal notes that the fit out of Area 1 will not compromise any significant fabric and will be closer to TWG's kitchens. TWG will also continue to have access to existing, underutilised office and cool room space on level B1 of the SOH.

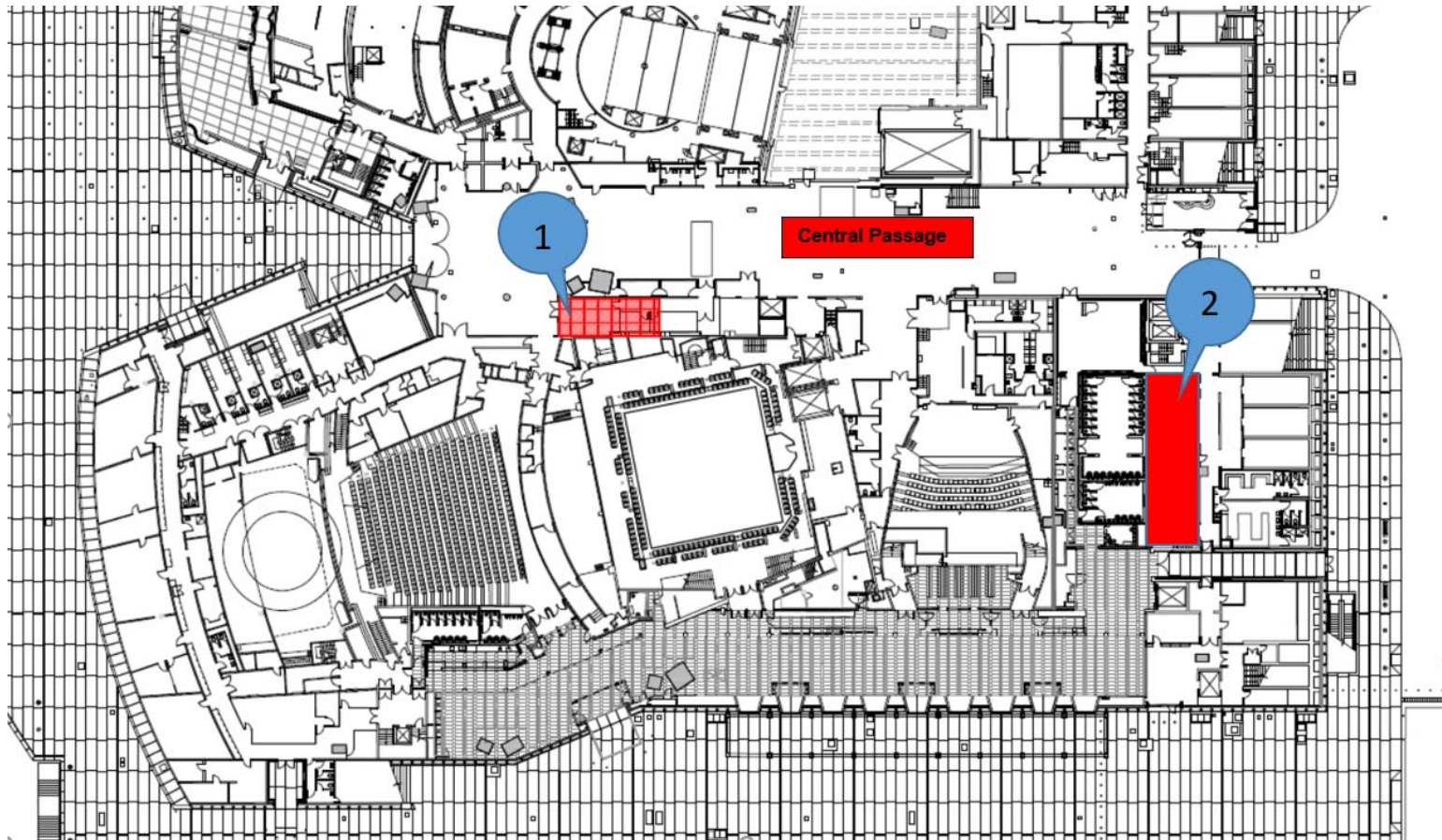
Area 1 is currently used by the Sydney Opera House (SOH) cleaning contractor (Quayclean) and the SOH's internal Tours team as a storage area. Area 1 also contains a temporary workshop used by the SOH staging team, which has been in this location temporarily due to Lift 36 construction works. In November, the workshop will return to its previous location behind the Lift 36 lift shaft. Quayclean will be relocated from Area 1 to available storage rooms within the level B2 corridor. Tours has consolidated storage and relocated to SOH's offsite storage items that are infrequently used. Impacts from all relocations required to facilitate the TIDE are considered

negligible and consistent with business as usual movements that occur in back-of-house areas from time to time.

