

## SOHT Responses to Statutory Authority Comments on SSD7881 Response to Submissions Document

### Environmental Protection Authority (EPA) letter 21/3/17

#### SSD 7881- FUNCTION CENTRE- RESPONSE TO SUBMISSIONS REPORT

EPA Comment	SOHT Comment
<p><u>1. 'out of hours' demolition and construction work</u>                      The Report states at 'EPA 2' that the Proponent" .. . does not support the use of standard construction hours ... ".</p> <p>The EPA anticipates that should any demolition/construction (which is audible at a surrounding residence) be proposed to be undertaken outside the standard hours, the proponent would be expected to fully justify undertaking each period of such 'out of hours' work on the grounds of safety and the need to maintain the integrity of an essential public utility network.</p> <p>Whilst the EPA acknowledges that it may be argued that there would be a safety imperative associated undertaking external demolition and construction work during standard hours, it notes that such work was in fact undertaken behind appropriate hoardings throughout the duration of the recent VAPS project. However, the EPA does not consider production schedules/targets to be adequate justification for undertaking 'out of hours' work.</p> <p>In any event, the EPA expects that any justified demolition/construction (which is audible at a surrounding residence) would only be undertaken outside the standard hours-</p> <ul style="list-style-type: none"> <li>a) on not more than 2 night during any single week, and</li> <li>b) be undertaken in such a manner as to ensure that the noisiest works are completed before a curfew time determined having regard to the circumstances of the case (typically before 10.00pm but no later than midnight).</li> </ul> <p>The EPA provides the above advice on the basis of-</p> <ul style="list-style-type: none"> <li>• patterns of community concern referred to the EPA as complaints about</li> </ul>	<p>As identified in the NIA, the only construction activities for which the predicted construction noise level would exceed the noise affected level at sensitive receivers would be:</p> <ul style="list-style-type: none"> <li>a) at night;</li> <li>b) at Kirribilli receivers; and</li> <li>c) for external demolition and piling activities only.</li> </ul> <p>SOHT has identified mitigation measures to limit this noise as much as possible and can commit to carefully programming of this work at night, if it is required.</p> <p>However, as previously stated, a midnight curfew would not be practical as noisy works are not proposed until after 23:30, to allow the ongoing use of performance venues adjacent the construction works.</p> <p>Therefore, SOHT notes that construction works at night will be carefully selected and carried out, and detailed in the Construction Management Plan, to carefully consider and minimise impacts on nearby residences. Accordingly, SOHT requests the same condition for hours of work as has been agreed for SSD 7665:  <b><i>Hours of Work</i></b></p>

<p>'offensive noise' emitted from construction (and demolition) activities, especially 'out of hours' activities, and</p> <ul style="list-style-type: none"> <li>• proven approaches over many years to the effective mitigation and management of noise impacts from public infrastructure projects.</li> </ul> <p>The EPA emphasises that whilst the level of noise experienced at a residence (or other noise sensitive receiver) is an important consideration in determining whether noise is 'offensive noise', the nature, character, and quality of the noise as well as the time at which the noise is made are equally relevant in determining whether noise constitutes 'offensive noise'.</p> <p>The EPA confirms its previous comments concerning the proper justification of 'out of hours' work likely to be audible at surrounding residences.</p>	<p><i>The hours of construction, including the delivery of materials to and from the Subject Site, shall be restricted as follows:</i></p> <ul style="list-style-type: none"> <li><i>a) between 7:00 am and 6:00 pm, Mondays to Fridays inclusive;</i></li> <li><i>b) between 8:00 am and 1:00 pm, Saturdays;</i></li> <li><i>c) no work on Sundays and public holidays.</i></li> <li><i>d) works may be undertaken outside these hours where:</i> <ul style="list-style-type: none"> <li><i>i) the works are internal and undertaken within the wholly enclosed building; or</i></li> <li><i>ii) the delivery and removal of vehicles, plant or materials is via the underground loading dock within the Subject Site (in which case it may be undertaken on a 24 hours a day, 7 days a week basis during the construction of the development); or</i></li> <li><i>iii) the delivery and removal of vehicles, plant or materials (not via the underground loading dock under Condition C1(d)(ii)) is required outside these hours by the Police or other public authorities, or it is determined that it would be hazardous to the general public (i.e. tourists, patrons or events in the forecourt/boardwalks), provided it is undertaken outside scheduled performance times at the Sydney Opera House (including not within 30 minutes before or after scheduled performances); or</i></li> <li><i>iv) it is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm; or</i></li> <li><i>v) a variation is approved in advance in writing by the Secretary or her nominee.</i></li> </ul> </li> </ul>
<p><u>2. Operational noise</u></p> <p>The EPA notes that the requested operational noise assessment in Tables 8 and 9 of the Noise Impact Assessment has not been updated from the EIS version. The EPA recommended that the predicted operational noise levels and appropriate criteria be derived in accordance with the NSW Industrial Noise Policy to reflect the 10:00pm to 01:30am period during which they will occur. However, the Report-</p> <ul style="list-style-type: none"> <li>a. only refers to impacts during the 10:00pm to midnight time period, and</li> </ul>	<ul style="list-style-type: none"> <li>a) The Response to Submissions document detailed that the Function Centre is proposed to operate with its doors closed after midnight, with activities on the boardwalk ceasing after midnight also (refer EPA 8- Response to Submissions (RtS) document).</li> </ul> <p>The NIA was updated to include the statement</p>

