



Proposed Residential Development
6-8 Edmondstone Road
Bowen Hills

ACOUSTIC REPORT



Client:
Pellicano Group

Reference:
2018231 R01A 6-8 Edmondstone Road, Bowen Hills RTN

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PLANS AND DOCUMENTS
referred to in the PDA
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1. Introduction

The following report is in response to a request by Pellicano Group for a road traffic noise assessment of a proposed residential development located at 6-8 Edmondstone Road, Bowen Hills. To facilitate the assessment, unattended noise monitoring was conducted in the vicinity of the Inner City Bypass and Abbotsford Road to establish road traffic noise impacts to the development.

2. Site Description

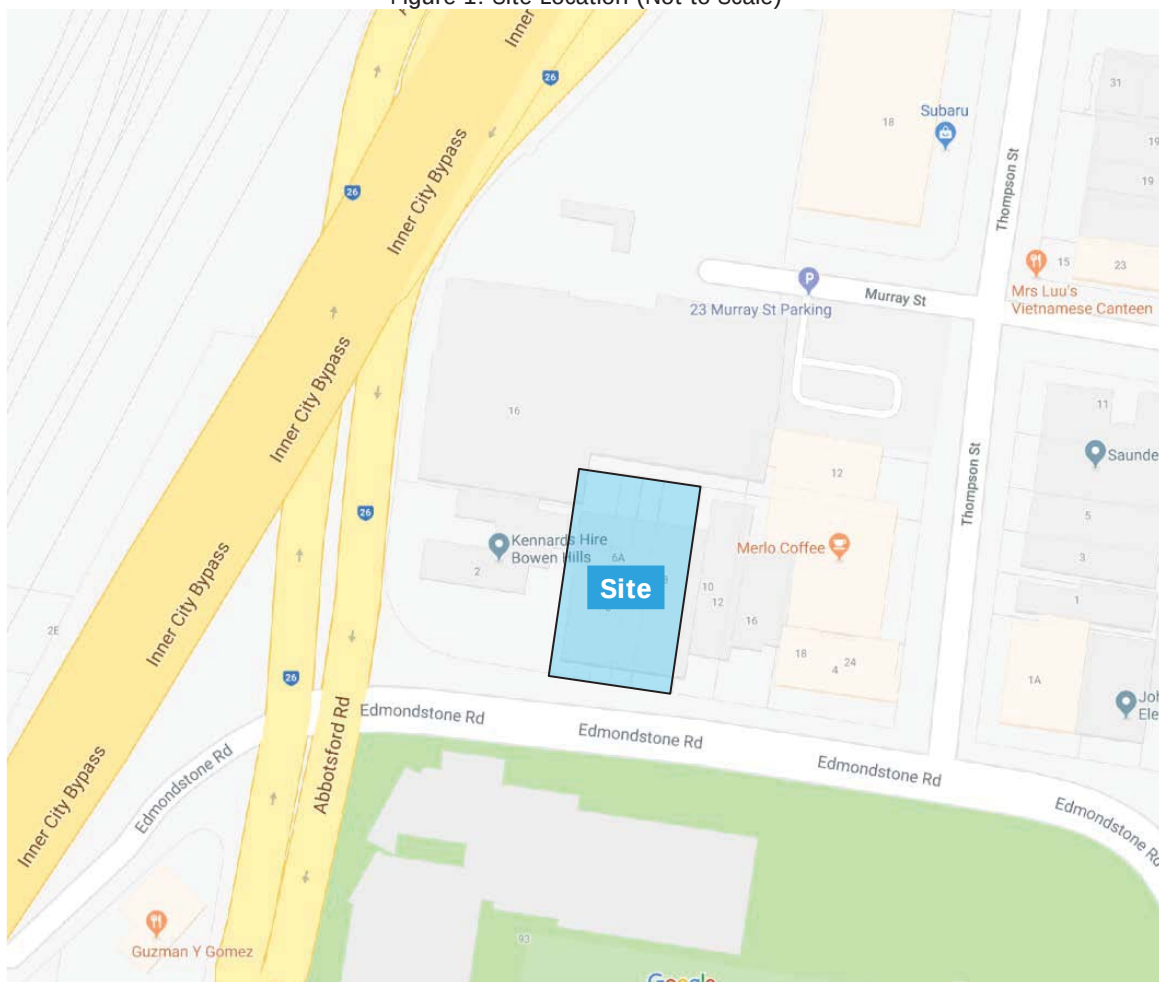
2.1 Site Location

The site is described by the following:

6-8 Edmondstone Road, Bowen Hills
Lots 32, 34, 58 & 59 on RP9382

Refer to Figure 1 for site location.

Figure 1: Site Location (Not to Scale)



A comprehensive site survey was conducted on the 25th July 2018 and identified the following:

- A two storey commercial building currently occupies the site and shall be demolished to make way for the proposed development.
- Commercial land uses bound the site to the west, north and east.

- c) Edmondstone Road is located adjacent the southern site boundary, separating the development from sports facilities.
- d) Abbotsford Road is located approximately 48m west of the site with the Inner City Bypass approximately 58m northwest of the site.

2.2 Proposal

The proposal is to construct an 8 storey residential building comprised of the following:

- Total site area of 1,560m².
- A 215m² commercial tenancy on ground floor level.
- 77 residential units from Level 1 to Level 7.
- Private recreation areas shall be provided for each unit with a communal rooftop terrace.
- 86 car parking spaces shall be provided over two basement levels and ground floor level.
- Site access is via Edmondstone Road.

Refer to the Appendices for development plans.

2.3 Acoustic Environment

The site is primarily affected by road traffic noise from Abbotsford Road and the Inner City Bypass.

3. Equipment

The following equipment was used to record noise levels:

- EL316 Environmental Noise Monitor
- BSWA Technology Co. Ltd Sound Calibrator

The EL316 Environmental Noise Monitor holds current NATA Laboratory Certification and was field calibrated before and after the monitoring period, with no significant drift from the reference signal recorded.

4. Noise Monitoring

4.1 Unattended Noise Monitoring

An EL316 environmental noise monitor was placed at 45 Abbotsford Road, 5.5m from the nearest lane of Abbotsford Road to measure road traffic noise levels. The monitor was located in a free field position with the microphone approximately 1.4 metres above ground surface level. The noise monitor was set to record noise levels between the 25th and 31st July 2018.

The environmental noise monitor was set to record noise levels in "A" Weighting, Fast response using 15 minute statistical intervals. Road traffic noise monitoring was conducted in accordance with Australian Standard *AS2702:1984 'Acoustics - Methods for the measurement of road traffic noise'*.

Refer to Figure 2 for noise monitoring location.

Figure 2: Noise Monitoring Location



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 Road Traffic Noise Levels

The road traffic noise levels measured at the monitoring location are as follows;

Table 1: Measured road traffic noise levels - all time periods

Day	Date	L10 (18h)	L90 (8h)	L90 (18h)	Leq (24h)
Thursday	26/07/18	73	48	58	71
Friday	27/07/18	73	49	58	70
Saturday	28/07/18	-	-	-	-
Sunday	29/07/18	-	-	-	-
Monday	30/07/18	73	48	58	70
Overall value		73	48	58	70

Road traffic data for the weekend was not utilised as it is not considered relevant to the assessment. Refer to the appendix for graphical representation.

6. Noise Criteria

6.1 Road Traffic Noise Criteria

As the development is located within the Transport Noise Corridor Overlay, as detailed in the Brisbane City Planning Scheme 2014, the following criteria applies:

6.1.1 Queensland Development Code MP4.4

To determine the minimum design requirements for any new buildings located within a transport corridor, the Queensland Development Code Part 4.4 may be applied if no alternative solutions are provided. In accordance with MP4.4, the noise categories are stated in Table 2.

Table 2: Queensland Development Code Part 4.4 Criteria

Queensland Development Code Part 4.4	
Category	$L_{10(18h)}$ dB(A)
4	> 73
3	68-72
2	63-67
1	58-62
0	< 57

The building treatment for any future development onsite shall be determined at Building Approval stage, in general accordance with the Queensland Development Code. Alternative solution may be provided on request.

7. Road Traffic Assessment

Road traffic noise associated with Abbotsford Road and the IBC for the ten year planning horizon was assessed at the development to determine compliance with the BCC criteria (refer to Section 6.1) and any requirements for acoustic treatments.

As presented in the Transport Noise Corridor Overlay in Figure 3, Abbotsford Road and the Inner City Bypass has the potential to impact the development, with the site nominated as QDC Noise Category 2-3. As the transport noise corridor overlay does not take into consideration any building screening, acoustic barriers, or topography, the site was assessed to determine if any reductions to the QDC Noise Categories can be achieved.

Figure 3: Transport Noise Corridor Overlay



- Queensland Development Code MP4.4 Noise Category 1
- Queensland Development Code MP4.4 Noise Category 2
- Queensland Development Code MP4.4 Noise Category 3
- Queensland Development Code MP4.4 Noise Category 4

7.1 Traffic Volumes

Current and future traffic volumes were obtained from Veitch Lister Consulting and are presented in the table below which include the percentage of heavy vehicles.

Table 3: Traffic Volumes

Location	2018 Predicted AADT	2028 Predicted AADT	Percentage of Heavy Vehicles
Inner City Bypass	57,573	63,912	6.1%
Abbotsford Road	33,601	45,597	7.4%

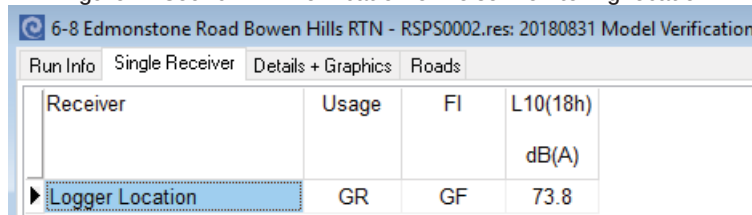
7.2 Road Traffic Noise Verification

To ensure the CoRTN noise model is accurate, a verification model of the predicted $L_{A10(18hr)}$ was created and compared to the measured noise level. The CoRTN method allows a 2dB(A) variation from the predicted and measured level, if the variation exceeds 2dB(A) a correction to the predicted level is required.

