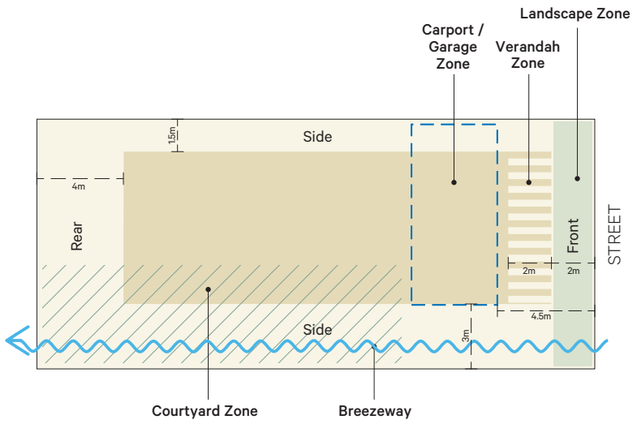
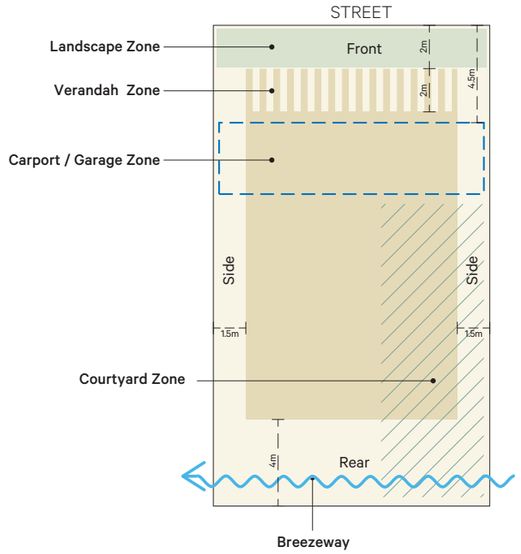
Land subject to a split residential coding requires a minimum site area of 2,500m², or the amalgamation of an entire street block, before development may occur at the higher density coding (R60) in accordance with Section 1.6 of the Lot 500 Madigan Road Development Plan.

East-West Oriented Lots



North-South Oriented Lots



Building Envelope
Excludes minor projections (eg. chimneys, awnings)

Verandah Zone
Minimum 2m deep by 3m wide

Landscape Zone
Minimum 2m deep

Carport / Garage Zone
Minimum setback 4.5m

Courtyard Zone

Breezeway
Minimum 3m wide

EAST-WEST AND NORTH-SOUTH ORIENTED LOTS (1/3)

1.0 General Requirements - Karratha Vernacular Design Principles

The following requirements have been developed to reflect the intent of the Karratha Vernacular Design Principles.

1. **Courtyard Zone:** A courtyard zone is to be positioned on the eastern side for north-south oriented lots, or southern side for east-west oriented lots. The courtyard zone is to accommodate an outdoor living area.
2. **Verandah Zone**: Verandahs may encroach the front setback to a maximum of 2m. Verandahs may be a minimum of 2m deep by 3m wide.
3. **Breezeway**: A minimum 3m wide breezeway is to be located at the rear of north-south oriented lots, or southern side for east-west oriented lots. No garages are permitted within the breezeway. Carports or boat storage carports constructed within the nominated breezeway shall be an open style only. Shade trees and low growing shrubs should be planted in the breezeway to capture and direct cool breezes.
4. **Landscaping**: The first 2m of the front setback is to be planted with shade trees and shrubs. Shade trees should be planted in the rear setback.
5. **Outbuildings**: Freestanding sheds and storerooms must comprise materials, finishes, colours and roof styles complementary to the dwelling to the satisfaction of the City of Karratha.

2.0 Quiet House Design

Dwellings identified in this LDP as being subject to noise mitigation measures are to be constructed in accordance with State Planning Policy 5.4 - Road and Rail Noise and the associated Guidelines 'Quiet House Design Package' specifications as modified in the Acoustic Report prepared by ND Engineering Consulting Engineers, (Acoustic Report (SPP5.4) Report 1010105 Revision 7 dated 20 March 2026), unless otherwise varied and approved by the City of Karratha. Refer to Attachment A - Quiet House Design.

