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Noise Impact Assessment Mac's Milling Group (MMG)

614 Haynes Kite Millar Road, Cherry Creek

Mac's Milling Group (MMG)
C/- IMEMS Pty Ltd

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Executive Summary

ATP Consulting Engineers (ATP) was engaged to prepare an operational noise impact assessment in support of a Material Change of Use (MCU) development application and Environmental Authority (EA) application for Environmentally Relevant Activity (ERA) 47(a) for the existing sawmill and woodchipping facility located at 614 Haynes Kite Millar Road, Cherry Creek.

The subject site is operated by Mac's Milling Group (MMG), a small family-owned and operated sawmill. The facility has been operating at the site for an extended period cutting and storing softwood timber products for the construction industry.

The proposed development is seeking for approval to increase their production capacity of less than 5,000 tonnes per annum to a maximum of less than 10,000 tonnes per annum under ERA 47(a). The proposal introduces two additional multi-rip saws to the existing operational footprint, alongside incremental upgrades to individual processing components (e.g. log receipt, sawing, docking, woodchipping, and material handling) anticipated over time to facilitate the increased output. The increase in production capacity may also result in extended operating hours and associated site activities. Current standard operating hours are Monday to Thursday 7:00am to 3:30pm and Friday 7:00am to 1:00pm. The proposed operating hours are Monday to Friday 6:00am to 7:00pm, with the extended operating window intended to provide flexibility for occasional early or late truck arrivals and associated site operations.

The proposal is classified as an environmentally relevant activity under the Environmental Protection Regulation 2019 and requires assessment against the Environmental Protection Act 1994 and the Environmental Protection (Noise) Policy 2019 (EPP Noise), as well as consideration of the requirements of the Toowoomba Regional Council planning policy.

The purpose of this noise impact assessment is to assess the potential operational noise impacts associated with the increased production capacity on surrounding noise sensitive receptors.

Detailed noise propagation modelling was carried out considering all potential noise emissions from the operation of the proposed timber milling and woodchipping facility at 614 Haynes Kite Millar Road in Cherry Creek to determine the potential noise impact on the nearest noise sensitive places.

The assessment has been carried out against the relevant provisions of PO8 of the Environmental Standards Code and the Environmental Protection (Noise) Policy 2019 (EPP Noise).

The results of the noise modelling demonstrate that predicted operational noise levels at all assessed sensitive receptors:

- Comply with the EPP Noise acoustic quality objectives for the relevant assessment periods;
- Comply with the adopted background creep criteria, with no material increase to the existing acoustic environment;
- Comply with the adopted Toowoomba Environmental Standards Code criteria, with no material increase to the existing acoustic environment; and

- All predicted noise levels include applicable adjustments for tonality and operational characteristics in accordance with the DES Noise Measurement Manual.

Predicted noise levels are below the relevant criteria, with the highest levels occurring at the closest receivers such as the dwelling at No. 542 Haynes Kite Miller Road. Notwithstanding this, the predicted noise levels are well within the acceptable noise limits for continuous and variable noise.

The modelling confirms that the primary factor contributing to the low noise impact at surrounding receivers is mainly due to the separation distance from the major plant and noise sources at the sawmill facility. The primary noise-generating activities are located approximately 350 m from the nearest noise sensitive receptors, resulting in significant distance attenuation.

Based on the modelling results, no adverse noise impacts are predicted at surrounding sensitive receptors under the proposed operational scenario. Accordingly, the proposed increase in production capacity and expansion of the site can be accommodated while achieving compliance with the noise criteria.

To ensure ongoing compliance with the noise criteria the following general noise control measures are recommended:

- Maintain effective enclosure of major plant within the saw shelters;
- Maintenance of the blades of the circular saws should be done regularly to maintain good cutting conditions and reduce noise generated by damaged equipment.
- Where reasonable and practical, mobile plant to be fitted with broadband reversing beepers.
- Use mufflers and engine covers/screens where appropriate for generators and mobile plant.
- Care should be taken to reduce noise when loading or unloading vehicles or moving materials. Minimise drop height of materials when transferring (e.g loading and unloading vehicles and storage areas).

These measures are consistent with standard industry practice and provide an additional level of control, particularly for tonal and intermittent noise sources.

Provided the recommendations of this report are fully implemented, there are no further acoustic constraints to the proposed increase in production capacity and expansion of the facility at 614 Haynes Kite Millar Road in Cherry Creek.

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Acoustics Glossary

A-weighting	Correction to sound levels to mimic the response of the human ear at low sound frequencies. A-weighting filter covers the full audio range - 20 Hz to 20 kHz and the shape mimics the response of the human ear at the lower frequency levels.
Decibel (dB)	(1) Degree of loudness (2) A unit for expressing the relative intensity of sounds on a scale from zero for the average least perceptible sound to about 130 for the average pain level. A unit used to express relative difference in power or intensity, between two acoustic signals, equal to ten times the common logarithm of the ratio of the two levels, one of which is a standard reference value.
dB(A)	The A-weighted sound pressure level in dB.
Façade adjusted	The noise level at 1m from a building façade is calculated by adding 2.5dB to the free-field noise level to account for sound reflected from the building façade. The external noise levels at the buildings facades are “façade-adjusted”.
Free-field	Noise level without any reflected sound from buildings or other hard, reflective surfaces (except for the ground plane).
Hz (Hertz)	Hertz is the standard measure of the frequency of oscillations in a wave motion. The frequency is most often measured in cycles per second (cps) or Hertz (Hz). Frequency of 1 Hz is one cycle per second.
Impulsive noise and impulsiveness adjustment	Noise having a high peak of short duration or a sequence of such peaks. Impulsive noise is present if the difference in A-weighted maximum noise levels between fast response and impulse response is greater than 2dB. Impulsiveness adjustment (penalty) of up to 5dB should be applied to the component noise level.
$L_{Amax,T}$	The maximum A-weighted sound pressure level occurring in a specified time period T in seconds.
$L_{Aeq,T}$	“Average-energy” sound level used in situations where sound varies over time. $L_{Aeq,T}$ is the A-weighted sound pressure level that has the same energy as the fluctuating sound over the time period T in seconds.
$L_{A1,T}$	Measure of the maximum sound level. $L_{A01,T}$ is a statistical parameter that is the A-weighted sound pressure level that is exceeded for 1% of the measurement time T.
$L_{A10,T}$	$L_{A10,T}$ is a statistical parameter that is the A-weighted sound pressure level that is exceeded for 10% of the measurement time T. Used as a traffic noise descriptor in Queensland.
$L_{A90,T}$	Background sound level. $L_{A90,T}$ is a statistical parameter that is the A-weighted sound pressure level that is exceeded for 90% of the measurement time T.
Noise	Unwanted sound.
Octave bands and 1/3 octave bands	A range of frequencies whose upper frequency limit is twice that of its lower frequency limit. In acoustics, the audible spectrum (20Hz to 20kHz) is divided into 10 parts (octaves) with centre frequencies of 31.5Hz, 63Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz and 16kHz.

For more detailed frequency analysis, octave bands are further divided into more discrete bands. For examples, 1/3 octaves bands are where each octave band is divided into three parts.

IEC 61260:1995, *Electroacoustics — Octave-band and fractional-octave band filters*

Sound power	The sound energy radiated per unit time by a sound source, measured in Watts (W).
Sound Power Level, L_w (SWL)	Logarithmic measure of sound power on a decibel scale, referenced to the human hearing threshold of 1×10^{-12} W.
Sound pressure	The fluctuations in air, measured in Pascals (Pa).
Sound Pressure Level, L_p (SPL)	Logarithmic measure of sound pressure on a decibel scale, referenced to the human hearing threshold of 2×10^{-5} Pa.
Tonal noise, tonality, and tonality adjustment	Tonal noise is characterised by one or more distinct frequency components (“tones”) that emerge audibly from the total sound. For example, distinct tones may be emitted by fans, saws, grinders, and other equipment. Tonal noise is generally far more annoying than non-tonal noise. Presence of tonal sound (“tonality”) can be identified by analysing the sound levels in adjacent 1/3 octave bands. AS1055.1-1997 and the DEHP Noise Measurement Manual 2013 provides guidance on how tonality should be assessed. If tonal components are clearly audible and they can be detected by 1/3 octave analysis (1/3 octave band exceeds neighbouring bands by at least 5dB), tonality adjustment (penalty) of up to 5dB should be applied to the component noise level.
Weighted Sound Reduction Index (R_w)	A single-number quantity which characterises the airborne sound insulation of a material or building element over a range of frequencies.

1. Introduction

1.1 Project Background

ATP Consulting Engineers (ATP) was engaged to prepare an operational noise impact assessment in support of a Material Change of Use (MCU) development application and Environmental Authority (EA) application for Environmentally Relevant Activity (ERA) 47(a) for the existing sawmill and woodchipping facility located at 614 Haynes Kite Millar Road, Cherry Creek.

The subject site is operated by Mac's Milling Group (MMG), a small family-owned and operated sawmill. The facility has been operating at the site for an extended period cutting and storing softwood timber products for the construction industry.

The proposed development is seeking for approval to increase their production capacity of less than 5,000 tonnes per annum to a maximum of less than 10,000 tonnes per annum under ERA 47(a). The proposal introduces two additional multi-rip saws to the existing operational footprint, alongside incremental upgrades to individual processing components (e.g. log receipt, sawing, docking, woodchipping, and material handling) anticipated over time to facilitate the increased output. The increase in production capacity may also result in extended operating hours and associated site activities. Current standard operating hours are Monday to Thursday 7:00am to 3:30pm and Friday 7:00am to 1:00pm. The proposed operating hours are Monday to Friday 6:00am to 7:00pm, with the extended operating window intended to provide flexibility for occasional early or late truck arrivals and associated site operations.

The proposal is classified as an environmentally relevant activity under the Environmental Protection Regulation 2019 and requires assessment against the Environmental Protection Act 1994 and the Environmental Protection (Noise) Policy 2019 (EPP Noise), as well as consideration of the requirements of the Toowoomba Regional Council planning framework.

The purpose of this noise impact assessment is to evaluate the potential operational noise impacts associated with the increased production capacity on surrounding noise sensitive receptors. The assessment includes background noise monitoring and predictive noise modelling to determine compliance with applicable noise criteria.

1.2 Study Objectives

Study objectives are as follows:

- Noise measurements using an automated noise logger to obtain data on the existing background noise levels.
- Noise propagation modelling, considering typical noise emissions associated with the use of the existing facility as well as the proposed increase in operation capacity to calculate the noise levels at the nearest noise sensitive places.
- Assessment of the noise levels against the relevant noise criteria from the *Environmental Protection (Noise) Policy 2019* and TRC PO8 of the Environmental Standards Code.

- Recommendation of noise mitigation measures to prevent noise impacts on the nearest noise sensitive places (if required).

1.3 Subject Site

The subject site comprises an existing timber milling and wood chipping facility located at 614 Haynes Kite Millar Road in Cherry Creek. The site is situated on land described as Lot 3 SP121826.

The site is located within the Toowoomba Regional Council (TRC) local government area and is illustrated in Figure 1.1.

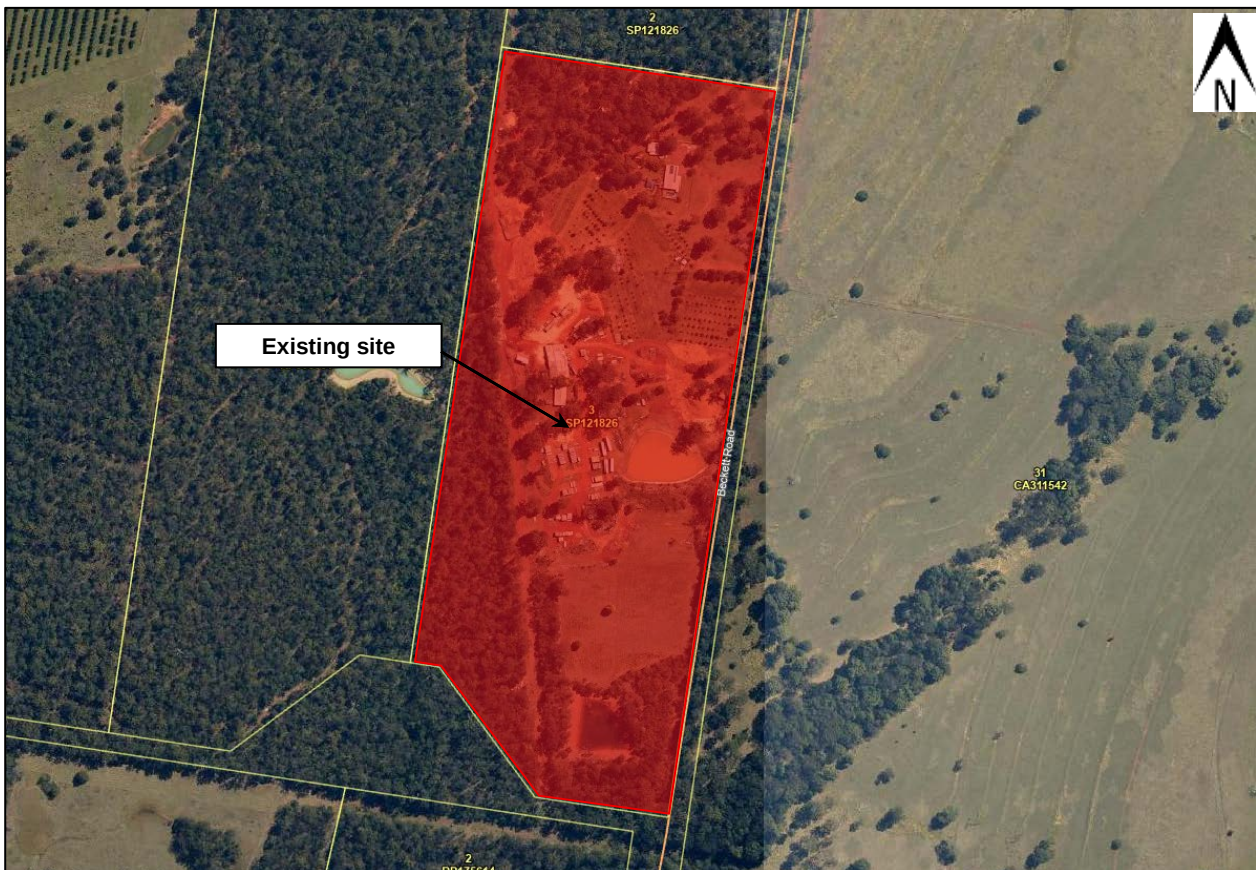


Figure 1.1 Site location

The operations at the site comprise timber milling and associated activities typical of a sawmill and woodchipping facility. Based on the information provided, these activities include:

- Delivery, receipt and storage of softwood logs;
- Timber processing, including sawing, docking, edging and woodchipping;
- Storage of processed timber and by-products; and
- Dispatch and ancillary activities, including use of mobile plant (e.g. loaders), workshop, maintenance and administrative functions.