The HIS did not raise any concerns about the use of Area 1 for storage in the short to medium term, or the loss of Area 2 for storage and considers the proposal complies with the policies and guidelines in *Respecting the Vision Sydney Opera House – a Conservation Management Plan Fourth Edition* (CMP4).



Figure 1: TWG storage will be relocated from Area 2 (proposed TIDE space) to Area 1





Appendix B – response to NSW Heritage

Request for further information – cutting the 1968 podium

- *It is unclear how the new opening within the 1968 podium structure will be detailed including to the cut edge.*

Elevation E4/s200 within sheet S250 (**Figure 2**) demonstrates the minimal demolition of the 1968 concrete podium wall above the existing opening. This elevation shows the lintel support detail required to form the new door opening. The new lintel will extend 150mm over the opening for structural stability.

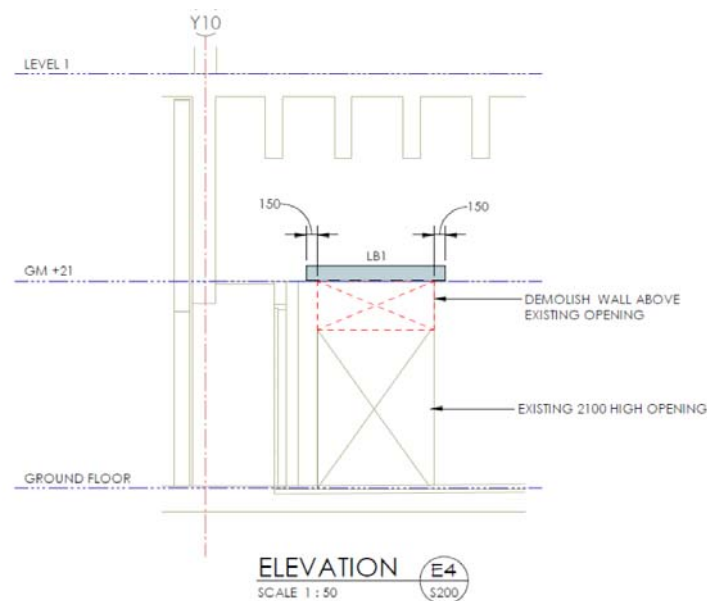


Figure 2: Elevation E4/s200 within sheet S250

At the Western Foyer entry to the TIDE space, the flooring will consist of glass reinforced concrete to the door threshold (as per the existing Western Foyers flooring). Inside the TIDE space, the flooring will be brush box timber. The automatic sliding door will be painted white on the exterior facing Bennelong Passage, and will include a brushbox veneer finish on the interior. A bronze door jamb will wrap around the door opening (side walls and soffit).

Bennelong Passage door details are provided in plan form on sheet CD511 and sections on sheet CD512. A small digital screen will be incorporated in the bronze portal frame to provide operational details regarding the room and to ensure it is not accessed during a tour group experience. The precast granite wall panels in Bennelong Passage will not be affected by the proposed works.

Request for further information – fire curtain

- *Details should also be provided for the new fire curtain to ensure it is neatly recessed and does not impact adjacent fabric, including concrete walls.*
- *The new fire curtain within the Bennelong Passage should be neatly finished including any guiding tracks, and not impact significant fabric including concrete walls. It should also be finished to compliment the character, quality and design aesthetic of the SOH.*

SOH has received advice from its fire engineering expert (Arup) that neither a fire curtain nor the existing smoke door is required to separate the Western Foyer and Bennelong Passage (in the event of a fire).

Arup has advised a performance solution will be provided to address departures from the Building Code of Australia (BCA) through deemed-to-satisfy provisions. This performance solution will be detailed post DA approval in the Fire Engineering Report (FER) and assessed by the appointed Crown Building Certifier at the Crown Building Works Certificate stage.

Request for further information – connection to slab beams

- *The documentation shows a new ceiling will be attached to the existing slab beams above but does not provide details of how this interaction between new and original fabric will be undertaken.*
- *Installation of the new ceiling within the Digital Immersion space should ensure existing fabric including the concrete slab beams, are not impacted by the works and are reversible.*

The concrete slab beams in the TIDE space (i.e. the food and beverage storage area) are painted black and contain many penetrations to support the storage shelves and typical Back-of-House (BOH) services such as ventilation, electricity, water and fire protection systems.