3.0 Residential Design Code Variations

The requirements of the City of Karratha Local Planning Scheme No. 8 (LPS8) and Residential Design Codes Volume 1 (R-Codes Volume 1 Part B) apply except as varied below:

R-Code Clause	Requirement
5.1.2 Street setback	A variation to Deemed-to-comply C2.1(i) to (iv) applies. The variation permits a minimum 4m setback to the front/ primary street boundary.
5.1.3 Lot boundary setback	A variation to Deemed-to-comply C3.1(i) applies. The variation permits a minimum 1.5m side setback and a minimum 4m rear setback. A variation to Deemed-to-comply C3.1 (ii) applies. A nil side setback for garages or carports is permitted where it is appropriately fire rated to AS2890.1. Garages may not be located in the breezeway. A 3m wide breezeway is to be positioned on the rear boundary for north-south oriented lots, or southern boundary for east-west oriented lots. A variation to Deemed-to-comply C3.2 (i), (ii) and (iv), C3.3 and C3.4 applies. No boundary walls are permitted in the breezeway.
5.1.4 Open space	A variation to Deemed-to-comply C4 applies. No minimum open space requirement applies where the courtyard zone and setbacks requirements are achieved.
5.2.1 Setback of carport and garages	A variation to Deemed-to-comply C1.1 (i) and (ii), and C1.2 (i) to (iii) applies. Garages and carports shall be set back 4.5m from the primary street boundary to allow for additional car parking within the front setback. Garage doors and carports shall also be set back 2.5m behind the front verandah post.
5.2.2 Garage width	A variation to Deemed-to-comply C2 applies. Maximum garage width is 7m (double door) including supporting structures.
5.3.1 Outdoor living areas	A variation to Deemed-to-comply C1.1 applies. The outdoor living area shall be provided as follows: Minimum area: 20m² Minimum covered space: 15m² Minimum dimension: 4m The outdoor living area is to be positioned on the eastern side for north-south oriented lots, or the southern side for east west oriented lots unless an alternative location is approved.
5.3.3 Parking	A variation to Deemed-to-comply C3.1 applies. Parking for two onsite car bays to be provided for each dwelling.
5.4.3 Outbuildings	Additional requirements to Deemed-to-comply C3 apply. Freestanding sheds and storerooms must comprise materials, finishes, colours and roof styles complementary to the dwelling to the satisfaction of the City of Karratha.

Local Development Plan
Madigan Estate, Baynton

No.	Summary of Amendment	Date Endorsed
-	Initial issue	10.04.13
1	Amendments to side setbacks for various lot types	21.04.20
2	Additional provisions to provide increased clarity and guidance	12.09.24
3	Legibility improvements	

This LDP has been approved by the City of Karratha under clause 52(1)(a) of Schedule 2 - Deemed Provisions of the Planning and Development (Local Planning Schemes) Regulations 2015:

City of Karratha

03/06/2026
Date

N

Scale: NTS
Date: 09 Mar 2026
File: **25-223 LDP1-2**
Staff: CW CO GW
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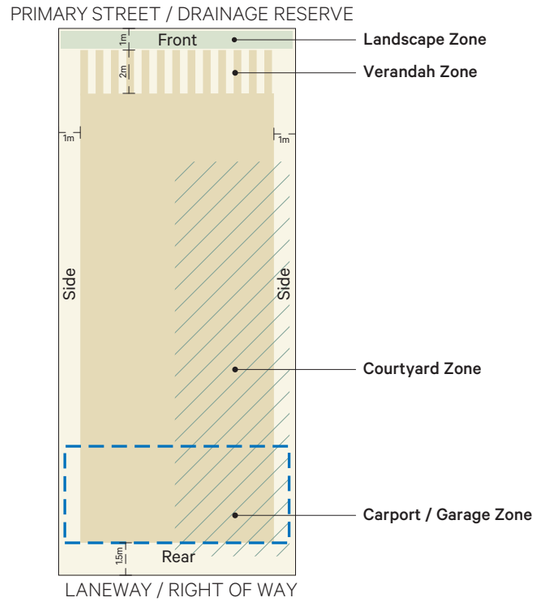
Land subject to a split residential coding requires a minimum site area of 2,500m², or the amalgamation of an entire street block, before development may occur at the higher density coding (R60) in accordance with Section 1.6 of the Lot 500 Madigan Road Development Plan.



Building Envelope
Excludes minor encroachments/projections (eg. chimneys, awnings)

Verandah Zone
Minimum 2m deep by 3m wide

Carport / Garage Zone

Courtyard Zone

Landscape Zone
Minimum 1m deep

COTTAGE LOTS (2/3)

1.0 General Requirements - Karratha Vernacular Design Principles

The following requirements have been developed to reflect the intent of the Karratha Vernacular Design Principles.