The sawmill has operated at the site for an extended period cutting and storing softwood timber products for the construction industry, with logs processed through milling, handling and dispatch stages.

The assessment has considered the proposed operating hours of Monday to Friday 6:00am to 7:00pm. The current standard operating hours are Monday to Thursday 7:00am to 3:30pm and Friday 7:00am to 1:00pm, during which the key equipment is operated, including the mills, generator, loaders and forklifts.

Weekend and public holiday operations are not typically undertaken, with any out-of-hours activities (e.g. maintenance or occasional deliveries) occurring on an infrequent basis.

As part of the proposed EA application, the scale of operations at the site is expected to increase from the current production level of less than 5,000 tonnes per annum to up to 10,000 tonnes per annum under ERA 47(a). The increase in throughput is anticipated to be facilitated through incremental upgrades to existing processing components and improved operational efficiency, rather than expansion of the site footprint or introduction of fundamentally new activities.

The layout of the subject site is provided in Appendix A.

1.4 Nearest Noise Sensitive Places

The definition of “noise sensitive place” considered by DES includes a sensitive receptor for the purposes of the *EPNP 2019*. The definition of “sensitive receptor” stated in the *EPNP 2019* is: “sensitive receptor means an area or place where noise is measured”. The types of sensitive receptors are listed in Schedule 1 of *EPNP 2019* and include residences, libraries and educational institutions, childcare centres, hospitals, and other medical institutions and commercial or retail activities.

The nearest noise sensitive residential receptors to the site are the residential dwellings located around the site. The nearest noise sensitive places to the site at 614 Haynes Kite Millar Road are listed in Table 1.1.

Table 1.1 Nearest noise sensitive places

Street address	Type	Zoning
No. 1 Astill Road	Residential dwelling	Rural
No. 542 Haynes Kite Millar Road	Residential dwelling	Rural
No. 586 Haynes Kite Millar Road	Residential dwelling	Rural
No. 557 Cherry Creek Road	Residential dwelling	Rural
No. 97 Astill Road	Residential dwelling	Rural

As per the Toowoomba Regional Planning Scheme V28 2022, the site and surroundings are zoned Rural.

The nearest noise sensitive places are identified in Figure 1.2, overlaid over the zoning map from the Toowoomba Regional Planning Scheme 2022.

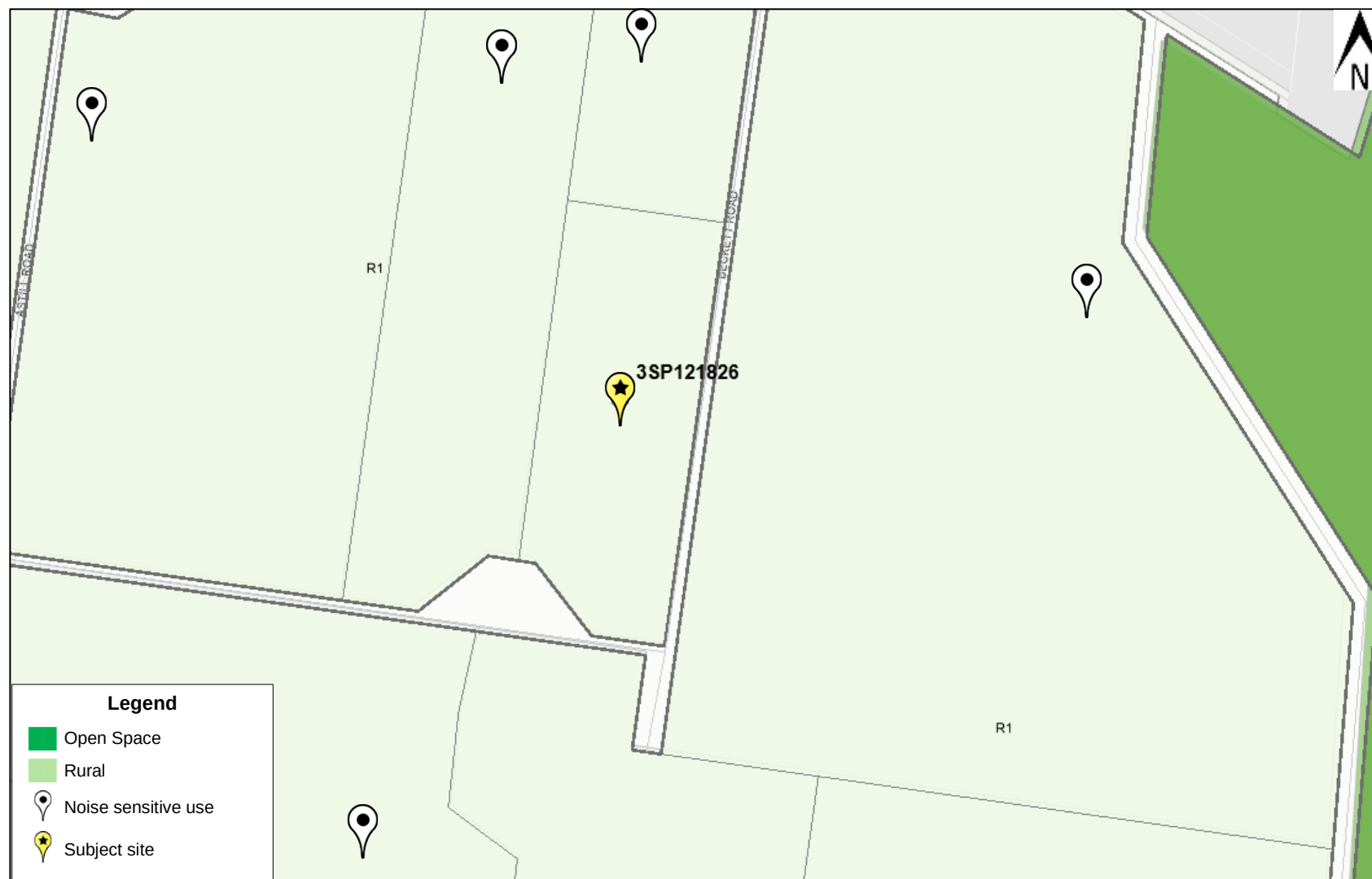


Figure 1.2 Nearest noise sensitive places

2. Existing Noise Amenity

2.1 Site-Specific Noise Measurements

Background noise monitoring was carried out in the period from 24 March to 4 April 2026 using an automated noise logger deployed along the northern boundary of Lot 3 on SP121826, to record the background noise levels representative of the noise amenity at the nearest noise sensitive places.

The noise measurement methodology is summarised in Table 2.1.

Table 2.1 Noise measurements

Relevant legislation, standards, and guidelines	The noise measurements were carried out in accordance with: - Australian Standard AS 1055:2018 (<i>Acoustics – Description and measurement of environmental noise</i>). - DES <i>Noise Measurement Manual v. 4.1</i>, 10 March 2020
Measurement location	The background noise measurements were carried out along the northern boundary of Lot 3 on SP121826, No. 614 Haynes Kite Millar Road, as presented in Figure 2.1. Photos showing the noise measurement locations are presented in Appendix B.
Measurement period	Continuous background noise monitoring was carried out from 24 March to 4 April 2026. Measurements obtained between 10:00 am and 3:00 pm on 25 and 26 March 2026 were excluded from the assessment due to extraneous construction noise in the vicinity of the monitoring location.
Measurement equipment	The following sound measurement equipment was used: - Environmental noise logger – ARL EL (Serial No. 15-203-537); and - Calibration – RION NC-75 Sound Level Calibrator (serial no. 34413140). The noise measurement instruments conform to Australian Standard AS/NZS IEC61672.1-2019. Calibration was performed during set up and download of the data from the noise logger. The calibration drift was <0.1 dB(A).
Meteorological conditions	The weather conditions during the monitoring period from 24 March to 4 April 2026 were mostly fine. Full meteorological data for the noise monitoring period is presented in Appendix C.
Analysis of data	The background noise data was analysed to determine the following noise descriptor: L_{A90,T}: Background noise level during daytime (7am to 6pm), evening (6pm to 10pm) and night-time (10pm to 7am).

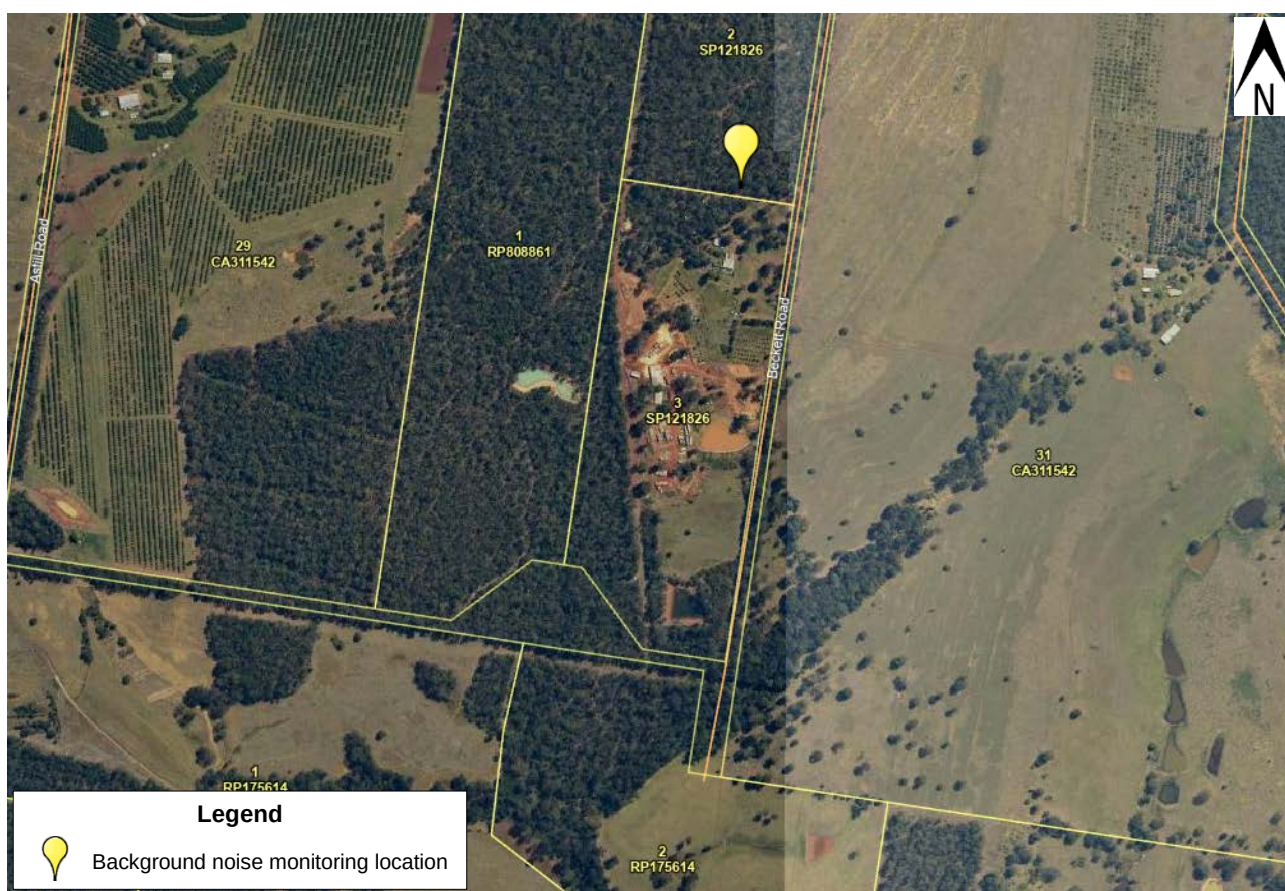


Figure 2.1 Background noise monitoring location

2.2 Measurement Results

2.2.1 Background noise monitoring

The results of the background noise measurements undertaken from 24 March to 4 April 2026, expressed in terms of the relevant noise descriptors, are presented in Table 2.2 and Appendix D.

Table 2.2 Measured background noise levels

Date	Background noise levels L_{90} dB(A)		
	$L_{90,11hr,Day}$ (7am–6pm)	$L_{90,4hr,Evening}$ (6pm–10pm)	$L_{90,9hr,Night}$ (10pm–7am)
24 March 2026 (Tue)	—	30	26
25 March 2026 (Wed)	32	30	28
26 March 2026 (Thu)	34	32	31
27 March 2026 (Fri)	41	30	38
28 March 2026 (Sat)	30	26	25
29 March 2026 (Sun)	32	31	25
30 March 2026 (Mon)	37	34	26
31 March 2026 (Tue)	35	42	32

Date	Background noise levels L ₉₀ dB(A)		
	L ₉₀ ,11hr,Day (7am–6pm)	L ₉₀ ,4hr,Evening (6pm–10pm)	L ₉₀ ,9hr,Night (10pm–7am)
1 April 2026 (Wed)	36	34	27
2 April 2026 (Thu)	33	31	26
3 April 2026 (Fri)	32	34	28
Arithmetic Average	34	32	28

Construction noise recorded on this day. Data measured during these periods were disregarded in the determination of background noise levels.

3. Noise Criteria

The following documents outline the information to be provided to support a development application and environmental authority application for activities with noise impacts:

- Department of the Environment, Tourism, Science and Innovation (DETSI), *Guideline: Environmental Protection Act 1994, Application requirements for activities with noise impacts*, 3 February 2020.
- Toowoomba Regional Council Planning Scheme 2022.

3.1 • Department of the Environment, Tourism, Science and Innovation

The DETSI guideline states the following:

When deciding an application, the department is required to assess the application against requirements stipulated in the EP Act, including considerations stated in the EP Regulation and any relevant Environmental Protection Policy, including the EPP (Noise).

For environmental authority applications that have noise impacts the application must describe how one of the following environmental objective and performance outcomes for the ERA will be achieved. Under Schedule 8, Part 3, Division 1 of the EP Regulation the environmental objectives and performance outcomes for noise emissions in Queensland are:

Environmental objective

The activity will be operated in a way that protects the environmental values of the acoustic environment.

