



REPORT R240248R3

Revision 0

Noise Impact Assessment

Proposed Residential Subdivision

Warra Warra Road

PREPARED FOR:

Texi Pty Ltd

3 August 2026



Noise Impact Assessment

Proposed Residential Subdivision

Warra Warra Road

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R240248R3	Revision 0	3 August 2026	Camilo Castillo	Desmond Raymond	Desmond Raymond

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1 INTRODUCTION

Rodney Stevens Acoustics Pty Ltd (RSA) has been engaged by Texi Pty Ltd to conduct a noise impact assessment for development application (DA) lodgment of the Proposed Residential Subdivision at Warra Warra Road.

This report addresses the noise impacts from the adjoining Nowra Rifle Range (NRR) on the amenity of the proposed subdivision.

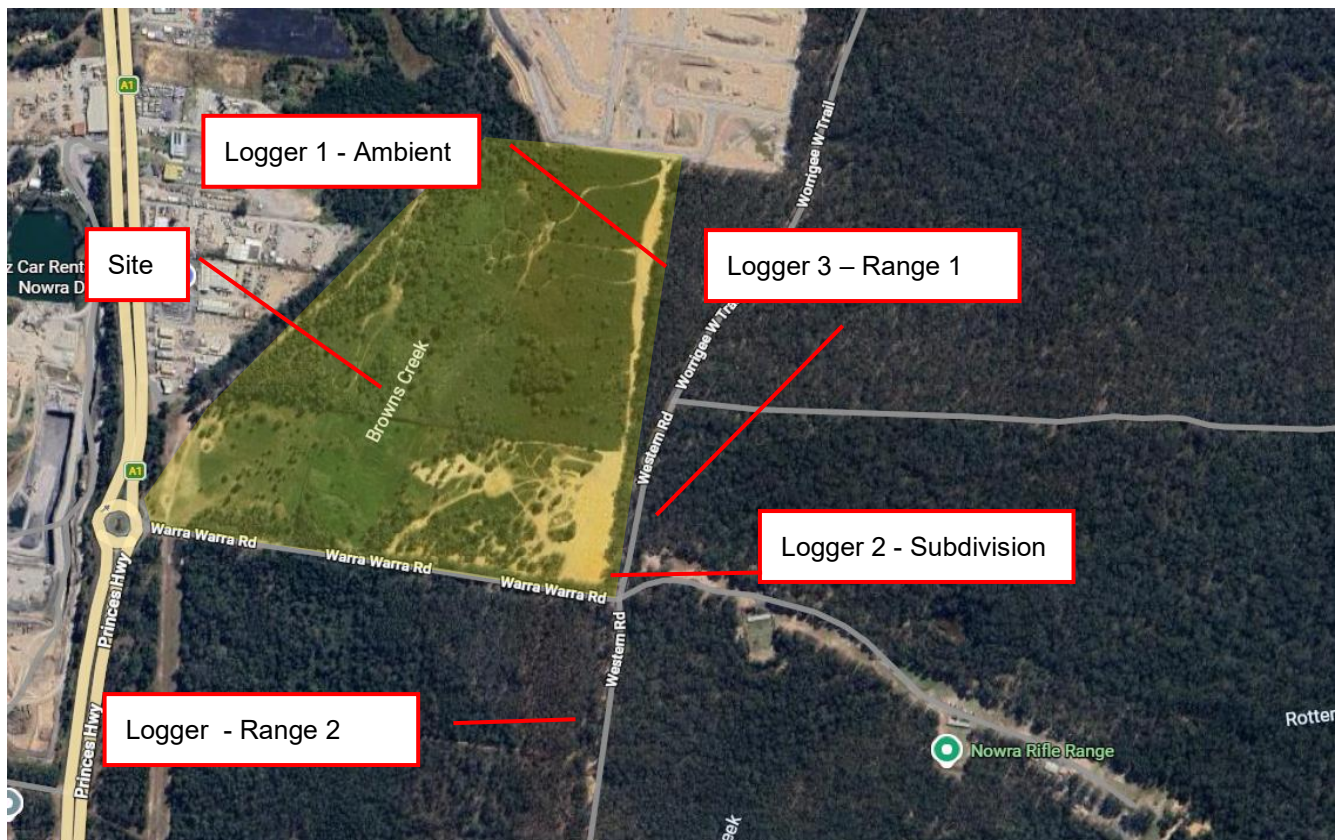
This assessment is to form part of the supporting documentation for the DA submission to Shoalhaven City Council. Specific acoustic terminology is used in this report. An explanation of common acoustic terms is provided in Appendix A.

2 PROPOSED DEVELOPMENT

2.1 Development Site

The proposed development is located at Warra Warra Road. The site is bounded by adjoining residential receivers to the north, commercial premises to the west and NRR to the east. Figure 2-1 shows an aerial image of the site area and the surrounding environment

Figure 2-1 Site Location



Aerial image courtesy of Google Maps © 2026

3 BASELINE NOISE SURVEY

3.1 Unattended Noise Monitoring

In order to characterise the existing acoustical environment of the area, unattended noise monitoring was conducted between Wednesday 1st April and Friday 24th April 2026 at the logging locations shown in Figure 2-1. 4 noise loggers were set up on site. The first logger was located to the furthest northern boundary of the site away from the range, noise monitoring at this location is representative of the typical acoustic environment of the site.

The remaining 3 loggers were installed to the east and south of the site, these locations are representative of the most critical receiver points for the proposed subdivision

Logger locations were selected with consideration to other noise sources which may influence readings, security issues for noise monitoring equipment and gaining permission for access from other landowners.

Instrumentation for the survey comprised of 4 Svantek Svan 977 environmental noise loggers (serial numbers 59621, 69795, 98819 and 81345) fitted with microphone windshields. Calibration of the loggers was checked prior to and following measurements. Drift in calibration did not exceed ± 0.5 dB(A). All equipment carried appropriate and current NATA (or manufacturer) calibration certificates.

The logger determines L_{A1} , L_{A10} , L_{A90} and L_{Aeq} levels of the ambient noise. L_{A1} , L_{A10} , L_{A90} are the levels exceeded for 1%, 10% and 90% of the sample time respectively (see Glossary for definitions in Appendix A). Detailed results at the monitoring location are presented in graphical format in Appendix B. The graphs show measured values of L_{A1} , L_{A10} , L_{A90} and L_{Aeq} for each 15-minute monitoring period.

3.2 Data Processing

In order to assess noise emission from the Proposed Residential Subdivision, the data obtained from the noise logger has been processed in accordance with the procedures contained in the NSW Environmental Protection Authority's (EPA) *Noise Policy for Industry* (NPfI, 2017) to establish representative noise levels that can be expected in the residential vicinity of the site. The monitored baseline noise levels are detailed in Table 3-1.

Table 3-1 Measured Baseline Noise Levels Corresponding to Defined NPfl Periods

Location	Measurement Descriptor	Measured Noise Level – dB(A) re 20 µPa		
		Daytime 7 am - 6 pm	Evening 6 pm – 10 pm	Night-time 10 pm – 7 am
Logger at Northern Boundary	L _{Aeq}	52	44	43
	RBL (Background)	36	34	29

Notes: All values expressed as dB(A) and rounded to nearest 1 dB(A);

L_{Aeq} Equivalent continuous (energy average) A-weighted sound pressure level. It is defined as the steady sound level that contains the same amount of acoustic energy as the corresponding time-varying sound.

L_{A90} Noise level present for 90% of time (background level). The average minimum background sound level (in the absence of the source under consideration).

3.1 Noise Intrusion (State Environmental Planning Policy (Transport and Infrastructure) 2021)

In order to assess noise intrusion from traffic into the Proposed Residential Subdivision, the data obtained from the original noise survey carried out in April 2024 has been processed to establish representative ambient noise levels at the facades most exposed to Warra Warra and Western Road.

The time periods used for this assessment are as defined in the State Environmental Planning Policy (Transport and Infrastructure) 2021 and the Development near Rail Corridors and Busy Roads Interim Guideline. Results are presented below in Table 3-2.

Table 3-2 Traffic Noise Levels Corresponding to Defined SEPP 2021 Periods

Location	Period	External Noise Levels dB(A)
Approximately 24m from Warra Warra Road and Western Road	Day Time 7:00 am - 10:00 pm	L _{Aeq} (15hour) 57
	Night Time 10:00 pm - 7:00 am	L _{Aeq} (9hour) 44
Approximately 20m from Warra Warra Road & 80m from Princes Highway	Day Time 7:00 am - 10:00 pm	L _{Aeq} (15hour) 51
	Night Time 10:00 pm - 7:00 am	L _{Aeq} (9hour) 46

4 NOISE GUIDELINES AND CRITERIA

4.1 Noise Criteria

The determination of an acceptable level of shooting range noise impacting the residential receivers is specified in the NSW EPA's Target Shooting Ranges: Application Note for Assessing Noise Compliance. This guideline applies to shooting ranges in NSW and provides methodology on measurements and assessing the noise levels at the nearest residential boundaries.

The following table presents recommended number of days and nights a shooting range can operate depending on the shooting noise level.

Table 4-1 Recommended number of days and nights of range usage corresponding to shooting noise level

	Residential level (linear peak hold, decibels)										
	60	65	70	75	80	85	90	95	100	105	<105
	Maximum usage days (nights) per week										
Existing range daytime use	7	7	7	7	7	7	5	4	3	2	1
Existing range night-time use	3	3	2	2	2	1	-	-	-	-	-
Future range daytime use	7	5	5	4	3	2	1	-	-	-	-
Future range night-time use	3	2	1	-	-	-	-	-	-	-	-

4.2 Australian Standard AS/NZ 2107:2016

There is the potential for the NRR to impact on the amenity of the proposed subdivision. Australian Standard AS/NZS 2107:2016 – *Recommended Design Sound Levels and Reverberation Times for Building Interiors*. Provides design internal noise levels for residential areas. Table 4-2 presents the relevant extract from the standard that pertains to recommended noise levels in residential dwellings near minor roads.

Table 4-2 AS/NZS 2107:2016 – Recommended Internal Noise Levels

Type of Occupancy/Activity	Design Sound Level ($L_{Aeq,t}$) Range
RESIDENTIAL BUILDINGS	
Living Areas	30 – 40
Sleeping areas (night time)	30 – 35

The NSW EPA's Target Shooting Ranges: Application Note for Assessing Noise Compliance guideline is designed to assess the noise impact from a shooting range on nearby sensitive receivers. The Nowra Shooting Range (NRR) has been operational for several decades at its current location. The proposed subdivision must be designed to mitigate noise impacts from the NRR. Based on the fact that the guideline does not provide suitable methodology to assess noise impact into a new residential development, RSA has adopted Australian Standard *AS/NZS 2107:2016 – Recommended Design Sound Levels and Reverberation Times for Building Interiors*. The standard provides suitable design goals for residential receivers.

4.3 Road Noise Criteria

The determination of an acceptable level of traffic noise impacting the internal residential spaces requires consideration of the activities carried out within the space and the degree to which noise will interfere with those activities.

As sleep is the activity most affected by traffic noise, bedrooms are considered to be the most sensitive internal living areas. Higher levels of noise are acceptable in living areas without interfering with activities such as reading, listening to the television etc. Noise levels in utility spaces such as kitchens, bathrooms, laundries etc. can be higher.

4.4 State Environmental Planning Policy (Transport and Infrastructure) 2021

The NSW Government's State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP (Transport and Infrastructure) 2021) was introduced to facilitate the delivery of infrastructure across the State by improving regulatory certainty and efficiency. The NSW Department of Planning and Infrastructure's "*Development near Rail Corridors and Busy Roads - Interim Guideline*" (the DP&I Guideline) of December 2008 provides noise criteria for residential and non-residential buildings. These criteria are summarised in Table 4-3.

Table 4-3 DP&I Interim Guideline Noise Criteria

Type of occupancy	Noise Level dB(A)	Applicable time period
Sleeping areas (bedroom)	35	Night 10 pm to 7 am
Other habitable rooms (excl. garages, kitchens, bathrooms & hallways)	40	At any time

Note 1: Airborne noise is calculated as $L_{Aeq(15\text{hour})}$ daytime and $L_{Aeq(9\text{hour})}$ night-time

The following guidance is also provided in the DP&I Guideline:

"These criteria apply to all forms of residential buildings as well as aged care and nursing home facilities. For some residential buildings, the applicants may wish to apply

more stringent design goals in response to market demand for a higher quality living environment.

The night-time “sleeping areas” criterion is 5 dB(A) more stringent than the “living areas” criteria to promote passive acoustic design principles. For example, designing the building such that sleeping areas are less exposed to road or rail noise than living areas may result in less onerous requirements for glazing, wall construction and acoustic seals. If internal noise levels with windows or doors open exceed the criteria by more than 10 dB(A), the design of the ventilation for these rooms should be such that occupants can leave windows closed, if they so desire, and also to meet the ventilation requirements of the Building Code of Australia.”

The noise criteria presented in Section 4.4 and in Table 4-3 apply to a ‘windows closed condition’. Standard window glazing of a building will typically attenuate noise ingress by 20 dB(A) with windows closed and 10 dB(A) with windows open (allowing for natural ventilation). Accordingly, the external noise threshold above which a dwelling will require mechanical ventilation is an $L_{Aeq(9\text{hour})}$ 55 dB(A) for bedrooms and $L_{Aeq(15\text{hour})}$ 60 dB(A) for other areas.

