

**acoustic studio**

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**abn** 76 106 325 982

**17 September 2015**

Dear Leigh

**REDEVELOPMENT OF FOUR POINTS by SHERATON HOTEL at 161 SUSSEX STREET**

**NEW ROOFTOP BAR AND LOUNGE**

**RESPONSE TO OBJECTIONS RECEIVED RELATING TO DEVELOPMENT APPLICATION ACOUSTIC REPORT**

Please see enclosed Acoustic Studio's response to the objections received from surrounding stakeholders with respect to the DA Acoustic Report prepared by Acoustic Studio for the New Rooftop Bar and Lounge<sup>1</sup>.

Please let me know if you have any questions, or if you need anything further.

Yours sincerely

**Jason Cameron**

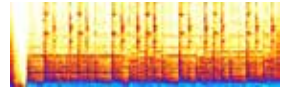
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<sup>1</sup> 161 Sussex Street Redevelopment Executive Lounge and Bar - Acoustic Assessment for Development Application, 3 June 2015, ISSUE 1, ref : 20150603 GLI2221.0017.Rep.docx, Acoustic Studio Pty Ltd.



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## 1. OBJECTIONS RECIEVED [OBJECTION] and ACOUSTIC STUDIO REPSONSE [ACS RESPONSE]

Objections received by Acoustic Studio (shown as [OBJECTION] below) are copy-pasted from the document received from Savills Australia on 9 September 2015. Acoustic Studio has made no attempt to modify the original text in terms of content, punctuation, spelling, etc.

### 1.1 King Street Wharf Apartments, Shelley Street, Sydney

#### [OBJECTION]

1. We are deeply concerned about the noise impacts of the proppsed level 11/12 bar and believe the methodology used to make the noise assessment for receivers at Shelley Street is deeply flawed. I am a member of the body corporate committee for the King St Wharf apartments at Shelley Street

The audio assessment, optimistic as it is, indicates that we will suffer a continuous increase in noise from an indoor/outdoor bar open 24/7 hours 365 days a year just a very short distance from our home. Comparing tables 8 and 9 shows that the noise impact from outdoor patrons at Shelley Street will be approximately twice as much as from indoor patrons, and much closer to the tolerance.

The flaw in the methodology is that it doesn't consider the range of possible outcomes, just one outcome optimistically described as "worst case" and assessed over 15 minutes. The crieria considered "worst case" consists only of 100 outdoor patrons talking at "normal volume". There is no way that could be described as a realistic worst case:

For example, intoxicated patrons in an outdoor setting tend to become louder.

The worst case risk to nearby residents is far greater than acknowledged and we are exposed to all the risk that the assessment is wrong. As table 9 shows, the noise from Level 12 will be close to limits even based on an optimistic version of a "worst case".

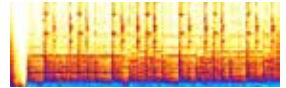
There is no account taken of peak times (for example weekends) when crowds will be greater an in celebratory situations resulting in higher pitches, numerous people speaking at above normal levels. For example, if 50 outdoor patrons are talking at normal levels and 50 at above normal levels, extrapolating from table 8, the criteria could easily be exceeded.

If the Department permits the outdoor bar then it exposes us to this risk and the risk that the music policy changes to include DJ music and/or live bands. Basically, it will make our living conditions intolerable and devalue our home. Further, the precinct is already oversupplied with alcohol vendors, as evidenced by the high police and riot quad

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presence frequently required to maintain order. The Department not approve this submission to avoid contributing to this problem which is a general cost to society.

*[ACS RESPONSE]*

The noise impact assessment has been undertaken in accordance with relevant standards and guidelines (which are referenced in the assessment report) and the recommendations from these references are used to set the noise assessment criteria for the development.

Patron capacity and nature of operations are based on the briefing information provided to Acoustic Studio by it's client. For the Bar and Lounge, we understand from our client that amplified music at any time will be limited to background music. There is no intent to have live music or a DJ.

The noise impact assessment is based on these assumptions.

*[OBJECTION]*

2. The noise impacts modelling by hired gun Jason Cameron of Acoustic Studio is based on very optimistic assumptions - he has obviously never lived near a 24/7 outdoor bar. The assumptions of "normal" speech levels are very unrealistic - as patrons become more intoxicated (part of the business model) everyone knows they typically become louder, shout, scream, or become aggressive and this greatly increases the noise level above "normal speech". The consideration of sleep disturbance takes no account of the impact of the random drunken screams can inevitably be expected in the middle of the night from patrons of the outdoor bar.

