



# LEGEND

-  LDP Boundary
-  Uniform fencing by developer - visually permeable above 1.2 metres
-  Primary dwelling orientation
-  Lots subject to Quiet House Design Requirements

## LOCAL DEVELOPMENT PLAN PROVISIONS

The provisions addressed below and accompanying plan relate to a Western Australian Planning Commission approved subdivision (WAPC reference 158181).

The City of Wanneroo District Planning Scheme No. 2, the Residential Design Codes and Local Planning Policy 4.19: Medium-Density Housing Standards (R-MD) apply unless otherwise provided for below.

Compliance with the following standards does not require consultation with adjoining landowners.

### SPECIFIC PROVISIONS

1. For Lots 2209-2212, buildings are to have a minimum setback of 2.0 metres from the adjoining public open space (POS). Dwellings on these lots must have an articulated elevation to the POS which includes one major opening.

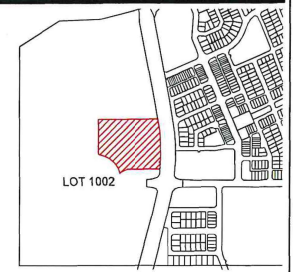
2. For Lots 2238 & 2282, buildings are to have a minimum setback of 1.0 metre from the adjoining public open space (POS). A major opening from a habitable room facing the POS is to be provided.

3. Quiet House Design Measures are provided in Attachment 1. Facade design treatments (Quiet House Design Measures) are required for the following:

Ground Floor: Lots 2188-2193 & Lots 2223-2225 as per Package 'B'  
Upper Floor: Lots 2205 & 2226 as per Package 'A'  
Lots 2188-2193 & Lots 2223-2225 as per Package 'C'



## LOCATION PLAN



MARMION AVENUE

AVENUE



## WESTERN VILLAGE (AURA) LOCAL DEVELOPMENT PLAN No. 1 LOT 1002 MARMION AVENUE, ALKIMOS

This Local Development Plan has been approved by Council under Clause 52(1)(a) of the Deemed Provisions of the City of Wanneroo District Planning Scheme No. 2.

Manager Approval Services

11 April 2025

Date

13 December 2029

Local Development Plan Expiry Date

# ATTACHMENT 1 - QUIET HOUSE DESIGN PACKAGES - LLOYD GEORGE ACOUSTICS

## Package A

Area	Orientation to Road or Rail Corridor	Package A (up to 60 dB $L_{Aeq(Day)}$ and 55 dB $L_{Aeq(Night)}$ )
Bedrooms	Facing	<ul style="list-style-type: none"><li>Windows systems: Glazing up to 40% of floor area (minimum <math>R_w + C_p</math> 28) – 6mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.</li></ul>
	Side	<ul style="list-style-type: none"><li>Windows systems: As above.</li></ul>
	Opposite	No requirements
Other Habitable Rooms including Kitchens	Facing	<ul style="list-style-type: none"><li>Windows and external door systems: Glazing up to 60% of floor area (minimum <math>R_w + C_p</math> 28) – 6mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings. Doors to be either 35mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to match the above. Sliding glass doors to be same performance including brush seals.</li></ul>
	Side	<ul style="list-style-type: none"><li>Windows and external door systems: As above.</li></ul>
	Opposite	No requirements
General	Any	<ul style="list-style-type: none"><li>Walls (minimum <math>R_w + C_p</math> 45) – Two leaves of 90mm thick brick with minimum 50mm cavity</li><li>Roof and ceiling (minimum <math>R_w + C_p</math> 35) – Standard roof construction with 10mm plasterboard ceiling and minimum R2.5 insulation between ceiling joists.</li><li>Eaves to be closed using 4mm compressed fibre cement sheet.</li><li>Mechanical ventilation – Refer following pages.</li></ul>
Outdoor Living Area		<ul style="list-style-type: none"><li>Boundary wall to be minimum 2m high; or</li><li>Locate on the side of the building that is opposite to the corridor; or</li><li>Locate within alcove area so that the house shields it from corridor.</li></ul>

Note: Any penetrations in a part of the building envelope must be acoustically treated so as to not downgrade 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.