Table 4: Comparison of Measured and Predicted Noise Levels

Location	Measured $L_{A10(18hr)}$ dB(A)	Predicted $L_{A10(18hr)}$ dB(A)	Correction
Abbotsford Road & ICB	73.3	73.8	0

Figure 4: SoundPLAN verification of noise monitoring location



6-8 Edmonstone Road Bowen Hills RTN - RSPS0002.res: 20180831 Model Verification				
Run Info	Single Receiver	Details + Graphics	Roads	
Receiver	Usage	FI	L10(18h)	
			dB(A)	
▶ Logger Location	GR	GF	73.8	

7.3 Predicted Road Traffic Noise Levels - 2028

Road traffic noise modelling for the proposed development was based on the following information:

- Site layout, floor plans and elevations provided by SJB Architects, Job No. 21211, drawings SD02_01 to SD30_02, revision 10, dated 1st October 2018.
- Abbotsford Road speed limit of 60km/h.
- Inner City Bypass speed limit of 70km/h.
- Receiver heights were based on 1.5m above finished floor level.
- Calculations include facade correction.

The 3D SoundPLAN CoRTN noise model predicted $L_{A10,18\text{hour}}$ levels with Table 5 presenting the predicted road traffic noise impacts for each unit.

Table 5: Predicted Road Traffic Noise Impacts

Location			Predicted Noise Impacts 2028	
Level	Unit	Room	LA10 (18hr) dB(A)	QDC Noise Category
1	1.01	Kitchen/Living/Dining	66	2
		Bed 1	66	2
	1.02	Kitchen/Living/Dining	66	2
		Bed 1	63	2
	1.03	Kitchen/Living/Dining	57	0
		Bed 1	65	2
		Bed 2	65	2
	1.04-1.07	All	≤57	0
	1.08	Kitchen/Living/Dining	60	1
		Bed 1	62	1
		Bed 2	45	0
	1.09	Kitchen/Living/Dining	55	0
		Bed 1	63	2
		Bed 2	61	1
	1.10	Kitchen/Living/Dining	55	0
		Bed 1	67	2
		Bed 2	67	2
	1.11	Kitchen/Living/Dining	67	2
		Bed 1	64	2
2	2.01	Kitchen/Living/Dining	68	3
		Bed 1	67	2
	2.02	Kitchen/Living/Dining	68	3
		Bed 1	65	2
	2.03	Kitchen/Living/Dining	63	2
		Bed 1	68	3
		Bed 2	68	3
	2.04	Kitchen/Living/Dining	63	2
		Bed 1	49	0
		Bed 2	63	2

Location			Predicted Noise Impacts 2028	
Level	Unit	Room	LA10 (18hr) dB(A)	QDC Noise Category
	2.05-2.07	All	≤57	0
	2.08	Kitchen/Living/Dining	61	1
		Bed 1	63	2
		Bed 2	48	0
	2.09	Kitchen/Living/Dining	57	0
		Bed 1	64	2
		Bed 2	62	1
	2.10	Kitchen/Living/Dining	57	0
		Bed 1	68	3
		Bed 2	68	3
	2.11	Kitchen/Living/Dining	68	3
		Bed 1	66	2
3	3.01	Kitchen/Living/Dining	69	3
		Bed 1	67	2
	3.02	Kitchen/Living/Dining	69	3
		Bed 1	66	2
	3.03	Kitchen/Living/Dining	65	2
		Bed 1	69	3
		Bed 2	69	3
	3.04	Kitchen/Living/Dining	65	2
		Bed 1	51	0
		Bed 2	65	2
	3.05-3.07	All	≤57	0
	3.08	Kitchen/Living/Dining	63	2
		Bed 1	64	2
		Bed 2	50	0
	3.09	Kitchen/Living/Dining	58	1
		Bed 1	65	2
		Bed 2	63	2
	3.10	Kitchen/Living/Dining	58	1
		Bed 1	69	3
		Bed 2	69	3
	3.11	Kitchen/Living/Dining	69	3
		Bed 1	67	2
4	4.01	Kitchen/Living/Dining	70	3
		Bed 1	68	3
	4.02	Kitchen/Living/Dining	70	3
		Bed 1	67	2
	4.03	Kitchen/Living/Dining	66	2
		Bed 1	70	3
		Bed 2	70	3
	4.04	Kitchen/Living/Dining	65	2
		Bed 1	51	1

Location			Predicted Noise Impacts 2028	
Level	Unit	Room	LA10 (18hr) dB(A)	QDC Noise Category
		Bed 2	65	2
	4.05-4.07	All	≤57	0
	4.08	Kitchen/Living/Dining	63	2
		Bed 1	65	2
		Bed 2	51	0
	4.09	Kitchen/Living/Dining	59	1
		Bed 1	66	2
		Bed 2	64	2
	4.10	Kitchen/Living/Dining	60	1
		Bed 1	70	3
		Bed 2	70	3
	4.11	Kitchen/Living/Dining	70	3
		Bed 1	68	3
5	5.01	Kitchen/Living/Dining	70	3
		Bed 1	68	3
	5.02	Kitchen/Living/Dining	70	3
		Bed 1	67	2
	5.03	Kitchen/Living/Dining	67	2
		Bed 1	70	3
		Bed 2	70	3
	5.04	Kitchen/Living/Dining	66	2
		Bed 1	52	0
		Bed 2	66	2
	5.05-5.07	All	≤57	0
	5.08	Kitchen/Living/Dining	64	2
		Bed 1	65	2
		Bed 2	52	0
	5.09	Kitchen/Living/Dining	60	1
		Bed 1	66	2
		Bed 2	64	2
	5.10	Kitchen/Living/Dining	60	1
		Bed 1	70	3
		Bed 2	70	3
	5.11	Kitchen/Living/Dining	70	3
		Bed 1	68	3
6	6.01	Kitchen/Living/Dining	71	3
		Bed 1	69	3
	6.02	Kitchen/Living/Dining	71	3
		Bed 1	68	3
	6.03	Kitchen/Living/Dining	67	2
		Bed 1	71	3
		Bed 2	71	3
	6.04	Kitchen/Living/Dining	66	2

Location			Predicted Noise Impacts 2028	
Level	Unit	Room	LA10 (18hr) dB(A)	QDC Noise Category
		Bed 1	53	0
		Bed 2	66	2
	6.05-6.07	All	≤57	0
	6.08	Kitchen/Living/Dining	64	2
		Bed 1	66	2
		Bed 2	53	0
	6.09	Kitchen/Living/Dining	61	1
		Bed 1	67	2
		Bed 2	65	2
	6.10	Kitchen/Living/Dining	61	1
		Bed 1	71	3
		Bed 2	71	3
	6.11	Kitchen/Living/Dining	71	3
		Bed 1	68	3
7	7.01	Kitchen/Living/Dining	71	3
		Bed 1	69	3
	7.02	Kitchen/Living/Dining	71	3
		Bed 1	68	3
	7.03	Kitchen/Living/Dining	68	3
		Bed 1	71	3
		Bed 2	71	3
	7.04	Kitchen/Living/Dining	67	2
		Bed 1	55	0
		Bed 2	66	2
	7.05-7.07	All	≤57	0
	7.08	Kitchen/Living/Dining	65	2
		Bed 1	66	2
		Bed 2	55	0
	7.09	Kitchen/Living/Dining	62	1
		Bed 1	67	2
		Bed 2	65	2
	7.10	Kitchen/Living/Dining	62	1
		Bed 1	71	3
		Bed 2	71	3
	7.11	Kitchen/Living/Dining	71	3
		Bed 1	68	3

Any locations not identified in Table 5 are nominated as QDC Noise Category 0. Figure 5 to Figure 8 show the predicted road traffic noise contours for the development.

