

RCA ref 17433-401/1

14 March 2025

Wagga Wagga City Council

243 Baylis Street (PO Box 20)  
Wagga Wagga NSW 2650

Attention: Hayden Bousfield

Geotechnical Engineering

Engineering Geology

Environmental Engineering

Hydrogeology

Construction Materials Testing

Environmental Monitoring

Sound & Vibration

Occupational Hygiene

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## ACOUSTIC ASSESSMENT PEER REVIEW

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### 1 INTRODUCTION AND PROPOSAL DESCRIPTION

RCA Australia (RCA) have been engaged by Wagga Wagga City Council (Council) to provide a peer review of a noise impact assessment report prepared to support an amendment to Schedule 1 *Additional permitted uses* to permit the use of a function centre on land zoned RU1 Primary Production in Wagga Wagga Local Environmental Plan 2010 (WWLEP 2010). The proposal is located at 92 Cooramin Street, Cartwrights Hill. The most recent noise impact assessment was prepared by Pulse White Noise Acoustics (PWNA).

The following proposal description has been taken from the PWNA report:

*“The existing clubhouse is proposed to include functions and event hire within the existing clubhouse. These events will include birthday parties, Christmas functions, corporate training days, sporting club and community club functions and events.”*

This peer review was undertaken by RCA’s Acoustics Manager, Alex Rees. Alex has been a member of the Australian Acoustical Society for over seven years and has been an acoustic consultant for over 12 years.

## 2 DOCUMENTS REVIEWED

RCA's initial peer review was prepared in November 2024 based on Pulse White Noise's Revision 3 report. This resulted in several clarifications being requested of Pulse White Noise. They have responded to those requests and have prepared Revision 4 for this review.

Documents that RCA have reviewed in preparing our initial and final review are outlined in **Table 1**.

**Table 1** *Reviewed documents*

Document author	Document title	Document ID
Pulse White Noise Acoustics Pty Ltd	Wagga Harness Racing Club – NIA	240461 – Wagga Harness Racing Club – NIA – R4, dated 4 March 2025
Pulse White Noise Acoustics Pty Ltd	Wagga Harness Racing Club – NIA	240461 - Wagga Harness Racing Club - NIA – R3, dated 02 October 2024
McLaren Traffic Engineering & Road Safety Consultants	TRAFFIC AND PARKING IMPACT ASSESSMENT OF THE PROPOSED CHANGE TO ENABLE FUNCTION CENTRE USE AT 92 COORAMIN STREET, CARTWRIGHTS HILL	240488.01FC, dated 30 September 2024
Salvestro Planning	Planning Proposal – Cooramin St (Harness Racing NSW)	Rev 3.0, dated October 2024

## 3 COMMENTS ON TECHNICAL REVIEW PROCESS

RCA first note that assessing patron and music noise against the NSW Liquor and Gaming (L&G) criteria is technically tricky and the outcome is heavily reliant upon assumptions such as:

- How many patrons are there and how are they dispersed over the available floor space (if outdoors).
- How many patrons are speaking simultaneously and what vocal effort are they using?
- What style of music is being played and how loud? This is important because it will determine the music LA10 spectrum that will later be compared against the L&G 1/1 Octave band criteria.

There is a range of reasonable assumptions available to the consultant in preparing such an assessment, and as a result, two experienced consultants will likely arrive at slightly different results.

It is also important to note that the reviewer does not have access to the detailed calculations and cannot interrogate the noise model used for the assessment. The reviewer therefore can only identify obvious errors or potential omissions and raise queries to be clarified by the consultant.

#### 4 COMMENTS ON GUIDELINES USED IN THE PWNA ASSESSMENT

Pulse White Noise Acoustics (PWNA) have prepared their assessment with reference to the following guidelines:

- NSW EPA Road Noise Policy (RNP) 2011 – Relevant for assessing road traffic noise impacts from public roads.
- NSW EPA Noise Policy for Industry (NPI) 2017 – Applied to evaluate operational noise emissions from car movements.
- NSW Liquor & Gaming Guidelines – Used to assess noise impacts associated with licensed premises (music and patron noise).

RCA agree that these guidelines are the most relevant to assess noise from the proposal.

#### 5 REVIEW FINDINGS

RCA previously put our peer review findings to PWNA and have received responses. The items previously raised for discussion are shown in the table below.