b. has inappropriately adopted noise conditions from a previous consent as criteria.

Accordingly, the EPA considers that the Report has not addressed its second recommendation (Attachment a to letter dated 8 December 2016) concerning operational noise impacts.

The proponent should provide a revised response to fully address the operational noise impacts.

in section 6.2.4:

*'Note that both of these levels are at least 15 dB below even the entire 'night' time period RBL values. Noise levels for all indoor event types would therefore be acceptable as noted above in Table 8 and Table 9. As such, any indoor operation proposed after midnight (such as up to 1:30am as currently proposed by Sydney Opera House) will be acceptable as long as the northern façade doors are closed if a louder amplified event type is taking place.'*

Therefore, the report described that the predicted levels after midnight for the external area are not required as noise generating activity is not proposed to be occurring.

b) The SOHT provided the advice given by its noise consultant, ARUP, in the RtS (refer EPA 8) as to why the NSW Industrial Noise Policy would not be appropriate in this instance.

However, per the assessment completed for the construction works, the RBL values are identified in section 5.1 of the NIA. These were:

- Bennelong 10pm- Midnight- 56dB<sub>L<sub>A90,5min</sub></sub>
- Kirribilli 10pm- Midnight- 51dB<sub>L<sub>A90,15min</sub></sub>

As per (a) above the requirement for analysis after midnight, until 0130, is not warranted as no activities on the broad walk are proposed. Therefore, the assessment data in Tables 8 & 9 in the NIA until midnight is a valid representation.

	<p>Furthermore, as can be seen in Tables 8 &amp; 9, the dBL for indoor loud music, with all of the doors closed (representative of the state if outdoor access is removed after midnight) are at least 15 dB below even the entire 'night' time period RBL values (51 or 58 dB LA90). The current assessment therefore provides adequate data from which to make an assessment.</p> <p>Therefore, SOHT believes that the NIA provides both assessment against the existing DA criteria and the RBL value provide a clear difference between the and can be assessed without additional analysis.</p> <p>At a meeting between, Keylan Consulting, Sydney Opera House Trust, ARUP and the Department of Planning and Environment on 11 April 2017, the approach to assessing and monitoring noise from outdoor events at the proposed Function Centre was discussed and agreed. ARUP has subsequently prepared a supplementary report outlining this approach which is provided at Attachment B.</p>
<p><u>3. Dust control and management</u>  The response at item 'EPA 5' of the Report states in part that "Construction plant and equipment selected will be suitable for an internal construction environment ... " which appears to indicate a misperception by the proponent that the EPA's advice concerns work health and safety issues. Instead, the EPA's advice concerns appropriate measures to control air pollution that would potentially arise from open air works such as the proposed demolition (removal of facade) adjacent to the northern boardwalk. The EPA confirms its previous comments concerning dust emissions.</p>	<p>Noted, as per EPA letter dated 8 December 16 the SOHT has no issues with the following recommendations:</p> <p><b><i>Dust control and management</i></b>  <i>The proponent be required to:</i>  (a) <i>minimise dust emissions on the site, and</i>  (b) <i>prevent dust emissions from the site.</i></p>

Office of Environment and Heritage 21/3/17 Letter

RE: FUNCTION CENTRE AND RELATED WORKS (SSD 7881) – SYDNEY OPERA HOUSE – SHR 01685 - RESPONSE TO SUBMISSIONS.  
(DOC17/ 149779)

