

Thursday 4 July 2019

ICONFM Australia Pty Ltd
23 Balintore Drive
CASTLE HILL NSW 2154

Our Reference 180974-04L-DD

For the attention of Mr Sohail Shamsi

Response to Council's Comments (Acoustics)

Proposed Place of Public Worship

1 Larapinta Place, Glenhaven

1.0 INTRODUCTION

This letter provides Acoustic Consulting Engineers' response to The Hills Shire Council's comments in regards to *Item 4(b)* of the letter dated 3 May 2019 (Development Application 1867/2018/JP).

2.0 COUNCIL'S COMMENTS

Council's comments in regards to *Item 4(b)* of the letter dated 3 May 2019 (Development Application 1867/2018/JP) are as follows:

4. Health Comments:

b) Acoustic Report

The acoustic report identifies that car movements and associated carpark noise will be the most significant noise source. The report is based on car movements which assume at least 2.7 – 2.9 people per car on average (numbers vary slightly within the report). It is considered that the number of cars is understated and that there will be more single occupant cars and less multi occupant cars. It has not been stated if the attendees come as family groups or if the participants are just male in which case less likely to be from the one family and less likely to be sharing cars.

Clarification is sought in regards to the calculations and assumptions for the noise from the area of the entrance to the basement carpark and whether the predicted noise levels to the neighbouring residence means at the boundary or at the residential dwelling. If the predicted level is not given for at the boundary this should be provided and provided for the worst case being the listed events.

Clarification is sought for the times for morning prayers. Table 2 and 3 of the noise assessment provide two times, 5am and 6am.

There is no information as to any mechanical ventilation for the basement carpark. If mechanical ventilation is required the location of the exhaust must be shown on a plan and addressed in the acoustic assessment.

It is noted that the noise assessment nominates there will be up to eight split system air-conditioners and that these will be located on the western side of the building which would be facing Larapinta Place. This is not shown on the plans and will be essentially at the front of the building. It is required that the area for the proposed air-conditioners be planned and shown on a plan with any screening that may be proposed.

There is no discussion in the noise assessment of potential construction noise. The site appears to have a significant amount of rock and if the creation of a basement carpark involves a large amount of rock breaking consideration of construction noise should be addressed in the acoustic assessment.

Clarification is also sought in regards to the special events. Is a special event one meeting or does each special event last for a period of days and involve multiple meetings ?

3.0 RESPONSE

3.1 Traffic Generation

Noise from car movements was identified as one (1) of the noise sources associated with the proposal and was assessed accordingly. The report does not identify car movements and associated car-park noise will be the most significant noise source.

Acoustic Consulting Engineers Pty Ltd does not have the expertise to address forecast traffic generation associated with the proposed development. With reference to *Section 3.2.5* of the Noise Assessment Report (*Report No. 180974-03L-DD* dated 31 January 2019), Acoustic Consulting Engineers Pty Ltd relies on traffic generation provided in the Updated Parking and Traffic Assessment Report (*Report No. 18-043-3*) prepared by Stanbury Traffic Planning dated January 2019.

3.2 Location of Noise Prediction

With reference to the EPA Noise Policy for Industry (NPfI), noise is assessed at the reasonably most-affected point on or within the residential property boundary or at the reasonably most-affected point within 30m of the residence if the property boundary is more than 30m from the residence.

The predicted noise levels from on-site traffic during the peak periods (Friday afternoon, Ramadan and Special Events) are:

- 24dB(A) $L_{Aeq,15min}$ North (2 Larapinta Place, most affected location on /within the residence);
- 33dB(A) $L_{Aeq,15min}$ East (123 Glenhaven Road, most affected location on /within the residence); and
- 31dB(A) $L_{Aeq,15min}$ West (7 Larapinta Place, within 30m of the residence)

Outside the peak periods during Friday afternoon, Ramadan and Special Events (which will occur only three (3) separate days a year) when car movements will be lower and using the basement car-park, noise from onsite vehicles will be significantly lower.

The predicted noise levels from vehicle movements comply with the assessment objectives during peak hours and outside peak hours.

3.3 Times for Morning Prayers

Tables 2 and 3 of the noise assessment report provide traffic generation (5:00am-6:00am and 6:00am-7:00am), as extracted from the Updated Parking and Traffic Assessment Report (*Report No. 18-043-3*), for the purpose of assessing noise from vehicles.

From an acoustic point of view, there will be no change to the findings and conclusion whether the times for the morning prayers are from 5:00am-6:00am or 6:00am-7:00am or both.

