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33 CROSS STREET, DOUBLE BAY– REVIEW OF ACOUSTIC SUBMISSION

1. INTRODUCTION

This report details the review of the acoustic submissions from neighbours to the 33 Cross Street development including the Renzo Tonin & Associates '25 William Street – Peer Review of Acoustic Report for 33 Cross Street' and the Wilkinson Murray 'Review of Acoustic Logic Report'.

2. REVIEW OF THE RENZO TONIN REPORT

This section of the report details the response to comments detailed within the Renzo Tonin & Associates '25 William Street – Peer Review of Acoustic Report for 33 Cross Street' dated 29th May, 2009 which has been conducted on behalf of a neighbouring resident. The issues raised have been summarised and our response to these is provided below.

2.1 BACKGROUND NOISE MONITORING

Criticism is made that the ambient noise monitoring location is not representative of all potentially impacted receivers. In response:

- Background noise monitoring locations were selected by Acoustic Logic to obtain representative noise levels for residential receivers surrounding the 33 Cross Street development.
- It was attempted to place noise monitors in one of the residences to the north of the subject development, however the residents were either unavailable or refused permission for this to occur.

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- In addition to the unattended monitoring location, attended monitoring was also conducted. The attended monitoring locations were selected to cover the residential streets to the north, given that the monitor could not be located there and because it is simply impractical to undertake long term monitoring at every potentially affected receiver.
- The unattended background noise monitoring (on the podium of the existing hotel) was specifically selected as this location was screened from surrounding road ways including Transvaal Avenue, Cross Street and William Street, and was therefore most likely to be representative of existing noise levels at the receivers to the north of the site.
- This is borne out by the results of background noise monitoring undertaken by Renzo Tonin. Their results vary with Acoustic Logic recorded results by 1 dB(A) during evening and night time periods. The 1 dB(A) difference is imperceptible by the human ear. Also, this difference is within the level of variance expected even if monitoring was to occur at the same location over two different periods. In other words, the 1 dB(A) difference may be due to factors other than the different measurement location.
- As indicated above a 1 dB(A) difference would not make any material difference to the assessment.

In summary, the DECC/EPA Industrial Noise Policy (and general practice) does not require that every potentially impacted receiver have monitoring undertaken, nor does it require the monitoring occur at the receiver. The monitoring location selected must however be representative of the noise environment at the receivers. The monitoring location we selected was the best location available to us, and the additional monitoring conducted by Renzo Tonin (with the benefit of access to one of the residential properties provides) some additional reassurance that the background levels we used are representative.

2.2 NOISE EMISSION LIMITS OR CRITERION

The Renzo Tonin review generally confirms that the methodology used to develop noise emission limits/criteria for various receivers to the 33 Cross Street development has been conducted in conjunction with the relevant codes.

Application of NSW Office of Liquor, Gaming and Racing (OLGR or formally the LAB) to activities associated with licensed premises is acknowledged.

Such an assessment is best carried out with a detailed knowledge of how these premises are to operate. Such operation matters are being defined (to the extent possible at this early stage) and an assessment of noise impact from the licensed areas will be conducted using OLGR criteria detailing the required acoustic treatments and management controls to ensure compliance all surrounding residential receivers.

While it is not ordinary practice to apply this criteria at this early stage a detailed assessment will be conducted as part of the separate updated acoustic impact assessment.

2.3 TRAFFIC NOISE

The Renzo Tonin report indicates that the criteria has been developed in conjunction with the relevant codes, however it suggests recorded noise levels surrounding the site have not been presented.

Table 2 of within Section 4 and Tables 4, 5 and 6 within Section 5.5 of the Acoustic Logic 'Noise Assessment Report' Ref: 2008844/0601A/R0/BW details the results of all attended and unattended noise monitoring conducted at the site.

The assessment of traffic noise was conducted based on expected traffic volumes associated with the development estimated on the number of car parking spaces within the basements of the project. Section 5.8 of the Acoustic Logic report indicates that compliance with traffic noise criteria will be achieved. The

assessment was conducted assuming up to a 75% renewal of car spaces during a worst case 1 hour during a peak morning or evening period.