Figure 5: Road Traffic Noise Contours 2028 – Level 1

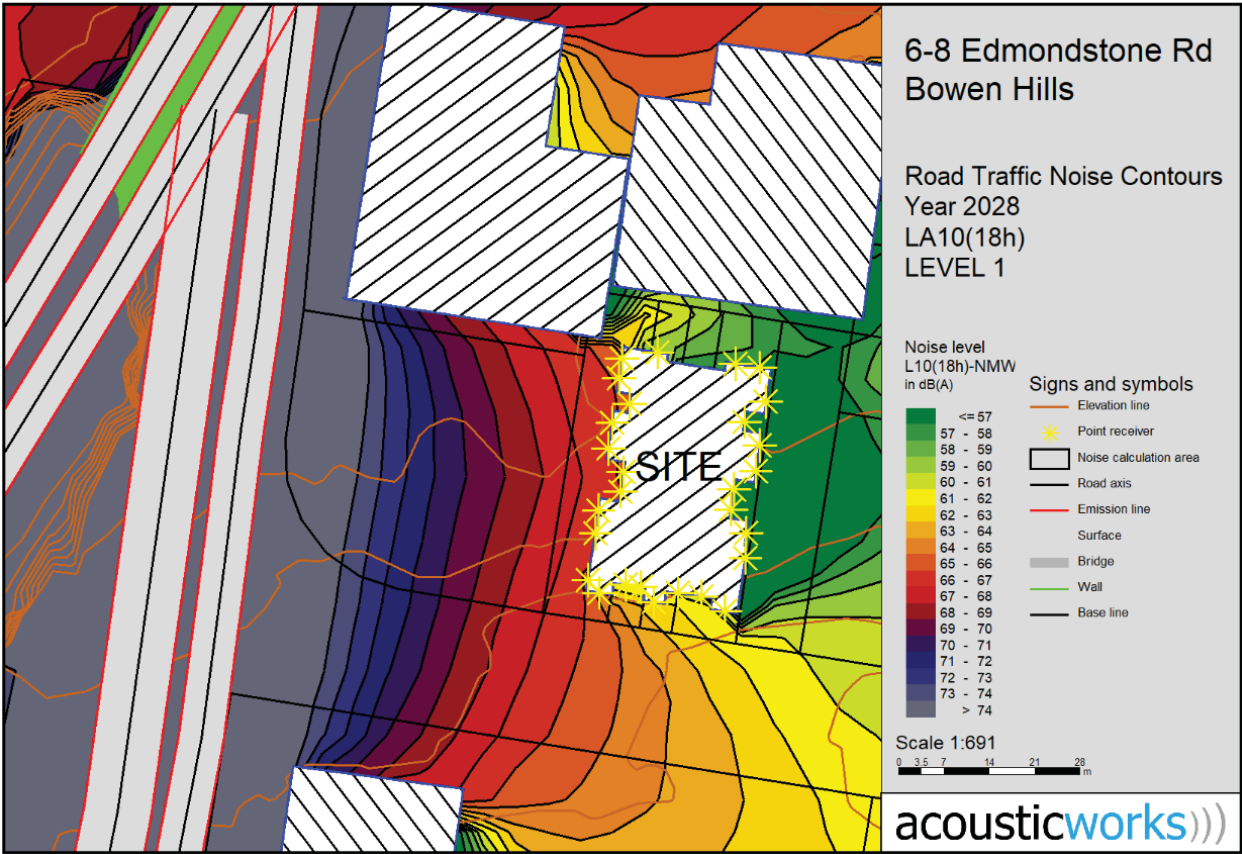


Figure 6: Road Traffic Noise Contours 2028 – Level 3

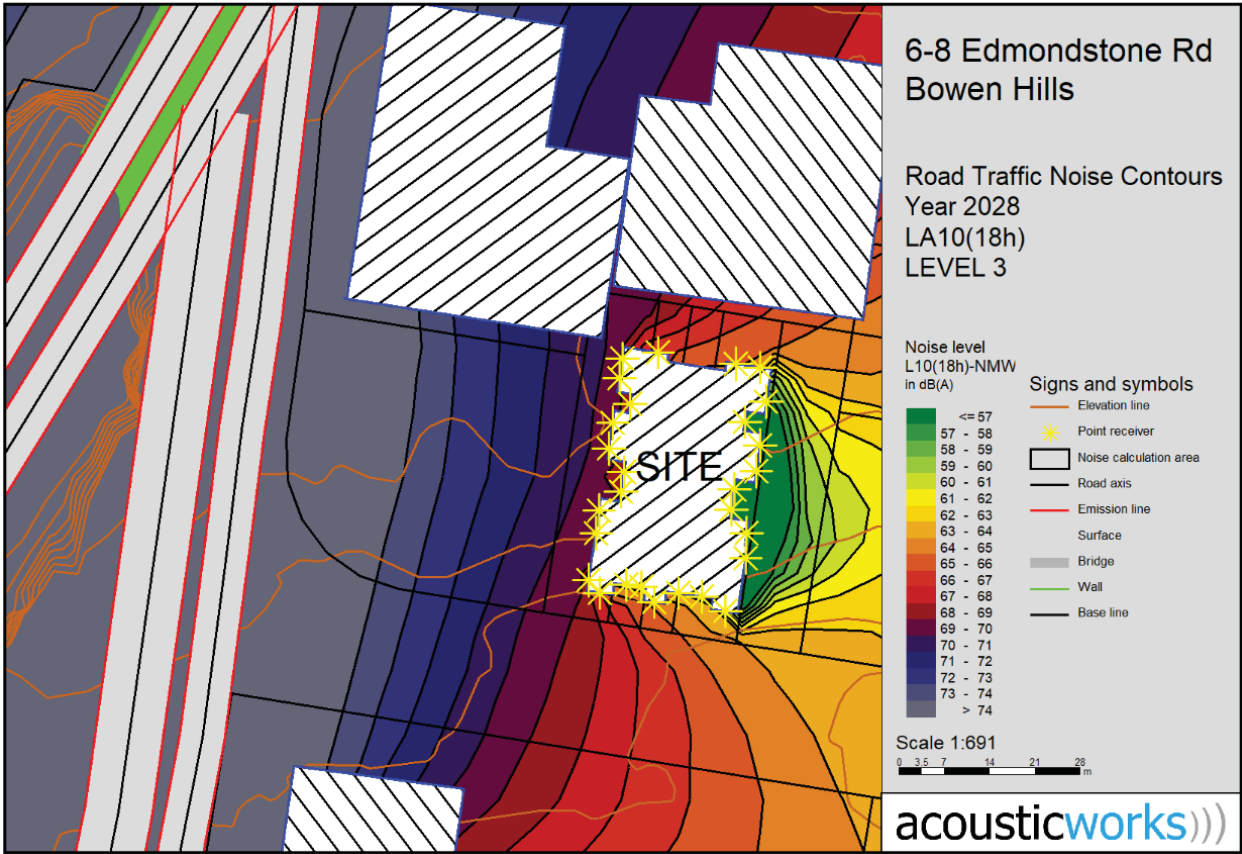


Figure 7: Road Traffic Noise Contours 2028 – Level 5

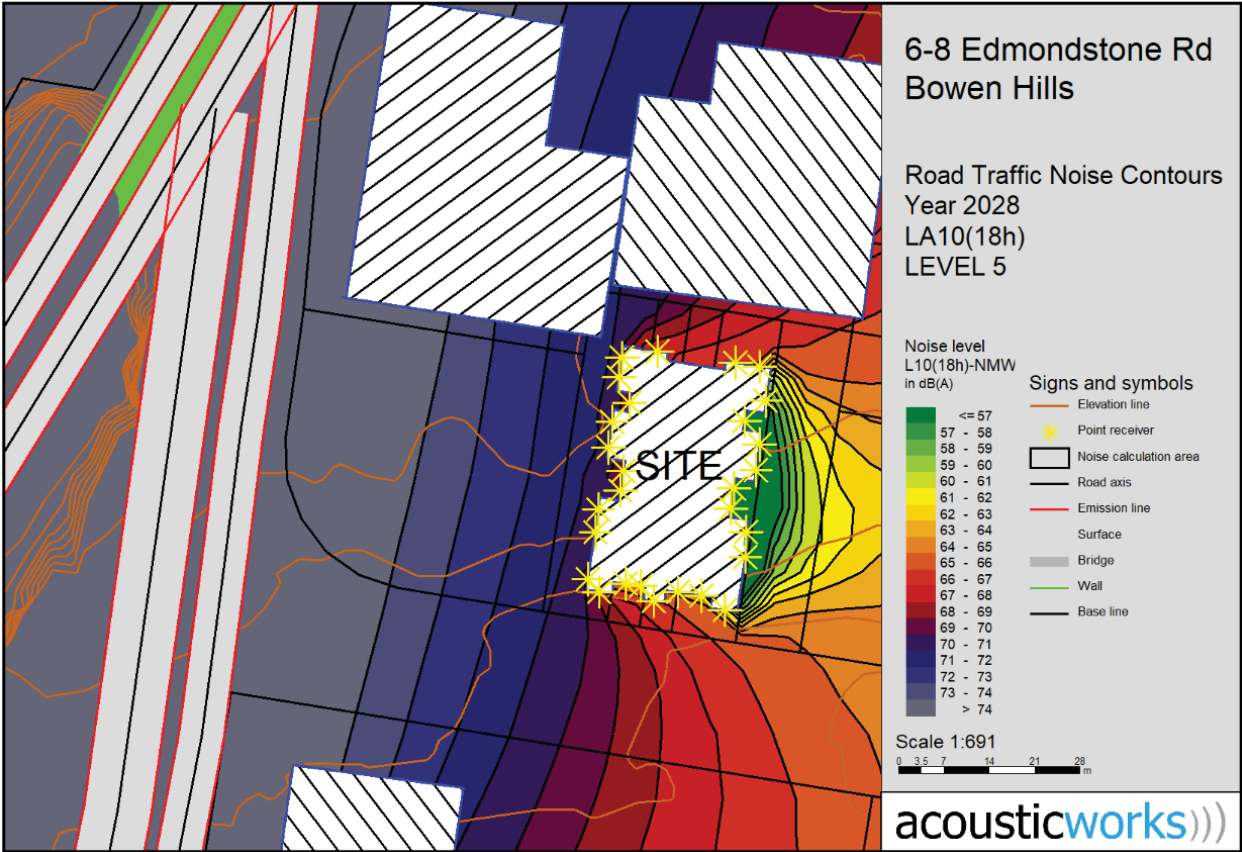
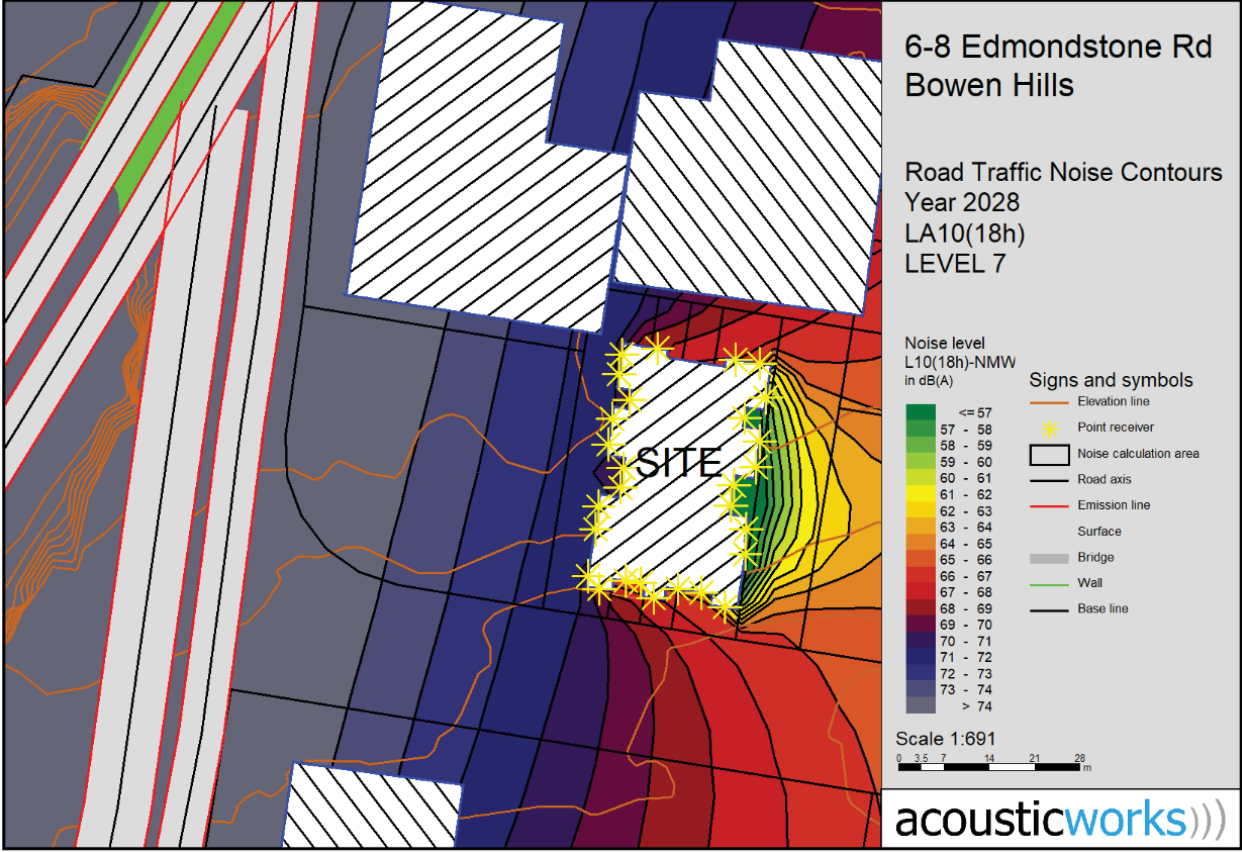


