Noise Impact Assessment

Proposed Rural Function Centre
1390 Hinterland Way, Bangalow

HEALTH SCIENCE ENVIROMENTAL EDUCATION
ENVIRONMENTAL AUDITOR

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1. Introduction

1.1 Purpose

Tim Fitzroy & Associates (TFA) has been engaged by Metropolis Studios Pty Ltd to undertake a *Noise Impact Assessment* (NIA) for a *proposed rural function centre* on land described in real property terms as Lot 1 DP 1077265, Hinterland Way, Bangalow. A development consent notice is being sought from Byron Shire Council for the temporary use of the land for the purpose of a Rural Function Centre for up to 20 events in any 12 month period. Up to 150 guests will be permitted at each function, with not more than 1 event on any given weekend. The application is being lodged pursuant to Clause 6.11 of the Byron Local Environmental Plan 2014 and is seeking approval to operate for a 3 year period.

The subject site is undulating land, zoned RU2 and covers an area of approximately 9.3 hectares. Existing infrastructure includes a dwelling, swimming pool, water tanks, a workers cabin, two sheds, driveway and fencing. Approximately 70% of the site is under macadamia plantation. There are several dwellings surrounding the proposed rural function centre, with the closest dwelling located approximately 187m southwest of the proposed activity.

This report provides details on the noise assessment and modelling carried out by *Tim Fitzroy & Associates* and *Noise Measurement Services, Brisbane* to establish existing noise levels at the subject site and investigate potential noise impacts on surrounding residences.

The purpose of this noise assessment is to:

1. Establish existing background noise levels across the subject site;
2. Examine the likely impacts of the proposed development on the existing surrounding residences in accordance with the Noise Policy for Industry (NSW EPA 2017); and
3. Report on noise levels and provide recommendations to ensure that the proposed rural function centre complies as far as practicable with the intent of the relevant Noise Guidelines.

1.2 Introduction

The key potential noise impacts associated with the proposed development relate to background amplified music and patrons; hence this is the main focus of the acoustic assessment report. In addition, this acoustic assessment also considers noise from vehicles entering and leaving the site and fixed mechanical equipment. The following sections discuss the appropriate criteria for the various noise sources considered in the assessment

1.3 Applicable Noise Criteria

***Protection of the Environment Operations Act 1997 (*POEO Act) and the Protection of the Environment Operations (Noise Control) Regulation 2008 (Noise Control Regulation)**

The *Protection of the Environment Operations Act 1997 (*POEO Act) and the Protection of the Environment Operations (Noise Control) Regulation 2008 (Noise Control

Regulation) provide the main legal framework and basis for managing unacceptable noise.

The POEO Act:

- identifies the authority responsible for regulating noise (s. 6 of the Act)
- defines 'noise' and 'offensive noise' (Dictionary in the Act)
- provides a range of regulatory tools to manage noise, including Noise Control Notices, Prevention Notices, Noise Abatement Directions and Noise Abatement Orders.

Depending on the circumstances, the Noise Control Regulation may require an assessment of a noise's audibility, time of occurrence, duration or offensiveness. The POEO Act does not always require noise to be measured to determine whether it is offensive. However, noise measurement can help in deciding what action, if any, is necessary.

1.3.1 Offensive Noise

Depending on the type of noise under consideration, noise can be considered as offensive in three ways according to its:

- audibility
- duration
- inherently offensive characteristics.

Council is to consider a range of factors to determine whether the noise is offensive, including the following:

- the loudness of the noise, especially compared with other noise in the area
- the character of the noise
- the time and duration of the noise
- whether the noise is typical for the area
- how often the noise occurs
- the number of people affected by the noise.

1.3.2 Intrusive Noise

Noise is identified as 'intrusive' if it is noticeably louder than the background noise and considered likely to disturb or interfere with those who can hear it.

1.3.3 Sleep disturbance

Specific provisions relate to sleep disturbance and the World Health Organization recommends that a maximum level of 45 dB (A) should not be exceeded inside a bedroom. For practical purposes this is equivalent to a maximum level of 55 dB (A) outside a residence, with an open window to the bedroom (Guidelines for Community Noise WHO 1999).

1.3.4 Noise Policy for Industry (NSW EPA 2017)

The Noise Policy for Industry provides a framework and criteria for the consistent assessment of the impact and control of noise from industrial developments.

The NPI sets out the procedure to determine the project noise trigger levels relevant to assess noise from mechanical plant and equipment. The project noise trigger level applies to existing noise-sensitive receivers.

The project noise trigger level provides a benchmark or objective for assessing a proposal or site. It is not intended for use as a mandatory requirement. The project noise trigger level is a level that, if exceeded, would indicate a potential noise impact on the community, and so 'trigger' a management response; for example, further investigation of mitigation measures.

The project noise trigger level is the lower (that is, the more stringent) value of the project intrusiveness noise level and project amenity noise level determined in Sections 2.3 and 2.4 of the policy.

1.2.4.1 Project Intrusiveness Criteria

The Noise Policy for Industry states:

The intrusiveness of an industrial noise source may generally be considered acceptable if the level of noise from the source (represented by the LAeq descriptor), measured over a 15-minute period, does not exceed the background noise level by more than 5 dB when beyond a minimum threshold. This intrusiveness noise level seeks to limit the degree of change a new noise source introduces to an existing environment.

The intrusiveness noise level is determined as follows:

- LAeq, 15min ≤ Rating Background Noise Level + 5 dB

1.2.4.2 Amenity Noise Levels and Project Amenity Noise Levels

To limit continuing increases in noise levels from application of the intrusiveness level alone, the ambient noise level within an area from all industrial noise sources combined should remain below the recommended amenity noise levels specified in Table 2.2 of the Noise Policy for Industry where feasible and reasonable. The recommended amenity noise levels will protect against noise impacts such as speech interference, community annoyance and some sleep disturbance. The noise amenity area is defined as Residential – Rural and the relevant noise amenity levels are given in Table 1.1.

Table 1.1 Amenity Criteria for Residential Rural Receiver

Time Period	*Amenity Criterion*
Daytime (7am-6pm Mon-Sat; 8am-6pm Sun)	50-55 dB(A)
Evening (6pm-10pm)	45-50 dB(A)
Night (remaining periods)	40-45 dB(A)

The recommended amenity noise levels represent the objective for total industrial noise at a receiver location, whereas the project amenity noise level represents the objective for noise from a single industrial development at a receiver location. To ensure that industrial noise levels (existing plus new) remain within the recommended amenity noise levels for an area, a project amenity noise level applies for each new source of industrial noise as follows:

Project amenity noise level for industrial developments = Recommended amenity noise level minus 5 dB(A)

1.4 Overview of Noise Assessment

This noise assessment establishes the existing background noise levels near the north eastern and western boundaries of the subject site to reflect noise impacts currently experienced by neighbours.

The noise assessment process included the following components:

- Measurement and determination of the existing background and ambient noise at the site;
- Consideration of potential noise impacts on surrounding residences; and
- Consideration of what feasible and reasonable noise mitigation measures ought to be considered where the project-specific noise levels are exceeded.

1.5 Site Description

The subject site is undulating land, zoned RU2 and covers an area of approximately 9.3 hectares. Existing infrastructure includes a dwelling, swimming pool, water tanks, a workers cabin, two sheds, driveway and fencing. Approximately 70% of the site is under macadamia plantation. Site photos are provided in **Appendix A**.

A site locality diagram is provided in **Illustration 1.1**.

1.5.1 Topography

The site is on moderate to steep terrain. The relief of the majority of the locality varies between 170 and 140m AHD.

1.5.2 Climate

The Bureau of Meteorology was referenced with respect to weather conditions during noise monitoring. Observations were taken from the Ballina Airport weather station (3 to 11 October 2020) and, while they give an indication of the weather conditions, they are not representative of the exact conditions while on site. Weather records taken while on site indicate that wind speeds were significant less at the site.

Significant rain and wind greater than 5km/hr were excluded from the noise monitoring results.

1.5.3 Surrounding Land use

The site is bounded by the Hinterland Way (old Pacific Highway) to the west, horticultural land uses to the north and east, native vegetation to the south east and the Bangalow Cemetery to the south.

1.6 Proposed Development

A development consent notice is also sought for the temporary use of the land for the purpose of a Rural Function Centre for up to 20 events in any 12 month period. Up to 150 guests will be permitted at each function, with not more than 1 event on any given weekend. The application is being lodged pursuant to Clause 6.11 of the Byron Local Environmental Plan 2014 and is seeking approval to operate for a 3 year period.

Whilst guests will move through various parts of the landscaped grounds in the vicinity of the dwelling, it is expected that the main focus of the temporary use will be confined to the areas adjacent to the dwelling and driveway. The proposed Function Centre will be operated in accordance with an Operational Management Plan (OMP) which has

been developed to ensure that impacts on the locality are minimised. Integral to this is the requirement for all functions to engage an approved wedding or event planner who will be responsible for overseeing the operation of the function in accordance with the OMP. Future clients (typically the bride & groom) will be required to sign contracts linked to compliance with the OMP.

1.6.1 Description of a Typical Event

Wedding functions will be held on a 'pop-up' basis, with all infrastructure required to support the event being transported to the site as required. This includes items such as marquees, furnishings, catering equipment and portable toilets. The dwelling on the land will not be accessed by function guests (other than any guests staying in the dwelling).

Weddings will typically be held on a Saturday afternoon. Ceremonies typically commence no earlier than midday and then the reception follows. All amplified music will cease no later than 10:00pm and all attendees will be off-site no later than 11:00pm (other than those staying overnight on the premises). Other functions (such as corporate events) will occur on a similar basis, with the exception of the ceremony component.

Functions on the site will involve three distinct phases:

- Phase 1 - Bump-in (1-2 days prior to function);
- Phase 2 – Function day; and
- Phase 3 – Bump-out (within 2 days of function).

We note that 'set up' and 'pack up' of the events involve relatively low key activities which are unlikely to result in noticeable off-site impacts. Accordingly, the application has focussed on mitigating against impacts associated with the activities occurring during the hosting of the function.

Frequency of Events

The application proposes that the property able to be utilised as a Function Centre for up to 20 events in any 12 month period. Up to 150 guests will be permitted at each function, with not more than 1 event on any given weekend.

1.6.2 Parking and Access

The OMP requires that vast majority of guests to the functions will be required to travel to or from the event via mini bus (coaster or the like). A small number of guests for whom this transport is not suitable (older persons or parents with young children) may access the site via taxi. The wedding party is permitted to access the site via private vehicle. All access associated with the operation of the function centre is to be obtained from Pioneers Crescent.

Vehicles typically associated with each phase of the event are summarised as follows:

Bump-in

	Inbound	Outbound	Total
Marquee Hire (Utility)	1	1	2
Wedding Hire (Utility)	2	2	4
Portable WC (LRV)	2	2	4
Wedding Coordinator	2	2	4
Catering (Utility)	1	1	2
Cool room	1	1	2
Other	2	2	4
Total			22

Function Day

	Inbound	Outbound	Total
Wedding hire – Utility	1	1	2
Wedding coordinator	2	2	4
Guests - Taxi	5	5	10
Guests – Private vehicle	6	6	12
Guests – Bus (22 Seater)	6*	6	12
Staff	3	3	6
Entertainment	1	1	2
Other (Flowers / makeup etc)	2	2	4
Total			60

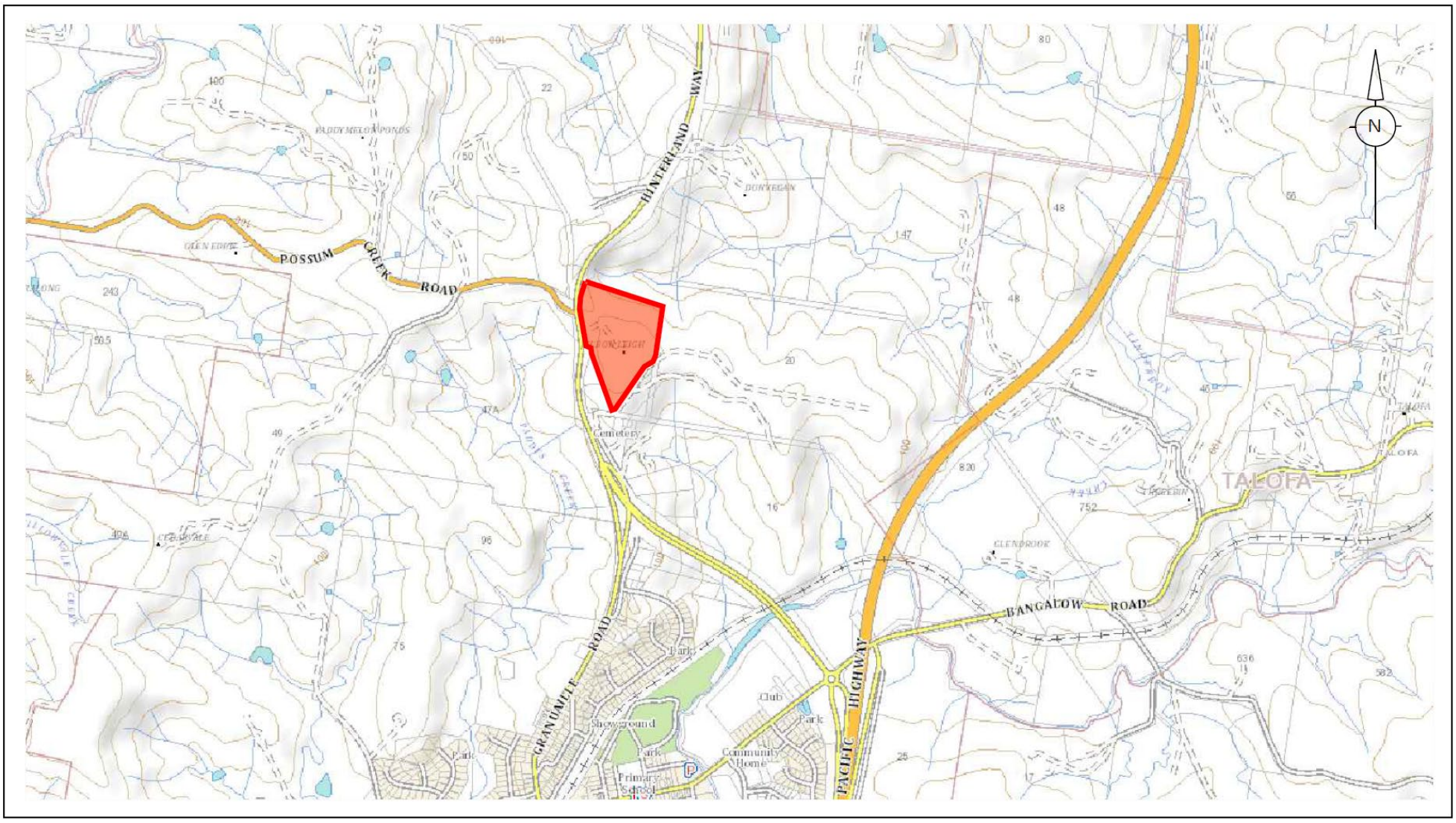
*Assumes 10 guests arriving by taxi, 12 guests arriving via private car and remainder via minibus (150 – 22 = 128, 120/22 = 5.8 mini buses).

Bump-out

	Inbound	Outbound	Total
Marquee Hire (Utility)	1	1	2
Wedding Hire (Utility)	2	2	4
Portable WC (LRV)	2	2	4
Wedding Coordinator	2	2	4
Catering (Utility)	1	1	2
Cool room	1	1	2
Other	2	2	4
Garbage removal	2	2	4
Total			24

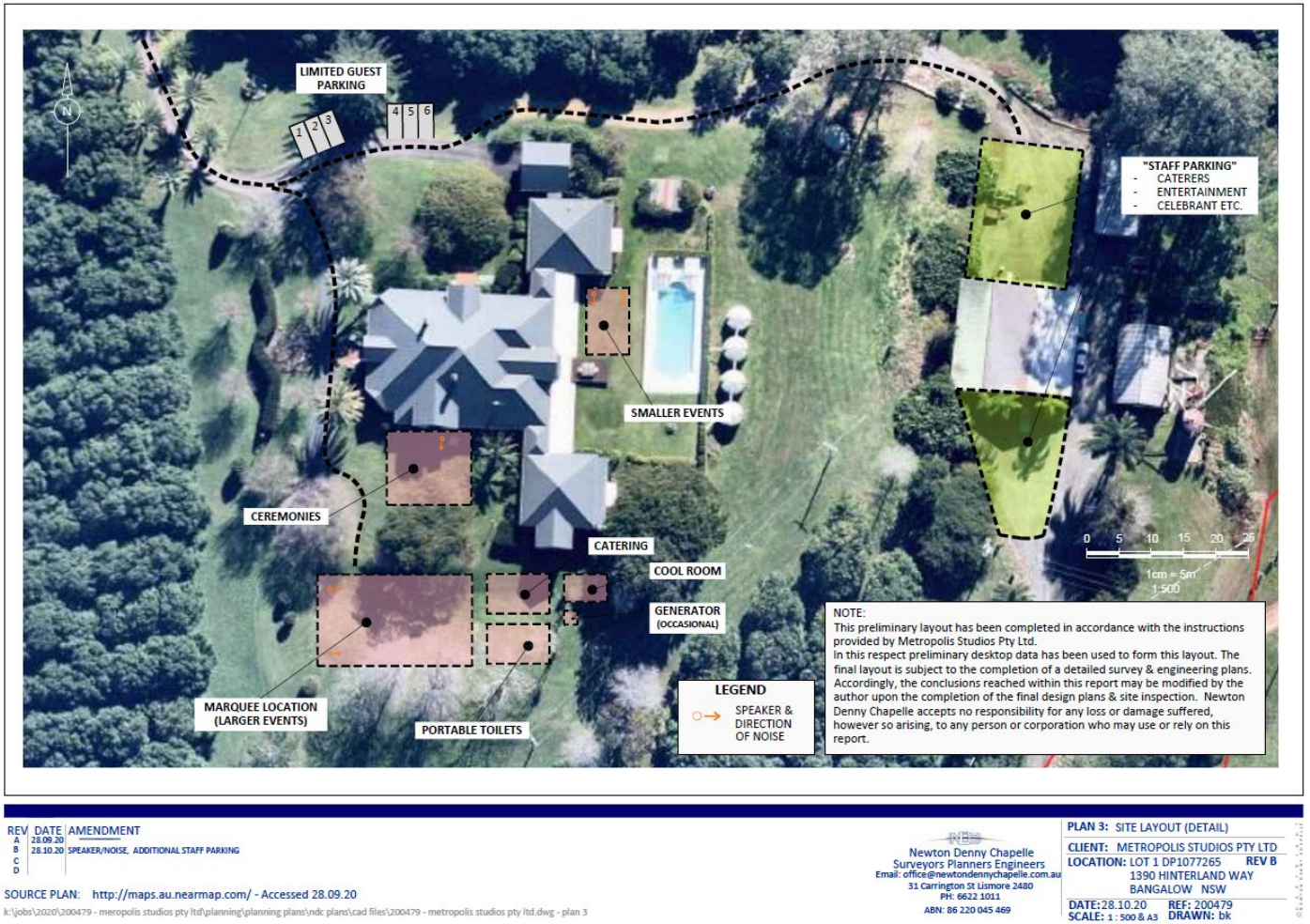
A copy of the proposed site layout plan is provided in **Illustration 1.2**.

Illustration 1.1 Site Locality



Source: NDC 2020

Illustration 1.2 Proposed Site Layout Plan



Source: NDC 2020

2. Instrumentation

2.1 Noise Monitoring Equipment

Tim Fitzroy & Associates utilised the following equipment in this Noise Impact Assessment:

- A Type 1, 1/3 Octave Band Larson Davis Noise Meter with sound recording and event trigger features

Calibration of the noise monitoring equipment was undertaken prior to use. To ensure no significant tonal drift occurred over the monitoring period, the calibration was checked before and after each measurement period.

