SYDNEY OPERA HOUSE (SOH) ACOUSTIC ASSESSMENT PREPARED BY THE ACOUSTIC GROUP DATED 27TH JANUARY 2016

Background

This report refers to acoustic levels recorded within an apartment in the Bennelong Building on 24 April 2014 and compares that to an ambient noise level undertaken some 20 months later in January 2016.

∓he following should be noted:

- 1. The location of the equipment used for the ambient noise measurement taken on 7 January 2016 was on a light pole on Macquarie Street at the entrance to the Opera House round-about above the gathering point for tour groups (This is the **noisiest** location that could be found to measure sound in the area that and it picks up buses with engines running, trucks with engines running, garbage trucks with engines running, extra loud Harley Davidson motorbikes speeding around the round-about, taken in the peak summer holiday period).
- 2. The study uses this ambient noise level as a basis for comparison with the music emanating from the Opera Bar in April 2014.
- 3. The report is believed to be deceptive and misleading.
- 4. Michelle Dixon, Director of Safety, Security and Risk from SOH quotes:
 - "the acoustic assessment submitted in support of the current DA was prepared in January this year. We understand that the report is based on measurement results from 2014 and 2016. 2016 testing was carried out on 7 January. I note that on page 6 the heading "Measurement Results 2014 Testing" should be "Measurement Results 2016 Testing". The text following that (incorrect) heading sets out what was recorded and where on 7 January 2016".
- 5. The stated ambient noise level of 59dBA on Level 5 of the Bennelong Apartments is inaccurate.
- 6. Independent testing of noise by residents of the ambient background noise inside apartments have shown readings under 50dB while noise from music and opera bar patrons have recorded readings in the high 70dB.
- 7. This demonstrates that the current entertainment at the Opera Bar is noncompliant with OLGA criteria for measurement at residential boundaries. It should also be noted that noise testing depends on the day they are undertaken, the volume of the music and the operator's decision whether to play the music loud or soft.

- 8. The acoustic report is a sham and should be totally disregarded. A new acoustic report should be undertaken that correctly measures the ambient noise and the noise emanating from Opera Bar at the same location, at the same time, at the peak seasonal time (the type and loudness of music played at the Opera Bar varies season to season). It should be noted that since this DA was lodged, the level of music from the Opera Bar has, we believe, temporarily been decreased substantially for the duration of the submission period for this DA.
- 9. It should be further noted that there has been on going verbal and email discussions over the last three years between the Opera House and the residents of the Bennelong Apartments regarding the excessive noise. The Opera House consequently acknowledged the excessive noise levels and in response to this undertook to do the following;
 - Cease playing loud amplified music;
 - Create a sound proof stage;
 - Turn all speakers away from Bennelong apartments; and
 - Cease playing drums.
- 10. To date, the Opera House has not been able to implement any of the undertakings as mentioned above.
- 11. The Acoustic Report ignores that the reality that larger umbrellas will trap the noise and funnel it back into the Lower Concourse Bar and Restaurant Area. Decibel readings in this area have already been measured at over 100dB with music and over 90dB with no music when at full capacity. It should be noted that this required 3m wide main thoroughfare is for the benefit of patrons of the Opera House to access the Opera House undercover from the bottom of the escalators and the carpark. These patrons are not necessarily using the venues within the major thoroughfare but are using this primary thoroughfare to access the Opera House. An increased dB level in this area would be unacceptable particularly for children who must walk through a crowded bar area and be subjected to loud noise. In this regard you would be aware of the recent World Health Organisation statement on the dangers of noise over 80dB on young children who are exposed to this noise for over 1 minute, and its effect on pregnant women and the elderly.
- 12. The acoustic report fails to mention that the proposed shade configuration specifies 4 speakers for each new umbrella, a total of 28 speakers. Currently there are 19 speakers under the existing umbrellas. This is an increase of some 36%. This is inconsistent with Opera House spokesperson Michelle Dixon who specifies there **won't be any more speakers**:
 - "the Environmental Impact Statement states that "Speakers are to be installed as per existing arrangements on the masts of the shade structures. There will be 4 speakers per mast angled to direct noise to the patrons and away from the direction of the nearest residences".

We have confirmed with the acoustician that the current DA does not seek any more speakers than Opera Bar currently has."

