

ACOUSTIC REPORT 2604046 Revision 0

LIMESTONE COAST BREWING

SETTLERS HILL SHOPPING VILLAGE
7/59 ARPENTEUR DRIVE, BALDIVIS WA 6171



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Consulting Engineers

32 years 1994 - 2026

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REFERENCES:

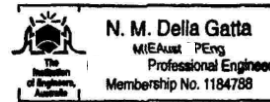
- A. Environmental Protection Act (Noise) Regulations 1997

REVISIONS:

Revision N°:	Date:	Comment	Status
0	10 JUNE 2026	Change of Use Application	Superseded
0.1	26 JUNE 2026	Change of Use Application Trading hrs adjustment Patrons para. 3.7.2	Current

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INTRODUCTION

- 1.1 This report covers the change of use of the current Restaurant Liquor Licence to a Tavern Liquor Licence due to need to sell takeaway beverages in particular beer.
- 1.2 The noise emissions of interest are due to the increase in patrons from 120 to 180 patrons, continuation of background music and two small 2.6kW cool room condensers mounted in the roof top area alongside existing services.
- 1.3 The other noise sources that are not affected by the change of use includes the mechanical services, kitchen ventilation fans, toilet fans, car parking, etc. These other noises sources have been in place since 2006 when the initial liquor licence was issued and have not changed since Limestone Coast Brewing became operators of the venue since 1 October 2025.

BUILDING DESCRIPTION

- 1.2.1 The site is located in the Settlers Hill Shopping Village 7/59 Arpenteur Drive, Baldivis WA.
- 1.2.2 Detailed information regarding the site is contained in ANNEX A – ASSIGNED NOISE LEVELS and ANNEX B – BUILDING / SITE.

ASSUMPTIONS, LIMITATIONS AND EXCLUSIONS

- 2.1 The following assumptions, known limitations and conditions are made:
 - a. The proposed building is correctly constructed, and maintained in good ongoing condition, in accordance with the Building Code of Australia and State Regulations, and
 - b. That building components are fabricated and installed in accordance with suppliers and/or manufacturer's requirements; and
 - c. That equipment and plant are installed and operated in accordance with suppliers and/or manufacturers requirements.



ASSESSMENT

- 3.1 The assessment comprises:
 - a. Loading Areas.
 - b. Mechanical Services.
 - e. Refrigeration.
 - f. Music including Annex M.
 - g. Patrons including see Annex P.
- 3.2 Please note that where ND Engineering provides advice or expresses an opinion with regards to compliance with all or part of Reference A the Noise Regulations this advice/opinion is always based on information supplied by operator and further subject to the 'Assumptions, Limitations and Exclusions' and the implementation of the 'Recommendations'.

Loading Areas - Assessment

- 3.3.1 The Loading/Delivery Area assessment is fairly straight forward as activities occur after 7am Monday to Saturday and is not affected by the change of use for the:
 - a. Existing kitchen occurs via the existing freezer/delivery area to the rear of the kitchen; and
 - b. New deliveries to the cool room occurs from the main carpark at the front of the venue.
- 3.3.2 The Loading Area assessment is also based on the following activities being exempt from the Noise Regulations (Reference A):
 - a. Noise emissions from vehicles on footpaths, cross overs and public roads all as defined in Section 5(1) of the Road Traffic Act 1974. Refer Reference A Regulation 3 (a).
 - b. Reversing beepers on vehicles is a warning device required by Acts and Regulations in particular those associated with WorkSafe. Refer Reference A Regulation 3 (c).
- 3.3.2 **The following generic RECOMMENDATIONS are made for the front Loading Area:**
 - a. The vehicles fitted with reversing beepers do not reverse in order not to activate the reversing warning device such as a beeper or croaker; and
 - b. Small trucks, vans and light vehicles are permitted to reverse; and
 - c. Engines and refrigeration equipment shall be shut down prior to and during unloading; and
 - d. Loading area staff and vehicle operators to be advised/trained to take care with regards to noise events such as shouting, revving of truck engines, banging, dropping of pallets if any, slamming of vehicle doors, etc; and
 - f. Radios and other similar devices are not permitted within the loading areas; and
 - h. Refrigeration trucks that are capable of operating off mains power be provided with mains power in order to minimise truck engine operating noise when in the relevant loading areas; and
 - i. Loading areas shall only be used Monday to Saturday 7am to 7pm.



Mechanical Services - Assessment

- 3.4.1 The Mechanical Services assessment again is fairly straight forward as there have not been any changes associated with operator taking over the venue in 1 October 2025.
- 3.4.2 The mechanical services are all located on the rear roof top compound that has a high parapet wall surrounding the mechanical services equipment, and refrigeration equipment, comprising a packaged AC unit and Toilet Exhaust Fan.
- 3.4.3 The mechanical services have been operating in their current arrangement for over 20 years.
- 3.4.4 **There are NO mechanical services recommendations.**

Refrigeration - Assessment

- 3.5.1 The Refrigeration Services assessment relates to a new cool room associated with the takeover of the venue by the operator from 1 October 2025. The change of use has not resulted in any further changes to any existing refrigeration equipment.
- 3.5.2 The refrigeration services are all located on the rear roof top compound that has a high parapet wall surrounding the refrigeration equipment and mechanical services equipment.
- 3.5.3 The refrigeration equipment installed by the operator comprises two Airefrig Australia Enthalpy Hermetic Condensers units each 3.5HP ~ 2.6kW. The refrigeration units are small measuring nominally 1.1 W x 0.9 D x 0.8m H with an image of the refrigeration units below in Figure 3.5.



FIGURE 3.5 – REFRIGERATION UNIT

- 3.5.4 **There are NO Refrigeration services recommendations.**



Music - Assessment

3.6.1 The detailed assessment of the music noise is conducted in ANNEX M – MUSIC.

3.6.2 The MUSIC assessment RECOMMENDATIONS are:

- a. No music permitted at night time defined as being between:
 - 10pm to 7am Monday to Saturday; and
 - 10pm to 9am Sundays & Public Holidays.
- b. Music within the times mentioned below also require the entertainer location and calibration point to be as shown in FIGURE M0.1 – ENTERTAINER LOCATION & CALIBRATION POINT.
 - Monday to Saturday 8am to 7pm set to LAeq 60 dB(A); and
 - Sunday & Public Holidays 8am to 7pm set to LAeq 50 dB(A); and
 - Evenings 7pm to 10pm set to LAeq 50 dB(A).

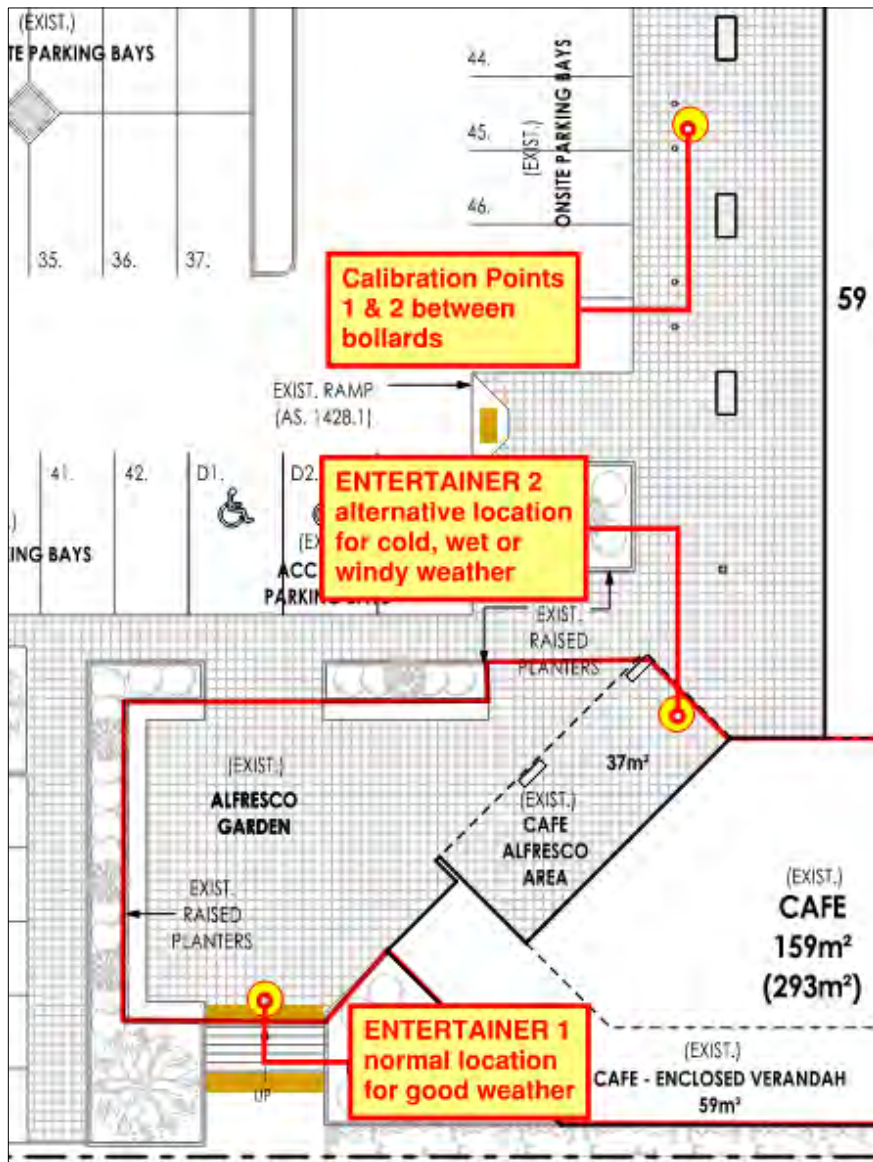


FIGURE M0.1 – ENTERTAINER LOCATION & CALIBRATION POINT



Patron – Assessment

3.7.1 The detailed assessment of the patron noise is conducted in ANNEX P – PATRONS.

3.7.2 **The PATRON assessment RECOMMENDATIONS are:**

- a. Trading is permitted between 8am to 10pm seven days a week.
- b. No trading permitted between 10pm to 8am seven days a week.