2.2 Monitoring Methodology

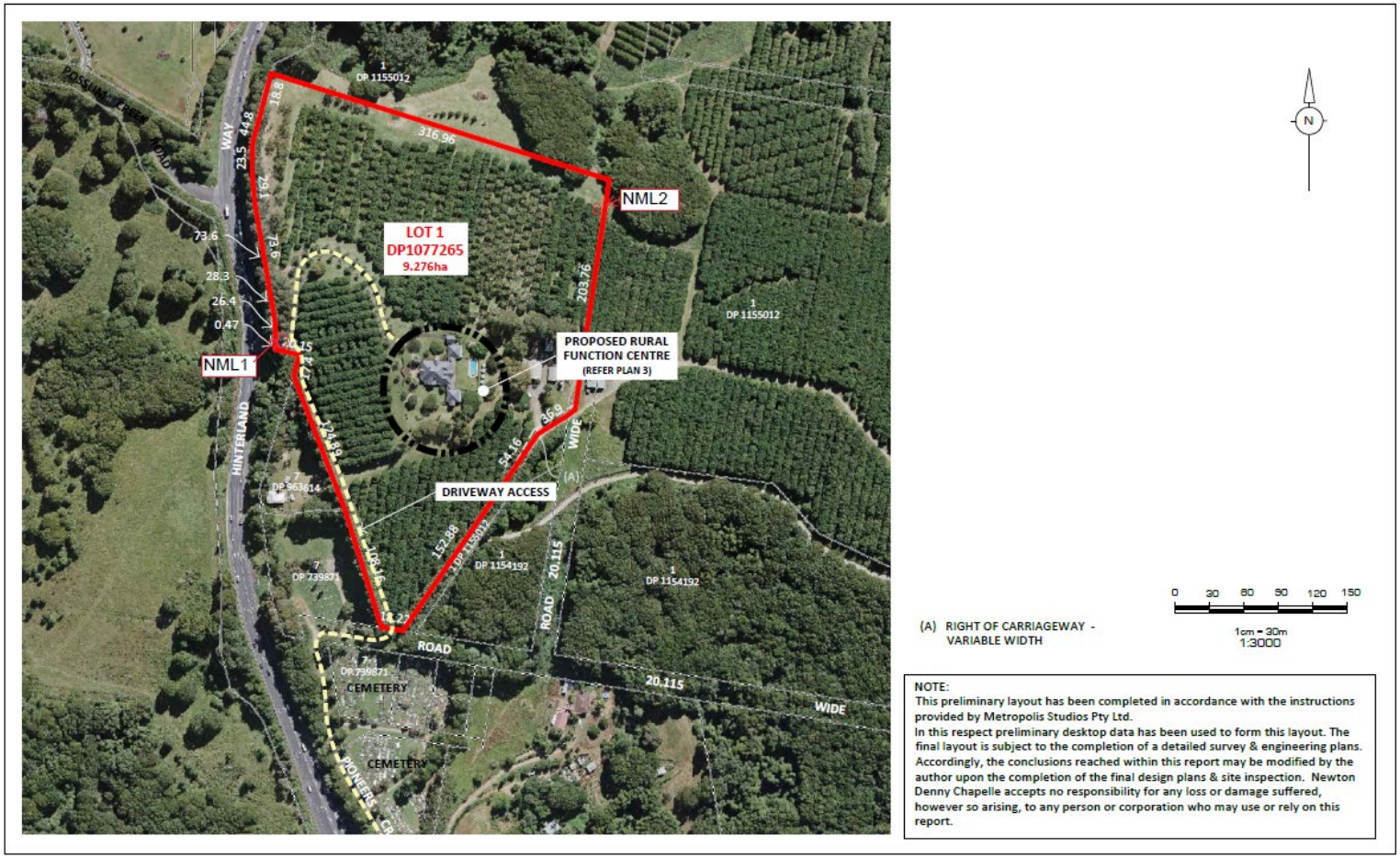
Consistent with the purpose of the acoustic assessment, the aim of the noise monitoring process was to:

- Establish existing background noise levels across the subject site;
- Examine the likely impacts of the proposed development on the existing surrounding residences in accordance with the Noise Policy for Industry (NSW EPA 2017); and
- Report on noise levels and provide recommendations to ensure that the proposed development complies as far as practicable with the intent of the relevant Noise Guidelines.

Long term noise monitoring was undertaken to establish the existing background noise environment at the nearest sensitive receiver (Dwelling No 1) located to the south west (NML1) of the subject site. In addition, long term noise monitoring was undertaken in the north east of the site (NML2) to establish existing background noise away from Hinterland Way. Ambient sound pressure levels were measured generally in accordance with Australian Standard AS1055.1:1997 - 'Acoustics-Description and measurement of environmental noise - Part 1: General procedures'. A Type 1, 1/3 Octave Band Larson Davis Noise Meter was placed at a measurement location NML1 to monitor the ambient noise levels, in continuous 15 minute intervals from 3 to 7 October 2020 and at measurement location NML2 from 7 to 11 October 2020 to gather information of background noise during the day, evening and night. The microphone at each location was 1.35m above ground level.

Illustration 2.1 shows the location of the noise meters.

Illustration 2.1 Noise Monitoring Locations



Source: NDC 2020

3. Acoustic Assessment

3.1 The Decibel Scale

The human ear responds to sound pressure levels over a very wide range – the loudest sound pressure level to which the human ear responds is ten million times greater than the quietest. This large ratio is reduced to a more manageable size by the use of logarithms. To avoid scale which is too compressed a factor of ten is introduced, giving rise to the decibel. The following **Table 3.1** provides an indication of typical A-Weighted sound pressure levels measured in decibels with typical noise sources. The table provides a good reference when comparing decibel readings.

Table 3.1 Example noise sources and the corresponding A-weighted decibel levels

Sound Pressure Level (dBA)	Typical Source	Subjective Evaluation
140	Long range gun, gunner's ear	Extremely noisy to intolerable
130	Threshold of pain	
120	Jet take-off at 100m	
110	Night club dance floor	
100	Loud car horn at 3 metres	Very noisy
90	Heavy truck at 10m	
80	Curbside of busy street	Loud
70	Car interior	
60	Normal conversation at 1m	Moderate to quiet
50	Office noise	
40	Living room in quiet area	Quiet to very quiet
30	Inside bedroom at night	
20	Unoccupied recording studio	Almost silent

The sensitivity of people to noise level changes varies from person to person. However generally, a change of up to 3 dBA in the level of a sound is difficult for most people to detect, whilst a 3 dBA to 5 dBA change corresponds to a small but noticeable change in loudness. A 10 dBA change corresponds to an approximate doubling or halving in loudness.

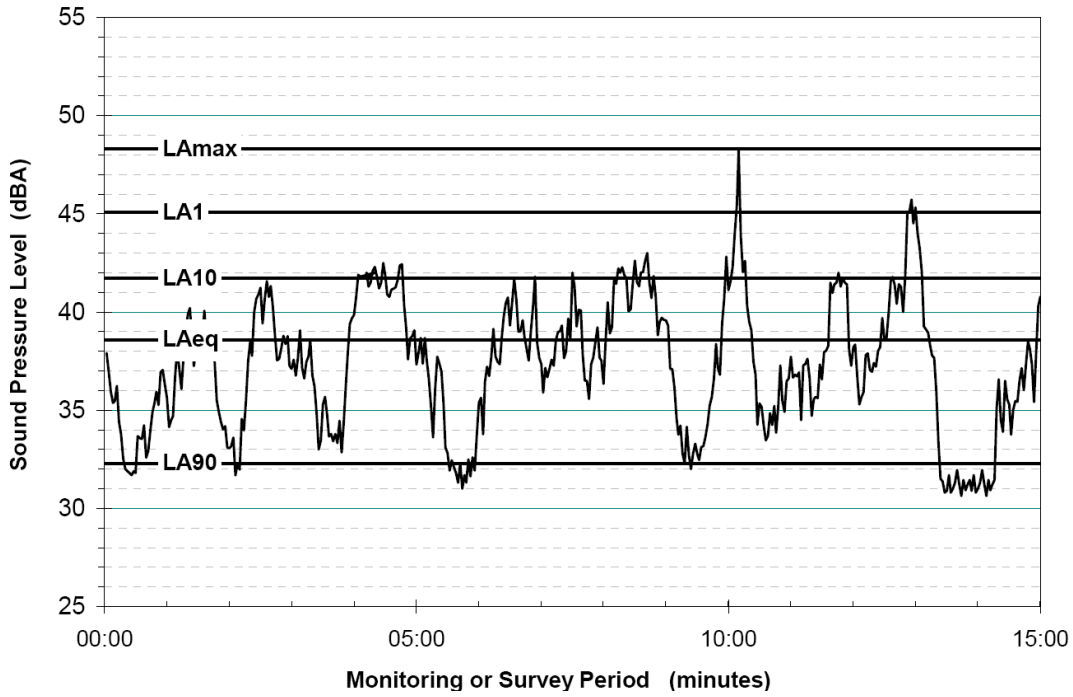
3.2 Acoustical Terms

This report makes reference to a number of different acoustical terms. Particularly the L_{Aeq}, L_{Amax}, L_{A10} and L_{A90} descriptors. Each descriptor is briefly explained below.

- The L_{Aeq} is essentially the average sound level. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time; varying sound over a defined measurement period.
- The L_{Amax} noise level is the maximum A-weighted noise level.
- The L_{A10} is the A-weighted sound pressure level exceeded 10% of a given measurement period and is utilised normally to characterise typical maximum noise levels.
- The L_{A90} noise level is the A-weighted sound pressure level exceeded 90% of a given measurement period and is representative of the average minimum background sound level (in the absence of the source under consideration), or simply the "background" level.

A graphical display of typical noise indices and the relationship between each noise descriptor is provided below in Figure 3.1.

Figure 3.1 Graphical Display of Typical Noise Indices



3.3 Existing Noise Environment

The primary noise observed while on site at NML1 emanates from vehicular movements along the Hinterland Way. Secondary noise sources impacting on the south western area of the subject site was noise from the bird calls.

The primary noise observed while on site at NML2 emanates from bird calls. Secondary noise sources impacting on the north eastern area of the subject site was noise from vehicles along the Hinterland Way.

3.3.1 Background Sound Pressure Levels

The ambient and background noise levels measured at ML1 over the monitoring period are presented in **Figure 3.2**.

Table 3.2 Background Sound Pressure Levels Site NML1

Period ***(1)***	***$L_{Aeq(period)}$*** ***(2)***	***RBL*** ***(3)***	***RBL+5 dB*** ***(5)***	***Rural Amenity Noise level***	***Project intrusiveness noise level***
Day	*64*	*41*	*46*	***50***	***46***
Evening	*58*	*35*	*40*	***45***	***40***
Night	*60*	*25**	*(30 + 5) 35*	***40***	***35***

Table 3.3 Background Sound Pressure Levels Site NML2

Period ***(1)***	***$L_{Aeq(period)}$*** ***(2)***	***RBL*** ***(3)***	***RBL+5 dB*** ***(5)***	***Rural Amenity Noise level***	***Project intrusiveness noise level***
Day	*48*	*38*	*43*	***50***	***43***
Evening	*43*	*30*	*35*	***45***	***35***
Night	*42*	*26**	*(30 + 5) 35*	***40***	***35***

* Minimum assumed RBLs apply in the new policy for Industry (NSW EPA 2017). The minimum daytime RBL = 30dB.

In accordance with the NPI (EPA, 2017) the surrounding land use in question is considered to be rural.

The NPI describes rural – *an area with an acoustical environment that is dominated by natural sounds, having little or no road traffic noise and generally characterised by low background noise levels. Settlement patterns would be typically sparse.*

Project Noise Trigger Levels

The amenity and intrusiveness noise levels were determined as shown in **Table 3.4**.

Table 3.4 Amenity and Intrusiveness Noise Levels NML1

Period	Intrusiveness noise level$_1$	Project amenity noise level$_2$
Daytime	46 dB $L_{Aeq\ 15min}$ (41 + 5)	44 $L_{Aeq\ 15min}$ (46 - 5 +3)
Evening	40 dB $L_{Aeq\ 15min}$ (35 + 5)	38 $L_{Aeq\ 15min}$ (40 - 5 + 3)
Night time	35 dB $L_{Aeq\ 15\ min}$ (30*+ 5)	33 $L_{Aeq\ 15min}$ (35 - 5 + 3)

*minimum background level = 30dB(A)

Table 3.5 Amenity and Intrusiveness Noise Levels NML2

Period	Intrusiveness noise level$_1$	Project amenity noise level$_2$
Daytime	43 dB $L_{Aeq\ 15min}$ (38 + 5)	41 $L_{Aeq\ 15min}$ (43 - 5 +3)
Evening	35 dB $L_{Aeq\ 15min}$ (30 + 5)	33 $L_{Aeq\ 15min}$ (35 - 5 + 3)
Night time	35 dB $L_{Aeq\ 15\ min}$ (30*+ 5)	33 $L_{Aeq\ 15min}$ (35 - 5 + 3)

*minimum background level = 30dB(A)

Notes:

1. Intrusiveness noise level is $L_{Aeq,15min}$ RBL + 5 (Section 2.1 (EPA 2017).
2. Project amenity noise level (ANL) is suburban ANL (Table 2.2, EPA 2017) minus 5 dB(A) plus 3 dB(A) to convert from a period level to a 15-minute level (dB = decibel; dB[A] = decibel [A-weighted]; RBL = rating background noise level).

The project noise trigger level is the lower (that is, the most stringent) value of the intrusiveness and amenity noise levels. Therefore, the project noise trigger levels are as follows:

NML1

- **daytime: $L_{Aeq,15min}$ 44 dB(A)**
- **evening: $L_{Aeq,15min}$ 38 dB(A)**
- **night-time: $L_{Aeq,15min}$ 33 dB(A).**

NML2

- **daytime: $L_{Aeq,15min}$ 41 dB(A)**
- **evening: $L_{Aeq,15min}$ 33 dB(A)**
- **night-time: $L_{Aeq,15min}$ 33 dB(A).**

Detailed noise data is provided in **Appendix B**.

Figure 3.2 Ambient and Background Noise Levels at South west Location NML1

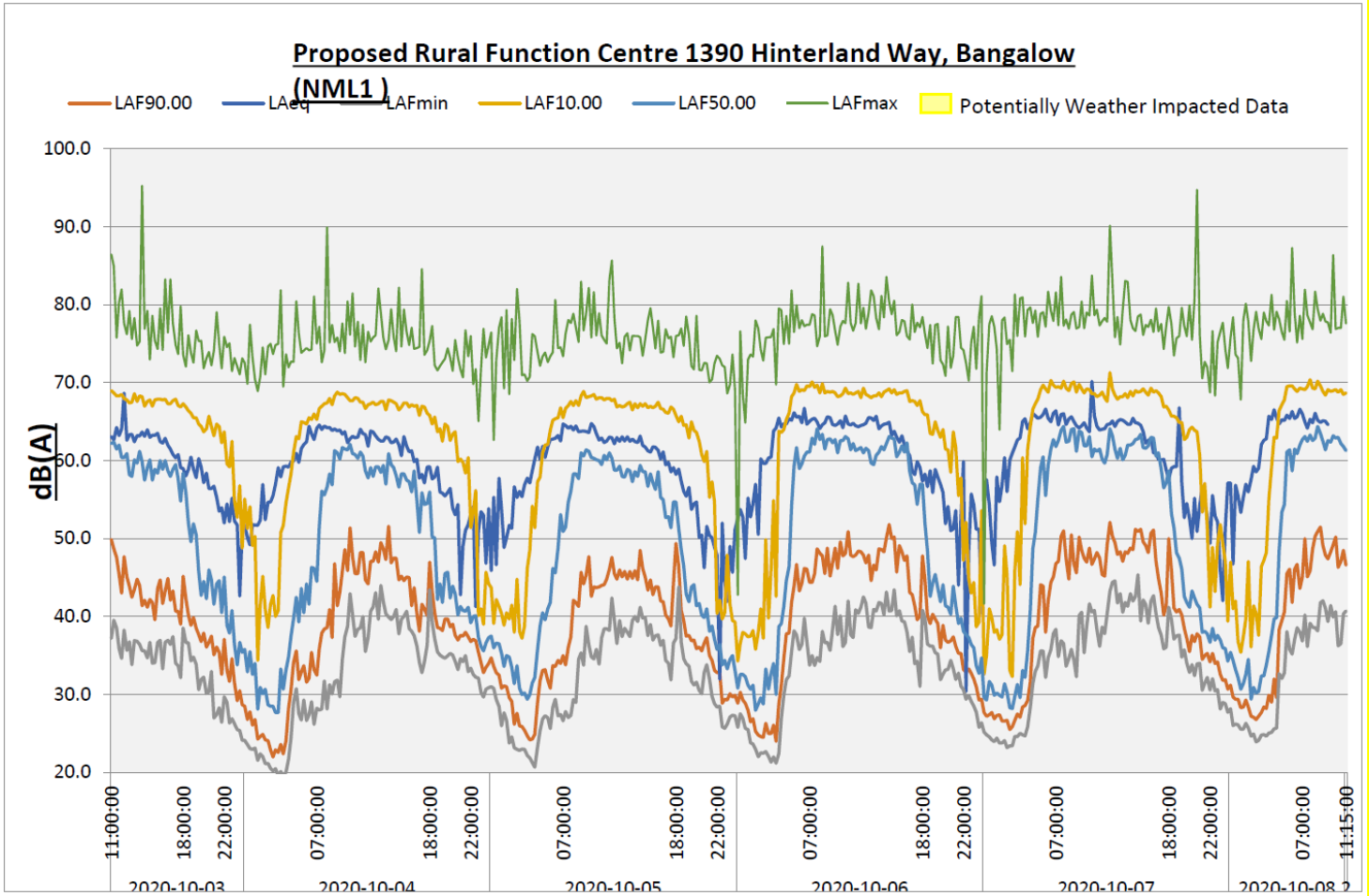
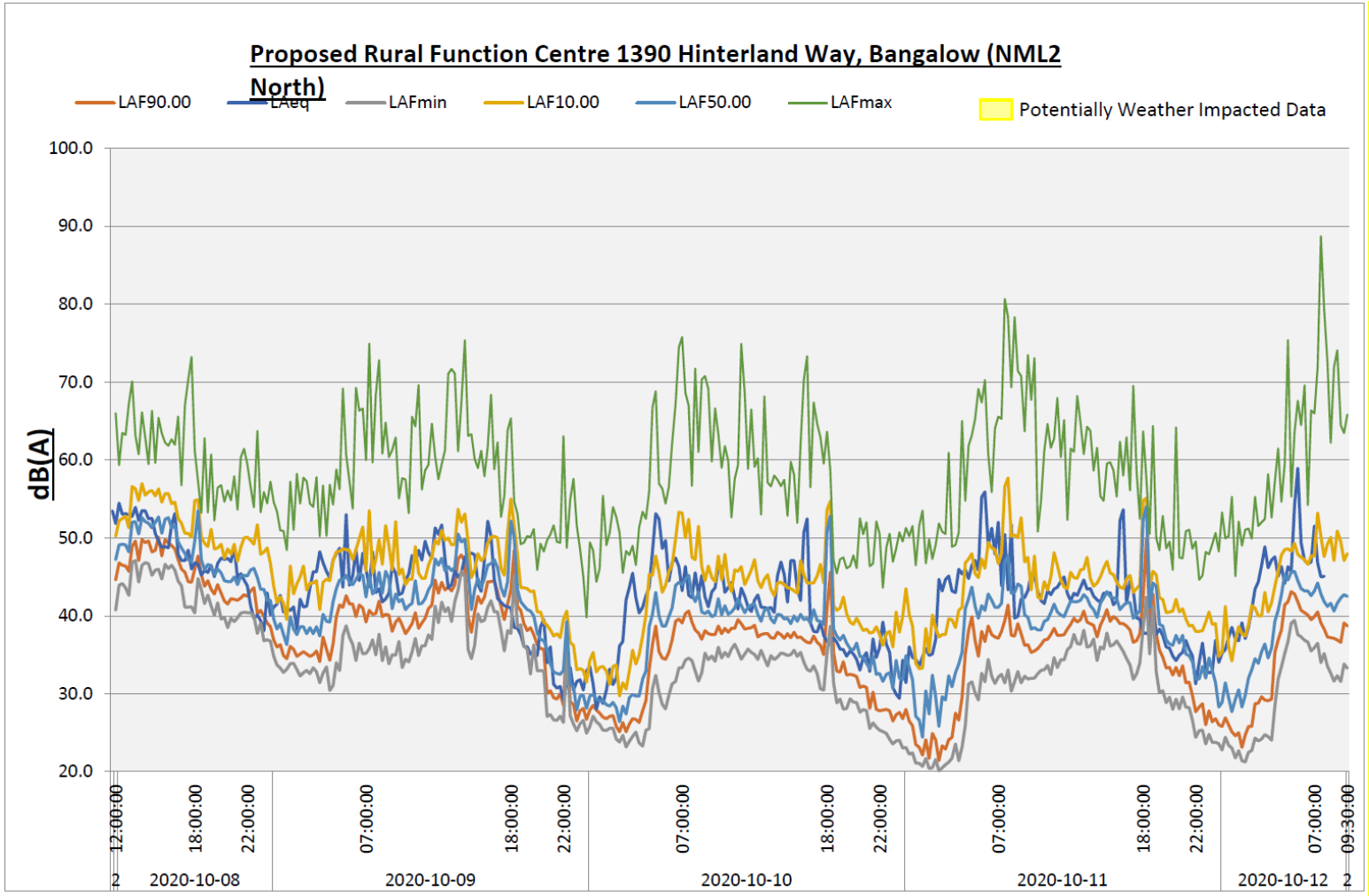


Figure 3.3 Ambient and Background Noise Levels at proposed Northeast Location NML2



3.4 Noise Model

Noise levels from the expected activities at the proposed wedding venue have been predicted to the closest sensitive dwellings using SoundPLAN v8.0 and the prediction methodology Concawe. All prediction models have limits to their accuracy of prediction. This is due to the inherent nature of the calculation algorithms that go into the design of the models, the assumptions made in the implementation of the model, and the availability of good source sound power data. Various researchers have suggested that an un-calibrated model has an accuracy of ±5 dB while a calibrated model has an accuracy of ±2 dB. Calibration means that the model has been established with reference to measured sound levels at a receiver, known source levels and tightly defined propagation variables (wind speed and direction, for example). Alternatively, a series of predictions with different programs but the same assumption variables can be used for verification purposes.

