

18 July 2024
Reference: 2024245 L02A Lot 8001 Baringa Drive Baringa Glazing Review

Plantation Baringa Pty Ltd
PO Box 126
Mooloolaba QLD 4557

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2024/1547
Date: 4 April 2025



Queensland
Government

RE: Glazing Review – Lot 8001 Baringa Drive, Baringa

Acoustic Works conducted a glazing review of the proposed residential development located at Lot 8001 Baringa Drive, Baringa to determine appropriate glazing treatments in regards to road traffic and offsite activity/mechanical plant noise. All residential units affected by road traffic and offsite noise impacts should be designed in accordance with AS2107:2016 *Acoustics – Recommended design sound levels and reverberation times for building interiors*.

The review was based on modelled noise impacts by Acoustic Works with plans provided by OGE Group, Job No. 23051, drawings DA_4.02 to DA_4.07, dated 17th June 2024.

1. CRITERIA

AS2107:2016 *Acoustics – Recommended design sound levels and reverberation times for building interiors* nominates the following design sound levels for apartment buildings:

Table 1: AS2107:2016 Recommended Design Sound Level

Apartments	Design Sound Level (LAeq, T)Range
Living areas	45 to 50
Sleeping areas	30 to 40

2. RECOMMENDATIONS

2.1 Road Traffic Noise and Offsite Activities/Mechanical Plant

All acoustic treatments were calculated in accordance with AS2107:2016 *Acoustics – Recommended design sound levels and reverberation times for building interiors* and Australian Standard AS3671:1989 *Road Traffic Noise Intrusion – Building Siting*.

2.1.1 Glazing

The minimum glazing treatments are presented in Table 2 with installed glazing systems to comply with the following:

- The minimum glass thickness specified shall not be reduced regardless of the R_w performance of the glass unless the glazier can provide a specific (non generic) NATA test report proving the proposed glazing system complies (the test report must be based on the same configuration proposed for the development). Note an estimation or calculated performance will not accepted.
- If compliance cannot be achieved with the minimum R_w ratings for the glass thickness nominated, then the glazing system shall be upgraded until compliance is achieved.

- Glazing specified with acoustic seals requires a seal that has been tested with a glazing system or door to achieve an R_w in accordance with AS/NZS ISO 717.1, 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.

Refer to appendix for development plans.