Where windows must be kept closed, the adopted ventilation systems must meet the requirements of the Building Code of Australia and Australian Standard 1668 – The use of ventilation and air conditioning in buildings.

5 NOISE IMPACT ASSESSMENT

In order to ascertain the existing noise impact from NRR, the measured noise logger data was processed to identify the resulting noise levels at the boundary of the proposed subdivision.

RSA did not have access to NRR to carry out noise levels of the activities carried out at the range, the noise levels recorded could not be referenced to a specific type of weapon, however the noise level at the boundary was recorded and correlated with the NRR’s timetable. The following table shows the noise levels recorded throughout the entire survey period. The 3 logging locations were correlated to ensure the most accurate noise levels at the future site boundary have been used for calculation purposes.

Noise maps presenting the noise contours from the noise recorded from NRR are presented in Appendix C

Table 5-1 Recorded Noise Levels

Activity at the Range	$L_{Aeq(1\text{sec})}$	L_{Amax}
100m General Practice	67	77
Small Bore Bench Rest & Prone	70	72

700m Long Range Rifle	73	78
800m Long Range Rifle	79	82
100m Shotgun	71	76

The noise levels presented above were recorded during different activities at NRR, the loudest gun shots recorded were identified as being long range rifles. Each shot duration is approximately 1 second

5.1 Recommended Noise Control Treatment

There is no specific requirement or guideline in NSW to assess noise intrusion from an existing shooting range into a proposed residential dwelling. Based on the noise levels presented in Section 5, the noise generated by the NRR is likely to have an impact on the future residents of the proposed subdivision, therefore, noise mitigation should be implemented to minimise the noise impact from weapons being fired. Due to the proximity of some of the proposed lots, the internal design goals in Australian Standard *AS/NZS 2107:2016* may be difficult to achieve.

The following noise mitigation measures are designed to minimise the noise impact from NRR in a practical and feasible way while attempting to attain the internal noise goals in Australian Standard *AS/NZS 2107:2016*

The calculation procedure establishes the required noise insulation performance of each surface component such that the internal noise level is achieved whilst an equal contribution of NRR noise energy is distributed across each component. Building envelope components with a greater surface area must therefore offer increased noise insulation performance.

We note that the traffic noise levels from Princess Highway on the western boundary of the site (Refer to Table 3-2) are below the threshold for specific acoustic treatment. Standard glazing is therefore considered sufficient to mitigate traffic noise intrusion. In addition, any acoustic treatment required to address noise from activities at the NRR is expected to exceed the requirements for traffic noise attenuation

The recommended acoustic treatment is based on the following room sizes and floor finishes:

Table 5-2 Room Conditions

Room Type	Size	Glazing Area m ² (Glazing Size)	Floor Finish
Bedrooms	3 x 3.5 x 2.7	3	Carpet and underlay
Living Room	4 x 6.5 x 2.7	8.1	Hard Flooring
Kitchen	2 x 3 x 2.7	2.7	Tiles

The acoustic requirements shown in this report may increase further where the bedroom floor finishes are tiled or timber.

All recommendations must be checked by others to ensure compliance with other non-acoustic requirements that Council or other authority may impose (e.g. Thermal requirements for BASIX compliance).

5.2 Glazing

The R_w rating required for each window will vary from room to room. Recommendations for windows also apply to any other item of glazing located on the external facade of the building in a habitable room unless otherwise stated.

Note that the R_w rating is required for the complete glazing and frame assembly. The minimum glazing thicknesses will not necessarily meet the required R_w rating without an appropriate frame system. It will be therefore necessary to provide a window glass and frame system having a laboratory tested acoustic performance meeting the requirements below

The window systems must be tested in accordance with both of the following:

- Australian Window Association Industry Code of Practice Window and Door – Method of Acoustic Testing; and
- AS 1191 Acoustics – Method for laboratory measurement of airborne sound insulation of building elements.

It is necessary to submit such Laboratory certification for the proposed glazing systems (i.e. windows and framing systems) (e.g. NAL or CSIRO) for approval by RSA prior to ordering or commitment.

The entire frame associated with the glazing must be sealed into the structural opening using acoustic mastics and backer rods. Normal weather proofing details do not necessarily provide the full acoustic insulation potential of the window system. The manufacturers' installation instructions for the correct acoustic sealing of the frame must be followed.

Where double glazing is required, each glass panel must have different thicknesses to ensure the performance of the glazing system is not compromised

It is possible that structural demands for wind loading or fire rating or the like may require more substantial glass and framing assemblies than nominated above. Where this is the case the acoustic requirements must clearly be superseded by the structural or fire rating demands.

Figure 5-1 Noise Zones

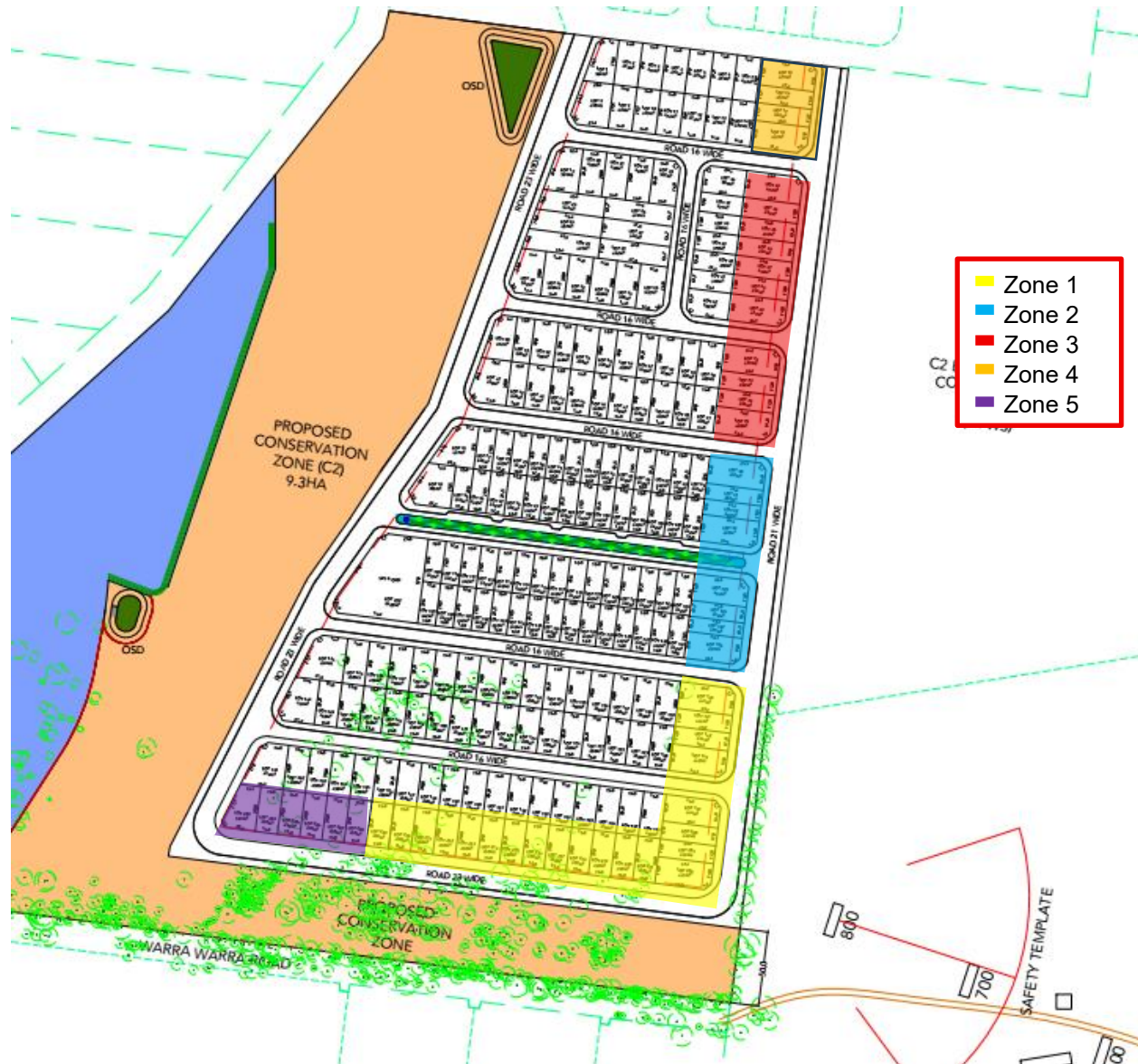


Table 5-3 Required Rw Ratings – Achieved Internal Noise Levels

Room Type	Achieved Internal Noise Level	AS2107 Design Goal	Rw Required
Zone 1			
Living Room	47/45	40	Rw 37/40
Bedroom	44/42	35	Rw 37/40
Zone 2			
Living Room	45/42	40	Rw 37/40
Bedroom	42/40	35	Rw 37/40
Zone 3			
Living Room	42/40	40	Rw 34/37
Bedroom	37/35	35	Rw 37/40
Zone 4			
Living Room	42/40	40	Rw 32/35
Bedroom	37/35	35	Rw 35/37
Zone 5			
Living Room	42/40	40	Rw 37/39
Bedroom	39/37	35	Rw 37/40

The internal noise levels presented above are based on the room conditions outlined in Table 5-2. Any changes to these conditions, such as an increase in glazing area, may result in different internal noise levels

The noise from weapons discharging is impulsive in nature and occur intermittently, unlike steady state noise such as traffic noise and industrial sources, it will be unfeasible to aim to achieve the noise goals in Australian Standard *AS/NZS 2107:2016*. It would be essential to ensure that the mitigation measures are designed to minimise the impact from NRR as practicable and feasible as possible.

The above recommended glazing systems consist of glass pane, frame and seals. Care should be taken when selecting the system to ensure the acoustic rating (Rw) is verified through laboratory tested data. As a guide, the following table presents the Rw ratings of different glass thicknesses, please note that these are shown as a guide only, all final glazing system selections must comply with the requirements in Section 5.2.

Table 5-4 Glass Thickness Guideline

Glass Thickness	Rw Rating (Glass Pane Only)
5mm	26
6mm	28
6.38mm Laminated	32
8.38 Laminated	34
10.38 Laminated	36
12.38 Laminated	37
4mm – 50mm Airgap – 6mm Double Glazed	41

5.3 Roof/Ceiling

The overall acoustic rating required is $R_w + C_{tr} 45$ (minimum). This can be achieved by the following construction:

- A steel metal roof with minimum Bradford Anticon 60 MD over timber or steel purlins
- 215mm Bradford Gold Batts R 4.1;
- Rondo suspended ceiling system with Gyprock resilient mounts
- Furring channel at 600mm max. centres;
- 2 x 10mm Gyprock HD Plasterboard (minimum 8.5 kg/m² density)

If ventilators, heat extraction units or other openings into the ceiling cavity for lighting, ventilation, decoration or other purposes are to be provided, then care should be taken to ensure that such units are properly attenuated and all penetrations are properly sealed off so as not to degrade the rating of the roof/ceiling construction system. Care should also be taken to avoid any noise paths into the ceiling cavity via the eaves.

5.4 External Walls

The following wall construction recommendations are given as guidance only. The client is responsible for selecting adequate systems in order to achieve the recommended acoustic ratings.

5.4.1 Masonry Walls

It is understood that the existing external walls are rendered masonry. The masonry external walls will be required to achieve a rating of $R_w 50 + C_{tr}$. This $R_w + C_{tr}$ rating is generally achieved with a standard construction with insulation. No further acoustic requirements are needed

5.4.2 Detailing

Note that well-detailed construction and careful installation is needed to achieve the required R_w acoustic ratings. All gaps are to be minimised and fully sealed with an acoustic rated sealant, such as FireBan One by Bostik or Sikaflex Pro 2HP by Sika.

5.5 Mechanical Plant Noise Assessment

A specific mechanical plant selection has not been supplied at this stage. It is anticipated that the building will be serviced by typical mechanical ventilation/air conditioning equipment.

Noise criteria for the use of the mechanical plant will be met through the use of conventional noise control methods (e.g. selection of equipment on the basis of quiet operation and, where necessary, providing enclosures, localised barriers, silencers and lined ductwork).

An appropriately qualified acoustic consultant should review the mechanical plant associated with the development at the detailed design stage when final plant selections have been made.

6 CONCLUSION

Rodney Stevens Acoustics has conducted a noise impact assessment of the Proposed Residential Subdivision at Warra Warra Road. The noise impact assessment has assessed the noise generation and intrusion of the site and compared it with the noise criteria required by in Shoalhaven City Council and other relevant standards.

A noise survey has been conducted and the processed data has been used to determine noise impact from Nowra Rifle Range at the project site.

