

29 October 2020

610.17898-L02-v0.1 Noise Inputs to Stage 1 Mod 201029ac.docx

Australian Turkish Maarif Foundation
c/o DFP Planning
11 Dartford Rd
Thornleigh NSW 2120

Attention: Stephen Earp

Dear Stephen

IMSA School Auburn SSDA Modification to Stage 1 Pupil Numbers

We write in response to the proposed IMSA School at 2 Percy Street, Auburn ("the Project"). Specifically, SLR Consulting Australia Pty Ltd ("SLR") are responding to the following comments which were made by Cumberland Council in the Response to Submissions (RTS) package issued by DPIE regarding a S4.55 Modification Application (Mod 1) to amend the consent for the Project to allow for +39 students in Stage 1.

The comments made by Cumberland Council are as follows:

Noise management and amended acoustic report

It is generally identified at Part 9 (Page 11) that scheduled activities and events shall not commence before 8 am and be concluded by 10 pm, excluding seldom events which may commence from 7 am. It is considered to be more appropriate that no activities or events shall be permitted prior to 8 am and be fully concluded by 10 pm to prevent noise disturbance / disruption to the adjoining residents.

An amended acoustic report / noise management plan should be submitted with the modification application and be thoroughly assessed to ensure the operating times and increases in student numbers have no adverse impacts on nearby residential amenity in terms of noise.

Regarding these comments, SLR notes the following:

1 Time of use

SLR understands that the Operational Management Plan for the School will be amended to confirm that for Stage 1 occupation, the times of use will be changed to 8am – 10pm.

2 Impact of increased pupil numbers

The original intention was for occupation to be 115 students within Stage 1 of the development. The Modification submitted would see this increase to 154 students for Phase 1 (no increase in ultimate capacity on occupation of the final Stage 3 of the development).

Noise generated by the occupant use of the school will be based on numbers of pupils generating noise at any given time. As the total number of pupils increases, so does the noise level in accordance with the following relationship:

$$\text{Change in } L_{Aeq} \text{ noise level} = 10 * \log (\text{Proposed no. of sources} / \text{Approved no. of sources})$$

Based on the above relationship, this increase in source noise levels associated with the proposed increase in student numbers would be less than 1.3 dB.

The “Handbook of Environmental Acoustics”¹ (1994) and “Industrial Noise Control: Fundamentals and Applications”² (1994) both present the following thresholds for the perception of change in noise level from noise sources:

- Less than 3dBA = No perceivable difference
- 3 dBA = Barely perceptible difference
- 5 dBA = Readily perceptible difference
- 10 dBA = ‘Doubling’ (or ‘halving’) of performance

As a result, SLR concludes that the increase in pupil numbers in Stage 1 occupation of the Project associated with the proposed S4.55 Modification Application (Mod 1) will not have any significant impact on noise generated by the development. We trust this addresses Cumberland Council’s comment regarding increased noise associated with the increased pupil numbers for the Modification.

Yours sincerely



ALEX CAMPBELL
Technical Director - Acoustics

Checked/
Authorised by: MI

¹ Cowan, James P 1994, Handbook of environmental acoustics, Van Nostrand Reinhold, New York

² Bell, LH & Bell, DH 1994, Industrial noise control: Fundamentals and applications, Marcel Dekker Inc, New York