

Melbourne Office Suite 11 70 Racecourse Rd **T:** 03 7015 5112

ABN: 36 105 797 715 PO Box 270 Neutral Bay NSW 2089 St Leonards NSW 2065 Nth Melbourne VIC 3051 E: info@acousticdynamics.com.au W: www.acousticdynamics.com.au



Project 4584 27 March 2025

Anglican Schools Corporation

C/o- EPM Projects Pty Ltd Attention: Mr Jordan Graham Level 13, 67 Albert Avenue CHATSWOOD NSW 20267

Email: jgraham@epmprojects.com.au Ph: 02 9452 8300

Dear Jordan

ROSEVILLE COLLEGE – POST-OCCUPATION NOISE COMPLIANCE CERTIFICATION OF ACOUSTIC REQUIREMENTS

SUMMARY

Acoustic Dynamics is engaged by EPM Projects Pty Ltd on behalf of Anglican Schools Corporations to provide an assessment of post-occupation noise emission at neighbouring sensitive receiver locations, for compliance with the noise emission requirements of the acoustic report prepared by Acoustic Dynamics (report 4584R001.LB.201102, dated 2 November 2020, revision 3), to ensure operational noise emission satisfies The Independent Planning Commission consent condition E6 and E7.

The assessment is based on our inspections and attended noise measurements conducted during the site visit on Wednesday 25 March 2025.

2 **ACOUSTIC REQUIREMENTS**

2.1 CONDITIONS OF CONSENT

The Independent Planning Commission Application Number: SSD-9912 contains the following consent conditions relevant to the assessment of post-occupation noise emission:

"Operational Noise Limits

- E6. The Applicant must ensure that noise generated by operation of the mechanical plant and equipment does not exceed the noise limits in Roseville College SWELL Centre Development Application Acoustic Assessment 29-37 Bancroft Avenue, Roseville, NSW prepared by Acoustic Dynamics and dated 2 November 2020 (Revision 3).
- E7. The Applicant must undertake short term noise monitoring in accordance with the Noise Policy for Industry where valid data is collected following the commencement of use of each stage of the development. The monitoring program must be carried out by an appropriately qualified person and a monitoring report must be submitted to the Planning



Secretary within two months of commencement of use of each stage of the development or other timeframe agreed to by the Planning Secretary to verify that operational noise levels do not exceed the recommended noise levels for mechanical plant and use of the rooftop outdoor sports courts identified in Roseville College SWELL Centre Development Application Acoustic Assessment 29-37 Bancroft Avenue, Roseville, NSW prepared by Acoustic Dynamics and dated 2 November 2020 (Revision 3). Should the noise monitoring program identify any exceedance of the recommended noise levels referred to above, the Applicant must implement appropriate noise attenuation measures so that operational noise levels do not exceed the recommended noise levels or provide attenuation measures at the affected noise sensitive receivers."

2.2 NOISE CRITERIA

The following noise acoustic criteria is presented within Acoustic Dynamics' report *4584R001.LB.201102*, dated 2 November 2020, revision 3. Noise emission from the school must comply with the following project noise trigger levels at all times:

Location	Time of Day	Project Noise Trigger Level L _{Aeq} [dB]	
	Daytime¹ (7am to 6pm)	43	
Location 1 Southern Boundary of 26 Bancroft Ave	Evening (6pm to 10pm)	41	
	Night time (10pm to 7am)	36	
Location 2 Eastern Boundary of 37 Bancroft Ave	Daytime¹ (7am to 6pm)	41	
	Evening (6pm to 10pm)	42	
	Night time (10pm to 7am)	36	

Table 2.1 Summary of Measured Noise Levels and Noise Emission Criteria – At Residences

Note: 1) 8am to 6pm on Sundays and public holidays.