Based on the noise impact study, practical and feasible mitigation measures have been recommended to reduce noise impacts from activities at the Nowra Rifle Range. Future dwelling designs should seek to satisfy the design goals of Australian Standard AS/NZS 2107:2016, or achieve the closest practicable outcome where full compliance is not feasible

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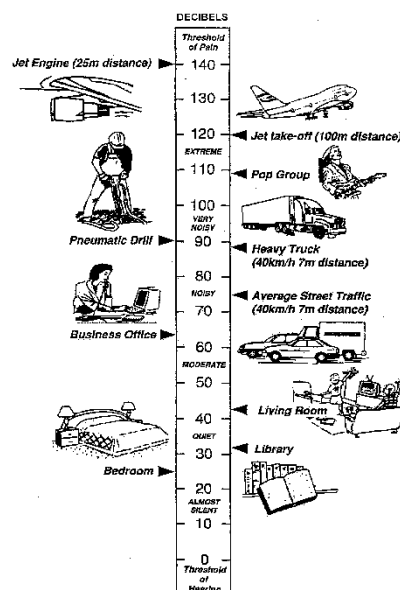
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Appendix A – Acoustic Terminology

A-weighted sound pressure	The human ear is not equally sensitive to sound at different frequencies. People are more sensitive to sound in the range of 1 to 4 kHz (1000 – 4000 vibrations per second) and less sensitive to lower and higher frequency sound. During noise measurement an electronic ' <i>A-weighting</i> ' frequency filter is applied to the measured sound level <i>dB(A)</i> to account for these sensitivities. Other frequency weightings (B, C and D) are less commonly used. Sound measured without a filter is denoted as linear weighted <i>dB(linear)</i> .
Ambient noise	The total noise in a given situation, inclusive of all noise source contributions in the near and far field.
Community annoyance	Includes noise annoyance due to: character of the noise (e.g. sound pressure level, tonality, impulsiveness, low-frequency content) character of the environment (e.g. very quiet suburban, suburban, urban, near industry) miscellaneous circumstances (e.g. noise avoidance possibilities, cognitive noise, unpleasant associations) human activity being interrupted (e.g. sleep, communicating, reading, working, listening to radio/TV, recreation).
Compliance	The process of checking that source noise levels meet with the noise limits in a statutory context.
Cumulative noise level	The total level of noise from all sources.
Extraneous noise	Noise resulting from activities that are not typical to the area. Atypical activities may include construction, and traffic generated by holiday periods and by special events such as concerts or sporting events. Normal daily traffic is not considered to be extraneous.
Feasible and reasonable measures	Feasibility relates to engineering considerations and what is practical to build; reasonableness relates to the application of judgement in arriving at a decision, taking into account the following factors: Noise mitigation benefits (amount of noise reduction provided, number of people protected). Cost of mitigation (cost of mitigation versus benefit provided). Community views (aesthetic impacts and community wishes). Noise levels for affected land uses (existing and future levels, and changes in noise levels).
Impulsiveness	Impulsive noise is noise with a high peak of short duration or a sequence of these peaks. Impulsive noise is also considered annoying.

Low frequency	Noise containing major components in the low-frequency range (20 to 250 Hz) of the frequency spectrum.
Noise criteria	The general set of non-mandatory noise levels for protecting against intrusive noise (for example, background noise plus 5 dB) and loss of amenity (e.g. noise levels for various land use).
Noise level (goal)	A noise level that should be adopted for planning purposes as the highest acceptable noise level for the specific area, land use and time of day.
Noise limits	Enforceable noise levels that appear in conditions on consents and licences. The noise limits are based on achievable noise levels, which the proponent has predicted can be met during the environmental assessment. Exceedance of the noise limits can result in the requirement for either the development of noise management plans or legal action.
Performance-based goals	Goals specified in terms of the outcomes/performance to be achieved, but not in terms of the means of achieving them.
Rating Background Level (RBL)	The rating background level is the overall single figure background level representing each day, evening and night time period. The rating background level is the median value of the lowest 10 th percentile L _{A90} noise level measured over all day, evening and night time monitoring periods.
Receptor	The noise-sensitive land use at which noise from a development can be heard.
Sleep disturbance	Awakenings and disturbance of sleep stages.
Sound and decibels (dB)	Sound (or noise) is caused by minute changes in atmospheric pressure that are detected by the human ear. The ratio between the quietest noise audible and that which should cause permanent hearing damage is a million times the change in sound pressure. To simplify this range the sound pressures are logarithmically converted to decibels from a reference level of 2×10^{-5} Pa.

The picture below indicates typical noise levels from common noise sources.



dB is the abbreviation for decibel – a unit of sound measurement. It is equivalent to 10 times the logarithm (to base 10) of the ratio of a given sound pressure to a reference pressure.

Sound power Level (SWL)

The sound power level of a noise source is the sound energy emitted by the source. Notated as SWL, sound power levels are typically presented in $dB(A)$.

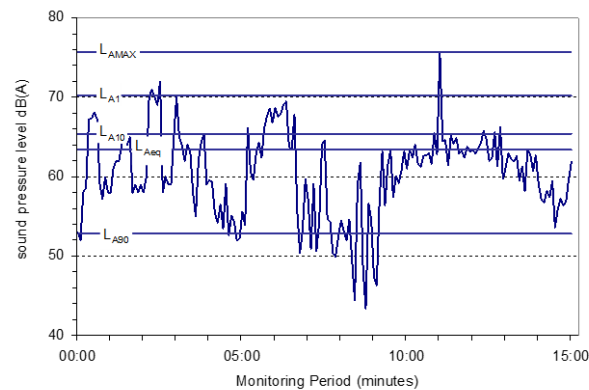
Sound Pressure Level (SPL)

The level of noise, usually expressed as SPL in $dB(A)$, as measured by a standard sound level meter with a pressure microphone. The sound pressure level in $dB(A)$ gives a close indication of the subjective loudness of the noise.

Statistic noise levels

Noise levels varying over time (e.g. community noise, traffic noise, construction noise) are described in terms of the statistical exceedance level.

A hypothetical example of A weighted noise levels over a 15 minute measurement period is indicated in the following figure:



Key descriptors:

L_{Amax} Maximum recorded noise level.

L_{A1} The noise level exceeded for 1% of the 15 minute interval.

L_{A10} Noise level present for 10% of the 15 minute interval. Commonly referred to the average maximum noise level.

L_{Aeq} Equivalent continuous (energy average) A-weighted sound pressure level. It is defined as the steady sound level that contains the same amount of acoustic energy as the corresponding time-varying sound.

L_{A90} Noise level exceeded for 90% of time (background level). The average minimum background sound level (in the absence of the source under consideration).

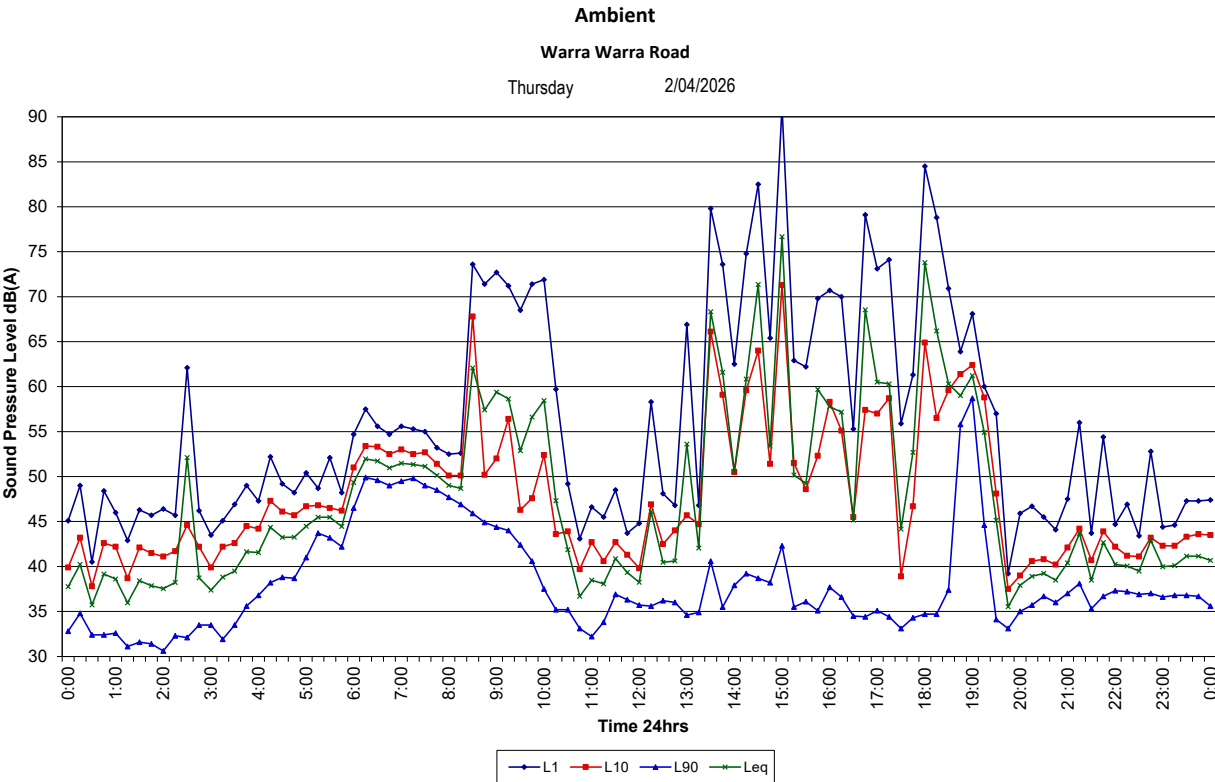
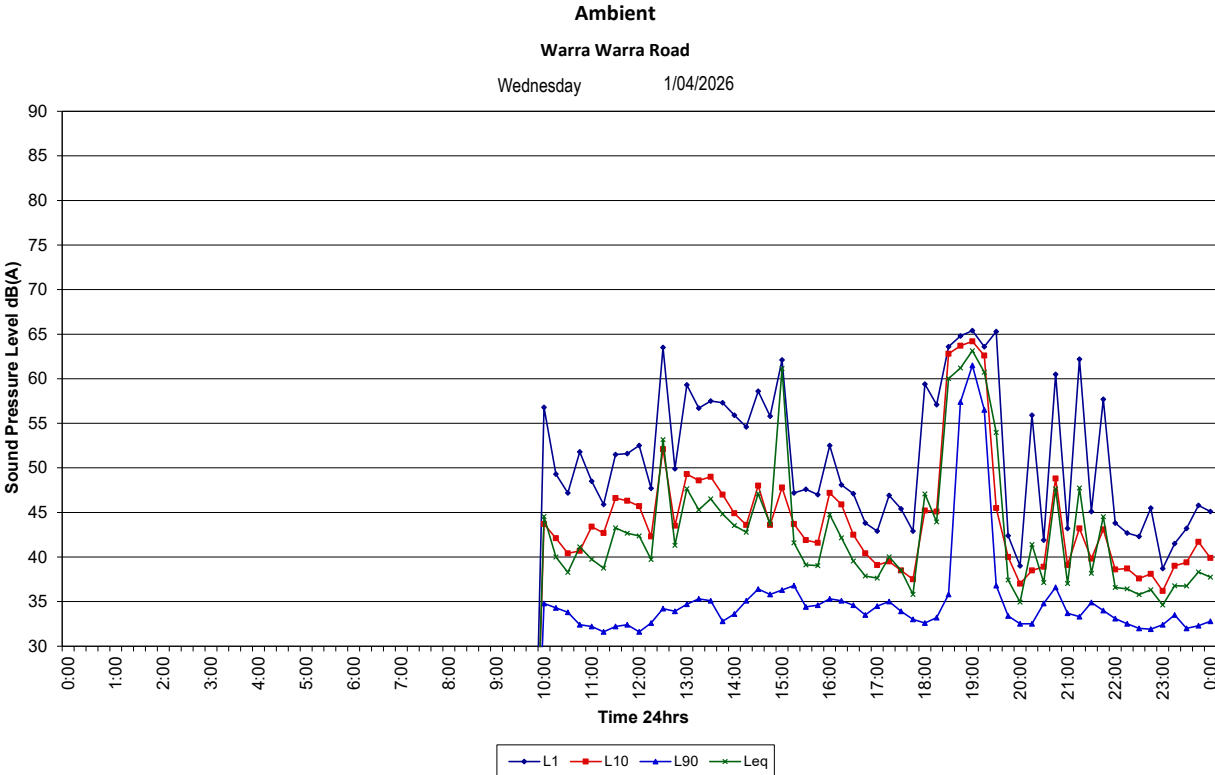
Threshold

The lowest sound pressure level that produces a detectable response (in an instrument/person).