Sections 1 and 2 in sheet CD2000 and elevation E3/s200 in sheet S250 detail the new structural connections to the existing ribs. Typical ceiling penetrations and connections with the existing ribs are detailed in sheet S255.

The number and depth of all penetrations to the slab beams has not been determined at this stage. This will be confirmed by the contractor prior to commencement of works, in consultation with the structural engineer and the SOH heritage architect.

These small penetrations into the concrete ribs are necessary to support the TIDE structure and ceiling. The design will minimise penetrations into existing fabric and utilise the new structure for support where possible. Sheet CD200 details the hangers that support the new ceiling.

Should the room be repurposed in the longer term, patching would be performed to the concrete beams. The repairs would match the existing concrete as closely as possible, consistent with concrete patches elsewhere in the SOH, to the satisfaction of the SOH heritage architect overseeing the works.

Recommendation – making good

- *Where elements are proposed to be removed including the floor spring door closers within the Bennelong Passage, fabric is to be made good.*

Where elements are proposed to be removed, SOH agrees to restore all fabric within Bennelong Passage to its previous condition prior to completion of the TIDE works.

Comment – no private functions

The use of the space for private functions is not supported. Heritage NSW considers the space should only be used for interpretative purposes.

On this matter of use, the TIDE HIS stated:

“The use of the Digital Immersion Space for uses other than a tour experience can be supported provided that these support and do not threaten the primary use of the place as a performing arts centre. As such interpretation related uses (such as talks, presentation or exhibitions) would be considered appropriate, however the privatisation or the use of the space for private functions is not supported.”

To be clear, the proposed uses of the TIDE theatre space are detailed below.

Use	Description	Explanation
Primary use	Tours immersive digital experience (TIDE)	During the Concert Hall closure period (around 2 years from February 2020) the TIDE content will focus on the interpretation of the Concert Hall as a performing arts venue inspired by Jorn Utzon. On re-opening of the Concert Hall, the TIDE content may be updated but the focus will remain on the performing arts and heritage.
Ancillary uses	Uses that support the primary function of the SOH as a performing arts centre	Talks, meetings, exhibitions, presentations, pre or post-show get-togethers and potentially small performances which could be complemented by food and beverage. These uses would only be permitted by SOH when the space is not required by Tours.

Weddings and private functions of a large scale are not anticipated for the TIDE space.

The proposed ancillary uses, including the hiring of the TIDE theatre for functions, are consistent with uses permitted under the *Sydney Opera House Trust Act 1961* (SOHT Act). With regards to ‘privatisation’ of the TIDE space, SOH has no intention of transferring the operation of the TIDE space to a private operator.

The HIS supports the change of use of the space which essentially enables the public access to what is currently a private (BOH) space. The HIS states the ‘TIDE project will ensure the Opera House maintains its status as a cultural icon, accessible to all’.

The SOHT Act gives the Sydney Opera House Trust (SOHT) the power to do all such things as it may deem incidental or conducive to the profitable and effective carrying out of its objects and functions [s4(2)]. The powers conferred to the SOHT under the SOHT Act (clause (a), schedule 1; s4(3) and (4)), include arranging the use of the SOH for conferences and meetings, displays, exhibitions, recitals and lectures. In addition, the SOH may permit any part of the site to be used by any person at such times and on such terms and conditions, and subject to payment of such hiring charges, as the SOH may think fit and proper for, or in connection with, any purpose approved by the SOHT (s26, SOHT Act).

The proposed ancillary uses for the TIDE space (as described above) would not be 'privatising' the space. These uses are consistent with existing uses within the Western Foyers and many venues within the Opera House including the Concert Hall, The Utzon Room and The Studio. These venues are available for hire for a range of events including small get-togethers, large celebrations, pre or post-show gatherings, press conferences, corporate networking, school events and community gatherings.

The proposed ancillary uses for the TIDE space are therefore consistent with other venues throughout the SOH, as well as with the objects and functions of the SOHT Act. There will be no disruption of the day-to-day functioning of the SOH as a busy performing arts venue as a result of the use of the TIDE space. Venue hire fees from these activities will enable the TIDE theatre space to support the main function of the SOH by providing financial investment back into artistic and community activities. Accordingly the proposed primary and ancillary uses should be supported for the TIDE space.

Recommendation – to adopt all recommendations from the HIS

Furniture

HIS recommendation - furniture is to be simple in design, visually recessive and compliment the character, quality and design aesthetic of the Sydney Opera House in accordance with the policies in the CMP 4th edition. Input and feedback during the design stages should be sought from the Sydney Opera House heritage architect.