1. **Courtyard Zone**: A courtyard is to be positioned on the eastern side for north-south oriented lots. The courtyard zone should accommodate an outdoor living area.
2. **Verandah Zone**: Verandahs may encroach the front setback to a maximum of 2m. Verandahs may be minimum 2m deep by 3m wide.
3. **Building Frontage**: Lots abutting a drainage reserve shall address the drainage reserve as the primary street frontage. Dwellings shall be designed to address the drainage reserve by fenestrations containing major opening(s).
4. **Landscaping**: The first 1m of the front setback is to be planted with shade trees and shrubs.
5. **Fencing and gates**: Alteration to any existing retaining wall(s) is not permitted. Back gates are not permitted to open into the laneway.

2.0 Residential Design Code Variations

The requirements of the City of Karratha Local Planning Scheme No. 8 (LPS8) and Residential Design Codes Volume 1 (R-Codes Volume 1 Part B) apply except as varied below:

R-Code Clause	Requirement
5.1.2 Street setback	A variation to Deemed-to-comply C2.1(i) to (iv) applies. The variation permits a minimum 3m setback to the front boundary
5.1.3 Lot Boundary Setback	A variation to Deemed-to-comply C3.1(i) applies. The variation permits a minimum 1.0m side setback and a minimum 1.5m rear setback. A variation to Deemed-to-comply C3.1 (ii) applies. A nil side setback for garages or carports is permitted where it is appropriately fire rated to AS2890.1.
5.1.4 Open space	A variation to Deemed-to-comply C4 applies. No minimum open space requirement applies where the courtyard zone and setbacks requirements are achieved.
5.2.1 Setbacks to carports and garages	A variation to Deemed-to-comply C1.3 applies. Garages and carports shall be set back at least 1.5m from the boundary abutting the laneway/right of way.
5.2.4 Street walls and fences	A variation to Deemed-to-comply C4.1 applies. Front fences within the primary street setback area may have a maximum height of 1.2m, measured from the primary street boundary and can be constructed with solid or visually permeable materials, or a combination of both.
5.3.1 Outdoor living areas	A variation to Deemed-to-comply C1.1 applies. Outdoor living area is to be a minimum of 20m² in area, with a minimum covered space of 15m² and a minimum dimension of 4m. Outdoor living areas are to be provided in the courtyard zone.
5.3.3 Parking	A variation to Deemed-to-comply C3.1 applies. Parking for two onsite car bays to be provided for each dwelling.
5.4.3 Outbuildings	Additional requirements to Deemed-to-comply C3 apply. Freestanding sheds and storerooms must comprise materials, finishes, colours and roof styles complementary to the dwelling to the satisfaction of the City of Karratha.

Local Development Plan
Madigan Estate, Baynton

No.	Summary of Amendment	Date Endorsed
-	Initial issue	10.04.13
1	Amendments to side setbacks for various lot types	21.04.20
2	Additional provisions to provide increased clarity and guidance	12.09.24
3	Legibility improvements	

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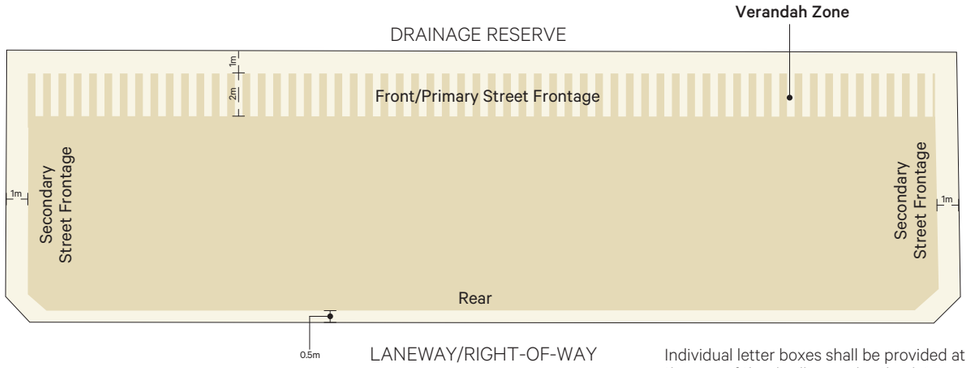
Land subject to a split residential coding requires a minimum site area of 2,500m², or the amalgamation of an entire street block, before development may occur at the higher density coding (R60) in accordance with Section 1.6 of the Lot 500 Madigan Road Development Plan.

Pedestrian Access
Minimum 1.2m wide pathway that connects all dwellings to a secondary street.



Individual letter boxes shall be provided at the rear of the dwelling and setback 1.5m from the rear laneway, unless communal letterboxes are provided abutting either or both road frontages (not laneway).