CONCLUSION

4. ND Engineering's opinion is that the proposed change of use from Restaurant Liquor Licence to a Tavern Liquor Licence can comply with Reference A (Noise Regulations) subject to the 'Assumptions, Limitations and Exclusions' and the implementation of the '**Recommendations**' contained within this report including the relevant assessments and annexes.

RECOMMENDATIONS

5. **Recommendations are contained within the ASSESSMENT section of the report.**

ANNEXES:

- A. ASSIGNED NOISE LEVELS.
- B. BUILDING / SITE.
- M. TAVERN MUSIC.
- P. TAVERN PATRONS.



ANNEX A – ASSIGNED NOISE LEVELS

A0. The nearest noise sensitive premises, for the purposes of this acoustic assessment, are the noise sensitive 'Residential' premises:

- a. To the North
#3 & #5 Osgood Way; and
- b. To the East
#9 Linott Close; and
- c. To the South East
#10 Ramsey Lane.



A1. The Assigned Noise Level (ANL) comprises a Base Noise Level (BNL in TABLE A1) and Influencing Factor (IF in TABLES A2.1, A2.2 & A2.3) calculated in order to account for increases over the BNL associated with the local environment associated with commercial and industrial premises.

The IF is based on City of Rockingham's Development and Planning zoning as found on Intramaps.

The assessment of the Assigned Noise Levels are contained in the following tables:

- TABLE A1 BASE NOISE LEVELS.
- TABLE A2.1 INFLUENCING FACTOR #3 & #5 OSGOOD WAY TO THE NORTH.
- TABLE A2.2 INFLUENCING FACTOR #9 LINOTT CLOSE TO THE EAST.
- TABLE A2.3 INFLUENCING FACTOR #10 RAMSEY LANE TO THE SOUTH EAST.
- TABLE A3 ASSIGNED NOISE LEVELS.



- A2.1 The Assigned Noise Levels may have adjustments for special characteristics associated with Tonality, Modulation and Music.
- A2.2 The following comments are made about the adjustments:
- a. Tonality is usually applied to machinery including air-conditioning, fans and refrigeration equipment; and
 - b. Modulation is unlikely to be applied at this site but if necessary, would be applied in the case of malfunctioning roof top plant; and
 - c. Music requires a mandatory adjustment of +10 dB(A) or with an adjustment of +15 dB(A) if the music is impulsive (bass guitars, drums and other percussion instruments).
- A3 The Base Noise Levels are shown in the following table.

TABLE A1 – BASE NOISE LEVELS					
Noise sensitive premises at locations a building directly associated with a noise sensitive use.	Time of day		Assigned Noise Levels dB(A)		
			LA10	LA1	LAmix
	Day	0700-1900 hrs Monday to Saturday	45+IF	55+IF	65+IF
		0900-1900 hrs Sunday, Public holidays	40+IF	50+IF	
		Evening	1900-2200 hrs all days	35+IF	45+IF
Night		2200-0700 hrs Monday to Saturday			
	2200-0900 hrs Sunday, Public holidays				
.. greater than 15 m from ..	All hours		60	75	80
Commercial premises	All hours		60	75	80



TABLE A2.1 – INFLUENCING FACTOR #3 & #5 OSGOOD WAY

INFLUENCING FACTOR CRITERIA			ASSESSMENT		
Item	Criteria	Value	Criteria	Value	Totals
Major Road within the					0 (Transport Factor ≤ 6)
- 100 m radius inner circle	veh/day > 15000	6 dB	-	-	
- 450 m radius outer circle		2 dB	-	-	
Secondary (Minor) Road within the					
- 100 m radius inner circle	15k > veh/day > 6k	2 dB	-	-	
Type A 'Industrial and Utility premises' within the					0.9 (≤ 30)
- 100 m radius inner circle	1/10 x Area%	≤ 10	0 %	0	
- 450 m radius outer circle	1/10 x Area%	≤ 10	0 %	0	
Type B 'Commercial premises' within the					
- 100 m radius inner circle	1/20 x Area%	≤ 5	14.2 %	0.7	
- 450 m radius outer circle	1/20 x Area%	≤ 5	1.2 %	0.1	

INFLUENCING FACTOR = 1 dB(A)

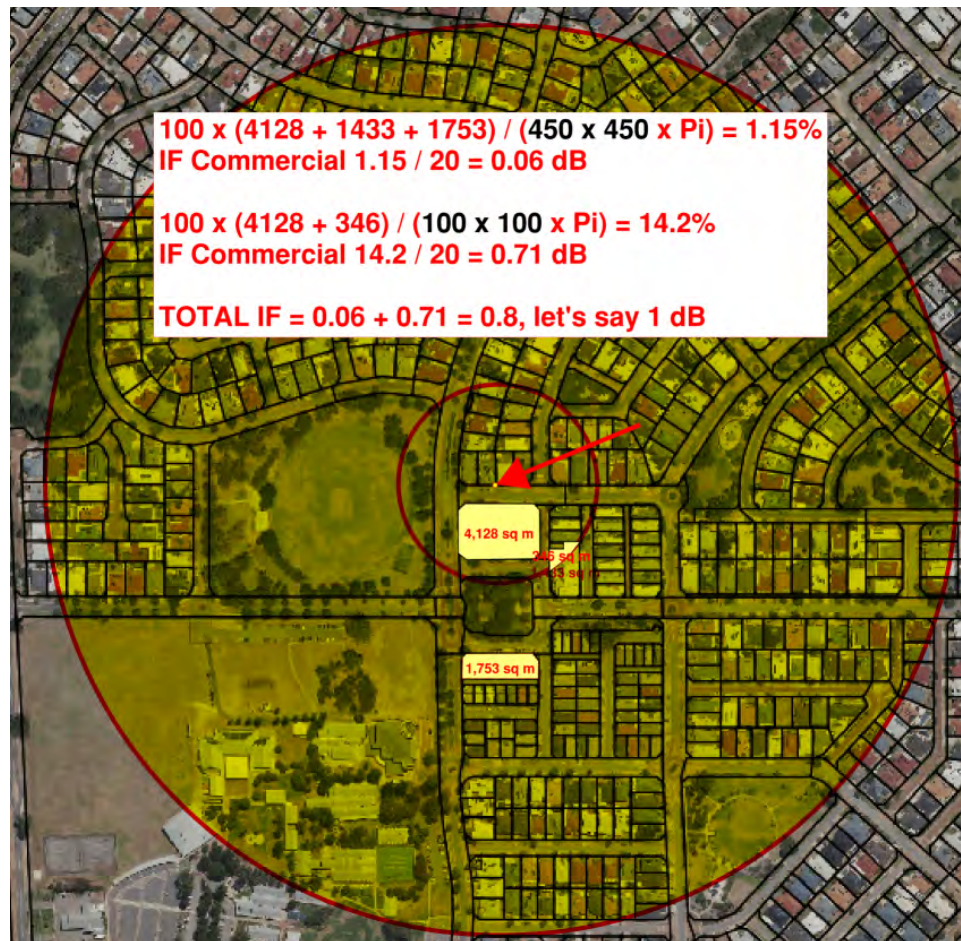




TABLE A2.2 - INFLUENCING FACTOR #9 LINOTT CLOSE

INFLUENCING FACTOR CRITERIA			ASSESSMENT		
Item	Criteria	Value	Criteria	Value	Totals
Major Road within the					0 (Transport Factor ≤ 6)
- 100 m radius inner circle	veh/day > 15000	6 dB	-	-	
- 450 m radius outer circle		2 dB	-	-	
Secondary (Minor) Road within the					
- 100 m radius inner circle	15k > veh/day > 6k	2 dB	-	-	1 (≤ 30)
Type A 'Industrial and Utility premises' within the					
- 100 m radius inner circle	1/10 x Area%	≤ 10	0 %	0	
- 450 m radius outer circle	1/10 x Area%	≤ 10	0 %	0	
Type B 'Commercial premises' within the					
- 100 m radius inner circle	1/20 x Area%	≤ 5	17 %	0.9	
- 450 m radius outer circle	1/20 x Area%	≤ 5	1.2 %	0.1	

INFLUENCING FACTOR = 1 dB(A)