Figure 8: Road Traffic Noise Contours 2028 – Level 7



Based on the predicted noise impacts, additional acoustic treatments are required. Refer to Section 8 for construction recommendations.

8. Recommendations

8.1 Road Traffic Noise

All building treatments for residential units shall be determined at the Building Approval stage in accordance with the assessment requirements of the Queensland Building Code Part 4.4. For reference, preliminary noise categories are nominated in Table 6.

8.1.1 Glazing

Calculations were conducted in accordance with Queensland Building Code Part 4.4 to ensure predicted compliance with the QDC. The results, including glazing treatments and the noise category for each room, are presented in the Table 6.

Table 6: QDC Noise Category & Glazing Treatments

Level	Unit	Room	QDC Category	QDC Rw Ratings					QDC Glazing	Acoustic seals
				Wall	Roof	Glazing	Entry door	Floors		
1	1.01	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	1.02	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	1.03	Kitchen/Living/Dining	0	-	-	-	-	-	4mm float	no
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	1.04-1.07	All	0	-	-	-	-	-	4mm float	no
	1.08	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	1	35	-	27	-	-	4mm float	yes
		Bed 2	0	-	-	-	-	-	4mm float	no
	1.09	Kitchen/Living/Dining	0	-	-	-	-	-	4mm float	no
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	1	35	-	27	-	-	4mm float	yes
	1.10	Kitchen/Living/Dining	0	-	-	-	-	-	4mm float	no
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
2	1.11	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	2.01	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	2.02	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	2.03	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	2.04	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	0	-	-	-	-	-	4mm float	no
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	2.05-2.07	All	0	-	-	-	-	-	4mm float	no
	2.08	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes

Level	Unit	Room	QDC Category	QDC Rw Ratings					QDC Glazing	Acoustic seals
				Wall	Roof	Glazing	Entry door	Floors	Glazing	
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	0	-	-	-	-	-	4mm float	no
	2.09	Kitchen/Living/Dining	0	-	-	-	-	-	4mm float	no
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	1	35	-	27	-	-	4mm float	yes
	2.10	Kitchen/Living/Dining	0	-	-	-	-	-	4mm float	no
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	2.11	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
3	3.01	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	3.02	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	3.03	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	3.04	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	0	-	-	-	-	-	4mm float	no
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	3.05-3.07	All	0	-	-	-	-	-	4mm float	no
	3.08	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	0	-	-	-	-	-	4mm float	no
	3.09	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	3.10	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	3.11	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
4	4.01	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	4.02	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	4.03	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	4.04	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	1	35	-	27	-	-	4mm float	yes
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	4.05-4.07	All	0	-	-	-	-	-	4mm float	no

Level	Unit	Room	QDC Category	QDC Rw Ratings					QDC Glazing	Acoustic seals
				Wall	Roof	Glazing	Entry door	Floors	Glazing	
	4.08	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	0	-	-	-	-	-	4mm float	no
	4.09	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	4.10	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	4.11	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
5	5.01	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	5.02	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
	5.03	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	5.04	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	0	-	-	-	-	-	4mm float	no
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	5.05-5.07	All	0	-	-	-	-	-	4mm float	no
	5.08	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	0	-	-	-	-	-	4mm float	no
	5.09	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	5.10	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	5.11	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
6	6.01	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	6.02	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	6.03	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	6.04	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes

Level	Unit	Room	QDC Category	QDC Rw Ratings					QDC Glazing	Acoustic seals
				Wall	Roof	Glazing	Entry door	Floors	Glazing	
		Bed 1	0	-	-	-	-	-	4mm float	no
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	6.05-6.07	All	0	-	-	-	-	-	4mm float	no
	6.08	Kitchen/Living/Dining	2	41	-	35	-	-	10.38mm lam	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	0	-	-	-	-	-	4mm float	no
	6.09	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	2	41	-	35	-	-	10.38mm lam	yes
		Bed 2	2	41	-	35	-	-	10.38mm lam	yes
	6.10	Kitchen/Living/Dining	1	35	-	27	-	-	4mm float	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	6.11	Kitchen/Living/Dining	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	-	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
7	7.01	Kitchen/Living/Dining	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	7.02	Kitchen/Living/Dining	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	7.03	Kitchen/Living/Dining	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	7.04	Kitchen/Living/Dining	2	41	38	35	-	-	10.38mm lam	yes
		Bed 1	0	-	-	-	-	-	4mm float	no
		Bed 2	2	41	38	35	-	-	10.38mm lam	yes
	7.05-7.07	All	0	-	-	-	-	-	4mm float	no
	7.08	Kitchen/Living/Dining	2	41	38	35	-	-	10.38mm lam	yes
		Bed 1	2	41	38	35	-	-	10.38mm lam	yes
		Bed 2	0	-	-	-	-	-	4mm float	no
	7.09	Kitchen/Living/Dining	1	35	35	27	-	-	4mm float	yes
		Bed 1	2	41	38	35	-	-	10.38mm lam	yes
		Bed 2	2	41	38	35	-	-	10.38mm lam	yes
	7.10	Kitchen/Living/Dining	1	35	35	27	-	-	4mm float	yes
		Bed 1	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 2	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
	7.11	Kitchen/Living/Dining	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes
		Bed 1	3	47	41	38	-	-	14.38mm lam or 5mm/44mm gap/6mm	yes

Any locations not identified in Table 6 are nominated as QDC Noise Category 0.

The minimum glazing treatments presented in Table 6 are required to comply with the following:

- The minimum glass thickness specified shall not be reduced regardless of the R_w performance of the glazing system.

- If compliance cannot be achieved with the minimum R_w ratings, the glazing system shall be increased until compliance is achieved.
- Glazing specified with acoustic seals requires a Q-lon seal or an equivalent product, mohair seals are not acceptable.
- The glazier shall provide NATA test reports on request to verify compliance with the minimum R_w ratings. Generic reports are not acceptable.

8.1.2 Alternative Ventilation

We recommend that all locations nominated in Table 6 as QDC Noise Category 1-3 have the provision for an alternative ventilation system similar to air-conditioning or mechanical ventilation to allow doors and windows to be closed.

8.1.3 Wall Construction

The QDC wall construction requirements are detailed in the table below:

Table 7: Minimum Wall Treatments

QDC Noise Category	Wall R_w	Minimum Wall Treatments
3	47	Precast concrete at least 150mm thick and without joints.
2	41	Precast concrete at least 100mm thick and without joints.
1	35	Precast concrete at least 100mm thick and without joints.
0	N/A	Standard Construction

8.1.4 Roof Construction

The QDC roof construction requirements are detailed in the table below:

Table 8: Minimum Roof Treatments

QDC Noise Category	Roof R_w	Minimum Roof Treatments
3	41	Concrete or terracotta tile or metal sheet roof with sarking, plasterboard ceiling at least 10mm thick fixed to ceiling joists, glass wool insulation at least 50mm thick with a density of at least 11kg/m ³ or polyester insulation at least 50mm thick with a density of at least 20kg/m ³ in the cavity. OR Concrete suspended slab at least 100mm thick.
2	38	Concrete or terracotta tile or metal sheet roof with sarking, plasterboard ceiling at least 10mm thick fixed to ceiling cavity, mineral insulation or glass wool insulation at least 50mm thick with a density of at least 11kg/m ³ . OR Concrete suspended slab at least 100mm thick.
1	35	Concrete or terracotta tile or metal sheet roof with sarking, plasterboard ceiling at least 10mm thick fixed to ceiling cavity. OR Concrete suspended slab at least 100mm thick.
0	N/A	Standard Construction

9. Conclusion

A road traffic noise assessment was conducted for the proposed residential development at 6-8 Edmondstone Road, Bowen Hills. On the condition the recommendations detailed in Section 8 are implemented, compliance is predicted with BCC assessment criteria.