Tonality

Tonal noise contains one or more prominent tones (and characterised by a distinct frequency components) and is considered more annoying. A 2 to 5 $dB(A)$ penalty is typically applied to noise sources with tonal characteristics

Appendix B – Logger Graphs

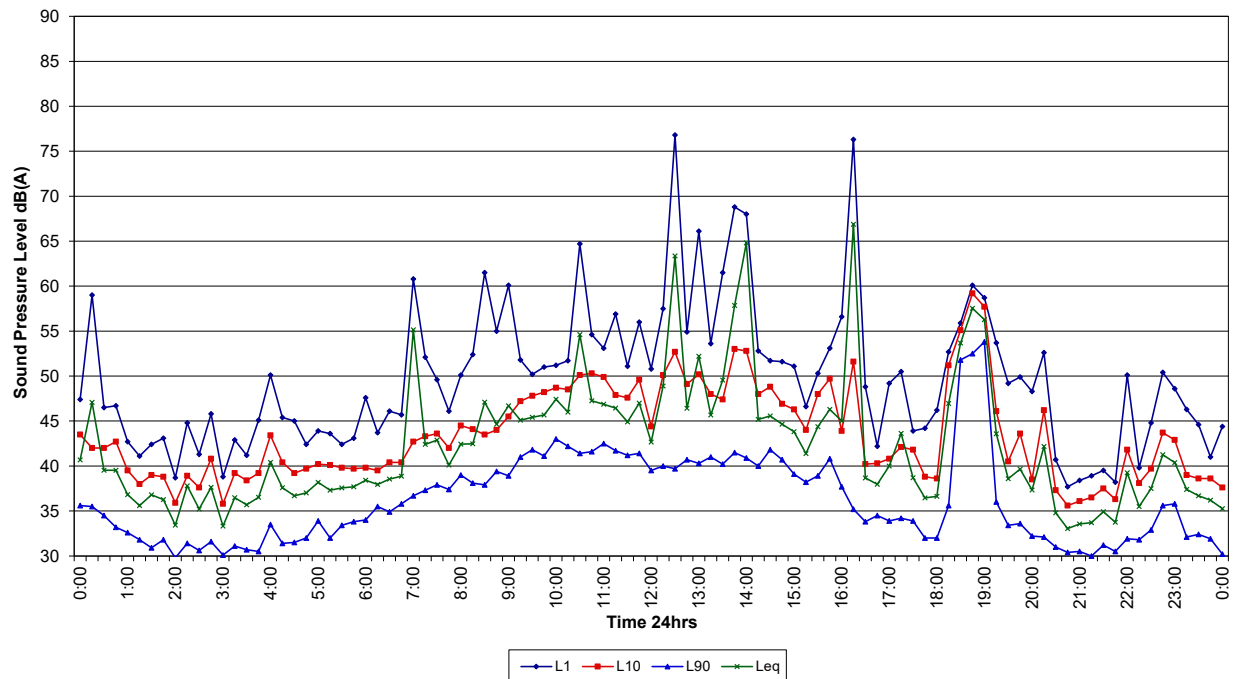


Ambient

Warra Warra Road

Friday

3/04/2026

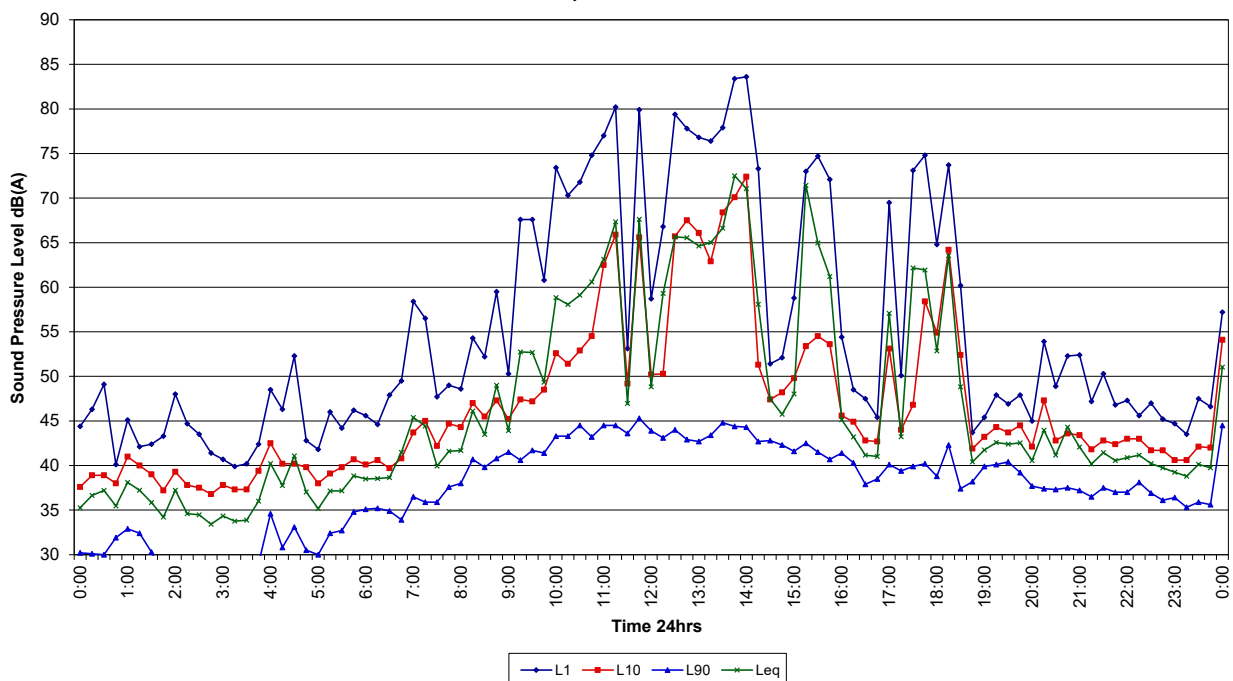


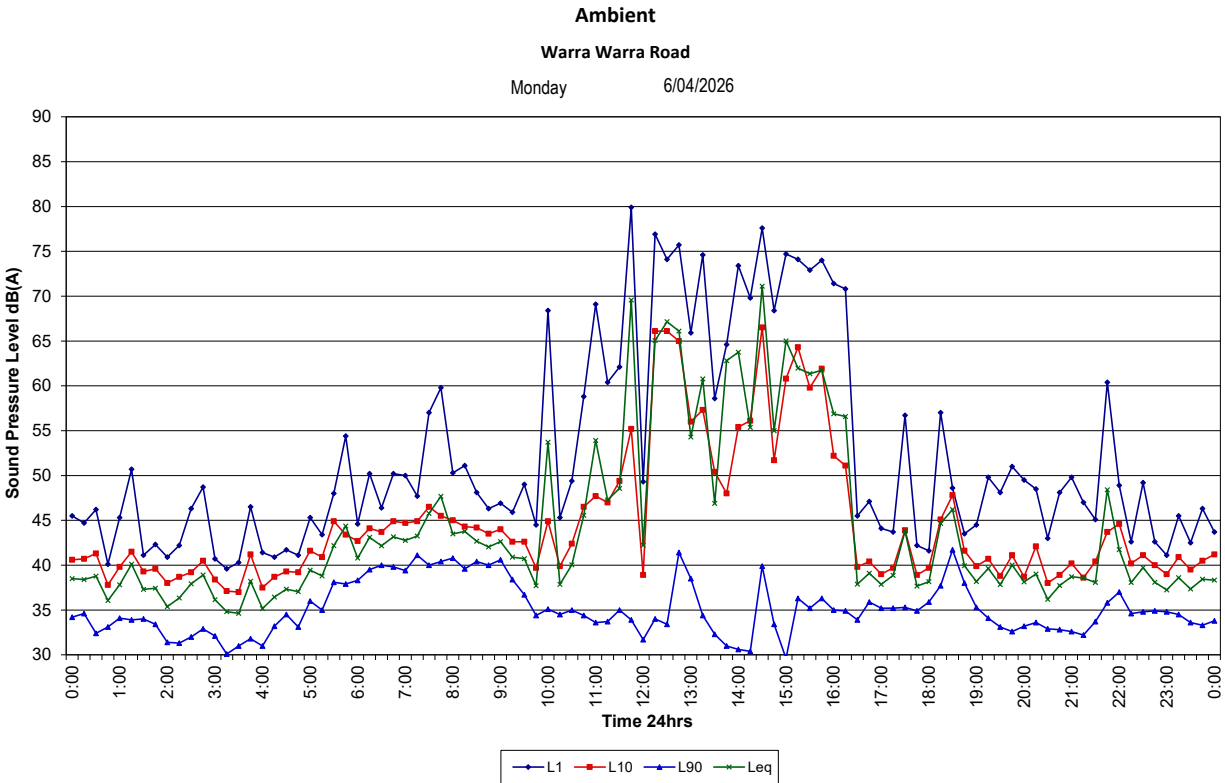
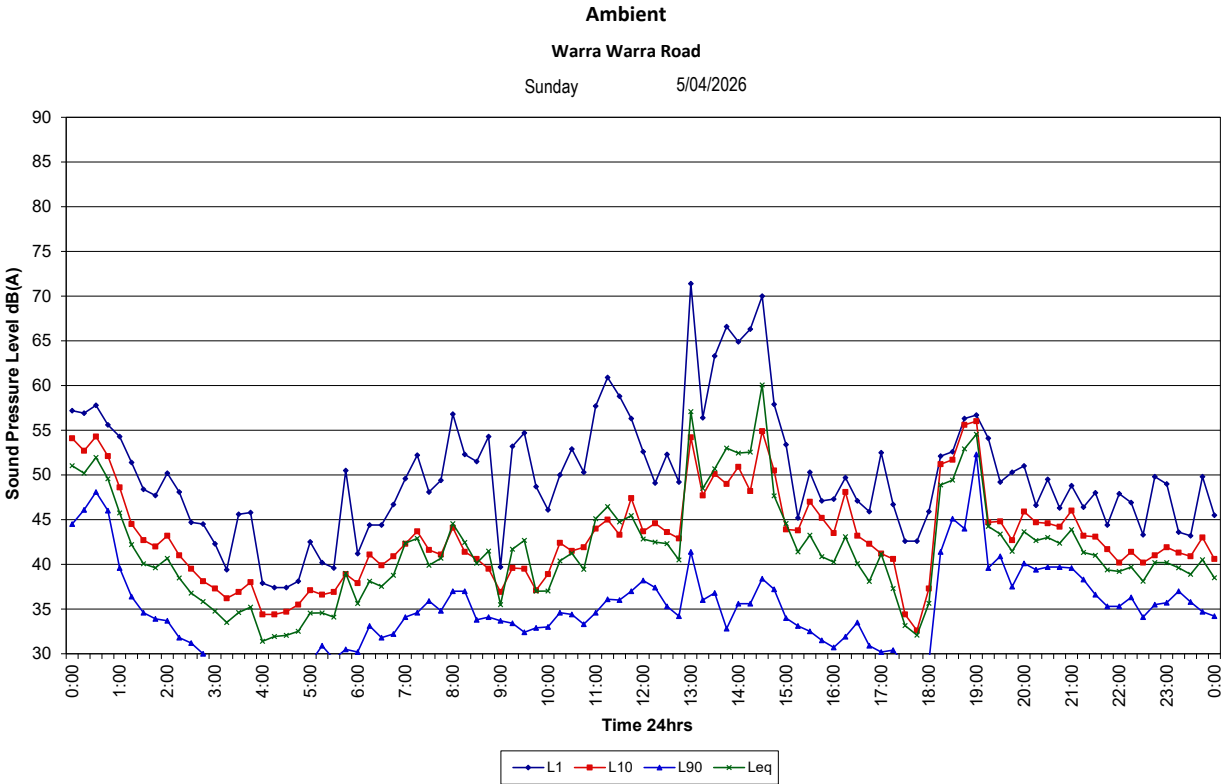
Ambient

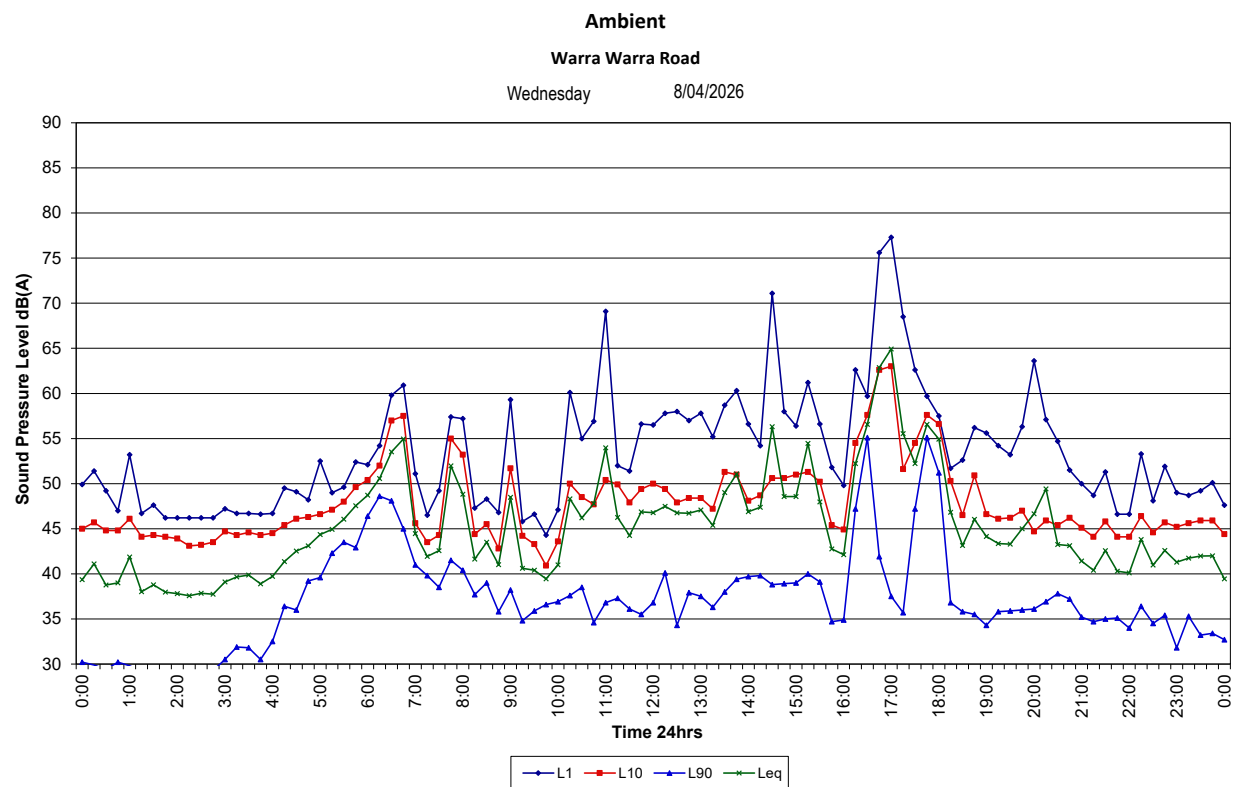
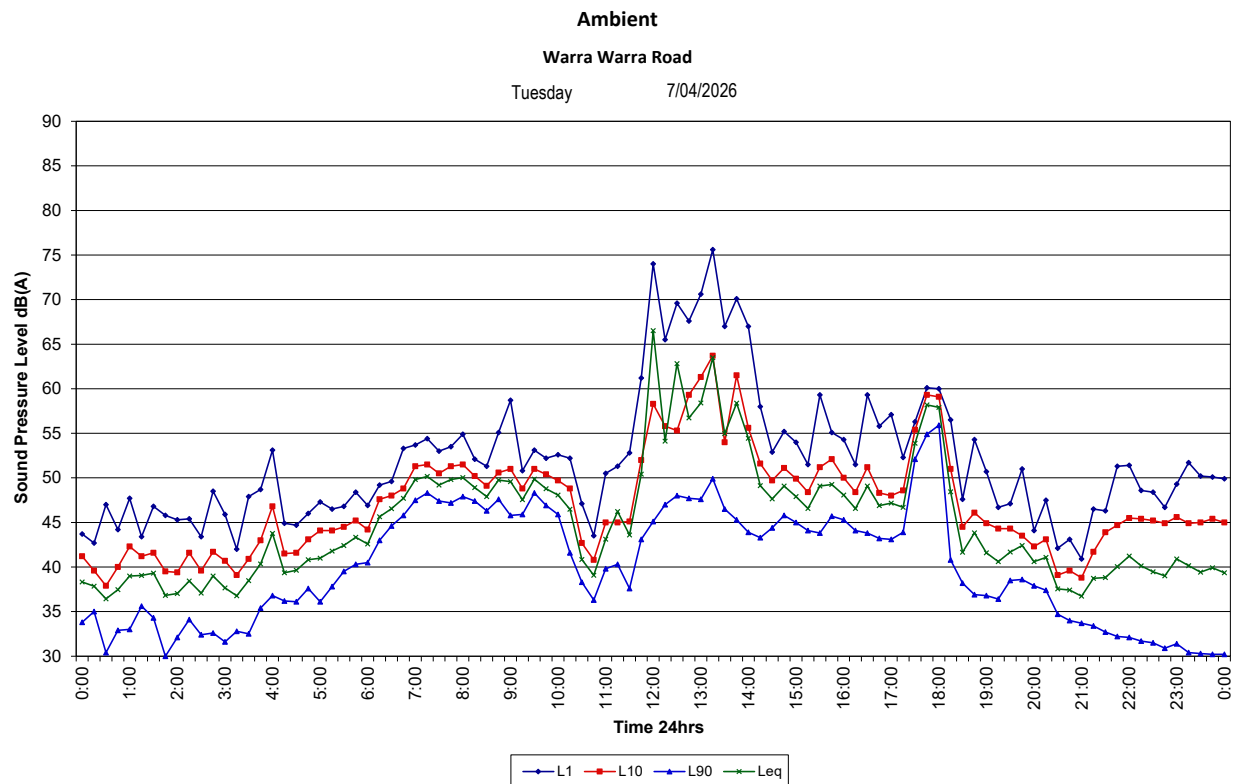
Warra Warra Road