Performance outcome

(a) Sound from the activity is not audible at a sensitive receptor, or

(b) The release of sound to the environment from the activity is managed so that adverse effects on environmental values including health and wellbeing and sensitive ecosystems are prevented or minimised.

The DES refers to the relevant Queensland legislation for regulating noise, including the *Environmental Protection (Noise) Policy 2019*.

3.2 Toowoomba Regional Council Planning Scheme 2022

The performance and acceptable outcomes relevant to acoustic amenity and noise from Section 9.4.2 Environmental Standards Code of the TRC 2022 are presented in Table 3.1.

Table 3.1 Performance and acceptable outcomes – TRC 2022 Table 9.4.2:1 Environmental Standards Code

Performance Outcomes	Acceptable Outcomes
PO8 The generation of noise from the premises does not cause Environmental Harm or Nuisance to adjoining properties or other noise sensitive land uses. (a) Development: - is located in an appropriate zone; - proposes best practice design and construction materials (in relation to noise attenuation); and - proposes operational practices that will minimise noise nuisance for adjoining sensitive land uses.	AO8.1 The development will achieve the following noise levels (when measured at the nearest sensitive receiver): - Background (L90) + 5dB(A) for variable noise between the hours of 7:00 am to 10:00 pm (measured at the facade of the sensitive land use); - Background (L90) + 3dB(A) for variable noise between the hours of 10:00 pm and 7:00 am (measured within bedrooms assuming open windows); - Background (L90) for continuous noise sources (measured at the facade of the sensitive land use between 7:00 am and 10:00 pm and within bedrooms assuming open windows from 10:00 pm – 7:00 am); and - maximum limit L_{Amax} 45dB(A) inside dwellings; and the development will achieve the Acoustic Quality Objectives listed within the Environmental Protection (Noise) Policy 2008. HOWEVER AO8.2 Where a development is unable to meet noise levels specified in AO8.1 an acoustic assessment has been undertaken by a suitably qualified and skilled person which demonstrates that the development will not result in environmental nuisance at any existing or likely future residential premises (within a 10-year planning horizon)

3.3 Toowoomba Environmental Standards Code

The TRC environmental standards criteria, based on the average measured existing background noise levels, presented in Section 2.2 of this report, are presented in Table 3.2.

Table 3.2 Environmental Standards Criteria

Noise characteristic	Environmental standards criteria, $L_{Aeq,adj,T}$	
	Day and Evening 7:00am to 10:00pm	Night 10:00pm to 7:00am
Continuous noise	33 ($L_{90} + 0$)	28 ($L_{90} + 0$)
Variable noise	38 ($L_{90} + 5$)	31 ($L_{90} + 3$)

3.4 Environmental Protection (Noise) Policy 2019

The *Environmental Protection (Noise) Policy 2019* identifies environmental values for the acoustic environment and sets acoustic quality objectives for sensitive receptors. The purpose of the acoustic quality objectives is to protect the acoustic amenity of the environment. The criteria from Schedule 1 of the policy are presented in Table 3.3.

Table 3.3 Environmental noise criteria

Sensitive receptor	Location	Period	Acoustic quality objectives			Environmental value
			$L_{Aeq,adj,1-hr}$	$L_{A10,adj,1-hr}$	$L_{A01,adj,1-hr}$	
Residence	Indoors	Day time and evening	35	40	45	Health and wellbeing
		Night-time	30	35	40	Health and wellbeing, in relation to the ability to sleep
	Outdoors	Day time and evening	50	55	65	Health and wellbeing
		Night-time	37 ($30 + 7$)	42 ($35 + 7$)	47 ($40 + 7$)	Health and wellbeing, in relation to the ability to sleep

The following is noted regarding the acoustic quality objectives:

- Under the *Noise Policy*, daytime is 7am to 6pm, evening is 6pm to 10pm and night-time is 10pm to 7am.

- The *Noise Policy* does not specify outdoor noise criteria for dwellings during night-time. However, the outdoor noise criteria have been derived from the internal criteria, assuming 7dB noise reduction by the building envelope with windows partially open¹.
- The assessment of compliance with the operational noise criteria is based on the results of the noise propagation modelling for a period of 1-hour with maximum noise emissions.

¹ Typical noise reduction for windows partially open, *Planning for Noise Control Guideline*, Dept. of Environment and Science (DES).

4. Noise Propagation Modelling

4.1 Modelling Methodology

A 3D model of the development and surroundings was developed using SoundPLAN noise propagation software considering the location and sound power levels of the dominant noise sources at the development.

The calculations were carried out as per the procedures specified in the International Standard ISO9613 (*Acoustics – Attenuation of sound during propagation outdoors*).

The calculation method for a single frequency is as follows:

$$L_S = [L_W + K_0] - [A_{dl} + A_{div} + A_{gr} + A_{bar} + A_{atm} + d_{Lrefl} + d_{LW}]$$

Where:	L_S	Sound pressure for a single frequency
	L_W	Sound power of source
	K_0	Correction for propagation in limited spacial angle
	A_{Dl}	Mean directivity correction
	A_{div}	Mean attenuation due to geometrical spreading
	A_{gr}	Mean attenuation due to ground effect
	A_{bar}	Mean attenuation due to screening
	A_{atm}	Mean attenuation due to air absorption
	d_{Lrefl}	Level increase due to reflections
	d_{LW}	Correction due to source operation time

The noise propagation losses are calculated as a combination of distance attenuation (geometrical spreading), screening, ground attenuation and other factors.

The results of noise modelling as per ISO9613 are in terms of L_{eq} . A conversion factor was applied to L_{eq} to obtain results in terms of the other assessment criteria L_{10} and L_{01} . The conversion factors are presented in Table 4.1.

Table 4.1 Noise descriptor conversion factors

Type of noise	Conversion factors	
	L_{eq} to L_{10}	L_{eq} to L_{01}
Non-continuous noise	$L_{10} = L_{eq} + 3 \text{ dB}$	$L_{01} = L_{eq} + 8 \text{ dB}$
Continuous noise	$L_{10} = L_{eq}$	$L_{01} = L_{eq}$

The assumptions and data used in development of the operational noise propagation model are presented in Table 4.2.

Table 4.2 Data and assumptions – Operational noise model

Terrain	- Department of Natural Resources and Mines Airborne Laser Scanning (LiDAR) 1 metre data was used to determine the elevation of the development relative to the surrounds. - Ground surface absorption factor of 0 was applied to all paved surfaces and 1 for all grassed areas.
Buildings	The existing buildings at the subject site were included in the model along with neighbouring buildings. The development layout is presented in Appendix A.
Noise sources and operating times	Refer to Section 4.2.
Receptors	- Receptors were attached to the façades of the noise sensitive buildings at a height of 1.5m above finished floor level. - SoundPLAN adds +2.5dB(A) to the calculated noise levels when the receptors are attached to the buildings, thus the noise levels are façade adjusted.
Noise control measures	Refer to Section 5 of this report for recommended noise control measures.
Distance attenuation	3D model of the subject site and surroundings was developed using cadastral and survey data using SoundPLAN software. The source-receiver distances and geometrical spreading are automatically calculated in SoundPLAN to a high level of accuracy in accordance with the ISO9613 procedure. - Separation distances and distance attenuation values are presented in Appendix E.
Barrier attenuation / screening	- Screening by walls and roofs was considered in the model. The screening was calculated in SoundPLAN in accordance with the ISO9613 procedure. - Barrier attenuation / screening values are presented in Appendix E.
Ground attenuation	- Sound reflecting surfaces such as pavement are modelled with ground absorption coefficient of 0 (no absorption). Grassed and vegetated areas were modelled with ground absorption coefficient of 1 (100% absorption) in accordance with ISO9613. - Ground attenuation values are presented in Appendix E.

4.2 Noise Sources

Details of the major noise sources at the development with a potential to impact on the nearest noise sensitive places are presented in Table 4.3.

The noise sources used in Table 4.3 have been sourced from SoundPLAN emission library and noise measurements carried out on site.

Table 4.3 Noise sources

Operational Noise Source	Location (refer Figure 4.1)	Sound Power Level dB(A) (re 10 ⁻¹² W)	Operational Scenario	Tonality/ Impulsiveness
Circular saw x2	Sawmill shelter (I, j, and K)	109 dB(A) – Point Source Sound power levels were derived from previous noise measurements of a similar sawmill configuration	Continuous operation 7:00am to 3:30pm • 30 minutes per hour	n/a
Grey bench		101 dB(A) – Point Source Sound power levels were derived from previous noise measurements of a similar sawmill configuration		
6 Inch Multi-rip saw	Main Stacking Shed (L)	109 dB(A) – Point Source Sound power levels were derived from previous noise measurements of a similar sawmill configuration	Continuous operation 7:00am to 3:30pm 30 minutes per hour	n/a
4 Inch Multi-rip saw				
Delivery truck idling	Storage sheds	90 dB(A) – point source x 3 SoundPLAN Library: Truck idling	Typical delivery times: 6:00am to 8:00am, 2:00pm to 4:00pm; and 5:00pm to 7:00pm Idling for 10 minutes per hour at each point location	+5 dB for tonality
Delivery truck movements	Internal driveways	101 dB(A) point source, moving at 15 km/h, equating to a line source with 58.9 dB(A) per metre ² . ATP Library: Truck Slowly Accelerating 10-20km/h	Typical delivery times: 6:00am to 8:00am, 2:00pm to 4:00pm; and 5:00pm to 7:00pm • 1 movement per hour for each location	n/a

² Modelled as a line source, with the sound power per metre calculated using the “moving point source definition” in SoundPLAN (point source with sound power of 100.7 dB(A) moving at 20 km/h).

Operational Noise Source	Location (refer Figure 4.1)	Sound Power Level dB(A) (re 10 ⁻¹² W)	Operational Scenario	Tonality/ Impulsiveness
Forklift movement	Internal driveways	91 dB(A) point source, moving at 10 km/h, equating to a line source with 51 dB(A) per metre ³ . ATP Library: Forklift Slowly Accelerating 10-20km/h	Continuous operation 6:00am to 7:00pm • 5 movements per hour	n/a
Forklift operation	As indicated in the map (refer to Figure 4.1)	78 dB(A) – x4 point sources ATP noise measurements: Forklift operation	Continuous operation 6:00am to 7:00pm • 30 minutes per hour	+5 dB for tonality
Front-end loader operation (loading)	As indicated in the map (refer to Figure 4.1)	83 dB(A) – point source x 2 SoundPLAN Library: Front end wheeler loading	Continuous operation 6:00am to 7:00pm • 5 movements per hour	+5 dB for tonality
Front-end loader movement	As indicated in the map (refer to Figure 4.1)	91 dB(A) point source, moving at 10 km/h, equating to a line source with 60 dB(A) per metre ⁴ . ATP Library: Front-end loader Slowly Accelerating 10-20km/h	Continuous operation 6:00am to 7:00pm • 5 movements per hour	n/a
Staff and visitor carpark	Lot 3 on SP121826	SoundPLAN calculates ⁵ noise emissions from parking areas based on the number of parking bays, surface type, and the type of parking lot, and considers the impact noise of a car door closing – ‘slam’. The data input for the car parks is as follows: • No. Parking Bays: 15 • Surface Type: Gravel • Parking Lot Type: Staff and visitors	Continuous operation 6:00am to 7:00pm • 15 movements per hour between 6:00am to 7:00am • 15 movements per hour between 6:00pm to 7:00pm	+5 dB for impulsiveness

Excerpt from the SoundPLAN 3D noise propagation model is presented in Figure 4.1.

³ Modelled as a line source, with the sound power per metre calculated using the “moving point source definition” in SoundPLAN (point source with sound power of 91 dB(A) moving at 15 km/h).

⁴ Modelled as a line source, with the sound power per metre calculated using the “moving point source definition” in SoundPLAN (point source with sound power of 90.5 dB(A) moving at 10 km/h).

⁵ SoundPLAN uses the methodology of the Bavarian parking lot study (2007) to calculate car park noise emissions. (Bavarian State Agency for the Environment 2007, *Parking Area Noise*, 6th Edition, Bavarian State Ministry for the Environment, Germany).

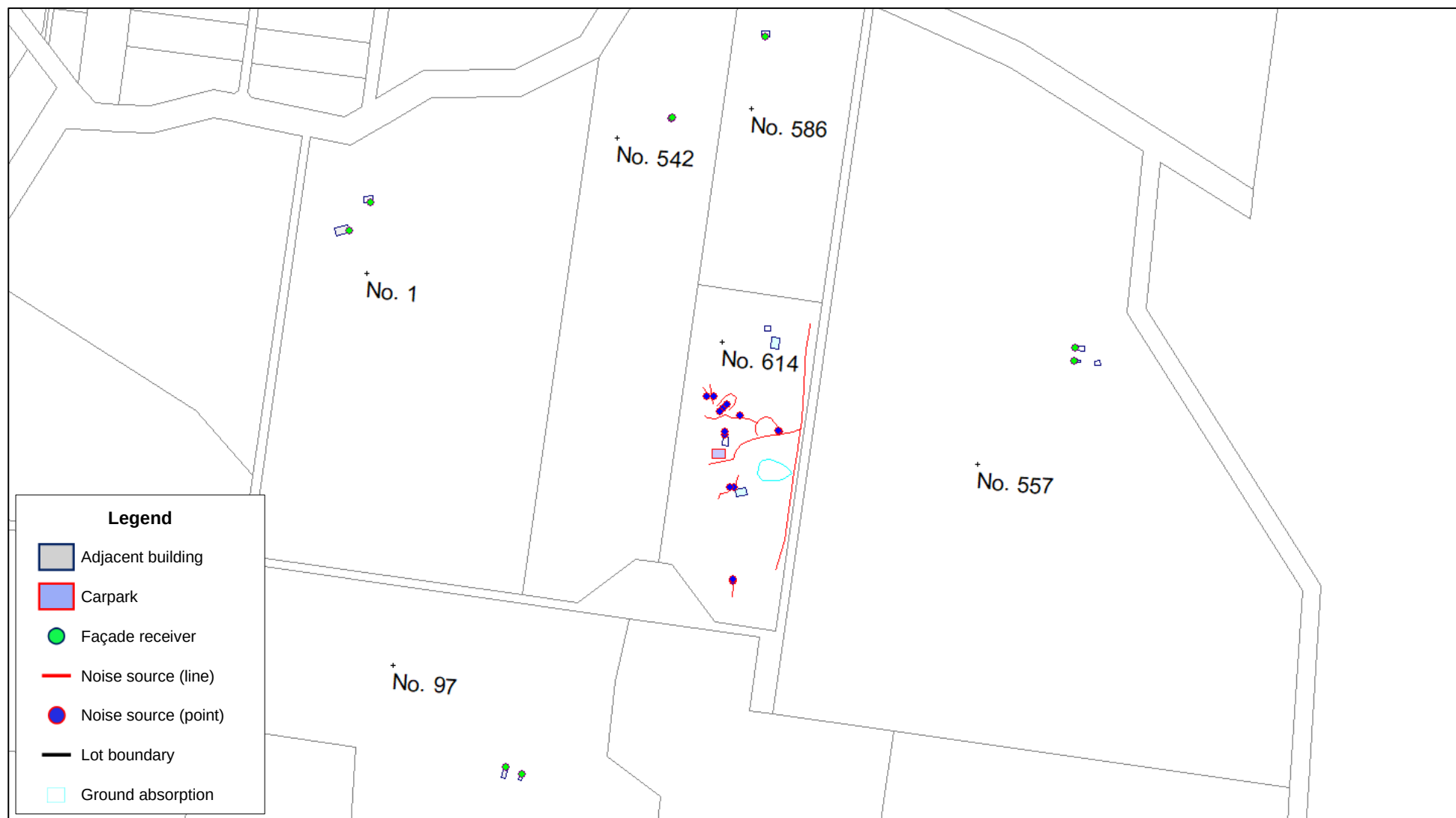


Figure 4.1 SoundPLAN operational noise model (Total view)

