

Attention: Neary Duncan

Company: Neary Duncan

From: Fu Siong Hie

Date: 08/03/2023

Subject: Childcare Centre at 50 Glen Street, Belrose - Acoustic Review

Document Reference: SYD2023-1033-R001A

Neary,

On behalf of Neary Duncan, Acouras Consultancy has been requested to assess the potential for increased noise impact associated with the operation of the existing Childcare Centre at 50 Glen Street, Belrose. The existing childcare centre has an external playarea at the rear of the site and is surrounded by existing residential dwellings. Nearby is Glenrose Village Shopping Centre and opposite is a public park with sporting facilities.

This application is to allow the existing childcare centre to from the current 18 children to 20 children. There is no proposal to modify the building or any new external works. It is our understanding that the centre is licensed by the Department of Education for a capacity of twenty (20) places.

At this stage we have not visited the site a survey of the background noise levels, surrounding ambient noise levels and children activity noise has not been conducted. Also, to the best of our knowledge there was no previous acoustic assessment conducted for the development.

However, the Association of Australian Acoustical Consultants (AAAC) "Guideline for Child Care Centre Acoustic Assessment" (Version 3.0) provides a guide for determining sound power for children noise. Table 1 below presents the sound power level corresponding to the age range.

Table 1— Effective Sound Power Levels of Children Playing (Source: AAAC)

Description	Sound Power Level ($L_{Aeq, 15min}$)
10 Children aged 0-2 years	78
10 Children aged 2-3 years	85
10 Children aged 3-6 years	87

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Taking this into consideration, the proposed overall net increase of two (2) children would theoretically result in an increase in noise level of less than 0.5dB.

Subjectively, the overall increase of up to 3dB would be consider only “Just Perceptible”¹ to the average observer. Therefore in our opinion, an increase of less than 0.5dB in noise level from children activity would be deemed as “imperceptible” to the average listener and would result in a indiscernible change to existing noise levels.

Regards,

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¹ Table 2.1 “Engineering Noise Control-Theory and Practice” Bies & Hansen