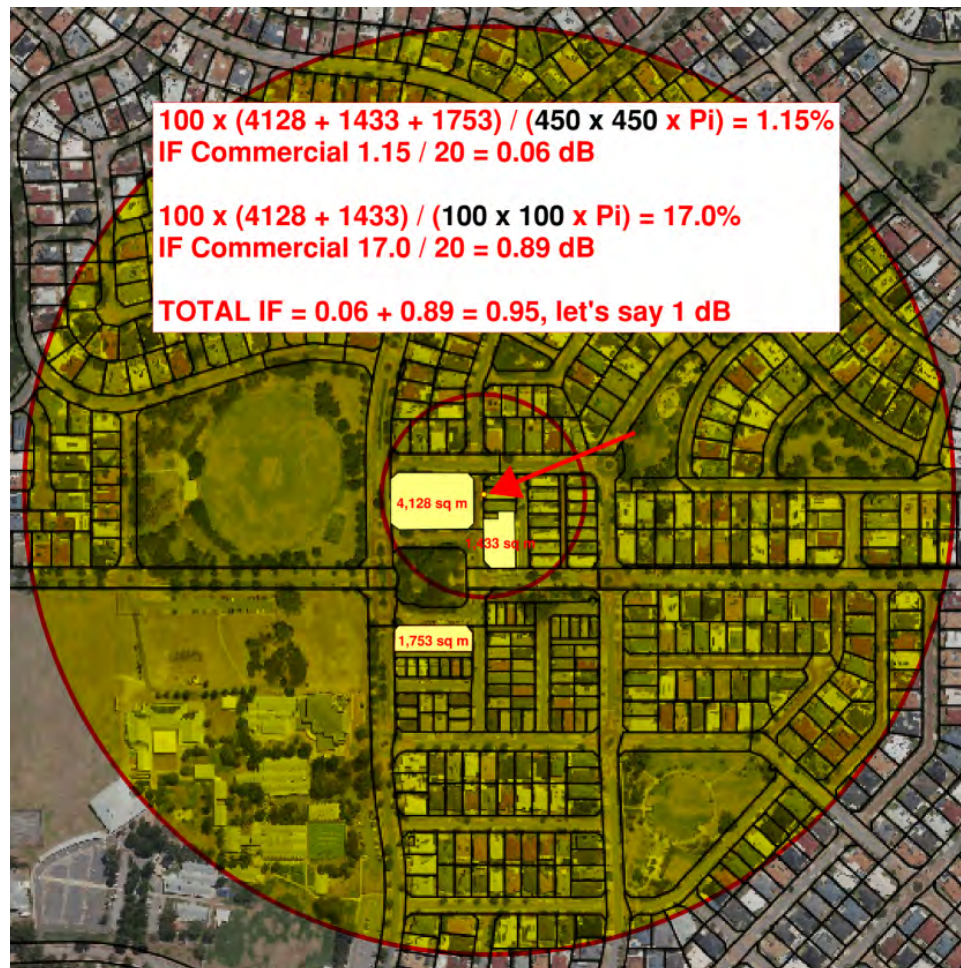




TABLE A2.3 - INFLUENCING FACTOR #10 RAMSEY LANE

INFLUENCING FACTOR CRITERIA			ASSESSMENT		
Item	Criteria	Value	Criteria	Value	Totals
Major Road within the					0 (Transport Factor ≤ 6)
- 100 m radius inner circle	veh/day > 15000	6 dB	-	-	
- 450 m radius outer circle		2 dB	-	-	
Secondary (Minor) Road within the					
- 100 m radius inner circle	15k > veh/day > 6k	2 dB	-	-	
Type A 'Industrial and Utility premises' within the					0.7 (≤ 30)
- 100 m radius inner circle	1/10 x Area%	≤ 10	0 %	0	
- 450 m radius outer circle	1/10 x Area%	≤ 10	0 %	0	
Type B 'Commercial premises' within the					
- 100 m radius inner circle	1/20 x Area%	≤ 5	1.2 %	0.6	
- 450 m radius outer circle	1/20 x Area%	≤ 5	12.9 %	0.1	

INFLUENCING FACTOR = 1 dB(A)

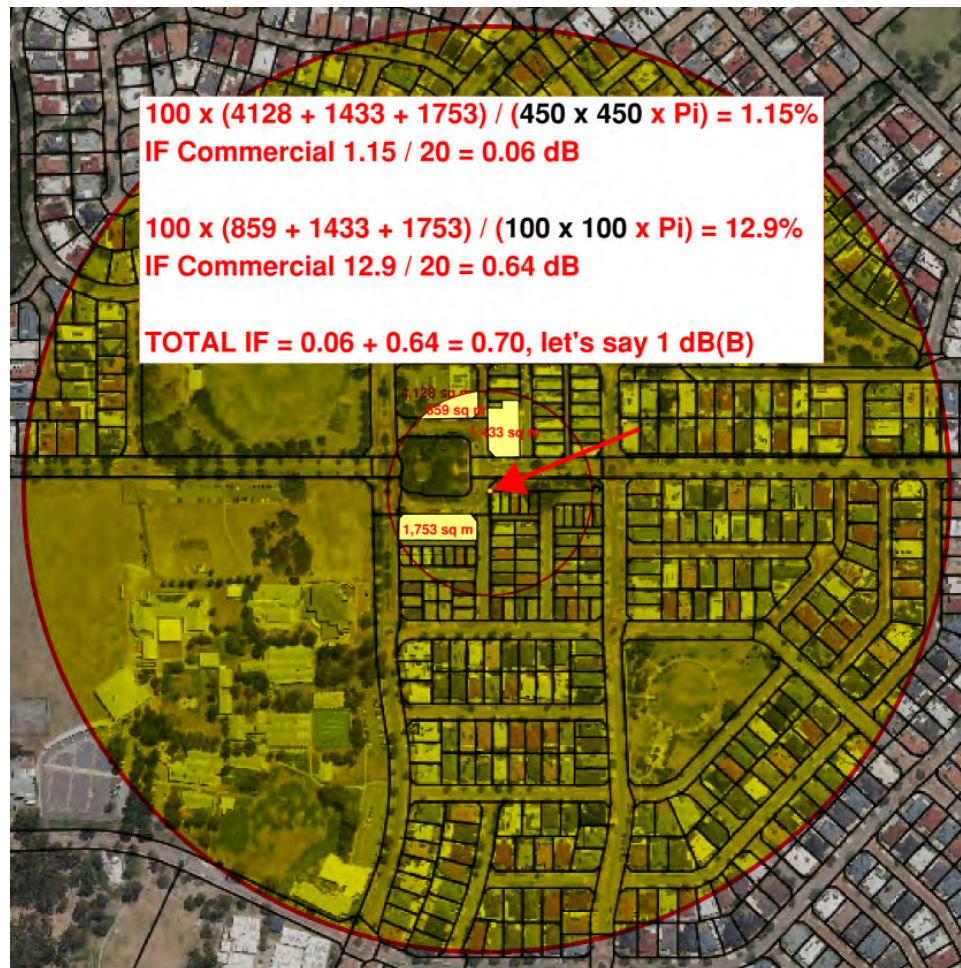




TABLE A3 – ASSIGNED NOISE LEVELS

#3 & #5 OSGOOD WAY ~50m to the NORTH

#9 LINOTT CLOSE ~ 20m to the EAST

#10 RAMSEY LANE ~80m to the SOUTH EAST

NOISE SENSITIVE PREMISES at locations within 15 m of a building directly associated with a noise sensitive use.	TIME OF DAY		ASSIGNED NOISE LEVELS		
			dB(A)		
			L _{A10}	L _{A1}	L _{Amax}
	Day	0700-1900 hrs Monday to Saturday	46	56	66
		0900-1900 hrs Sunday, Public holidays	41	51	
	Evenings	1900-2200 hrs all days	41		56
	Night	2200-0700 hrs Monday to Saturday	36	46	
		2200-0900 hrs Sunday, Public holidays			
Commercial Premises	All Hours		60	75	80

End Annex A



- B1. This annex contains the following:
 - a. FIGURE B1.1 SITE PLAN.
 - b. FIGURE B1.2 FLOOR PLAN.
 - c. FIGURE B2.1 EXTERNAL 3D VISUALS BY ADAGE FURNITURE (x10).
 - d. FIGURE B2.2 INTERNAL 3D VISUALS BY ADAGE FURNITURE (x7).
 - e. FIGURE B NDE PHOTOS.