2.4 POOL BAR AND RESTAURANT NOISE

Those areas of the building proposed to be licensed are being developed and those measures required to comply with relevant criteria (including the DECC and OLGR) will be determined accordingly. Potential acoustic treatments and controls may include the following:

- Screening to the boundary of the level 4 level.
- Specification of materials to be used within the construction of the project.
- Enclosing of the future ground floor and level 4 bars and restaurants at specific times during the evening/night.
- Management of patron usage.

It is noted that Renzo Tonin makes comment regarding the cumulative impact of the level 1 and level 4 activities. While we concur that the cumulative impacts of these areas should be considered we point out that the most impacted receivers for the level 1 noise emissions will not necessarily be the same as for level 4 emissions, and in practice there may be no cumulative impact.

3. REVIEW OF THE WILKINSON MURRAY REPORT

This section of the report details the response to comments detailed within the Wilkinson Murray 'Review of Acoustic Logic Report' dated 29th May, 2009 which has been conducted on behalf of a neighbouring resident(s).

3.1 ACOUSTIC SURVEY

Wilkinson Murray suggest that recorded logging results at the northern boundary of the site may not be acoustically representative background noise levels due to the elevation of the logger and the period when logging was conducted.

These comments are opinion only and are not substantiated by any quantitative data.

The unattended logging conducted by Renzo Tonin within a neighbouring property (discussed in the section above) confirms that the levels used in our assessment are representative. We therefore disagree with the comments made by Wilkinson Murray.

3.2 NOISE EMISSION LIMITS

The Wilkinson Murray confirms that the Acoustic Logic report correctly assesses noise from the development in conjunction with Woollahra Council and EPA criteria.

Wilkinson Murray have identified that areas of the future development which include licensed premises (including areas on level 1 and 4 of the project) will be required to comply with criteria detailed in the NSW Office of Liquor, Gaming and Racing (OLGR or formally the LAB).

Our response to this is the same as that detailed above for the same issue raised by Renzo Tonin.

3.3 TRAFFIC NOISE

Wilkinson Murray make comments regarding the application of DECC/EPA guidelines for assessing traffic noise impacts due to vehicle movements generated by the proposed development.

- The EPA 'Environmental Criteria for Road Traffic Noise' indicates that for "developments with the potential to create additional traffic on local roads" where feasible and reasonable mitigations should be implemented to meet base noise levels. Mitigation treatments may include the erection of barriers, relocation of driveways, using clustering, treatment to neighbouring premises etc.

Clearly, beyond the scheduling of service vehicles to exclude night periods, none of the treatments/management controls indicated are feasible or reasonable in this case.

- Where the achievement of the base noise level is not feasible or reasonable, the EPA Policy permits an 2 dB increase of existing noise levels, this being a change in noise that is barely noticeable. Our analysis indicated noise levels would not increase by more than 2 dB.

Wilkinson Murray suggest that the Policy should be interpreted to read that none of the existing traffic generated by any existing development on the subject site should be included in the assessment of a potential noise increase. This has the effect of multiplying the change in vehicle movements and therefore noise levels.

Such an interpretation of the policy is ludicrous, and this is demonstrated below by example.

In a hypothetical situation where an existing development generates 200 vehicle movements on a local road, but a proposed re-development on the site results in significantly fewer movements, say 100.

If the number of all other movements not associated with the development is 50 vehicles, the proposal would then decrease the total number of movements from 250 to 150.

Assessed using the Wilkinson Murray interpretation (that is, excluding traffic from the existing development) the number of movements generated by the proposal would increase from 50 to 150, which is equivalent to a 5 dB increase and is therefore non-compliant with the Policy.

Our (correct) interpretation is that the proposed development has the potential to change total traffic movements from 250 movements down to 150. Clearly, this is an improvement and acceptable.

This example highlights that the Wilkinson Murray (mis)interpretation leads to results that are clearly illogical.