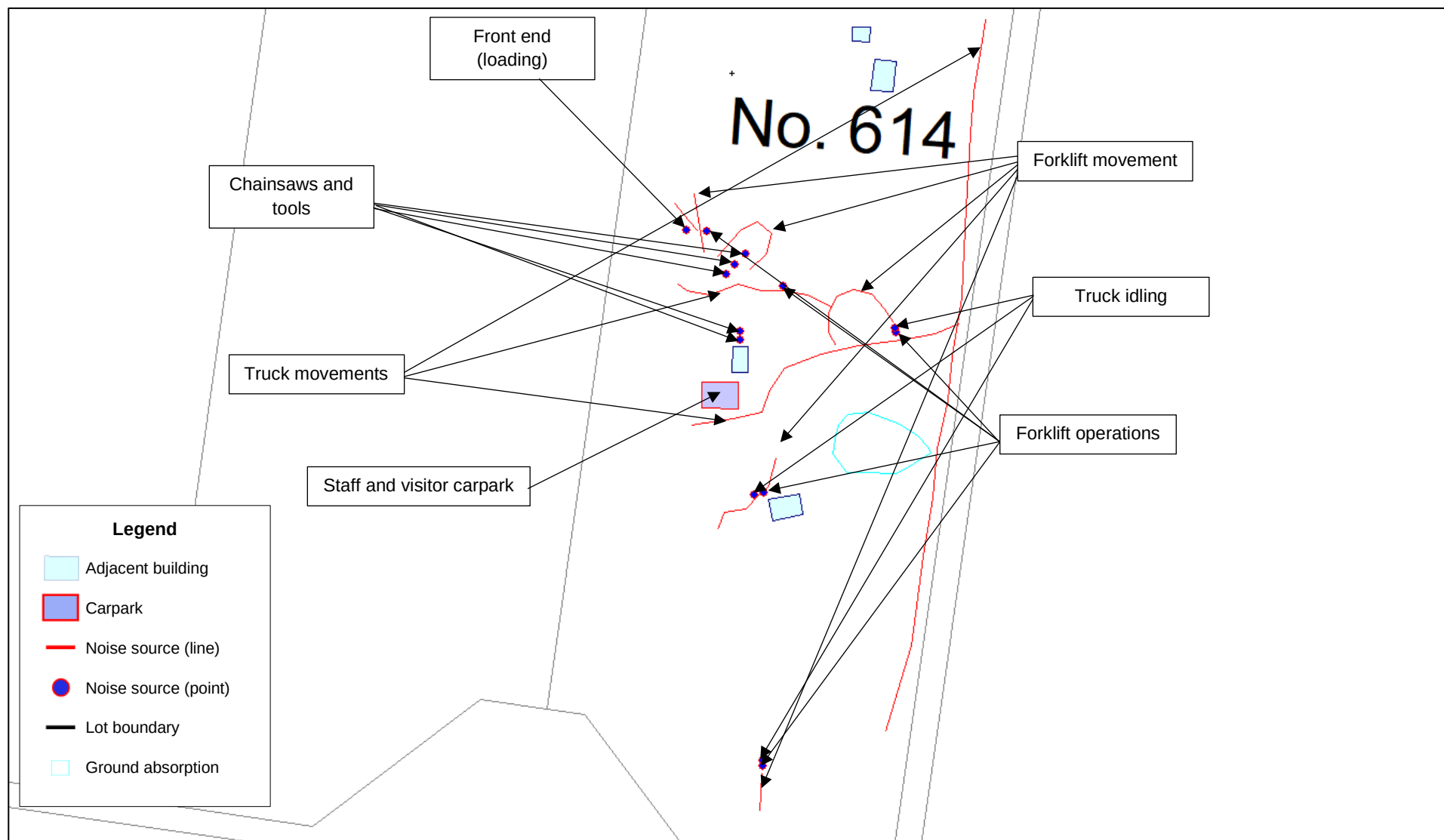


Figure 4.2 SoundPLAN operational noise model (zoom in view)

4.3 Operational Noise Calculation Results

4.3.1 Toowoomba Environmental Standard Code

Summary of the highest calculated noise levels for the time interval T = 15hr and 9hr at the nearest noise sensitive places, relative to the Toowoomba Environmental code criteria, are presented in Table 4.4.

Table 4.4 Toowoomba environmental code

Location	L_{eq,adj,15hr} Day and evening dB(A)	L_{eq,adj,9hr} Night dB(A)	Complies with noise criteria?
Continuous noise	33 (L ₉₀ + 0)	28 (RBL + 0)	
Variable noise	38 (RBL + 5)	31 (RBL + 5)	
No. 1 Astill Road	27	8	Yes
No. 542 Haynes Kite Millar Road	32	12	Yes
No. 557 Cherry Creek Road	29	11	Yes
No. 586 Haynes Kite Millar Road	29	9	Yes
No. 97 Astill Road	27	11	Yes

SoundPLAN tabulated noise levels (cumulative noise impacts) are presented in Appendix E.

Separate acoustic impacts of the individual noise sources considered in the SoundPLAN model, and the noise propagation modelling factors as per International Standard ISO9613 (*Acoustics – Attenuation of sound during propagation outdoors*) calculation method are also presented in Appendix E.

Noise propagation modelling contour maps are presented in Appendix F.

4.3.2 Acoustic Quality Objectives

Summary of the highest calculated noise levels for time interval T = 1hr at the nearest noise sensitive places, relative to the acoustic quality objectives, are presented in Table 4.5.

Table 4.5 Operational noise levels – Acoustic quality objectives

Location	Calculated noise levels									Complies with noise criteria?
	Leq,adj,1hr day dB(A)	Leq,adj,1hr evening dB(A)	Leq,adj,1hr night dB(A)	L10,adj,1hr day dB(A)	L10,adj,1hr evening dB(A)	L10,adj,1hr night dB(A)	L01,adj,1hr day dB(A)	L01,adj,1hr evening dB(A)	L01,adj,1hr night dB(A)	
<i>EP Noise 2019 acoustic quality objectives (external criteria) for residences:</i>	50	50	37	55	55	42	65	65	47	
No. 1 Astill Road	29	18	18	31	20	20	37	26	26	Yes
No. 542 Haynes Kite Millar Road	34	22	22	36	24	24	42	30	30	Yes
No. 557 Cherry Creek Road	31	20	20	33	22	22	39	28	28	Yes
No. 586 Haynes Kite Millar Road	32	19	19	34	21	21	40	27	27	Yes
No. 97 Astill Road	30	21	21	32	23	23	38	29	29	Yes

5. Discussion and Recommendations

The operational noise impacts associated with the proposed increase in production capacity of the timber milling and woodchipping facility at 614 Haynes Kite Millar Road, Cherry Creek have been assessed through detailed noise propagation modelling, based on site-specific background measurement and representative operational scenarios.

The assessment considers the increase in production capacity to ERA 47(a), including the addition of two multi-rip saws and extended operational hours. However, whilst two additional multi-rip saws are introduced, the nature and type of noise sources remain consistent with the existing operations, with no fundamentally different noise-generating activities introduced as part of the proposal.

The dominant noise sources are associated with mechanical processing within the main shelter areas (including the twin saw, grey bench, and multi-rip saw). Additional contributions arise from ancillary activities such as delivery truck movements and idling, forklift and front-end loader operations, and staff/visitor car parking. These sources have been conservatively modelled assuming representative worst-case operating conditions.

The assessment has been carried out against the relevant provisions of the PO8 of the Environmental Standards Code and the Environmental Protection (Noise) Policy 2019 (EPP Noise).

The results of the noise modelling demonstrate that predicted operational noise levels at all assessed sensitive receptors:

- Comply with the EPP Noise acoustic quality objectives for the relevant assessment periods;
- Comply with the adopted background creep criteria, with no material increase to the existing acoustic environment ;
- Comply with the adopted noise criteria as per the Environmental Standards Code under TRC planning scheme; and
- All predicted noise levels include applicable adjustments for tonality and operational characteristics in accordance with the DES Noise Measurement Manual.

Predicted noise levels are below the relevant criteria, with the highest levels occurring at the closest receivers such as the dwelling at No. 542 Haynes Kite Miller Road. Notwithstanding this, the predicted noise levels are well within the acceptable noise limits for continuous and variable noise.

- The modelling confirms that the primary factor contributing to the low noise impact at surrounding receivers is mainly due to the separation distance from the major plant and noise sources at the sawmill facility. The primary noise-generating activities are located approximately 350 m from the nearest noise sensitive receptors, resulting in significant distance attenuation.

Based on the modelling results, no adverse noise impacts are predicted at surrounding sensitive receptors under the proposed operational scenario. Accordingly, the proposed increase in production capacity and expansion of the site can be accommodated while achieving compliance with the noise criteria.

To ensure ongoing compliance with the noise criteria the following general noise control measures are recommended:

- Maintain effective enclosure of major plant within the saw shelters;
- Maintenance of the blades of the circular saws should be done regularly to maintain good cutting conditions and reduce noise generated by damaged equipment.
- Where reasonable and practical, mobile plant to be fitted with broadband reversing beepers.
- Use mufflers and engine covers/screens where appropriate for generators and mobile plant.
- Care should be taken to reduce noise when loading or unloading vehicles or moving materials. Minimise drop height of materials when transferring (e.g loading and unloading vehicles and storage areas).

These measures are consistent with standard industry practice and provide an additional level of control, particularly for tonal and intermittent noise sources.

Provided the recommendations of this report are fully implemented, there are no further acoustic constraints to the proposed increase in production capacity and expansion of the facility at 614 Haynes Kite Millar Road in Cherry Creek.

6. Complaints Management Procedure

The operations manager commits to take all reasonable precautionary measures to minimise nuisance caused by excessive noise when operation in progress.

6.1 Contingencies

The Operations Manager shall allocate sufficient resources (personnel and materials) to the site to immediately attend to any non-conformance and/or emergency event.

Corrective actions may be agreed upon, dependent upon the severity of non-conformance and/or emergency and parameter involved, between the Operations Manager and relevant governing body.

6.2 Responsibilities

It should be noted that the basic responsibility for the implementation of the noise control measures rest with all personnel. The specific responsibilities that pertain to the complaint management procedure (CMP) are presented in Table 6.2.

Table 6.1 Specific responsibilities

Party	Primary Responsibility
Property Manager	- Overall implementation of the CMP and management of potential noise impacts and risks. - Responsible for reporting any incidents to relevant authorities if required. - Issue and distribution of CMP. - Revision of the CMP, as required, to reflect the operating conditions. - Revisions are to be made by replacing the entire document by consecutively numbered amendments.
	- Implementation of strategies, requirements, procedures, and measures to ensure that appropriate noise control measures are in place. - Inspections to ensure adherence to the commitments under the CMP. - Direct actions, as required, to protect the noise amenity of the local environment and to minimise and/or rectify any concerns.
All other site personnel	- Responsible for a General Environmental Duty under the <i>Environmental Protection Act 1994</i>. - Responsible for environmentally sound management of operations and reporting any observed incidents to the Operations Manager. - Adherence to Site Safety Rules, the Emergency Plan and the CMP.
Environmental Consultant	Assist with implementation, monitoring, reporting and corrective actions as required by the Operations Manager.

6.3 Complaints and Incidents

The Operations Manager shall investigate all noise complaints. Where considered appropriate and/or required, the Operations Manager shall notify Toowoomba Regional Council and/or any other relevant statutory authority. Complaints received by external parties will also be subject to investigation by the Operations Manager.

Should an incident of noise emissions impacting on the surrounding land uses occur during the operation of the sawmill, the authorised staff member on duty shall take prompt action to minimise any impact and, where necessary, seek the advice of the relevant authorities.

All complaints will be treated with respect. The Operations Manager shall maintain a Complaints Register (refer Appendix G) and shall direct an appropriate course of action relating to the complaint. The Complaints Register will be included in any audit reports and shall record the date, time and nature of any complaint, the name and contact details of the complainant, action taken, person responsible for action, and resolution of complaint. The Operations Manager shall certify each entry on the record.

6.4 Awareness and Training

A copy of this CMP will be available from the Operations Manager.

As part of training all personnel shall be made aware of the provisions of the CMP to promote a general awareness of the potential for noise generation and to minimise any potential impacts.