## Package B

Area	Orientation to Road or Rail Corridor	Package B (up to 63 dB $L_{Aeq(Day)}$ and 58 dB $L_{Aeq(Night)}$ )
Bedrooms	Facing	<ul style="list-style-type: none"><li>Windows systems: Glazing up to 40% of floor area (minimum <math>R_w + C_p</math> 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.</li></ul>
	Side	<ul style="list-style-type: none"><li>Windows systems: As above.</li></ul>
	Opposite	<ul style="list-style-type: none"><li>Windows systems: Glazing up to 40% of floor area (minimum <math>R_w + C_p</math> 25) – 4mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings. Alternatively, 6mm thick glass (monolithic, toughened or laminated) in sliding frame.</li></ul>
Other Habitable Rooms including Kitchens	Facing	<ul style="list-style-type: none"><li>Windows and external door systems: Glazing up to 60% of floor area (minimum <math>R_w + C_p</math> 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings. Doors to be either 35mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to match the above. Sliding glass doors to have laboratory certificate confirming <math>R_w + C_p</math> 31 performance. Alternative, change to hinged door with perimeter acoustic seals and 10mm thick glass.</li></ul>
	Side	<ul style="list-style-type: none"><li>Windows and external door systems: Glazing up to 60% of floor area (minimum <math>R_w + C_p</math> 28) – 6mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings. Doors to be either 35mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to match the above. Sliding glass doors to be same performance including brush seals.</li></ul>
	Opposite	No requirements
General	Any	<ul style="list-style-type: none"><li>Walls (minimum <math>R_w + C_p</math> 50) – Two leaves of 90mm thick brick with minimum 50mm cavity. Cavity to include 50mm thick insulation and where wall ties are required, these are to be anti-vibration/resilient type.</li><li>Roof and ceiling (minimum <math>R_w + C_p</math> 35) – Standard roof construction with 10mm plasterboard ceiling and minimum R2.5 insulation between ceiling joists.</li><li>Eaves to be closed using 4mm thick compressed fibre cement sheet.</li><li>Mechanical ventilation – Refer following pages.</li></ul>
Outdoor Living Area		<ul style="list-style-type: none"><li>Boundary wall to be minimum 2.4m high; or</li><li>Locate on the side of the building that is opposite to the corridor; or</li><li>Locate within alcove area so that the house shields it from corridor.</li></ul>

Note: Any penetrations in a part of the building envelope must be acoustically treated so as to not downgrade 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.

## Package C

Area	Orientation to Road or Rail Corridor	Package C (up to 65 dB $L_{Aeq(Day)}$ and 60 dB $L_{Aeq(Night)}$ )
Bedrooms	Facing	<ul style="list-style-type: none"><li>Windows systems: Glazing up to 20% of floor area (minimum <math>R_w + C_p</math> 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.</li></ul>
	Side	<ul style="list-style-type: none"><li>Windows systems: Glazing up to 40% of floor area (minimum <math>R_w + C_p</math> 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.</li></ul>
	Opposite	<ul style="list-style-type: none"><li>Windows systems: Glazing up to 40% of floor area (minimum <math>R_w + C_p</math> 28) – 6mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.</li></ul>
Other Habitable Rooms including Kitchens	Facing	<ul style="list-style-type: none"><li>Windows and external door systems: Glazing up to 60% of floor area (minimum <math>R_w + C_p</math> 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings. Doors to be either 35mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to match the above. Sliding glass doors to have laboratory certificate confirming <math>R_w + C_p</math> 31 performance. Alternative, change to hinged door with perimeter acoustic seals and 10mm thick glass.</li></ul>
	Side	<ul style="list-style-type: none"><li>Windows and external door systems: Glazing up to 40% of floor area (minimum <math>R_w + C_p</math> 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings. Doors to be either 35mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to match the above. Sliding glass doors to have laboratory certificate confirming <math>R_w + C_p</math> 31 performance. Alternative, change to hinged door with perimeter acoustic seals and 10mm thick glass.</li></ul>
	Opposite	<ul style="list-style-type: none"><li>Windows systems: Glazing up to 40% of floor area (minimum <math>R_w + C_p</math> 28) – 6mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.</li></ul>
General	Any	<ul style="list-style-type: none"><li>Walls (minimum <math>R_w + C_p</math> 50) – Two leaves of 90mm thick brick with minimum 50mm cavity. Cavity to include 50mm thick insulation and where wall ties are required, these are to be anti-vibration/resilient type.</li><li>Roof and ceiling (minimum <math>R_w + C_p</math> 40) – Standard roof construction with 2 x 10mm plasterboard ceiling and minimum R3.0 insulation between ceiling joists.</li><li>Eaves to be closed using 6mm thick compressed fibre cement sheet.</li><li>Mechanical ventilation – Refer following pages.</li></ul>
Outdoor Living Area		<ul style="list-style-type: none"><li>Locate on the side of the building that is opposite to the corridor; or</li><li>Locate within alcove area so that the house shields it from corridor.</li></ul>

Note: Any penetrations in a part of the building envelope must be acoustically treated so as to not downgrade 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.

## Mechanical Ventilation requirements

It is noted that natural ventilation must be provided in accordance with F4.6 and F4.7 of Volume One and 3.8.5.2 of Volume Two of the National Construction Code. Where the noise *limit* is likely to be exceeded, a mechanical ventilation system is usually required. Mechanical ventilation systems will need to comply with AS 1668.2 – *The use of mechanical ventilation and air-conditioning in buildings*.

In implementing the acceptable treatment packages, the following must be observed:

- Evaporative air conditioning systems will meet the requirements for Packages A and B provided attenuated air vents are provided in the ceiling space and designed so that windows do not need to be opened.
- Refrigerant based air conditioning systems need to be designed to achieve fresh air ventilation requirements.
- External openings (e.g. air inlets, vents) need to be positioned facing away from the transport corridor where practicable.
- Ductwork needs to be provided with adequate silencing to prevent noise intrusion.