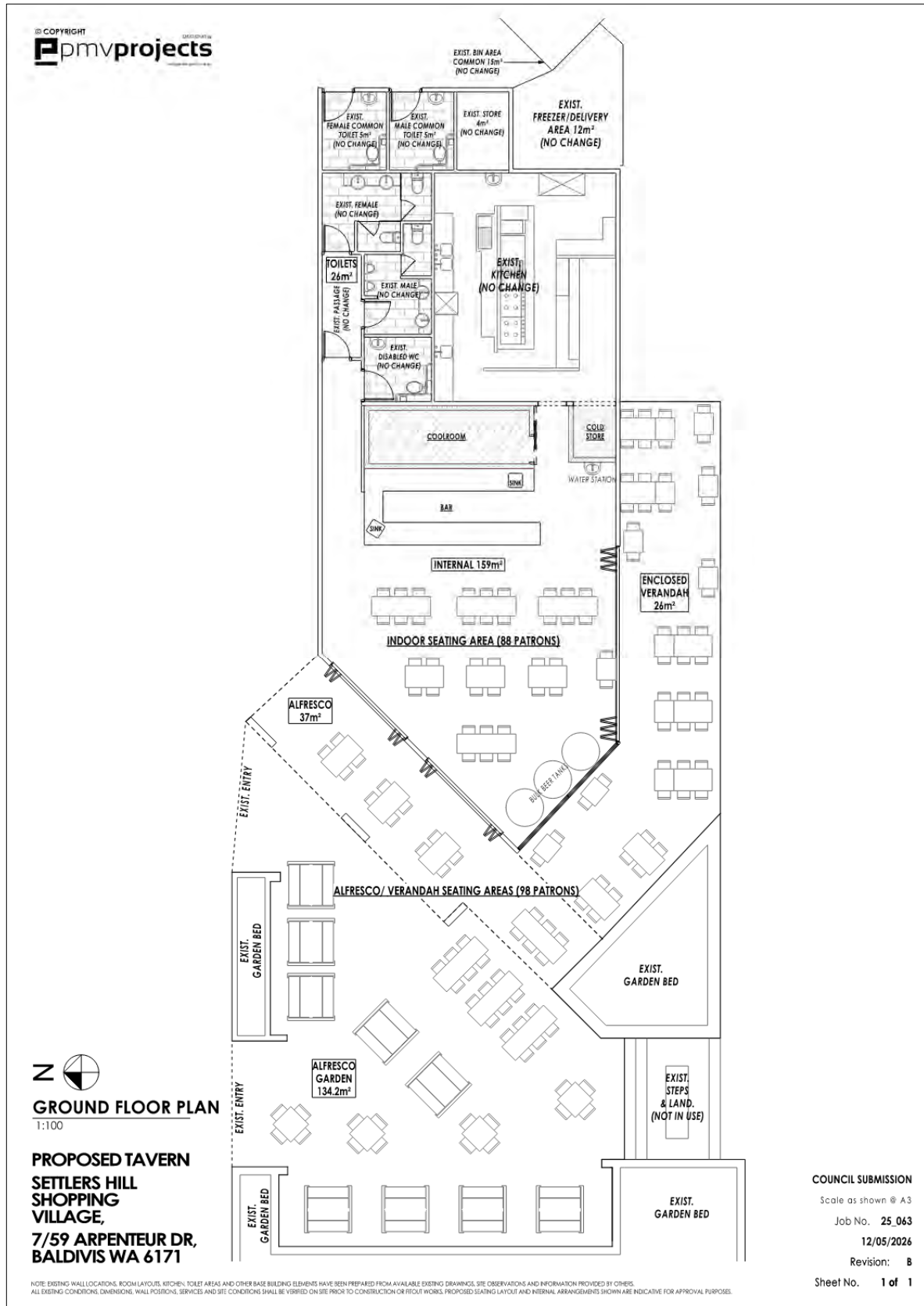


FIGURE B1.2 - FLOOR PLAN



FIGURE B2.1 - EXTERNAL 3D VISUALS by ADAGE FURNITURE



FIGURE B2.2 - INTERNAL 3D VISUALS by ADAGE FURNITURE



Common Back Of House



Common Back Of House



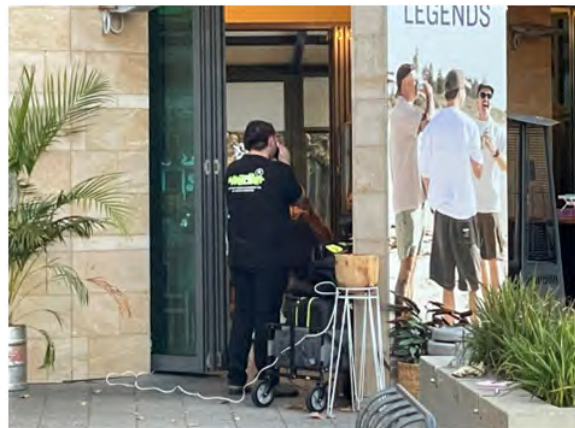
Enclosed Verandah seen from Clyde Ave West



Enclosed Verandah seen from Clyde Ave East



Alfresco Garden seen from carpark



Musician/singer in Alfresco Area

FIGURE B3 – NDE PHOTOS 5pm Friday 1 May 2026

End Annex B



ANNEX M – MUSIC

M0 This annex contains the following Figures:

- FIGURE M0.1 – ENTERTAINER LOCATIONS & CALIBRATION POINTS.
- FIGURE M0.2 – ENTERTAINER LOCATION 2 PHOTO.
- FIGURE M0.3 – CALIBRATION POINT FOR LOCATION 2 PHOTO.
- FIGURE M1.1 – ENTERTAINER LOCATION 1 Monday to Saturday 7am to 7pm
Contour LA10 = 46 dB(A) includes +10 dB(A) adjustment for music.
Calibration point LAeq = 60 dB(A).
- FIGURE M1.2 – ENTERTAINER LOCATION 1 Sunday & Public Holidays 9am to 7pm
Contour LA10 = 46 dB(A) includes +10 dB(A) adjustment for music.
Calibration point LAeq = 50 dB(A).
- FIGURE M1.3 – ENTERTAINER LOCATION 1 Evenings 7pm to 10pm
Contour LA10 = 41 dB(A) includes +10 dB(A) adjustment for music.
Calibration point LAeq must be reset at 7pm to LAeq = 50 dB(A).
- FIGURE M2.1 – ENTERTAINER LOCATION 2 Monday to Saturday 7am to 7pm
Contour LA10 = 46 dB(A) includes +10 dB(A) adjustment for music.
Calibration point LAeq = 60 dB(A).
- FIGURE M2.2 – ENTERTAINER LOCATION 2 Sunday & Public Holidays 9am to 7pm
Contour LA10 = 46 dB(A) includes +10 dB(A) adjustment for music.
Calibration point LAeq = 50 dB(A).
- FIGURE M2.3 – ENTERTAINER LOCATION 2 Evenings 7pm to 10pm
Contour LA10 = 41 dB(A) includes +10 dB(A) adjustment for music.
Calibration point LAeq must be reset at 7pm to LAeq = 50 dB(A).

M1 The current restaurant's change of use to a tavern is only for the purpose of being able to sell take away beers and for an increase in patrons from 120 to 180. There is no intended change in the current music format given that it mainly caters to families and locals as can be seen in the covering page to this report.

M2 Noise modelling was undertaken using SoundPlan software with CONCAWE conditions for the following Assigned Noise Levels (ANL):

- Monday to Saturday 7am to 7pm ANL = 46 dB(A); and
- Sunday & Public Holidays 9am to 7pm ANL = 41 dB(A); and
- Evenings 7pm to 10pm ANL = 41 dB(A).

M3 Trading outside the times mentioned in the above paragraph M2 do not comply with the Noise Regulations. However trading within the times mentioned in the above paragraph M2 require the positioning of the entertainer and calibration point as per FIGURE M0.1 – ENTERTAINER LOCATION & CALIBRATION POINTS.