ENVIRONMENTAL IMPACT STATEMENT

The Environmental Impact Statement as referenced in the report prepared by BBC Consulting Planners states:

Heritage

Weir Phillips Heritage have considered the likely impacts of proposed new shelters on the Lower Concourse of the Sydney Opera House, on the significance of the site and on nearby heritage items/conservation areas and conclude that:

• The proposed works will considerably improve amenity not only for people attending performances within the Opera House but also for people enjoying its unique location;

My Response

It is obvious that the proposed works will NOT improve the amenity for people walking from the escalators to the Opera House particularly during inclement weather where the only undercover access is through the Opera Bar. They will be subject to increased noise from an increase in the number of speakers from 19 to 28_7 and the larger surface area of the umbrellas. This increase of 55% will cause significantly more debilitating sound into the concrete walkway area where it will be unfortunately enhanced by the hard surfaces.

The acoustic report refers to sound recordings of 108dB to the north of the stage while independent recordings without music in the undercroft on a busy day is around 90dB. An increase of this level of noise is unacceptable for young children, pregnant women, and elderly who use this walkway to access the Opera House as this is the only undercover thoroughfare on windy, wet and cold days.

• The proposed works are consistent with the Conservation Plan for the Site, the Management Plan for the site and Utzon's design principles;

My Response

The works proposed are NOT consistent with the Conservation Plan for the Site, the Management Plan for the site nor Utzon's Design Principles.

It will have a huge impact on the vista of and from the lower forecourt where Utzon's Design Principle very clearly specifies that the area should not be

cluttered to obstruct the view of the Opera House and its significance in the harbour.

Reference is made to the SOH Conservation Plan by James Kerr p60 to re iterate this item of importance:

Furniture on the surrounds of the Opera House should:

- be strictly controlled in accordance with policies 3.2 to 3.5 to prevent the proliferation of items and retain the uncluttered aspect of the open areas;
- be located away from key visual features. For example, furniture should not be placed at the bases of the pedestals from which the shell ribs spring, nor should items obscure the bases of the lower forecourt columns (fig.44);
- be made of materials that will not result in damage to, or disfigurement of, the fabric on which the item sits. For example, the mobile sign introduced in 2000 was made stable by a heavy steel box base and, consequently, Sydney rain results in oxides staining the granite paving below. Also the former sites of some garbage bins show accelerated decay and discolouration. Both create maintenance problems;
- avoid excessive brightness and harsh tonal and colour contrasts with adjacent fabric. White umbrellas, tables and seating are, for example, highly obtrusive in a reconstituted granite setting and in direct competition with the tiled shells. (See pages 65 to 66 for exterior lighting
- The proposed works will not block view corridors to/from nearby heritage items/conservation areas and will have no impact on the character of the setting of nearby heritage items/conservation areas because they are minor and visually recessive;

My Response

The proposed increase in the coverage of the umbrellas' covers by 55% will result in views from the lower forecourt to the Opera House sails and the Harbour Bridge to be lost. Please see photographs attached. This is in complete contradiction to Jorn Utzon's vision and Design Principles Document.

This is also contrary to the submission by the Australian Federal Government in support of the listing for the SOH by the UNESCO World Heritage Convention.

• The proposed works are minor and do not give rise to a significant impact as it is defined by the Matters of National

COMMENTS OUTLINING CRITICISM OF THE DOCUMENTS SUBMITTED IN SUPPORT OF PLANNING APPLICATION NOs SSD 15_7430 AND 7431 Environmental Significance Significant Impact Guidelines 1:1 and do not require a separate approval under this Act;

My Response

The proposed works are NOT minor as they clearly impacts the Opera House from all directions within the designated buffer zone created to ensure the conservation of this Significant Site. This note has significant importance for the listing of the Opera Houses. Should this development proposal gain approval, it will inevitably herald the beginning of further future negative impacts for our World Heritage Listed Iconic site.

The proposed buffer zone (438.1 hectares) has been designed to protect the property's universal values in relation to its setting on Sydney Harbour. The buffer zone centres on the inner waters of the harbour and includes places around the harbour within a radius of 2.5 kilometres that have been identified as offering critical views to and from the Sydney Opera House. ICOMOS considers that the proposed core zone includes all the physical components that express the property's outstanding universal values. The proposed buffer zone assures the proper management of the views from and to the Sydney Opera House. We believe that construction regulations should be implemented in order to assure the conservation of the present features of the shore landscape included in the buffer zone.