OEH Comment	SOHT Comment
<p>The original submitted drawings indicated that in order to form the three interconnected double height spaces for the function centre, demolition of the two existing concrete radial walls, which are significant structural elements of the Podium, would have been required. The entire removal of these walls would have had an unacceptable impact on the significant fabric of the Opera House. Revised documentation received 28 November 2018 indicated the partial retention of these walls, with large openings cut out of them to facilitate the connection of the spaces, and the sides and top of existing walls retained in situ. A further reduction in cut out opening sizes has been proposed and included within the RTS. Whilst this reduction does not match the extent proposed by the Heritage Council, it is considered that the applicant has demonstrated through design options that the proposed partial retention of the wall will provide clear evidence and understanding the original wall and spatial arrangement of the area.</p>	<p>Noted</p>
<p>The openings within the walls will require strengthening on one face (facing out). Should this component be approved, details must be provided outlining the proposed new work associated with the partial removal of the walls as part of the s.60 application, including details of how cut edges of the wall are finished, and details of strengthening of walls required including lintels. It is also noted that any removal of significant fabric and alteration of significant spaces will increase the significance of the Opera House's unaltered fabric and spaces.</p>	<p>Noted</p>
<p>The proposed works maintain the existing curved glass wall facing the Northern Broadwalk. External modifications comprise of two new pairs of double bronze doors and the enlargement of the existing single entry on the western side of the podium. These proposed minor works to the external façade are considered acceptable as existing materials and details will be matched and because they will facilitate access to the proposed new function area. They are also reversible. It is recommended that further details be provided with the s60 application for approval, and that building elements proposed to be removed be salvaged and stored for potential future use.</p>	<p>Noted</p>

OEH Comment	SOHT Comment
<p>The proposed internal refurbishment of the function centre area provides the opportunity to reinstate original finishes. It is recommended that where paint has been applied to significant concrete surfaces which originally had a face concrete finish, the paint should be removed and original finishes are restored. Details of this process, including what product will be used to avoid staining or damaging the original surface, should be provided with the s60 application.</p>	<p>Noted</p>
<p>The proposed removal of the existing marquee from the northern boardwalk will considerably improve the setting of the Sydney Opera House and views to the northern façade of the Opera House. This has been a long standing recommendation of the CMP and is supported.</p>	<p>Noted</p>
<p>The relocation of the ballet rehearsal room removes the last remaining original rehearsal space under the Joan Sutherland Theatre. Whilst this is not considered appropriate as it impacts on the space's historical association with the building, it is understood that the relocation of the rehearsal room meets the changing operational requirements of the SOH. It is also acknowledged the major users of the room, The Australian Ballet and Opera Australia, are both supportive of this move, noting that the move will provide a rehearsal space that meets their rehearsal needs. Further consideration however, should be given to relocating the ballet rehearsal back to the podium under the eastern shell if the opportunity arises in the future.</p>	<p>Noted</p>
<p>The RTS notes the SOH will explore options for relocating the Mega Store with a view to enabling the return to a rehearsal room in the future. Any options are to be prepared in close consultation with the Opera House's heritage architect, Eminent Architects Panel and Conservation Council and will require approval under the Heritage Act.</p>	<p>SOHT wishes to clarify that it has <i>already</i> explored the relocation of the Mega Store, which was outlined in the RtS. It is not feasible, nor would it provide the operational requirements for The Australian Ballet and Opera Australia.</p> <p>Works related to the relocation of the Mega Store will be referred to the Heritage Council, should they be unable to be undertaken within the standard Opera House exemptions.</p>
<p><u>Photographic archival recording</u> 1. Prior to the works commencing, a photographic archival record of the areas proposed to be modified must be prepared in accordance with the NSW Heritage</p>	<p>Noted</p>