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

Report Prepared By



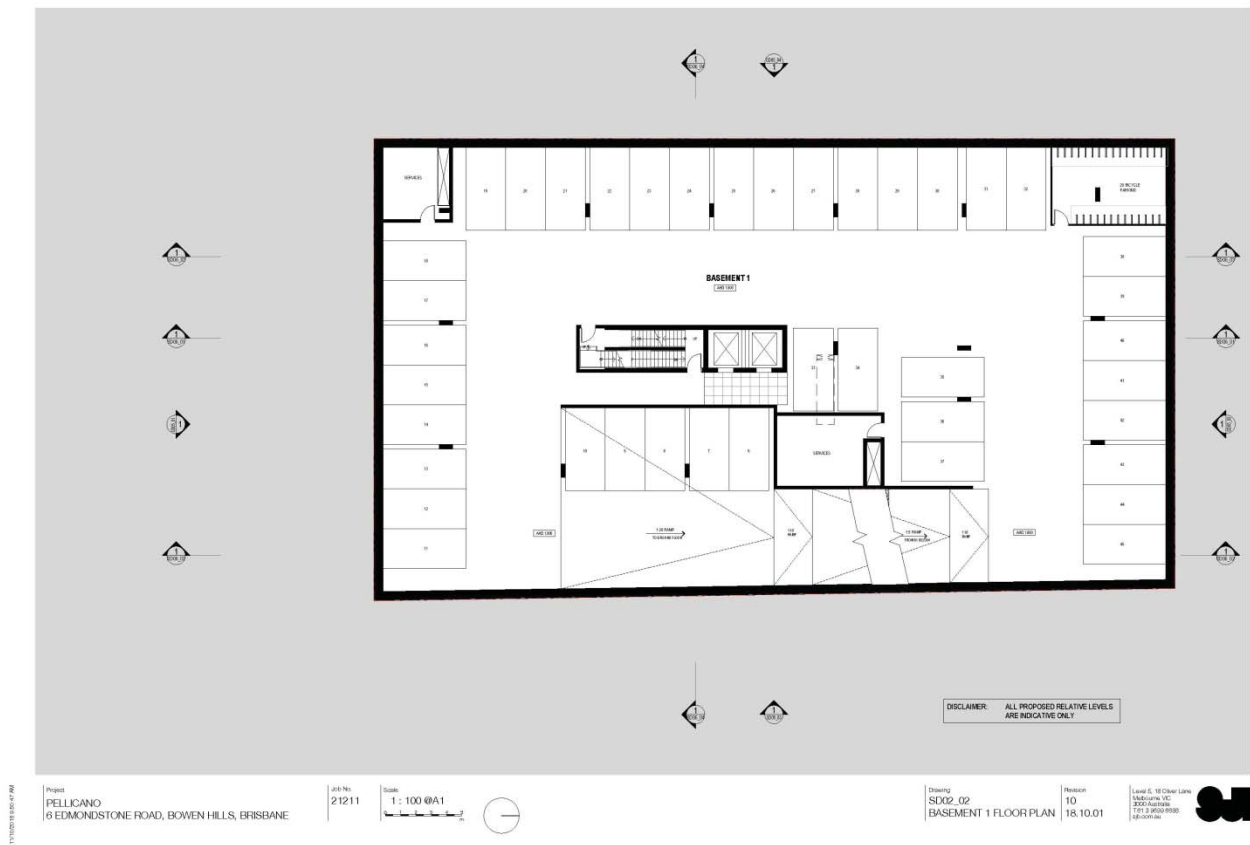
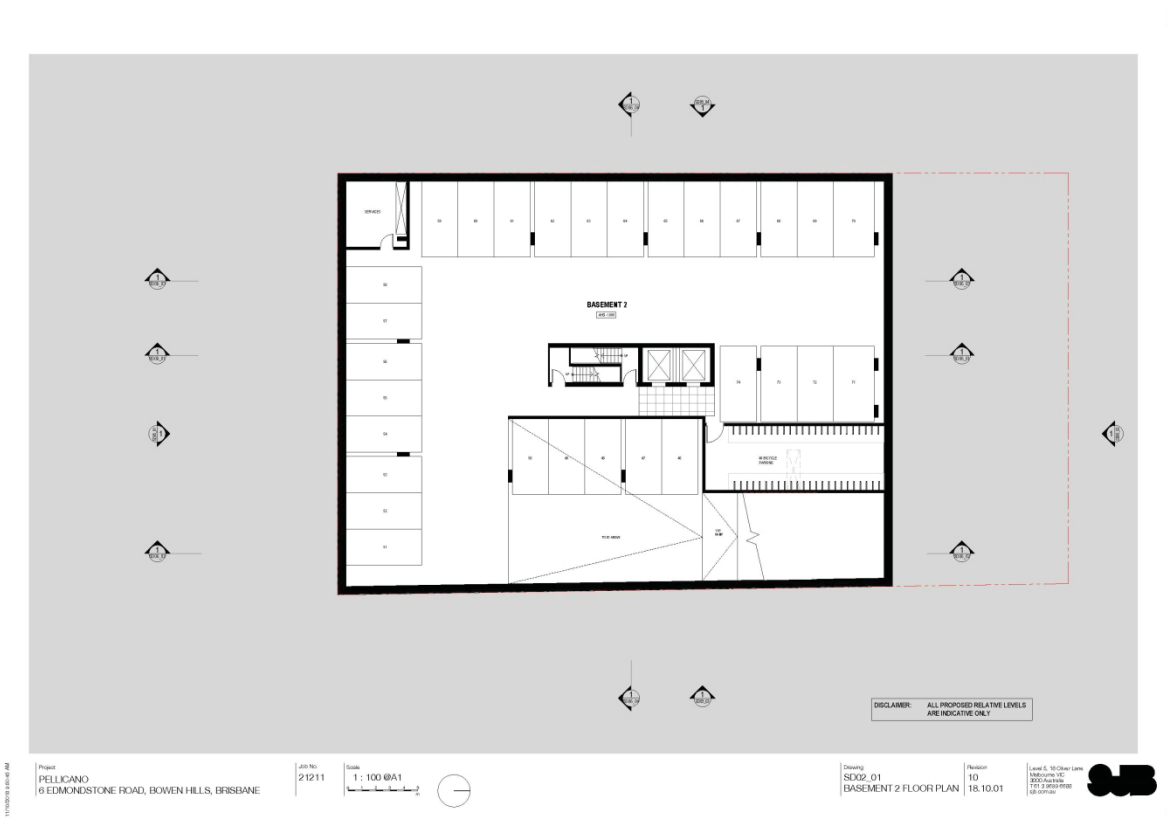
KAREN MCMORROW B.A.I