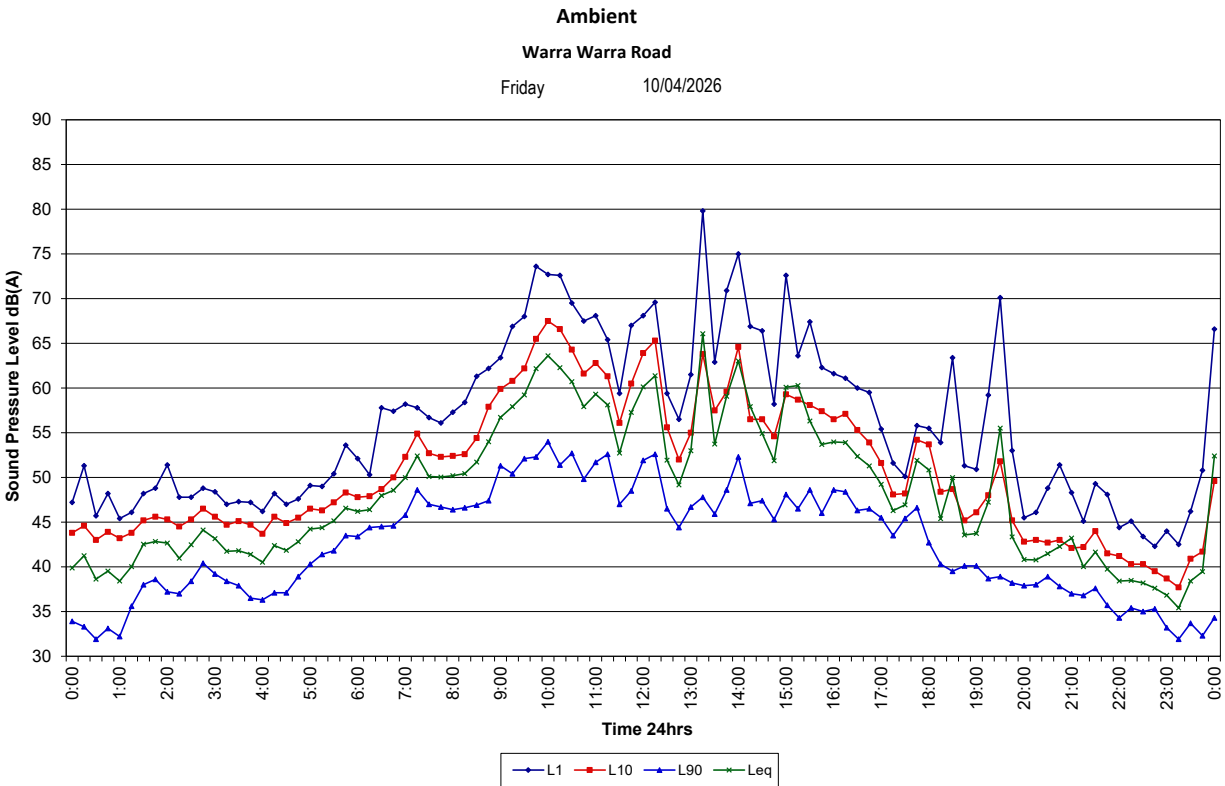
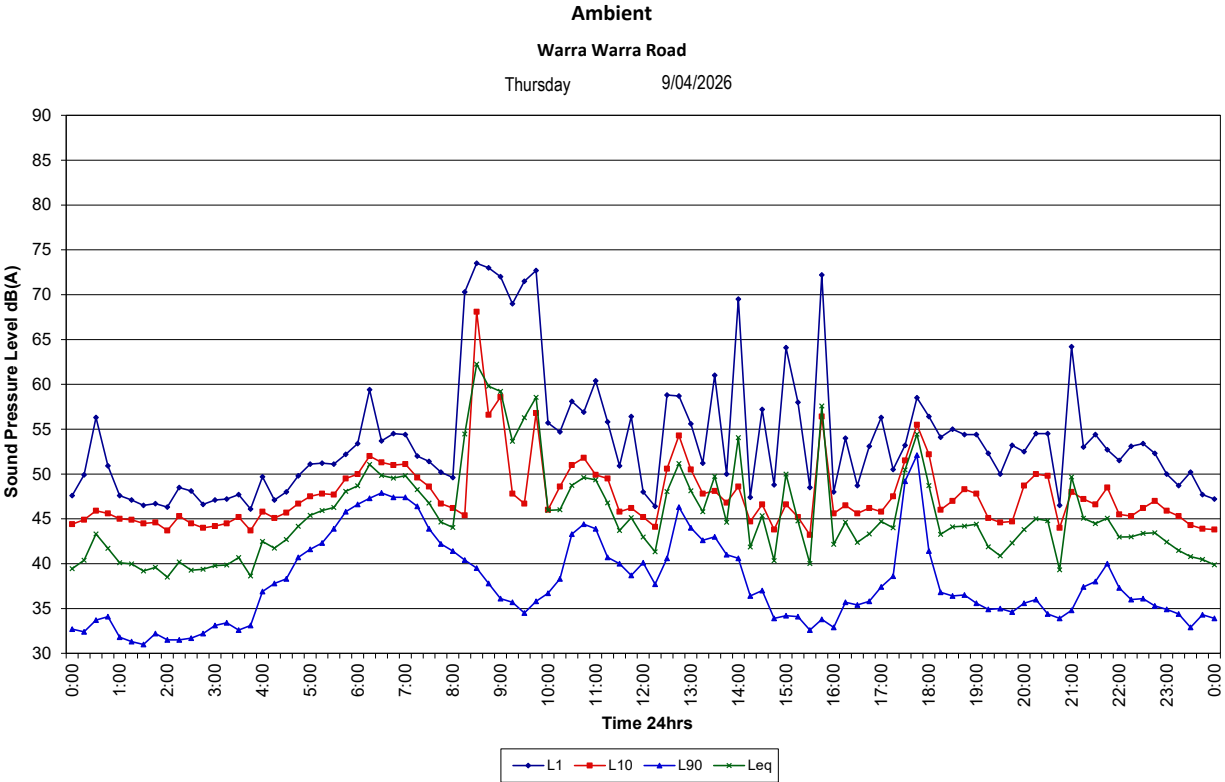
Saturday

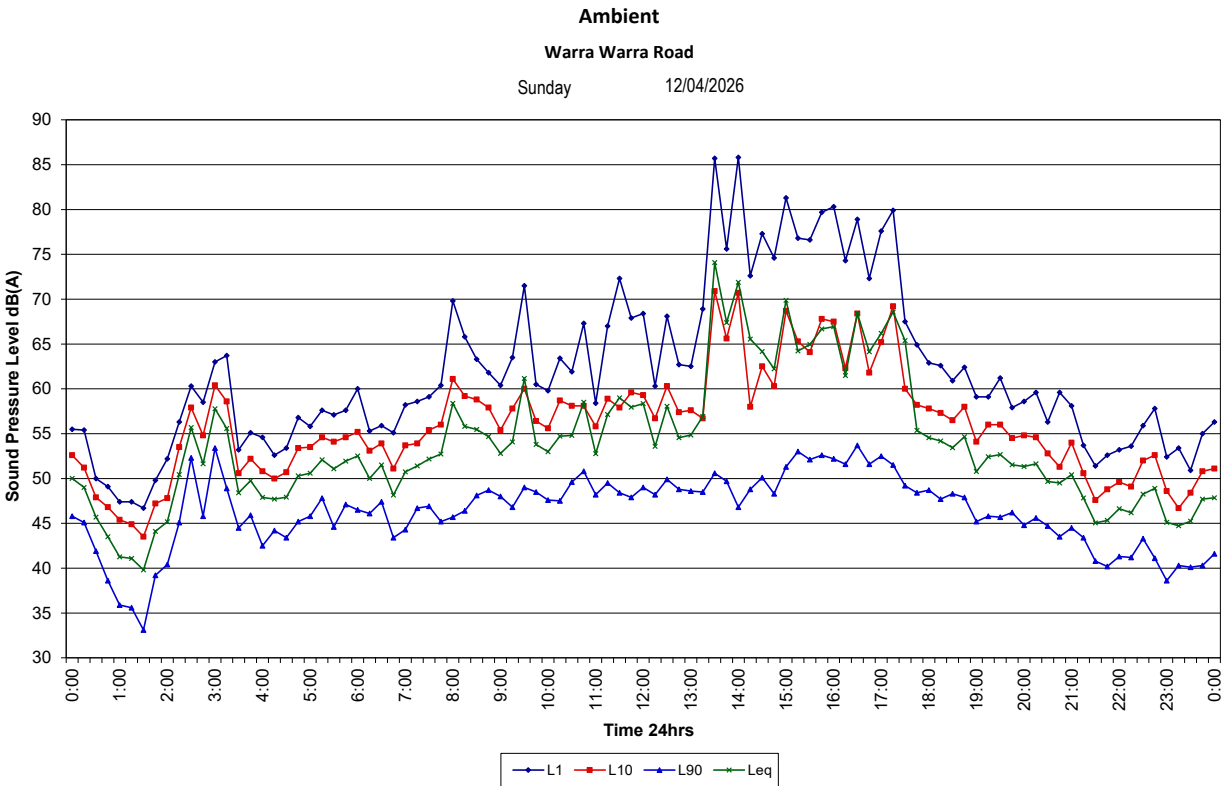
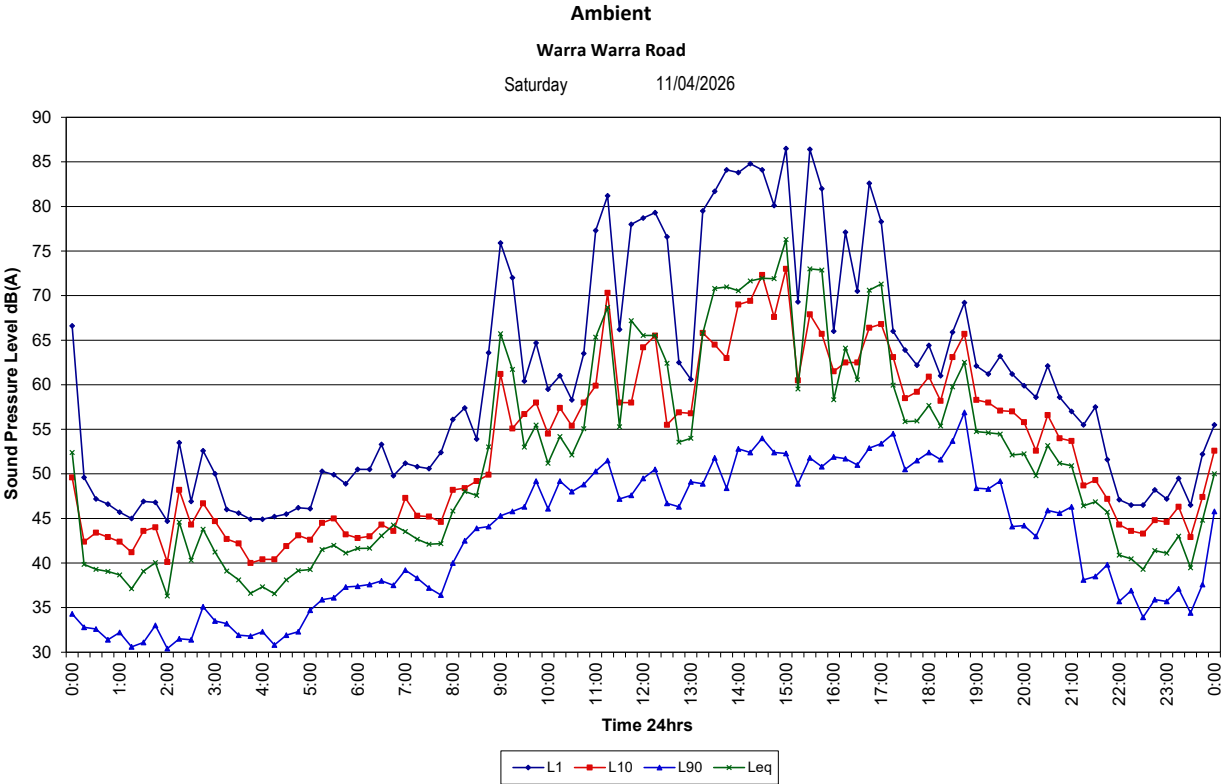
4/04/2026