7. References

- Australian Standard AS 1055:2018 (*Acoustics – Description and Measurement of Environmental Noise*)
- Australian Standard AS/NZS IEC 61672.1-2019 (*Electroacoustics – Sound level meters – Specifications*)
- Toowoomba Regional Council, *Planning Scheme Version 2014*
- Department of Environment and Science (DES), *Guideline: Environmental Protection Act 1994, Application requirements for activities with noise impacts*, 3 February 2020.
- Department of Environment and Science (DES), *Noise Measurement Manual v. 4.1*, 10 March 2020
- International Standard ISO 9613 (*Acoustics – Attenuation of sound during propagation outdoors*)
- Queensland Government, *Environmental Protection Act 1994*
- Queensland Government, *Environmental Protection (Noise) Policy 2019*
- Queensland Government, *Environmental Protection Regulation 2019*

8. Appendices

Appendix A – Site Layout

Appendix B – Site Photos

Appendix C – Meteorological Data

Appendix D – Background Noise Measurement Results

Appendix E – Operational Noise Level

Appendix F – Noise Contour Maps

Appendix G – Complaints Management Procedure

Appendix A – Site Layout

Attachments



Figure 1 – Site Plan

A WATER STORAGE TANKS
 B WATER STORAGE TANKS
 C WATER STORAGE TANKS
 D CHOOK HOUSE
 E SHED /GARAGE
 F MAIN HOUSE
 G GAZEBO
 H OFFCUTS WASTE READY FOR MULCHING
 I TRANSPORTABLE SAWMILL SHELTER
 J TRANSPORTABLE SAWMILL SHELTER
 K TRANSPORTABLE SAWMILL SHELTER
 L MAIN STACKING SHED
 M OFFICE

N TRACTOR SHELTER
 O TRANSPORTABLE STACKING SHELTER
 P LOG STORAGE AREA
 Q STORMWATER CATCHMENT DAM
 R TIMBER PACK STORAGE AREA
 S TIMBER PACK STORAGE AREA
 T ORIGINAL FARM SHED
 U TIMBER PACK STORAGE AREA
 V 2ND STORMWATER CATCHMENT DAM

Appendix B – Site Photos



Photo 1: Background noise monitoring location – view due north



Photo 2: Transportable sawmill shelter - I, J, K



Photo 3: Tractor shelter – N, O



Photo 4: Main stacking shelter - L



Photo 5: Main stacking shelter - L



Photo 6: Front end loader

Appendix C – Meteorological Data

Kingaroy, Queensland

March 2026 Daily Weather Observations



Australian Government
Bureau of Meteorology

Date	Day	Temps		Rain	Evap	Sun	Max wind gust			9am						3pm					
		Min	Max				Dirn	Spd	Time	Temp	RH	Cld	Dirn	Spd	MSLP	Temp	RH	Cld	Dirn	Spd	MSLP
		°C	°C					km/h	local	°C	%	eighths		km/h	hPa	°C	%	eighths		km/h	hPa
1	Su	17.7	29.4	0.2			E	43	17:02	23.2	72		ESE	26	1012.4	28.9	54		E	17	1009.5
2	Mo	18.0	30.5	0			ESE	37	10:09	24.1	68		ESE	19	1013.0	29.0	46		E	19	1009.3
3	Tu	14.7	30.5	0			ENE	30	12:00	23.8	61		E	15	1013.4	29.4	36		E	13	1010.0
4	We	15.3	28.9	0.2			ESE	31	16:25	19.6	95		NE	9	1014.7	25.9	55		NE	13	1011.2
5	Th	15.6	30.4	0.6			NE	43	14:06	22.6	77		E	19	1013.0	29.3	48		NE	22	1009.5
6	Fr	20.3	28.3	0.4			ENE	35	10:49	23.2	92		ENE	15	1012.3	25.9	81		E	19	1009.7
7	Sa	20.7	28.3	3.8			ESE	37	16:28	24.6	81		ESE	15	1010.9	27.1	71		SE	20	1007.5
8	Su	20.6	22.4	35.2			SE	39	20:31	21.6	98		ESE	9	1008.1	22.0	96		SE	11	1004.1
9	Mo	18.6	23.9	180.0			SSE	37	17:34	19.4	97		SE	9	1005.6	20.3	95		SE	17	1001.7
10	Tu	18.2	28.7	16.4			ESE	41	10:18	23.0	75		ESE	19	1008.7	27.3	52		SSE	19	1007.6
11	We	15.2	29.1	0			SE	33	08:56	22.5	69		ESE	20	1012.8	27.4	44		S	13	1009.5
12	Th	14.0	32.6	0			NNW	28	09:14	23.0	68		NW	13	1010.8	31.6	37		SSE	6	1007.5
13	Fr	17.0	33.2	0			ESE	48	17:05	26.9	60		WNW	4	1012.9	31.5	34		ENE	6	1011.2
14	Sa	19.4	26.0	2.2			ESE	46	10:32	21.3	79		ESE	24	1022.7	24.5	47		ESE	26	1021.2
15	Su	15.6	25.0	0			E	39	09:28	21.6	67		ESE	20	1022.4	23.6	58		ESE	17	1019.5
16	Mo	13.9	27.1	0			ENE	37	12:50	22.1	68		E	17	1019.9	27.0	49		ENE	17	1015.9
17	Tu	12.9	28.4	0			E	31	13:54	23.6	62		NE	9	1018.9	26.2	48		NE	9	1015.4
18	We	12.2	27.0	0			NE	35	13:39	21.6	80		ENE	11	1018.2	26.8	55		NNE	17	1014.7
19	Th	16.3	26.0	0			ENE	28	16:22	20.8	84		NE	11	1015.7	25.2	62		NE	13	1012.6
20	Fr	17.1	28.2	4.0			ENE	39	16:38	21.0	82		ENE	13	1016.2	25.5	56		NNE	17	1012.8
21	Sa	15.6	28.3	0			NNE	37	09:59	22.3	76		NNE	19	1017.4	25.8	51		SE	22	1013.9
22	Su	17.9	26.6	0			NE	37	10:50	21.6	76		NE	20	1017.1	25.2	57		NE	22	1014.5
23	Mo	18.1	28.2	1.0			ENE	35	09:36	22.4	75		ESE	19	1017.2	26.8	55		ENE	20	1013.9
24	Tu	17.5	27.4	0			SE	39	08:31	22.8	68		E	24	1014.9	26.9	53		E	17	1012.0
25	We	15.1	30.3	0			NNE	24	10:12	22.4	69		E	15	1015.0	29.4	42			Calm	1011.7
26	Th	19.5	31.0	0			NNW	28	08:42	23.9	75		NNW	17	1014.9	29.5	40		WNW	4	1009.1
27	Fr	16.7	25.1	0			W	46	14:08	23.1	58		SW	22	1010.0	24.4	41		WSW	24	1008.1
28	Sa	6.6	24.6	0			S	43	07:57	17.1	50		S	26	1014.2	23.5	37		ENE	9	1011.7
29	Su	8.1	26.6	0			E	37	09:55	19.7	70		ENE	20	1018.2	24.7	51		NE	15	1015.8
30	Mo	12.0	25.6	0			NNE	41	10:16	20.7	68		NE	17	1021.6	24.0	51		NNE	19	1018.3
31	Tu	14.4	26.0	0			NNE	39	12:02	21.6	68		NNE	17	1021.9	22.6	68		NNE	15	1018.8
Statistics for March 2026																					
Mean		16.0	27.9							22.2	73			16	1015.0	26.4	53			15	1011.9
Lowest		6.6	22.4							17.1	50		WNW	4	1005.6	20.3	34			Calm	1001.7
Highest		20.7	33.2	180.0			ESE	48		26.9	98		#	26	1022.7	31.6	96		ESE	26	1021.2
Total				244.0																	

Observations were drawn from Kingaroy Airport {station 040922}

IDCJDW4069.202603 Prepared at 13:01 UTC on 7 Apr 2026
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Users of this product are deemed to have read the information and
accepted the conditions described in the notes at
<http://www.bom.gov.au/climate/dwo/IDCJDW0000.pdf>

Kingaroy, Queensland
April 2026 Daily Weather Observations

Date	Day	Temps		Rain	Evap	Sun	Max wind gust			9am						3pm					
		Min	Max				Dirn	Spd	Time	Temp	RH	Cld	Dirn	Spd	MSLP	Temp	RH	Cld	Dirn	Spd	MSLP
		°C	°C					km/h	local	°C	%	eighths		km/h	hPa	°C	%	eighths		km/h	hPa
1	We	17.3	26.8	0.2			ENE	33	12:30	20.4	83		NE	11	1021.7	25.6	56		ENE	15	1019.0
2	Th	16.7	26.8	0			ENE	33	10:04	21.2	77		NE	17	1022.5	25.1	50		NE	17	1018.8
3	Fr	14.8	26.1	0			NNE	31	14:23	21.3	75		NE	13	1020.5	25.6	56		NNE	20	1017.0
4	Sa	16.3	26.6	0			NE	41	09:09	20.8	77		E	17	1020.3	23.8	50		NNE	20	1016.8
5	Su	13.1	25.8	0			NNE	43	10:23	20.9	73		ENE	13	1020.0	25.1	56		NNE	15	1017.3
6	Mo	11.1	26.0	0			ESE	31	08:57	19.4	74		NNE	17	1020.0	25.0	47		NNE	11	1016.0
7	Tu	10.2	30.4	0			NW	19	11:10	20.7	73		NW	6	1016.9	29.4	41				1012.5
8	We	11.7	32.4	0				26	10:56	23.7	64				1017.2	32.1	29				1013.8
9	Th	13.3	30.7	0				20	14:33	21.4	82				1019.6	30.0	35				1014.8
10	Fr	13.0	29.7	0				19	09:45	22.3	77				1018.7	29.3	44				1013.3
11	Sa	13.1	30.9	0				28	15:47	19.1	87				1014.1	30.1	42				1008.2
12	Su	11.7		0						22.9	34				1011.9	26.5	22				1010.6
Statistics for the first 12 days of April 2026																					
Mean		13.5	28.4							21.2	73			13	1018.6	27.3	44			16	1014.8
Lowest		10.2	25.8							19.1	34		NW	6	1011.9	23.8	22		NNE	11	1008.2
Highest		17.3	32.4	0.2			NNE	43		23.7	87		#	17	1022.5	32.1	56		NNE	20	1019.0
Total				0.2																	

Observations were drawn from Kingaroy Airport {station 040922}

Appendix D – Background Noise Measurement Results

Unattended Noise Measurements
Mac's Milling Group, Cherry Creek
Environmental Noise Levels Day, Evening and Night

Logger Location - Northern boundary of lot

ARL Environmental Noise Logger
 Logger Serial Number 15-203-537
 Measurement Title Field Reading.
 Measurement started at 24/03/2026 12:02
 Measurement stopped at 4/04/2026 12:10
 Frequency Weighting A
 Time Averaging Fast
 Statistical Interval 15 min
 Pre-measurement Ref. 94.4
 Post-measurement Ref. 94.0
 Engineering Units dB SPL

		L _{Aeq,T} dB(A)			L _{A01,T} dB(A)			L _{A10,T} dB(A)			L _{A90,T} dB(A)		
Date	Day	D	E	N	D	E	N	D	E	N	D	E	N
24/03/2026	Tuesday	—	34	28	—	40	33	—	35	29	—	30	26
25/03/2026	Wednesday	39	34	30	48	39	35	39	36	32	32	30	28
26/03/2026	Thursday	40	37	35	49	42	41	43	39	36	34	32	31
27/03/2026	Friday	46	33	42	53	38	48	49	35	45	41	30	38
28/03/2026	Saturday	37	30	29	46	36	36	38	32	30	30	26	25
29/03/2026	Sunday	38	35	28	46	41	33	40	37	28	32	31	25
30/03/2026	Monday	42	40	29	49	45	34	44	42	30	37	34	26
31/03/2026	Tuesday	42	49	37	50	57	45	43	52	39	35	42	32
1/04/2026	Wednesday	41	38	30	48	43	38	43	39	32	36	34	27
2/04/2026	Thursday	39	40	30	48	50	37	41	42	30	33	31	26
3/04/2026	Friday	37	37	31	45	41	36	38	38	32	32	34	28
Average		40	37	32	48	43	38	42	39	33	34	32	28