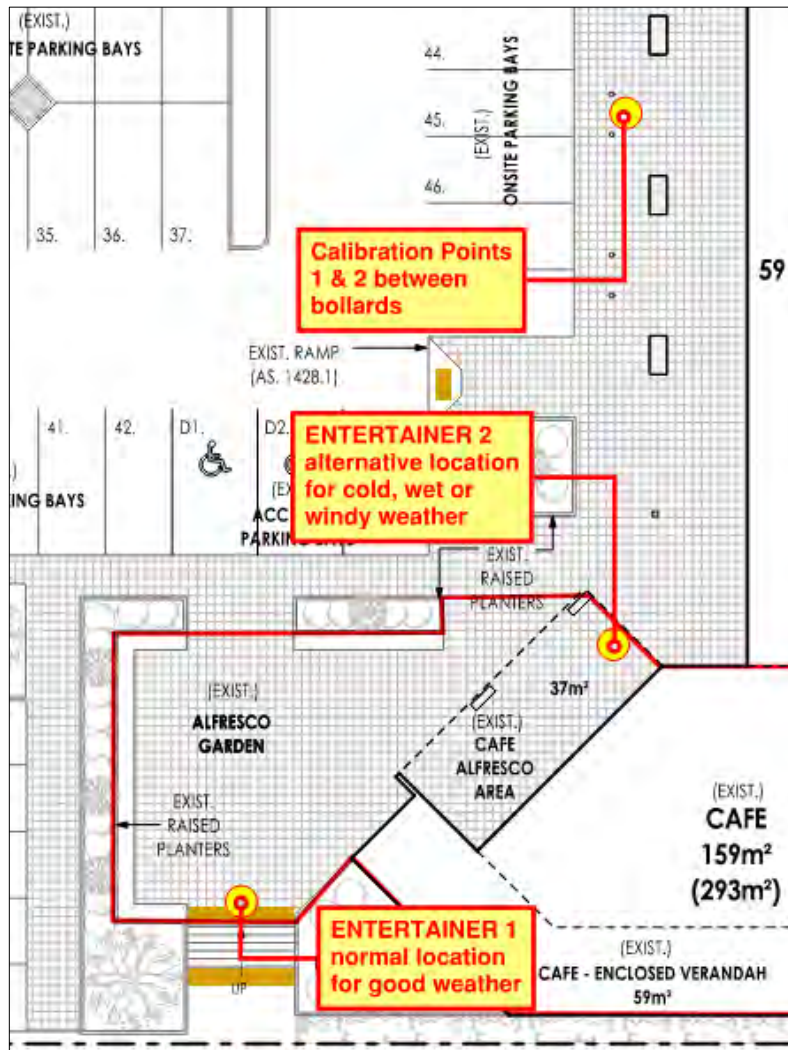


FIGURE M0.1 – ENTERTAINER LOCATIONS & CALIBRATION POINTS



FIGURE M0.2 – ENTERTAINER LOCATION 2 PHOTO



FIGURE M0.3 – CALIBRATION POINT FOR LOCATION 2 PHOTO

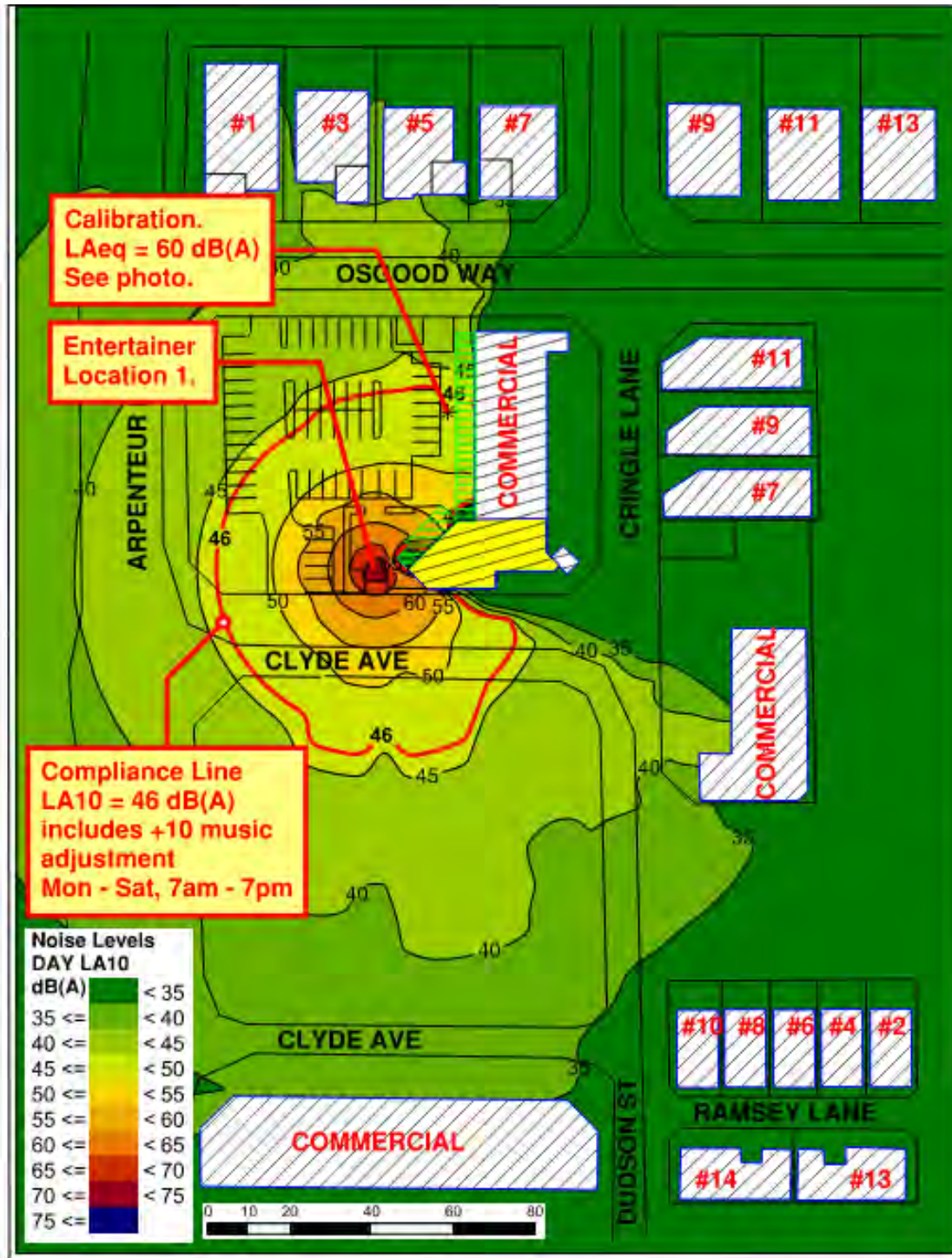


FIGURE M1.1 – ENTERTAINER LOCATION 1 MONDAY TO SATURDAY 7am to 7pm

Compliance Contour LA10 = 46 dB(A) includes a +10 dB(A) adjustment for music

Calibration LAeq adjusted to LAeq = 60 dB(A)

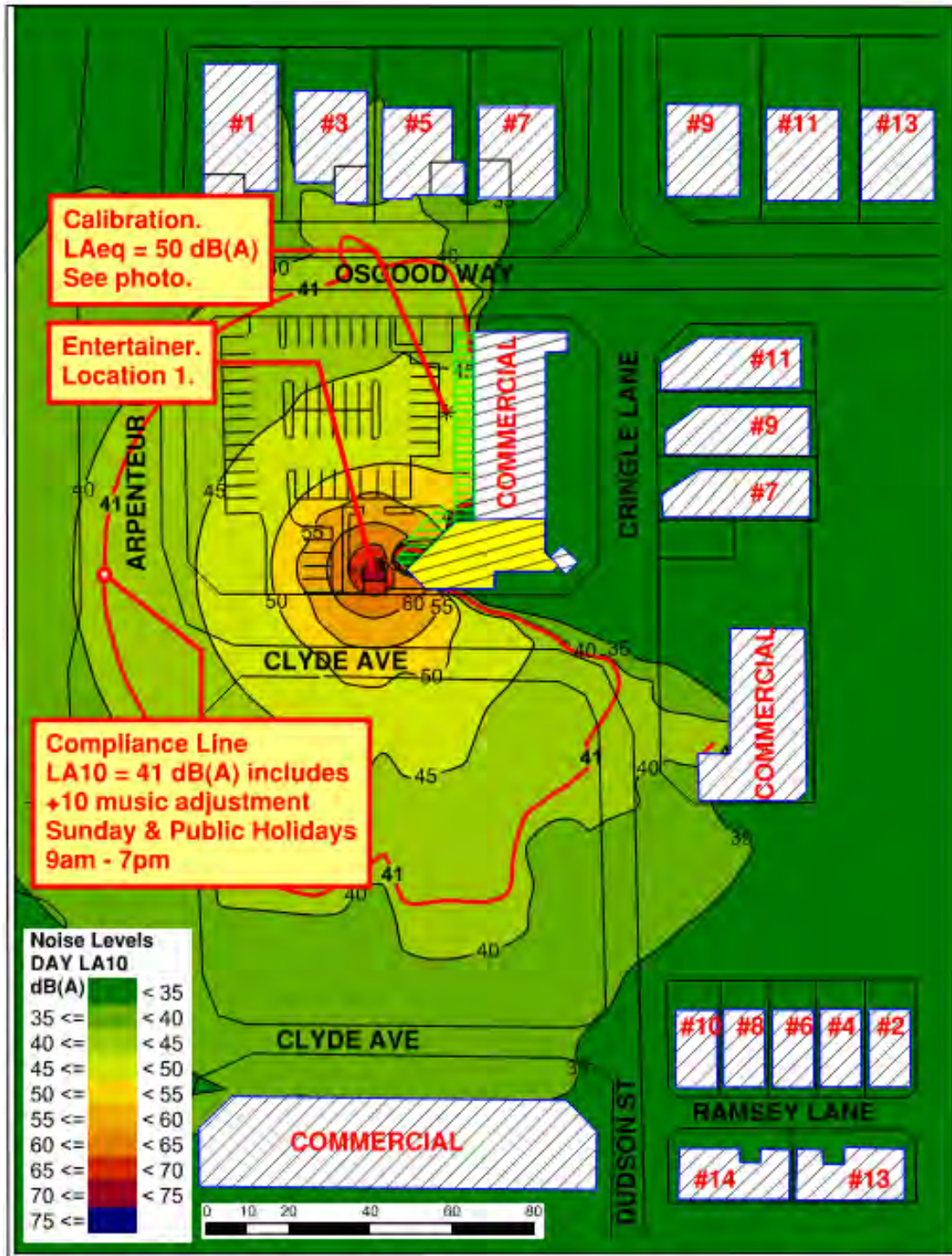


FIGURE M1.2 – ENTAINER LOCATION 2 SUNDAY & PUBLIC HOLIDAYS 9am to 7pm

Compliance Contour LA10 = 46 dB(A) includes a +10 dB(A) adjustment for music

Calibration LAeq adjusted to LAeq = 50 dB(A)