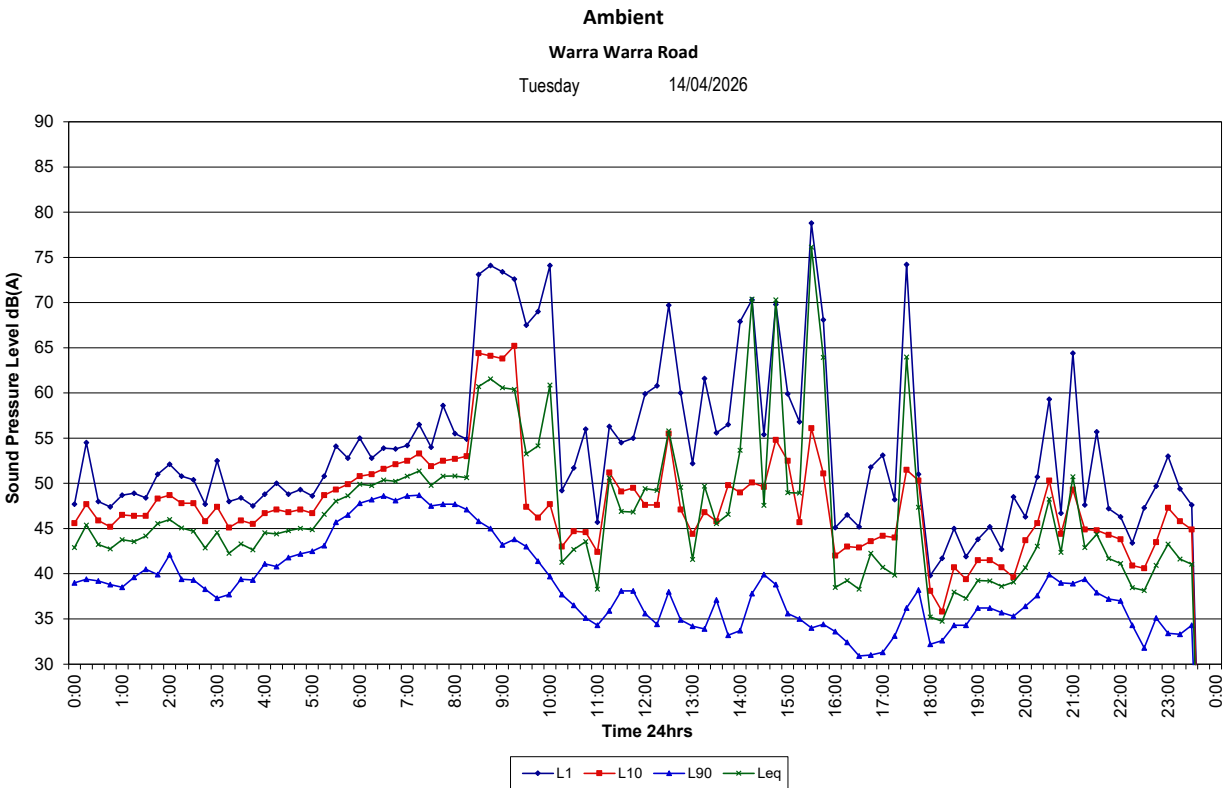
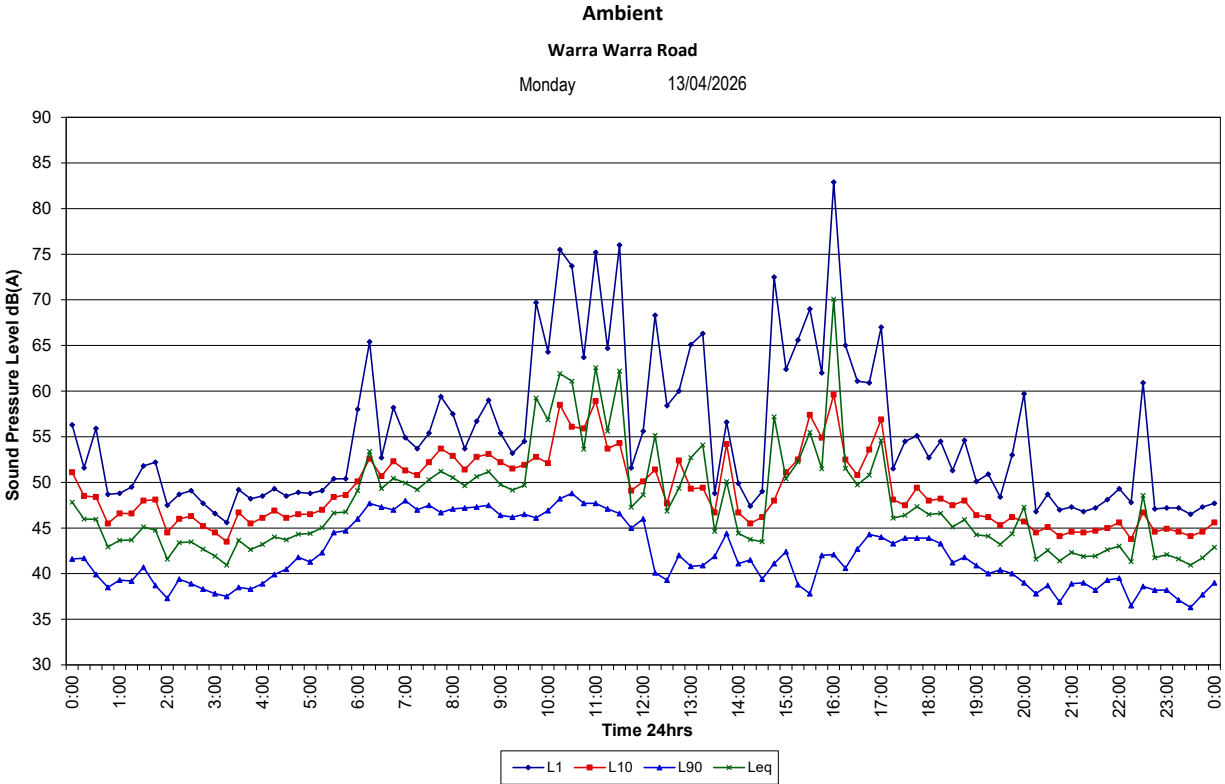




