

February 3rd, 2021

Jill McLachlan
Education Director
Blue Gum Community School
1 Rosemead Road
Hornsby NSW 2077

By Email: jill@bluegum.act.edu.au

Dear Jill,

**Response to Acoustic Submission
Proposed Preschool & Community School – 1 Rosemead Road, Hornsby, NSW**

I refer to the above matter; to the various reports prepared by NG Child & Associates; to the various submissions prepared on behalf of your neighbour at 1A Rosemead Road by Noise and Sound Services ("NSS"); to the responses previously provided to those submissions, and in particular to the most recent and third NSS document titled *Updated Acoustic Comment and Advice for the Proposed Development of a Blue Gum Community Preschool and Primary* dated December 14th, 2020.

For convenient reference, the sequence of documents is as follows:

Acoustic Assessment Report: Proposed Preschool & Primary School 1 Rosemead Road Hornsby NSW (NG Child & Associates; Version 3; December 5th, 2019) – "Acoustic Report";

Proposed Community Preschool and Primary School – Noise Impact Assessment (Noise and Sound Services; Report No. nss23149 – Final; January 2020) – "First NSS Report";

Acoustic Assessment and Report: Proposed Preschool & Community School – 1 Rosemead Road, Hornsby, NSW (NG Child & Associates; February 10th, 2020) – "Response to First NSS Report";

Acoustic Assessment Report: Proposed Community School 1 Rosemead Road Hornsby NSW (NG Child & Associates; Version 5; May 6th, 2020) – the "Updated Acoustic Report";

Peer Review of Acoustic Assessment Report: Proposed Community School 1 Rosemead Road Hornsby NSW; Report No. nss23239 – Final; July 2020) – the "Second NSS Report";

Updated Acoustic Comment and Advice: Proposed Preschool & Community School – 1 Rosemead Road, Hornsby, NSW (NG Child & Associates; November 6th, 2020) – the "Addendum Advice".

Updated Acoustic Assessment and Report: Proposed Preschool & Community School: 1 Rosemead Road, Hornsby, NSW (NG Child & Associates; December 8th, 2020) – "Response to the Second NSS Report"; and

Updated Acoustic Comment and Advice for the Proposed Development of a Blue Gum Community Preschool and Primary; Report No. 23329 – Final; December 14th, 2020) – the "Third NSS Report";

This further response, provided at your request, addresses the issues raised in the **Third NSS Report**.

Issues Raised in the Third NSS Report

The key issues raised in the **Third NSS Report**, and my responses, are set below:

Revised Car Park Layout

Acoustic issues associated with the proposed car park have been addressed in previous reports and responses.

The car park layout has been “flipped”, as detailed in the final plans and drawings for the development and in the Application, which has the effect of minimising noise impacts at the adjoining residential boundary.

The Third NSS Report repeats concerns previously expressed that the revised car park layout presents risks of acoustic non-compliance at the adjoining residential boundary.

This issue has been extensively addressed in previous responses, and in the **Addendum Advice** regarding changes to the car park design and fencing.

As previously advised, it is my opinion that the current car park design and vehicle loadings have been adequately and conservatively assessed. This opinion is based on an assessment of noise levels generated in typical car parks associated with developments of the type and scale proposed.

Acoustic protection will be provided by distance; the acoustic boundary fence, and the operational and behavioural controls to be set out in the Noise Management Plan component of the overall Plan of Management for the Centre. Appropriate quantification has been provided in the **Updated Acoustic Report**, and the **Addendum Advice**.

In my opinion, the currently proposed controls will ensure appropriate and compliant noise impacts at the adjoining 1A Rosemead Road residential boundary.

As noted in previous responses, and while not considered likely to be required, additional acoustic protection for the 1A Rosemead Road residential boundary can quickly and easily be provided by the inclusion of 400 -600 mm clear plastic extensions to the section of boundary fence in question.

Compliance with Relevant Standards

The acoustic assessment provided for the Rosemead Road development proposal has taken into account relevant and appropriate standards and guidelines, as detailed in the **Updated Acoustic Report**.

Road Traffic Noise

As indicated in the **Updated Acoustic Report**, and previous responses, the noise impact of traffic on local roads has been assessed on the basis of the traffic numbers set out in the applicable Traffic Report.