Building Envelope
Excludes minor encroachments (eg. chimneys, awnings)

Verandah Zone
Minimum 2m deep by 3m wide

GROUPED HOUSING LOTS (3/3)

1.0 General Requirements - Karratha Vernacular Design Principles

The following requirements have been developed to reflect the intent of the Karratha Vernacular Design Principles.

1. **Courtyard Zone**: A courtyard is to be positioned on the eastern side for north-south oriented lots.
2. **Verandah Zone**: Verandahs may encroach the front setback of the dwelling to a maximum of 2m. Verandahs may be minimum 2m deep by 3 metres wide.
3. **Building Frontage**: Any second storey shall be constructed to address the drainage reserve by way of at least one major opening from a habitable room, except where a studio apartment is proposed above a garage. Dwelling entry shall address the drainage reserve and be clearly visible and recognisable.
4. **Pedestrian Access**: Pedestrian access shall be provided abutting the drainage reserve via a minimum 1.2 metre wide pathway.
5. **Fencing and gates**: Alteration to any existing retaining wall(s) is not permitted. Back gates are not permitted to open into the laneway.

2.0 Residential Design Code Variations

The requirements of the City of Karratha Local Planning Scheme No. 8 (LPS8) and Residential Design Codes Volume 1 (R-Codes Volume 1 Part C) apply except as varied below:

R-Code Clause	Requirement
1.1 Private Open Space	A variation to Deemed-to-comply C1.1.1 applies. An external private open space with a minimum area of 20m² and minimum dimension of 3m shall be provided to the southern and/or eastern side of the dwelling, and shall be accessed via an internal living area other than a bedroom.
2.6 Outbuildings	A variation to Deemed-to-comply C2.6.1 applies by inserting the following additional requirement. Freestanding sheds and storerooms must not be constructed in the front setback area and must comprise materials, finishes, colours and roof styles complimentary to the dwelling to the satisfaction of the City of Karratha.
3.1 Site Cover	A variation to Deemed-to-comply C3.1.1 applies. No maximum site cover requirement applies where the courtyard and setback requirements are achieved.
3.4 Lot boundary setbacks	A variation to Deemed-to-comply C3.4.1, C3.4.4 and 3.4.5 applies to permit a nil side setback where: • development achieves the front/primary street and rear setbacks specified in Table 3.3a of the R Codes Volume 1 Part C; and • the boundary wall is not located in front of the courtyard zone. A nil lot boundary setback is not permitted for garages or lots with a secondary frontage to Prancing Avenue or Coolajacka Crescent.
3.6 Streetscape	A variation to Deemed-to-comply C3.6.1 applies. Dwelling must address the adjacent drainage reserve as the primary frontage. A variation to Deemed-to-comply C3.6.5 applies. Maximum garage width is 7 metres (double door) including supporting structures. A variation to Deemed-to-comply C3.6.7 applies. Front fences within the primary street setback area may have a maximum height of 1.2m, measured from the primary street and can be constructed with solid or visually permeable materials, or a combination of both.