SOH has considered a number of options for the TIDE furniture (being essentially benches), including both off-the-shelf products and custom designs. These concepts have been presented to the Design Advisory Panel (DAP) which provides advice to the SOH on issues of architecture or design and in relation to the management and conservation of the building as it evolves with changing circumstances. The SOH heritage architect has also been involved in the consideration of these options.

As a result of an extensive review process, a chair by a local designer has been selected for the TIDE space. Other 'sculptural' furniture options for the TIDE space were rejected and considered by the DAP as inconsistent with existing furniture. The chosen furniture will be custom-made in brushbox to match existing timber furniture and fit-out through out front-of-house (FOH) spaces.

The DAP considers the chosen designer will provide consistency with existing SOH furniture as the same designer was procured in 2018 to custom-make new furniture for the major auditoria foyers and other areas. Final bench designs will be presented to the DAP and the SOH heritage architect for approval prior to procurement.

Lighting

HIS recommendation - lighting to the TIDE entry space is to be indirect and baffled 'warm' lighting around the edge of the space.

SOH confirms that warm, indirect and baffled lighting has been incorporated into the design.

Door finishes

HIS recommendation - door finishes are to match existing finishes of adjacent and related spaces.

HIS recommendation - door hardware should similarly adopt the established design hierarchy for FoH and BoH spaces: being bronze within the Bennelong Passage and proposed new TIDE

entry space, and chrome/stainless steel for doors fronting BoH areas. Door frames should be painted steel, (black or bronze) within the TIDE entry space, and white within BoH areas – bronze coverings on frames are not acceptable.

All areas of the SOH, whether back-of-house (BOH), FOH or technical spaces have specific and consistent door finishes. The proposed TIDE door finishes are consistent with the HIS as follows:

1. Sliding **main entry** door details:
 - white painted finish facing Bennelong Passage
 - brush box veneer facing the TIDE space
 - edges be faced with bronze
 - individual bronze lettering and hardware.
2. **BOH door** to the service passage:
 - black painted door facing service passage to match doors opposite
 - brush box laminated batten board facing TIDE space
 - door frame painted steel
 - bronze hardware to TIDE space
 - stainless steel hardware and lettering to service passage side to match doors opposite.

BSSS standard

HIS recommendation - the BSSS standard should guide any works to service lines that may be required to installed the Digital Immersion Space.

SOH notes this document has been updated to the SOH Building Services Standard (SOH BSS). This version replaced the previous 2004 version known as the BSSS. It sets out minimum quality requirements for materials, equipment, workmanship, and system configuration and operation for Sydney Opera House building services.

All personnel, consultants and contractors responsible for the maintenance and installation of new services are required to use the SOH BSS, including for minor and major works for internal, external, retail, and commercial tenant spaces.

Signage

HIS recommendation - additional signage (e.g. hearing loop) will need to comply with the Sydney Opera House signage manual and the conservation policies contained in the CMP 4th edition. Other temporary or permanent signage (including wayfinding signage) within the Bennelong Passage, associated with a particular use of the Digital Immersion Space, is not considered to be appropriate.

SOH agrees. A small digital screen will be incorporated in the bronze portal frame within the access doorway to provide operational details regarding the TIDE theatre and to ensure it is not accessed during a tour group experience. The digital screen will primarily display the following wording:

- 'Room in Use,
- Do Not Enter', or
- 'Room Vacant'.

This signage will also incorporate the hearing loop signage and will comply with conservation policies in CMP4 as recommended by the HIS.

Wayfinding signage associated with the TIDE space is not currently proposed.

Protection of fabric

All significant structures, fabric and elements are to be protected during the works from potential damage. Protection systems must ensure they are not damaged or removed. All tradespeople and workers on site must be made aware of the significant fabric on site and the works overseen by a heritage architect appropriately qualified and experienced in working with similar structures and materials.

Heritage is regularly discussed at toolbox meetings undertaken by all SOH contractors. It is also a key part of any contractor site induction, which all workers performing works on the TIDE project will need to undertake. SOH will monitor the works and work methodology to ensure there is no damage to existing fabric.

Archives

An archival photographic recording of all the affected areas is to be undertaken prior to the works, in accordance with the Heritage Division document entitled, Photographic Recording of Heritage Items using Film or Digital Capture. The original copy of the archival record shall be submitted to Heritage NSW.

SOH agrees.