3.4 LIKELY IMPACTS

As indicated as part of the response to issues raised by Renzo Tonin, further architectural development is occurring and any measures needed to comply with DECC and OLGR will be adopted.

As indicated above many of the operational details of the Hotel were not available at the time of the assessment and assumptions regarding the use of certain facilities cannot be made without these being defined.

For example, Wilkinson Murray make assumptions regarding the use of the pool and noise levels generated. In fact it was also entertained that there would be restrictions on pool usage, as much for

operational reasons as noise reasons. Clearly, a hotel operator would not want the pool used at night, or by people who are also using the bar. Clearly, an open air wedding reception at night with loud music and simultaneous use of the pool is a situation that cannot be entertained for operational as well as noise reasons.

Further, we are advised that it is not expected that the pool would be used intensively, as would be the normal case on a hotel.

Those areas of the building proposed to be licensed are being developed and those measures required to comply with relevant criteria (including the DECC and OLG) will be determined accordingly, and in response to realistic potential, operational scenarios.

For example, management of the proposed pool area will result in it not be operational after 8pm, nor is it proposed to be used as part of (enclosed) night functions.

3.5 MITIGATIONS

Experience with similar developments indicates that it is both possible and practical to treat the proposed pool and restaurant areas of the 33 Cross Street development to comply with the criteria for "realistic scenarios" and for reasons stipulated above details will be developed to meet all criteria.

The example cited of people talking on balconies is not relevant since the proposed L4 terrace will be acoustically screened from the existing residential buildings.

3.6 GALBRAITH WALKWAY

It is proposed to control noise associated with pedestrian movements on Galbraith Walkway by closing the gate between the hours of 11pm and 8am Monday to Saturday and all day on Sundays.

3.7 APARTMENT NOISE

The Wilkinson Murray report identified future residential balconies on the 33 Cross Street development site as potential noise emission sources potentially impacting neighbouring receivers.

In response it is noted that:

- There are no specific assessment criteria for noise generated from the use of residential spaces.
- As pointed out by Wilkinson Murray, the existing balconies are used infrequently, and this is generally true of all residential balconies: they for the most part not intensively used spaces. When in use, the most common use would be for quiet, passive activities.
- SEPP 65 makes specific a recommendation that balconies opening off living areas are particularly desirable. SEPP 65 also makes recommendations regarding acceptable setbacks between dwellings to provide adequate levels of privacy.
- Balconies in apartment buildings, balconies on terrace houses, and the rear yards of detached dwellings all have the potential to create noise. For example, rear yards of detached dwelling can contain pools, and may be grassed and therefore mowed regularly using petrol driven mowers.

- Clearly, residential balconies cannot be assessed in the same way as the terrace of a bar, for example. If external space attached to residential dwellings was assessed in this way, then there would be no balconies or back yards.
- The proposed separation of the future residential balconies are no different the majority of residential balconies within multiple story units or the gardens and outdoor areas of other residential properties. The proposed separation is no different to the separation of existing gardens and balconies of existing properties surrounding the subject site.

3.8 CONSTRUCTION NOISE AND VIBRATION

Noise and vibration associated with the construction period of the development will be assessed in conjunction with the Australian Standard AS2436 and the DECC Interim Construction Noise Guideline.

While some level of impact will occur as a result of demolition and construction, impacts are normally managed using practices and methodology referred to in the above documents.

The management of construction noise and vibration usually commences with the development of a Construction Noise and Vibration Management Plan, which provides a framework for the assessment and implementation of work practices to limit noise and vibration emissions. Such a management plan is refined and developed as work proceeds.

Such a plan is best developed at a later stage. A management plan developed at a very early stage by its nature must be generic and not specific. It is required when concepts for work methods and practices are being developed and specific construction programs and techniques have been investigated, rather than at development approval stage.

4. CONCLUSION

A review of the acoustic submissions received from neighbours to the 33 Cross Street development, including reports from Renzo Tonin and Wilkinson Murray has been conducted by Acoustic Logic and are discussed within this report.

We trust this information is satisfactory. Please contact us should you have any further queries.

Regards



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