Local Development Plan
Madigan Estate, Baynton

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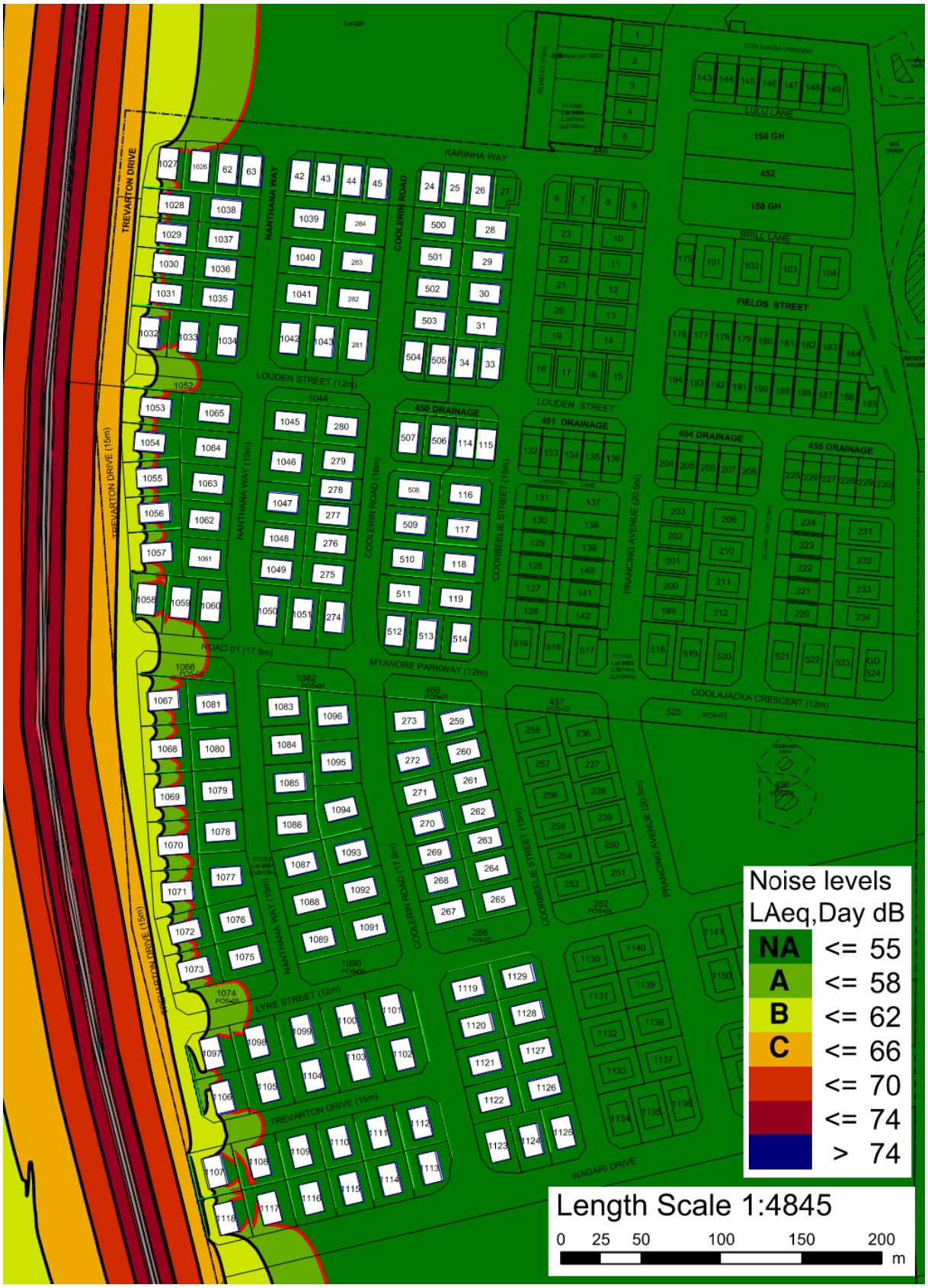

FIGURE A1 – SITE WITH HOUSES & RESIDENTIAL FENCES
(with Dense Graded Asphalt & Madigan Rd elevated 1m)

APPENDIX SA – QUIET HOUSE A REQUIREMENTS

TABLE 3A – QUIET HOUSE 'A' REQUIREMENTS

MODIFIED Extract from SPP5.4 Table 3 – Quiet house requirements

Exposure Category A Quiet House A - ACOUSTIC RATINGS (Rw+Ctr) and EXAMPLE constructions

Orientation to corridor	Walls	External doors NB: 10mm glass can be replaced with either: - 6.50 Hush glass; or - 6.76 Whisper glass.	Windows NB: 10mm glass can be replaced with either: - 6.50 Hush glass; or - 6.76 Whisper glass.
FACING			
	Bedrooms and **Indoor living & Work areas** to **Rw+Ctr 45 dB** **Double Brick Option 1**: NA **Brick Veneer Option 2**: - Brick 110x230x76, 140 kg/m^2, 1273 kg/m^3; - 50 airgap + 75 steel stud with point ties & 75 fibrous insulation 11 kg/m^3; - 10 plasterboard. Overall 245width. Predicted Rw+Ctr 54 > 45. **Stud wall Option 3:** - 1x layer 16mm JH Linea Weatherboard 1x 21.9 kg/m^2 = 21.9 kg/m^2; - minimum 75 airgap including 75 steel studs & 75mm cavity insulation GlassWool or 75 fibrous insulation 11 kg/m^3; - 2x layers 13mm plasterboard 2x 9kg/m^2 = 18 kg/m^2. Overall 117width = 16 + (75) + 13 + 13. Predicted: Rw+Ctr 47 > 45	**Bedrooms:** **-** Fully glazed hinged door with certified **Rw+Ctr 28dB** rated door and frame including seals and 6mm glass **Other external doors** to **Rw+Ctr 25dB**, e.g. - 35mm solid core timber hinged door and frame system certified to **Rw 28dB** including seals; - Glazed sliding door with **10mm** glass and weather seals.	**Bedrooms:** - Total external door and window system area up to 40% of room floor area: Sliding or double hung with minimum **10mm** single or 6mm-12mm-**10mm** double insulated glazing **Rw+Ctr 28 dB.** Sealed awning or casement windows may use 6 mm glazing instead. **Indoor living and work areas** - Up to 40% floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing **Rw+Ctr 25dB.**
SIDE-ON			
	Bedrooms and **Indoor living & Work areas** to **Rw+Ctr 45 dB** As per FACING above.	**Bedrooms:** **-** Fully glazed hinged door with certified **Rw+Ctr 25dB** rated door and frame including seals and 6mm glass	**Bedrooms:** - Total external door and window system area up to 40% of room floor area: Sliding or double hung with minimum **10mm** single or 6mm-12mm-10mm