Table 2: Minimum Acoustic Treatments

Floor	Unit Type	Location	Façade	Rw Ratings			Glazing	Acoustic seals
				Wall	Roof	Windows		
GF	Office	Tenancy A	All	45	-	31	6.38mm lam	yes
GF	Medical	Tenancy B	All	45	-	35	10.38mm lam	yes
GF	Office	Tenancy C	All	45	-	31	6.38mm lam	yes
GF	Food and Beverage	-	All	45	-	31	6.38mm lam	yes
GF	D8	Living rooms	NE	45	40	35	10.38mm lam	yes
GF	D8	Bedroom	NE	45	40	35	10.38mm lam	yes
GF	D8	Living rooms	SE	45	40	35	10.38mm lam	yes
GF	D8	Bedroom	SE	45	40	35	10.38mm lam	yes
GF	D8	Living rooms	SW	45	40	31	6.38mm lam	yes
GF	D8	Bedroom	SW	45	40	31	6.38mm lam	yes
GF	D8	Living rooms	NW	45	40	35	10.38mm lam	yes
GF	D8	Bedroom	NW	45	40	35	10.38mm lam	yes
1	Office	Tenancy D	All	45	40	31	6.38mm lam	yes
1	Office	Tenancy E	All	45	40	31	6.38mm lam	yes
1	Office	Tenancy F	All	45	40	31	6.38mm lam	yes
1	Office	Tenancy G	All	45	40	35	10.38mm lam	yes
1	Office	Tenancy H	All	45	40	35	10.38mm lam	yes
1 to 4	D3	Living rooms	NE	45	40	35	10.38mm lam	yes
1 to 4	D3	Bedroom	NE	45	40	35	10.38mm lam	yes
1 to 4	D3	Living rooms	SE	45	40	35	10.38mm lam	yes
1 to 4	D3	Bedroom	SE	45	40	35	10.38mm lam	yes
1 to 4	D3	Living rooms	SW	45	40	31	6.38mm lam	yes
1 to 4	D3	Bedroom	SW	45	40	31	6.38mm lam	yes
1 to 4	D3	Living rooms	NW	45	40	35	10.38mm lam	yes
1 to 4	D3	Bedroom	NW	45	40	35	10.38mm lam	yes
1 to 4	D1a	Living rooms	NE	45	40	35	10.38mm lam	yes
1 to 4	D1a	Bedroom	NE	45	40	35	10.38mm lam	yes
1 to 4	D1a	Living rooms	SE	45	40	35	10.38mm lam	yes
1 to 4	D1a	Bedroom	SE	45	40	35	10.38mm lam	yes
1 to 4	D1a	Living rooms	SW	45	40	31	6.38mm lam	yes
1 to 4	D1a	Bedroom	SW	45	40	31	6.38mm lam	yes
1 to 4	D1a	Living rooms	NW	45	40	35	10.38mm lam	yes
1 to 4	D1a	Bedroom	NW	45	40	35	10.38mm lam	yes
1 to 4	D5	Living rooms	NE	45	40	35	10.38mm lam	yes
1 to 4	D5	Bedroom	NE	45	40	35	10.38mm lam	yes
1 to 4	D5	Living rooms	SE	45	40	35	10.38mm lam	yes
1 to 4	D5	Bedroom	SE	45	40	35	10.38mm lam	yes
1 to 4	D5	Living rooms	SW	45	40	31	6.38mm lam	yes
1 to 4	D5	Bedroom	SW	45	40	31	6.38mm lam	yes
1 to 4	D5	Living rooms	NW	45	40	35	10.38mm lam	yes
1 to 4	D5	Bedroom	NW	45	40	35	10.38mm lam	yes

Floor	Unit Type	Location	Façade	Rw Ratings			Glazing	Acoustic seals
				Wall	Roof	Windows		
1 to 4	D6	Living rooms	NE	45	40	35	10.38mm lam	yes
1 to 4	D6	Bedroom	NE	45	40	35	10.38mm lam	yes
1 to 4	D6	Living rooms	SE	45	40	35	10.38mm lam	yes
1 to 4	D6	Bedroom	SE	45	40	35	10.38mm lam	yes
1 to 4	D6	Living rooms	SW	45	40	31	6.38mm lam	yes
1 to 4	D6	Bedroom	SW	45	40	31	6.38mm lam	yes
1 to 4	D6	Living rooms	NW	45	40	35	10.38mm lam	yes
1 to 4	D6	Bedroom	NW	45	40	35	10.38mm lam	yes

2.1.2 Wall Construction

The required external wall acoustic rating is Rw 45, with the proposed masonry façade predicted to comply.

2.1.3 Roof Construction

The required roof/ceiling acoustic rating is Rw 40, with a concrete slab predicted to comply. Penetrations through the ceiling shall not reduce the overall acoustic performance of the installed ceiling system.

2.1.4 Alternative Ventilation

To achieve the required internal noise levels for the development, we recommend all habitable rooms have the provision for an alternative ventilation system (in accordance with National Construction Code 2022 requirements and AS1668.2) similar to air-conditioning or mechanical ventilation to allow doors and windows to be closed.

3. CONCLUSION

A review of building treatments was conducted for the proposed mixed use development located at Lot 8001 Baringa Drive, Baringa. On the condition the recommendations detailed in Section 2 are implemented, compliance is predicted with AS2107:2016.

We trust this information meets with your current requirements. Should you have any queries please do not hesitate to contact us.