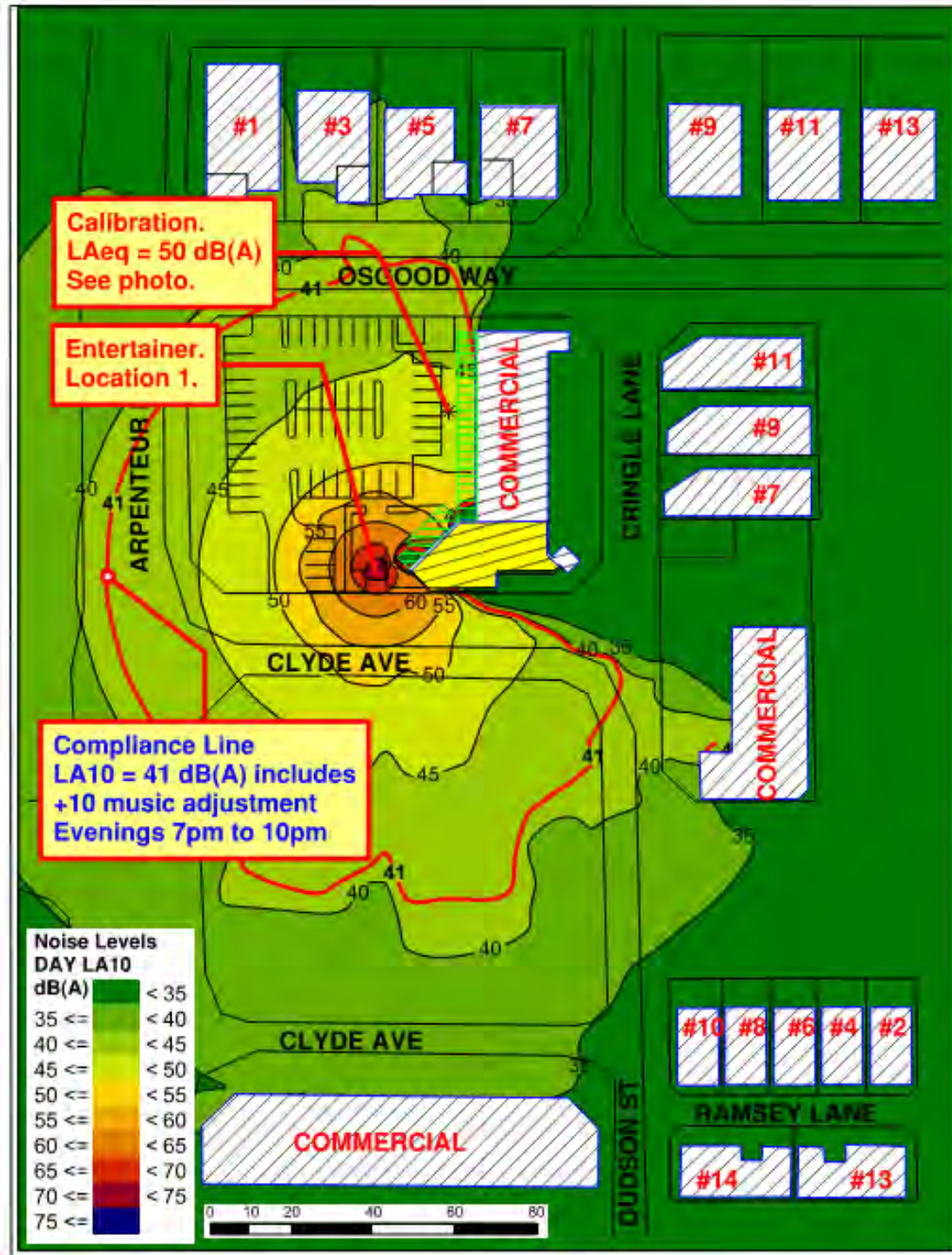


FIGURE M1.3 – ENTAINER LOCATION 1 EVENINGS 7pm to 10pm

Compliance Contour LA10 = 41 dB(A) includes a +10 dB(A) adjustment for music

Calibration LAeq reset at 7pm to LAeq = 50 dB(A)

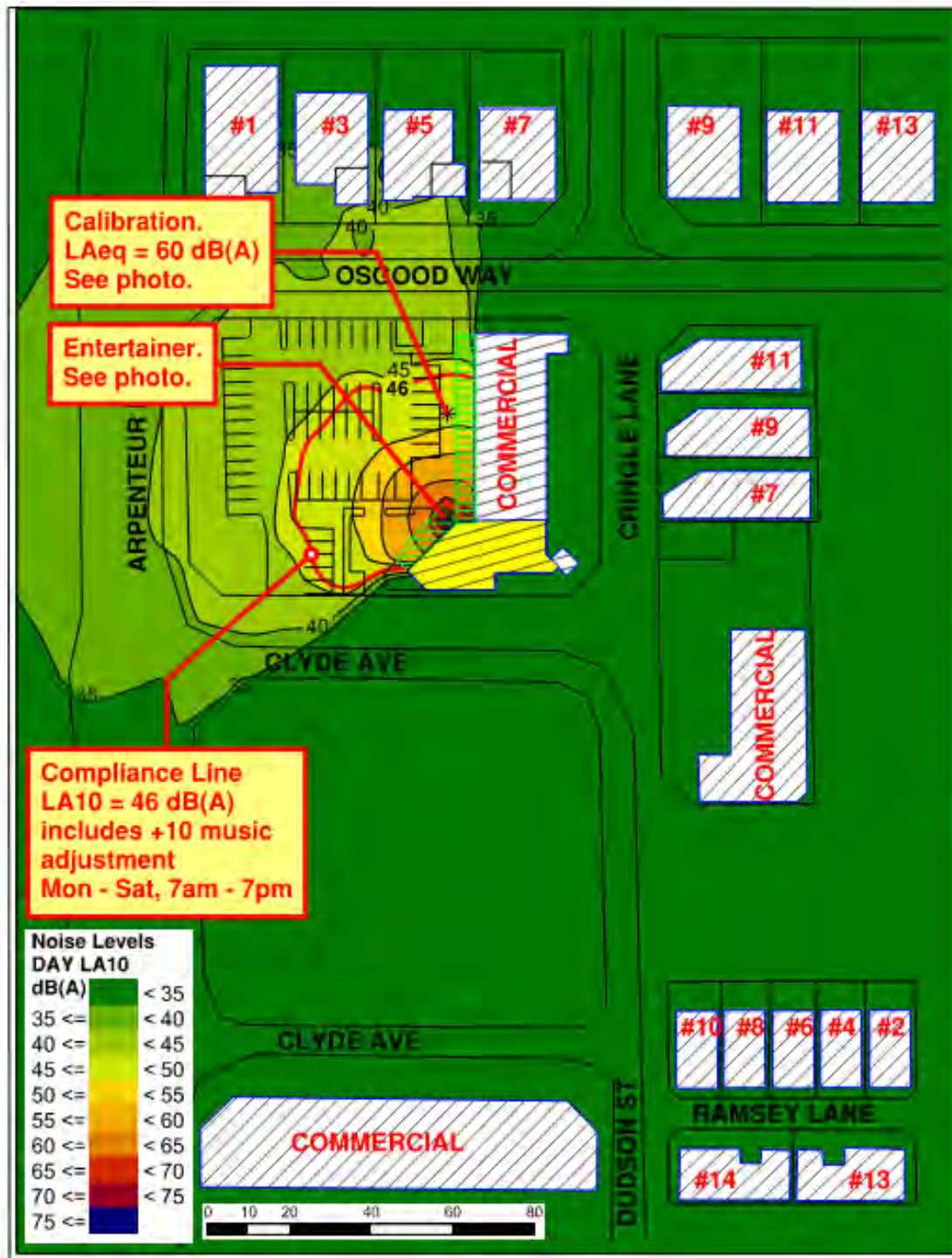


FIGURE M2.1 – ENTERTAINER LOCATION 2 MONDAY TO SATURDAY 7am to 7pm

Compliance Contour LA10 = 46 dB(A) includes a +10 dB(A) adjustment for music

Calibration LAeq adjusted to LAeq = 60 dB(A)

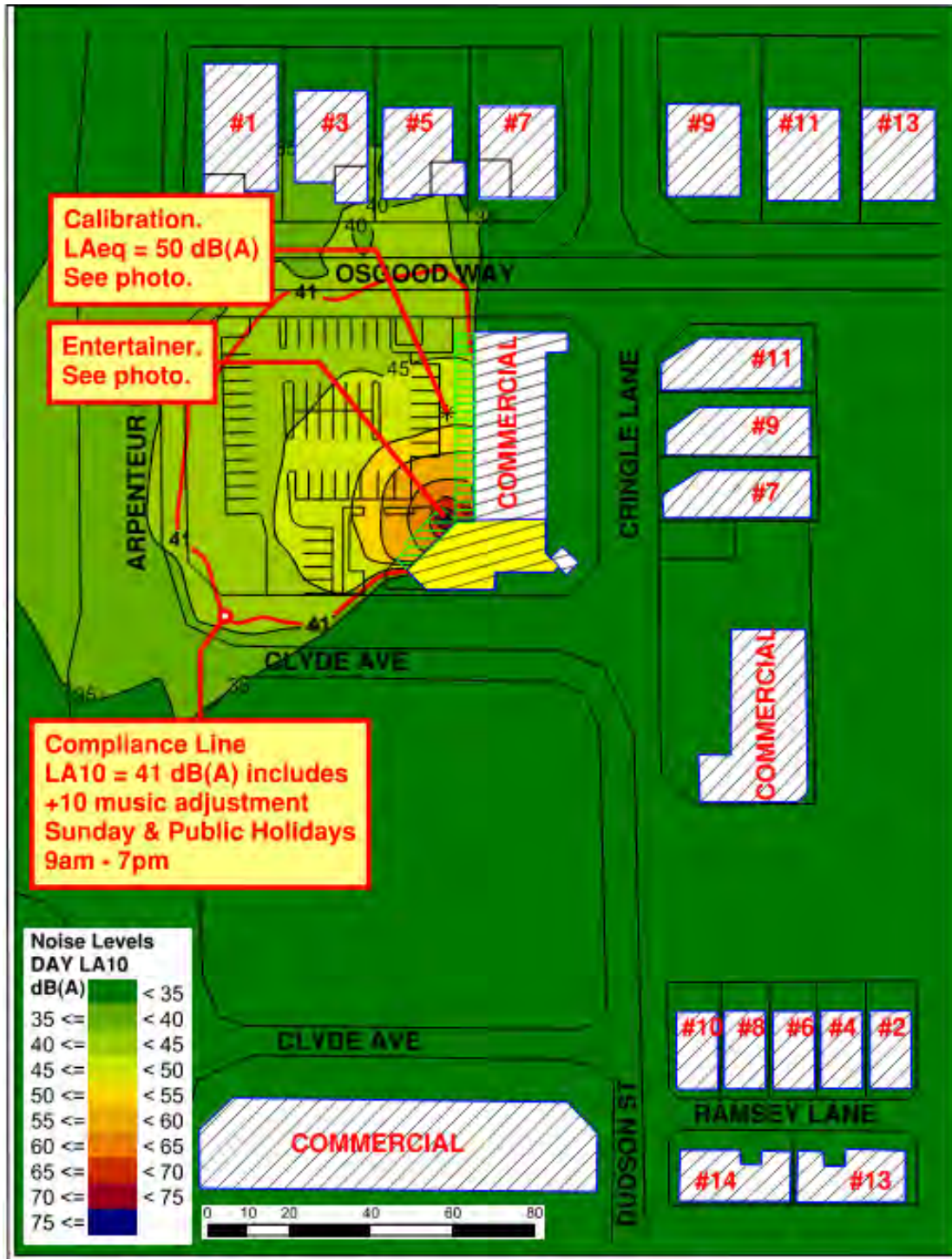


FIGURE M2.2 – ENTAINER LOCATION 2 SUNDAY & PUBLIC HOLIDAYS 9am to 7pm

Compliance Contour LA10 = 46 dB(A) includes a +10 dB(A) adjustment for music

Calibration LAeq adjusted to LAeq = 50 dB(A)