		Other external doors to **Rw+Ctr 22dB**, e.g. - 35mm solid core timber hinged door and frame system certified to **Rw 25dB** including seals; - Glazed sliding door with **10mm** glass and weather seals for bedrooms	double insulated glazing **Rw+Ctr 25 dB.** Sealed awning or casement windows may use 6 mm glazing instead. **Indoor living and work areas** - Up to 40% floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing **Rw+Ctr 22dB.**
OPPOSITE			
	Bedrooms and **Indoor living & Work areas** No specific requirements	**Bedrooms** and **Indoor living & Work areas** No specific requirements	**Bedrooms** and **Indoor living & Work areas** No specific requirements

1 – Ground floor roofs and ceilings to **Rw+Ctr 35dB**

Metal sheet roof with minimum 50mm anti-condensation insulation under,
with at least 10mm plasterboard ceiling;
with R1.3+ insulation or greater to meet energy efficiency requirements,
with average minimum 250mm ceiling cavity.

2 - Outdoor living areas

a. At least one outdoor living area located on the opposite side of the building from the corridor; and/or

b. At least one ground level outdoor living area screened using a solid continuous fence or other structure, including nearby residences, of minimum 2.0 metres height above ground level.

NB - A significant consideration is that for the Lots within the land cells closest to Madigan Road, t*ypically between Trevarton Drive and Nathana Way*, are set so that the Outdoor Living Areas are shielded from Madigan Road by being paced on the Eastern sides so then there is no requirement to build a noise wall between the LOTS and Madigan Road. This determination needs to be made at the detailed design stage.

See also APPENDIX G – GENERAL REQUIREMENTS Applicable to All Packages.

See also APPENDIX O – ORIENTATION for the façade orientation derivations:

APPENDIX SB – QUIET HOUSE B REQUIREMENTS

TABLE 3B – QUIET HOUSE 'B' REQUIREMENTS

MODIFIED Extract from SPP5.4 Table 3 – Quiet house requirements

REQUIRED Acoustic Ratings (Rw+Ctr) and EXAMPLE constructions

Orientation to corridor	Walls	External doors	Windows
		NB: 10mm glass can be replaced with laminated glass being either: - 6.50 Viridian Hush glass; or - 6.76 Cooling Bros Whisper glass.	**NB: 10mm** glass can be replaced with laminated glass being either: - 6.50 Viridian Hush glass; or - 6.76 Cooling Bros Whisper glass.
FACING			
	Bedrooms and **Indoor living & Work areas** to **Rw+Ctr 50 dB** **Double Brick Option 1**: NA **Brick Veneer Option 2**: - Brick 110x230x76, 140 kg/m^2, 1273 kg/m^3; - 50 airgap + 75 steel stud with point ties & 75 fibrous insulation 11 kg/m^3; - 10 plasterboard. Overall 245width. Predicted Rw+Ctr 54 > 50. **Stud wall** - 1x layer 16mm JH Linea Weatherboard 1x 21.9 kg/m^2 = 21.9 kg/m^2; - minimum 103mm airgap including 75 steel studs with 28 resilient mounts & 75mm cavity insulation GlassWool or 75 fibrous insulation 11 kg/m^3; - 2x layers 13mm CSR Soundcheck 2x 13.0kg/m^2 = 26 kg/m^2. Overall 145width = 16 + (75 + 28) + 13 + 13 Predicted: Rw+Ctr 53 > 50	**Bedrooms:** - Fully glazed hinged door with certified **Rw+Ctr 31dB** rated door and frame including seals and 10mm glass **Other external doors:** to **Rw+Ctr 28dB**, e.g. - 35mm solid core timber hinged door and frame system certified to **Rw 28dB** including seals; - Glazed sliding door with 10mm glass and weather seals	**Bedrooms:** Total external door and window system area up to 40% of room floor area: Fixed sash, awning or casement with minimum 6mm single or 6mm-12mm-**6.38mm** double insulated glazing **Rw+Ctr 31 dB.** **Indoor living & Work areas:** - Up to 40% floor area: Sliding or double hung with minimum 6mm single pane or 6mm-12mm-**6.38mm** double insulated glazing **Rw+Ctr 28 dB**; and - Sealed awning or casement windows may use 6mm glazing instead **Rw+Ctr 28 dB.**
SIDE-ON			
	Bedrooms and	**Bedrooms:**	**Bedrooms:**