As previously indicated, the effects of road traffic noise can be an issue in relation to the overall noise impact of facilities such as that proposed for 1 Rosemead Road.

Road traffic noise can be assessed in various ways, using different approaches.

In my opinion, the approach adopted in the **Updated Acoustic Report** is both accurate and reasonable.

As indicated in the **Second and Third NSS Reports**, excessive traffic noise can result in greater noise impact than controlled and reasonable traffic noise.

As previously advised, it is my opinion that subject to reasonable and responsible driver behaviour no undue noise impacts will be caused by the additional road traffic projected to be generated by the proposed development.

Summary

As previously indicated the various NG Child & Associates and NSS reports approach the assessment of the proposed preschool & community school in slightly different ways.

Both assessment approaches identify potential acoustic vulnerabilities due to the low background sound levels applicable, and the potential for undue or non-compliant impacts from outdoor play area noise, and motor vehicle noise.

The **Updated Acoustic Report** includes management and control strategies considered appropriate to ensure that undue and non-compliant noise impacts are avoided.

The mechanisms for sound reduction presented in the **Updated Acoustic Report** rely on a combination of controls, including the acoustic attenuation provided by boundary fencing; the varying and controllable distances between the noise sources (the groups of children) and adjoining residential boundaries, and the very important issue of supervision and control.

In recent years NG Child & Associates and Noel Child have been involved in the environmental and acoustic assessment of approximately one hundred childcare and early education facilities. For convenient reference, a summary of some of these projects is provided at Appendix A.

In all cases similar assessment methodologies and noise control approaches to those used in the assessment of the 1 Rosemead Road facility have been adopted, and in all cases appropriate acoustic outcomes have been demonstrated by subsequent operational performance. In no cases have facilities assessed as being satisfactory from an acoustic and acoustic impact perspective subsequently been found not to provide satisfactory and compliance acoustic performance.

The sound reduction mechanisms used in the assessment of the proposed Rosemead Road development have been deliberately conservative.

As previously indicated, it is my assessment, in response for the not unreasonable concerns expressed in the three NSS reports, that the mechanisms, controls, and potential remedies available (in the unlikely event that remedy is required) provide a reasonable, appropriate, and reliable basis for the assessment of the potential acoustic impacts of the proposed development at adjoining residential boundaries.

In the final analysis the acoustic assessment of the proposed Rosemead Road development, while based on appropriate calculations, does inevitably involve a degree of professional opinion and judgement. In this case, that professional opinion and judgement takes into account the very considerable and successful experience reflected in the project record presented at Appendix A.

Please contact me at any time if you have any questions regarding the matters raised in this letter, or if you require any further or more detailed information

Yours Very Truly



Noel Child
BSc (Hons), PhD, MIEA, MRACI
Principal, NG Child & Associates

APPENDIX A

NG CHILD & ASSOCIATES

**SUMMARY OF CHILDCARE, EARLY LEARNING & EDUCATIONAL
FACILITY ASSESSMENT EXPERIENCE**

NG CHILD & ASSOCIATES – PROFILE

Childcare Centre Projects

NG Child & Associates is a specialist Sydney based environmental consultancy that has operated successfully for twenty years, with a significant focus on childcare, early learning, and educational centres. Some examples of current and past involvement with such projects includes:

Client: Mostyn Copper Group
Project Manager: Mr Sean Mostyn
Timing: 2015/2021
Projects: Kirrawee, St Ives, Wollstonecraft
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Lodestone HQ
Project Manager: Mr Steve and Mr Peter Schlederer
Timing: 1998/2021
Project: Gladesville
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Whitestone Group
Project Manager: Mr Julian Carlo-Stella
Timing: 2019/2021
Project: Baulkham Hills, West Pennant Hills, Austral
Involvement: Environmental assessments including acoustic
Outcome: Developments in progress

Client: The Montessori Academy
Project Manager: Various
Timing: 2010/2021
Project: Alexandria, Kirrawee, Gungahlin (ACT)
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational or awaiting commissioning

Client: Liskowski Architects
Project Manager: Various
Timing: 2012/2020
Project: Artarmon, Burwood, Lakemba, Liverpool, Surry Hills, Wahroonga, Chatswood
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Archizen Architects
Project Manager: Mr Adrian Zenere
Timing: 2008/2021
Project: Kirrawee, Beverly Hills, Denistone East, Edgeworth, Chester Hill, Moorebank, Condell Park, Blakehurst, Kingsgrove, Dapto, Caringbah, Gymea, Chatswood
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational or awaiting commissioning