Note

— No noise data available

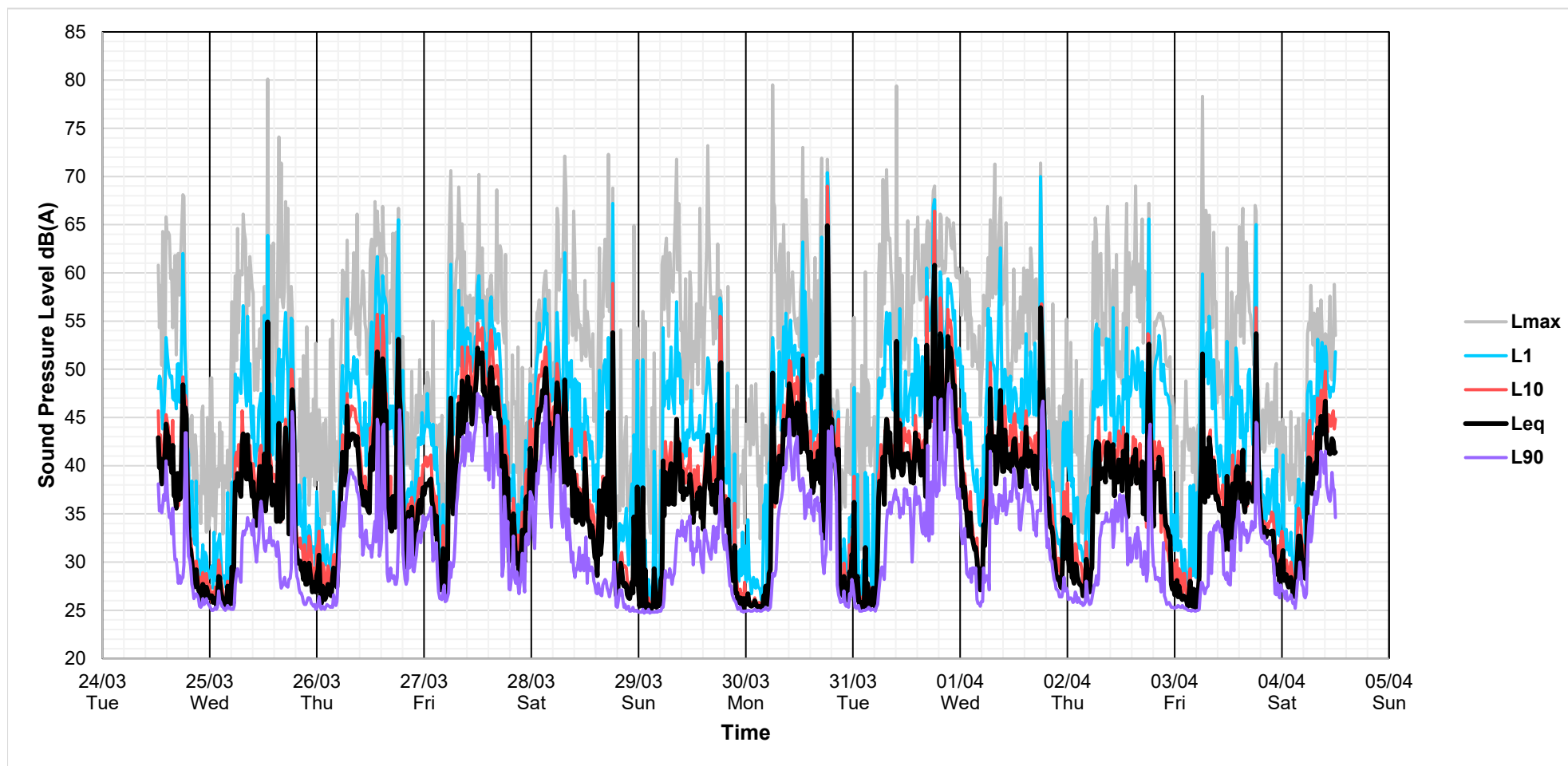
Day (D): 7:00am to 6:00pm

Evening (E): 6:00pm to 10:00pm

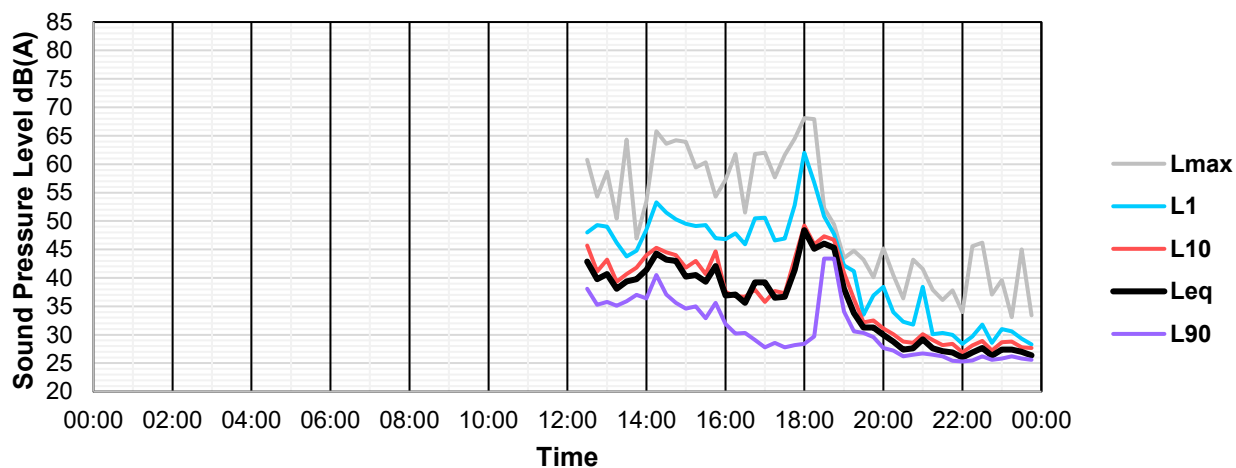
Night (N): 10:00pm to 7:00am

Rainfall recorded on this day

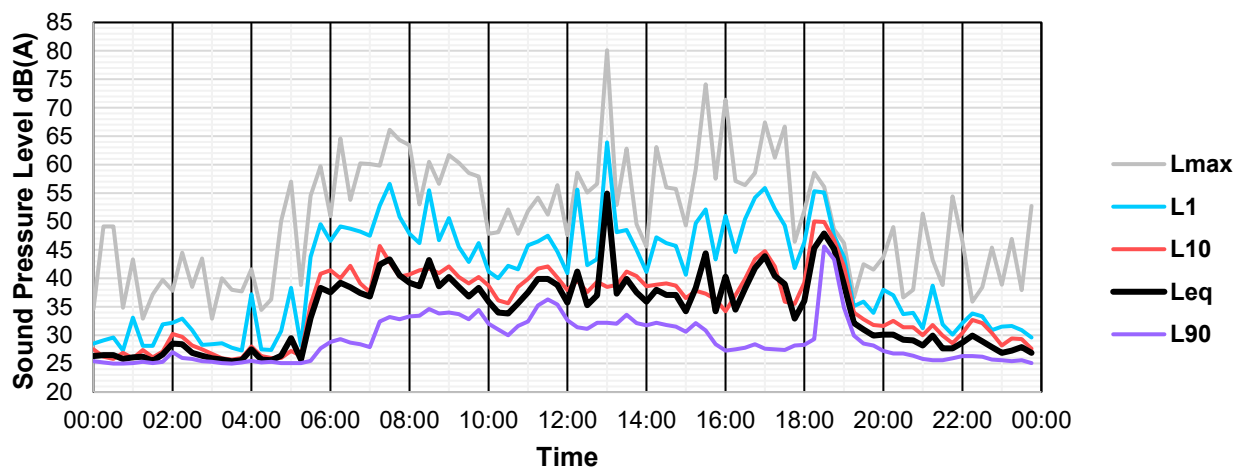
Unattended Noise Measurements 24 March to 4 April 2026



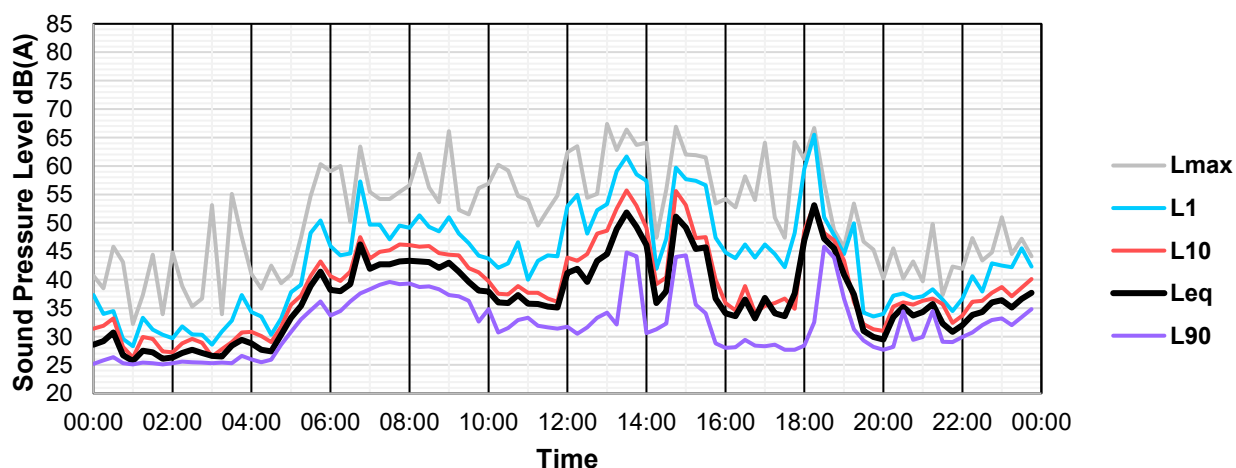
Unattended Noise Measurements Tuesday 24 March 2026



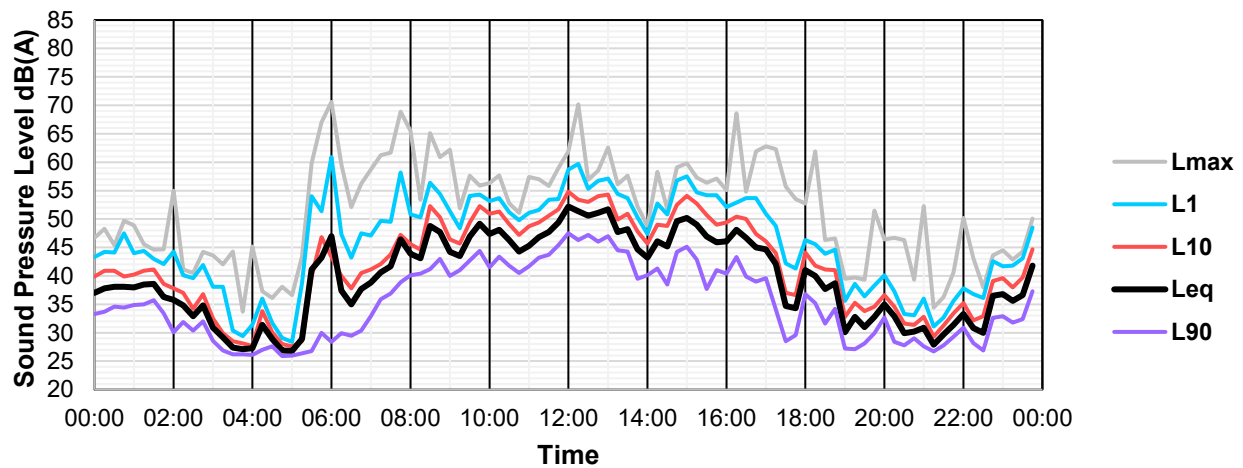
Unattended Noise Measurements Wednesday 25 March 2026



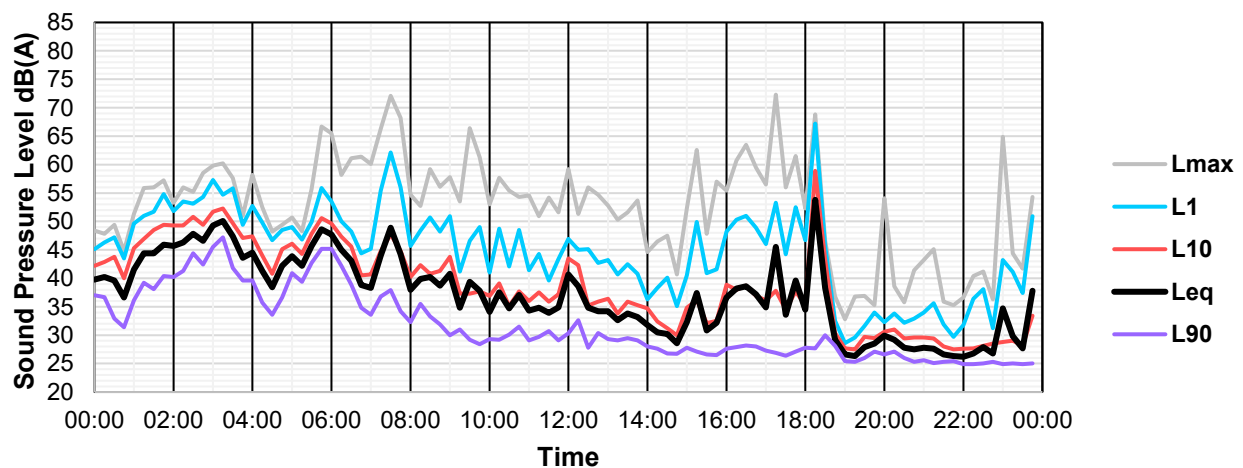
Unattended Noise Measurements Thursday 26 March 2026



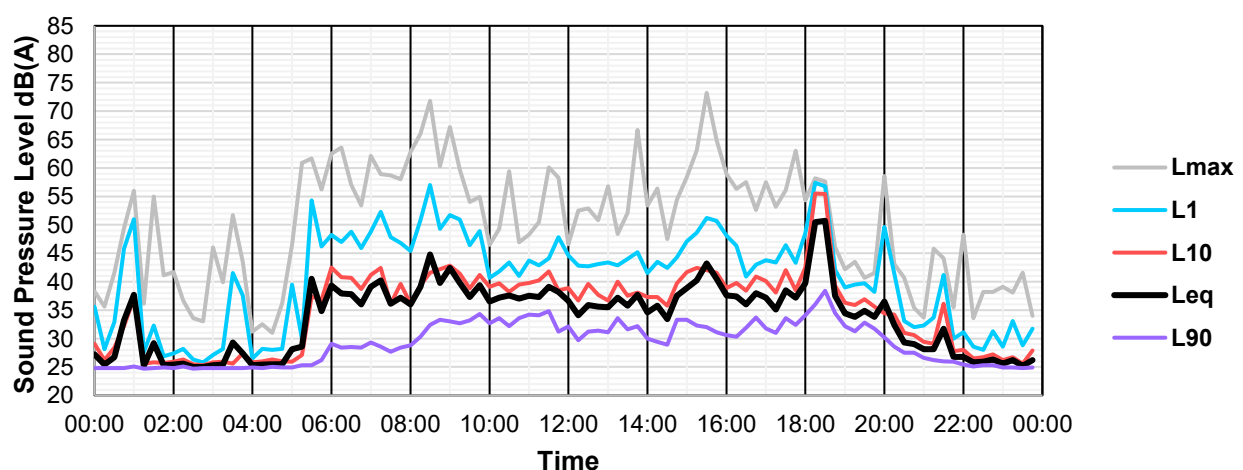
Unattended Noise Measurements Friday 27 March 2026



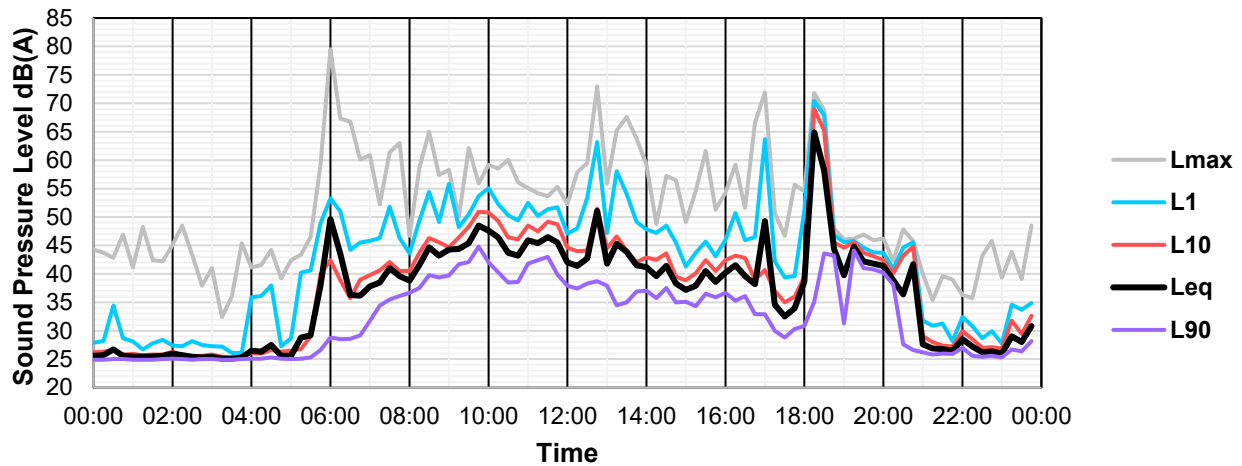
Unattended Noise Measurements Saturday 28 March 2026



