

21 January 2019

Mr David McNamara
Director
Key Sites and Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Attention: Mr Karl Fetterplace

Dear Mr McNamara

Response to Submissions - Sydney Opera House, Concert Hall Upgrade and New Creative learning Centre (SSD 8663)

This Response to Submissions (RtS) has been prepared by Keylan Consulting Pty Ltd on behalf of the Sydney Opera House Trust (the applicant) to address submissions received for the above State significant application during the public exhibition period and issues raised in your letter of 7 December 2018.

We note that submissions were received from the City of Sydney Council (CoS), Botanic Gardens & Centennial Parklands (BGCP), Environment Protection Authority (EPA), Office of Environment and Heritage (OEH), Roads and Maritime Services (RMS) and Transport for NSW (TfNSW).

We have reviewed these submissions and have responded at **Attachment 1**, with additional supporting information at **Attachment 2**.

We also note that the Department of Planning & Environment received a further letter from the NSW Heritage Council dated 20 December 2018. **Attachment 3** provided here includes a detailed response to the issues raised by the Heritage Council. **Attachment 4** provides additional supporting figures. **Attachment 5** provides additional supporting architectural plans.

A response to the matters requiring further consideration and request for additional information by the Department of Planning and Environment (the Department) is provided below.

Matters requiring additional information

General

- *Confirm the EPA's recommendations can be met in relation to asbestos containing material, dust, sediment, waste and construction and operational noise.*

Response

SOHT has a detailed asbestos register, which is updated on a regular basis for Work Health and Safety and compliance purposes. The register was updated in 2017 to include the Concert Hall.

We note further work is being undertaken to include survey of other potential hazardous materials such as PCBs, lead and chromate paints specific to the Concert Hall. These investigations will be complete prior to works commencing.

The draft CMP advises a Construction Environmental Management Plan (CEMP) will be prepared by the principal contractor prior to works commencing. This plan will incorporate the abovementioned findings as well as include actions to minimise the impacts associated with construction activity ensuring appropriate environmental management.

We note that the consent for SSD 7665 (Condition B12) required the principal contractor to prepare a Construction Environmental Management Plan (CEMP). The SOHT anticipates and will accept a similar condition of consent.

With regards to operational noise, the Noise Impact Assessment (NIA) concluded that there will be no significant impact on surrounding sensitive receivers as a result of proposed construction activities.

An updated NIA, addressing matters raised in EPA's submission, has been prepared by ARUP and is included at Attachment 2.

Noise

- *Consider undertaking all demolition, site preparation, construction and construction-related activities likely to affect sensitive receivers during standard construction hours, and correcting references in the Noise Impact Assessment to highly affected construction noise levels and sleep disturbance criteria.*

Response:

The CMP proposes hours of work consistent with other recent SOH consents, including SSD 7665 and SSD 7881. These consents allow for work to be undertaken between the following hours:

Hours of Work

C1. The hours of construction, including the delivery of materials to and from the subject site, shall be restricted as follows:

- a) Between 7.00am and 6:00pm, Mondays to Fridays inclusive*
- b) Between 8.00am and 1:00pm, Saturdays*
- c) No work on Sundays and public holidays.*
- d) Works may be undertaken outside these hours where:*
 - (i) The works are internal and undertaken within the wholly enclosed building; or*
 - (ii) The delivery and removal of vehicles, plant or materials 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*
 - (iii) The delivery and removal of vehicles, plant or materials (not via the underground loading dock ... 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 scheduled performances); or*
 - (iv) It is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm; or*

- (v) A variation is approved in advance in writing by the Secretary or her nominee.

SOHT is prepared to accept a similar Condition of consent to SSD 7665 and SSD 7881, Condition C1 'Hours of Work'.

The updated NIA is included as Attachment 2.

Other Issues

- Review the references to works to redefining the vehicular concourse beneath the Opera House steps as a primarily pedestrian space.

Response

We note that the EIS contains a reference to "provide the redefinition of the vehicular concourse beneath the Opera House steps to a primary pedestrian space" on page 15 and 62. We confirm that works relating to the Under the Steps/vehicular concourse do not form part of this application.

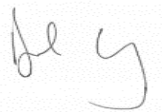
As outlined in the EIS, works relating to the Under the Steps area fall within the definition of exempt development provisions under the *State Environmental Planning Policy (State Significant Precincts) 2005*.

Summary

The RtS has comprehensively examined and responded to the issue raised by the Department and submissions received from State agencies. We trust this response provides all the information required for the Department to finalise its assessment of this application.

Please do not hesitate to contact Dan Keary on 02 8459 7511 or dan@keylan.com.au in the first instance if you wish to discuss any aspect of this submission.