3 NOISE MEASUREMENT EQUIPMENT AND STANDARDS

All measurements were conducted in general accordance with AS 1055.1:2018 Acoustics – Description and Measurement of Environmental Noise Part 1: General Procedures. Sound measurements were carried out using precision sound level meters conforming to the requirements of IEC 61672.1:2002 *Electroacoustics: Sound Level Meters – Part 1: Specifications*. The instrumentation used during the survey is set out in **Table 3.1**.

4584L009.LB.250327

Page 2 of 6



Table 3.1 Noise Survey Instrumentation					
Туре	Serial Number	Instrument Description			
2270	2664115	Brüel & Kjaer Modular Precision Sound Level Meter			
4189	2385698	Brüel & Kjaer 12.5 mm Prepolarised Condenser Microphone			
4230	623588	Brüel & Kjaer Acoustic Calibrator			

The reference sound pressure level was checked prior to and after the measurements using the acoustic calibrator and remained within acceptable limits.

4 SITE INSPECTION & MEASUREMENTS

Acoustic Dynamics attended site and conducted inspections and noise measurements on Wednesday 26 March 20258, to verify noise emission achieves compliance with the project noise trigger levels.

It is understood that general operating hours for the mechanical plant will be day time hours, with lower capacity after hours use. Furthermore, Acoustic Dynamics is advised the rooftop courts will generally be in use during daytime hours only.

Measurements were conducted during the maximum operation of all mechanical plant, and during the use of the rooftop courts during lunchtime activities, at nearfield locations, and at the closest boundary shared with 37 Bancroft Avenue. The rooftop courts were in use by up to approximately 25 children, which although is not maximum capacity, is deemed to be representative of typical usage on a daily basis.

Based on the results of the nearfield measurements, and the boundary measurement, the cumulative mechanical plant and rooftop court noise has been calculated at the closest sensitive receiver locations, and includes the benefit of shielding and distance, and lower capacity operations during the night time period.

Table 4.1 presents the calculated noise levels based on results of the short-term attended and unattended noise measurements, at each of the closest affected receiver locations, and a comparison with the EPA Project Noise Trigger Levels.



Table 4.1 Calculated Noise Levels & EPA Project Noise Trigger Levels						
Location	Noise Source	Calculated L _{Aeq(period)} [dB]	EPA L _{Aeq(15min)} Project Noise Trigger Levels [dB]	Complies?		
Eastern boundary	Mech. plant	42	41 (day) / 42 (evening)	Yes ¹		
of 37 Bancroft	Rooftop court	46	41 (day)	Yes ³		
Ave	Mech. plant	38	36 (night)	Yes ¹		
Southern	Mech. plant	35	41 (day) / 42 (evening)	Yes		
boundary of 26 to	Rooftop court	52	41 (day)	Yes ³		
32 Bancroft Ave	Mech. plant	32	36 (night)	Yes		
Northern	Mech. plant	33	41 (day) / 42 (evening)	Yes		
boundary of 36	Rooftop court	33	41 (day)	Yes ³		
Victoria St	Mech. plant	27	36 (night)	Yes		
Western boundary of 23 Bancroft Ave	Mech. plant	37 ²	41 (day) 42 (evening)	Yes		
	Rooftop court	40	41 (day)	Yes ³		
	Mech. plant	37 ²	36 (night)	Yes ¹		

Table 4.1 Calculated Noise Levels & EPA Project Noise Trigger Levels

Note. 1) As per Section 4.2 of the NSW Noise Policy for Industry, an exceedance of 1-2 dB is considered negligible, and would not be discernible by the average listener.

2) A 5 dB correction has been added for the audible tonal component emitted via the level 2 plant louvres at this adjacent receiver.

3) Rooftop court noise levels do not include the benefit of the rooftop courts acoustic barrier that was recommended within Acoustic Dynamics' report 4584R001.LB.201102, dated 2 November 2020, revision 3. See **Section 5** below for further details.