If the department approves the development it should only be on the basis of a fully enclosed and sound insulated bar.

*[ACS RESPONSE]*

Jason Cameron is a Director of Acoustic Studio. Acoustic Studio is a member of the Association of Australian Acoustical Consultants (AAAC). As a member firm of the AAAC, Acoustic Studio is required to follow a strict Code of Professional Conduct or Ethics (<http://www.aaac.org.au/au/aaac/ethics.aspx>). We uphold this responsibility.

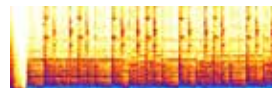
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*[OBJECTION]*

3. (Construction noise and sleep disruption/disturbance at night time)

the work noisy are unacceptable ! According to it apparently their extension work therefore no more further to carry on. As an neighborhood we are live ( 365 Kent Street) our bedrooms window are face to the work place, at 24 hours, especial in the midnight to next morning their making a huge unacceptable noisy caused our human body very... very sick !

*[ACS RESPONSE]*

Client to respond.

*[OBJECTION]*

4. The current venue is small, say 20 people, but it is only noisy when music is played, the sound seems to echo around the buildings. 20 people talking will never by themselves seem loud but if you times that by ten, to 200 people and add a sound system fit out as I assume a venue like this will have, then you have noise problems.

I can easily imagine the big bass note from a sound system on Saturday night as the Sun Sets. We can already hear music noise from Cargo bar or from boat parties, regardless of building design sound will get out, the building as shown has large opening where sound will leak from and bounce around darling harbor. This might as well be an application for a roof top helicopter pad as the noise could be the same.

*[ACS RESPONSE]*

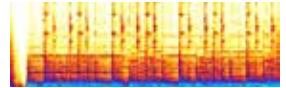
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In determining the noise levels at all affected receivers, appropriate allowances have been made for building screening or attenuation, distance attenuation and sound reflections off surrounding buildings and structures.

The noise impact assessment is based on these assumptions and allowances.

*[OBJECTION]*

5. Any noise at all, no matter how slight, echoes and redoubles in the space between the buildings which face Sussex and Kent Streets and who back one another.

*[ACS RESPONSE]*

The noise impact assessment has been undertaken in accordance with relevant standards and guidelines (which are referenced in the assessment report) and the recommendations from these references are used to set the noise assessment criteria for the development.

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In determining the noise levels at all affected receivers, appropriate allowances have been made for building screening or attenuation, distance attenuation and sound reflections off surrounding buildings and structures.

The noise impact assessment is based on these assumptions and allowances.

1.2 Submission on behalf of the Body Corporate of 365 Kent St

Construction Noise Impacts

*[OBJECTION]*

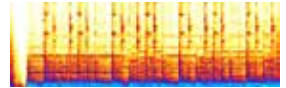
6. Whilst the Acoustic Assessment prepared by Acoustic Studio provides an assessment of the potential operational noise impacts, it lacks all consideration of potential construction noise during stages of constructing the proposed development. This also raises concern, given the current construction of the south tower and the potential cumulative impacts during the period of construction.

Recommendation 1: The Acoustic Assessment prepared by Acoustic Studio be revised to include assessment of potential construction noise impacts on affected receivers. This is to include cumulative impact of the construction for the southern tower.

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Recommendation 2: Restriction on machinery and equipment to be utilised during the course of construction to eliminate potential for offensive and obtrusive noise to receivers.

*[ACS RESPONSE]*

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*[OBJECTION]*

7. As is the nature of construction within the Sydney CBD, it is acknowledged that during the course of construction there will be the need to use machinery and equipment that will potentially impact nearby receivers. The potential impact relates not only to potentially offensive or obtrusive noise, but also relates to the times of the day of which such activities are to occur. Whilst this may be acceptable in short periods and in isolated times of the day, concern is raised that this may be undertaken without approval or consultation, and without consideration to the potentially affected receivers. The NSW Industrial Noise Policy Application Notes – Sleep Disturbance provides criteria for which noise levels are acceptable during specific shoulder periods and at night. Given the lack of assessment for construction works, this issue has not been adequately addressed.