3.4.1 Noise Sources

Noise sources from the site are expected to include vehicle movements, plant and equipment, patrons, and amplified entertainment. Each noise source is described below, with source levels presented in **Table 3.6** and modelled locations presented in **Plate 3.1.**

- **Car movements** are represented in the noise model as a moving point source with a speed of 20kph and 30 movements per hour. The number of movements per hour presents a worst case where all expected vehicles arrive or leave within one hour.
- **Truck and bus movements** are represented in the noise model as a moving point source with a speed of 20kph and 6 movements per hour**.**
- **Plant noise** is represented in the noise model as point sources in the location specified on the supplied plans for the cool room, generator, and catering. The precise size of the generator is not known, but it is understood the generator is used to power the cool room for which a 3 kVa generator is sufficient and is modelled as such. Source levels for the cool room are based on an outdoor condenser unit from the SoundPlan emission library. Noise from catering is represented by a nominal point source level of 75 dB(A).
- **Patron noise** is represented in the noise model as point sources with a source level that represents 150 patrons according to Prediction of Noise from Small to Medium Sized Crowds (Hayne et al., 2011). Point sources are positioned 1.5m above ground centrally in each proposed area.
- **Amplified entertainment** is represented in the noise model as point sources positioned at the locations indicated on the supplied plans. Nominal directivity is applied to the direction indicated using the SoundPlan directivity library for a JBL outdoor speaker. The point sources run continuously at a level of 94dB(A) at 1m. Speaker sources are positioned 1.5m above ground.

Table 3.6 Noise Source

Description	dB(Z) (Hz)								Sum dB(A)	
	63	125	250	500	1k	2k	4k	8k	Leq	Lmax
Vehicle Movements (SWL)	95	96	82	80	77	76	74	69	85	85
Truck Movements (SWL)	95	96	82	80	77	76	74	69	94	94
Car Door Closure (SWL) Lmax	84	87	88	90	90	86	84	79	N/A	94
Cool Room (SWL)	62	69	71	65	60	60	57	56	68	N/A
Generator (SWL)	99	94	91	86	84	81	79	77	90	N/A
Catering (SWL)	84	79	76	71	69	66	64	62	75	N/A
Amplified Entertainment (SWL)	104	108	99	98	95	94	92	89	102	N/A
Patron Noise x 150 (SWL)	-	86	93	96	92	87	82	76	97	105

Plate 3.1 Location of point and area noise sources (vehicle sources are shown in Plate 3.2)

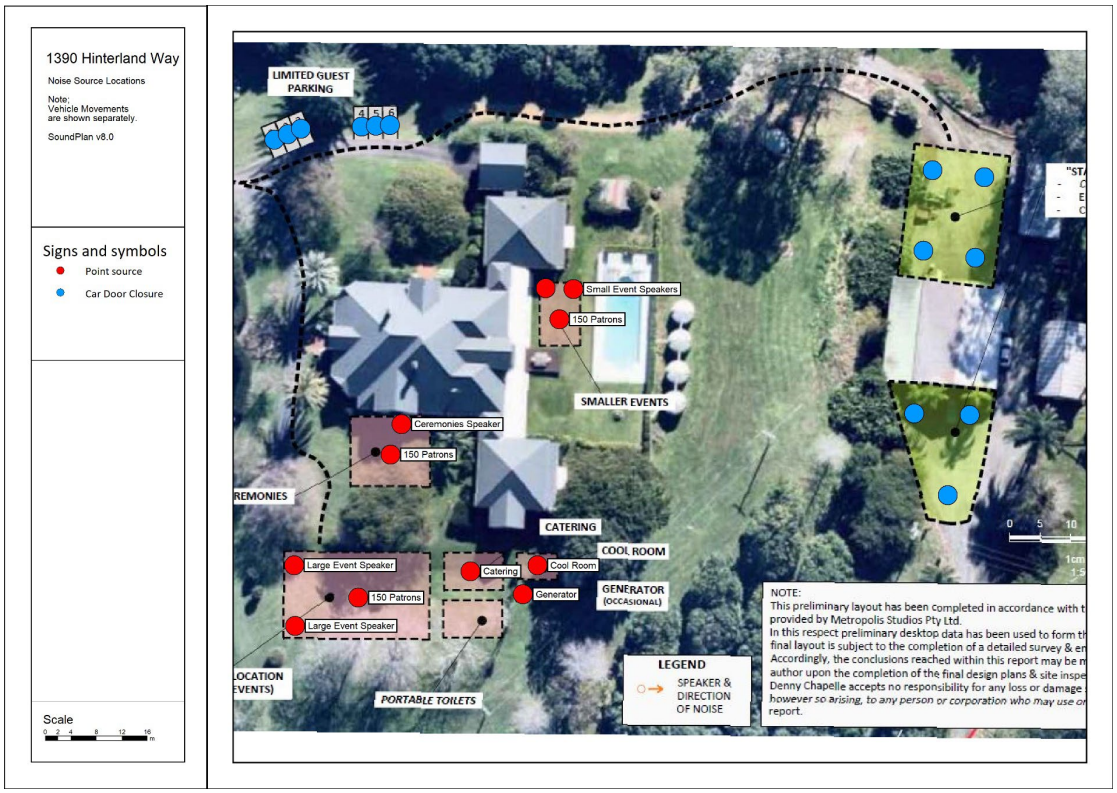
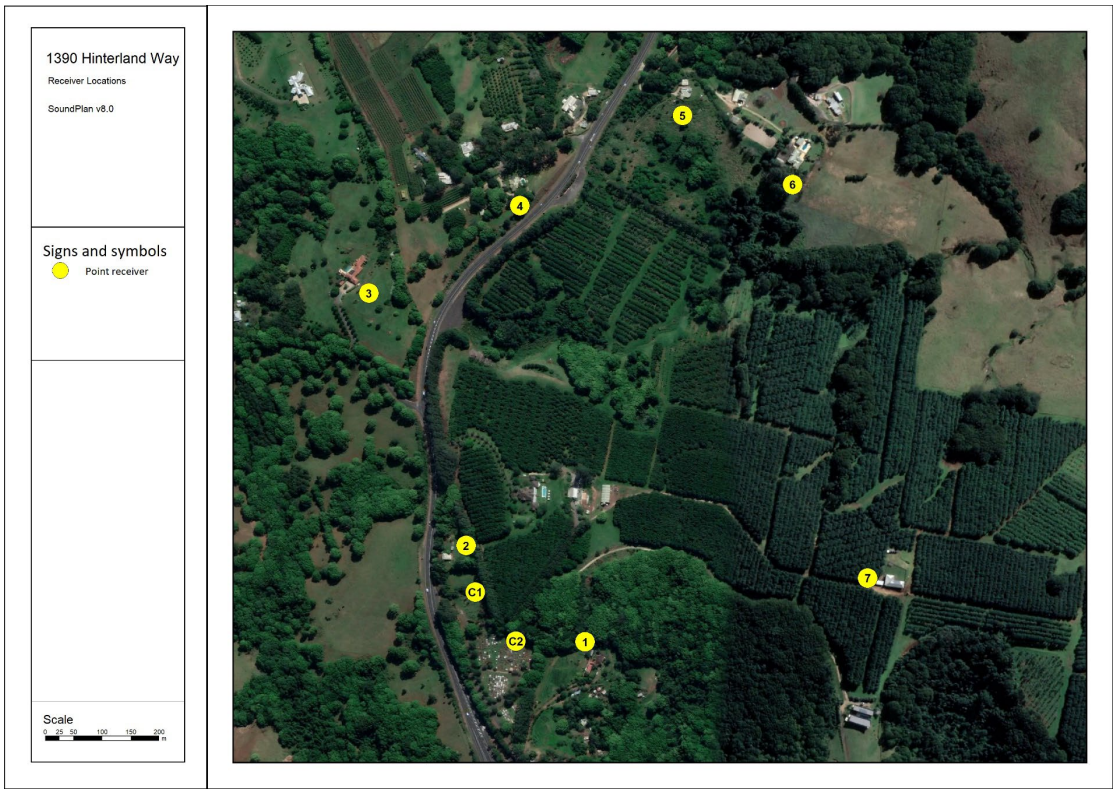


Plate 3.2 Location of vehicle movement noise sources (cars and trucks)

3.4.2 Sensitive Receptors

Seven nearby residential receivers have been chosen to represent the closest surrounding uses. Receptor points are placed 30 metres from the residence in the direction of the noise sources. Receiver points are modelled at a height of 1.5m above ground and predicted levels are free-field. Receptor locations are presented in **Plate 3.3.** Receptors C1 and C2 are included for assessment of the cemetery. Although the cemetery is not expected to be sensitive during the night period, assessment is presented for all time periods.

Plate 3.3 Location of sensitive receptors



3.4.3 Weather Conditions

Noise modeling has been made using the prediction methodology *Concawe* which may be used to present both Standard and Noise-enhancing meteorological conditions.

- **Standard meteorological conditions** are represented in the SoundPlan software with a stability class of D and wind speed of 0.5m/s source-to-receiver.
- **Noise-enhancing meteorological conditions for daytime and evening** are represented in the SoundPlan software with a stability class of D and wind speed of 3m/s source-to-receiver.
- **Noise-enhancing meteorological conditions for night-time** are represented in the SoundPlan software with a stability class of F and wind speed of 2m/s source-to-receiver.

Annual wind roses from Ballina are considered representative of this location. Wind from 0 m/s to 3m/s does not occur for more than 30% of time in one direction in either the 9am or 3pm wind rose, therefore daytime and evening predictions are made using standard meteorological conditions.

Noise generating activities at the site are not proposed for more than 30% of the night-time period, therefore night-time predictions are made using standard meteorological conditions.

3.4.4 Model Verification

The noise model presents future scenarios that have not been measured on site and validation measurements are not possible, the model is therefore considered to be uncalibrated.

3.4.5 Calculation of Noise Levels

Noise levels from the site have been predicted to each receptor. Predicted noise levels include screening from surrounding structures and topography, with topographic information sourced from Geoscience Australia. Predicted noise levels are presented for the following scenarios:

1. Vehicles and plant only (i.e. patrons arriving and leaving, Leq),
2. Patrons and music at the Ceremony location (including plant),
3. Patrons and music at the Small Events location (including plant),
4. Patrons and music at the Large Events location (including plant),
5. Door closures and patrons at all event areas (i.e. patrons leaving, Lmax, night).

The ceremony and event locations are expected to be limited to the day and evening time periods; however, assessment is also presented for the night period to demonstrate the possible exceedances should events run later than 10pm.

Predicted noise levels are presented with assessment to the NPfI criteria in **Tables 3.7 to 3.11** and visual noise contours are presented in **Plates 3.4** to **3.8.** It is noted that noise from patrons and amplified entertainment is excluded from the NPfI and would ultimately be assessed against the Liquor & Gaming NSW criteria. Assessment to the Liquor & Gaming NSW criteria is based on detailed measurements taken at the site to determine operational noise limits, and predictive assessment to the criteria is not meaningful. In this case, cumulative noise from all sources are assessed against the NPfI criteria.

Table 3.7 Predicted noise levels, standard meteorology, vehicle movements, cool room, generator and catering noise sources operating. Levels are in dB(A) Leq

Receptor	Receiver Type	Noise Level	Criteria			Assessment		
			Day	Evening	Night	Day	Evening	Night
1	Residential	14	41	35	35	Pass	Pass	Pass
2	Residential	38	41	35	35	Pass	+3	+3
3	Residential	18	41	35	35	Pass	Pass	Pass
4	Residential	16	41	35	35	Pass	Pass	Pass
5	Residential	13	41	35	35	Pass	Pass	Pass
6	Residential	14	41	35	35	Pass	Pass	Pass
7	Residential	16	41	35	35	Pass	Pass	Pass
C1	Cemetery	36	50	50	50	Pass	Pass	Pass
C2	Cemetery	27	50	50	50	Pass	Pass	Pass

Plate 3.4 Noise contours at 1.5m above ground, standard meteorology, vehicle movements, cool room, generator and catering noise sources operating. Levels are in dB(A) Leq

Table 3.8 Predicted noise levels, standard meteorology, patrons and music at the Ceremony location. Levels are in dB(A) Leq.

Receptor	Receiver Type	Noise Level	Criteria			Assessment		
			Day	Evening	Night	Day	Evening	Night
1	Residential	21	41	35	35	Pass	Pass	Pass
2	Residential	40	41	35	35	Pass	+5	+5
3	Residential	17	41	35	35	Pass	Pass	Pass
4	Residential	14	41	35	35	Pass	Pass	Pass
5	Residential	13	41	35	35	Pass	Pass	Pass
6	Residential	14	41	35	35	Pass	Pass	Pass
7	Residential	17	41	35	35	Pass	Pass	Pass
C1	Cemetery	30	50	50	50	Pass	Pass	Pass
C2	Cemetery	32	50	50	50	Pass	Pass	Pass

Plate 3.5 Noise contours at 1.5m above ground, standard meteorology, patrons and music at the Ceremony location. Levels are in dB(A) Leq

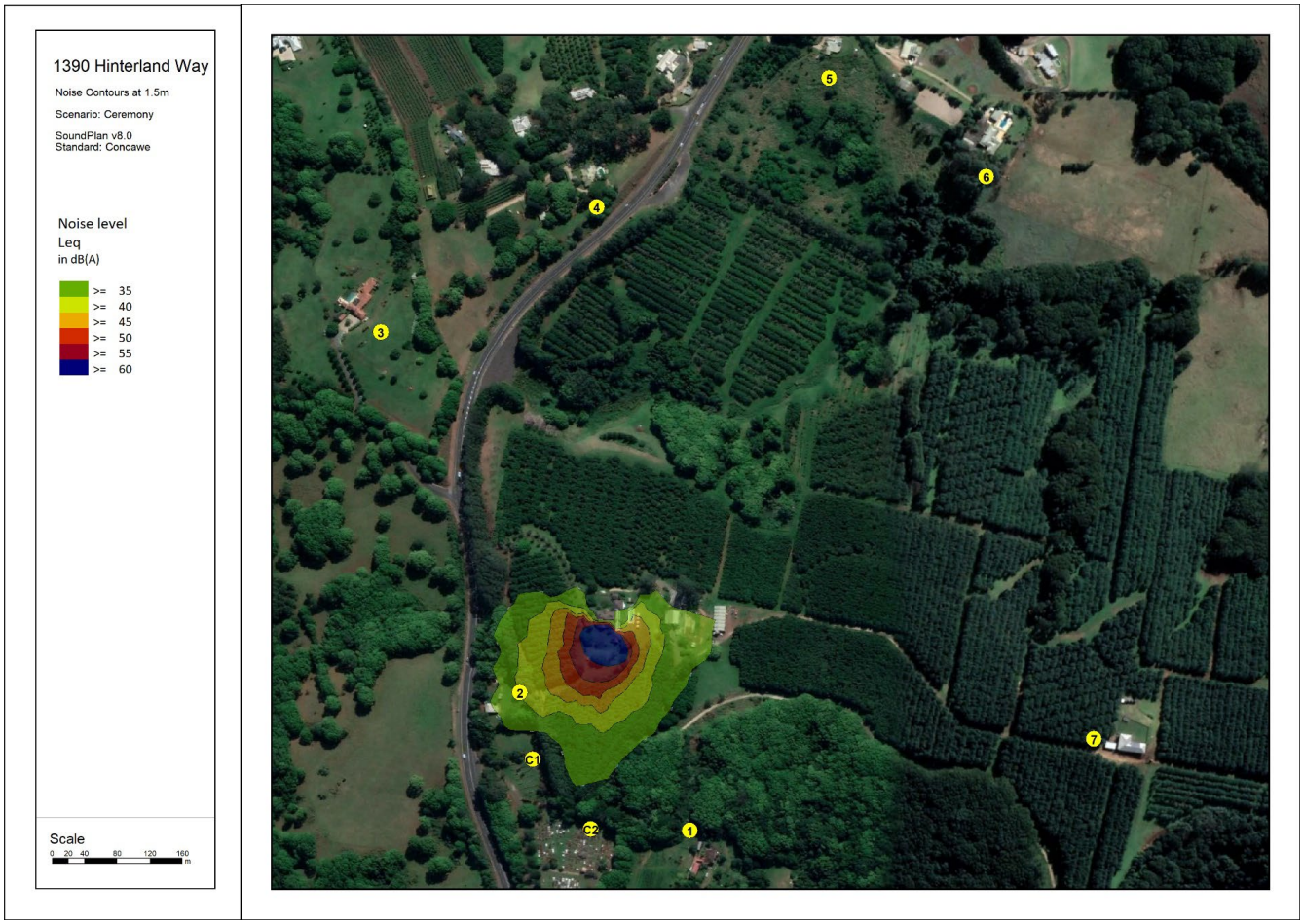


Table 3.9 Predicted noise levels, standard meteorology, patrons and music at the Small Event location (including plant). Levels are in dB(A) Leq.

Receptor	Receiver Type	Noise Level	Criteria			Assessment		
			Day	Evening	Night	Day	Evening	Night
1	Residential	24	41	35	35	Pass	Pass	Pass
2	Residential	28	41	35	35	Pass	Pass	Pass
3	Residential	18	41	35	35	Pass	Pass	Pass
4	Residential	27	41	35	35	Pass	Pass	Pass
5	Residential	26	41	35	35	Pass	Pass	Pass
6	Residential	26	41	35	35	Pass	Pass	Pass
7	Residential	28	41	35	35	Pass	Pass	Pass
C1	Cemetery	25	50	50	50	Pass	Pass	Pass
C2	Cemetery	22	50	50	50	Pass	Pass	Pass

Plate 3.6 Noise contours at 1.5m above ground, standard meteorology, patrons and music at the Small Event location. Levels are in dB(A) Leq

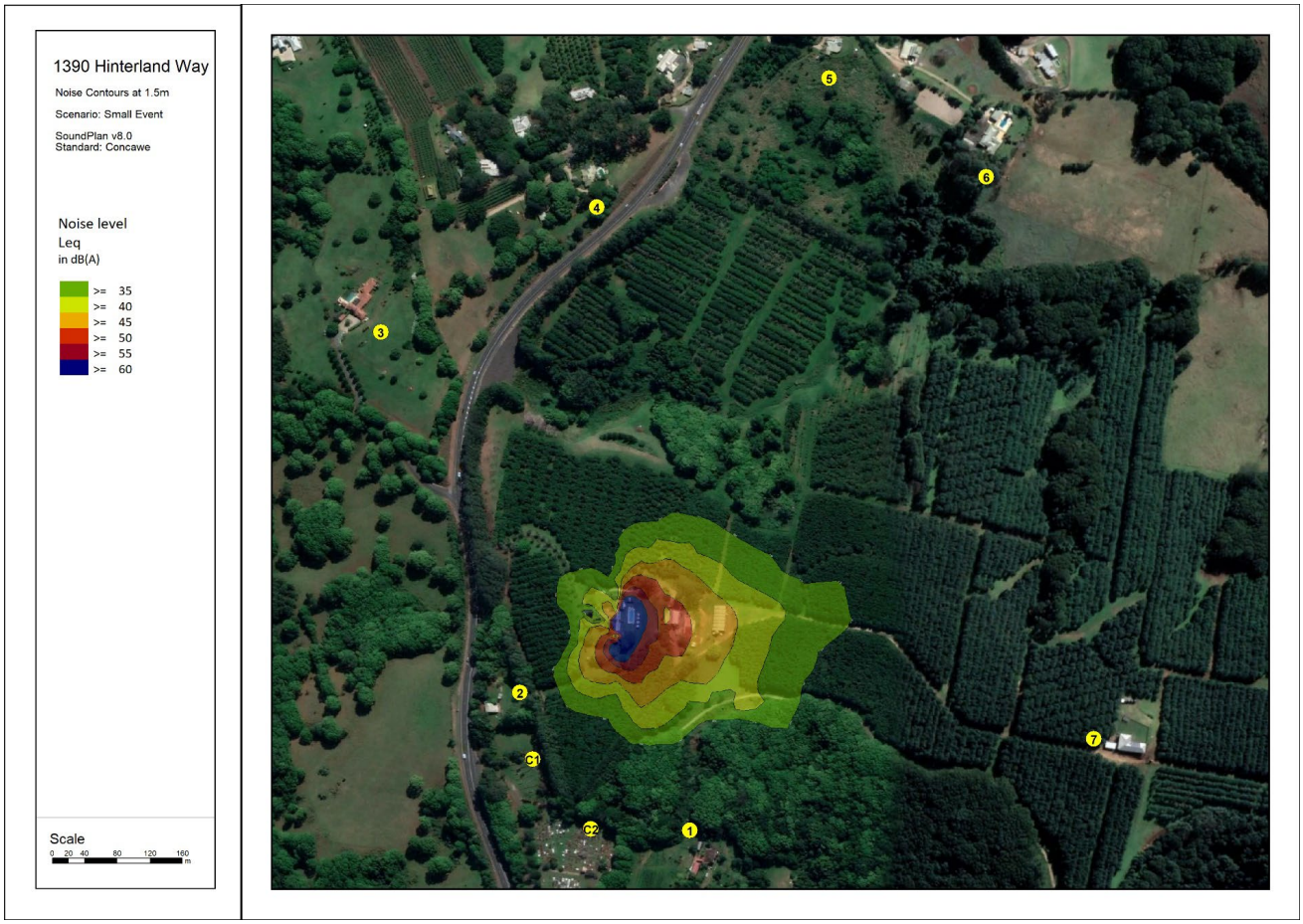


Table 3.10 Predicted noise levels, standard meteorology, patrons and music (including plant) at the Large Event location. Levels are in dB(A) Leq

Receptor	Receiver Type	Noise Level	Criteria			Assessment		
			Day	Evening	Night	Day	Evening	Night
1	Residential	23	41	35	35	Pass	Pass	Pass
2	Residential	41	41	35	35	Pass	+6	+6
3	Residential	29	41	35	35	Pass	Pass	Pass
4	Residential	23	41	35	35	Pass	Pass	Pass
5	Residential	15	41	35	35	Pass	Pass	Pass
6	Residential	16	41	35	35	Pass	Pass	Pass
7	Residential	29	41	35	35	Pass	Pass	Pass
C1	Cemetery	33	50	50	50	Pass	Pass	Pass
C2	Cemetery	30	50	50	50	Pass	Pass	Pass

Plate 3.7 Noise contours at 1.5m above ground, standard meteorology, patrons and music (including plant) at the Large Event location. Levels are in dB(A) Leq.

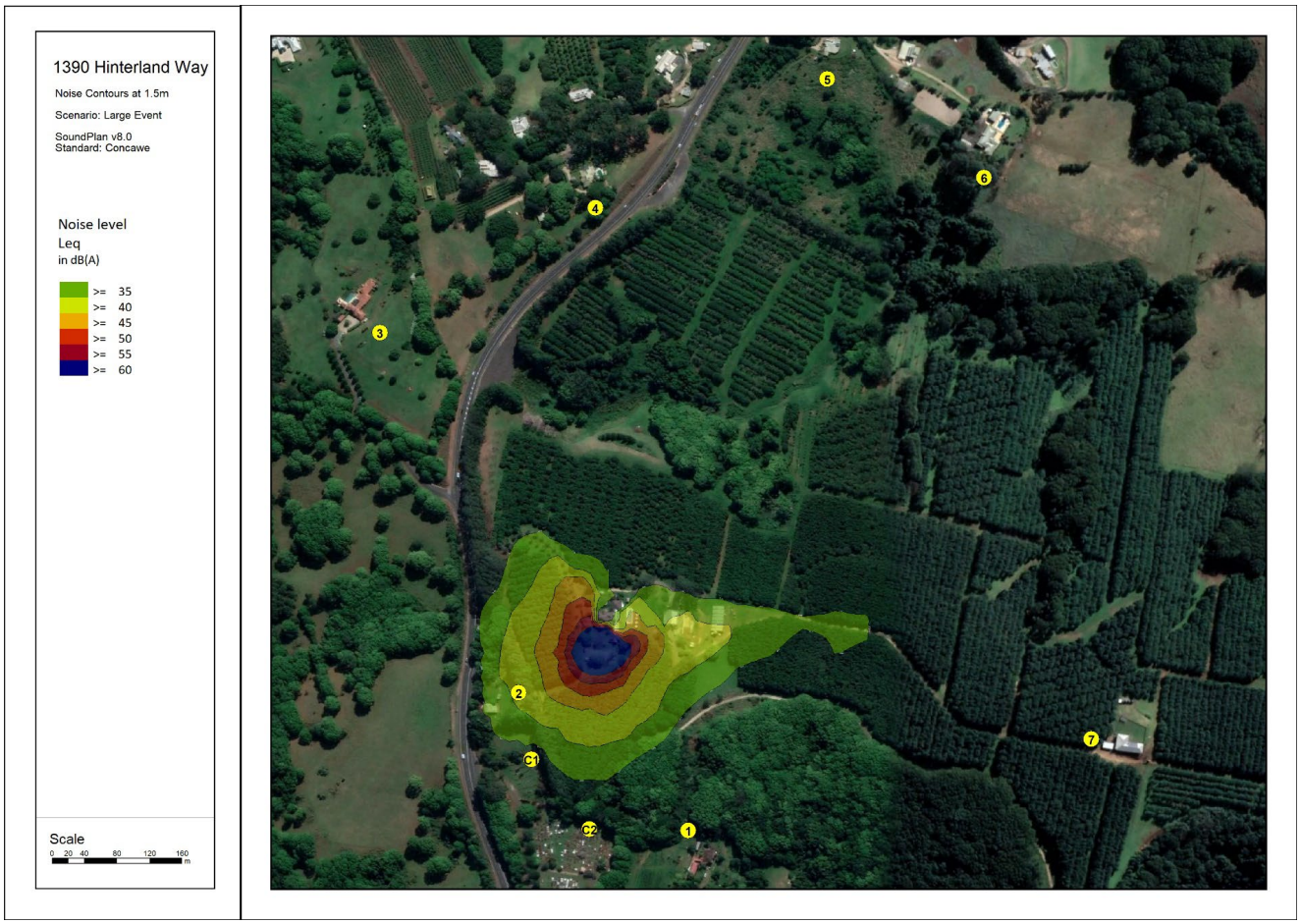


Table 3.11 Predicted noise levels, standard meteorology, Vehicle movements, car door closures and patrons at all event areas (Lmax, night). Levels are in dB(A) Lmax.

Receptor	Receiver Type	Noise Level	Criteria	Assessment
1	Residential	22	52	Pass
2	Residential	54	52	+2
3	Residential	35	52	Pass
4	Residential	29	52	Pass
5	Residential	32	52	Pass
6	Residential	32	52	Pass
7	Residential	33	52	Pass
C1	Cemetery	50	52	Pass
C2	Cemetery	44	52	Pass

Plate 3.8 Noise contours at 1.5m above ground, standard meteorology, Vehicle movements, car door closures and patrons at all event areas (Lmax, night). Levels are in dB(A) Lmax.

3.4.6 Offensive Noise

In accordance with D9.4.1 this NIA has considered as to whether noise associated with the proposed rural function centre could be deemed to be *offensive* under the Protection of the Environment Operation (POEO) Act 1997.

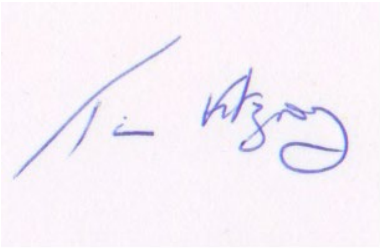
4. Conclusion

A noise model has been constructed to predict the propagation of noise from vehicle movements, plant and equipment, patrons, and amplified entertainment from the proposed wedding venue. The model includes shielding effects from topography and existing structures. Topography information included in the model was sourced from Geoscience Australia.

It is concluded that –

- Noise levels from vehicles, plant and equipment are predicted to meet criteria at all nearby receptors during the day period. An exceedance of the evening and night criteria by 3 dB(A) is predicted at Receptor 2 which is primarily caused by truck movements passing the receiver on the driveway.
- Noise levels from the Ceremony location (including 150 patrons, amplified music, plant and equipment) is predicted to meet criteria at all nearby receptors during the day period. An exceedance of the evening and night criteria by 5 dB(A) is predicted at Receptor 2, which is primarily caused by amplified music and patron noise.
- Noise levels from the Small Event location (including 150 patrons, amplified music, plant and equipment) is predicted to meet criteria at all nearby receptors during all time periods.
- Noise levels from the Large Event location (including 150 patrons, amplified music, plant and equipment) is predicted to meet criteria at all nearby receptors during the day period. An exceedance of the evening and night criteria by 6 dB(A) is predicted at Receptor 2, which is primarily caused by amplified music and patron noise.
- Noise levels from relevant Lmax sources that may occur at night (including patrons at all event areas, and car door closures) are predicted to exceed criteria by 2 dB(A) at Receptor 2. The exceedance is caused by truck movements passed the receiver on the driveway.

This report has been prepared by Tim Fitzroy of *Tim Fitzroy & Associates.* Noise Modelling was undertaken by Matt Dever of *Noise Management Services.*



Tim Fitzroy
Environmental Health Scientist
Environmental Auditor

References

NSW EPA 2017 Noise Policy for Industry, Environment Protection Authority, Sydney

NSW DECC, 2009 Noise Guide for Local Government, Department of Environment, Climate Change & Water, Sydney

A/NZ Standards, 1987 Internal noise limits from Australian/New Zealand Standard AS/NZS 2107:1987.

World Health Organisation 1999 Guidelines for Community Noise (Editor B Berglund et al Geneva Switzerland 1999)

Copyright and Usage

A Site Photos

Photo A Location for Large Events

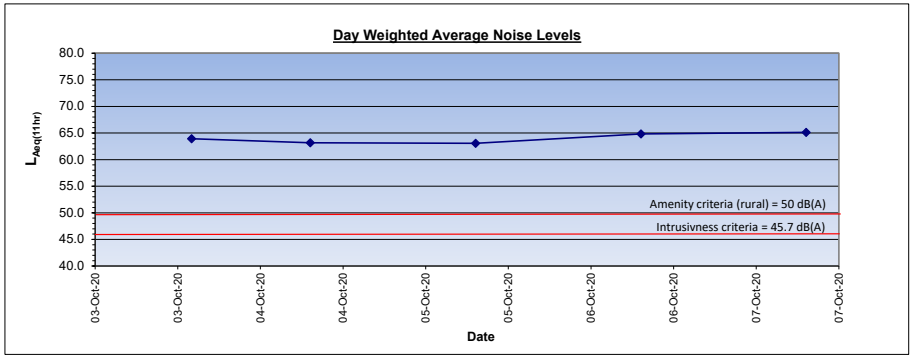
Photo B Location of Smaller Events

B Noise Data

Noise Assessment

Day Period	7am to 6pm		
amenity criteria	50	dB(A)	rural
Intrusiveness criteria (RBL+ 5)	45.7	dB(A)	
Interim Construction Noise Guidelines (RBL + 10)	50.7	dB(A)	
Average LaeqDay 07:00-18:00	64.0	dB(A)	

Day	Date	$L_{Aeq(day)}$	ABL	RBL
Saturday	3/10/2020	63.9	40.7	
Sunday	4/10/2020	63.1	38.1	
Monday	5/10/2020	63.1	38.8	**40.7**
Tuesday	6/10/2020	64.8	42.8	
Wednesday	7/10/2020	65.1	44.8	



no.	Date	time	$L_{Aeq(15\ minute)}$	$L_{A90(15minute)}$	$L_{A90(15min)}$ assending order	$10^{((L_{Aeq(15\ minute)}/10))}$	period sums	hrly sums	hrly Laeq
1	2020-10-03	11:00:00	65.7	49.9	39.0	3684945		3684945	
2	2020-10-03	11:15:00	65.4	48.7	39.6	3451493			
3	2020-10-03	11:30:00	64.3	47.6	40.7	2683249			
4	2020-10-03	11:45:00	64.6	45.4	40.7	2870047			
5	2020-10-03	12:00:00	64.7	43.0	41.2	2982339		11987128	64.8
6	2020-10-03	12:15:00	63.6	47.7	41.4	2290820			
7	2020-10-03	12:30:00	63.5	45.1	41.7	2257766			
8	2020-10-03	12:45:00	63.1	43.9	41.8	2037788			
9	2020-10-03	13:00:00	62.7	42.5	42.1	1855269		8441644	63.2
10	2020-10-03	13:15:00	64.3	43.5	42.1	2663710			
11	2020-10-03	13:30:00	63.2	44.8	42.2	2110367			
12	2020-10-03	13:45:00	64.1	44.0	42.5	2547229			
13	2020-10-03	14:00:00	68.7	41.4	43.0	7331536		14652843	65.6
14	2020-10-03	14:15:00	62.6	42.1	43.3	1827381			
15	2020-10-03	14:30:00	63.3	41.2	43.3	2155336			
16	2020-10-03	14:45:00	63.4	42.2	43.5	2180294			
17	2020-10-03	15:00:00	62.4	41.8	43.6	1744074		7907085	63.0
18	2020-10-03	15:15:00	63.2	39.6	43.9	2100574			
19	2020-10-03	15:30:00	63.2	43.6	44.0	2078543			
20	2020-10-03	15:45:00	63.7	44.7	44.7	2329180			
21	2020-10-03	16:00:00	63.1	41.7	44.8	2056909		8565205	63.3
22	2020-10-03	16:15:00	64.0	43.3	44.9	2495456			
23	2020-10-03	16:30:00	63.0	44.9	45.1	1990742			
24	2020-10-03	16:45:00	63.2	42.1	45.2	2111402			
25	2020-10-03	17:00:00	63.3	43.3	45.4	2118264		8715865	63.4

26	2020-10-03	17:15:00	63.5	40.7	47.6	2243314			
27	2020-10-03	17:30:00	62.5	40.7	47.7	1759450			
28	2020-10-03	17:45:00	62.3	39.0	48.7	1679090			
29	2020-10-03	18:00:00	62.9	45.2	49.9	1932418		7614272	62.8
							71568986		
1	2020-10-04	07:15:00	61.6	35.9	35.9	1429496			
2	2020-10-04	07:30:00	62.1	37.9	37.3	1612761			
3	2020-10-04	07:45:00	62.4	38.4	37.9	1750209			
4	2020-10-04	08:00:00	64.4	38.6	38.1	2756830		7549297	62.8
5	2020-10-04	08:15:00	63.4	40.9	38.4	2208274			
6	2020-10-04	08:30:00	62.7	37.3	38.6	1863104			
7	2020-10-04	08:45:00	64.2	46.8	40.1	2600878			
8	2020-10-04	09:00:00	64.6	41.4	40.4	2876014		9548270	63.8
9	2020-10-04	09:15:00	64.0	43.1	40.9	2514896			
10	2020-10-04	09:30:00	64.4	45.8	41.0	2778312			
11	2020-10-04	09:45:00	64.2	48.6	41.4	2636574			
12	2020-10-04	10:00:00	64.3	45.9	41.4	2663361		10593143	64.2
13	2020-10-04	10:15:00	63.9	51.4	41.6	2445271			
14	2020-10-04	10:30:00	64.1	47.7	43.1	2545927			
15	2020-10-04	10:45:00	63.8	45.5	43.7	2416529			
16	2020-10-04	11:00:00	63.9	45.5	44.2	2468579		9876306	63.9
17	2020-10-04	11:15:00	63.4	48.2	44.6	2204697			
18	2020-10-04	11:30:00	63.7	48.2	44.7	2354605			
19	2020-10-04	11:45:00	62.3	44.7	44.7	1701163			
20	2020-10-04	12:00:00	62.8	44.2	45.0	1904316		8164781	63.1
21	2020-10-04	12:15:00	63.1	47.1	45.1	2061641			
22	2020-10-04	12:30:00	62.9	47.1	45.2	1967565			
23	2020-10-04	12:45:00	63.0	48.3	45.5	2014652			
24	2020-10-04	13:00:00	64.0	47.0	45.5	2534989		8578846	63.3
25	2020-10-04	13:15:00	63.5	49.5	45.8	2232261			
26	2020-10-04	13:30:00	63.3	48.7	45.9	2161862			
27	2020-10-04	13:45:00	61.9	47.3	46.8	1532671			
28	2020-10-04	14:00:00	63.8	51.6	46.9	2394881		8321676	63.2
29	2020-10-04	14:15:00	63.7	46.9	47.0	2329469			
30	2020-10-04	14:30:00	63.2	47.5	47.0	2089609			
31	2020-10-04	14:45:00	62.8	47.5	47.1	1886232			
32	2020-10-04	15:00:00	62.5	44.7	47.1	1793560		8098870	63.1
33	2020-10-04	15:15:00	62.5	45.2	47.3	1782235			
34	2020-10-04	15:30:00	63.1	44.6	47.5	2027585			
35	2020-10-04	15:45:00	62.9	45.1	47.5	1959363			
36	2020-10-04	16:00:00	62.3	45.0	47.7	1703354		7472538	62.7
37	2020-10-04	16:15:00	62.4	41.4	48.2	1730968			
38	2020-10-04	16:30:00	62.8	43.7	48.2	1902160			
39	2020-10-04	16:45:00	62.0	40.4	48.3	1597574			
40	2020-10-04	17:00:00	60.6	38.1	48.6	1152460		6383162	62.0
41	2020-10-04	17:15:00	63.1	41.6	48.7	2041122			
42	2020-10-04	17:30:00	61.9	41.0	49.5	1532237			
43	2020-10-04	17:45:00	61.1	40.1	51.4	1296012			
44	2020-10-04	18:00:00	61.3	47.0	51.6	1336509		6205881	61.9
							90792769		
1	2020-10-05	07:15:00	61.8	33.8	33.8	1508527			
2	2020-10-05	07:30:00	62.7	36.1	36.1	1862263			
3	2020-10-05	07:45:00	62.8	37.4	37.4	1900190			
4	2020-10-05	08:00:00	62.9	42.1	38.8	1941413		7212393	62.6
5	2020-10-05	08:15:00	63.2	41.8	39.7	2101871			
6	2020-10-05	08:30:00	62.5	41.3	40.2	1786286			
7	2020-10-05	08:45:00	64.7	45.7	41.3	2963678			
8	2020-10-05	09:00:00	64.5	44.2	41.8	2836273		9688107	63.8
9	2020-10-05	09:15:00	64.2	45.3	41.9	2600561			
10	2020-10-05	09:30:00	64.4	47.7	42.0	2757655			

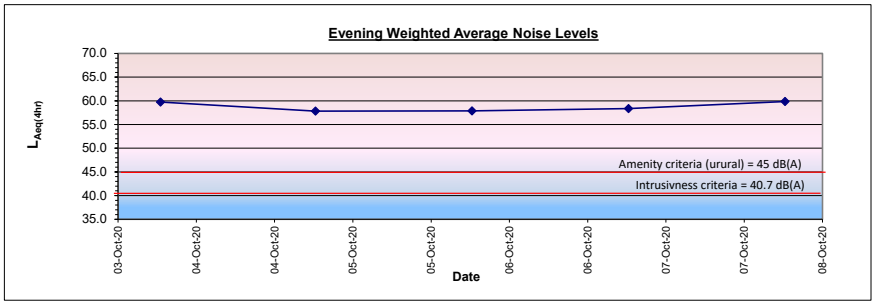
11	2020-10-05	09:45:00	63.9	42.6	42.1	2467823			
12	2020-10-05	10:00:00	64.5	43.8	42.6	2793380		10619419	64.2
13	2020-10-05	10:15:00	63.7	43.7	42.8	2352816			
14	2020-10-05	10:30:00	63.8	43.8	43.4	2379896			
15	2020-10-05	10:45:00	63.8	44.0	43.7	2410244			
16	2020-10-05	11:00:00	63.8	44.1	43.8	2371756		9514712	63.8
17	2020-10-05	11:15:00	63.6	44.8	43.8	2305335			
18	2020-10-05	11:30:00	64.8	46.1	43.8	2993147			
19	2020-10-05	11:45:00	64.4	47.6	43.8	2737575			
20	2020-10-05	12:00:00	63.5	45.5	44.0	2230001		10266057	64.1
21	2020-10-05	12:15:00	62.6	44.8	44.1	1834805			
22	2020-10-05	12:30:00	62.9	46.0	44.2	1955199			
23	2020-10-05	12:45:00	62.3	45.1	44.3	1704908			
24	2020-10-05	13:00:00	62.5	45.8	44.7	1788966		7283878	62.6
25	2020-10-05	13:15:00	63.0	44.8	44.7	2012853			
26	2020-10-05	13:30:00	62.9	45.8	44.8	1965921			
27	2020-10-05	13:45:00	62.2	44.9	44.8	1646353			
28	2020-10-05	14:00:00	63.0	45.9	44.8	1983732		7608859	62.8
29	2020-10-05	14:15:00	62.5	44.7	44.9	1772523			
30	2020-10-05	14:30:00	63.1	48.5	45.1	2031922			
31	2020-10-05	14:45:00	62.5	46.2	45.1	1791711			
32	2020-10-05	15:00:00	63.1	45.1	45.3	2022376		7618533	62.8
33	2020-10-05	15:15:00	62.5	43.4	45.5	1772658			
34	2020-10-05	15:30:00	62.8	44.7	45.7	1900190			
35	2020-10-05	15:45:00	62.4	42.8	45.8	1755565			
36	2020-10-05	16:00:00	62.3	43.8	45.8	1709937		7138350	62.5
37	2020-10-05	16:15:00	63.2	43.8	45.9	2074613			
38	2020-10-05	16:30:00	62.0	42.0	46.0	1579694			
39	2020-10-05	16:45:00	61.7	41.9	46.1	1494301			
40	2020-10-05	17:00:00	61.3	40.2	46.2	1339729		6488336	62.1
41	2020-10-05	17:15:00	61.1	39.7	47.6	1291038			
42	2020-10-05	17:30:00	61.8	38.8	47.7	1511305			
43	2020-10-05	17:45:00	61.7	44.3	48.5	1480778			
44	2020-10-05	18:00:00	61.3	49.4	49.4	1357882		5641003	61.5
							89079647		
1	2020-10-06	07:15:00	66.1	44.4	39.6	4120909			
2	2020-10-06	07:30:00	65.6	45.5	40.1	3613807			
3	2020-10-06	07:45:00	65.7	48.7	41.4	3733542			
4	2020-10-06	08:00:00	64.9	48.1	42.8	3059412		14527670	65.6
5	2020-10-06	08:15:00	66.7	47.8	43.1	4710749			
6	2020-10-06	08:30:00	64.7	45.5	44.4	2932986			
7	2020-10-06	08:45:00	65.1	48.8	44.6	3203082			
8	2020-10-06	09:00:00	65.3	45.2	45.2	3412888		14259705	65.5
9	2020-10-06	09:15:00	65.4	46.9	45.5	3497059			
10	2020-10-06	09:30:00	65.0	48.8	45.5	3128787			
11	2020-10-06	09:45:00	64.1	46.2	45.7	2589292			
12	2020-10-06	10:00:00	64.6	49.6	46.0	2896043		12111181	64.8
13	2020-10-06	10:15:00	64.9	47.8	46.2	3063113			
14	2020-10-06	10:30:00	65.7	48.1	46.6	3675132			
15	2020-10-06	10:45:00	65.5	50.9	46.9	3567541			
16	2020-10-06	11:00:00	64.6	47.9	46.9	2904651		13210438	65.2
17	2020-10-06	11:15:00	64.5	47.7	47.2	2837194			
18	2020-10-06	11:30:00	64.7	47.9	47.7	2964968			
19	2020-10-06	11:45:00	65.1	48.4	47.8	3261752			
20	2020-10-06	12:00:00	64.2	48.3	47.8	2642537		11706451	64.7
21	2020-10-06	12:15:00	65.7	47.9	47.8	3740193			
22	2020-10-06	12:30:00	64.7	46.9	47.8	2949069			
23	2020-10-06	12:45:00	64.6	47.9	47.9	2869730			
24	2020-10-06	13:00:00	64.8	44.6	47.9	3017713		12576706	65.0
25	2020-10-06	13:15:00	64.5	46.6	47.9	2798872			

26	2020-10-06	13:30:00	64.4	46.0	47.9	2729732			
27	2020-10-06	13:45:00	64.5	48.7	48.1	2821396			
28	2020-10-06	14:00:00	64.6	48.6	48.1	2892737		11242737	64.5
29	2020-10-06	14:15:00	64.8	48.3	48.3	3028196			
30	2020-10-06	14:30:00	65.5	50.1	48.3	3580264			
31	2020-10-06	14:45:00	65.5	51.8	48.3	3544884			
32	2020-10-06	15:00:00	65.1	50.0	48.4	3268248		13421591	65.3
33	2020-10-06	15:15:00	65.7	50.2	48.6	3724775			
34	2020-10-06	15:30:00	64.1	45.7	48.7	2576131			
35	2020-10-06	15:45:00	64.5	49.1	48.7	2789510			
36	2020-10-06	16:00:00	64.7	48.3	48.8	2926321		12016738	64.8
37	2020-10-06	16:15:00	64.7	47.2	48.8	2972658			
38	2020-10-06	16:30:00	64.9	47.8	49.1	3124842			
39	2020-10-06	16:45:00	63.2	43.1	49.6	2104694			
40	2020-10-06	17:00:00	63.8	42.8	50.0	2386096		10588291	64.2
41	2020-10-06	17:15:00	63.0	41.4	50.1	2009130			
42	2020-10-06	17:30:00	62.4	39.6	50.2	1728276			
43	2020-10-06	17:45:00	63.2	40.1	50.9	2082591			
44	2020-10-06	18:00:00	62.0	47.8	51.8	1598428		7418424	62.7
							133079931		
1	2020-10-07	07:15:00	65.6	47.1	40.2	3604558			
2	2020-10-07	07:30:00	65.9	50.3	41.4	3931624			
3	2020-10-07	07:45:00	66.6	51.0	43.0	4603944			
4	2020-10-07	08:00:00	65.4	47.4	44.8	3494395		15634521	65.9
5	2020-10-07	08:15:00	65.0	44.8	44.9	3152231			
6	2020-10-07	08:30:00	66.1	50.5	45.2	4072790			
7	2020-10-07	08:45:00	66.4	46.8	45.4	4365299			
8	2020-10-07	09:00:00	64.6	45.6	45.6	2878711		14469030	65.6
9	2020-10-07	09:15:00	65.9	50.2	46.7	3904307			
10	2020-10-07	09:30:00	66.0	48.5	46.8	4016474			
11	2020-10-07	09:45:00	64.7	47.5	47.0	2923102			
12	2020-10-07	10:00:00	65.3	47.0	47.1	3417032		14260916	65.5
13	2020-10-07	10:15:00	65.6	48.8	47.1	3652532			
14	2020-10-07	10:30:00	65.0	46.7	47.1	3182790			
15	2020-10-07	10:45:00	64.5	47.4	47.4	2809008			
16	2020-10-07	11:00:00	64.2	48.2	47.4	2629868		12274198	64.9
17	2020-10-07	11:15:00	64.5	47.5	47.5	2814790			
18	2020-10-07	11:30:00	64.9	45.4	47.5	3079399			
19	2020-10-07	11:45:00	64.2	45.2	48.0	2635755			
20	2020-10-07	12:00:00	63.7	49.2	48.1	2354653		10884597	64.3
21	2020-10-07	12:15:00	70.2	52.1	48.2	10415545			
22	2020-10-07	12:30:00	65.8	50.3	48.2	3777209			
23	2020-10-07	12:45:00	64.4	49.5	48.3	2773882			
24	2020-10-07	13:00:00	63.9	48.0	48.3	2469540		19436176	66.9
25	2020-10-07	13:15:00	64.0	48.3	48.5	2522290			
26	2020-10-07	13:30:00	64.1	47.1	48.6	2560590			
27	2020-10-07	13:45:00	64.6	48.3	48.8	2910328			
28	2020-10-07	14:00:00	64.7	48.1	48.8	2946857		10940065	64.4
29	2020-10-07	14:15:00	65.1	48.8	49.1	3240037			
30	2020-10-07	14:30:00	64.4	48.6	49.2	2755770			
31	2020-10-07	14:45:00	65.0	51.2	49.5	3193508			
32	2020-10-07	15:00:00	65.3	50.9	49.6	3387591		12576907	65.0
33	2020-10-07	15:15:00	65.2	51.2	50.0	3299104			
34	2020-10-07	15:30:00	65.0	49.6	50.2	3148886			
35	2020-10-07	15:45:00	64.7	49.1	50.3	2935919			
36	2020-10-07	16:00:00	64.7	48.2	50.3	2936202		12320111	64.9
37	2020-10-07	16:15:00	65.5	50.7	50.5	3511648			
38	2020-10-07	16:30:00	64.9	51.1	50.7	3065039			
39	2020-10-07	16:45:00	64.8	47.1	50.9	3020884			
40	2020-10-07	17:00:00	64.5	44.9	51.0	2848354		12445925	64.9

Noise Assessment

Evening Period	6pm to 10pm		
amenity criteria	45	dB(A)	rural
Intrusiveness criteria (RBL+ 5)	40.1	dB(A)	
Median LaeqEvening 18:00-22:00	58.4	dB(A)	

Day	Date	$L_{Aeq(evening)}$	ABL	RBL
Saturday Evening	3/10/2020	59.8	35.1	
Sunday Evening	4/10/2020	57.8	37.0	
Monday Evening	5/10/2020	57.9	33.1	**35.1**
Tuesday Evening	6/10/2020	58.4	35.3	
Wednesday Evening	7/10/2020	59.9	34.5	



item	Date	time	$L_{Aeq(15\ minute)}$	$L_{A90(15minute)}$	$L_{A90(15min)}$ assending order	10^(($L_{Aeq(15\ minute)}$/10))	period sums	hrly sums	hrly Laeq
1	2020-10-03	18:15:00	62.0	42.3	32.6	1580440			
2	2020-10-03	18:30:00	61.5	40.2	35.1	1410259			
3	2020-10-03	18:45:00	60.8	38.9	35.4	1206394			
4	2020-10-03	19:00:00	60.4	39.9	36.1	1086838		5283931	61.2
5	2020-10-03	19:15:00	60.8	38.5	36.1	1195680			
6	2020-10-03	19:30:00	59.1	37.7	36.7	813945			
7	2020-10-03	19:45:00	59.0	36.8	36.8	791671			
8	2020-10-03	20:00:00	58.1	37.9	37.1	638972		3440269	59.3
9	2020-10-03	20:15:00	58.9	36.1	37.5	771584			
10	2020-10-03	20:30:00	60.5	36.7	37.7	1114436			
11	2020-10-03	20:45:00	59.0	37.5	37.9	786952			
12	2020-10-03	21:00:00	57.8	35.1	38.5	605678		3278649	59.1
13	2020-10-03	21:15:00	60.3	36.1	38.9	1066216			
14	2020-10-03	21:30:00	59.2	35.4	39.9	825633			
15	2020-10-03	21:45:00	57.2	32.6	40.2	523134			
16	2020-10-03	22:00:00	58.4	37.1	42.3	690518		3105500	58.9
							15108350		
1	2020-10-04	18:15:00	59.9	43.1	36.8	972911			
2	2020-10-04	18:30:00	60.2	40.5	37.0	1038922			
3	2020-10-04	18:45:00	57.8	38.6	37.4	595819			
4	2020-10-04	19:00:00	58.2	38.5	37.5	667647		3275299	59.1
5	2020-10-04	19:15:00	57.2	38.2	37.6	520727			
6	2020-10-04	19:30:00	59.2	39.7	37.6	825049			
7	2020-10-04	19:45:00	59.2	39.7	38.0	837647			
8	2020-10-04	20:00:00	57.7	38.7	38.2	584301		2767725	58.4
9	2020-10-04	20:15:00	57.9	39.0	38.5	621327			
10	2020-10-04	20:30:00	59.2	37.6	38.6	830044			
11	2020-10-04	20:45:00	56.0	37.0	38.7	397581			
12	2020-10-04	21:00:00	55.8	37.6	39.0	381991		2230943	57.5
13	2020-10-04	21:15:00	55.5	37.5	39.7	352257			
14	2020-10-04	21:30:00	55.9	38.0	39.7	391617			
15	2020-10-04	21:45:00	56.5	37.4	40.5	441924			
16	2020-10-04	22:00:00	53.9	36.8	43.1	246062		1431860	55.5
							9705827		
1	2020-10-05	18:15:00	60.2	46.4	32.8	1052580			
2	2020-10-05	18:30:00	61.1	40.8	33.1	1299155			
3	2020-10-05	18:45:00	59.5	39.5	34.4	881589			
4	2020-10-05	19:00:00	59.8	37.5	35.0	953892		4187215	60.2
5	2020-10-05	19:15:00	58.6	37.6	35.6	718017			
6	2020-10-05	19:30:00	59.1	36.9	35.9	817231			
7	2020-10-05	19:45:00	58.3	37.0	36.1	668484			
8	2020-10-05	20:00:00	58.9	35.9	36.6	781617		2985350	58.7

9	2020-10-05	20:15:00	57.4	36.1	36.9	546925			
10	2020-10-05	20:30:00	56.1	35.6	37.0	404846			
11	2020-10-05	20:45:00	55.5	36.6	37.3	351277			
12	2020-10-05	21:00:00	56.6	37.3	37.5	454593		1757642	56.4
13	2020-10-05	21:15:00	53.7	35.0	37.6	236193			
14	2020-10-05	21:30:00	54.4	34.4	39.5	278344			
15	2020-10-05	21:45:00	54.7	33.1	40.8	296584			
16	2020-10-05	22:00:00	50.2	32.8	46.4	103569		914689	53.6
							9844896		
1	2020-10-06	18:15:00	61.3	44.7	33.2	1345067			
2	2020-10-06	18:30:00	60.6	40.1	35.3	1154979			
3	2020-10-06	18:45:00	58.6	39.1	35.3	729145			
4	2020-10-06	19:00:00	58.2	40.3	36.0	664765		3893956	59.9
5	2020-10-06	19:15:00	59.9	39.7	36.2	975940			
6	2020-10-06	19:30:00	59.2	39.1	36.7	824360			
7	2020-10-06	19:45:00	57.4	36.0	36.9	546129			
8	2020-10-06	20:00:00	58.3	38.9	37.0	671175		3017604	58.8
9	2020-10-06	20:15:00	56.7	37.0	37.4	464547			
10	2020-10-06	20:30:00	58.7	36.7	38.9	745231			
11	2020-10-06	20:45:00	55.9	36.9	39.1	387449			
12	2020-10-06	21:00:00	58.9	37.4	39.1	774426		2371654	57.7
13	2020-10-06	21:15:00	57.9	36.2	39.7	621664			
14	2020-10-06	21:30:00	56.9	35.3	40.1	494993			
15	2020-10-06	21:45:00	55.9	35.3	40.3	393083			
16	2020-10-06	22:00:00	51.9	33.2	44.7	155432		1665172	56.2
							10948386		
1	2020-10-07	18:15:00	61.0	46.0	34.2	1257874			
2	2020-10-07	18:30:00	60.9	41.1	34.5	1241029			
3	2020-10-07	18:45:00	60.2	40.6	35.0	1038310			
4	2020-10-07	19:00:00	60.1	40.9	35.3	1015708		4552921	60.6
5	2020-10-07	19:15:00	60.2	40.2	35.5	1043838			
6	2020-10-07	19:30:00	58.8	38.5	36.8	756101			
7	2020-10-07	19:45:00	57.7	37.2	37.2	584014			
8	2020-10-07	20:00:00	59.0	35.5	37.4	801781		3185734	59.0
9	2020-10-07	20:15:00	59.2	37.6	37.6	840487			
10	2020-10-07	20:30:00	59.2	36.8	37.8	840905			
11	2020-10-07	20:45:00	66.8	37.8	38.5	4778372			
12	2020-10-07	21:00:00	57.2	37.4	40.2	523456		6983220	62.4
13	2020-10-07	21:15:00	52.7	34.5	40.6	184994			
14	2020-10-07	21:30:00	54.5	35.0	40.9	282465			
15	2020-10-07	21:45:00	52.6	35.3	41.1	180717			
16	2020-10-07	22:00:00	50.0	34.2	46.0	100102		748278	52.7
							15470153		
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3						1			
4						1		4	0.0
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7						1			
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14		1		
15		1		
16		1	4	0.0
			16	

1		1		
2		1		
3		1		
4		1	4	0.0
5		1		
6		1		
7		1		
8		1	4	0.0
9		1		
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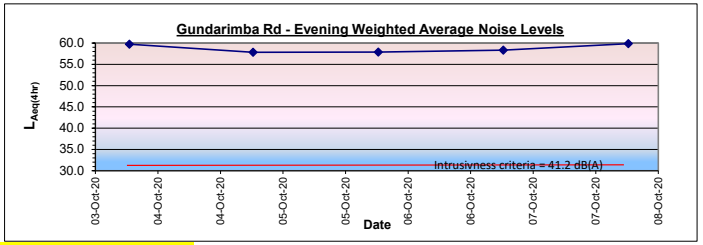
11		1		
12		1	4	0.0
13		1		
14		1		
15		1		
16		1	4	0.0
			16	

1		1		
2		1		
3		1		
4		1	4	0.0
5		1		
6		1		
7		1		
8		1	4	0.0
9		1		
10		1		
11		1		
12		1	4	0.0
13		1		
14		1		
15		1		
16		1	4	0.0
			16	

Previous Noise Assessment October 2016

Evening Period	6pm to 10pm		
amenity criteria	50-55	dB(A)	urban
Intrusiveness criteria (RBL+ 5)	#REF!	dB(A)	



Day	Date	$L_{Aeq(evening)}$	ABL	RBL
Monday Evening	#REF!	#REF!	#REF!	
Tuesday Evening	18/10/2016	41.0	30.1	
Wednesday Evening	19/10/2016	58.4	32.7	#REF!
Thursday Evening	20/10/2016	40.8	31.0	
Friday Evening	21/10/2016			

15	17/10/2016	21:45	33.9	29.5	50	2455			
16	17/10/2016	22:00	38.6	31.3	57.3	7244		9699	33.8
							9699		
	18/10/2016	18:15	49	40.3	30.1				
	18/10/2016	18:30	49.8	39.7	30.4				
	18/10/2016	18:45	45.6	39.2	30.9				
	18/10/2016	19:00	65.9	43.4	31.9			0	
	18/10/2016	19:15	64.9	60.6	35.9				
	18/10/2016	19:30	62.8	59.2	37.3				
	18/10/2016	19:45	58.1	44	37.4				
	18/10/2016	20:00	55.3	40.1	38.8			0	
1	18/10/2016	20:15	44.7	38.8	39.2	29512			
2	18/10/2016	20:30	43	37.3	39.7	19953			
3	18/10/2016	20:45	43.9	37.4	40.1	24547			
4	18/10/2016	21:00	42.4	35.9	40.3	17378		91390	43.6
5	18/10/2016	21:15	35.4	31.9	43.4	3467			
6	18/10/2016	21:30	33.1	30.1	44	2042			
7	18/10/2016	21:45	33.6	30.4	59.2	2291			
8	18/10/2016	22:00	33.8	30.9	60.6	2399		10199	34.1
							101589		
	19/10/2016	18:15	50	41.1	30.4	100000			
	19/10/2016	18:30	45.6	37.8	32.7	36308			
	19/10/2016	18:45	57.3	38.3	35.3	537032			
	19/10/2016	19:00	68.4	40.5	35.7	6918310		7591649	62.8
	19/10/2016	19:15	64.1	50.1	36.1	2570396			
	19/10/2016	19:30	57.9	55.8	36.6	616595			
	19/10/2016	19:45	49.3	38.7	37.1	85114			
	19/10/2016	20:00	38.1	36.6	37.1	6457		3278561	59.1
	19/10/2016	20:15	38.1	35.7	37.8	6457			
	19/10/2016	20:30	41.1	37.1	37.8	12882			
	19/10/2016	20:45	43.2	37.1	38.3	20893			
	19/10/2016	21:00	40.4	36.1	38.7	10965		51197	41.1
	19/10/2016	21:15	36.3	32.7	40.5	4266			
	19/10/2016	21:30	34.3	30.4	41.1	2692			
	19/10/2016	21:45	39.8	35.3	50.1	9550			
	19/10/2016	22:00	40.8	37.8	55.8	12023		28530	38.5
							10949937		
	20/10/2016	18:15	49.3	39.5	31				
	20/10/2016	18:30	47.4	38.1	31.1				
	20/10/2016	18:45	54.6	37.5	31.2				
	20/10/2016	19:00	67.4	39.3	31.4			0	
	20/10/2016	19:15	65.2	55.5	31.4				
	20/10/2016	19:30	59.5	57.2	33				

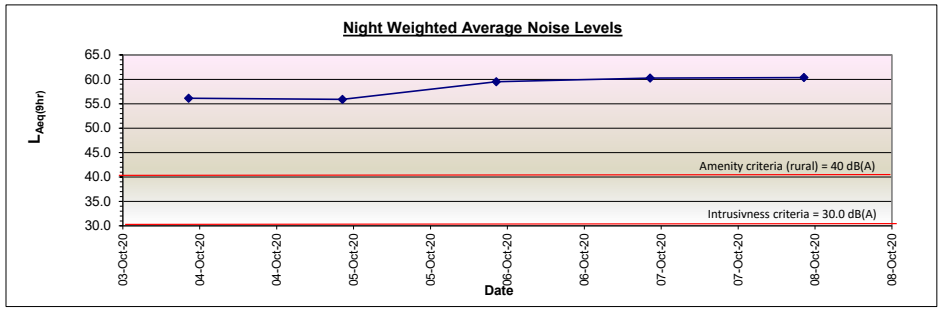
1	20/10/2016	19:45	48.4	39	33.9	69183			
2	20/10/2016	20:00	38.2	36	34.1	6607		75790	
3	20/10/2016	20:15	36.6	34.1	36	4571			
4	20/10/2016	20:30	38.2	33.9	37.5	6607			
5	20/10/2016	20:45	36.1	33	38.1	4074			
6	20/10/2016	21:00	35.3	31.4	39	3388		18640	36.7
7	20/10/2016	21:15	34.1	31.2	39.3	2570			
8	20/10/2016	21:30	42.7	31.4	39.5	18621			
9	20/10/2016	21:45	34	31	55.5	2512			
10	20/10/2016	22:00	33.5	31.1	57.2	2239		25942	38.1
							120372		
	21/10/2016	18:15	51.4	38.6	32				
	21/10/2016	18:30	51.2	38.3	32.6				
	21/10/2016	18:45	56.2	38.7	33.1				
	21/10/2016	19:00	67.9	41.4	33.6			0	
	21/10/2016	19:15	64.1	52.7	33.8				
	21/10/2016	19:30	59.6	54.2	34.5				
	21/10/2016	19:45	50.4	46.6	34.7				
	21/10/2016	20:00	41.4	36.3	35.1			0	
	21/10/2016	20:15	38.9	35.1	36.3				
	21/10/2016	20:30	38.4	34.5	38.3				
	21/10/2016	20:45	41.3	34.7	38.6				
	21/10/2016	21:00	36.1	33.6	38.7			0	
	21/10/2016	21:15	36.4	33.1	41.4				
	21/10/2016	21:30	41.8	33.8	46.6				
1	21/10/2016	21:45	34.3	32	52.7	2692			
2	21/10/2016	22:00	36.4	32.6	54.2	4365		7057	
	22/10/2016	18:15	60.6	35.7	30	1148154			
	22/10/2016	18:30	62.9	33.8	30.9	1949845			
	22/10/2016	18:45	66.6	34.6	31.1	4570882			
	22/10/2016	19:00	65.7	38.2	31.7	3715352		11384232	64.5
	22/10/2016	19:15	58.4	55.7	31.8	691831			
	22/10/2016	19:30	52.1	46.4	31.9	162181			
	22/10/2016	19:45	42.4	40.5	32	17378			
	22/10/2016	20:00	40.6	33.3	32.3	11482		882872	53.4
	22/10/2016	20:15	34.6	31.8	33.3	2884			
	22/10/2016	20:30	34.5	31.9	33.8	2818			
	22/10/2016	20:45	34.4	31.1	34.6	2754			
	22/10/2016	21:00	34.8	32	35.7	3020		11477	34.6
	22/10/2016	21:15	34.3	32.3	38.2	2692			
	22/10/2016	21:30	36.2	31.7	40.5	4169			
	22/10/2016	21:45	33.2	30	46.4	2089			
	22/10/2016	22:00	32.9	30.9	55.7	1950		10899	34.4
							12289480		
	23/10/2016	18:15	40	35.2	25.4	10000			
	23/10/2016	18:30	39.1	36.1	26.6	8128			
	23/10/2016	18:45	40.6	34.3	26.7	11482			
	23/10/2016	19:00	42.6	33.2	27	18197		47807	40.8
	23/10/2016	19:15	36.7	32	27.6	4677			
	23/10/2016	19:30	38.2	31.4	27.6	6607			
	23/10/2016	19:45	34.2	30.7	27.9	2630			
	23/10/2016	20:00	31.5	27.6	28.2	1413		15327	35.8
	23/10/2016	20:15	32.3	27.9	28.5	1698			
	23/10/2016	20:30	32.7	28.5	30.7	1862			
	23/10/2016	20:45	32.1	27.6	31.4	1622			
	23/10/2016	21:00	31.9	28.2	32	1549		6731	32.3
	23/10/2016	21:15	31.5	27	33.2	1413			
	23/10/2016	21:30	32.6	26.6	34.3	1820			
	23/10/2016	21:45	33	26.7	35.2	1995			

	23/10/2016	22:00	31.3	25.4	36.1	1349		6576	32.2
							76441		
	24/10/2016	18:15	51.5	39.6	29				
	24/10/2016	18:30	45	38.3	30.6				
	24/10/2016	18:45	42.4	37.5	30.8				
	24/10/2016	19:00	61.6	38	31.1			0	
	24/10/2016	19:15	61.4	46.9	31.3				
	24/10/2016	19:30	55.7	52.6	32.1				
1	24/10/2016	19:45	43	38	33.5	19953			
2	24/10/2016	20:00	39.1	37.1	34.7	8128		28081	
3	24/10/2016	20:15	38	34.7	37.1	6310			
4	24/10/2016	20:30	36.2	33.5	37.5	4169			
5	24/10/2016	20:45	35.7	32.1	38	3715			
6	24/10/2016	21:00	34.9	31.3	38	3090		17284	36.4
7	24/10/2016	21:15	33.6	30.6	38.3	2291			
8	24/10/2016	21:30	34.9	30.8	39.6	3090			
9	24/10/2016	21:45	33.1	31.1	46.9	2042			

Noise Assessment

Night Period	10pm to 7am		
amenity criteria	40	dB(A)	rural
Intrusiveness criteria (RBL+ 5)	30.0	dB(A)	
Sleep Disturbance criteria (RBL+ 15)	39.9	dB(A)	
Median LAeqNight 22:00-07:00	59.5	dB(A)	

Night	Date	$L_{aeq(night)}$	ABL	RBL
Saturday Night	3/10/2020	56.1	22.9	
Sunday Night	4/10/2020	55.9	24.9	
Monday Night	5/10/2020	59.5	24.8	**24.9**
Tuesday Night	6/10/2020	60.3	26.6	
Wednesday Night	7/10/2020	60.4	27.2	



no.	date	time	$L_{Aeq(15\ minute)}$	$L_{A90(15minute)}$	$L_{A90(15min)}$ assending order	10^(($L_{Aeq(15\ minute)}$/10))	period sums	hrly sums	hrly Laeq	Sleep Disturbance events
1	2020-10-03	22:15:00	56.4	33.1	22.0	437106				1
2	2020-10-03	22:30:00	56.4	31.7	22.4	440471				1
3	2020-10-03	22:45:00	56.7	34.6	22.6	472152				1
4	2020-10-03	23:00:00	55.3	31.5	22.9	337057		1686786	56.2	1
5	2020-10-03	23:15:00	53.5	29.2	22.9	225406				1
6	2020-10-03	23:30:00	54.0	30.5	23.6	249179				1
7	2020-10-03	23:45:00	52.0	28.7	24.1	159164				1
8	2020-10-04	00:00:00	54.4	28.5	24.1	278133		911883	53.6	1
9	2020-10-04	00:15:00	52.2	26.8	24.2	165055				1
10	2020-10-04	00:30:00	55.2	27.8	24.3	329543				1
11	2020-10-04	00:45:00	52.3	26.1	24.6	167889				1
12	2020-10-04	01:00:00	51.8	26.8	24.9	150044		812530	53.1	1
13	2020-10-04	01:15:00	42.6	24.3	26.1	18383				1
14	2020-10-04	01:30:00	51.3	24.6	26.8	134108				1
15	2020-10-04	01:45:00	51.7	24.9	26.8	148234				1
16	2020-10-04	02:00:00	50.1	24.2	27.8	102370		403095	50.0	1
17	2020-10-04	02:15:00	49.2	24.1	28.2	83217				1
18	2020-10-04	02:30:00	51.8	22.9	28.5	151013				1
19	2020-10-04	02:45:00	51.8	22.0	28.7	150015				1
20	2020-10-04	03:00:00	51.7	22.9	29.2	148554		532799	51.2	1
21	2020-10-04	03:15:00	52.4	22.6	30.5	172209				1
22	2020-10-04	03:30:00	57.0	23.6	30.6	496084				1
23	2020-10-04	03:45:00	52.4	22.4	31.5	174290				1
24	2020-10-04	04:00:00	54.7	24.1	31.6	294078		1136660	54.5	1
25	2020-10-04	04:15:00	54.7	28.2	31.7	295702				1
26	2020-10-04	04:30:00	55.5	30.6	31.9	355063				1
27	2020-10-04	04:45:00	57.0	34.1	32.1	501788				1
28	2020-10-04	05:00:00	59.1	35.6	32.5	813771		1966323	56.9	1
29	2020-10-04	05:15:00	57.9	31.9	32.9	620716				1
30	2020-10-04	05:30:00	59.2	32.9	33.1	836533				1
31	2020-10-04	05:45:00	59.3	33.7	33.2	849576				1
32	2020-10-04	06:00:00	59.2	31.6	33.7	826226		3133051	58.9	1
33	2020-10-04	06:15:00	59.8	32.1	34.1	962359				1
34	2020-10-04	06:30:00	60.0	35.4	34.6	991688				1
35	2020-10-04	06:45:00	61.0	33.2	35.4	1245194				1
36	2020-10-04	07:00:00	59.8	32.5	35.6	954555		4153796	60.2	1
							14736922			**36**
1	2020-10-04	22:15:00	53.1	37.1	24.2	202724				1
2	2020-10-04	22:30:00	54.4	36.9	24.3	274599				1
3	2020-10-04	22:45:00	42.8	35.4	24.7	18947				1
4	2020-10-04	23:00:00	49.1	34.1	24.9	81130		577401	51.6	1
5	2020-10-04	23:15:00	51.1	32.8	25.4	128426				1

6	2020-10-04	23:30:00	51.8	33.5	25.9	152321				1
7	2020-10-04	23:45:00	53.1	34.0	26.0	206097				1
8	2020-10-05	00:00:00	54.1	34.7	26.2	259515		746359	52.7	1
9	2020-10-05	00:15:00	41.3	33.6	27.6	13366				1
10	2020-10-05	00:30:00	51.0	32.8	29.0	127247				1
11	2020-10-05	00:45:00	53.5	32.5	29.1	221643				1
12	2020-10-05	01:00:00	53.0	30.8	29.6	200294		562551	51.5	1
13	2020-10-05	01:15:00	46.8	31.1	30.8	48223				1
14	2020-10-05	01:30:00	53.9	31.0	30.8	244183				1
15	2020-10-05	01:45:00	45.9	29.6	31.0	38968				1
16	2020-10-05	02:00:00	55.3	29.1	31.1	340110		671485	52.2	1
17	2020-10-05	02:15:00	46.6	26.2	31.8	45929				1
18	2020-10-05	02:30:00	57.8	27.6	31.8	598986				1
19	2020-10-05	02:45:00	53.8	26.0	32.5	240116				1
20	2020-10-05	03:00:00	48.9	25.9	32.8	76985		962016	53.8	1
21	2020-10-05	03:15:00	50.1	25.4	32.8	102481				1
22	2020-10-05	03:30:00	51.7	24.7	33.1	148032				1
23	2020-10-05	03:45:00	51.3	24.2	33.2	135628				1
24	2020-10-05	04:00:00	56.7	24.3	33.5	465694		851836	53.3	1
25	2020-10-05	04:15:00	55.3	24.9	33.6	337280				1
26	2020-10-05	04:30:00	56.1	29.0	33.6	404664				1
27	2020-10-05	04:45:00	55.4	31.8	33.7	344920				1
28	2020-10-05	05:00:00	56.9	33.1	34.0	488599		1575465	56.0	1
29	2020-10-05	05:15:00	57.8	33.2	34.0	598876				1
30	2020-10-05	05:30:00	57.1	31.8	34.1	517935				1
31	2020-10-05	05:45:00	58.7	30.8	34.4	745724				1
32	2020-10-05	06:00:00	60.2	33.7	34.7	1046601		2909135	58.6	1
33	2020-10-05	06:15:00	61.8	33.6	35.0	1496939				1
34	2020-10-05	06:30:00	60.1	34.4	35.4	1024911				1
35	2020-10-05	06:45:00	61.9	34.0	36.9	1532435				1
36	2020-10-05	07:00:00	60.4	35.0	37.1	1094208		5148492	61.1	1
							14004740			**36**
1	2020-10-05	22:15:00	50.5	32.9	24.0	111545				1
2	2020-10-05	22:30:00	46.2	28.9	24.5	42143				1
3	2020-10-05	22:45:00	51.6	29.4	24.6	144206				1
4	2020-10-05	23:00:00	50.4	29.3	24.8	109605		407499	50.1	1
5	2020-10-05	23:15:00	50.1	30.1	25.0	102264				1
6	2020-10-05	23:30:00	48.9	29.7	25.0	77432				1
7	2020-10-05	23:45:00	47.9	29.9	25.3	62092				1
8	2020-10-06	00:00:00	32.0	28.9	26.1	1574		243362	47.8	0
9	2020-10-06	00:15:00	52.0	30.3	26.3	158493				1
10	2020-10-06	00:30:00	44.6	29.3	26.5	28984				1
11	2020-10-06	00:45:00	41.9	28.9	26.9	15586				1
12	2020-10-06	01:00:00	49.0	28.0	28.0	79616		282679	48.5	1
13	2020-10-06	01:15:00	45.7	26.5	28.8	37034				1
14	2020-10-06	01:30:00	51.2	26.9	28.9	131017				1
15	2020-10-06	01:45:00	52.6	25.3	28.9	180993				1
16	2020-10-06	02:00:00	53.7	24.8	28.9	236432		585476	51.7	1
17	2020-10-06	02:15:00	52.8	24.6	29.3	190195				1
18	2020-10-06	02:30:00	47.5	24.5	29.3	55665				1
19	2020-10-06	02:45:00	55.2	26.3	29.4	333054				1
20	2020-10-06	03:00:00	52.8	25.0	29.7	189986		768900	52.8	1
21	2020-10-06	03:15:00	54.6	25.0	29.9	285829				1
22	2020-10-06	03:30:00	57.0	26.1	30.1	499639				1
23	2020-10-06	03:45:00	50.5	24.0	30.3	112584				1
24	2020-10-06	04:00:00	60.3	28.8	31.2	1060022		1958075	56.9	1
25	2020-10-06	04:15:00	59.7	31.2	32.9	927120				1
26	2020-10-06	04:30:00	59.7	34.6	34.6	924879				1
27	2020-10-06	04:45:00	60.3	37.8	37.8	1079613				1
28	2020-10-06	05:00:00	60.5	37.9	37.9	1109637		4041249	60.0	1

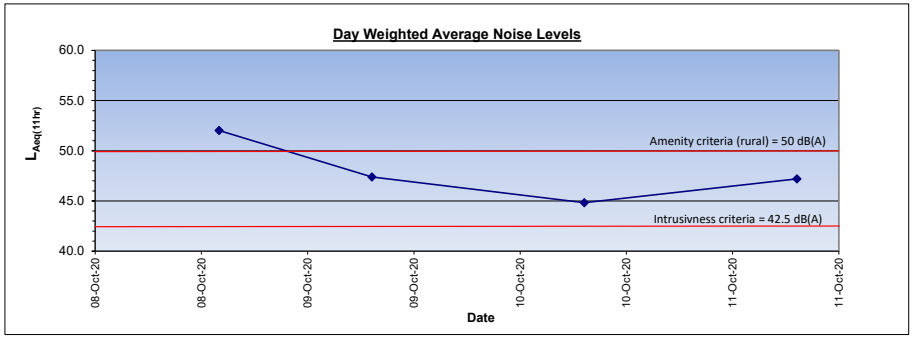
29	2020-10-06	05:15:00	63.8	41.8	41.8	2399651				1
30	2020-10-06	05:30:00	64.2	43.9	43.3	2627260				1
31	2020-10-06	05:45:00	65.5	46.7	43.9	3529864				1
32	2020-10-06	06:00:00	64.3	43.3	44.3	2701662		11258436	64.5	1
33	2020-10-06	06:15:00	64.7	44.3	44.4	2969826				1
34	2020-10-06	06:30:00	64.7	46.2	46.1	2953140				1
35	2020-10-06	06:45:00	65.4	46.1	46.2	3459298				1
36	2020-10-06	07:00:00	65.2	44.4	46.7	3296940		12679204	65.0	1
							32224880			**35**
1	2020-10-06	22:15:00	54.1	32.9	25.5	258404				1
2	2020-10-06	22:30:00	51.0	33.3	25.9	126438				1
3	2020-10-06	22:45:00	51.3	32.7	26.6	133585				1
4	2020-10-06	23:00:00	53.6	32.0	26.6	229504		747931	52.7	1
5	2020-10-06	23:15:00	44.0	31.0	26.7	25342				1
6	2020-10-06	23:30:00	53.0	29.3	26.7	200129				1
7	2020-10-06	23:45:00	59.9	29.4	26.9	974592				1
8	2020-10-07	00:00:00	30.4	27.7	27.1	1097		1201161	54.8	0
9	2020-10-07	00:15:00	48.5	27.2	27.2	71332				1
10	2020-10-07	00:30:00	55.7	27.4	27.3	373722				1
11	2020-10-07	00:45:00	54.3	27.7	27.4	271767				1
12	2020-10-07	01:00:00	51.2	26.9	27.4	132337		849158	53.3	1
13	2020-10-07	01:15:00	51.2	27.3	27.5	131483				1
14	2020-10-07	01:30:00	40.4	27.4	27.7	11038				1
15	2020-10-07	01:45:00	54.4	26.6	27.7	275827				1
16	2020-10-07	02:00:00	57.6	26.6	28.4	572776		991124	53.9	1
17	2020-10-07	02:15:00	54.4	26.7	28.6	273398				1
18	2020-10-07	02:30:00	49.4	25.5	29.2	87823				1
19	2020-10-07	02:45:00	46.6	25.9	29.3	45675				1
20	2020-10-07	03:00:00	57.9	26.7	29.4	618750		1025645	54.1	1
21	2020-10-07	03:15:00	54.7	27.5	31.0	298516				1
22	2020-10-07	03:30:00	56.8	27.1	31.6	483900				1
23	2020-10-07	03:45:00	60.4	28.4	32.0	1093435				1
24	2020-10-07	04:00:00	56.0	28.6	32.7	400952		2276803	57.6	1
25	2020-10-07	04:15:00	60.1	29.2	32.9	1016120				1
26	2020-10-07	04:30:00	61.0	31.6	33.3	1249189				1
27	2020-10-07	04:45:00	61.8	37.2	37.2	1503845				1
28	2020-10-07	05:00:00	62.6	38.6	38.0	1836974		5606127	61.5	1
29	2020-10-07	05:15:00	63.0	38.8	38.6	1973558				1
30	2020-10-07	05:30:00	65.0	44.1	38.8	3191979				1
31	2020-10-07	05:45:00	65.4	43.9	42.0	3448474				1
32	2020-10-07	06:00:00	64.1	38.0	43.9	2559717		11173729	64.5	1
33	2020-10-07	06:15:00	64.9	42.0	44.1	3066959				1
34	2020-10-07	06:30:00	66.0	44.4	44.4	4023593				1
35	2020-10-07	06:45:00	65.8	45.1	45.1	3770700				1
36	2020-10-07	07:00:00	65.5	46.8	46.8	3511600		14372852	65.6	1
							38244531			**35**
1	2020-10-07	22:15:00	55.2	35.3	26.8	331005				1
2	2020-10-07	22:30:00	50.9	34.0	27.1	123511				1
3	2020-10-07	22:45:00	54.3	34.2	27.2	267058				1
4	2020-10-07	23:00:00	56.7	32.6	27.2	468187		1189760	54.7	1
5	2020-10-07	23:15:00	54.8	31.8	27.7	299253				1
6	2020-10-07	23:30:00	52.9	31.9	28.2	195153				1
7	2020-10-07	23:45:00	49.4	30.7	28.3	86839				1
8	2020-10-08	00:00:00	55.5	31.2	28.4	358770		940015	55.0	1
9	2020-10-08	00:15:00	52.9	29.7	28.4	195134				1
10	2020-10-08	00:30:00	52.1	29.4	28.4	163797				1
11	2020-10-08	00:45:00	45.9	29.4	29.0	38471				1
12	2020-10-08	01:00:00	42.1	28.3	29.3	16036		413438	50.1	1

13	2020-10-08	01:15:00	51.4	28.4	29.4	136919				1
14	2020-10-08	01:30:00	57.2	29.3	29.4	518881				1
15	2020-10-08	01:45:00	57.2	28.4	29.6	520525				1
16	2020-10-08	02:00:00	46.7	27.2	29.7	47033		1223360	54.9	1
17	2020-10-08	02:15:00	56.9	27.1	29.9	486185				1
18	2020-10-08	02:30:00	55.5	26.8	30.7	355505				1
19	2020-10-08	02:45:00	53.3	27.2	31.2	215858				1
20	2020-10-08	03:00:00	55.3	27.7	31.8	337241		1394790	55.4	1
21	2020-10-08	03:15:00	57.0	28.4	31.9	499535				1
22	2020-10-08	03:30:00	56.0	28.2	32.0	396754				1
23	2020-10-08	03:45:00	57.6	29.9	32.6	576086				1
24	2020-10-08	04:00:00	59.3	29.0	34.0	845185		2317560	57.6	1
25	2020-10-08	04:15:00	58.6	32.0	34.2	717241				1
26	2020-10-08	04:30:00	59.1	29.6	35.3	805410				1
27	2020-10-08	04:45:00	62.1	38.3	38.3	1617201				1
28	2020-10-08	05:00:00	62.6	39.5	39.5	1829056		4968908	60.9	1
29	2020-10-08	05:15:00	62.8	40.6	40.6	1910201				1
30	2020-10-08	05:30:00	65.7	45.5	41.8	3725718				1
31	2020-10-08	05:45:00	65.3	46.1	43.6	3370428				1
32	2020-10-08	06:00:00	66.5	41.8	45.1	4500306		13506652	65.3	1
33	2020-10-08	06:15:00	65.5	46.1	45.5	3565743				1
34	2020-10-08	06:30:00	64.7	46.7	46.1	2958006				1
35	2020-10-08	06:45:00	65.3	43.6	46.1	3362227				1
36	2020-10-08	07:00:00	65.2	45.1	46.7	3284127		13170103	65.2	1
							39124585			**36**
1						1				0
2						1				0
3						1				0
4						1		4	0.0	0
5						1				0
6						1				0
7						1				0
8						1		4	0.0	0
9						1				0
10						1				0
11						1				0
12						1		4	0.0	0
13						1				0
14						1				0
15						1				0
16						1		4	0.0	0
17						1				0
18						1				0
19						1				0
20						1		4	0.0	0
21						1				0
22						1				0
23						1				0
24						1		4	0.0	0
25						1				0
26						1				0
27						1				0
28						1		4	0.0	0
29						1				0
30						1				0
31						1				0

Noise Assessment

Day Period	7am to 6pm		
amenity criteria	50	dB(A)	rural
Intrusiveness criteria (RBL+ 5)	42.5	dB(A)	
Interim Construction Noise Guidelines (RBL + 10)	47.5	dB(A)	
Average LaeqDay 07:00-18:00	47.9	dB(A)	

Day	Date	$L_{Aeq(day)}$	ABL	RBL
Saturday	8/10/2020	52.0	44.6	
Sunday	9/10/2020	47.4	38.3	
Monday	10/10/2020	44.8	36.6	37.5
Tuesday	11/10/2020	47.2	36.2	



no.	Date	time	$L_{Aeq(15\ minute)}$	$L_{A90(15minute)}$	$L_{A90(15min)}$ assending order	10^(($L_{Aeq(15\ minute)}$/10))	period sums	hrly sums	hrly Laeq
								0	
1	2020-10-08	12:00:00	48.5	44.6	44.3	71070		71070	42.5
2	2020-10-08	12:15:00	50.0	46.8	44.4	100285			
3	2020-10-08	12:30:00	50.5	46.5	44.6	110925			
4	2020-10-08	12:45:00	50.5	46.4	45.6	112365			
5	2020-10-08	13:00:00	49.2	45.7	45.7	84073		407648	50.1
6	2020-10-08	13:15:00	54.2	48.9	46.0	260061			
7	2020-10-08	13:30:00	53.5	49.6	46.0	223322			
8	2020-10-08	13:45:00	51.8	47.1	46.4	151952			
9	2020-10-08	14:00:00	54.5	49.8	46.5	279451		914786	53.6
10	2020-10-08	14:15:00	53.0	49.4	46.8	201136			
11	2020-10-08	14:30:00	53.1	49.6	47.1	204969			
12	2020-10-08	14:45:00	53.0	48.2	47.2	198247			
13	2020-10-08	15:00:00	52.8	48.4	47.7	188659		793011	53.0
14	2020-10-08	15:15:00	53.9	50.1	48.2	247822			
15	2020-10-08	15:30:00	52.3	47.7	48.4	167904			
16	2020-10-08	15:45:00	53.5	49.8	48.6	224703			
17	2020-10-08	16:00:00	53.5	49.4	48.9	222684		863112	53.3
18	2020-10-08	16:15:00	52.5	49.0	49.0	175918			
19	2020-10-08	16:30:00	52.5	48.6	49.4	178137			

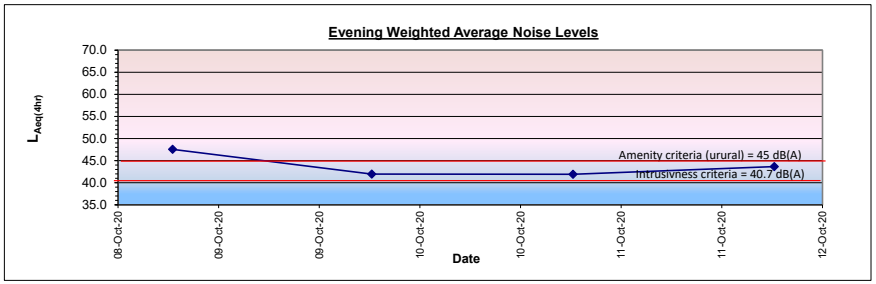
20	2020-10-08	16:45:00	50.6	47.2	49.4	113788			
21	2020-10-08	17:00:00	49.6	46.0	49.6	90719		558562	51.5
22	2020-10-08	17:15:00	48.8	45.6	49.6	75611			
23	2020-10-08	17:30:00	48.9	44.4	49.8	77015			
24	2020-10-08	17:45:00	48.7	44.3	49.8	74598			
25	2020-10-08	18:00:00	51.7	46.0	50.1	146873		374096	49.7
							3982286		
1	2020-10-09	07:15:00	53.0	40.7	37.7	199245			
2	2020-10-09	07:30:00	43.9	40.2	37.9	24546			
3	2020-10-09	07:45:00	45.1	40.3	38.0	32600			
4	2020-10-09	08:00:00	48.5	41.9	38.3	70853		327245	49.1
5	2020-10-09	08:15:00	44.5	39.9	38.4	28252			
6	2020-10-09	08:30:00	48.1	40.2	38.8	63835			
7	2020-10-09	08:45:00	45.9	40.1	39.0	39197			
8	2020-10-09	09:00:00	43.7	38.0	39.1	23521		154805	45.9
9	2020-10-09	09:15:00	48.2	39.2	39.2	66516			
10	2020-10-09	09:30:00	43.0	39.7	39.5	19899			
11	2020-10-09	09:45:00	43.5	38.8	39.7	22226			
12	2020-10-09	10:00:00	41.8	37.7	39.7	15087		123729	44.9
13	2020-10-09	10:15:00	42.2	38.3	39.9	16513			
14	2020-10-09	10:30:00	42.9	39.0	39.9	19518			
15	2020-10-09	10:45:00	46.3	40.4	40.1	43041			
16	2020-10-09	11:00:00	45.4	38.4	40.2	35001		114073	44.6
17	2020-10-09	11:15:00	42.7	39.1	40.2	18630			
18	2020-10-09	11:30:00	42.9	39.7	40.3	19631			
19	2020-10-09	11:45:00	44.5	40.9	40.4	28068			
20	2020-10-09	12:00:00	45.4	41.4	40.5	34776		101104	44.0
21	2020-10-09	12:15:00	47.7	44.6	40.7	59520			
22	2020-10-09	12:30:00	47.0	42.9	40.9	49959			
23	2020-10-09	12:45:00	48.4	44.3	41.2	69333			
24	2020-10-09	13:00:00	47.1	43.3	41.4	51726		230539	47.6
25	2020-10-09	13:15:00	49.6	43.7	41.5	90908			
26	2020-10-09	13:30:00	48.1	43.2	41.6	65120			
27	2020-10-09	13:45:00	47.4	44.0	41.9	54903			
28	2020-10-09	14:00:00	51.3	47.3	42.4	134403		345334	49.4
29	2020-10-09	14:15:00	50.4	47.8	42.5	110827			
30	2020-10-09	14:30:00	51.7	47.0	42.9	147447			
31	2020-10-09	14:45:00	47.4	39.9	43.1	54475			
32	2020-10-09	15:00:00	43.6	37.9	43.2	22761		335510	49.2
33	2020-10-09	15:15:00	44.0	40.5	43.3	25105			
34	2020-10-09	15:30:00	45.8	42.5	43.4	37705			
	2020-10-09	15:45:00	45.0	41.6	43.7				
	2020-10-09	16:00:00	45.5	42.4	44.0			62811	42.0
	2020-10-09	16:15:00	47.6	44.4	44.3				
35	2020-10-09	16:30:00	48.0	44.4	44.4	62440			
36	2020-10-09	16:45:00	48.0	44.5	44.4	63793			
37	2020-10-09	17:00:00	47.8	43.1	44.5	60624		186857	46.7
38	2020-10-09	17:15:00	44.1	41.2	44.6	25960			
39	2020-10-09	17:30:00	43.1	39.5	47.0	20623			
40	2020-10-09	17:45:00	47.2	41.5	47.3	52222			
41	2020-10-09	18:00:00	52.2	43.4	47.8	164793		263598	48.2

							2245605		
1	2020-10-10	07:15:00	48.7	40.3	35.0	73417			
2	2020-10-10	07:30:00	49.7	40.6	36.2	92678			
3	2020-10-10	07:45:00	44.5	39.2	36.5	28079			
4	2020-10-10	08:00:00	46.8	38.2	36.6	48173		242347	47.8
5	2020-10-10	08:15:00	47.4	37.8	36.6	55206			
6	2020-10-10	08:30:00	46.3	37.0	36.9	43085			
7	2020-10-10	08:45:00	43.2	38.1	37.0	21079			
8	2020-10-10	09:00:00	46.4	37.7	37.1	43164		162534	46.1
9	2020-10-10	09:15:00	42.6	37.6	37.1	18375			
10	2020-10-10	09:30:00	42.3	37.6	37.2	17065			
11	2020-10-10	09:45:00	45.5	38.7	37.2	35814			
12	2020-10-10	10:00:00	42.8	37.7	37.2	18939		90193	43.5
13	2020-10-10	10:15:00	45.2	38.4	37.3	33207			
14	2020-10-10	10:30:00	42.4	37.9	37.3	17469			
15	2020-10-10	10:45:00	41.2	38.4	37.4	13083			
16	2020-10-10	11:00:00	43.1	38.4	37.6	20314		84073	43.2
17	2020-10-10	11:15:00	43.6	39.5	37.6	23004			
18	2020-10-10	11:30:00	46.5	39.0	37.6	44486			
19	2020-10-10	11:45:00	46.3	38.3	37.6	42471			
20	2020-10-10	12:00:00	43.0	38.4	37.7	20077		130038	45.1
21	2020-10-10	12:15:00	43.6	38.5	37.7	22981			
22	2020-10-10	12:30:00	44.3	38.8	37.7	26930			
23	2020-10-10	12:45:00	42.4	37.3	37.7	17328			
24	2020-10-10	13:00:00	40.8	37.6	37.7	12160		79399	43.0
25	2020-10-10	13:15:00	43.6	37.7	37.8	22723			
26	2020-10-10	13:30:00	42.5	37.7	37.9	17714			
27	2020-10-10	13:45:00	41.1	37.2	37.9	13021			
28	2020-10-10	14:00:00	40.6	37.1	37.9	11378		64836	42.1
29	2020-10-10	14:15:00	42.0	37.9	38.1	15920			
30	2020-10-10	14:30:00	42.7	37.6	38.2	18576			
31	2020-10-10	14:45:00	41.1	37.1	38.3	12846			
32	2020-10-10	15:00:00	41.1	37.7	38.4	12791		60134	41.8
33	2020-10-10	15:15:00	41.0	37.2	38.4	12470			
34	2020-10-10	15:30:00	41.1	37.9	38.4	12739			
35	2020-10-10	15:45:00	40.4	37.2	38.4	11091			
36	2020-10-10	16:00:00	45.1	37.3	38.5	32645		68943	42.4
37	2020-10-10	16:15:00	46.9	36.9	38.7	49207			
38	2020-10-10	16:30:00	45.3	36.6	38.8	33745			
39	2020-10-10	16:45:00	41.7	36.5	39.0	14940			
40	2020-10-10	17:00:00	47.1	37.4	39.2	51155		149047	45.7
41	2020-10-10	17:15:00	47.1	36.6	39.5	51064			
42	2020-10-10	17:30:00	43.5	36.2	40.3	22200			
43	2020-10-10	17:45:00	42.0	35.0	40.6	15742			
44	2020-10-10	18:00:00	50.7	40.9	40.9	117360		206366	47.1
							1337912		
1	2020-10-11	07:15:00	45.8	38.0	35.3	38173			
2	2020-10-11	07:30:00	55.2	39.4	35.5	334190			
3	2020-10-11	07:45:00	55.9	41.4	35.8	390222			
4	2020-10-11	08:00:00	49.1	37.5	36.2	80682		843268	53.2
5	2020-10-11	08:15:00	51.3	37.4	36.3	133450			

6	2020-10-11	08:30:00	47.9	39.0	36.3	61750			
7	2020-10-11	08:45:00	52.0	37.7	36.6	158378			
8	2020-10-11	09:00:00	43.8	36.2	36.8	24225		377803	49.8
9	2020-10-11	09:15:00	50.5	36.3	36.9	111069			
10	2020-10-11	09:30:00	43.3	35.3	37.0	21401			
11	2020-10-11	09:45:00	51.7	35.5	37.3	147811			
12	2020-10-11	10:00:00	39.7	35.8	37.4	9353		289635	48.6
13	2020-10-11	10:15:00	39.9	36.3	37.5	9843			
14	2020-10-11	10:30:00	42.1	36.9	37.5	16388			
15	2020-10-11	10:45:00	42.3	37.0	37.5	17170			
16	2020-10-11	11:00:00	43.3	37.6	37.6	21156		64556	42.1
17	2020-10-11	11:15:00	45.4	38.4	37.6	34589			
18	2020-10-11	11:30:00	45.3	37.5	37.7	33621			
19	2020-10-11	11:45:00	43.1	37.5	37.7	20343			
20	2020-10-11	12:00:00	42.0	37.6	38.0	15760		104313	44.2
21	2020-10-11	12:15:00	41.6	38.3	38.2	14346			
22	2020-10-11	12:30:00	43.2	38.9	38.3	21061			
23	2020-10-11	12:45:00	42.7	39.7	38.4	18722			
24	2020-10-11	13:00:00	43.4	39.2	38.7	22075		76204	42.8
25	2020-10-11	13:15:00	43.7	39.5	38.8	23359			
26	2020-10-11	13:30:00	44.4	40.6	38.8	27683			
27	2020-10-11	13:45:00	45.0	39.2	38.9	31484			
28	2020-10-11	14:00:00	42.9	39.0	39.0	19339		101865	44.1
29	2020-10-11	14:15:00	41.9	38.8	39.0	15558			
30	2020-10-11	14:30:00	42.9	37.3	39.0	19453			
31	2020-10-11	14:45:00	42.6	38.8	39.0	18255			
32	2020-10-11	15:00:00	43.6	39.7	39.2	22931		76198	42.8
33	2020-10-11	15:15:00	44.6	40.8	39.2	28927			
34	2020-10-11	15:30:00	43.4	39.3	39.3	21995			
35	2020-10-11	15:45:00	43.5	39.9	39.4	22352			
36	2020-10-11	16:00:00	42.5	39.6	39.5	17904		91177	43.6
37	2020-10-11	16:15:00	42.0	39.0	39.6	15994			
38	2020-10-11	16:30:00	41.7	39.0	39.7	14915			
39	2020-10-11	16:45:00	42.9	38.7	39.7	19557			
40	2020-10-11	17:00:00	42.8	38.2	39.9	19096		69562	42.4
41	2020-10-11	17:15:00	43.0	36.6	40.6	19728			
42	2020-10-11	17:30:00	41.4	36.8	40.8	13858			
43	2020-10-11	17:45:00	41.9	37.7	41.4	15458			
44	2020-10-11	18:00:00	52.2	42.4	42.4	167217		216260	47.3
							2310840		
1						1			
2						1			
3						1			
4						1		4	0.0
5						1			
6						1			
7						1			
8						1		4	0.0
9						1			
10						1			
11						1			
12						1		4	0.0
13						1			

Noise Assessment

Evening Period	6pm to 10pm		
amenity criteria	45	dB(A)	rural
Intrusiveness criteria (RBL+ 5)	34.6	dB(A)	
Median LaeqEvening 18:00-22:00	42.8	dB(A)	



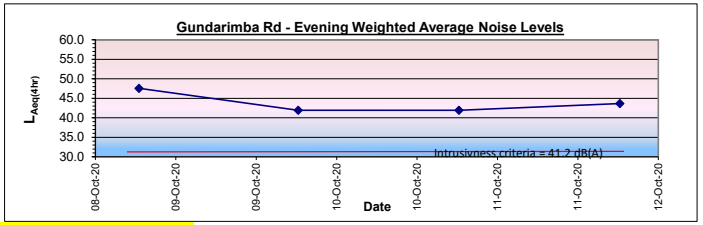
Day	Date	$L_{Aeq(evening)}$	ABL	RBL
Saturday Evening	8/10/2020	47.6	41.9	
Sunday Evening	9/10/2020	41.9	29.3	29.6
Monday Evening	10/10/2020	41.9	28.0	
Tuesday Evening	11/10/2020	43.7	29.8	

item	Date	time	$L_{Aeq(15\ minute)}$	$L_{A90(15minute)}$	$L_{A90(15min)}$ assending order	10^(($L_{Aeq(15\ minute)}$/10))	period sums	hrly sums	hrly Laeq
1	2020-10-08	18:15:00	53.1	47.7	41.5	205763			
2	2020-10-08	18:30:00	47.9	45.3	41.9	61230			
3	2020-10-08	18:45:00	47.1	43.8	42.0	51466			
4	2020-10-08	19:00:00	47.1	44.5	42.1	51161		369620	49.7
5	2020-10-08	19:15:00	48.4	43.4	42.2	69624			
6	2020-10-08	19:30:00	46.0	42.8	42.3	39946			
7	2020-10-08	19:45:00	46.8	44.0	42.5	47971			
8	2020-10-08	20:00:00	46.6	42.9	42.7	45677		203217	47.1
9	2020-10-08	20:15:00	45.2	41.9	42.8	33298			
10	2020-10-08	20:30:00	45.8	41.5	42.9	38424			
11	2020-10-08	20:45:00	45.6	42.2	43.4	36050			
12	2020-10-08	21:00:00	46.5	42.1	43.8	44600		152372	45.8
13	2020-10-08	21:15:00	45.0	42.0	44.0	31734			
14	2020-10-08	21:30:00	46.7	42.3	44.5	47020			
15	2020-10-08	21:45:00	47.4	42.7	45.3	55298			
16	2020-10-08	22:00:00	47.3	42.5	47.7	53112		187163	46.7
							912372		
1	2020-10-09	18:15:00	50.3	48.4	28.5	105979			
2	2020-10-09	18:30:00	44.7	41.2	29.3	29391			
3	2020-10-09	18:45:00	42.2	40.7	29.5	16701			
4	2020-10-09	19:00:00	41.7	39.0	30.0	14847		166917	46.2
5	2020-10-09	19:15:00	41.3	38.1	30.0	13541			
6	2020-10-09	19:30:00	41.2	38.5	30.4	13036			
7	2020-10-09	19:45:00	41.0	37.6	35.7	12637			
8	2020-10-09	20:00:00	38.5	36.3	35.8	7125		46338	40.6
9	2020-10-09	20:15:00	38.4	35.8	36.3	6980			
10	2020-10-09	20:30:00	37.6	35.7	37.6	5719			
11	2020-10-09	20:45:00	36.0	30.0	38.1	4024			
12	2020-10-09	21:00:00	36.0	30.4	38.5	4001		20725	37.1
13	2020-10-09	21:15:00	35.1	29.5	39.0	3252			
14	2020-10-09	21:30:00	34.9	29.3	40.7	3056			
15	2020-10-09	21:45:00	34.9	30.0	41.2	3076			
16	2020-10-09	22:00:00	38.6	28.5	48.4	7251		16635	36.2
							250616		
1	2020-10-10	18:15:00	52.5	45.6	27.8	175875			
2	2020-10-10	18:30:00	39.1	35.3	28.0	8080			
3	2020-10-10	18:45:00	38.0	32.9	28.1	6310			

4	2020-10-10	19:00:00	37.9	32.8	30.2	6176		196440	46.9
5	2020-10-10	19:15:00	39.2	34.1	30.8	8239			
6	2020-10-10	19:30:00	37.5	32.4	30.8	5571			
7	2020-10-10	19:45:00	36.7	32.5	31.0	4694			
8	2020-10-10	20:00:00	36.4	32.4	32.2	4343		22846	37.6
9	2020-10-10	20:15:00	37.2	32.2	32.4	5200			
10	2020-10-10	20:30:00	36.6	30.8	32.4	4577			
11	2020-10-10	20:45:00	35.7	31.0	32.5	3750			
12	2020-10-10	21:00:00	35.7	30.8	32.8	3681		17208	36.3
13	2020-10-10	21:15:00	34.8	28.1	32.9	3044			
14	2020-10-10	21:30:00	35.5	30.2	34.1	3529			
15	2020-10-10	21:45:00	35.1	28.0	35.3	3226			
16	2020-10-10	22:00:00	34.4	27.8	45.6	2764		12563	35.0
							249057		
1	2020-10-11	18:15:00	53.6	50.0	27.7	231125			
2	2020-10-11	18:30:00	41.6	38.6	29.8	14330			
3	2020-10-11	18:45:00	44.5	42.8	31.4	28005			
4	2020-10-11	19:00:00	43.2	37.7	31.5	20808		294267	48.7
5	2020-10-11	19:15:00	39.7	35.6	32.3	9413			
6	2020-10-11	19:30:00	39.5	34.7	32.4	9003			
7	2020-10-11	19:45:00	37.7	33.3	33.3	5948			
8	2020-10-11	20:00:00	37.8	33.4	33.4	6008		30371	38.8
9	2020-10-11	20:15:00	37.5	32.4	33.4	5659			
10	2020-10-11	20:30:00	41.0	33.4	33.6	12556			
11	2020-10-11	20:45:00	37.6	32.3	34.7	5780			
12	2020-10-11	21:00:00	38.3	33.6	35.6	6780		30775	38.9
13	2020-10-11	21:15:00	37.5	31.4	37.7	5575			
14	2020-10-11	21:30:00	36.0	31.5	38.6	3986			
15	2020-10-11	21:45:00	35.9	29.8	42.8	3849			
16	2020-10-11	22:00:00	34.8	27.7	50.0	3038		16448	36.1
							371861		
1						1			
2						1			
3						1			
4						1		4	0.0
5						1			
6						1			
7						1			
8						1		4	0.0
9						1			
10						1			
11						1			
12						1		4	0.0
13						1			
14						1			
15						1			
16						1		4	0.0
							16		
1						1			
2						1			
3						1			
4						1		4	0.0
5						1			
6						1			
7						1			

Previous Noise Assessment October 2016

Evening Period	6pm to 10pm		
amenity criteria	50-55	dB(A)	urban
Intrusiveness criteria (RBL+ 5)	#REF!	dB(A)	



Day	Date	$L_{Aeq(evening)}$	ABL	RBL
Monday Evening	#REF!	#REF!	#REF!	
Tuesday Evening	18/10/2016	41.0	30.1	#REF!
Wednesday Evening	19/10/2016	58.4	32.7	
Thursday Evening	20/10/2016	40.8	31.0	

15	17/10/2016	21:45	33.9	29.5	50	2455				
16	17/10/2016	22:00	38.6	31.3	57.3	7244			9699	33.8
							9699			
	18/10/2016	18:15	49	40.3	30.1					
	18/10/2016	18:30	49.8	39.7	30.4					
	18/10/2016	18:45	45.6	39.2	30.9					
	18/10/2016	19:00	65.9	43.4	31.9				0	
	18/10/2016	19:15	64.9	60.6	35.9					
	18/10/2016	19:30	62.8	59.2	37.3					
	18/10/2016	19:45	58.1	44	37.4					
	18/10/2016	20:00	55.3	40.1	38.8				0	
1	18/10/2016	20:15	44.7	38.8	39.2	29512				
2	18/10/2016	20:30	43	37.3	39.7	19953				
3	18/10/2016	20:45	43.9	37.4	40.1	24547				
4	18/10/2016	21:00	42.4	35.9	40.3	17378			91390	43.6
5	18/10/2016	21:15	35.4	31.9	43.4	3467				
6	18/10/2016	21:30	33.1	30.1	44	2042				
7	18/10/2016	21:45	33.6	30.4	59.2	2291				
8	18/10/2016	22:00	33.8	30.9	60.6	2399			10199	34.1
							101589			
	19/10/2016	18:15	50	41.1	30.4	100000				
	19/10/2016	18:30	45.6	37.8	32.7	36308				
	19/10/2016	18:45	57.3	38.3	35.3	537032				
	19/10/2016	19:00	68.4	40.5	35.7	6918310			7591649	62.8
	19/10/2016	19:15	64.1	50.1	36.1	2570396				
	19/10/2016	19:30	57.9	55.8	36.6	616595				
	19/10/2016	19:45	49.3	38.7	37.1	85114				
	19/10/2016	20:00	38.1	36.6	37.1	6457			3278561	59.1
	19/10/2016	20:15	38.1	35.7	37.8	6457				
	19/10/2016	20:30	41.1	37.1	37.8	12882				
	19/10/2016	20:45	43.2	37.1	38.3	20893				
	19/10/2016	21:00	40.4	36.1	38.7	10965			51197	41.1
	19/10/2016	21:15	36.3	32.7	40.5	4266				
	19/10/2016	21:30	34.3	30.4	41.1	2692				
	19/10/2016	21:45	39.8	35.3	50.1	9550				
	19/10/2016	22:00	40.8	37.8	55.8	12023			28530	38.5
							10949937			
	20/10/2016	18:15	49.3	39.5	31					

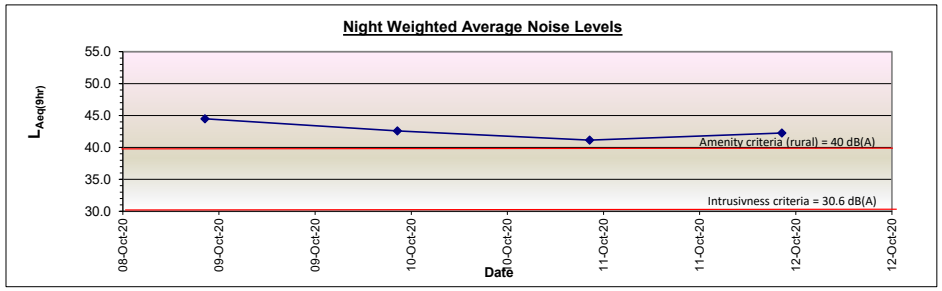
	20/10/2016	18:30	47.4	38.1		31.1			
	20/10/2016	18:45	54.6	37.5		31.2			
	20/10/2016	19:00	67.4	39.3		31.4		0	
	20/10/2016	19:15	65.2	55.5		31.4			
	20/10/2016	19:30	59.5	57.2		33			
1	20/10/2016	19:45	48.4	39		33.9	69183		
2	20/10/2016	20:00	38.2	36		34.1	6607	75790	
3	20/10/2016	20:15	36.6	34.1		36	4571		
4	20/10/2016	20:30	38.2	33.9		37.5	6607		
5	20/10/2016	20:45	36.1	33		38.1	4074		
6	20/10/2016	21:00	35.3	31.4		39	3388	18640	36.7
7	20/10/2016	21:15	34.1	31.2		39.3	2570		
8	20/10/2016	21:30	42.7	31.4		39.5	18621		
9	20/10/2016	21:45	34	31		55.5	2512		
10	20/10/2016	22:00	33.5	31.1		57.2	2239	25942	38.1
								120372	
	21/10/2016	18:15	51.4	38.6		32			
	21/10/2016	18:30	51.2	38.3		32.6			
	21/10/2016	18:45	56.2	38.7		33.1			
	21/10/2016	19:00	67.9	41.4		33.6		0	
	21/10/2016	19:15	64.1	52.7		33.8			
	21/10/2016	19:30	59.6	54.2		34.5			
	21/10/2016	19:45	50.4	46.6		34.7			
	21/10/2016	20:00	41.4	36.3		35.1		0	
	21/10/2016	20:15	38.9	35.1		36.3			
	21/10/2016	20:30	38.4	34.5		38.3			
	21/10/2016	20:45	41.3	34.7		38.6			
	21/10/2016	21:00	36.1	33.6		38.7		0	
	21/10/2016	21:15	36.4	33.1		41.4			
	21/10/2016	21:30	41.8	33.8		46.6			
1	21/10/2016	21:45	34.3	32		52.7	2692		
2	21/10/2016	22:00	36.4	32.6		54.2	4365	7057	
	22/10/2016	18:15	60.6	35.7		30	1148154		
	22/10/2016	18:30	62.9	33.8		30.9	1949845		
	22/10/2016	18:45	66.6	34.6		31.1	4570882		
	22/10/2016	19:00	65.7	38.2		31.7	3715352	11384232	64.5
	22/10/2016	19:15	58.4	55.7		31.8	691831		
	22/10/2016	19:30	52.1	46.4		31.9	162181		
	22/10/2016	19:45	42.4	40.5		32	17378		
	22/10/2016	20:00	40.6	33.3		32.3	11482	882872	53.4
	22/10/2016	20:15	34.6	31.8		33.3	2884		
	22/10/2016	20:30	34.5	31.9		33.8	2818		
	22/10/2016	20:45	34.4	31.1		34.6	2754		
	22/10/2016	21:00	34.8	32		35.7	3020	11477	34.6
	22/10/2016	21:15	34.3	32.3		38.2	2692		
	22/10/2016	21:30	36.2	31.7		40.5	4169		
	22/10/2016	21:45	33.2	30		46.4	2089		
	22/10/2016	22:00	32.9	30.9		55.7	1950	10899	34.4
								12289480	
	23/10/2016	18:15	40	35.2		25.4	10000		
	23/10/2016	18:30	39.1	36.1		26.6	8128		
	23/10/2016	18:45	40.6	34.3		26.7	11482		
	23/10/2016	19:00	42.6	33.2		27	18197	47807	40.8
	23/10/2016	19:15	36.7	32		27.6	4677		

	23/10/2016	19:30	38.2	31.4	27.6	6607			
	23/10/2016	19:45	34.2	30.7	27.9	2630			
	23/10/2016	20:00	31.5	27.6	28.2	1413		15327	35.8
	23/10/2016	20:15	32.3	27.9	28.5	1698			
	23/10/2016	20:30	32.7	28.5	30.7	1862			
	23/10/2016	20:45	32.1	27.6	31.4	1622			
	23/10/2016	21:00	31.9	28.2	32	1549		6731	32.3
	23/10/2016	21:15	31.5	27	33.2	1413			
	23/10/2016	21:30	32.6	26.6	34.3	1820			
	23/10/2016	21:45	33	26.7	35.2	1995			
	23/10/2016	22:00	31.3	25.4	36.1	1349		6576	32.2
							76441		
	24/10/2016	18:15	51.5	39.6	29				
	24/10/2016	18:30	45	38.3	30.6				
	24/10/2016	18:45	42.4	37.5	30.8				
	24/10/2016	19:00	61.6	38	31.1			0	
	24/10/2016	19:15	61.4	46.9	31.3				
	24/10/2016	19:30	55.7	52.6	32.1				
1	24/10/2016	19:45	43	38	33.5	19953			
2	24/10/2016	20:00	39.1	37.1	34.7	8128		28081	
3	24/10/2016	20:15	38	34.7	37.1	6310			
4	24/10/2016	20:30	36.2	33.5	37.5	4169			
5	24/10/2016	20:45	35.7	32.1	38	3715			
6	24/10/2016	21:00	34.9	31.3	38	3090		17284	36.4
7	24/10/2016	21:15	33.6	30.6	38.3	2291			
8	24/10/2016	21:30	34.9	30.8	39.6	3090			
9	24/10/2016	21:45	33.1	31.1	46.9	2042			

Noise Assessment

Night Period	10pm to 7am		
amenity criteria	40	dB(A)	rural
Intrusiveness criteria (RBL+ 5)	30.6	dB(A)	
Sleep Disturbance criteria (RBL+ 15)	40.6	dB(A)	
Median LAeqNight 22:00-07:00	42.4	dB(A)	

Night	Date	$L_{aeq(night)}$	ABL	RBL
Saturday Night	8/10/2020	44.5	34.8	
Sunday Night	9/10/2020	42.6	26.1	25.6
Monday Night	10/10/2020	41.1	22.9	
Tuesday Night	11/10/2020	42.3	25.0	



no.	date	time	$L_{Aeq(15\ minute)}$	$L_{A90(15minute)}$	$L_{A90(15min)}$ assending order	10^(($L_{Aeq(15\ minute)}$/10))	period sums	hrly sums	hrly Laeq	Sleep Disturbance events
1	2020-10-08	22:15:00	47.4	43.2	34.1	54730				1
2	2020-10-08	22:30:00	46.9	43.6	34.3	49421				1
3	2020-10-08	22:45:00	48.8	40.3	34.5	76735				1
4	2020-10-08	23:00:00	44.8	40.7	34.8	30311		211197	47.2	1
5	2020-10-08	23:15:00	45.4	39.9	34.8	34809				1
6	2020-10-08	23:30:00	44.6	39.1	34.9	28898				1
7	2020-10-08	23:45:00	43.9	38.6	35.0	24333				1
8	2020-10-09	00:00:00	41.3	36.9	35.1	13487		101526	44.0	1
9	2020-10-09	00:15:00	39.7	36.0	35.1	9323				0
10	2020-10-09	00:30:00	40.1	36.3	35.4	10210				0
11	2020-10-09	00:45:00	39.4	34.9	35.5	8699				0
12	2020-10-09	01:00:00	38.1	34.5	35.7	6409		34641	39.4	0
13	2020-10-09	01:15:00	43.0	36.1	35.7	19766				1
14	2020-10-09	01:30:00	40.1	35.7	36.0	10295				0
15	2020-10-09	01:45:00	41.1	34.8	36.1	12966				1
16	2020-10-09	02:00:00	41.5	35.1	36.3	14174		57202	41.6	1
17	2020-10-09	02:15:00	42.6	35.4	36.4	18286				1
18	2020-10-09	02:30:00	40.5	35.1	36.9	11165				0
19	2020-10-09	02:45:00	41.0	34.8	37.3	12702				1
20	2020-10-09	03:00:00	40.7	35.0	38.6	11649		53801	41.3	1
21	2020-10-09	03:15:00	41.2	35.5	39.1	13039				1
22	2020-10-09	03:30:00	38.3	34.1	39.2	6714				0
23	2020-10-09	03:45:00	42.2	37.3	39.9	16421				1
24	2020-10-09	04:00:00	41.1	35.7	39.9	12915		49090	40.9	1
25	2020-10-09	04:15:00	41.3	34.3	39.9	13348				1
26	2020-10-09	04:30:00	43.7	36.4	40.3	23185				1
27	2020-10-09	04:45:00	45.7	39.9	40.7	36831				1
28	2020-10-09	05:00:00	45.7	41.4	41.0	36797		110161	44.4	1
29	2020-10-09	05:15:00	48.2	41.1	41.1	66571				1
30	2020-10-09	05:30:00	46.8	42.6	41.4	48099				1
31	2020-10-09	05:45:00	45.7	41.5	41.4	36912				1
32	2020-10-09	06:00:00	44.9	41.5	41.5	30553		182135	46.6	1
33	2020-10-09	06:15:00	47.1	39.9	41.5	51815				1
34	2020-10-09	06:30:00	48.0	41.4	42.6	62732				1
35	2020-10-09	06:45:00	48.7	41.0	43.2	73792				1
36	2020-10-09	07:00:00	43.7	39.2	43.6	23329		211668	47.2	1
							1011420			**29**

1	2020-10-09	22:15:00	39.5	37.6	25.1	9015			0
2	2020-10-09	22:30:00	34.0	29.0	25.1	2493			0
3	2020-10-09	22:45:00	36.0	28.6	25.8	4011			0
4	2020-10-09	23:00:00	31.2	26.5	26.1	1331		16851 36.2	0
5	2020-10-09	23:15:00	30.7	27.8	26.3	1182			0
6	2020-10-09	23:30:00	30.9	28.1	26.3	1241			0
7	2020-10-09	23:45:00	29.2	26.7	26.5	827			0
8	2020-10-10	00:00:00	31.5	27.9	26.7	1418		4668 30.7	0
9	2020-10-10	00:15:00	33.4	28.5	26.7	2171			0
10	2020-10-10	00:30:00	30.4	27.9	26.8	1106			0
11	2020-10-10	00:45:00	31.6	27.5	26.8	1431			0
12	2020-10-10	01:00:00	31.8	27.0	27.0	1517		6225 31.9	0
13	2020-10-10	01:15:00	30.5	26.8	27.1	1116			0
14	2020-10-10	01:30:00	32.9	27.1	27.2	1960			0
15	2020-10-10	01:45:00	33.5	27.2	27.5	2263			0
16	2020-10-10	02:00:00	31.3	25.8	27.8	1339		6679 32.2	0
17	2020-10-10	02:15:00	28.0	25.1	27.8	633			0
18	2020-10-10	02:30:00	29.6	26.3	27.9	915			0
19	2020-10-10	02:45:00	28.7	25.1	27.9	746			0
20	2020-10-10	03:00:00	30.5	26.1	28.1	1115		3409 29.3	0
21	2020-10-10	03:15:00	33.2	26.8	28.5	2082			0
22	2020-10-10	03:30:00	31.2	26.7	28.6	1314			0
23	2020-10-10	03:45:00	32.0	26.3	29.0	1579			0
24	2020-10-10	04:00:00	36.1	27.8	29.1	4099		9074 33.6	0
25	2020-10-10	04:15:00	36.7	29.1	33.1	4692			0
26	2020-10-10	04:30:00	42.1	33.1	34.4	16084			1
27	2020-10-10	04:45:00	43.6	36.3	34.6	23133			1
28	2020-10-10	05:00:00	45.5	38.7	35.3	35139		79047 43.0	1
29	2020-10-10	05:15:00	42.3	35.4	35.4	17091			1
30	2020-10-10	05:30:00	40.4	34.6	36.3	10904			0
31	2020-10-10	05:45:00	41.1	34.4	36.9	12831			1
32	2020-10-10	06:00:00	42.6	35.3	37.6	18103		58929 41.7	1
33	2020-10-10	06:15:00	43.6	36.9	38.7	23071			1
34	2020-10-10	06:30:00	48.2	39.3	39.1	66589			1
35	2020-10-10	06:45:00	53.1	39.6	39.3	205042			1
36	2020-10-10	07:00:00	52.4	39.1	39.6	175226		469928 50.7	1
							654810		**10**
1	2020-10-10	22:15:00	33.0	27.9	21.4	2005			0
2	2020-10-10	22:30:00	34.6	28.0	21.7	2912			0
3	2020-10-10	22:45:00	35.3	27.8	22.1	3382			0
4	2020-10-10	23:00:00	32.8	26.5	22.9	1925		10224 34.1	0
5	2020-10-10	23:15:00	37.0	27.3	23.1	5053			0
6	2020-10-10	23:30:00	34.7	27.6	23.3	2925			0
7	2020-10-10	23:45:00	35.9	26.8	23.5	3889			0
8	2020-10-11	00:00:00	39.2	28.0	24.1	8354		20220 37.0	0
9	2020-10-11	00:15:00	36.4	26.5	24.1	4327			0
10	2020-10-11	00:30:00	35.3	25.9	24.1	3400			0
11	2020-10-11	00:45:00	30.8	23.5	24.4	1199			0
12	2020-10-11	01:00:00	29.9	23.1	24.9	986		9912 33.9	0
13	2020-10-11	01:15:00	29.4	22.1	25.9	870			0
14	2020-10-11	01:30:00	34.3	24.1	26.5	2703			0

15	2020-10-11	01:45:00	31.4	21.7	26.5	1381			0
16	2020-10-11	02:00:00	36.0	24.9	26.6	3995	8949	33.5	0
17	2020-10-11	02:15:00	34.7	24.1	26.8	2942			0
18	2020-10-11	02:30:00	34.4	21.4	27.3	2765			0
19	2020-10-11	02:45:00	33.6	23.3	27.5	2285			0
20	2020-10-11	03:00:00	34.7	22.9	27.6	2977	10969	34.4	0
21	2020-10-11	03:15:00	35.8	24.1	27.8	3806			0
22	2020-10-11	03:30:00	34.9	24.4	27.9	3108			0
23	2020-10-11	03:45:00	35.1	27.5	28.0	3243			0
24	2020-10-11	04:00:00	37.0	26.6	28.0	4968	15125	35.8	0
25	2020-10-11	04:15:00	44.7	29.5	29.5	29518			1
26	2020-10-11	04:30:00	43.2	35.1	34.8	20915			1
27	2020-10-11	04:45:00	44.7	38.1	35.1	29341			1
28	2020-10-11	05:00:00	45.1	39.9	36.7	32511	112285	44.5	1
29	2020-10-11	05:15:00	43.2	36.8	36.8	20889			1
30	2020-10-11	05:30:00	43.0	34.8	37.1	19904			1
31	2020-10-11	05:45:00	46.0	38.0	37.3	39784			1
32	2020-10-11	06:00:00	45.4	36.7	37.6	34541	115118	44.6	1
33	2020-10-11	06:15:00	46.0	38.7	38.0	39463			1
34	2020-10-11	06:30:00	44.8	37.6	38.1	30043			1
35	2020-10-11	06:45:00	46.5	37.3	38.7	44683			1
36	2020-10-11	07:00:00	47.1	37.1	39.9	51376	165564	46.2	1
							468366		**12**
1	2020-10-11	22:15:00	34.3	28.3	23.1	2668			0
2	2020-10-11	22:30:00	35.0	28.7	24.6	3134			0
3	2020-10-11	22:45:00	35.3	26.0	24.7	3403			0
4	2020-10-11	23:00:00	36.8	27.8	25.0	4829	14035	35.5	0
5	2020-10-11	23:15:00	35.7	26.4	25.1	3707			0
6	2020-10-11	23:30:00	34.9	26.8	25.8	3059			0
7	2020-10-11	23:45:00	31.3	26.0	25.8	1339			0
8	2020-10-12	00:00:00	34.1	25.8	25.8	2553	10657	34.3	0
9	2020-10-12	00:15:00	36.5	26.9	26.0	4466			0
10	2020-10-12	00:30:00	33.2	26.0	26.0	2093			0
11	2020-10-12	00:45:00	32.7	25.1	26.0	1846			0
12	2020-10-12	01:00:00	32.8	24.6	26.4	1911	10316	34.1	0
13	2020-10-12	01:15:00	36.9	25.0	26.8	4851			0
14	2020-10-12	01:30:00	34.0	23.1	26.9	2519			0
15	2020-10-12	01:45:00	35.2	24.7	27.8	3335			0
16	2020-10-12	02:00:00	35.7	25.8	28.3	3705	14410	35.6	0
17	2020-10-12	02:15:00	37.3	25.8	28.7	5334			0
18	2020-10-12	02:30:00	38.5	28.7	28.7	7098			0
19	2020-10-12	02:45:00	37.0	28.8	28.8	5000			0
20	2020-10-12	03:00:00	36.8	29.6	29.1	4782	22215	37.4	0
21	2020-10-12	03:15:00	39.1	29.2	29.2	8146			0
22	2020-10-12	03:30:00	37.1	29.1	29.3	5085			0
23	2020-10-12	03:45:00	38.5	29.3	29.6	7141			0
24	2020-10-12	04:00:00	40.8	35.3	35.3	12055	32426	39.1	1
25	2020-10-12	04:15:00	43.4	36.9	36.9	21999			1
26	2020-10-12	04:30:00	44.4	38.2	38.2	27340			1
27	2020-10-12	04:45:00	46.5	41.4	39.5	44311			1
28	2020-10-12	05:00:00	48.9	41.8	39.9	76900	170550	46.3	1

29	2020-10-12	05:15:00	46.2	43.1	40.1	41212				1
30	2020-10-12	05:30:00	47.1	42.8	40.4	51762				1
31	2020-10-12	05:45:00	47.6	41.8	40.7	57109				1
32	2020-10-12	06:00:00	45.1	40.7	41.4	32302		182385	46.6	1
33	2020-10-12	06:15:00	46.3	40.4	41.8	42938				1
34	2020-10-12	06:30:00	44.1	40.1	41.8	25956				1
35	2020-10-12	06:45:00	46.3	39.5	42.8	42853				1
36	2020-10-12	07:00:00	45.7	39.9	43.1	37236		148983	45.7	1
							605977			**13**
1						1				0
2						1				0
3						1				0
4						1		4	0.0	0
5						1				0
6						1				0
7						1				0
8						1		4	1.2	0
9						1				0
10						1				0
11						1				0
12						1		4	0.0	0
13						1				0
14						1				0
15						1				0
16						1		4	0.0	0
17						1				0
18						1				0
19						1				0
20						1		4	0.0	0
21						1				0
22						1				0
23						1				0
24						1		4	0.0	0
25						1				0
26						1				0
27						1				0
28						1		4	0.0	0
29						1				0
30						1				0
31						1				0
32						1		4	0.0	0
33						1				0
34						1				0
35						1				0
36						1		4	0.0	0
							36			**0**
1						1				0
2						1				0
3						1				0
4						1		4	0.0	0
5						1				0
6						1				0
7						1				0