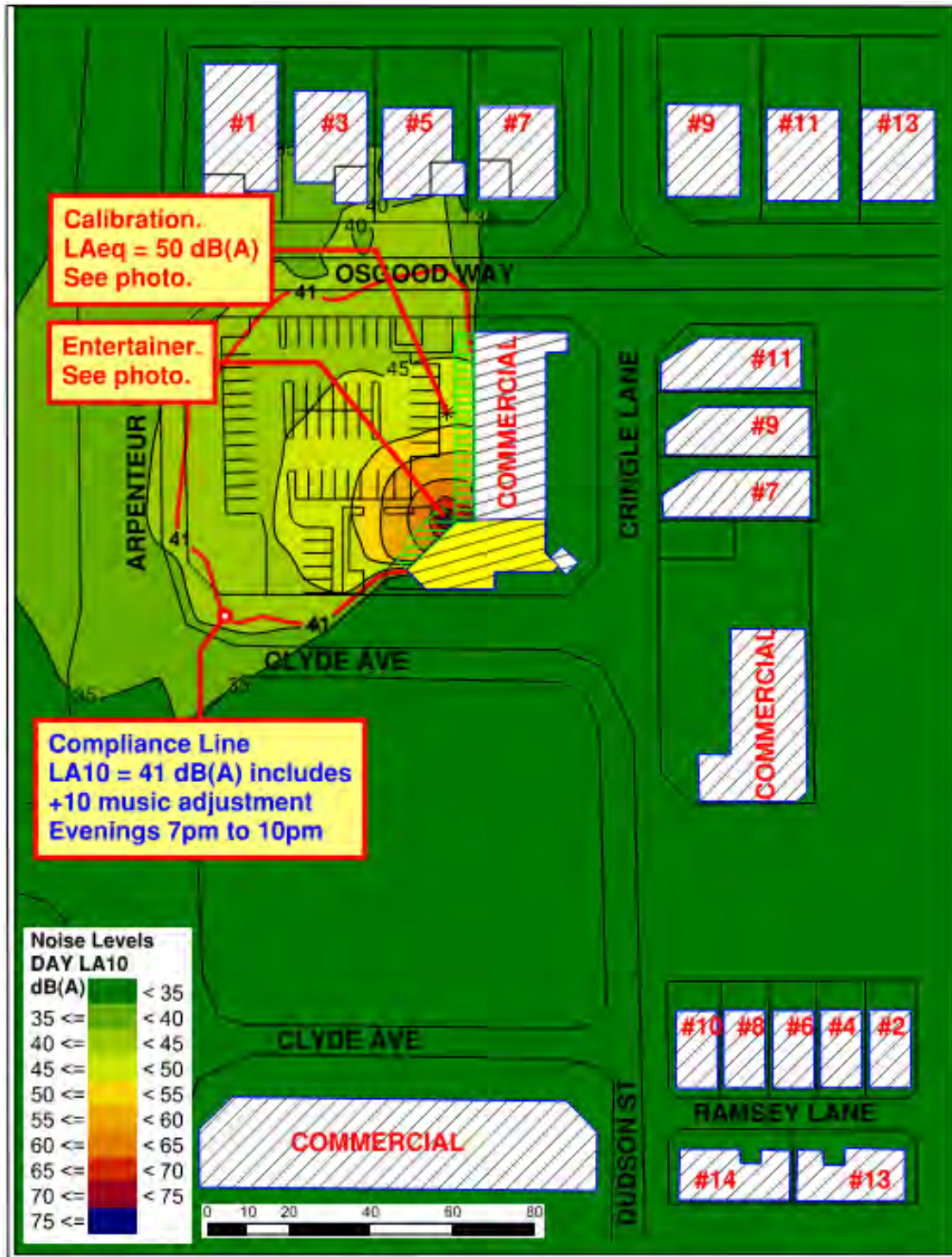


FIGURE M2.3 – ENTERTAINER LOCATION 2 EVENINGS 7pm to 10pm

Compliance Contour LA10 = 41 dB(A) includes a +10 dB(A) adjustment for music

Calibration LAeq reset at 7pm to LAeq = 50 dB(A)



ANNEX P – PATRONS

P0 This annex contains the following Figures:

- FIGURE P1 – Monday to Saturday 7am to 7pm
Compliance Contour LA10 = 46 dB(A).
- FIGURE P2 – Sunday & Public Holidays 9am to 7pm
Compliance Contour LA10 = 41 dB(A).
- FIGURE P3 – Evenings 7pm to 10pm
Compliance Contour LA10 = 41 dB(A).

P1.1 The current venue's change of use from a Restaurant Liquor Licence to a Tavern Liquor Licence is only for the purpose of being able to sell take away beverages in particular beers and for an increase in patrons from 120 to 180. There is no intended change in the current format given that it mainly caters to families and locals as can be seen in the covering page to this report.

P1.2 The patrons of interest for the purposes on this noise report are in the two alfresco areas being the:

- Alfresco Garden ~139 m² with 76 seats; and
- Café Alfresco area ~ 37m² with 18 seats.

P2.1 A typical man's voice produces a Sound Pressure Level of $L_p = 60$ dB(A) @ 1m which is equivalent to a Sound Power Level of $L_w = 68$ dB(A). Not everyone at a table talks at once and a typical allocation is for a table of:

- 0 tables of 2 seats 1 person talking per table $L_w = 68$ dB(A); and
- 7 tables of 4 seats 1 person talking per table $L_w = 68$ dB(A); and
- 13 tables of 6 seats 2 persons talking per table $L_w = 71$ dB(A).

P2.2 The total of 106 seats gives 33 persons talking in the two alfresco areas

P3.1 Noise modelling was undertaken using SoundPlan software with CONCAWE conditions for the following Assigned Noise Levels:

- Monday to Saturday 7am to 7pm ANL = 46 dB(A); and
- Sunday & Public Holidays 9am to 7pm ANL = 41 dB(A); and
- Evenings 7pm to 10pm ANL = 41 dB(A).

P3.2 Trading outside the times mentioned in the above paragraph P3.1 do not comply with the Noise Regulations.