Client: Archian Architecture
Project Manager: Colin Jlang
Timing: 2019/20
Project: Austral, Edmondson Park
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational or awaiting commissioning

Client: ACA Architects
Project Manager: Various
Timing: 2011/2020
Project: Vineyard, Telopea, Carlingford, Horningsea Park, Five Dock
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Creative Drafting
Project Manager: Shane Duck
Timing: 2010/2020
Project: Annangrove, Austral, Bargo, Beresfield, Doonside, Dural, Ermington, Mays Hill, Riverstone, Smithfield
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational or awaiting commissioning

Client: Leda Constructions
Project Manager: Wayne Holborow
Timing: 2006/2020
Project: Caringbah, Bellevue Hill, Taren Point
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Ceerose Constructions
Project Manager: Mitchell Favaloro
Timing: 2019/2021
Project: Willoughby
Involvement: Environmental assessments
Outcome: Development in Planning and Approval Stage

Client: Armada Architecture & Clients
Project Manager: Mr Jarrod Lamshed
Timing: 2016/2017
Projects: Chatswood, Maroubra, Carlton
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Childcare Concepts
Project Manager: Mr Phillip Malek
Timing: 2012/2018
Projects: Maroubra, Narellan Vale
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: First Impressions Property
Project Manager: Ms Nadene Anderson
Timing: 2016/2020
Project: Northmead; Avalon Beach, Forestville, Alexandria
Involvement: Environmental assessments including acoustic.
Outcome: Satisfactorily completed; developments operational

Client: Abignano Group
Project Manager: Mr Joseph Abignano
Timing: 2016
Project: Hornsby
Involvement: Environmental assessments
Outcome: Assessments successfully completed

Client: Kaunitz Yeung Architecture
Project Manager: Kaunitz Yeung Architecture
Timing: 2013/2018
Project: Artarmon, Brookvale, Botany, Moore Park
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Little Learning School
Project Manager: Various
Timing: 2008/2018
Project: Artarmon, Strawberry Hills, Macquarie Park
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Marchese Partners
Project Manager: Various
Timing: 2014/2020
Project: Willoughby, Alexandria, Merrylands, Wolli Creek
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational or awaiting commissioning

Client: The Trumen Group
Project Manager: Trumen
Timing: 2015
Project: Alexandria, Brookvale
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; developments operational

Client: Commonwealth Bank
Project Manager: Paragon Project Management
Timing: 2013/2014
Project: Darling Park Sydney
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; development operational

Client: Anthony Hanna & Childcare Consultancy
Project Manager: Anthony Hanna
Timing: 2014
Project: Smithfield
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; development operational

Client: Tony Hakim
Project Manager: Childcare Consultancy – Anthony Keogh
Timing: 2014
Project: Forest Lodge
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; development operational

Client: Gerard Sleiman
Project Manager: Austracorp Pty Ltd
Timing: 2014
Project: Hurstville
Involvement: Acoustic Assessment & Certification
Outcome: Satisfactorily completed; development operational

Client: Childcare Concepts
Project Manager: Philip Malek
Timing: 2013
Project: Roselands
Involvement: Environmental assessments
Outcome: Satisfactorily completed; development operational

Client: Gavin Wright
Project Manager: Lipman Group
Timing: 2013
Project: Alexandria
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; development operational

Client: Hornsby Shire Council
Project Manager: Mode Design
Timing: 2013
Project: Hornsby
Involvement: Environmental assessments including acoustic.
Outcome: Satisfactorily completed; development operational

Client: David Forrest
Project Manager: Billy Kids Early Learning Centres
Timing: 2014/2020
Project: Avalon, Frenchs Forrest, St Ives
Involvement: Environmental assessments
Outcome: Satisfactorily completed; development operational

Client: Various
Project Manager: Michael Bell Architects
Timing: 2002/2020
Projects: Chifley, Thornton, Chatswood, Market Street Sydney, College Street Sydney, Five Dock, Little Collins Street Melbourne, Chatswood, George Street Sydney, Jesse Street Parramatta, Smith Street Parramatta
Involvement: Environmental assessments including acoustic
Outcome: Satisfactorily completed; development operational