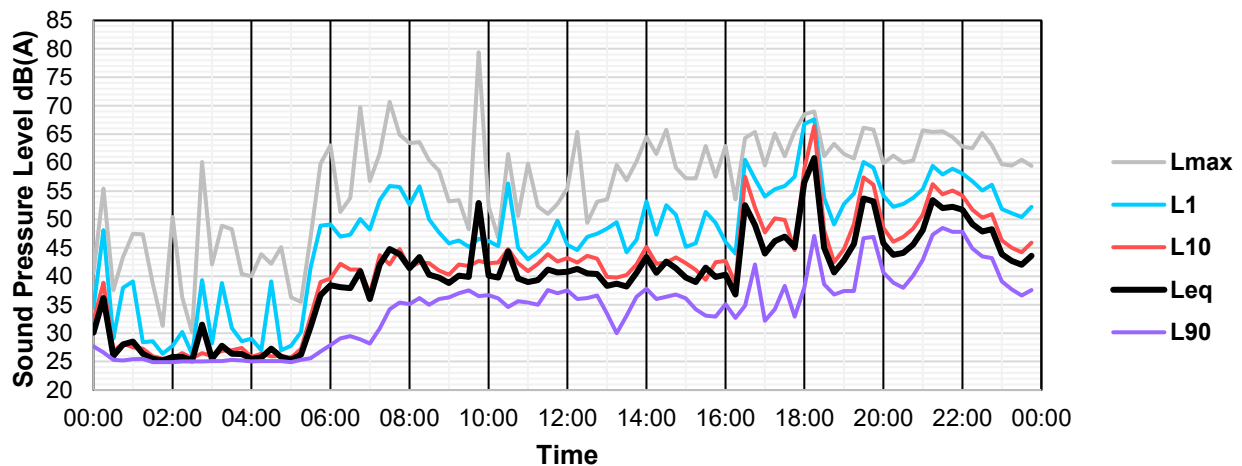
Unattended Noise Measurements Sunday 29 March 2026



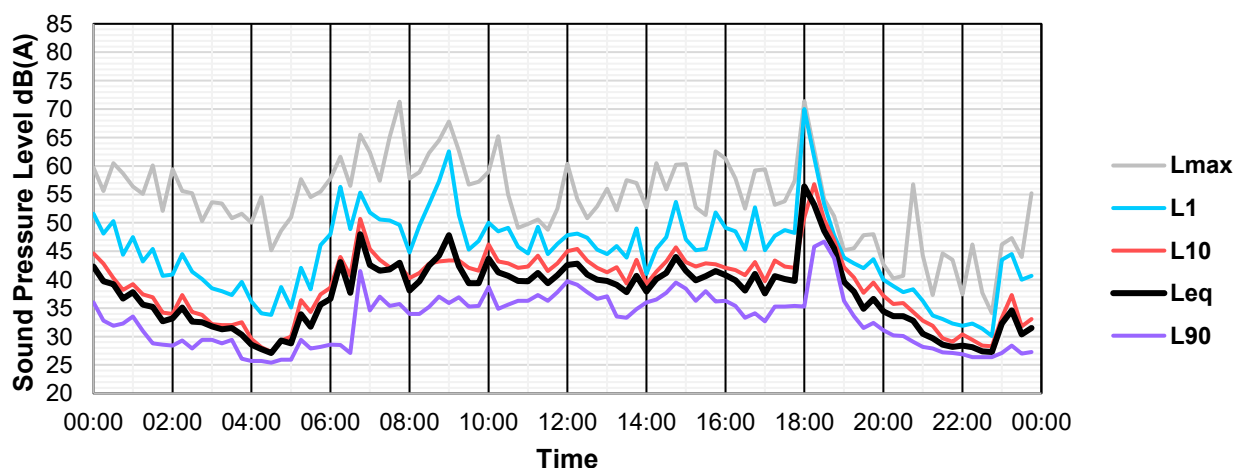
Unattended Noise Measurements Monday 30 March 2026



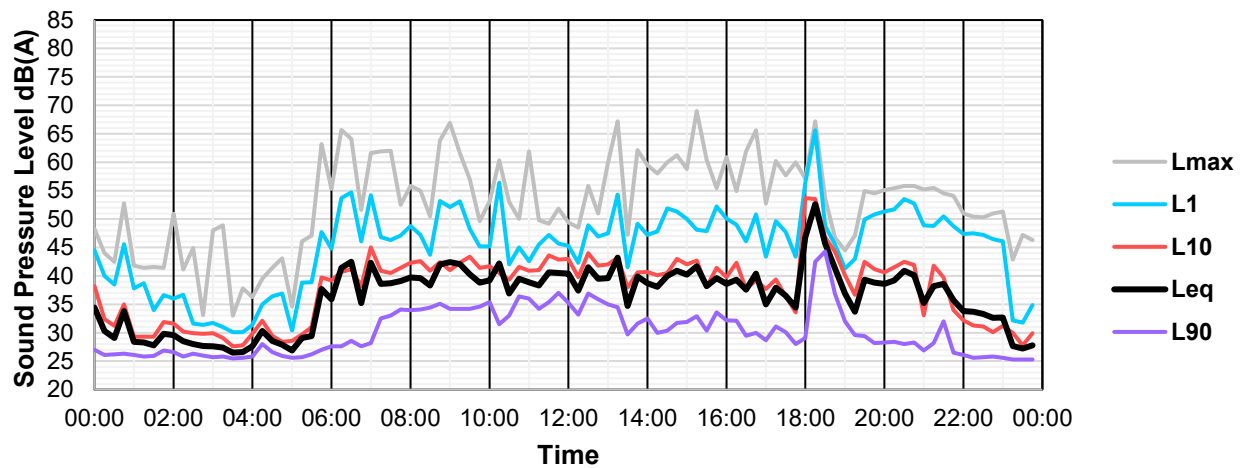
Unattended Noise Measurements Tuesday 31 March 2026



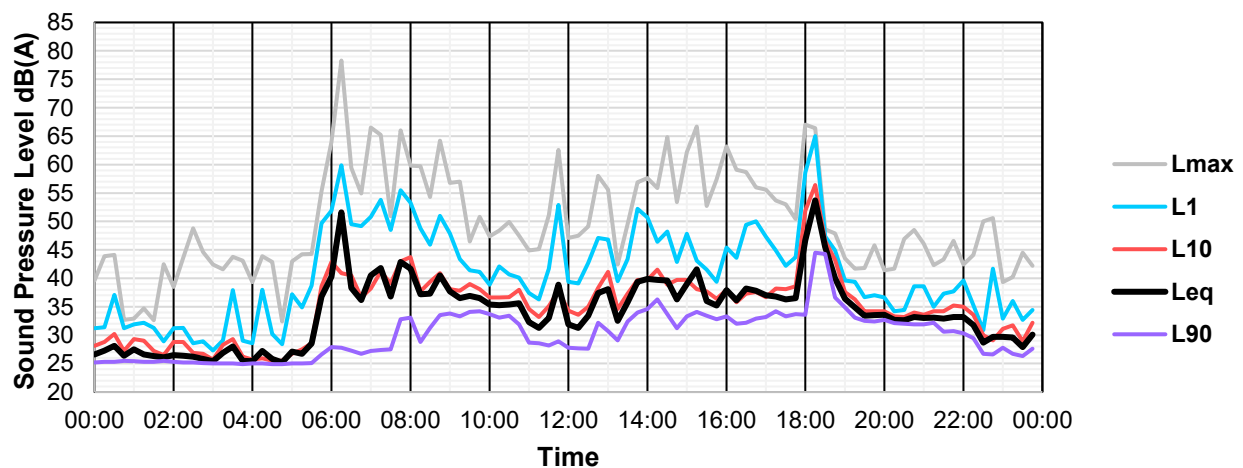
Unattended Noise Measurements Wednesday 1 April 2026



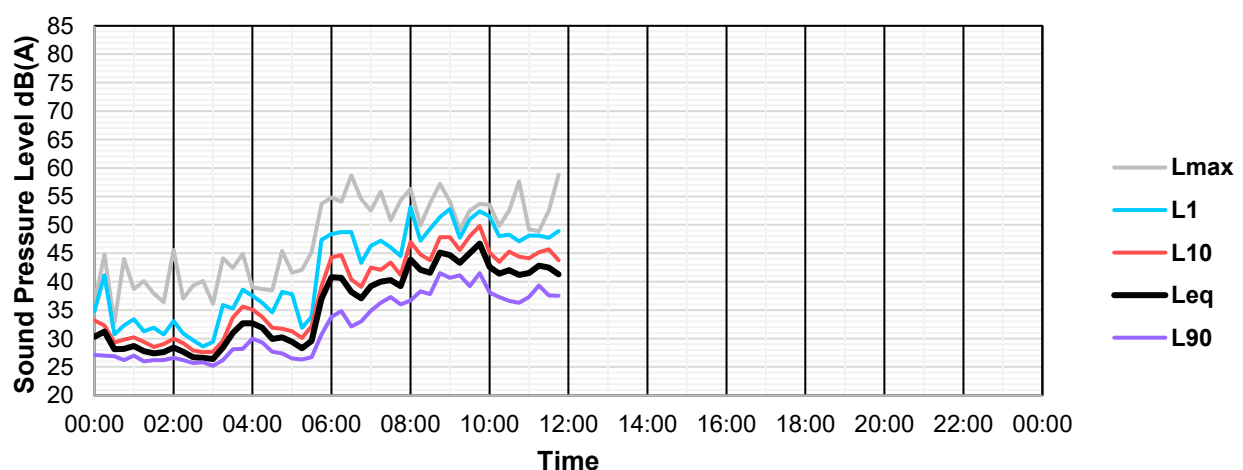
Unattended Noise Measurements Thursday 2 April 2026



Unattended Noise Measurements Friday 3 April 2026



Unattended Noise Measurements Saturday 4 April 2026



Appendix E – Operational Noise Level

614 Haynes Kite Millar Road, Cherry Creek
Predicted Operational Noise Levels
at Existing Development From Activities at Adjacent Uses

Receiver	Leq,adj,15 dB(A)	Leq,adj,9h dB(A)
No. 1 Astill Road	26	8
No. 1 Astill Road	27	8
No. 97 Astill Road	27	11
No. 97 Astill Road	27	11
No. 542 Haynes Kite Millar Road	32	12
No. 542 Haynes Kite Millar Road	32	12
No. 557 Cherry Creek Road	29	11
No. 557 Cherry Creek Road	29	10
No. 586 Haynes Kite Millar Road	29	9



ATP Consulting

614 Haynes Kite Millar Road, Cherry Creek
Predicted Operational Noise Levels at Existing Development
From Activities at Adjacent Uses

Receiver Name	Floor	Facade	Leq,adj, 1h Day dB(A)	Leq,adj, 1h Evening dB(A)	Leq,adj, 1h Night dB(A)	Leq,adj, 11h Day dB(A)	Leq,adj, 4h Evening dB(A)	Leq,adj, 9h Night dB(A)
No. 1 Astill Road	GF	E	29	17	17	28	11	8
No. 1 Astill Road	GF	S	29	18	18	28	12	8
No. 542 Haynes Kite Millar Road	GF	E	34	22	22	33	16	12
No. 542 Haynes Kite Millar Road	GF	S	34	22	22	33	16	12
No. 557 Cherry Creek Road	GF	W	31	20	20	30	14	11
No. 557 Cherry Creek Road	GF	W	31	20	20	30	14	10
No. 586 Haynes Kite Millar Road	GF	S	32	19	19	30	13	9
No. 97 Astill Road	GF	N	30	20	20	28	14	11
No. 97 Astill Road	GF	N	30	21	21	28	14	11



Mac's Milling Group
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

Legend

Source		Source name
Source type		Type of source (point, line, area)
time slice		Name of time slice
Li	dB(A)	Level inside
R'w	dB	Rated transmission loss
L'w	dB(A)	Sound power per m, m ²
Lw	dB(A)	Sound power per unit
l or A	m,m ²	Size of source (Length or area)
KI	dB	Correction for source impulsiveness
KT	dB	Correction for source tonality
Ko	dB	Correction for propagation in limited spacial angle
S	m	Distance source - receiver
Adiv	dB	Mean attenuation due to geometrical spreading
Agr	dB	Mean attenuation due to ground effect
Abar	dB	Mean attenuation due to screening
Aatm	dB	Mean attenuation due to air absorption
Amisc	dB	Mean attenuation due to foliage, industrial areas and building areas
ADI	dB	Mean directivity correction
dLrefl	dB(A)	Level increase due to reflections
Ls	dB(A)	Unassessed sound pressure level at receiver $L_s = L_w + K_o + ADI + A_{div} + A_{gr} + A_{bar} + A_{atm} + A_{fol_site_house} + A_{wind} + dL_{refl}$
dLw	dB	Correction due to source operation time
Cmet	dB	Meteorological correction
ZR	dB	Correction for rest periods
Lr	dB(A)	Assessed level of time slice