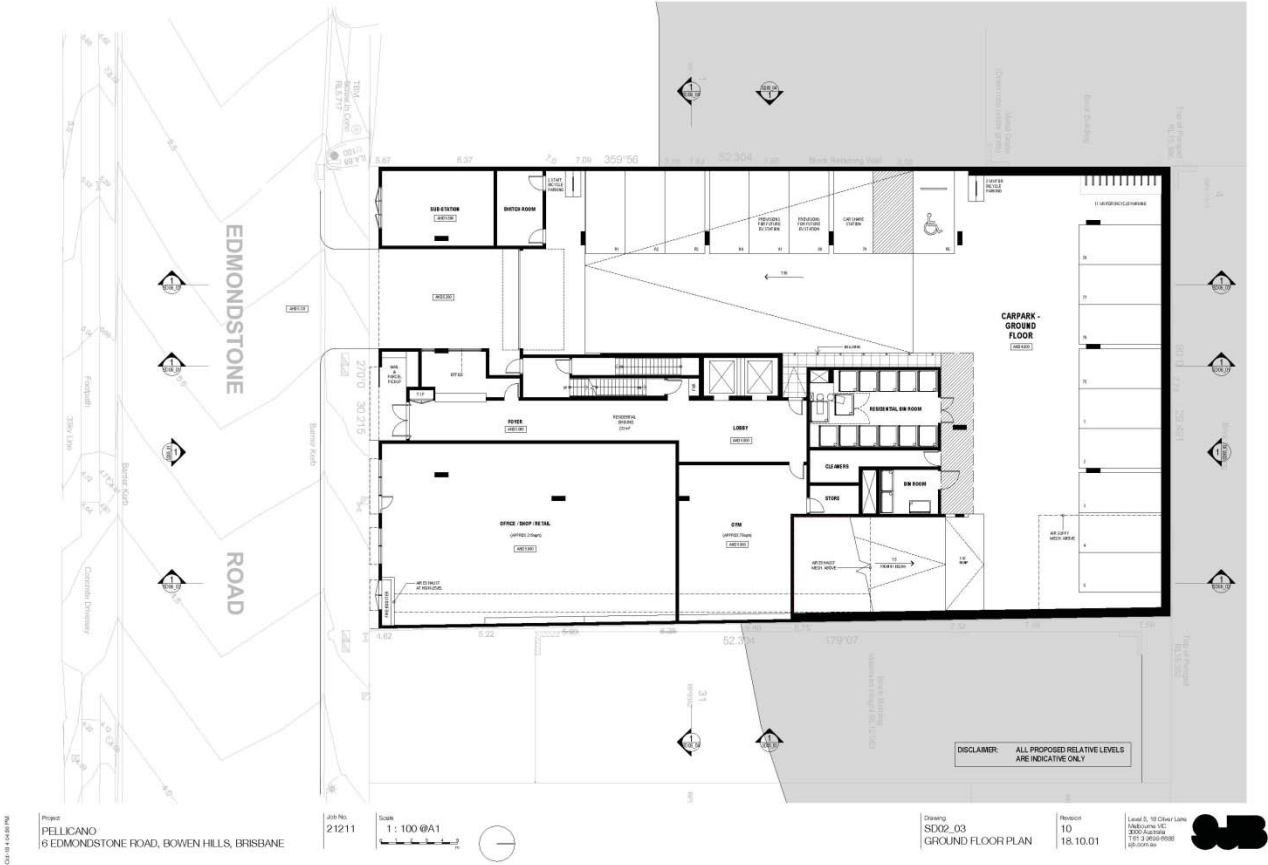
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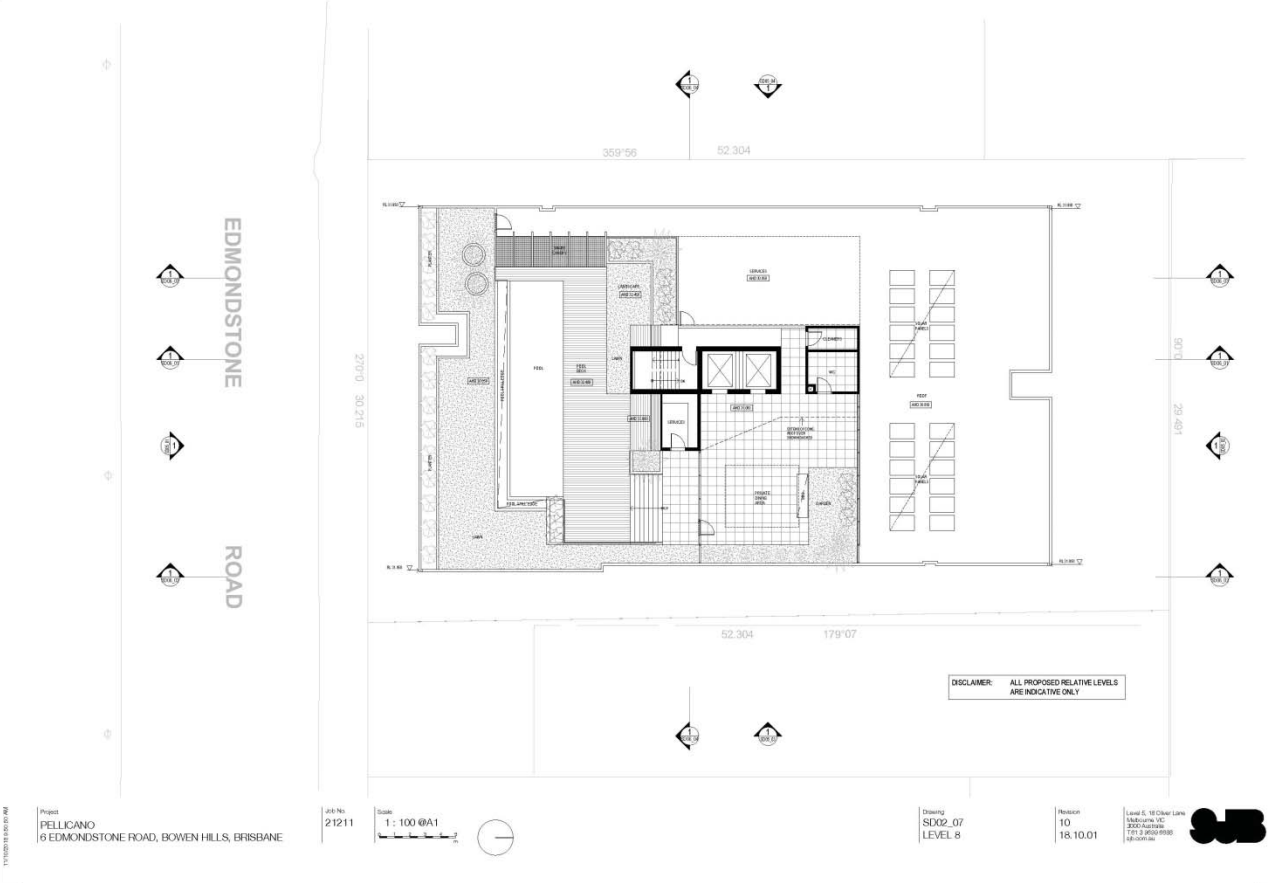
acousticworks)))

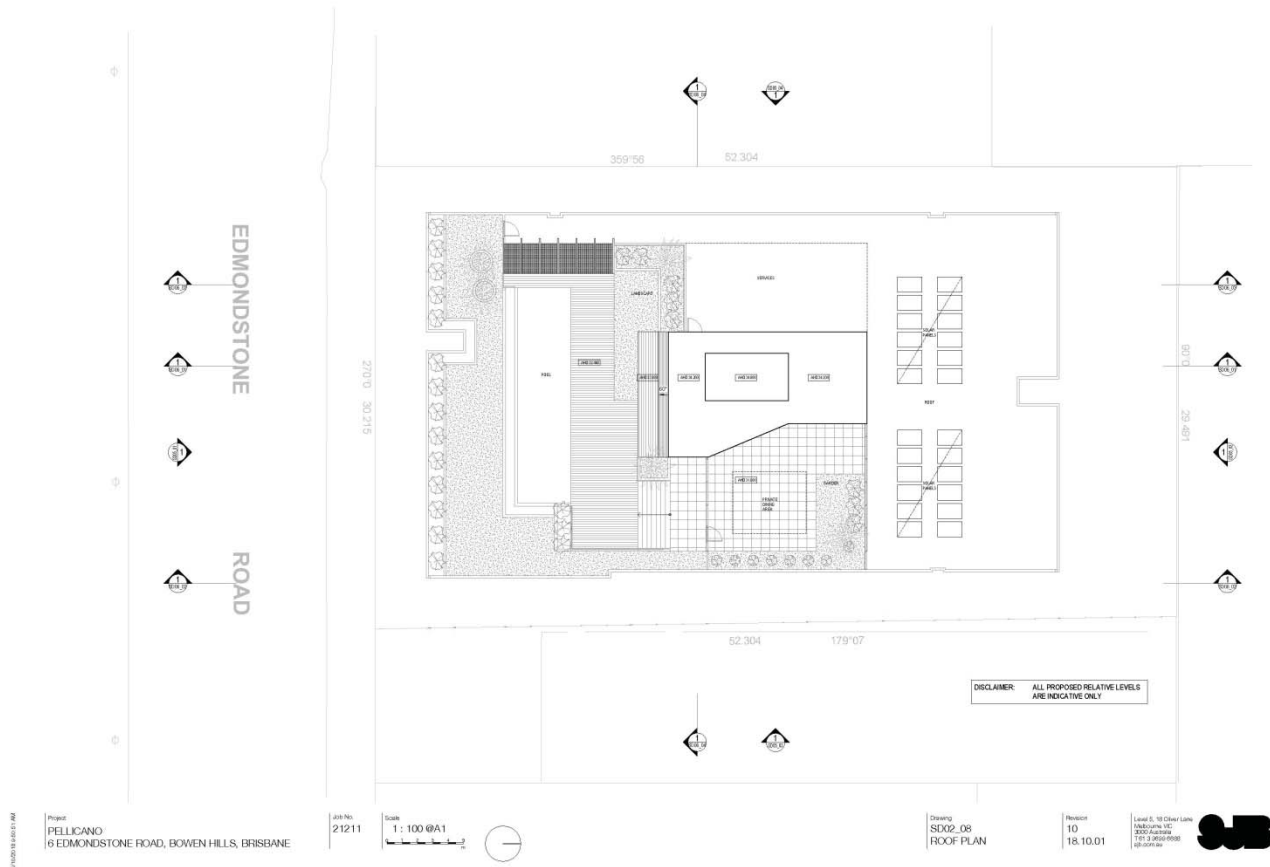
10. Appendices

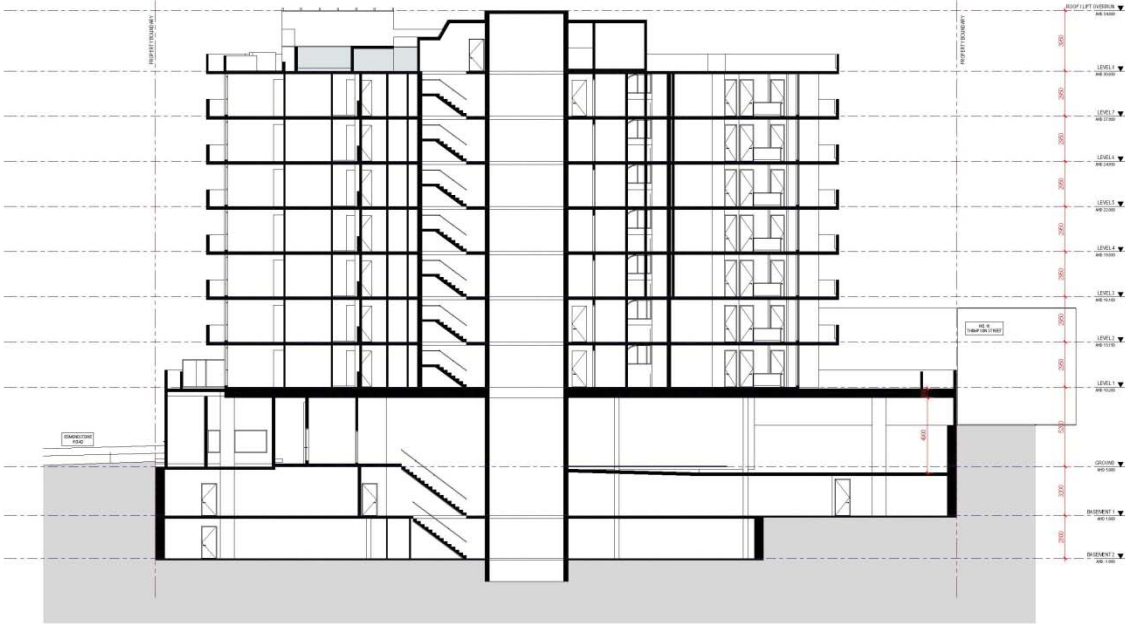
10.1 Development Plans











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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