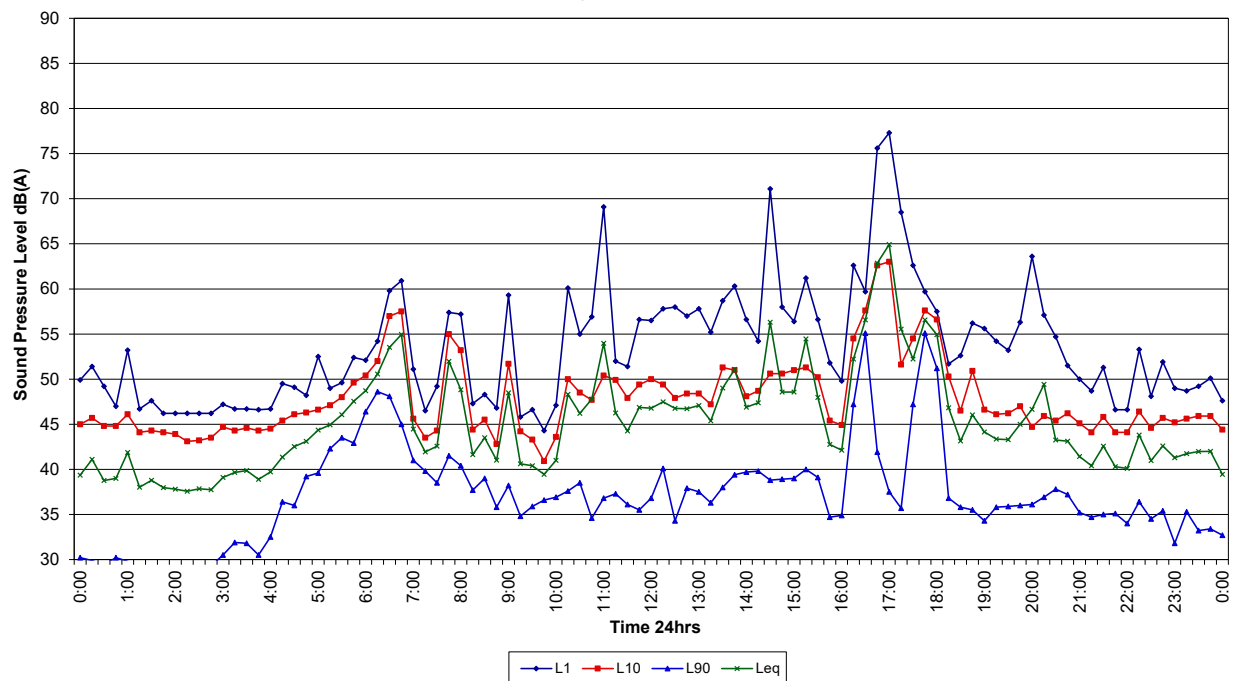






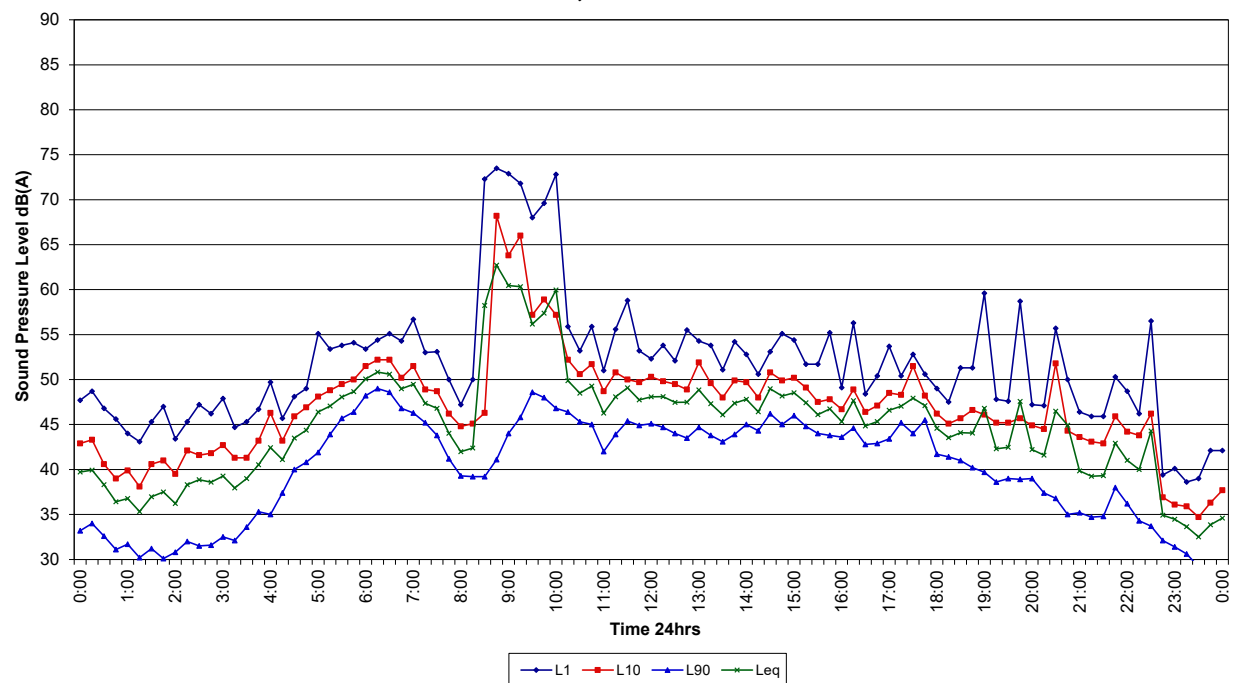


Ambient
Warra Warra Road
Wednesday 8/04/2026



Ambient Weeks 3 - 4

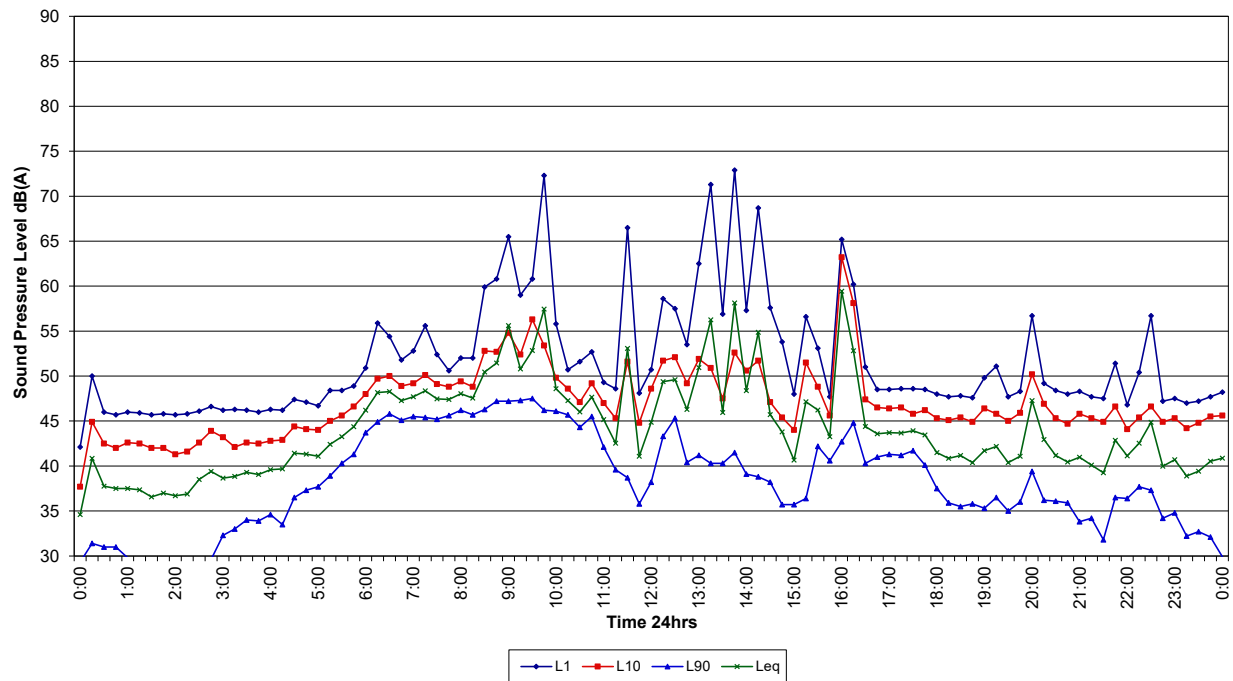
Warra Warra Road
Thursday 16/04/2026



Ambient Weeks 3 - 4

Warra Warra Road

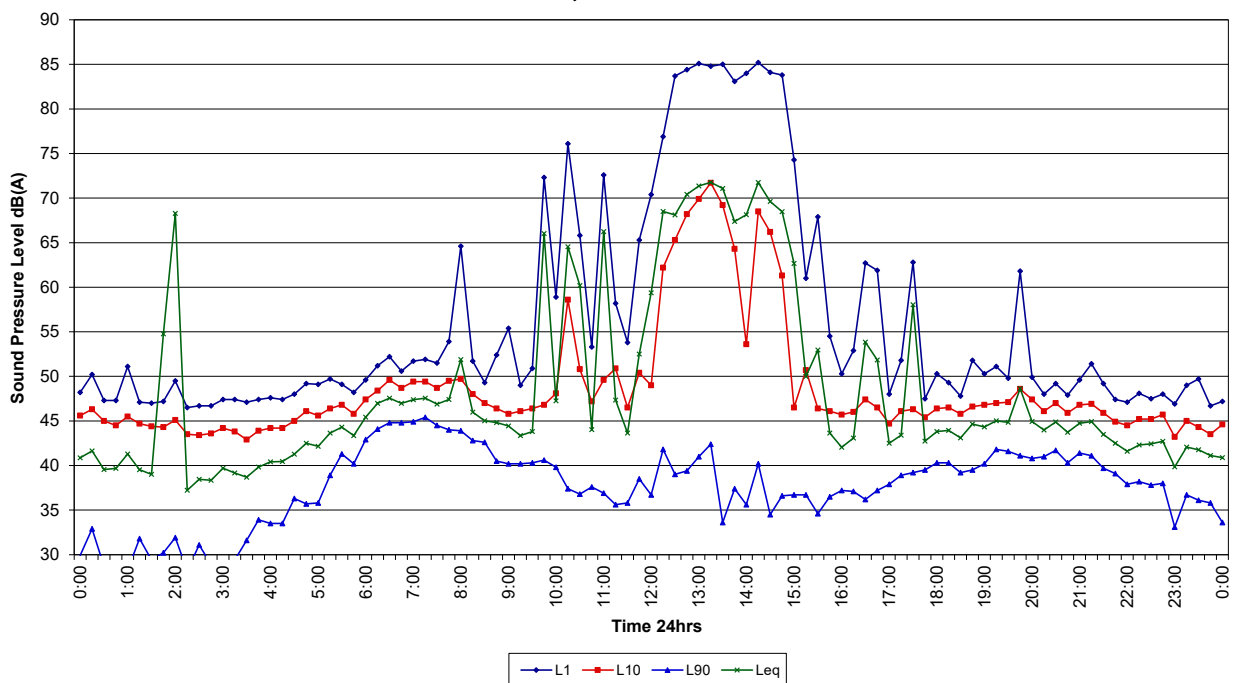
Friday 17/04/2026



Ambient Weeks 3 - 4

Warra Warra Road

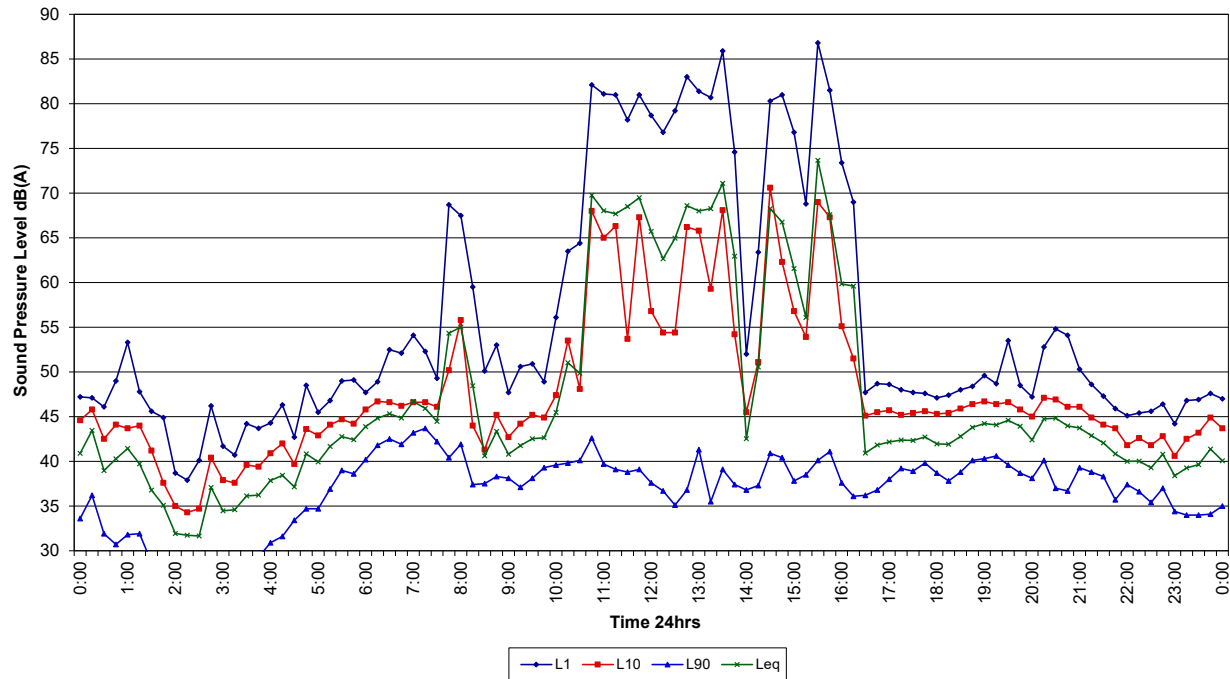
Saturday 18/04/2026



Ambient Weeks 3 - 4

Warra Warra Road

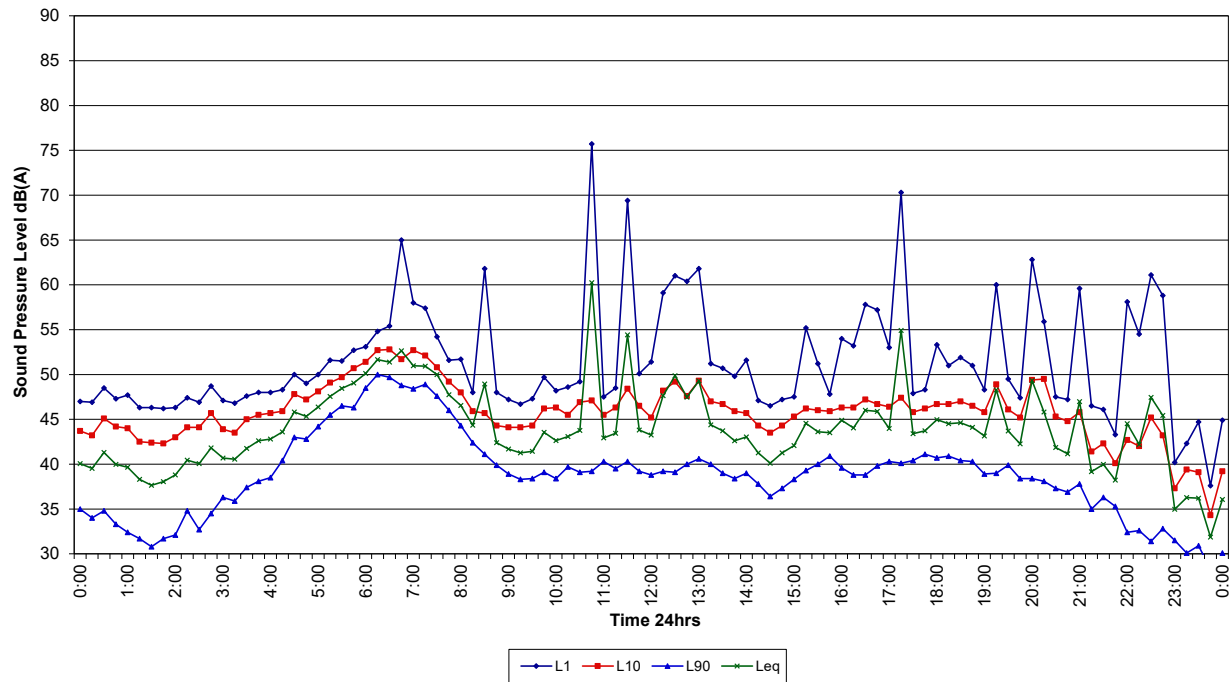
Sunday 19/04/2026



Ambient Weeks 3 - 4