	Indoor living & Work areas to **Rw+Ctr 50 dB** As per FACING above.	**-** Fully glazed hinged door with certified **Rw+Ctr 25dB** rated door and frame including seals and 6mm glass **Other external doors:** to **Rw+Ctr 22dB**, e.g. - 35mm solid core timber hinged door and frame system certified to **Rw 25dB** including seals; - Glazed sliding door with 10mm glass and weather seals.	Total external door and window system area up to 40% of room floor area: - Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing **Rw+Ctr 25 dB**. - Sealed awning or casement windows may use 6mm glazing instead. **Indoor living & Work areas:** Up to 40% floor area: Sliding, casement or double hung with minimum 6mm single pane or 6mm-12mm-**6.38mm** double insulated glazing **Rw+Ctr 22 dB**.
OPPOSITE			
	Bedrooms and **Indoor living & Work areas** to **Rw+Ctr 50 dB** As per FACING above.	**Bedrooms:** **-** Fully glazed hinged door with certified **Rw+Ctr 25dB** rated door and frame including seals and 6mm glass **Other external doors** to **Rw+Ctr 22dB**, e.g. - 35mm solid core timber hinged door and frame system certified to **Rw 25dB** including seals; - Glazed sliding door with 10mm glass and weather seals for bedrooms	**Bedrooms:** - Total external door and window system area up to 40% of room floor area: Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing **Rw+Ctr 25 dB.** Sealed awning or casement windows may use 6 mm glazing instead. **Indoor living and work areas** - Up to 40% floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing **Rw+Ctr 22dB.**

1 - Roofs and ceilings of highest floors to **Rw+Ctr 35dB**
Metal sheet roof with minimum 50mm anti-condensation insulation under, and all with at least 10mm plasterboard ceiling, with R3.0+ insulation.

2 - Outdoor Living Areas (OLA) requirements:

a. At least one OLA located on opposite side of the building from traffic corridor; and/or

b. At least one ground level OLA screened using a close solid continuous fence or other close structure of minimum 2.4 metres height above ground level.

NB - A significant consideration is that for the Lots within the land cells closest to Madigan Road, t*ypically between Trevarton Drive and Nathana Way*, are set so that the Outdoor Living Areas are shielded from Madigan Road by being paced on the Eastern sides so then there is no requirement to build a noise wall between the LOTS and Madigan Road. This determination needs to be made at the detailed design stage.

See also APPENDIX SG – GENERAL REQUIREMENTS.

See also APPENDIX O – ORIENTATION for the residential façade orientation derivations:

APPENDIX SG – GENERAL REQUIREMENTS

(APPLICABLE TO ALL PACKAGES)

3 - Mechanical ventilation / air conditioning considerations:

- Acoustically rated openings and ductwork to provide a minimum sound reduction performance of Rw 40dB into sensitive spaces;
- Evaporative systems require attenuated ceiling air vents to allow closed windows;
- Refrigerant-based systems need to be designed to achieve NCC fresh air ventilation requirements;
- Openings such as eaves, vents and air inlets must be acoustically treated, closed or relocated to building sides facing away from the corridor where practicable.

4 - The airborne weighted sound reduction index (Rw) and traffic correction term (Ctr) are published by manufacturers/suppliers, can be determined by acoustical consultants or measured in accordance with AS ISO 717.1. Higher Rw+Ctr values infer greater sound insulation. All values are minimum Rw+Ctr.

5 - Example construction for different external wall ratings of Rw+Ctr 45dB and 50dB are provided and are are based on the installation and sealing of joints and penetrations.

Recommendations specific to this project are contained in the Quiet House tables.

NB1: Use fibreglass insulation requirements being the greater of either the acoustic requirements or energy efficiency requirements.

NB2: The use of polystyrene or any other board product including permicav for acoustic purposes is prohibited. All reference to insulation is to glass wool (GW) insulation.

6 - Window and external door sound reduction values provided are based on the provision of suitable acoustic seals to prevent sound leakage.