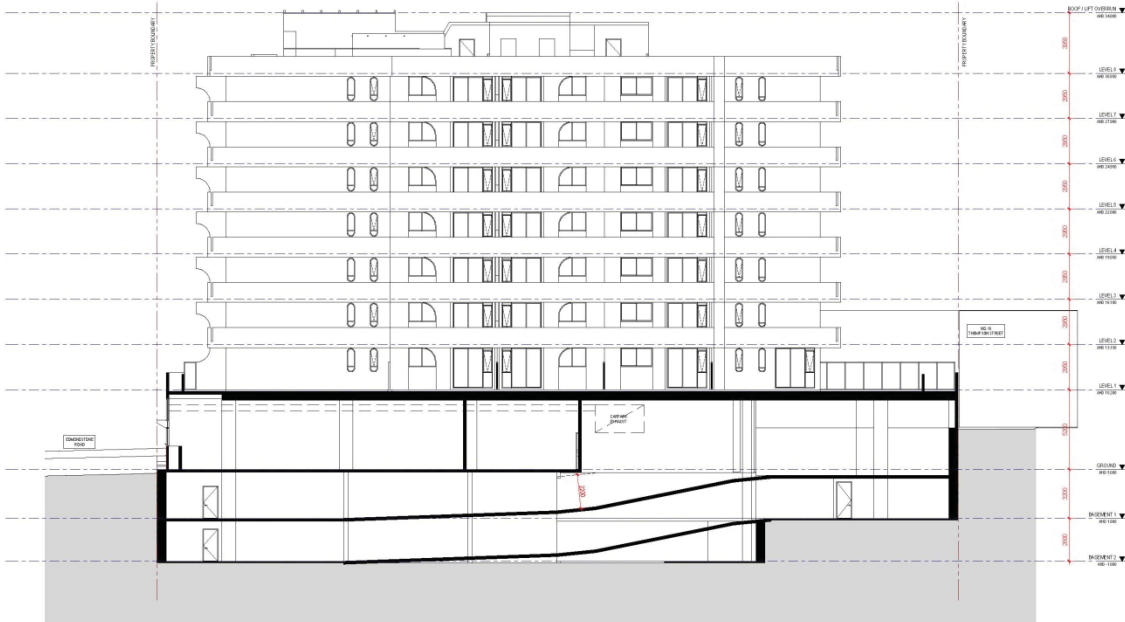
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SD06_01
SECTION AA

Revision
10
18.10.01

Level 0, 10 Clear Lanes
Brisbane, VIC
2002 Australia
T 07 3 8500 0000
a@acousticworks.com.au



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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

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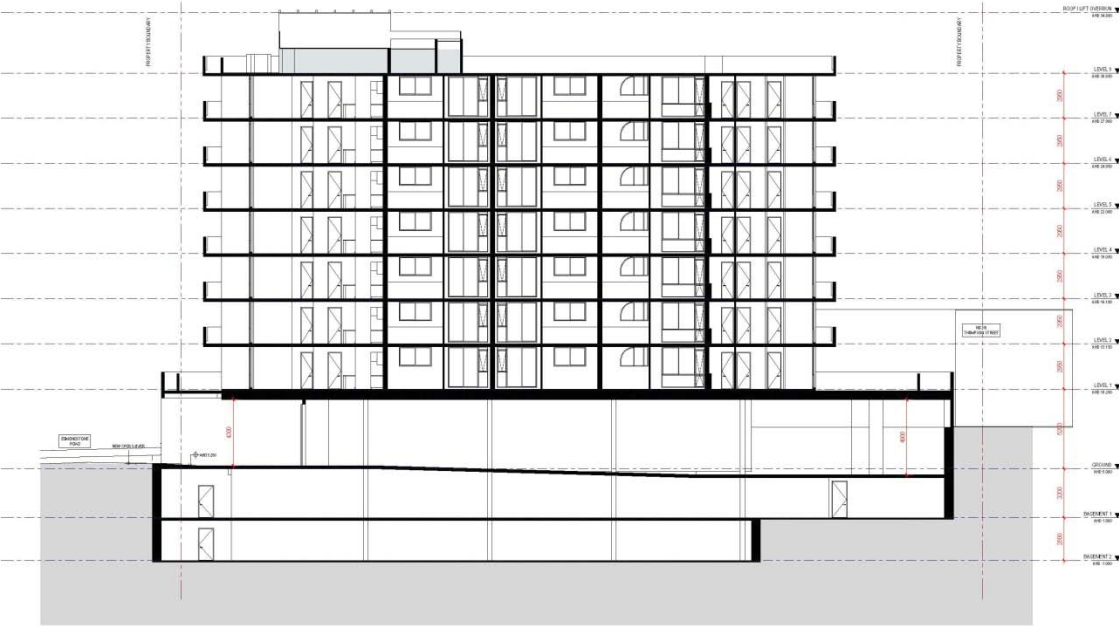
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Brisbane, VIC
2002 Australia
T 07 3 8500 0000
a@acousticworks.com.au





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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

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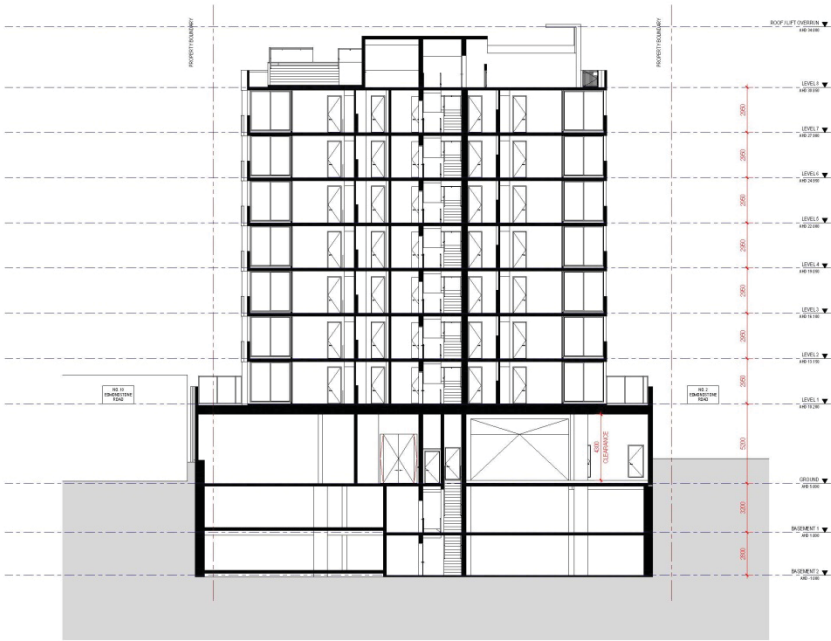
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DISCLAIMER: ALL PROPOSED RELATIVE LEVELS ARE INDICATIVE ONLY

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Brisbane, VIC
2020-2025
T11-2 (2020-2025)
2020-2025



17/10/2018 10:00 AM

Project
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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

Job No.
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DISCLAIMER: ALL PROPOSED RELATIVE LEVELS ARE INDICATIVE ONLY

Drawing
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SECTION DD

Revision
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18.10.01

Level 5, 10 Clear Levels
Brisbane, VIC
2020-2025
T11-2 (2020-2025)
2020-2025



MATERIAL LEGEND	
BM01	- BRICKWORK PATTERN
PC01	- PRECAST CONCRETE GREY
MT01	- POWDERCOATED ALUMINIUM BLACK
MT02	- PERFORATED METAL SCREENING / DOOR
GL01	- CLEAR GLAZING
TM01	- TIMBER CLADDING



DISCLAIMER: ALL PROPOSED RELATIVE LEVELS ARE INDICATIVE ONLY

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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

Job No.
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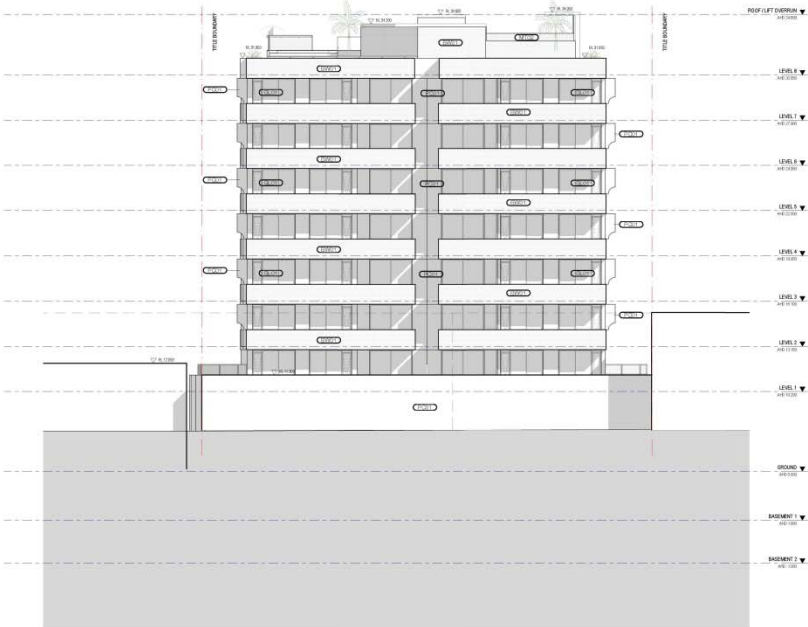
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SOUTH ELEVATION

Revision
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18.10.01

Legend C, 18 Other Layers
Modelling V02
2020 AutoCAD
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480 1000 480



MATERIAL LEGEND	
BM01	- BRICKWORK PATTERN
PC01	- PRECAST CONCRETE GREY
MT01	- POWDERCOATED ALUMINIUM BLACK
MT02	- PERFORATED METAL SCREENING / DOOR
GL01	- CLEAR GLAZING
TM01	- TIMBER CLADDING



DISCLAIMER: ALL PROPOSED RELATIVE LEVELS ARE INDICATIVE ONLY

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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