OEH Comment	SOHT Comment
<p>Division publication “How to prepare archival records” and submitted to the NSW Heritage Division for the approval of the Heritage Council or its delegate. The photographic archival recording is to include atmospheric’ photographs which convey the feeling and mood of the existing spaces space in relation to their function.</p>	
<p><u>Salvage of significant building fabric</u>  2. Any significant internal building fabric and elements proposed to be removed, such as glazed panels, doors and door hardware, door hood, etc. are to be carefully removed, catalogued and safely stored for future use.</p>	Noted
<p><u>New works</u>  3. Further refinement of the design of the proposed new function centre is to be undertaken and comprehensive plans and details submitted with the s60 application for approval. The design refinements are to be prepared in close consultation with the Opera House’s heritage architect, Eminent Architects Panel and the Conservation Council.</p>	Noted
<p><u>New works</u>  4. Additional details must be submitted as part of the s.60 application outlining proposed works associated with the cutting of openings within the two main radial walls including how the edges of the cut walls will be finished, and of strengthening required including lintel details.</p>	Noted
<p><u>New works</u>  5. Existing paint on wall surfaces proposed to be removed to expose original off-form concrete within the proposed function centre area, is to be removed in a way which does not damage or stain the original surface. Details of this process, including what product will be used to avoid staining or damaging the original surface, must be submitted as part of the s.60 application.</p>	Noted
<p><u>New works</u>  6. The proposed new doors to the function room and new hood on the western façade, are to match existing materials and details, and are to be reversible.</p>	Noted
<p><u>New works</u>  7. The temporary bollards and umbrellas proposed for the Northern Broadwalk are to be removable elements, capable of insertion and removal without damage to existing</p>	Noted

OEH Comment	SOHT Comment
<p>paving. The colours of the new outdoor elements must be visually recessive. These new outdoor elements are to be designed and selected in close consultation with the Opera House's heritage architect, Eminent Architects Panel and Conservation Council. Design excellence and adherence to the Utzon Design Principles and the CMP should be paramount considerations. Comprehensive details of the elements must be included with the s60 application for this work.</p>	
<p><u>New works</u> 8. The bollards and umbrellas must be arranged in a staggered pattern, only used in conjunction with an event at the proposed Function Centre and removed when not required for events for more than 24 hours leaving the Broad Walk uncluttered. There should be no opportunity to connect up the umbrellas, either to each other, or to the Podium, or provide drop down weather protection.</p>	Noted
<p><u>Site protection &amp; works</u> 9. Significant building fabric and elements are to be protected during the works from potential damage. Protection systems must ensure historic fabric is not damaged or removed;</p>	Noted
<p><u>Site protection &amp; works</u> 10. The installation of new services shall be carried out in such a manner as to minimise damage to or removal of significant fabric.</p>	Noted
<p><u>Heritage consultant and tradespeople</u> 11. A suitably qualified and experienced heritage consultant is to be nominated for the works. The nominated heritage consultant shall inspect the demolition and removal of material to ensure that there is no unapproved removal of significant fabric or elements.</p>	Noted
<p><u>Heritage consultant and tradespeople</u> 12. The nominated heritage consultant is to provide ongoing advice to tradespeople undertaking the proposed works throughout the construction period.</p>	Noted
<p><u>Requirement for an application under the Heritage Act 1977</u> 13. An application under section 60 of the Heritage Act 1977 must be submitted to and approved by a delegate of the Heritage Council of NSW, prior to works commencing.</p>	Noted



**City of Sydney (CoS) letter 21/3/17**

SSD 7881, FUNCTION CENTRE and RELATED WORKS, SYDNEY OPERA HOUSE- RESPONSE TO SUBMISSIONS (R/2016/26/B)

<b>CoS Comment</b>	<b>SOHT Comment</b>
<p>We note that an updated Conservation Management Plan (CMP) has now been drafted and approved by the Sydney Opera House Expert Review Panel, however the NSW Office of Environment and Heritage and Heritage Council have not had an opportunity to endorse the document specifically as it relates to the works proposed.</p> <p>Accordingly, key stakeholders are unable to assess of the suitability of the CMP, or make an assessment of the proposal against the provisions therein.</p> <p>We maintain that the CMP should have been prepared and endorsed prior to developing the detailed design.</p> <p>In light of the above, we maintain our objection to the proposal and will not be providing recommended conditions of consent.</p>	<p>SOHT has been working collaboratively with the City of Sydney Council to date, including arranging several site visits and meetings to work through the City's concerns.</p> <p>SOHT does not consider that the comments made in Council's letter justify the sustained objection as there is currently an endorsed and legislated Conservation Management Plan (3<sup>rd</sup> Edition), which the project has been referenced and assessed against.</p> <p>SOHT therefore requests that the Department of Planning proceeds with the assessment, taking into consideration the City's objection.</p>