Yours faithfully



Matthew Bechara

Associate Director

acousticworks)))

Lot 800I Retirement Resort - LEVEL 02



NO.	DATE	REVISION	BY	CHKD
1	17/06/2024	ISSUED FOR PERMIT	DA	DA

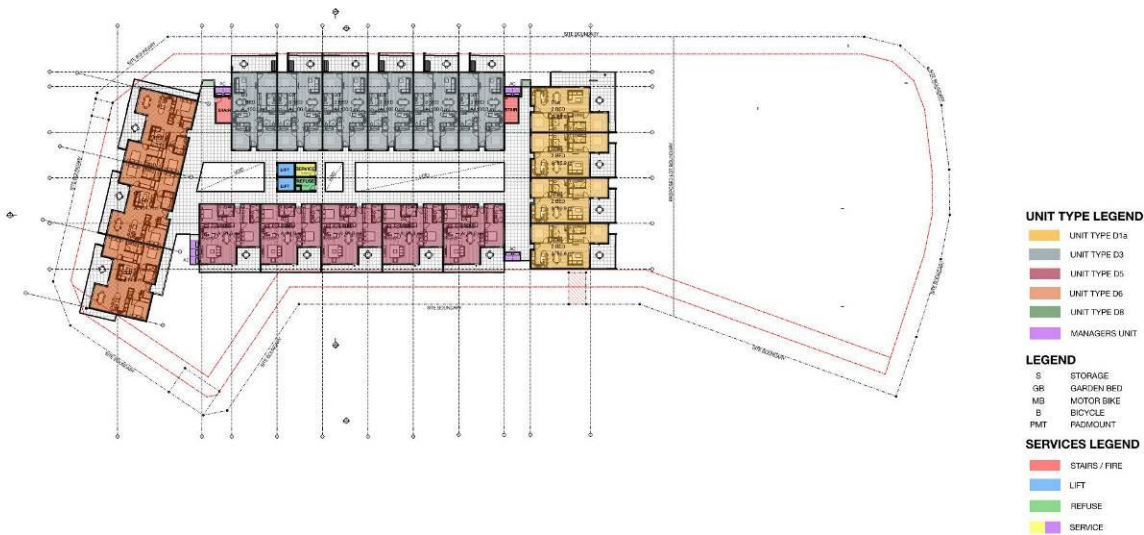
PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT: Lot 800I Retirement Resort
Lot 800I Baringa Drive
Baringa
SUBJECT: Level 02
Preliminary Retirement Resort
DRAWING NO: 2305
DATE: 17/06/2024
SCALE: 1:500
DA 4.04 P2
OGE Group Pty Ltd
Level 1 The Old Court House
4 Park Avenue, Toowoomba QLD 4350
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NSW Reg No: 11863



OGE Group
Architects

Lot 800I Retirement Resort - LEVEL 03



NO.	DATE	REVISION	BY	CHKD
1	17/06/2024	ISSUED FOR PERMIT	DA	DA

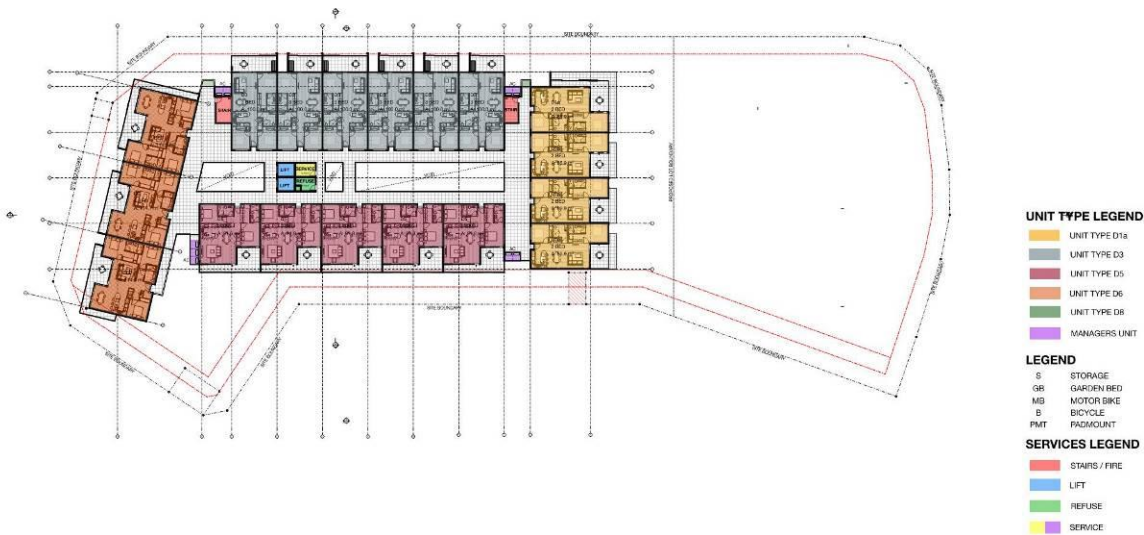
PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT: Lot 800I Retirement Resort
Lot 800I Baringa Drive
Baringa
SUBJECT: Level 03
Preliminary Retirement Resort
DRAWING NO: 2305
DATE: 17/06/2024
SCALE: 1:500
DA 4.05 P2
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NSW Reg No: 11863