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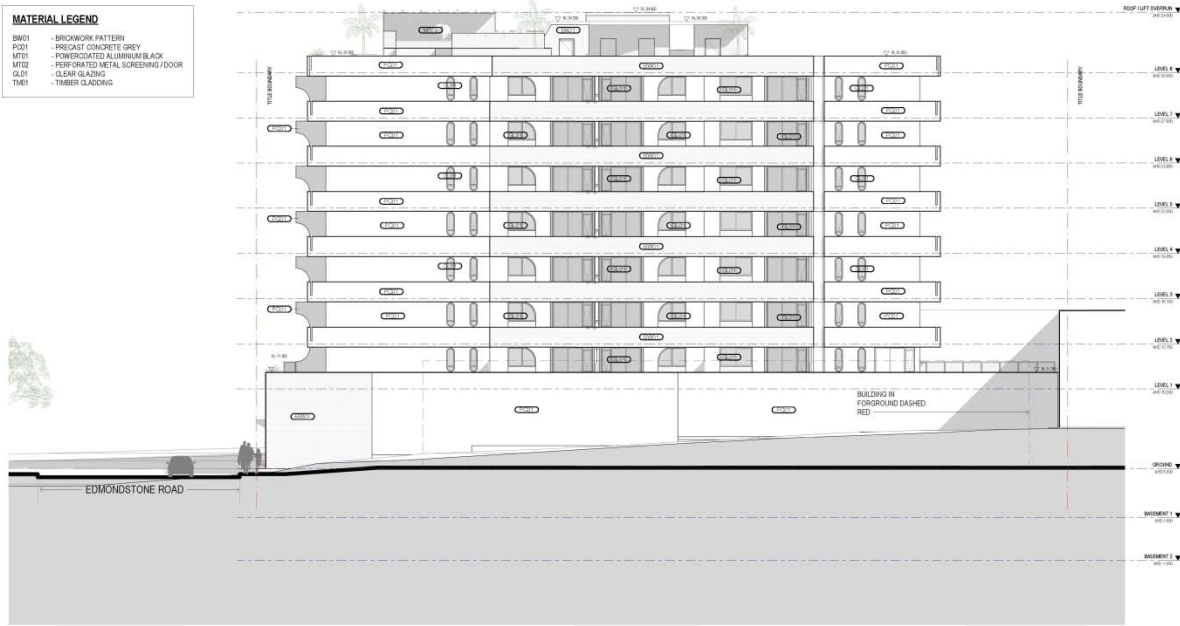


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18.10.10.01

Project
PELLICANO
6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

Job No.
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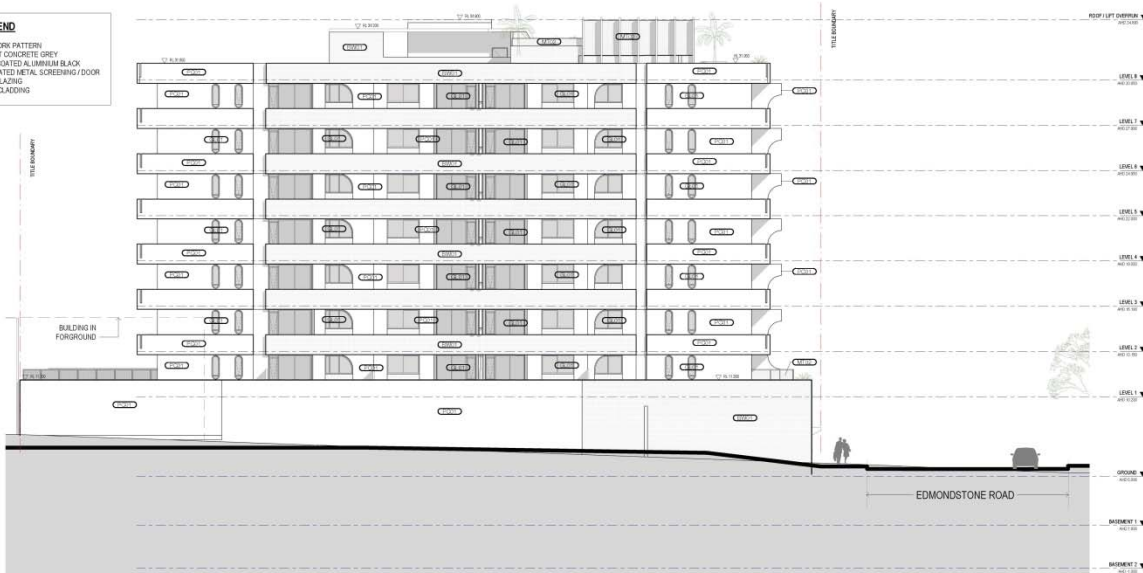
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2020.10.10
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MATERIAL LEGEND

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- PC01 - PRECAST CONCRETE GREY
- MT01 - POWDERCOATED ALUMINIUM BLACK
- MT02 - PERFORATED METAL SCREENING / DOOR
- GL01 - CLEAR GLAZING
- TM01 - TIMBER CLADDING



18.10.10.01

Project
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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

Job No.
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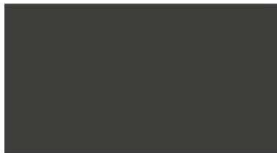




BW01 | BRICKWORK | PATTERN



PC01 | PRE-CAST CONCRETE | GREY



MT01 | POWDERCOATED ALUMINIUM | BLACK
(FLEMISH BOND PATTERN)



MT02 | PERFORATED METAL SCREENING DOOR



GL01 | CLEAR GLAZING



TM01 | TIMBER CLADDING

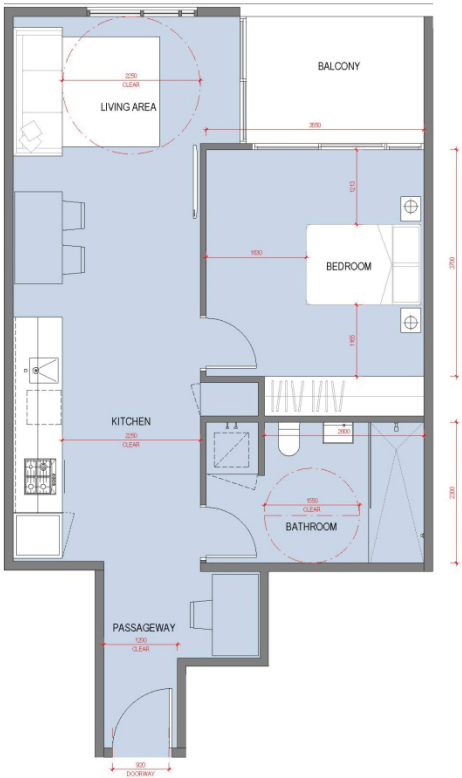
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Brisbane, QLD
2020 Australia
1:10 3000000000
agb.com.au



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6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

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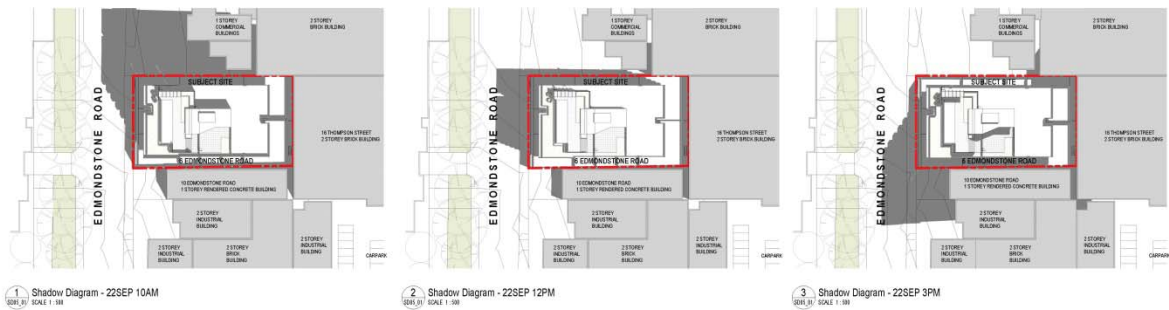
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Revision

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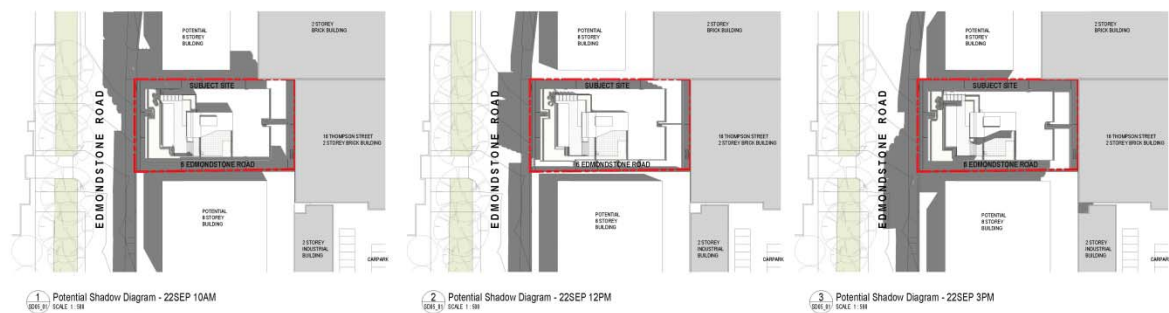
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Revision
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18.10.01

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T1: 1.5 (MAX) 0.666
400-700nm



Project
PELLICANO
6 EDMONDSTONE ROAD, BOWEN HILLS, BRISBANE

Job No.
21211

Scale
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Drawing
SD30_02
ANALYSIS OF POTENTIAL
FUTURE BUILT FORM

Revision
10
18.10.01

Layout C: 18 Clear Lanes
Maximum VLT
2000 lux/m²
T1: 1.5 (MAX) 0.666
400-700nm



10.2 Noise Monitoring Charts