5 **DISCUSSION**

- The measured and calculated noise results indicate that noise associated with the operation of the installed mechanical plant complies with the recommended noise levels for mechanical plant identified in Roseville College SWELL Centre Development Application Acoustic Assessment 29-37 Bancroft Avenue, Roseville, NSW (report 4584R001.LB.201102) prepared by Acoustic Dynamics and dated 2 November 2020 (Revision 3);
- The measured and calculated noise results indicate that noise associated with the use of the rooftop courts exceeds the recommended noise levels for rooftop outdoor sports courts identified in Roseville College SWELL Centre Development Application Acoustic Assessment 29-37 Bancroft Avenue, Roseville, NSW (report 4584R001.LB.201102) prepared by Acoustic Dynamics and dated 2 November 2020 (Revision 3);
- 3. However, it is noted that the predicted noise levels associated with the use of the roof-top sports court within Acoustic Dynamics' report *4584R001.LB.201102* relied on the acoustic benefit of a recommended 3 metre acoustic barrier, as detailed below:

"A 2 metre high noise barrier with 1 metre high cantilevered canopy (or 3 metre high noise barrier) should be constructed along the northern and north-western boundary (to Bancroft Avenue) and the eastern boundary adjacent to the covered area (to 39 Bancroft Avenue),"



- 4. SSD-9912 Condition D9 does not permit installation of an acoustic barrier around the rooftop sports courts hence the noise levels associated with the use of the sports courts is greater than predicted;
- 5. Notwithstanding, the school has committed to implementing a Plan of Management reflective of the recommendations detailed in Acoustic Dynamics' report *4584R001.LB.201102*, which will assist in ensuring noise impacts associated with the use of the roof-top sports court are reduced, ensuring the acoustic amenity of neighbouring residents is adequately protected, and satisfying the intent of SSD-9912 condition E7. The recommended measures are reproduced below:

"6.2 ROOFTOP SPORT AREA

- 1. Any installed speakers used for the broadcast of warning signals, amplified instructions or music should be installed at a maximum height of 500mm below the top of the adjacent perimeter barrier and must be orientated away from adjacent receivers;
- 2. The maximum noise level (L_{Aeq(period}) from broadcast warning signals, amplified instructions or music can be set to ensure that adjacent residential receivers are not adversely affected, following the installation of the speaker system;
- 3. Sporting activities should cease at 9:45pm sharp with no amplified music, instructions or warning signals to be broadcast after this time;
- 4. All activities should be supervised by an appropriately trained member of staff at all times. Staff should be instructed to prevent overly noise behaviour during the evening and night time assessment periods; and
- 5. Use of whistles should be restricted to handheld low noise emitting "squeezy whistles" such as the Gilbert 'Whizzball' (<u>www.woolmersales.co.uk/product/gilbert-whizzball-squeezy-whistle/</u>)."

6 CONCLUSION

Acoustic Dynamics is engaged by **EPM Projects Pty Ltd** on behalf of **Anglican Schools Corporations** to provide an assessment of post-occupation noise emission at neighbouring sensitive receiver locations, for compliance with the noise emission requirements of the acoustic report prepared by Acoustic Dynamics (report 4584R001.LB.201102, dated 2 November 2020, revision 3), to ensure operational noise emission satisfies The Independent Planning Commission consent condition E6 and E7.

Statement of Compliance

Based on the results of noise measurements conducted on site, and noise calculations, Acoustic Dynamics advises that suitable noise mitigation has been incorporated into the design and operation of the site and satisfies The Independent Planning Commission SSD-9912 Consent Condition E6 and E7.

4584L009.LB.250327



We trust this meets with your immediate requirements. Should you require any further information, please do not hesitate to contact us.

Kind Regards ACOUSTIC DYNAMICS

60 ssociation of ustralasian coustical onsultants

LUCAS BROOKER

Associate, MArchSci (Audio & Acoustics), MAAS

Document	Rev	Date	Prepared	Reviewed	Authorised	Approved
4584L009.LB.250327	0	27 March 2025	LB	RH	RH	ll