To comply with the above ratings, all external glass windows and doors specified must have the following:

- Operable windows and external doors must have a seal to restrict air infiltration fitted to each edge and doors must have a drop seal to provide an airtight seal when closed
- Within doors or fixed framing, glazing must be set and sealed using an airtight arrangement of non-hardening sealant, soft rubber (elastomer) gasket and/or glazing tape, or be verified by manufacturer or approved person that the construction system as to be installed achieves the relevant Rw+Ctr value
- In this context, a seal is foam or silicon-based rubber compressible strip, fibrous seal with vinyl fin interleaf or the like. Brush / pile type seals without this seal included are not allowed.
- Glazing referenced can be monolithic, laminated or toughened safety glass.

7 - Any penetrations in a part of the building envelope must be acoustically treated so as not to degrade the performance of the building elements affected. Most penetrations in external walls such as pipes, cables or ducts can be sealed through caulking gaps with non-hardening mastic or suitable mortar.

APPENDIX O – ORIENTATION

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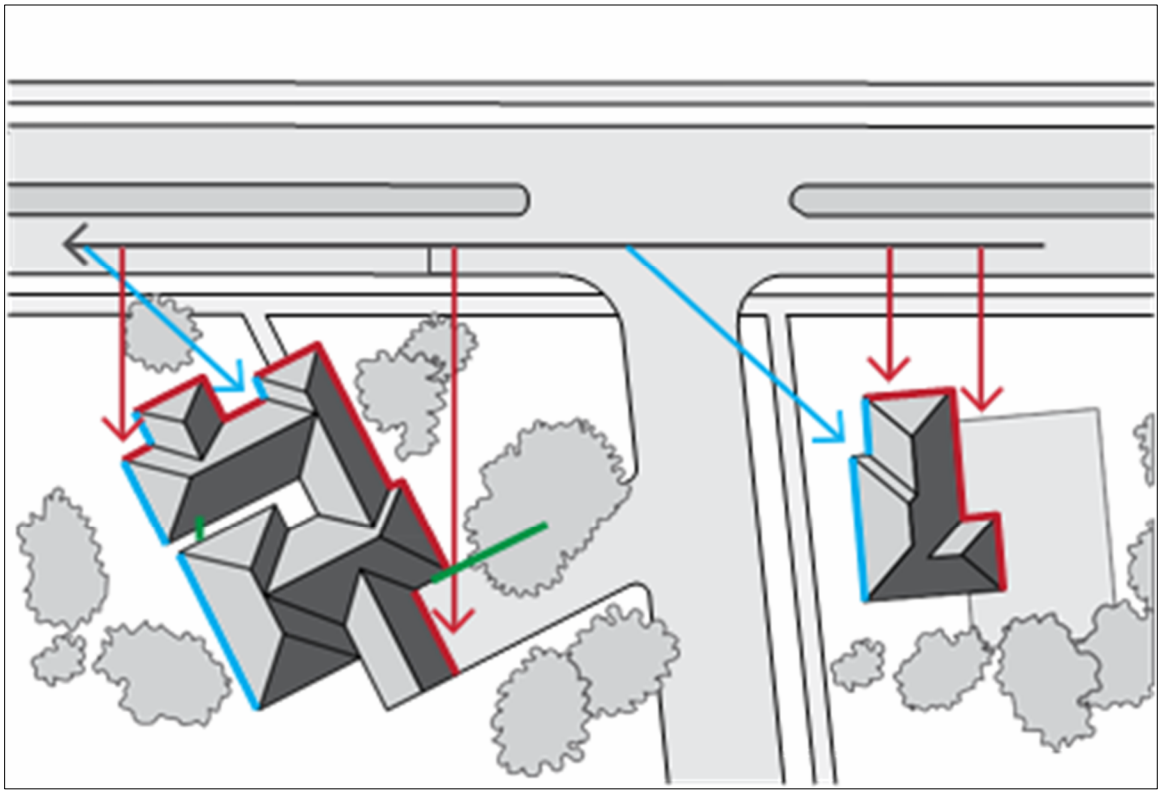
Determining building face orientation



DETERMINING BUILDING FACE ORIENTATION

'Facing' the transport corridor (red):

Any part of a building facade is 'facing' the transport corridor if any straight line drawn perpendicular (at a 90-degree angle) to its nearest road lane or railway line intersects that part of the façade without obstruction (ignoring any fence).

'Side on' to transport corridor (blue):

Any part of a building facade that is not 'facing' is 'side on' to the transport corridor if any straight line, at any angle, can be drawn from it to intersect the nearest road lane or railway line without obstruction (ignoring any fence).

'Opposite' to transport corridor (green):

Neither 'side on' nor 'facing', as defined above.

FIGURE O1 – SPP5.4 ORIENTATION EXTRACT