Yours sincerely



Dan Keary BSc MURP MPIA
Director



Michael Woodland BTP
Director

Attachments:

Attachment 1	Response to issues raised during public exhibition, prepared by Keylan Consulting Pty Ltd
Attachment 2	Noise Impact Assessment updated by ARUP
Attachment 3	Responses to issues raised by the NSW Heritage Council in a letter to the Department of Planning & Environment dated 20 December 2018
Attachment 4	Rendered images of the Concert Hall in "At Rest" mode
Attachment 5	Architectural plans: A0900, A0903, and A0905

Attachment 1

Response to issues raised during public exhibition

Submitter	Issue ID	Issue	Response
Botanic Gardens & Centennial Parklands	BGCP	<ul style="list-style-type: none"> BGCP has reviewed the proposal and concluded there are no adverse impacts on access to the Gardens. 	<ul style="list-style-type: none"> Noted.
City of Sydney Council	CoS 01	<ul style="list-style-type: none"> The (CoS) has reviewed the proposal and concluded that there works on balance, have an acceptable heritage impact and will not have a net adverse impact on the heritage significance of the place, at local, State or World Heritage level. 	<ul style="list-style-type: none"> Noted.
Environment Protection Authority	EPA 01	<p>Construction Phase – recommended conditions of consent</p> <p><u>Asbestos containing material</u></p> <ul style="list-style-type: none"> <i>The proponent be required, prior to commencing work, to prepare and implement an appropriate procedure for identifying and dealing with unexpected finds of site contamination, including:</i> <ul style="list-style-type: none"> a) <i>asbestos containing materials</i> b) <i>lead-based paint</i> <i>The proponent be required to satisfy the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 ‘asbestos wastes’.</i> <i>The proponent be required to consult with Safework NSW concerning the handing of any asbestos waste that may be encountered during the course of the project.</i> 	<ul style="list-style-type: none"> Noted. As outlined in the covering letter the EIS was accompanied by a draft CMP which demonstrates SOHT commit best practice environmental management. <p>In addition, SOHT also has an asbestos register in place which is updated regular to ensure WH&S and compliance with regulatory obligations.</p> <p>SOHT are willing to accept a similar condition of consent to SSD 7665 and SSD 7881, Condition B8 and B9 ‘Contamination’.</p>
	EPA 02	<p><u>Noise</u></p> <p><i>The EPA notes that:</i></p> <ul style="list-style-type: none"> <i>Table 3 to EIS Appendix 15 incorrectly interprets the Interim Construction Noise</i> 	<ul style="list-style-type: none"> A revised NIA has been prepared by ARUP (Attachment 2) addressing these issues.

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		<p>Guideline in that in the column headed “Highly Noise Affected Level” the same noise management level (i.e. RBL + 5 dB) for all assessment periods other than ‘Day (standard) hours’;</p> <ul style="list-style-type: none"> Section 5.4.1 to EIS Appendix 15 (5th para, page 12) incorrectly states that ‘sleep disturbance screening criteria’ “... includes all background noise including noise from the project”; section 7.2 to EIS Appendix 15 indicates that “... work at night would only take place internally ...” and “.. the exception to this night-time ban on work would be the delivery of small loads of concrete and the delivery of large items that cannot safely be delivered during the day.”; and section 8 to EIS Appendix 15 concludes that such work “... would not have detrimental impact on the nearest noise sensitive receivers Recommends that the proponent be required to ensure that as far as practicable all demolition, site preparation, construction and construction-related activities likely to be audible at any noise sensitive receivers such as surrounding residences are only undertaken during the standard construction hours, being: <ol style="list-style-type: none"> 7am to 6pm Monday to Friday 8am to 1pm Saturday No work on Sundays or gazetted public holidays. The proponent be required to ensure construction vehicles do not arrive at the project site or in surrounding residential precinct outside of approved construction hours. 	<ul style="list-style-type: none"> As outlined in the covering letter the EIS was accompanied by a draft CMP which established the ‘hours of work’ similar to recent approvals for SSD 7665 and SSD 7881. <p>SOHT are willing to accept a similar condition of consent to SSD 7665 and SSD 7881, Condition C1 ‘Hours of Work’.</p> <ul style="list-style-type: none"> The draft CMP also advises a Construction Pedestrian and Traffic Management Plan (CPTMP) will be prepared. The CPTMP outlines the parameters for construction, including restricting any public roads surrounding the subject site from being