OGE Group
Architects

Lot 800I Retirement Resort - LEVEL 04



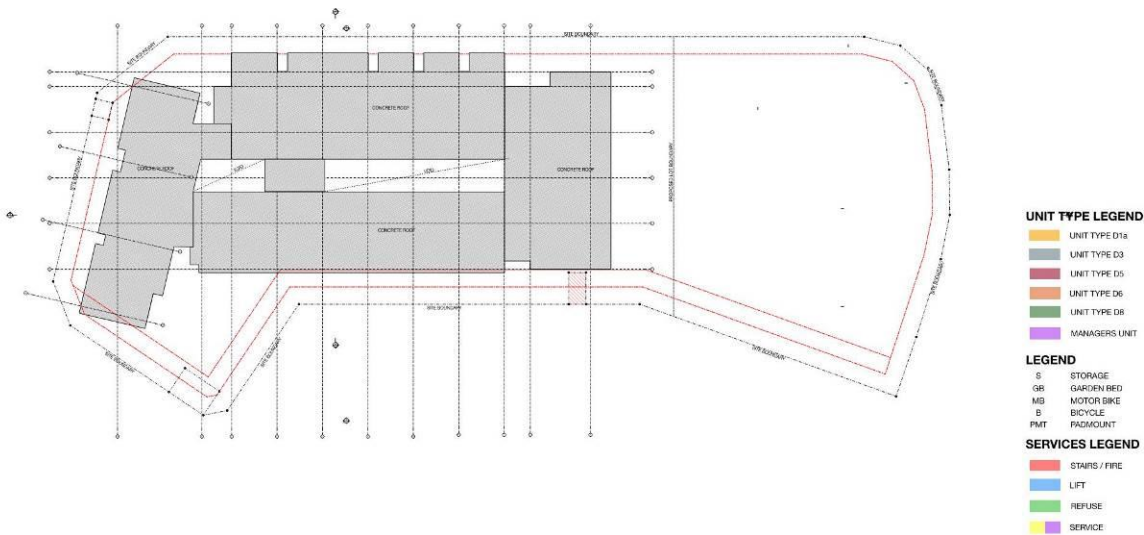
NO.	DATE	REVISION	BY	CHKD
1	17/06/2024	ISSUED FOR PERMIT	DA	DA
2	17/06/2024	ISSUED FOR PERMIT	DA	DA

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT: Lot 800I Retirement Resort
Lot 800I Baringa Drive
Baringa
CONSULTANT: LEVEL 04
PROJECT: Retirement Resort
PROJECT NO: 2305
DATE: 17/06/2024
SCALE: 1:500
DRAWN BY: DA
CHECKED BY: DA
APPROVED BY: DA
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Lot 800I Retirement Resort - ROOF LEVEL



NO.	DATE	REVISION	BY	CHKD
1	17/06/2024	ISSUED FOR PERMIT	DA	DA
2	17/06/2024	ISSUED FOR PERMIT	DA	DA

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT: Lot 800I Retirement Resort
Lot 800I Baringa Drive
Baringa
CONSULTANT: ROOF LEVEL
PROJECT: Retirement Resort
PROJECT NO: 2305
DATE: 17/06/2024
SCALE: 1:500
DRAWN BY: DA
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NGB Reg No: 11843