**Table 2** RCA's review of the PWNA Noise Impact Assessment report

Report section	RCA raised with PWNA in November 2024	Status of item
-	<p>Council would like to understand how this proposal fits within the context of the existing site. There have been historical and serial noise complaints about the paceway (RCA note that the offending noise source is the PA system).</p> <p>While it could be argued that this proposal is separate from existing operations, RCA believe it would be prudent to comment/address existing noise concerns.</p>	<p>PWNA have since added Section 5.5 <i>Cumulative noise impact assessment</i> which states that the proposal is not seeking to operate while the existing approved events are occurring. This provides a delineation between the proposal and the existing events.</p> <p>RCA are satisfied that this position does not contravene the noise guidelines which the assessment is based upon.</p>
Section 3.3.1	<p>Is Olympic Hwy the dominant L90 contributor?</p> <p>RCA recommend PWNA include an attended noise monitoring table that identifies local noise sources.</p>	<p>PWNA gave no response to this question, though we see that PWNA are predicting compliance at all receivers by safe margins that should not be compromised even if Olympic Highway is the controlling the background and if the true background levels were marginally lower at receivers closer to site.</p> <p>RCA are satisfied that this point will not make a material difference in respect to compliance / non-compliance.</p>
4.2.2.4	<p>PWNA have excluded patron noise from NPI assessment. RCA accept that this approach is open to interpretation and do not necessarily disagree, though it may make the point above more important.</p> <p>This was marginal whether we raised this here or not.</p>	<p>PWNA have made the point that the NPI expressly excludes the assessment of patron noise.</p> <p>RCA accept this position and consider this item closed.</p>
4.3	<p>PWNA have adjusted OLGR criteria at 31.5 Hz to match threshold of hearing. We have not seen this before but seems reasonable if the standard has been correctly cited.</p> <p>In Table 9, are the Octave band levels Linear and only the "Overall A" column A-weighted? I don't think that is the best way to present the OLGR criteria, since this is meant to be spectral A weighted LA10 targets.</p>	<p>PWNA have confirmed that adjusting the OLGR criteria at 31.5 Hz (according to the relevant standard) is common practice. RCA accept this.</p> <p>PWNA have since updated Table 9 in line with RCA recommendations.</p> <p>RCA consider this item closed.</p>

Report section	RCA raised with PWNA in November 2024	Status of item
5.1	<p>A mechanical ventilation assessment has not been provided because it is existing plant.</p> <p>RCA believe that it should be included since it forms part of the proposed use of the space. Also, having functions may mean that the existing AC plant may now be used later at night than what is currently the case.</p>	<p>PWNA have accepted RCA's recommendation and included mechanical ventilation plant in their assessment. RCA note that compliance is predicted.</p> <p>RCA consider this item closed.</p>
5.2	<p>PWNA conclude that traffic on local roads will not be a concern without any evidence. RCA anticipate an indicative <math>10 \times \log_{10}</math> (new/existing) calculation with reference to TIA will support this conclusion.</p>	<p>PWNA have since included an assessment of traffic on local roads using industry accepted noise modelling software implementing a common road traffic noise algorithm. RCA note that the objectives of the Road Noise Policy were met and consider this item closed.</p>
5.3.1.1	<p>Council have concerns that PWNA's operational scenario assumptions may not be realistic.</p> <ul style="list-style-type: none"> <li>• All patrons inside.</li> <li>• All windows / doors closed.</li> <li>• Minimum Rw 31 (RCA recommend adding details of the current glazing and façade construction so that it is clear if the current façade (including seals) meets this assumption or whether the client will need to upgrade).</li> </ul> <p>RCA recommend a comment from PWNA whether the assumed internal noise level captures a live music scenario.</p>	<p>PWNA have stated that they are relying on information provided to them by their client regarding a commitment not to allow any external patrons. RCA accept that this becomes a matter for operational management to enforce.</p> <p>PWNA have stated that their calculations are based on an internal noise level of 85 dBA. RCA note that this is quite loud and likely offers some conservatism in the calculations.</p> <p>PWNA have stated that it is the responsibility of the venue to ensure that façade elements meet the requirements stated by PWNA. RCA accept this and recommend that this becomes a condition of consent.</p> <p>RCA consider that no additional certainty can be provided at this stage and that PWNA have made reasonable assumptions in preparing their assessment.</p>
5.3.1.1	<p>Table 10 appears to be A-weighted levels. Suggest "dBA" is written somewhere.</p> <p>If we sum across the first row, we get 90, not 87 dBA.</p>	<p>PWNA have since made minor adjustments to the table for clarity.</p> <p>RCA consider this item to be closed.</p>

Report section	RCA raised with PWNA in November 2024	Status of item
5.4	Table 11 appears to show Linear L10 noise targets when this should be LA10.	PWNA have since made minor adjustments to the table for clarity. RCA consider this item to be closed.

## 6 CONCLUSION

RCA were engaged by Wagga Wagga City Council to provide third party technical review of a Noise Impact Assessment prepared for a proposal to hold functions within the existing Wagga Wagga paceway.

RCA put several queries for clarifications to PWNA in November 2024 and PWNA updated their report (current version is Rev 4) in response.

RCA are satisfied that each item raised has either been addressed in the updated report or adequately answered in our correspondence from PWNA. We accept that some items (such as enforcing operational procedures) become a matter for management and are outside the control of PWNA. We consider that the noise assessment has been prepared according to standard industry practices.

Yours faithfully

**RCA AUSTRALIA**



Alex Rees  
Principal Acoustics Consultant