*[ACS RESPONSE]*

Client to respond.

Operational Noise Impacts

*[OBJECTION]*

8. The Acoustic Assessment assumes that the patrons of the venue will be “male patrons talking “normally””, providing the worst case scenario. Whilst this assumption may be acceptable for the Level 11 Lounge, given its somewhat enclosed setting, this assumption falls short of what would be a typical setting for the Level 12 Bar. Rather, the Level 12 Bar, being open to external noise impacts, will promote levels of talking greater than that which would be considered as a “normal” talking voice.

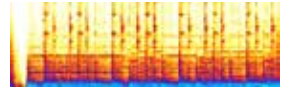
It is acknowledged that the volume of patrons may be difficult to control, however, control of contributing factors will demote the probability of elevated voices. These mitigating measures have not been explored in the acoustic assessment.

*[ACS RESPONSE]*

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recommendations from these references are used to set the noise assessment criteria for the development.

Patron capacity and nature of operations are based on the briefing information provided to Acoustic Studio by its client. For the Bar and Lounge, we understand from our client that amplified music at any time will be limited to background music. There is no intent to have live music or a DJ.

The noise impact assessment is based on these assumptions.

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*[OBJECTION]*

9. Furthermore, as background levels decrease between the hours of 12:00am to 7:00am, the proposed 24 hours of operation, provides an unacceptable risk that the patrons' acoustic levels will exceed that of the background levels. In this regard, further consideration should be given to the Operational Management Plan and the proposed acoustic mitigation measures for the proposed development.

*[ACS RESPONSE]*

The noise impact assessment has been undertaken in accordance with relevant standards and guidelines (which are referenced in the assessment report) and the recommendations from these references are used to set the noise assessment criteria for the development.

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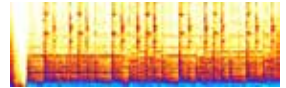


*[OBJECTION]*

10. the Acoustic Assessment to states:

There is no patron noise assessment provided for this receiver as it will be totally screened/shielded from the patron areas.

However, this is not true as there is a direct line-of-sight from the upper levels of our clients' site to the Level 12 Bar should the Louvres be open. Furthermore, the assessment does not take into consideration redirections, reflections or reverberation of sound due to the ongoing operation of the Level 12 Bar, especially in a 24 hour format.



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*[ACS RESPONSE]*

The comment in the acoustic report regarding screening of this receiver relates to the closest receivers at this address (ie those receivers at approximately 70 m distance from the proposed bar and lounge - refer to Fig.3 in report). We acknowledge that there may be either full or partial line of site from the residences on the upper levels of this receiver to part of the terrace (western-most part). However, the distance to these receivers will be greater than 70 m, and the number of 'unscreened patrons' will be less than that assumed in the assessment (due to the reduced area of unscreened external bar terrace area). Given this, the predicted noise levels at all receivers at this address are expected to comply with the relevant noise criteria and limits.

We also note that, in determining the noise levels at all affected receivers, appropriate allowances have been made for building screening or attenuation, distance attenuation and sound reflections off surrounding buildings and structures.

The noise impact assessment is based on these assumptions and allowances.

*[OBJECTION]*

11. the Acoustic Assessment also states:

Mechanical plant associated with the operation of the proposed Executive Lounge and Bar should be controlled to ensure external noise emissions are not intrusive and do not impact on the amenity of the nearest residential receivers.

It is noted that there has been no assessment of the potential impacts of the mechanical plant room, which is likely to be visually screened by louvres, however does not provide any details for acoustic attenuation.

Recommendation 9: Acoustic Assessment be revised to consider the cumulative impacts of the background sound levels and patrons. The revised assessment should also include an assessment of the proposed mechanical plant and provide recommendations for acoustic screening. This assessment should be in increments, within the whole of a 24 hour period as proposed.

*[ACS RESPONSE]*

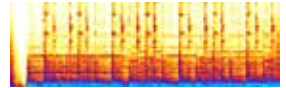
An assessment of all plant noise has been included, including cumulative impacts.

Acoustic Studio is employed by its client to complete detailed design, documentation and construction supervision services relating to the acoustic design - including noise controls for mechanical plant and equipment.

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As part of this role, Acoustic Studio is required to ensure that noise controls will be included as required to ensure that, for the final plant selected, all noise limits and criteria are met.

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