3.4 Car-park Mechanical Ventilation

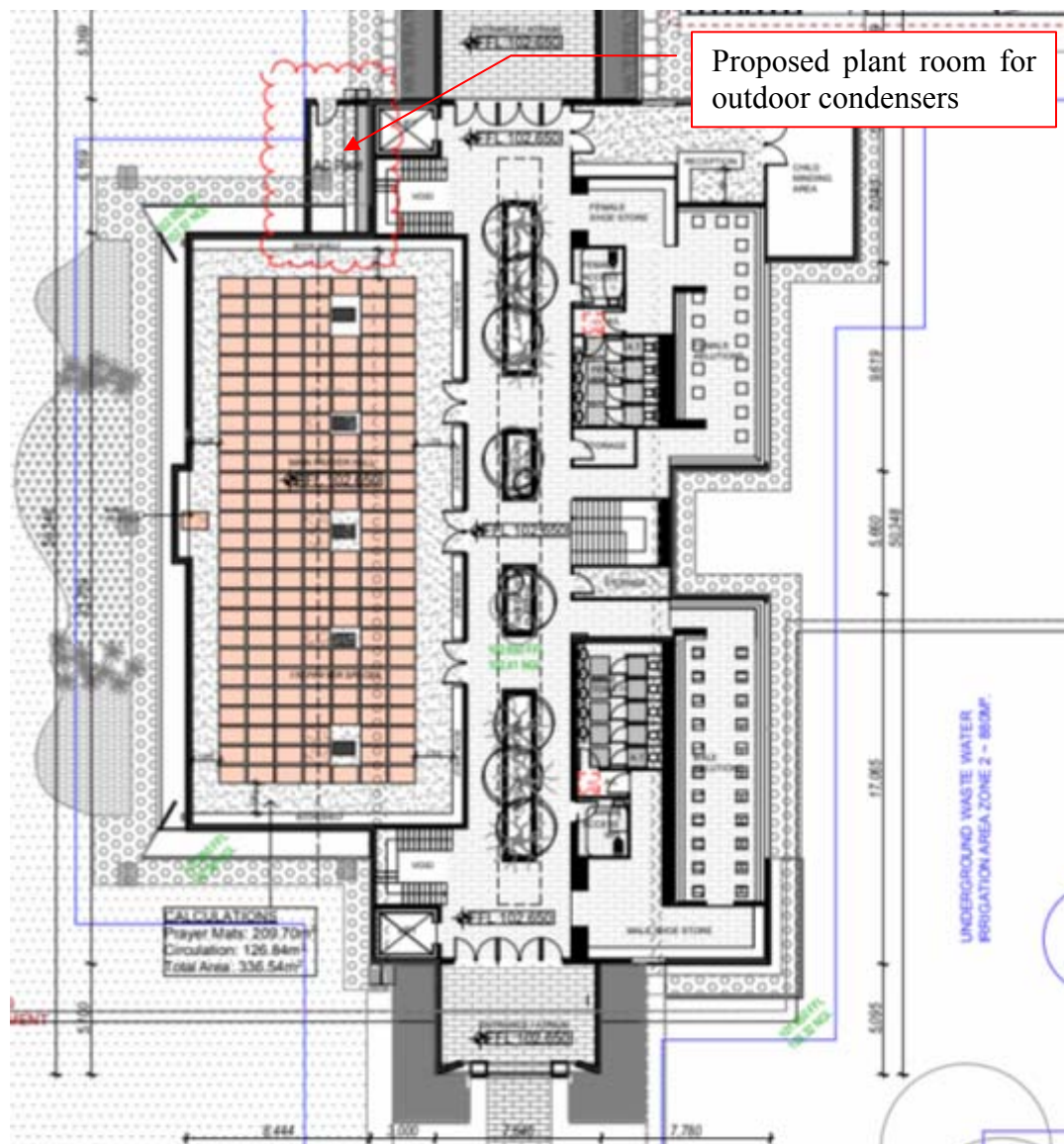
Mechanical ventilation for the car-park would be designed/specified by a qualified mechanical consultant and is normally addressed during the Construction Certificate (CC) Phase.

From previous experience, it is anticipated that a car-park exhaust air fan would be required. The car-park exhaust air fan would normally be located inside the car-park and can be incorporated with acoustic attenuators on both the air intake and discharge sides and/or internally lined ductwork/bends to control the noise readily.

The DA noise assessment has recommended further acoustic input by a qualified acoustic engineer following development approval (if approval were granted) (ie. Construction Certificate (CC) and Occupation Certificate (OC) Phases to ensure compliance with the noise assessment objectives.

3.5 Outdoor Condenser Location

The figure below shows the proposed location of the plant room for the air-conditioning equipment outdoor condensers. Given the site location and distance separation, noise from the outdoor condensers will readily be controlled. Noise from the outdoor condensers will also be reviewed during the Construction Certificate (CC) Phase to address the relevant condition(s) of approval (if approval were granted).



3.6 Construction Noise

Construction methodology and plant and equipment are not available at this time as the proposal has not been approved.

Due to the nature of activities and equipment, it is expected that noise from construction activities would exceed the EPA Interim Construction Noise Guide (ICNG) recommended noise management levels at times.

With appropriate equipment selection, standard work hours, work methodology, management measures and respite periods for noisy activities/equipment, construction noise and vibration would be minimised.

It is recommended that following project approval, a Construction Noise and Vibration Management Plan (CNVMP) be prepared to identify potential noise and vibration generating equipment/activities and determine work methodology and control and management measures to minimise construction noise and vibration impacts.

3.7 Special Event

From the Updated Parking and Traffic Assessment Report (*Report No. 18-043-3*), Acoustic Consulting Engineers Pty Ltd understands that Special Events will occur three (3) separate days per year, which include one (1) day during the month of Ramadan, one (1) day for Eid and one (1) day for Easter.

For the one (1) day during the month of Ramadan, the Special Events will generate *higher than normal* traffic from 6:00pm-7:00pm (evening) and 9:00pm-10:00pm (evening) on same day.

The Eid Special Events will generate *higher than normal* traffic from 6:00am-7:00am (night-time) and 9:00am-10:00am (daytime) on the same day.

The Easter Special Event will generate *higher than normal* traffic from 11:00am-12:00midday (daytime) and 2:00pm-3:00pm (daytime) on the same day.

It is noted that the noise assessment shows compliance with the objectives during Special Events. Hence, from acoustics perspective, it does not matter whether a Special Event is one (1) meeting or a period of days involving multiple meetings.

We trust the information in this letter is satisfactory. Please do not hesitate to contact our office should further information or clarification be required.

Yours sincerely,



Dan Dang
Principal Acoustic Engineer
Acoustic Consulting Engineers Pty Ltd