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		<ul style="list-style-type: none"> <i>The proponent be required to consider undertaking safety risk assessment of proposed construction activities to determine whether it is practicable to use audible movement alarms to minimise the impact on surrounding sensitive receivers.</i> 	<p>used by construction traffic as a waiting area.</p> <ul style="list-style-type: none"> It is noted that the draft CMP proposes the use of non-tonal alarms to minimise the impact on surrounding sensitive receivers. <p>Given the above, SOHT does not consider a condition requiring a safety risk assessment to be necessary.</p>
	EPA 03	<p><u>Dust control and management</u></p> <ul style="list-style-type: none"> <i>The proponent be required to:</i> <ol style="list-style-type: none"> <i>minimise dust emissions on the site</i> <i>prevent dust emissions from the site.</i> 	<ul style="list-style-type: none"> Noted. SOHT is committed to minimising dust emission from the site. The EIS advises a Dust Management Plan will be prepared by the principal contractor engaged to undertake works. <p>In addition, the draft CMP advises a Construction Environmental Management Plan (CEMP) will be prepared, which will include mitigation measures to ensure best practice environmental management throughout construction phase.</p>
	EPA 04	<p><u>Sediment control</u></p> <ul style="list-style-type: none"> <i>The proponent should implement all such feasible and reasonable measures as may be necessary to prevent water pollution in the course of developing the site.</i> 	<ul style="list-style-type: none"> Noted. As outlined above, it is proposed that a CEMP will be prepared by the principal contractor prior to commencement of works to mitigate any potential adverse environmental impacts. <p>SOHT are willing to accept a similar condition of consent to SSD 7665 and SSD 7881, Condition B12 'Construction Environmental Management Plan'.</p>
	EPA 05	<p><u>Waste control and management (general)</u></p> <ul style="list-style-type: none"> The proponent be required to ensure that: <ol style="list-style-type: none"> <i>all waste generated during the project is assessed, classified and managed in accordance with the EPA "Waste Classification Guidelines Part 1: Classifying Waste", November 2014</i> 	<ul style="list-style-type: none"> Noted. SOHT is committed to waste control and management, as such the draft CMP outlines several measures to minimise waste. <p>It is also proposed that a Waste Management Plan will be prepared by the</p>

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		<p>and the 2016 Addendum thereto;</p> <p>b) the body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste, or spoil from the vehicle or trailer; and</p> <p>c) mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site, is removed before the vehicle, trailer or motorised plant leaves the premises.</p>	<p>principal contractor prior to works commencing.</p> <p>SOHT are willing to accept a similar condition of consent to SSD 7665 and SSD 7881, Condition B18 'Waste Management Plan'.</p>
	EPA 06	<p>Operational Phase – recommended conditions of consent</p> <p>Noise impacts</p> <ul style="list-style-type: none"> The proponent be required to ensure mechanical ventilation plant is: <ul style="list-style-type: none"> (a) selected such that it is consistent with the octave-band sound power level data presented in Table 6 to EIS appendix 15; and (b) is installed and operated such that it does not emit noise: <ul style="list-style-type: none"> (i) that exceeds 30dBA at residential receivers, and (ii) that exhibits tonal or other annoying characteristics. 	<ul style="list-style-type: none"> Noted. As outlined above in the covering letter, the NIA concluded that there will be no significant impact on surrounding sensitive receivers as a result of proposed construction works. The updated NIA addresses this issue through inclusion of a statement that “Plant will be selected such that the sound power levels radiated to atmosphere will not exceed that given below.” This gives scope to include noise attenuation if the final plant selections exceed the sound power levels.
	EPA 07	<p>Waste Management</p> <ul style="list-style-type: none"> The proponent be required to identify and implement feasible and reasonable opportunities for the re-use and recycling of waste, including food waste. 	<ul style="list-style-type: none"> Noted. The applicant agrees to EPA's condition.
Office of Environment and Heritage	OEH 01	<ul style="list-style-type: none"> OEH has reviewed the proposal and recommended the following condition of consent: <ul style="list-style-type: none"> (a) A Construction Environmental 	<ul style="list-style-type: none"> Noted. As outlined above the SOHT is committed to preparing a CEMP.

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		<i>Management Plan must be implemented that outlines construction techniques to avoid potentially affecting the water quality of the harbour and include, where relevant, mitigation measures such as sediment controls, 'wet-vacuuming' or off-site removal of contaminated materials whilst undertaking the construction works.</i>	
Heritage Council	HC 01	<ul style="list-style-type: none"> Heritage Council considered and supported application at recent meeting (November 2018). However requested extension of time for further consideration by newly reconstituted Heritage Council in February 2019. 	<ul style="list-style-type: none"> Noted.
Roads and Maritime Services	RMS 01	<ul style="list-style-type: none"> RMS has reviewed the proposal and has no further comment. 	<ul style="list-style-type: none"> Noted.
Transport for NSW	TfNSW	<ul style="list-style-type: none"> TfNSW has reviewed the proposal and requested the applicant be required to prepare a Construction Pedestrian and Traffic Management Plan. 	<ul style="list-style-type: none"> Noted. As outlined above the SOHT is committed to preparing a CPTMP.