Mac's Milling Group
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

Source	Source type	time slice	Li dB(A)	R'w dB	L'w dB(A)	Lw dB(A)	l or A m,m²	KI dB	KT dB	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Amisc dB	ADI dB	dLrefl dB(A)	Ls dB(A)	dLw dB	Cmet dB	ZR dB	Lr dB(A)
Receiver No. 542 Haynes Kite Millar Road FI GF Leq,adj,1h 34 dB(A)																							
car park	PLot	Leq,adj,1h			53.7	81.2	567.8	0.0	0.0	0	746.91	-68.5	-3.2	-3.4	-3.1	0.00	0.0	0.1	3.2		0.0		
4 Inch Multi-rip saw	Point	Leq,adj,1h			108.5	108.5		0.0	0.0	0	708.00	-68.0	-1.4	-3.7	-6.1	0.00	0.0	2.5	31.8	-3.0	0.0	0.0	28.8
6 Inch Multi-rip saw	Point	Leq,adj,1h			108.5	108.5		0.0	0.0	0	701.36	-67.9	-1.5	-3.7	-6.0	0.00	0.0	2.4	31.8	-3.0	0.0	0.0	28.8
Circular saw (I)	Point	Leq,adj,1h			108.5	108.5		0.0	0.0	0	656.17	-67.3	-1.4	-3.9	-5.7	0.00	0.0	0.0	30.2	-3.0	0.0	0.0	27.2
Circular saw (K)	Point	Leq,adj,1h			108.5	108.5		0.0	0.0	0	644.19	-67.2	-1.4	-4.0	-5.6	0.00	0.0	0.0	30.4	-3.0	0.0	0.0	27.4
Forklift movement (H)	Line	Leq,adj,1h			49.2	65.8	45.7	0.0	0.0	0	614.17	-66.8	-3.4	-3.2	-2.7	0.00	0.0	0.0	-10.2	7.0	0.0	0.0	-3.2
Forklift movement (I,J,K)	Line	Leq,adj,1h			49.2	68.7	88.8	0.0	0.0	0	634.61	-67.0	-3.4	-3.1	-2.8	0.00	0.0	0.0	-7.7	7.0	0.0	0.0	-0.7
Forklift movement (P)	Line	Leq,adj,1h			49.2	69.1	95.8	0.0	0.0	0	695.03	-67.8	-3.4	-1.3	-3.5	0.00	0.0	0.0	-7.0	7.0	0.0	0.0	0.0
forklift movement (T)	Line	Leq,adj,1h			49.2	68.1	77.6	0.0	0.0	0	826.72	-69.3	-3.4	-2.2	-3.7	0.00	0.0	0.9	-9.7	7.0	0.0	0.0	-2.7
Forklift movement (U)	Line	Leq,adj,1h			49.2	63.8	28.6	0.0	0.0	0	1052.31	-71.4	-3.4	-3.2	-4.3	0.00	0.0	0.0	-18.6	7.0	0.0	0.0	-11.6
Forklift operation (H)	Point	Leq,adj,1h			77.5	77.5		0.0	5.0	0	621.86	-66.9	-3.6	-3.0	-2.8	0.00	0.0	0.0	1.3	-3.0	0.0	0.0	3.2
Forklift operation (O)	Point	Leq,adj,1h			78.0	78.0		0.0	5.0	0	674.19	-67.6	-1.4	-3.2	-2.6	0.00	0.0	0.0	3.2	-3.0	0.0	0.0	5.2
Forklift operation (P)	Point	Leq,adj,1h			78.0	78.0		0.0	5.0	0	732.22	-68.3	-4.3	-0.1	-4.3	0.00	0.0	0.0	1.0	-3.0	0.0	0.0	3.0
Forklift operation (T)	Point	Leq,adj,1h			70.9	70.9		0.0	5.0	0	826.00	-69.3	-4.3	-1.9	-3.6	0.00	0.0	0.0	-8.2	7.0	0.0	0.0	3.8
Forklift operation (U)	Point	Leq,adj,1h			78.0	78.0		0.0	5.0	0	1033.19	-71.3	-4.3	-2.5	-4.4	0.00	0.0	0.0	-4.6	-3.0	0.0	0.0	-2.6
Front end loader (loading) (H)	Point	Leq,adj,1h			82.5	82.5		0.0	5.0	0	618.89	-66.8	-2.2	-3.1	-3.1	0.00	0.0	0.0	7.2	7.0	0.0	0.0	19.2
Front end loading (movement) (H)	Line	Leq,adj,1h			58.9	73.4	28.3	0.0	0.0	0	609.17	-66.7	-2.3	-3.5	-3.0	0.00	0.0	0.0	-2.0	7.0	0.0	0.0	5.0
Grey bench (J)	Point	Leq,adj,1h			100.5	100.5		0.0	0.0	0	650.14	-67.3	-0.7	-4.3	-7.7	0.00	0.0	0.0	20.6	-3.0	0.0	0.0	17.6
Truck idling (P)	Point	Leq,adj,1h			90.8	90.8		0.0	5.0	0	728.98	-68.2	-3.1	-0.3	-4.7	0.00	0.0	0.0	14.4	-7.8	0.0	0.0	11.7
Truck idling (T)	Point	Leq,adj,1h			90.8	90.8		0.0	5.0	0	826.24	-69.3	-3.1	-1.6	-3.7	0.00	0.0	0.0	13.0	-7.8	0.0	0.0	10.3
Truck idling (U)	Point	Leq,adj,1h			90.8	90.8		0.0	5.0	0	1028.58	-71.2	-3.1	-2.8	-4.6	0.00	0.0	0.0	9.1	-7.8	0.0	0.0	6.3
Truck movement (Main)	Line	Leq,adj,1h			58.9	86.3	552.1	0.0	0.0	0	742.52	-68.4	-2.2	-0.8	-4.0	0.00	0.0	0.0	10.9	0.0	0.0	0.0	10.9
Truck movement (Q)	Line	Leq,adj,1h			58.9	82.6	232.4	0.0	0.0	0	744.72	-68.4	-2.3	-2.3	-3.9	0.00	0.0	0.0	5.7	0.0	0.0	0.0	5.7
Truck movement (R)	Line	Leq,adj,1h			58.9	79.8	124.1	0.0	0.0	0	673.49	-67.6	-2.3	-3.5	-3.3	0.00	0.0	0.0	3.3	0.0	0.0	0.0	3.3

Appendix F – Noise Contour Maps



ATP251046

Mac's Milling Group

Noise Levels Associated with
Proposed Development

Ground Floor (1.8m AGL)

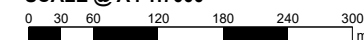
Operational Noise Level
Leq,adj,15hr, Day dB(A)

	<= 33
33 <	<= 36
36 <	<= 39
39 <	<= 42
42 <	<= 45
45 <	<= 48
48 <	<= 51
51 <	<= 54
54 <	<= 57
57 <	<= 60
60 <	<= 63
63 <	<= 66
66 <	<= 69
69 <	<= 72
72 <	

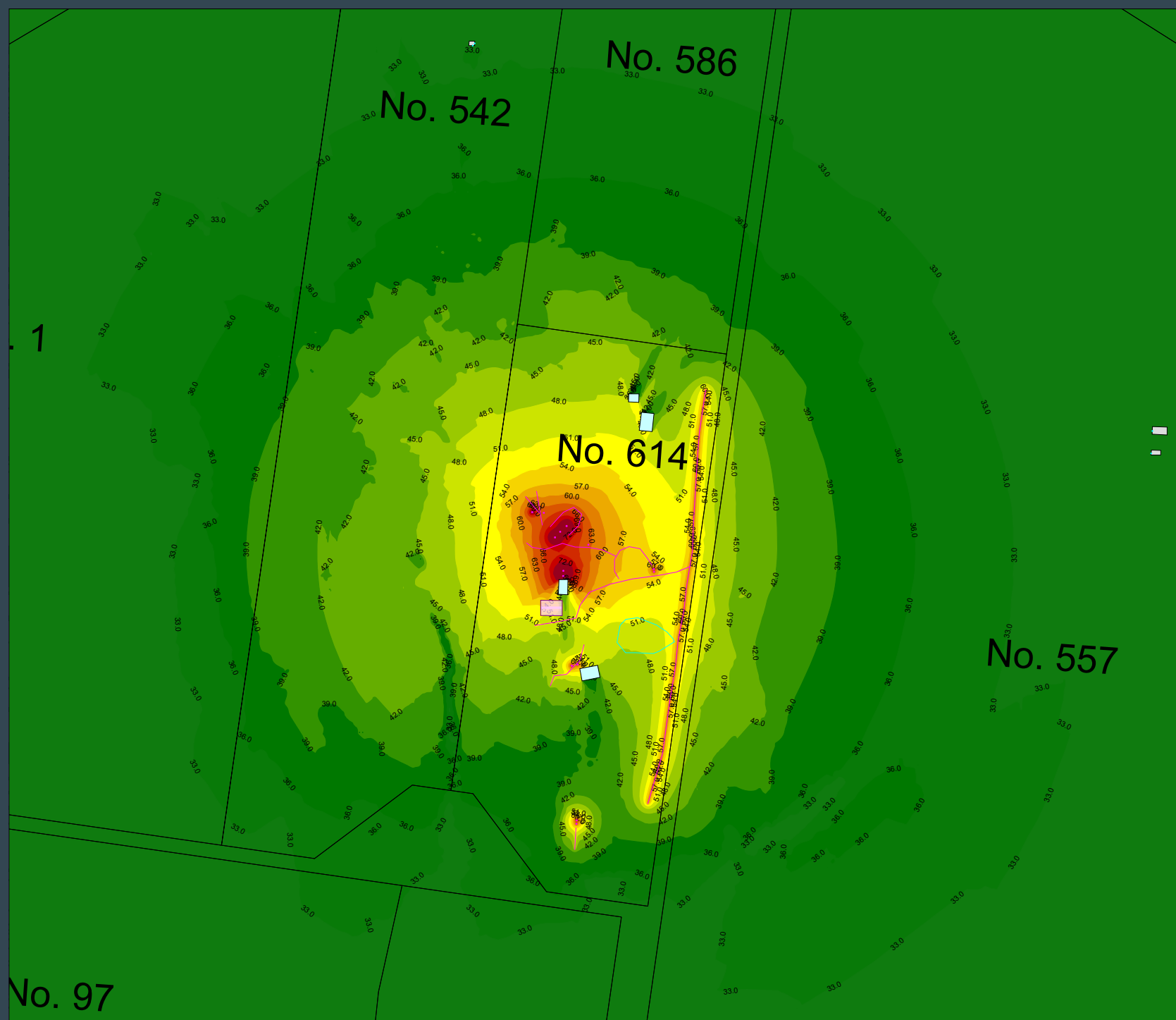
Legend

- Adjacent building
- Proposed development
- Noise source (carpark)
- Point receiver
- Noise source (point)
- Noise source (line)
- Lot boundary
- Ground absorption

SCALE @ A4 1:7000



Grid Spacing: 2m
Project Engineer: Johnson Chin
Created: 3/06/2026
Processed with SoundPLAN 9.1





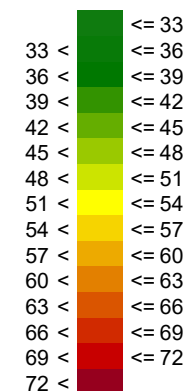
ATP251046

Mac's Milling Group

Noise Levels Associated with
Proposed Development

Ground Floor (1.8m AGL)

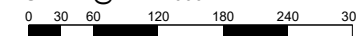
Operational Noise Level
Leq,adj,9hr, Night dB(A)



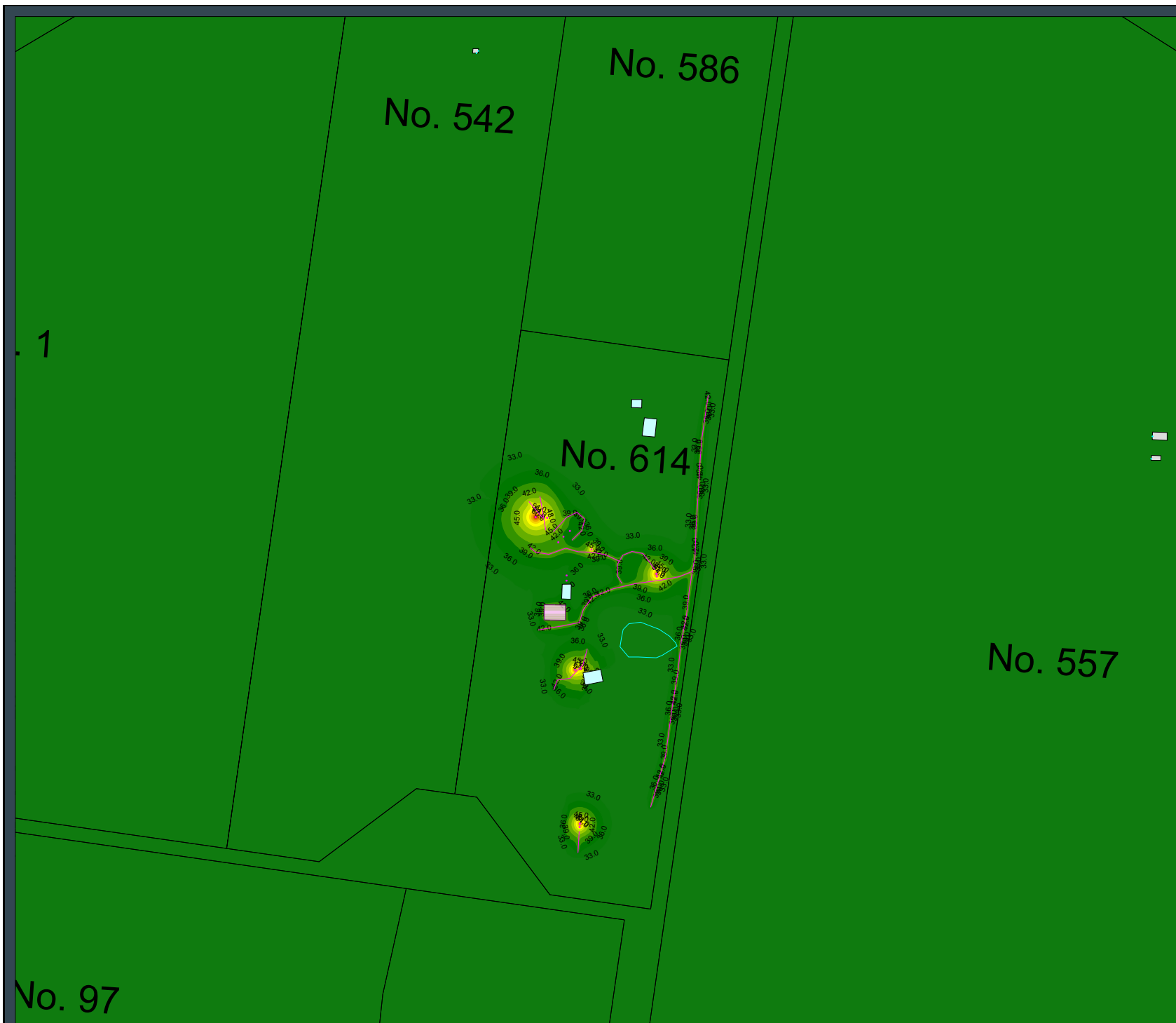
Legend

- Adjacent building
- Proposed development
- Noise source (carpark)
- Point receiver
- Noise source (point)
- Noise source (line)
- Lot boundary
- Ground absorption

SCALE @ A4 1:7000



Grid Spacing: 2m
Project Engineer: Johnson Chin
Created: 3/06/2026
Processed with SoundPLAN 9.1



Appendix G – Complaints Management Procedure

For the recording of any complaint pertaining to the operation of the sawmill and the environment.

Date:	Time:
Name and Contact Details of Complainant:	
Details of Complaint:	
Action Taken:.....	
Responsible Person:	
Resolution/Notes:	
Operations Manager:	Date:
Date:	Time:
Name and Contact Details of Complainant:	
Details of Complaint:	
Action Taken:.....	
Responsible Person:	
Resolution/Notes:	
Operations Manager:	Date:
Date:	Time:
Name and Contact Details of Complainant:	
Details of Complaint:	
Action Taken:.....	
Responsible Person:	
Resolution/Notes:	
Operations Manager:	Date: