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Brisbane Christian Assembly
27 McIlwraith Street
Everton Park

ACOUSTIC REPORT






Client:
Brisbane Christian Assembly
c/- Urban Strategies
Attn: Jared Cooper

Reference:
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1. Introduction

The following report is in response to a request by Brisbane Cristian Assembly for a noise compliance assessment of a church located at 27 McIlwraith Street, Everton Park. To facilitate the assessment, unattended noise monitoring was conducted in the vicinity of the site to establish the criteria for onsite activities. A compliance assessment of the site was also undertaken on Sunday the 7th of September 2025, with attended measurements conducted during the operation of the site and of the resulting noise impacts at the nearest receivers. Based on the results of the assessment, recommendations have been provided in this report.

A previous report was completed for the development dated 23rd October 2025 *(2025333 R01F 27 Mcilwraith Street Everton Park ENV.).* This updated report is in response to Brisbane City Councils information request dated 10th April 2026.

2. Site Description

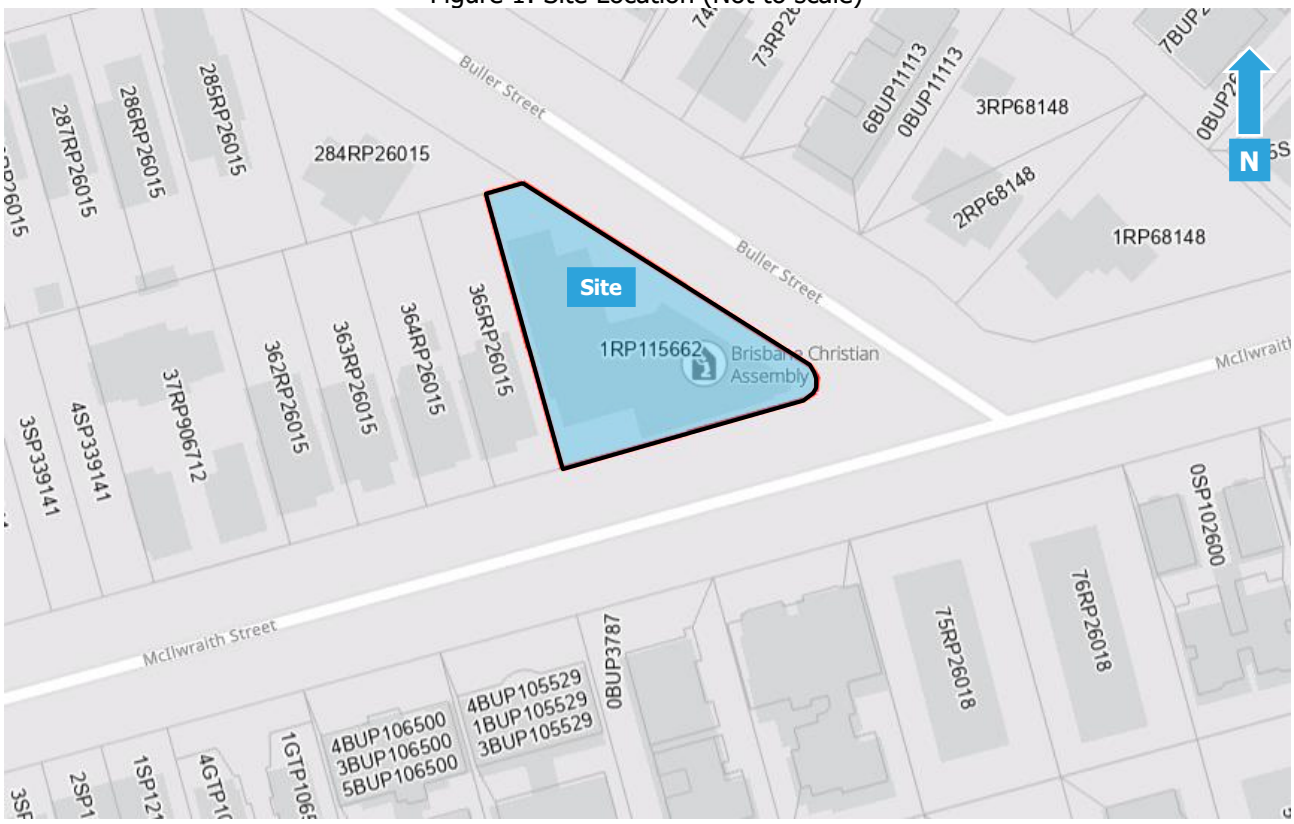
2.1 Site Location

The site is described by the following:

27 McIlwraith Street, Everton Park
Lots 1 on RP115662

Refer to for site location.

Figure 1: Site Location (Not to scale)



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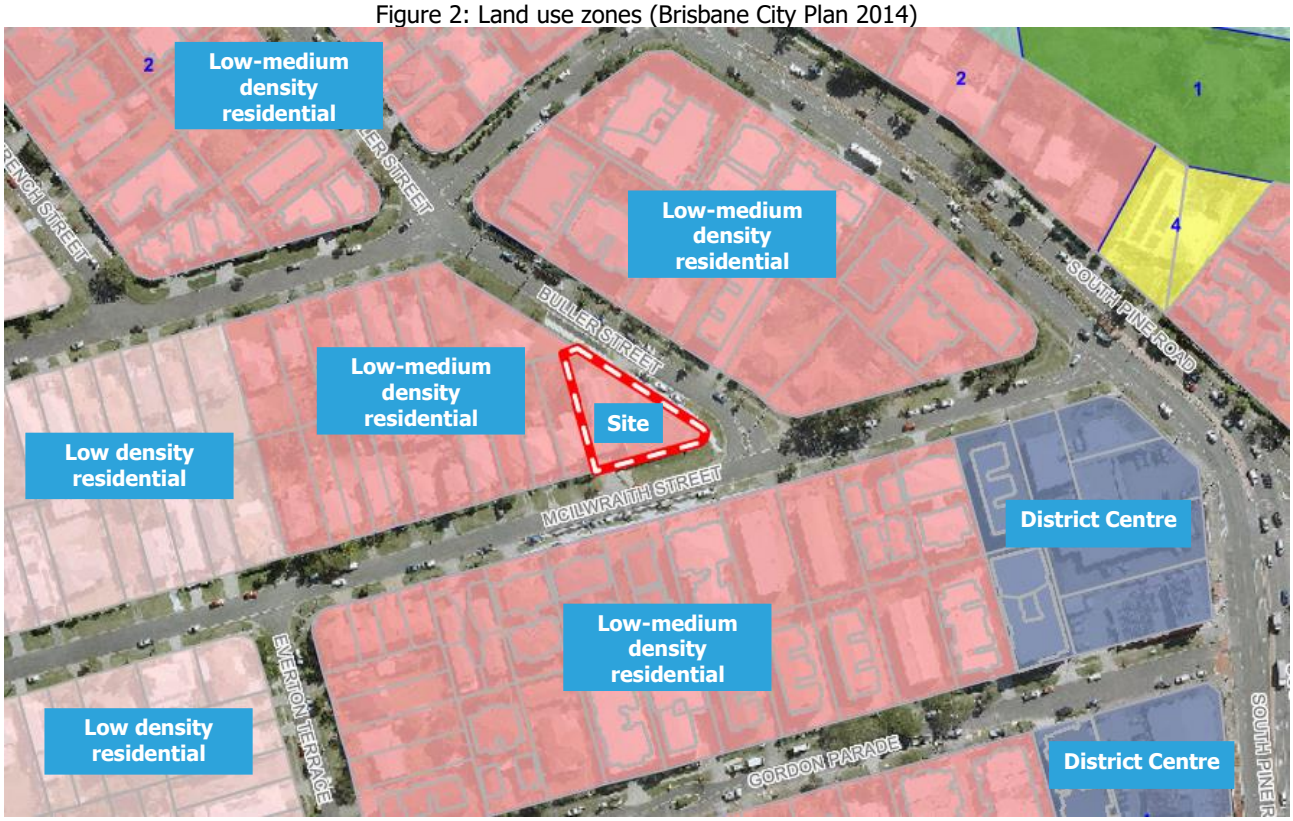
A comprehensive site survey was conducted on the 7th September 2025 and identified the following:

a) The site is currently occupied by an existing Church.
b) The site is located in a Low-Medium Density Residential Zone.
c) Buller Road bounds the site to the northeast separating the site from single storey dwellings and three storey residential units.
d) A single storey high set dwelling is located adjacent the western site boundary.
e) McIlwraith Street bounds the site to the south, separating the site from single, two and three storey residential buildings.
f) South Pine Road (State Controlled) is located 110 metres northeast and a District Centre located 90 metres southeast of the site.

2.2 Land Zoning

Land use zone categories for the site and surroundings are shown in the figure below;

Figure 2: Land use zones (Brisbane City Plan 2014)



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2.3 Proposal

The proposal is to use the premises for the following activities:

Church Area:

- Church Service (weekly): Sundays 09:50-13:00 (105 adults and 45 children).
- Bible Study (weekly): Wednesdays 18:30-20:30 (30 adults and 15 children).
- Fasting Prayer (weekly): Friday 09:30-12:00 (20 adults and 12 children).
- Prayer (weekly): Friday 18:30-20:30 and Saturday 09:30-12:00 and 18:30-20:30 (50 adults and 20 children per session).
- Prayer (once every 2 months): Sunday 18:30-20:20 (25 adults).
- Men's Metting (once per month): Monday or Tuesday 18:30-20:30 (25 adults).
- Amplified music for services.
- Ladies Meeting (2 per month): Thursday 18:30-20:00 (25 adults and 5 children).
- Infrequent ancillary activities such as weddings or funeral services limited to the Church congregation, nothing no gatherings, wakes or receptions occurring within the Church grounds after the service.

Hall Area:

- Sunday School (weekly): Sunday 08:30-09:45 (15 adults and 45 children).
- Lunch after Church (weekly): 13:00-13:30 (105 adults and 45 children).
- No amplified music within the hall.
- Pastor meetings with members: booked on an appointment basis only and occurs a few times a week within the hall office.

The previous DA approval for the Church when occupied by the Brisbane Bass Band, required additional façade treatment for the Sunday Service area. This additional treatment has now been installed with the compliance measurement at sensitive receivers accounting for this and reverberation time within the building.

2.4 Acoustic Environment

The area surrounding the site is primarily affected by road traffic noise from the surrounding road network.

3. Equipment

The following equipment was used to record noise levels:

- Rion NL42 Environmental Noise Monitor
- Norsonics Nor140 Sound Level Meter
- BSWA Technology Co. Ltd Sound Calibrator

The Nor140 Sound Level Meter and Rion NL42 Environmental Noise Monitor holds current NATA Laboratory Certification and was field calibrated before and after the measurements period, with no significant drift from the reference signal recorded.

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4. Receivers & Measurements Locations

4.1 Receiver Locations

The nearest residential receiver locations were identified as follows;

1. A three-storey apartment building located at 30 McIlwraith Street - 25m from the site (Low-medium density residential zone).
2. A three-storey apartment building located at 5 Buller Street – 28m from the site (Low-medium density residential zone).
3. Single storey highset dwelling located at 29 McIlwraith Street – 3m from the site (Low-medium density residential zone) (Level 1: Receiver at 1.5m).
4. Single storey highset dwelling located at 29 McIlwraith Street – 3m from the site (Low-medium density residential zone) (Level 2: Receiver at 4.5m).
5. Single storey highset dwelling located at 29 McIlwraith Street – 3m from the site (Low-medium density residential zone) (Level 3: Receiver at 7.5m).

These locations were chosen as being representative of the nearest residential receivers to the site. Refer to Figure 3 for these locations and measurement locations used for the assessment.

Figure 3: Receiver and Noise Monitoring Location



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4.2 Unattended Noise Monitoring

A Rion NL 42 environmental noise monitor was placed onsite to measure ambient noise levels. The monitor was located in a free field location with the microphone approximately 1.4 metres above ground surface level. The noise monitor was set to record noise levels between the 27th of August and 7th of September 2025.

The Rion NL42 environmental noise monitor was set to record noise levels in "A" Weighting, Fast response using 15-minute statistical intervals. Ambient noise monitoring was conducted generally in accordance with Australian Standard AS1055:2018 *Acoustics – Description and measurement of environmental* noise. Refer to for the noise monitoring location.

4.3 Attended Noise Measurement Procedure

Attended noise measurements of the current Sunday service were conducted between the hours of 08:45am to 11:30am on the 7th September 2025, with the microphone approximately 1.5 metres above ground surface level. Weather conditions during the measurement period were generally fine, with light winds and no rain.

The sound level meter was set to record third octave and noise statistics as follows:

- "A" weight in broadband.
- Linear in 1/3 octaves
- "Fast" response.
- 5-minute statistical interval for music for both the source and intrusive. Note the attended music measurements excluded ambient noise sources in close proximity to the measurement location where possible. It should be noted that urban hum from the nearby major roads was still present. As they form part of the existing amenity they cannot be completely excluded due to the high frequency of occurrence.

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5. Measured Noise Levels

The following table presents the measured ambient noise levels from the unattended noise survey. Any periods of inclement weather or extraneous noise were omitted from the measured data prior to determining the results.

5.1 Meteorological Conditions

Meteorological observations during the unattended noise monitoring survey were obtained from the Bureau of Meteorology website (http://www.bom.gov.au/climate/data), shown in Table 1 below.

Table 1: Meteorological Conditions – Brisbane

Day	Date	Rainfall (mm)	Wind			
			9am		3pm	
			Speed (km/h)	Direction	Speed (km/h)	Direction
Wednesday	27/08/2025	0	4	S	9	NE
Thursday	28/08/2025	0	9	SW	26	W
Friday	29/08/2025	0	6	SW	15	W
Saturday	30/08/2025	0	11	W	13	WSW
Sunday	31/08/2025	0	7	WSW	11	NE
Monday	1/09/2025	0	7	ESE	6	ESE
Tuesday	2/09/2025	0	6	SSW	9	E
Wednesday	3/09/2025	0	6	SW	11	NE
Thursday	4/09/2025	0	4	SSW	9	NE
Friday	5/09/2025	0	7	SSW	11	ESE
Saturday	6/09/2025	0	9	ESE	15	ESE
Sunday	7/09/2025	0.2	6	SSW	7	NE

5.2 Ambient Noise Levels

The noise levels measured at the monitoring location are as follows:

Table 2: Measured Ambient Noise Levels - All Time Periods

Day	Date	L90 dB(A) (Rating Background Level)		
		Day	Evening	Night
Wednesday	27/08/2025	-	46	39*
Thursday	28/08/2025	42	42	31
Friday	29/08/2025	43	45	31
Saturday	30/08/2025	44	40	36
Sunday	31/08/2025	38	39	32
Monday	1/09/2025	41	36	30
Tuesday	2/09/2025	41	41	29
Wednesday	3/09/2025	39	43	32
Thursday	4/09/2025	41	45	32
Friday	5/09/2025	39	38	33
Saturday	6/09/2025	42	39	30
Sunday	7/09/2025	39	-	-
Overall value		41	41	32

Any periods of inclement weather (*) or extraneous noise are omitted from the measured data prior to determining the results.

Refer to the appendix for a graphical representation of the noise monitoring data.

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6. Noise Criteria

6.1 BCC - Environmental Noise Criteria

To ensure a reasonable acoustic amenity is maintained, Council requires environmental noise be assessed in accordance with Noise Impact Assessment – Planning Scheme Policy (2014). To accurately assess environmental noise, the noise must first be classified as to the type and its duration. Sections 6.1.1 breaks down the assessment requirements in relation to the project and considers the criteria in relation to the type of noise being assessed.

6.1.1 Community facilities code of the Brisbane City Plan 2014

To ensure a reasonable amenity is maintained, the noise criteria as specified in the Community Facilities Code of the Brisbane City Plan 2014 shall be applied for the assessment of onsite activities to surrounding sensitive receivers. This criteria is detailed in Table 3.

Table 3: 9.3.5 Community facilities code – Table 9.3.5.3.A – Performance Outcomes and Acceptable Outcomes

Performance Outcome	Acceptable Outcome
PO1 Development ensures that the hours of operation are: a. consistent with reasonable community expectations for the use and are consistent with the purpose of the zone or zone precinct; b. controlled so that the community facility does not impact on the amenity of: i. a residence within the building where the use is located; ii. nearby sensitive uses.	**AO1.1** Development for a non-residential use has hours of operation, including the use of indoor activity areas and private open space, which are limited to 7am to 6pm.
	AO1.2 Development has hours of operation for delivery vehicles which are limited to 7am to 6pm Monday to Saturday, excluding public holidays.
PO2 Development ensures that noise generated does not exceed the noise (planning) criteria in Table 9.3.5.3.B and night-time noise criteria in Table 9.3.5.3.C at a sensitive zone or sensitive use. Note—A noise impact assessment report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome. Note—Where the development involves an activity regulated by the Entertainment Venues and Events Local Law, the operating noise levels and requirements may be specified on a permit or approval issued under that law.	**AO2.1** Development: a. does not involve amplified music entertainment; b. is conducted wholly within an enclosed building and does not involve external activity, dining or entertainment areas; c. provides a 2m high acoustic fence along any boundary with land in a residential zone; d. ensures mechanical plant or equipment is acoustically screened from adjoining sensitive uses. Note—Mechanical plant includes generators, motors, compressors and pumps such as air-conditioning, refrigeration or coldroom motors.
	AO2.2 Development does not generate noise that is clearly audible and creates a disturbance within a dwelling or its associated balcony or patio.

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Further reference is made to *Table 9.3.5.3.B – Noise (Planning) Criteria* as defined in the Brisbane City Plan 2014:

Table 4: Table 9.3.5.3.B – Noise (Planning) Criteria

Criteria Location	Intrusive Noise Criteria	Acoustic Amenity Criteria		
	Day, evening and night $L_{Aeq,adj,T}$ are not greater than the RBL plus the value in this column for the relevant criteria location, where T equals: • Day - 11hr • Evening - 4hr • Night - 9hr	Day, evening and night $L_{Aeq,adj,T}$ are not greater than the values in the column below for the relevant criteria location, where T equals: • Day - 11hr • Evening - 4hr • Night - 9hr		
		Day	Evening	Night
Low-Medium Density Residential Zone	3 dB(A)	55 dB(A)	45 dB(A)	40 dB(A)

The intrusive noise criteria applicable to this development are as follows:

Table 5: Applicable Intrusive Noise Criteria

Time Period	Receiver
	Criteria dB(A) (Rating L_{90} + 3 dB(A))
Day 7am–6pm	44
Evening 6pm-10pm	44
Night 10pm–7am	35

The low frequency noise criteria as applied by Brisbane City Council in accordance the Brisbane City Plan 2014 are as follows:

Table 6: Low Frequency Noise Criteria

Criteria Location	Low Frequency Noise Criteria		
	Day, evening and night $L_{Ceq,adj,T}$ are not greater than the values in the column below for the relevant criteria location, where T equals: • Day - 11hr • Evening - 4hr • Night - 9hr		
	Day	Evening	Night
Low-medium Density Residential Zone Boundary	65 dB(C)	65 dB(C)	60 dB(C)

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6.1.2 Centre or mixed-use code of the Brisbane City Plan 2014

As requested by Brisbane City Council in the information request dated 5th December 2025 *(Ref: A006898449),* the following low frequency noise criteria will be applied to the assessment:

Table 7: Low Frequency Noise Criteria

Criteria Location	Low Frequency Noise Criteria		
	Day, evening and night $L_{Ceq,adj,T}$ are not greater than the values in the column below for the relevant criteria location, where T equals: • Day - 11hr • Evening - 4hr • Night - 9hr		
	Day	Evening	Night
Low-medium Density Residential Zone Boundary	65 dB(C)	65 dB(C)	60 dB(C)

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7. Environmental Noise Assessment

7.1 Review of Existing Operations

Acoustic works conducted a site visit on the 7th of September 2025 to undertake noise measurements of the existing operation of the Sunday School and Sunday Service. At the time of the site visit, there was a full congregation. Measurements were conducted of the Sunday Service both during song and preaching and of the Sunday School during 'snack time' and teaching periods. These measurements were then used to determine compliance with Brisbane City Councils noise criteria.

Based on site visits conducted the following assumptions were used for the noise modelling:

- The noise from teaching during Sunday School was not included in the assessment as this activity was not audible at the nearby receivers. Observations confirmed that this activity involves small groups of children (approximately 10), divided into groups depending on age and then split into different rooms of the Church. The teaching involved quiet voice conversation between the teachers and students.
- Snack time involves all children from the Sunday school gathering in the Sunday School Hall for snack time. This activity occurs for approximately 15 minutes. To allow for worst case scenario, this activity has been assumed to occur for 30 minutes.
- During Sunday Service it was observed that singing occurs for the first 20 minutes of the service. This involved a keyboard, electric drums, guitar and two singers. Further singing occurs for a similar duration at a midway point of the service, with more singing occurring towards the end. The client has requested the option to extend hours of amplified music from 8am to 1pm on a Sunday and for intermittent period during the evening period. amplified To allow for worst case scenario, this activity has been assumed to occur for a total of 5 hours for the daytime and 2 hours in the evening specifically for the prayer meetings. The prayer meeting in the evening will be relocated from the hall to the main church and will consist of amplified speech, acoustic guitar or keyboard.

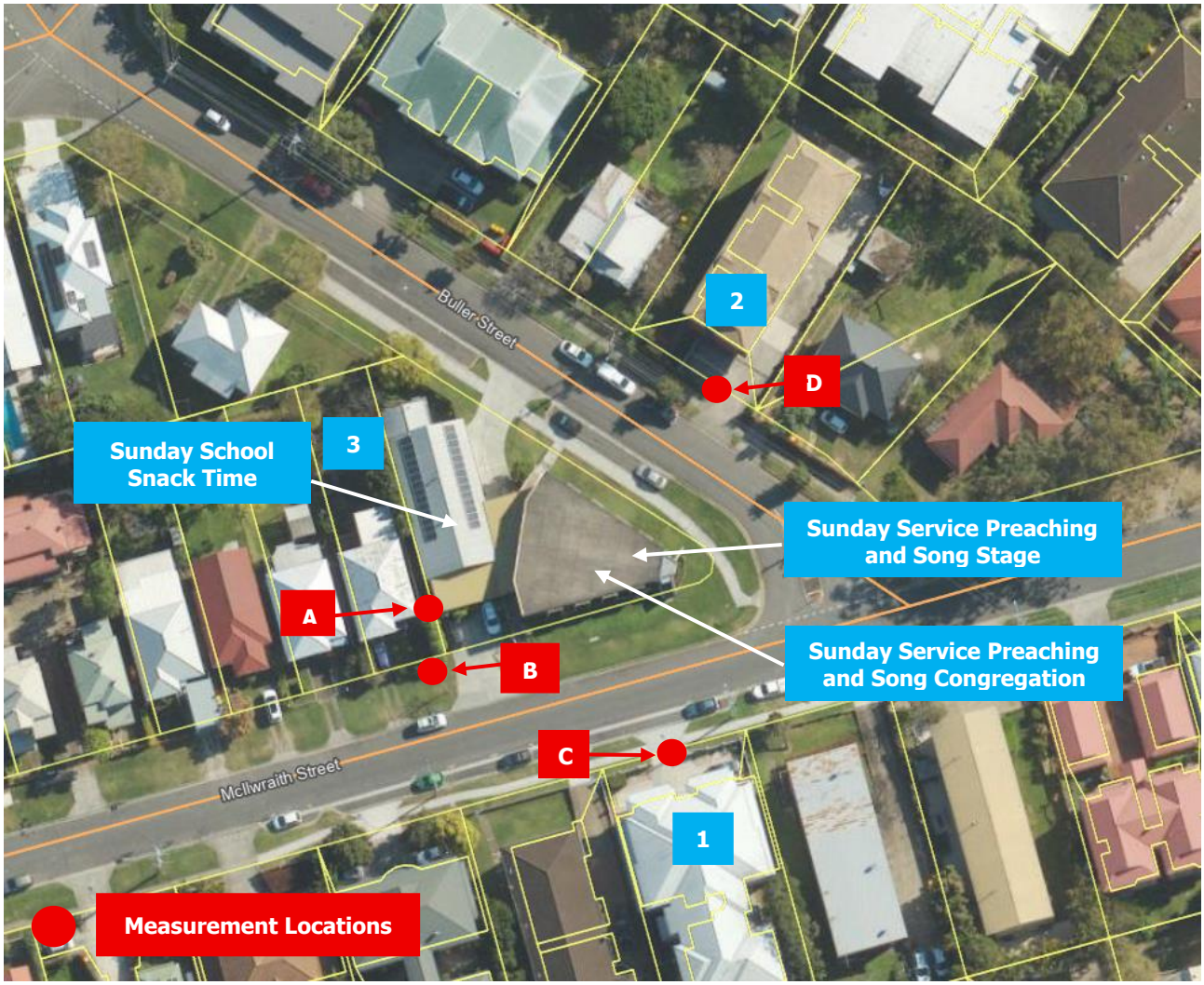
For the Friday night prayer meeting and car movements, the noise associated with these activities were assessed based on previous measurements of similar activities. The calculations assume that the nominated activities are located at the closest representative point within the development site to each receiver location. Any relevant shielding or building transmission loss is taken into account for these activities.

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7.2 Attended Noise Measurements

The location of the attended noise measurements and the onsite activities are shown in Figure 4.

Figure 4: Attended Noise Measurement Locations



The results of the attended measurements are shown in the table below. These results have been used in the environmental noise assessment of the site.

Table 8: Measured Noise Levels

Source Measurement Location	Source Noise	Measured Source Noise Level LAeq dB(A)
A	Snack Time	48.2
B	Preaching	48.5
B	Music/Song	52.1
C	Preaching	48.1
C	Music/Song	47.9
D	Preaching	52.2
D	Music/Song	47.2

Internal Noise measurement of amplified music/song and speech when conduct at the receivers was based on the internal noise level of 88dB(A) when measured 4 metres from the speakers. If levels exceed the criteria, then amplified sound will need to be reduced to comply.

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7.3 Intrusive and Acoustic Amenity Compliance

The average noise source levels and predicted impacts at the nearby receiver locations are shown in Table 8 as follows. L_{Aeq} results are not shown where the calculated total is less than 0dBA.

Table 9: Intrusive and Acoustic Amenity Compliance Based on Internal Level of 88dB(A)

Sources
1. 30 McIlwraith Street
2. 5 Buller Street
3. 29 McIlwraith Street (Receiver Height 1.5)
4. 29 McIlwraith Street (Receiver Height 4.5)
5. 29 McIlwraith Street (Receiver Height 7.5)

Source		Source Leq@1m dB(A)	Correction dB(A)*	Corrected Leq@1m dB(A)	No. of events per 15min Day	No. of events per 15min Eve	Duration per event	Source Distance (m)	Receiver Distance (m)	Barrier (height (m)) Inc	Barrier screening dB	Building TL or shield dB	Topo screening dB	Dist atten. @-6dB/dd	LAeq adj,T ext. dB(A) Day	LAeq adj,T ext. dB(A) Eve	Intrusive Compliance LAeq Day	Intrusive Compliance LAeq Eve	Intrusive Compliance LAeq Night	Amenity Complaince LAeq Day	Amenity Complaince LAeq Eve	Amenity Complaince LAeq Night
1	Criteria																44	44	35	55	45	40
	Car passby	69		69	20	20	15	1	21					-27	21	25	Yes	Yes	n/a	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	26					-29	17	21	Yes	Yes	n/a	Yes	Yes	Yes
	Car door closure	75	2	77	20	20	2	1	26					-29	18	22	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday Service Preaching R1	48		48	20		900	24	24					0	45		No	n/a	n/a	Yes	Yes	Yes
	Sunday Service Song R1	48		48	20	8	900	24	24					0	45	45	No	No	n/a	Yes	Yes	Yes
	Sunday School Snack Time R1	48		48	2		900	12	37					-10	25		Yes	n/a	n/a	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	31			-15		-30		42	n/a	Yes	n/a	n/a	n/a	n/a
	Total														48	47	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
2	Criteria																44	44	35	55	45	40
	Car passby	69		69	20	20	15	1	48					-34	14	18	Yes	Yes	n/a	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	43					-33	13	17	Yes	Yes	n/a	Yes	Yes	Yes
	Car door closure	75	2	77	20	20	2	1	43					-33	14	18	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday Service Preaching R2	47		47	20		900	19	19					0	44		Yes	n/a	n/a	Yes	Yes	Yes
	Sunday Service Song R2	52		52	20	8	900	19	19					0	49	49	No	No	n/a	Yes	Yes	Yes
	Sunday School Snack Time R2	48		48	2		900	12	40					-11	24		Yes	n/a	n/a	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	31			-15		-30		42	n/a	Yes	n/a	n/a	n/a	n/a
	Total														50	50	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
3	Criteria																44	44	35	55	45	40
	Car door closure	75	2	77	20	20	2	1	9					-20	27	31	Yes	Yes	n/a	Yes	Yes	Yes
	Car passby	69		69	20	20	15	1	13					-23	25	29	Yes	Yes	n/a	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	9					-20	26	30	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday Service Preaching R3	47		47	10		900	25	25					0	41		Yes	n/a	n/a	Yes	Yes	Yes
	Sunday Service Song R3	52		52	20	8	900	25	25					0	49	49	No	No	n/a	Yes	Yes	Yes
	Sunday School Snack Time R3	48		48	2		900	11	11					0	35		Yes	n/a	n/a	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	23			-10		-28		49	n/a	No	n/a	n/a	n/a	n/a
	Total														50	52	**No**	**No**	**Yes**	**Yes**	**Yes**	**No**
4	Criteria																58	55	48	55	45	40
	Car door closure	75	2	77	20	20	2	1	9					-20	27	31	Yes	Yes	Yes	Yes	Yes	Yes
	Car passby	69		69	20	20	15	1	13					-23	25	29	Yes	Yes	Yes	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	9					-20	26	30	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday Service Preaching R3	47		47	20		900	25	25.2					-1	43		Yes	n/a	Yes	Yes	Yes	Yes
	Sunday Service Song R3	52		52	20	8	900	25	25.2					-1	48	48	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday School Snack Time R3	48		48	2		900	11	12					-1	34		Yes	n/a	Yes	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	23			-15		-28		44	n/a	Yes	n/a	n/a	n/a	n/a
	Total														49	50	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
5	Criteria																58	55	48	65	65	60
	Car passby	75	2	77	20	20	2	1	9					-20	27	27	Yes	Yes	Yes	Yes	Yes	Yes
	Car start	69		69	20	20	15	1	13					-23	25	25	Yes	Yes	Yes	Yes	Yes	Yes
	Car door closure	74	2	76	20	20	2	1	9					-20	26	26	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday Service Preaching R1	47		47	20		900	25	26					-1	43	43	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday Service Song R1	52		52	8	4	900	25	26					-1	44	44	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday School Snack Time R1	48		48	2		900	11	12.3					-1	34	34	Yes	Yes	Yes	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	23			-10		-28		45	n/a	n/a	n/a	n/a	n/a	n/a
	Total														46	49	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Minor exceedances are noted for song, amplified music and speech based on the internal noise level of 88dB(A), to determine the maximum allowable noise levels further calcs were conducted to determine in then calcs, Compliance is predicted for all onsite activities at the sensitive receiver locations on the condition the recommendations in Section 8 are implemented.

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Table 10: Intrusive and Acoustic Amenity Compliance Based on Internal level of 82dB(A)

Sources

1. 30 McIlwraith Street
2. 5 Buller Street
3. 29 McIlwraith Street (Receiver Height 1.5)
4. 29 McIlwraith Street (Receiver Height 4.5)
5. 29 McIlwraith Street (Receiver Height 7.5)

Source		Source Leq@1m dB(A)	Correction dB(A)*	Corrected Leq@1m dB(A)	No. of events per 15min Day	No. of events per 15min Eve	Duration per event	Source Distance (m)	Receiver Distance (m)	Barrier (height (m)) Inc	Barrier screening dB	Building TL or shield dB	Topo screening dB	Dist atten. @-6dB/dd	LAeq adj,T ext. dB(A) Day	LAeq adj,T ext. dB(A) Eve	Intrusive Compliance LAeq Day	Intrusive Compliance LAeq Eve	Intrusive Compliance LAeq Night	Amenity Complaince LAeq Day	Amenity Complaince LAeq Eve	Amenity Complaince LAeq Night
1	Criteria																44	44	35	55	45	40
	Car passby	69		69	20	20	15	1	21					-27	21	25	Yes	Yes	n/a	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	26					-29	17	21	Yes	Yes	n/a	Yes	Yes	Yes
	Car door closure	75	2	77	20	20	2	1	26					-29	18	22	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday Service Preaching R1	42		42	20		900	24	24					0	39		Yes	n/a	n/a	Yes	Yes	Yes
	Sunday Service Song R1	42		42	20	8	900	24	24					0	39	39	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday School Snack Time R1	48		48	2		900	12	37					-10	25		Yes	n/a	n/a	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	31			-18		-30		39	n/a	Yes	n/a	n/a	n/a	n/a
	Total														42	42	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
2	Criteria																44	44	35	55	45	40
	Car passby	69		69	20	20	15	1	48					-34	14	18	Yes	Yes	n/a	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	43					-33	13	17	Yes	Yes	n/a	Yes	Yes	Yes
	Car door closure	75	2	77	20	20	2	1	43					-33	14	18	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday Service Preaching R2	41		41	20		900	19	19					0	38		Yes	n/a	n/a	Yes	Yes	Yes
	Sunday Service Song R2	46		46	20	8	900	19	19					0	43	43	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday School Snack Time R2	48		48	2		900	12	40					-11	24		Yes	n/a	n/a	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	31			-18		-30		39	n/a	Yes	n/a	n/a	n/a	n/a
	Total														44	44	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	Criteria																44	44	35	55	45	40
	Car door closure	75	2	77	20	20	2	1	9					-20	27	31	Yes	Yes	n/a	Yes	Yes	Yes
	Car passby	69		69	20	20	15	1	13					-23	25	29	Yes	Yes	n/a	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	9					-20	26	30	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday Service Preaching R3	41		41	10		900	25	25					0	35		Yes	n/a	n/a	Yes	Yes	Yes
	Sunday Service Song R3	46		46	20	8	900	25	25					0	43	43	Yes	Yes	n/a	Yes	Yes	Yes
	Sunday School Snack Time R3	48		48	2		900	11	11					0	35		Yes	n/a	n/a	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	23			-10		-28		49	n/a	No	n/a	n/a	n/a	n/a
	Total														44	50	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
4	Criteria																58	55	48	55	45	40
	Car door closure	75	2	77	20	20	2	1	9					-20	27	31	Yes	Yes	Yes	Yes	Yes	Yes
	Car passby	69		69	20	20	15	1	13					-23	25	29	Yes	Yes	Yes	Yes	Yes	Yes
	Car start	74	2	76	20	20	2	1	9					-20	26	30	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday Service Preaching R3	41		41	20		900	25	25.2					-1	37		Yes	n/a	Yes	Yes	Yes	Yes
	Sunday Service Song R3	46		46	20	8	900	25	25.2					-1	42	42	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday School Snack Time R3	48		48	2		900	11	12					-1	34		Yes	n/a	Yes	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	23			-15		-28		44	n/a	Yes	n/a	n/a	n/a	n/a
	Total														44	46	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
5	Criteria																58	55	48	65	65	60
	Car passby	75	2	77	20	20	2	1	9					-20	27	27	Yes	Yes	Yes	Yes	Yes	Yes
	Car start	69		69	20	20	15	1	13					-23	25	25	Yes	Yes	Yes	Yes	Yes	Yes
	Car door closure	74	2	76	20	20	2	1	9					-20	26	26	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday Service Preaching R1	41		41	20		900	25	26					-1	37	37	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday Service Song R1	46		46	8	4	900	25	26					-1	38	38	Yes	Yes	Yes	Yes	Yes	Yes
	Sunday School Snack Time R1	48		48	2		900	11	12.3					-1	34	34	Yes	Yes	Yes	Yes	Yes	Yes
	Prayer Meeting	87		87		16	900	1	23			-10		-28		45	n/a	n/a	n/a	n/a	n/a	n/a
	Total														41	46	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

On the condition amplified music/speech and song does not exceed 82dB(A) when measured at 4 metres from the speakers internally, compliance is predicted with the criteria.

superseded

7.4 Low Frequency Noise Assessment

The average low frequency noise source levels and predicted impacts at the nearby receiver locations are shown in Table 8 as follows. L_{Aeq} results are not shown where the calculated total is less than 0dBA.

Table 10: Intrusive and Acoustic Amenity Compliance

Sources
1. 30 McIlwraith Street
2. 5 Buller Street
3. 29 McIlwraith Street (Receiver Height 1.5)
4. 29 McIlwraith Street (Receiver Height 4.5)
5. 29 McIlwraith Street (Receiver Height 7.5)

Source		Source Leq@1m dB(A)	Correction dB(A)*	Corrected Leq@1m dB(A)	No. of events per 15min Day	No. of events per 15min Eve	Duration per event	Source Distance (m)	Receiver Distance (m)	Barrier (height (m)) Inc	Barrier screening dB	Building TL or shield dB	Topo screening dB	Dist atten. @-6dB/dd	LCeq adj, Text. dB(A) Day	LCeq adj, Text. dB(A) Eve	LCeq adj, Text. dB(A) Night	Low Frequency Noise Criteria Day	Eve	Night
1	Criteria																	65	65	60
	Car passby	79		79	20	20	15	1	21					-27	31	35		Yes	Yes	Yes
	Car start	84	2	86	20	20	2	1	26					-29	27	31		Yes	Yes	Yes
	Car door closure	85	2	87	20	20	2	1	26					-29	28	32		Yes	Yes	Yes
	Sunday Service Preaching R1	58		58	20		900	24	24					0	55			Yes	Yes	Yes
	Sunday Service Song R1	58		58	20	8	900	24	24					0	55	55		Yes	Yes	Yes
	Sunday School Snack Time R1	58		58	2		900	12	37					-10	35			Yes	Yes	Yes
	Prayer Meeting	97		97		16	900	1	31			-18		-30		49		n/a	n/a	n/a
	Total														58	56	12	**Yes**	**Yes**	**Yes**
2	Criteria																	65	65	60
	Car passby	79		79	20	20	15	1	48					-34	24	28		Yes	Yes	Yes
	Car start	84	2	86	20	20	2	1	43					-33	23	27		Yes	Yes	Yes
	Car door closure	85	2	87	20	20	2	1	43					-33	24	28		Yes	Yes	Yes
	Sunday Service Preaching R2	57		57	20		900	19	19					0	54			Yes	Yes	Yes
	Sunday Service Song R2	52		52	20	8	900	19	19					0	49	49		Yes	Yes	Yes
	Sunday School Snack Time R2	58		58	2		900	12	40					-33	12			Yes	Yes	Yes
	Prayer Meeting	97		97		16	900	1	31			-18		-30		49		n/a	n/a	n/a
	Total														55	52	12	**Yes**	**Yes**	**Yes**
3	Criteria																	65	65	60
	Car door closure	85	2	87	20	20	2	1	9					-20	37	41		Yes	Yes	Yes
	Car passby	79		79	20	20	15	1	13					-23	35	39		Yes	Yes	Yes
	Car start	84	2	86	20	20	2	1	9					-20	36	40		Yes	Yes	Yes
	Sunday Service Preaching R3	57		57	20		900	25	25					0	54			Yes	Yes	Yes
	Sunday Service Song R3	62		62	20	8	900	25	25					0	59	59		Yes	Yes	Yes
	Sunday School Snack Time R3	58		58	2		900	11	11					0	45			Yes	Yes	Yes
	Prayer Meeting	97		97		16	900	1	23			-18		-28		51		n/a	n/a	n/a
	Total														60	60	12	**Yes**	**Yes**	**Yes**
4	Criteria																	65	65	60
	Car passby	85		85	20	20	2	1	9					-20	35	39	40	Yes	Yes	Yes
	Car start	79	2	81	20	20	15	1	13					-22	38	42	42	Yes	Yes	Yes
	Car door closure	84	2	86	20	20	2	1	9					-19	37	41	42	Yes	Yes	Yes
	Sunday Service Preaching R1	57		57	20		900	25	25.3					-28	26		16	Yes	Yes	Yes
	Sunday Service Song R1	62		62	20	8	900	25	25.3					-28	31	31	18	Yes	Yes	Yes
	Sunday School Snack Time R1	58		58	2		900	11	11.3					-21	24		21	Yes	Yes	Yes
	Prayer Meeting	97		97		16	900	1	23			-18		-27		52		n/a	n/a	n/a
	Total														42	53	46	**Yes**	**Yes**	**Yes**
5	Criteria																	65	65	60
	Car passby	79		79	20	20	2	1	9					-51	11	15	12	Yes	Yes	Yes
	Car start	84	2	86	20	20	15	1	13					-50	10	14	11	Yes	Yes	Yes
	Car door closure	85	2	87	20	20	2	1	9					-50	11	15	12	Yes	Yes	Yes
	Sunday Service Preaching R1	58		58	20		900	25	26					-50				Yes	Yes	Yes
	Sunday Service Song R1	58		58	20	8	900	25	26					-52				Yes	Yes	Yes
	Sunday School Snack Time R1	58		58	2		900	11	12.3					-52				Yes	Yes	Yes
	Prayer Meeting	97		97		16	900	1	23			-18		-52				n/a	n/a	n/a
	Total														17	20	17	**Yes**	**Yes**	**Yes**

Compliance with the low frequency noise criteria is predicted for all onsite activities at the sensitive receiver locations on the condition the recommendations in Section 8 are implemented.

8. Recommendations

superseded

8.1 Onsite Activities

Compliance is predicted with Brisbane City Council assessment criteria for church services during the proposed hours of operation on the condition the following recommendations are implemented.

- All doors and windows to the main church building will remain closed during church services, its also recommended that the internal doors remain closed when not in use for entry and exit.
- Noise levels from amplified sound within the Church should not exceed 82dB(A), measured at a distance of 4 metres in front of the speakers.
- If weddings or funeral services are provided for members of the Church they should be restricted to day time period only, with no gatherings, receptions or wakes to be undertaken within the Church grounds following the service. Note amplified music and speech will comply with 82dB(A) measured at a distance of 4 metres from the source.
- All doors and windows to the church hall will remain closed during use for Sunday school or any other events.
- We recommend that patrons of the church are reminded to be considerate of the existing residents in the area when arriving and leaving.
- The use of the Church Hall shall be restricted to quiet activities only such as pastor meetings, lunches and Sunday School.

superseded

9. Conclusion

A compliance assessment was conducted for the Brisbane Christian Assembly Church building located at 27 McIlwraith Street, Everton Park. Compliance with BCC criteria is predicted on the condition the recommendations detailed in section 8 are implemented.

If you should have any queries please do not hesitate to contact us.

Report Prepared By,

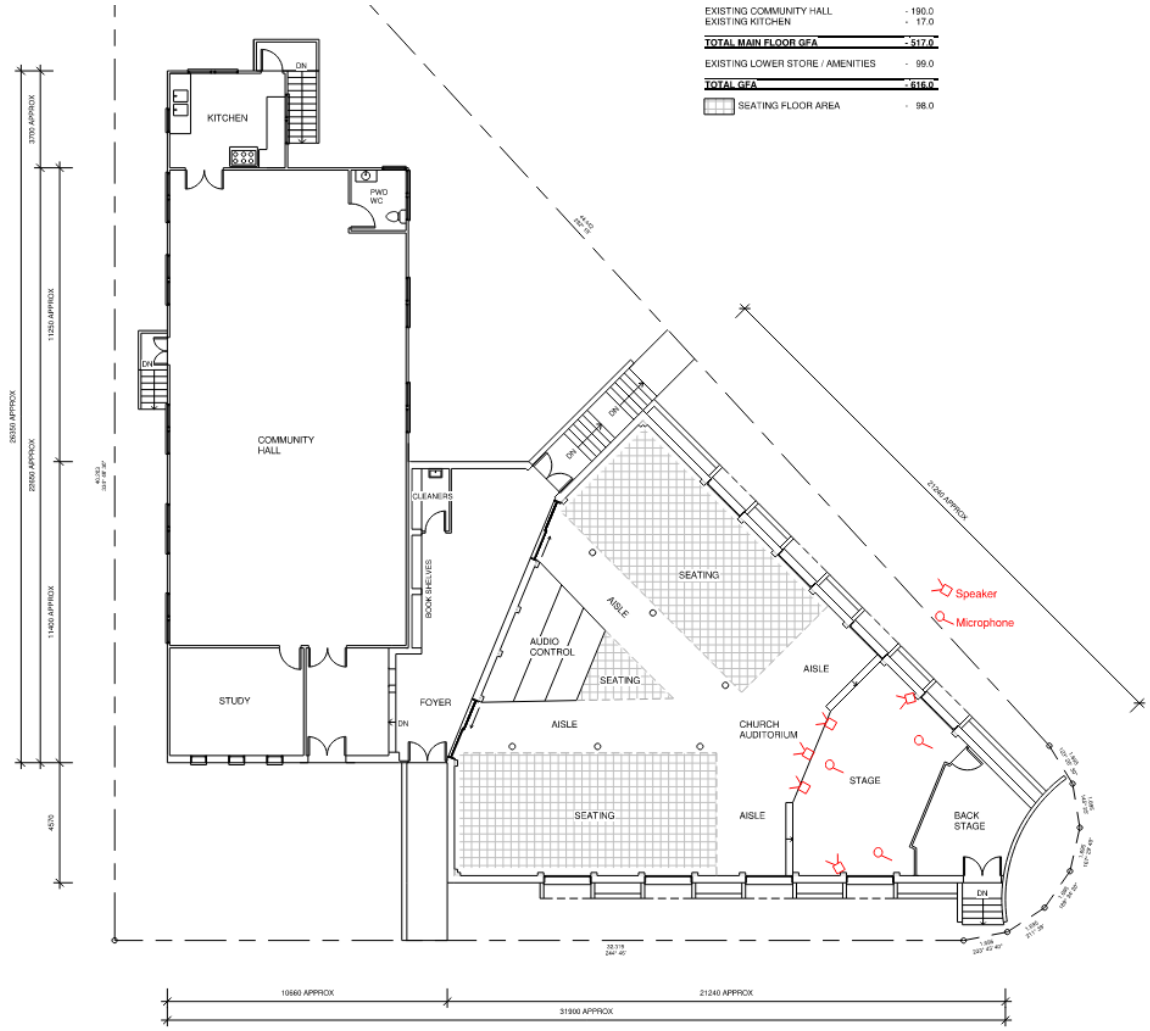


Shauna Livingstone
Acoustic Consultant
acousticworks)))

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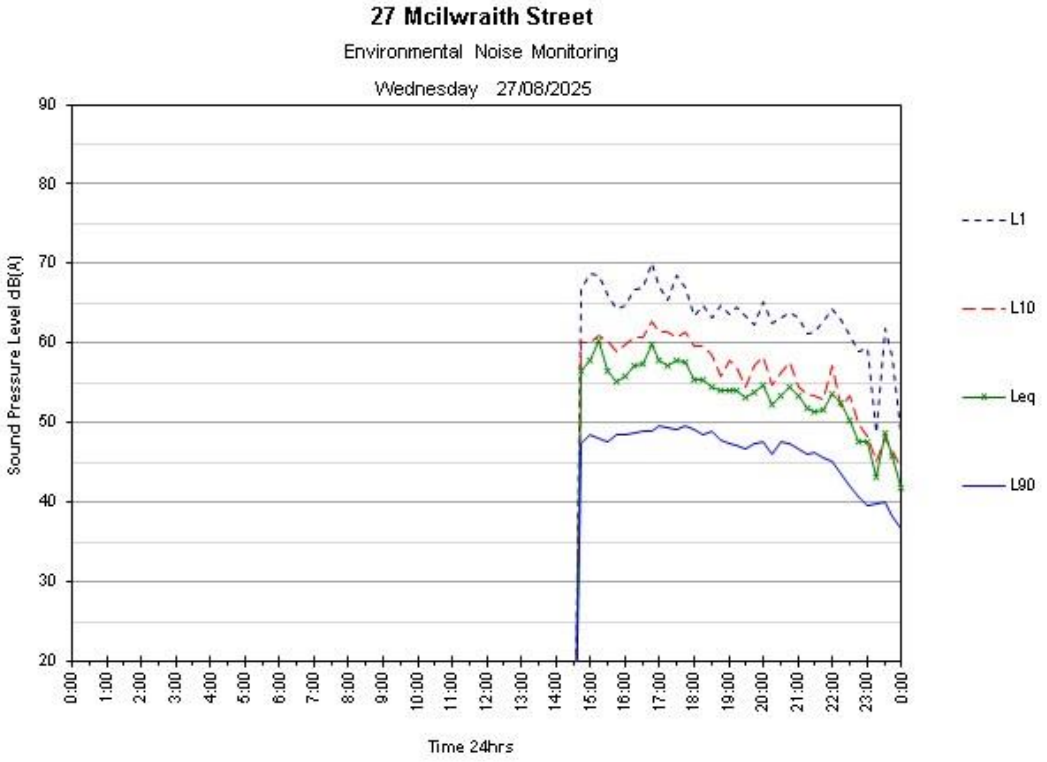
10. Appendices

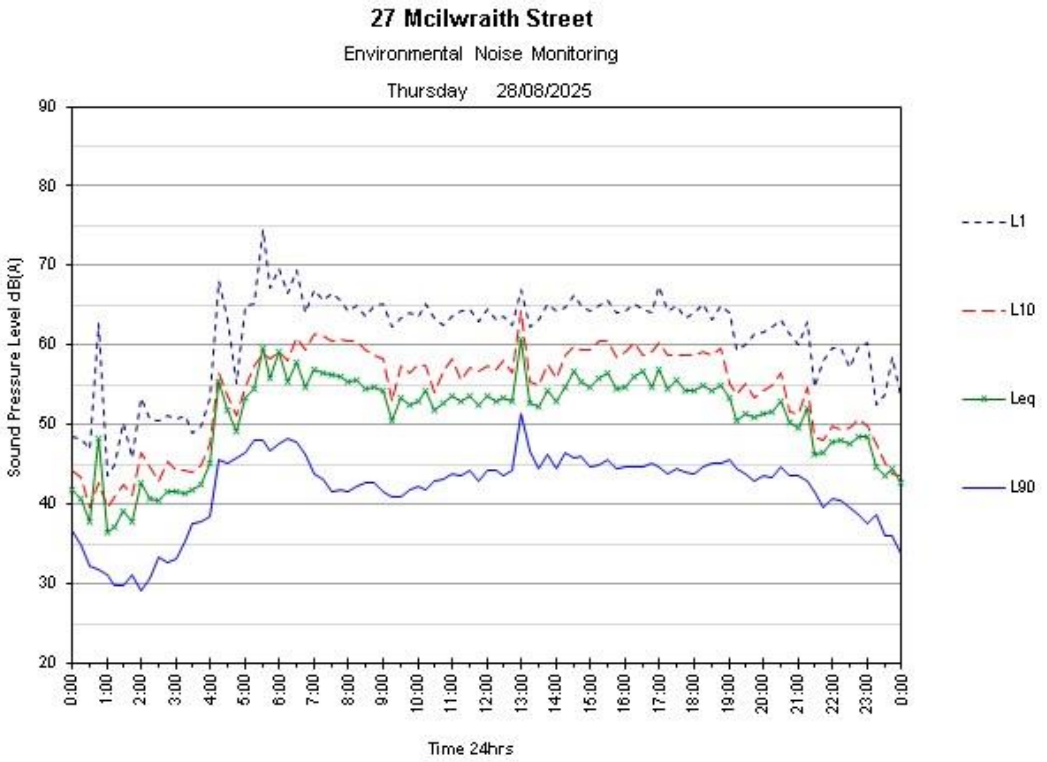
10.1 Markup of speaker locations



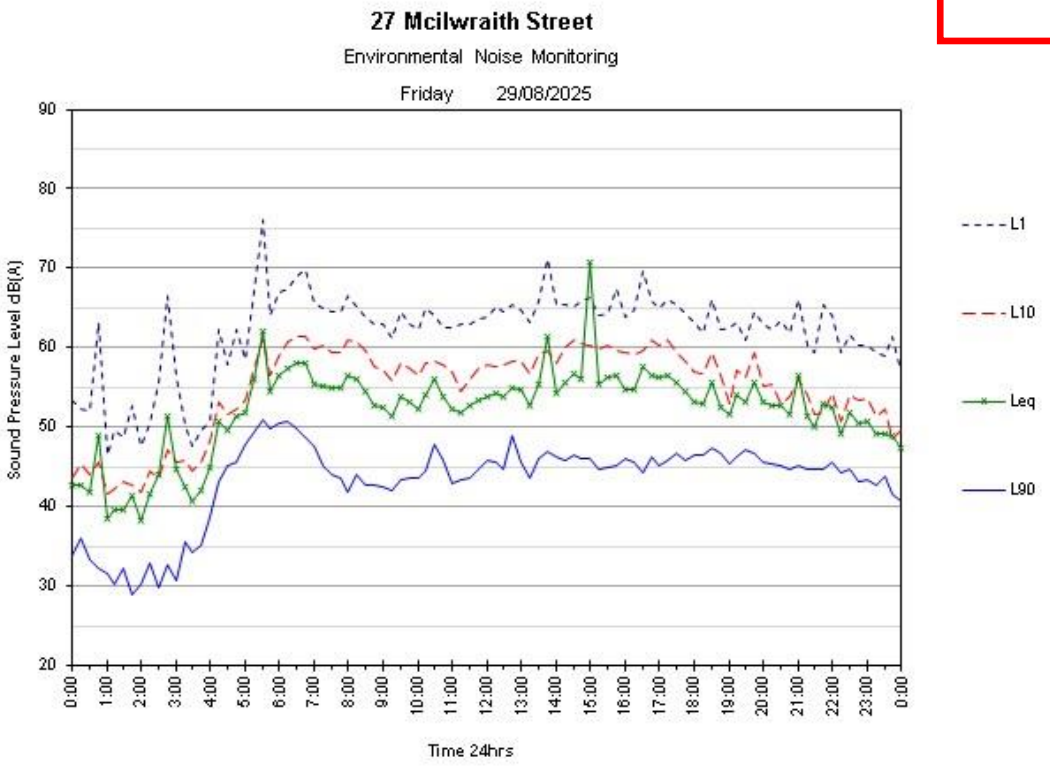
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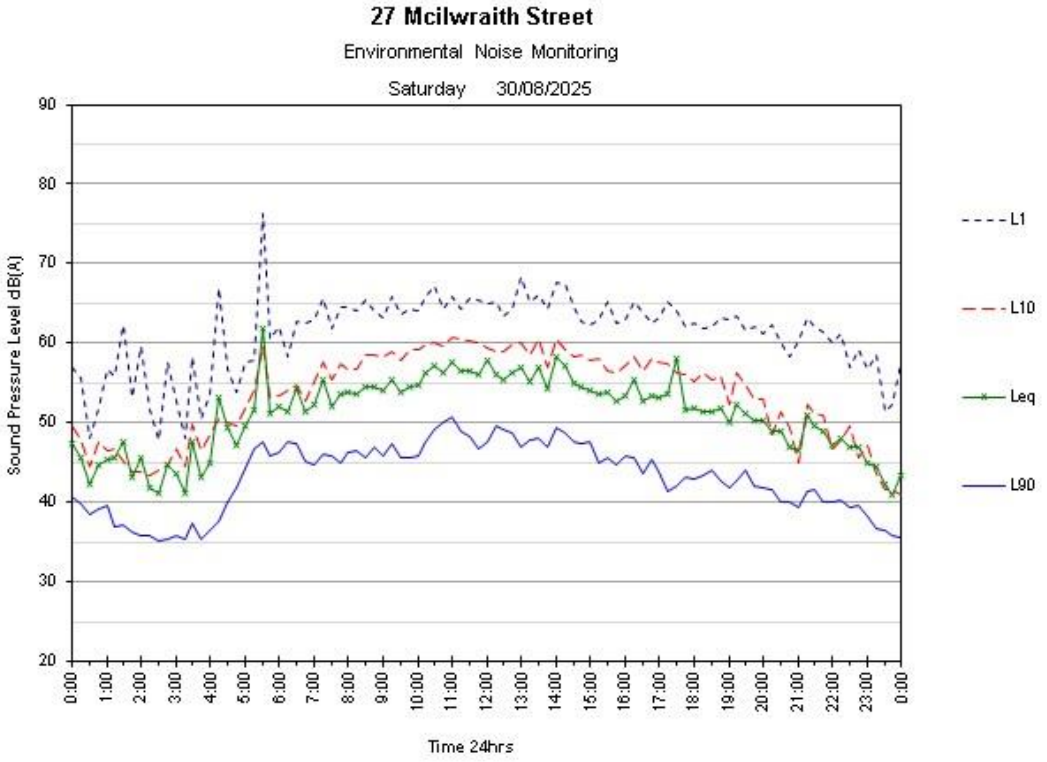
10.2 Noise Monitoring Charts



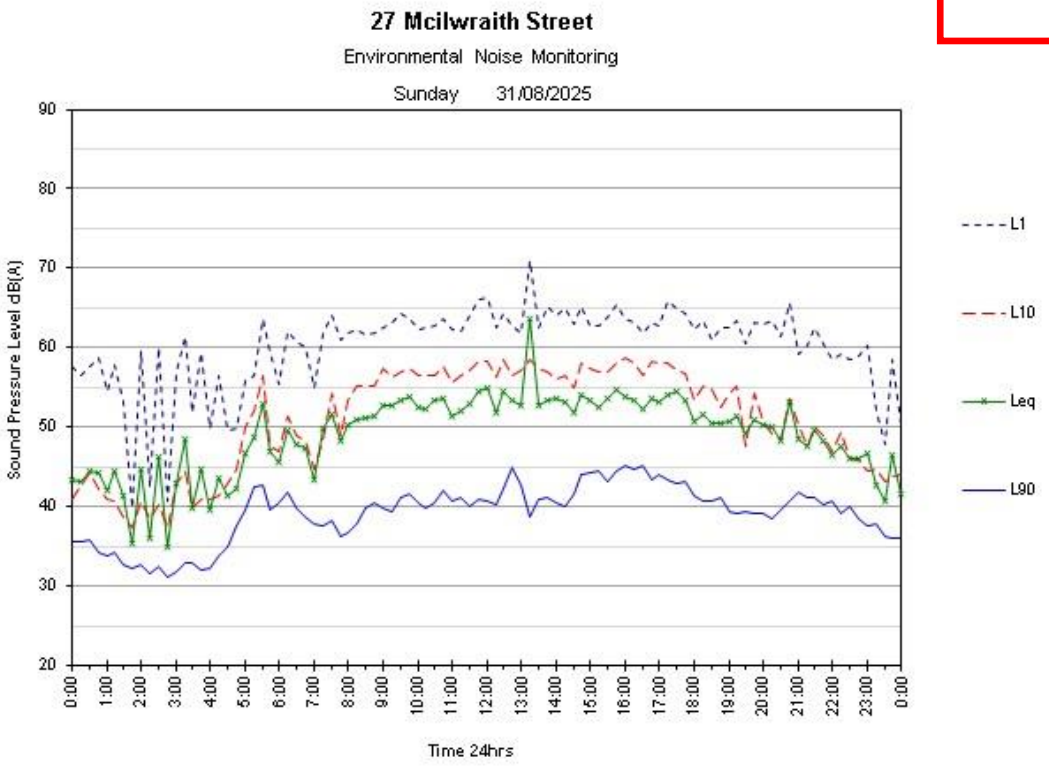


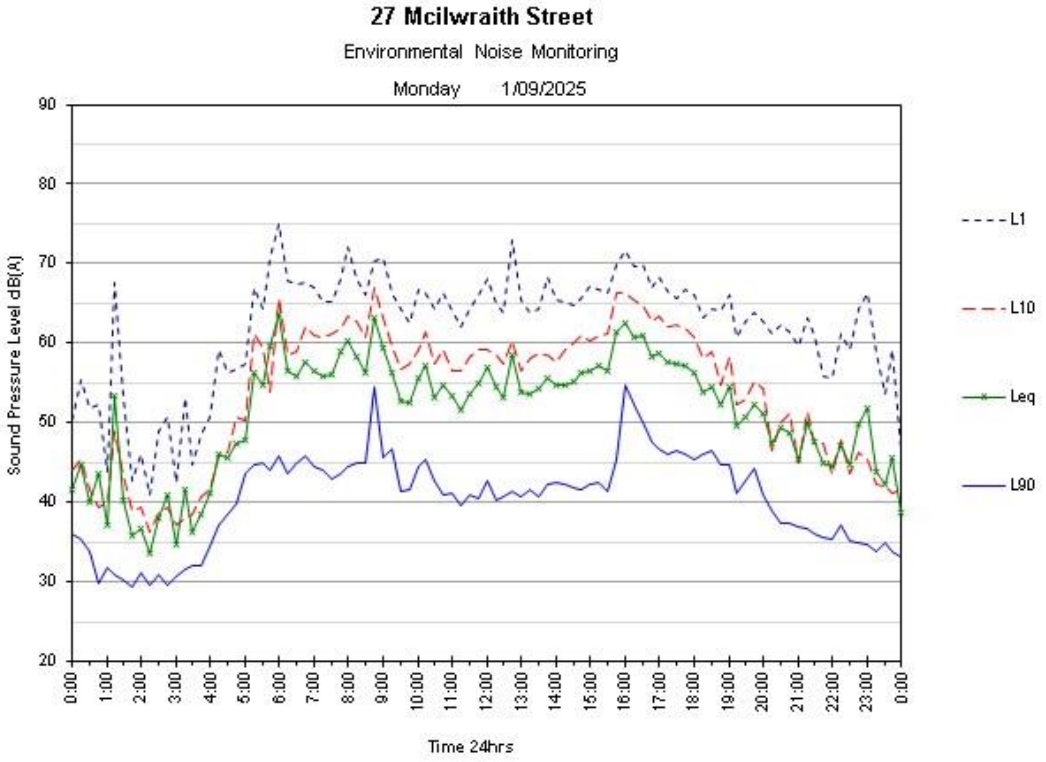
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27 Mcilwraith Street
Environmental Noise Monitoring
Friday 29/08/2025
Sound Pressure Level dB(A)
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time 24hrs
L1
L10
Leq
L90

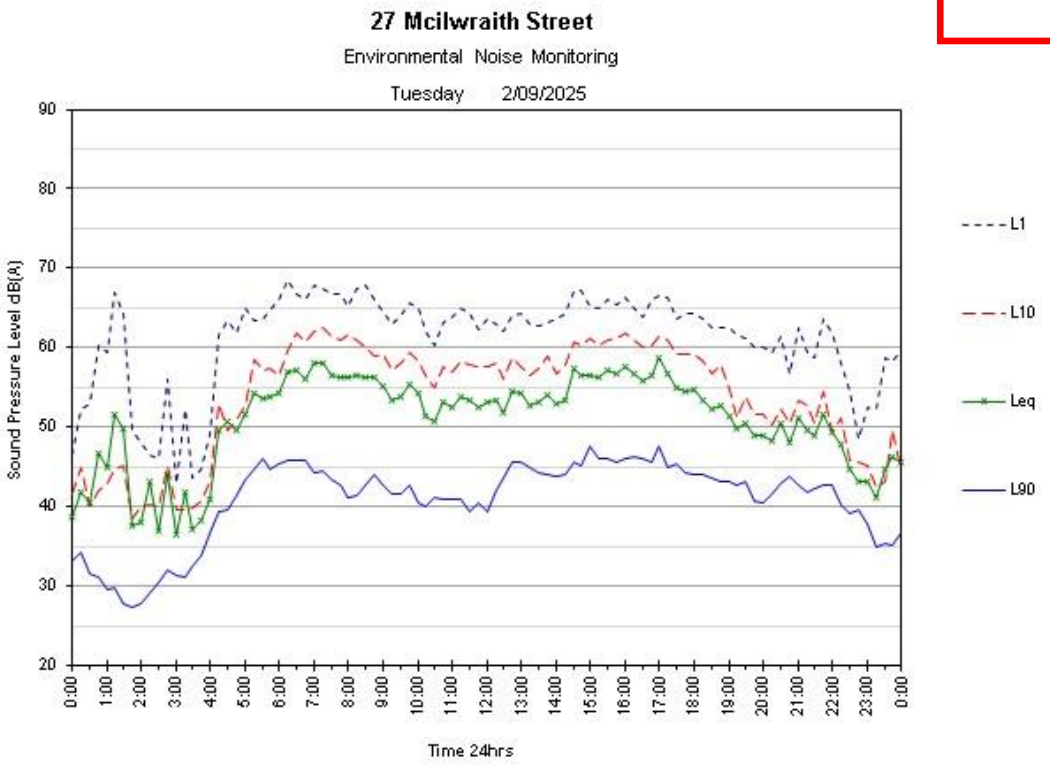

27 Mcilwraith Street
Environmental Noise Monitoring
Saturday 30/08/2025
Sound Pressure Level dB(A)
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time 24hrs
L1
L10
Leq
L90

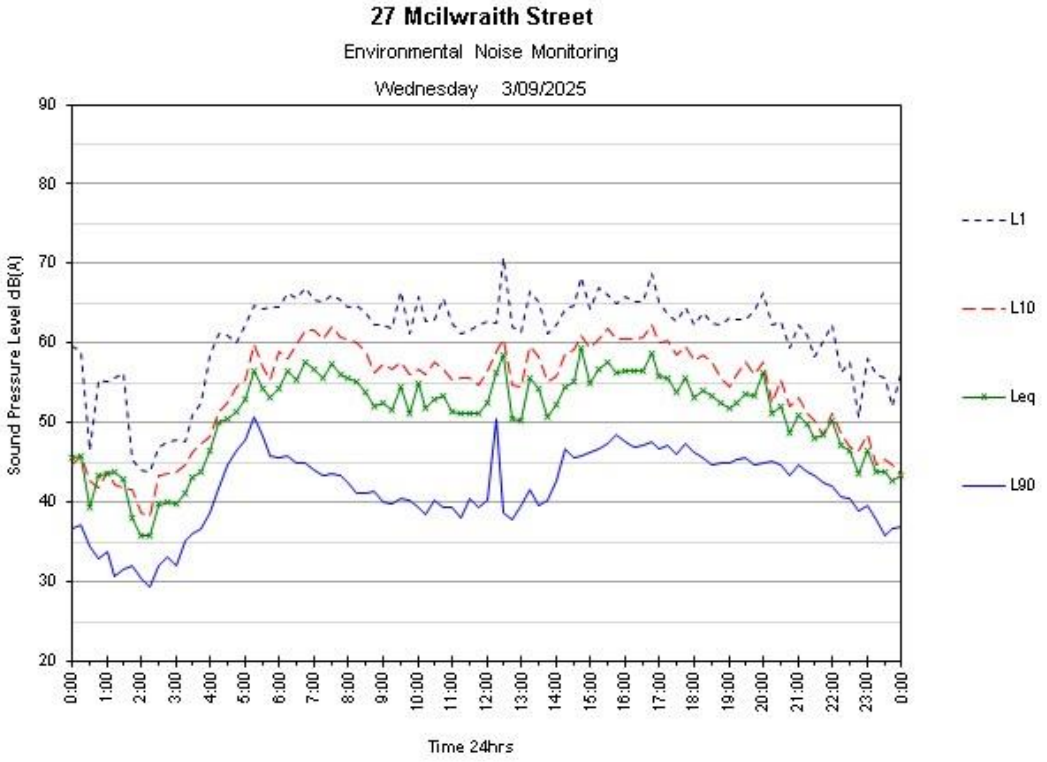
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27 Mcilwraith Street
Environmental Noise Monitoring
Sunday 31/08/2025
Sound Pressure Level dB(A)
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time 24hrs
L1
L10
Leq
L90

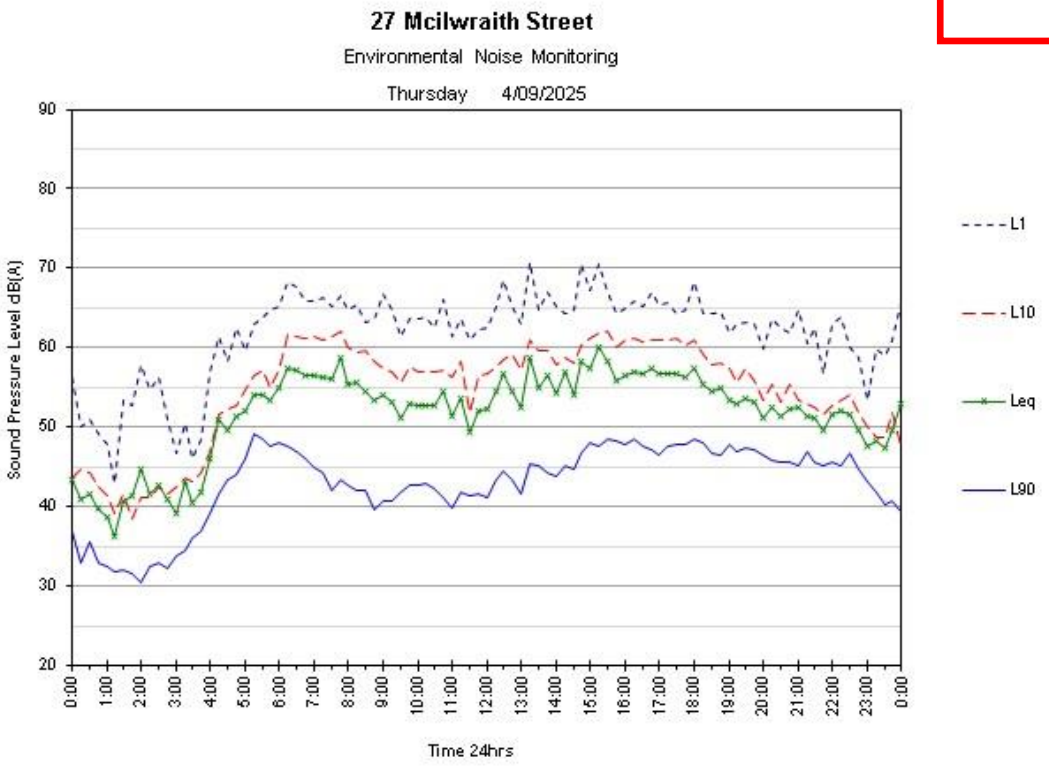

27 Mcilwraith Street
Environmental Noise Monitoring
Monday 1/09/2025
Sound Pressure Level dB(A)
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
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20:00
21:00
22:00
23:00
0:00
Time 24hrs
L1
L10
Leq
L90

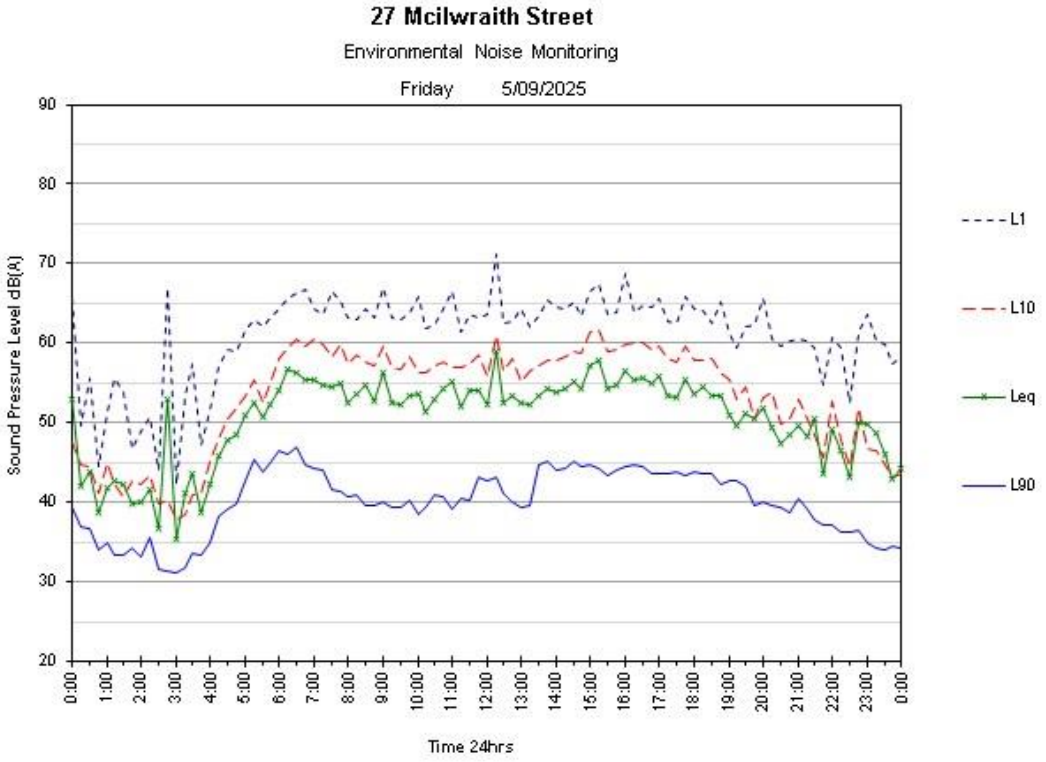
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27 Mcilwraith Street
Environmental Noise Monitoring
Tuesday 2/09/2025
Sound Pressure Level dB(A)
Time 24hrs
L1
L10
Leq
L90

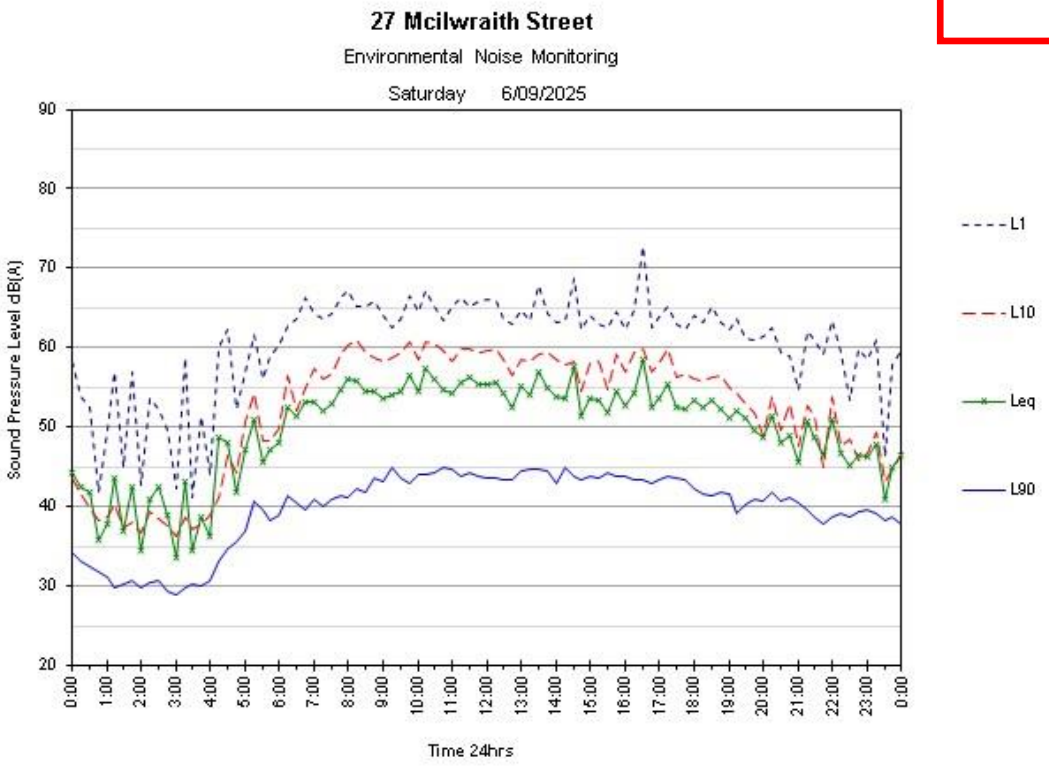

27 Mcilwraith Street
Environmental Noise Monitoring
Wednesday 3/09/2025
Sound Pressure Level dB(A)
Time 24hrs
L1
L10
Leq
L90

superseded


27 Mcilwraith Street
Environmental Noise Monitoring
Thursday 4/09/2025
Sound Pressure Level dB(A)
Time 24hrs
L1
L10
Leq
L90


27 Mcilwraith Street
Environmental Noise Monitoring
Friday 5/09/2025
Sound Pressure Level dB(A)
Time 24hrs
L1
L10
Leq
L90

superseded


27 Mcilwraith Street
Environmental Noise Monitoring
Saturday 6/09/2025
Sound Pressure Level dB(A)
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time 24hrs
L1
L10
Leq
L90


27 Mcilwraith Street
Environmental Noise Monitoring
Sunday 7/09/2025
Sound Pressure Level dB(A)
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time 24hrs
L1
L10
Leq
L90