Warra Warra Road

Monday 20/04/2026

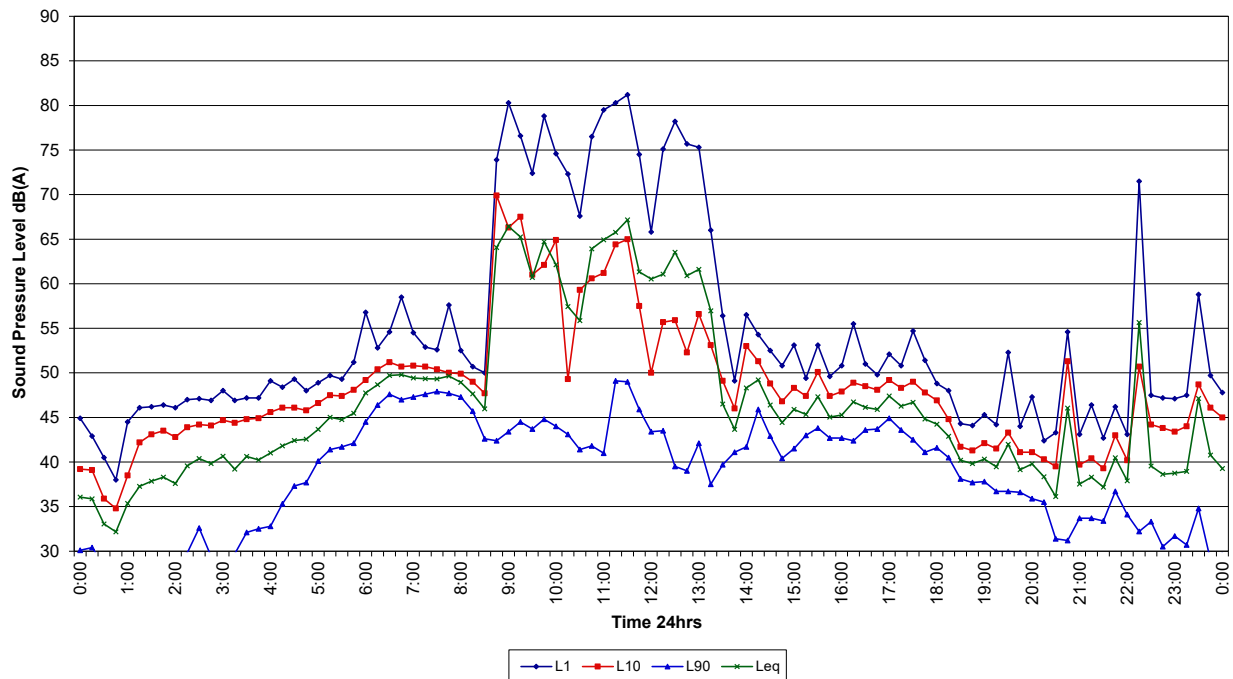


Ambient Weeks 3 - 4

Warra Warra Road

Tuesday

21/04/2026

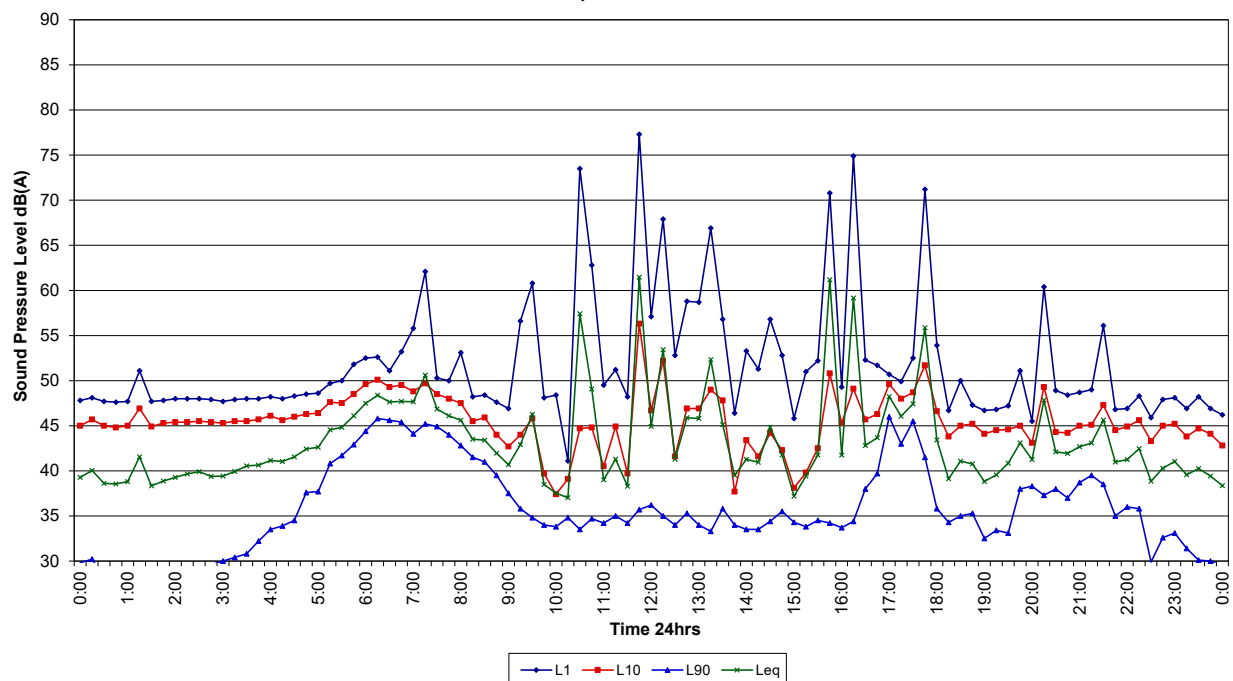


Ambient Weeks 3 - 4

Warra Warra Road

Wednesday

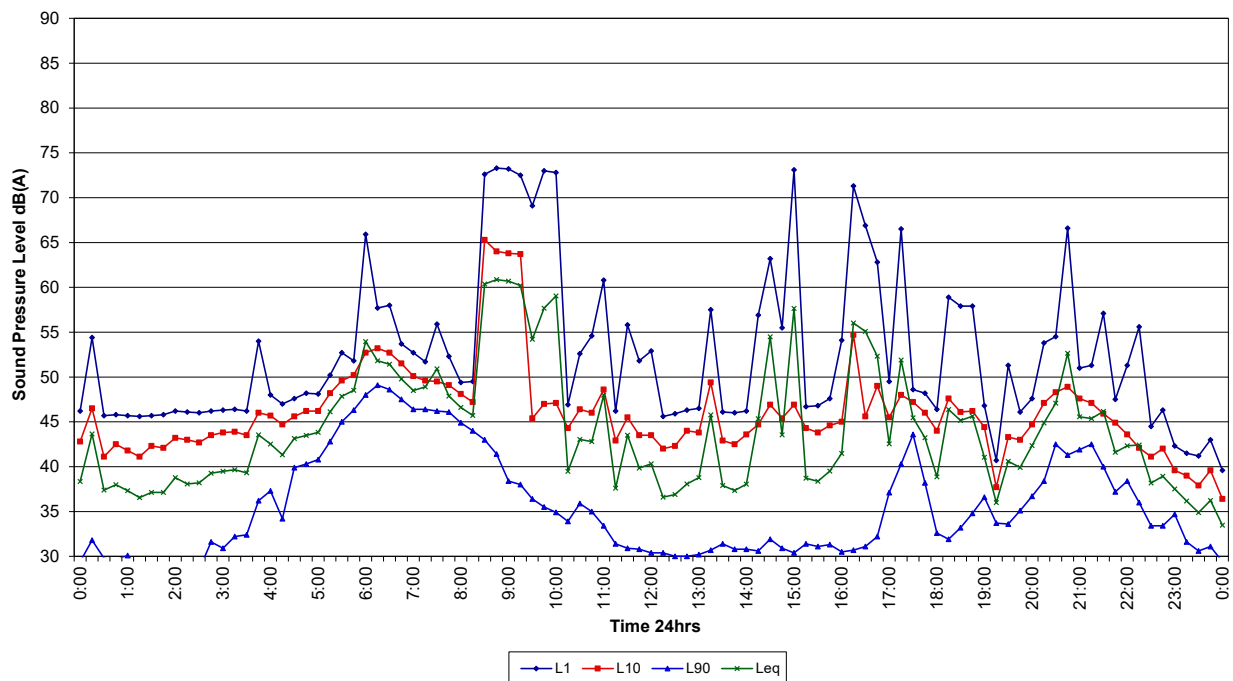
22/04/2026



Ambient Weeks 3 - 4

Warra Warra Road

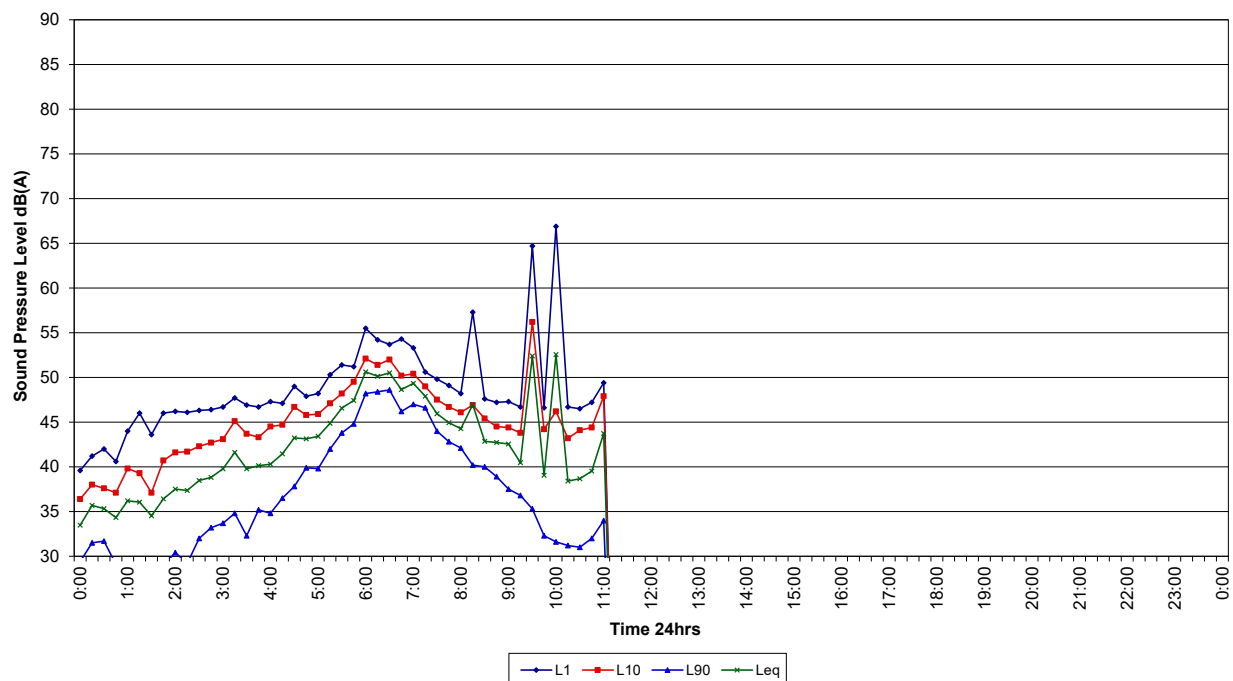
Thursday 23/04/2026



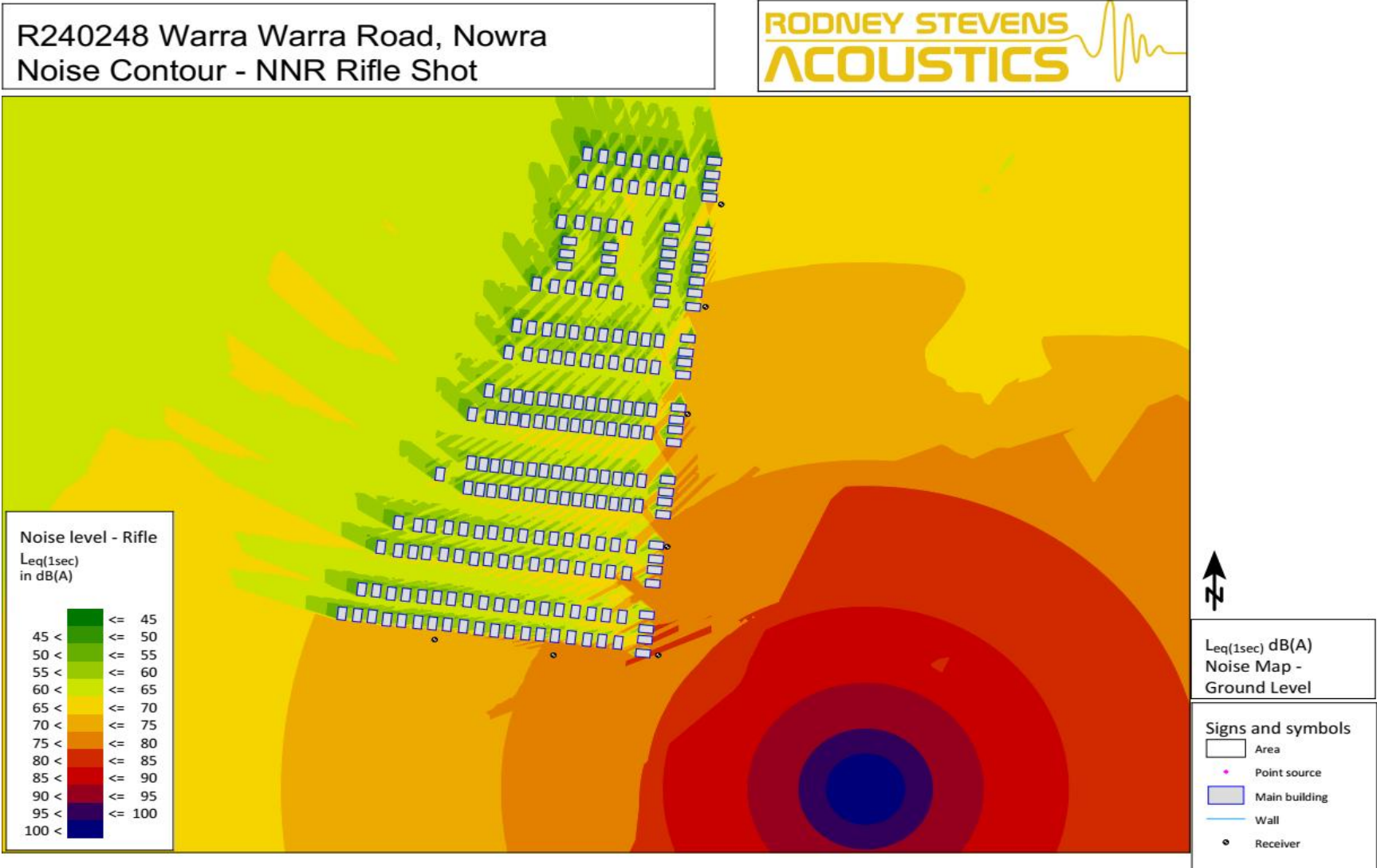
Ambient Weeks 3 - 4

Warra Warra Road

Friday 24/04/2026



Appendix C – Noise Maps



R240248 Warra Warra Road, Nowra
Noise Contour - NNR Rifle Shot