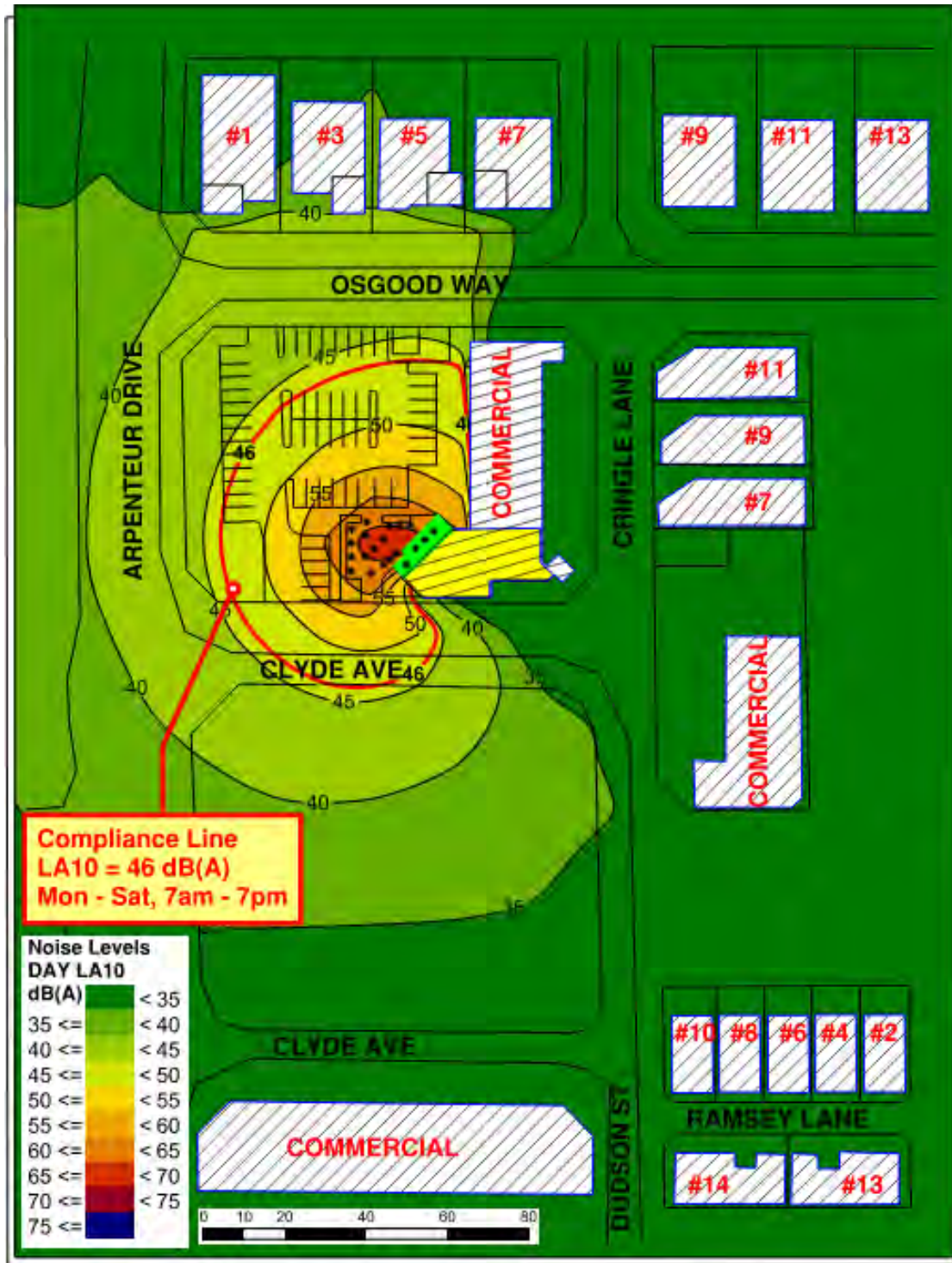


FIGURE P1 – Monday to Saturday 7am to 7pm

Compliance Contour LA10 = 46 dB(A)

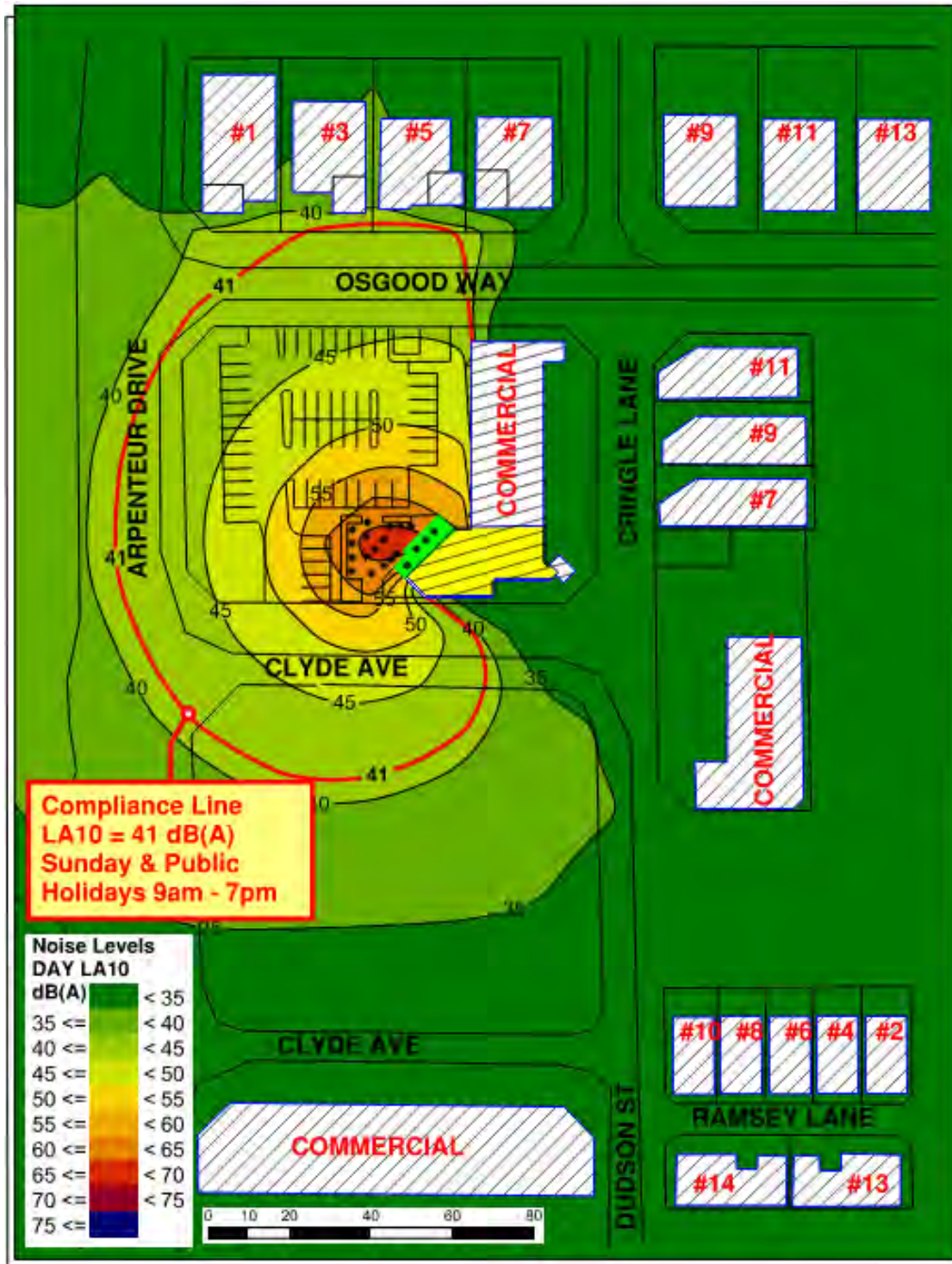


FIGURE P2 – Sunday & Public Holidays 9am to 7pm
Compliance Contour LA10 = 41 dB(A)

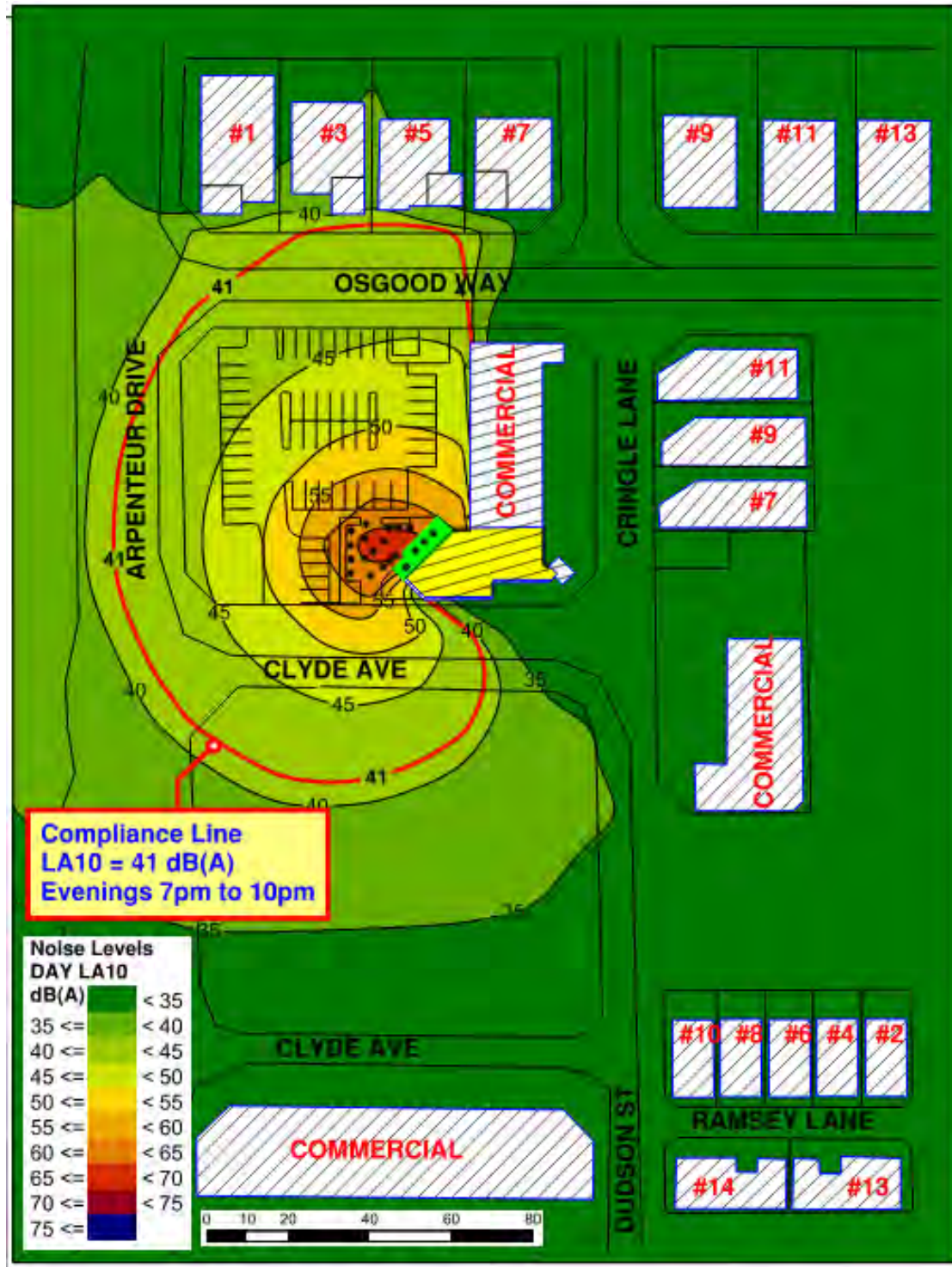


FIGURE P3 – Evenings 7pm to 10pm

Compliance Contour LA10 = 41 dB(A)