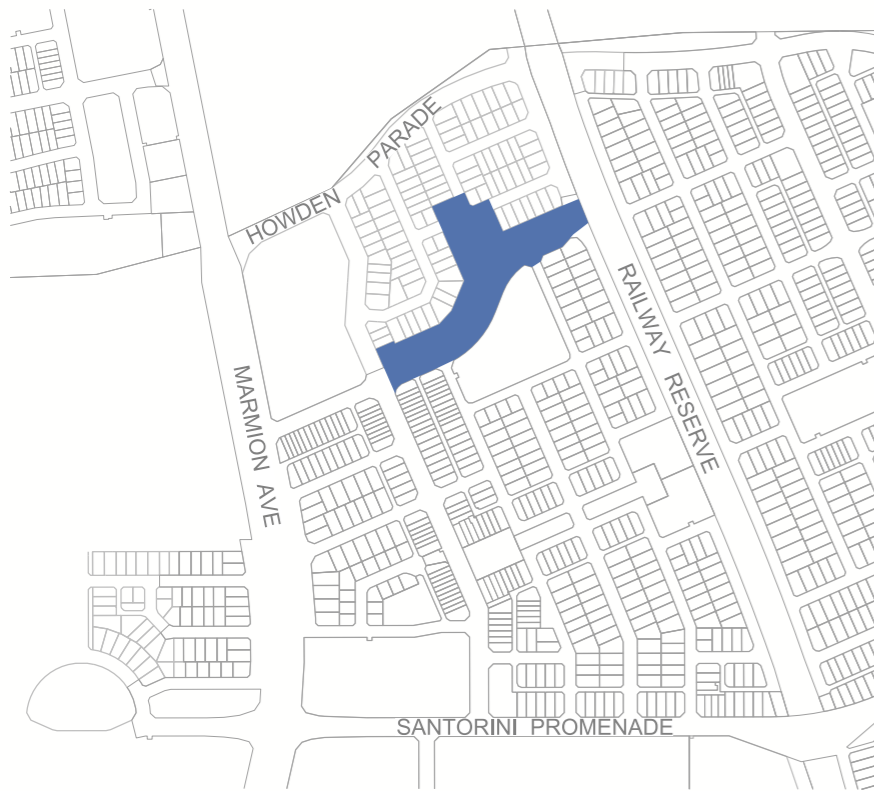


Location Plan



Local Development Plan Provisions

1.0 GENERAL PROVISIONS

- 1.1 The requirements of the City of Wanneroo District Planning Scheme No. 2, the Residential Design Codes (R-Codes) and Local Planning Policy 4.19: Medium-Density Housing Standards (RMD-Codes) apply, unless otherwise provided below.
- 1.2 The following standards represent variations to the deemed-to-comply provisions of the R-Codes and constitute new deemed-to-comply provisions pursuant to the R-Codes, or are deemed to meet the relevant Design Principles of the R-Codes.
- 1.3 The following standards are deemed to meet the relevant Design Principles of the R-Codes and do not require consultation with adjacent owners.

2.0 RESIDENTIAL DESIGN CODE AND ZONE

LOTS APPLICABLE	R-CODE DENSITY AND ZONING
Lots 2084-2088, 2096-2099, 2108-2109, 2121-2139, 2291-2294	RMD40

3.0 DEVELOPMENT STANDARDS

- 3.1 For all corner lots, driveways may be located closer than 6m to a street corner or the point at which a carriageway begins to deviate.

4.0 ACOUSTIC REQUIREMENTS

LOTS APPLICABLE	REQUIREMENTS
Lots 2096, 2136-2139, 2292-2294	<p>3.1 Façade protection treatments (Quiet House Design Measures) as defined in the Lloyd George Noise Assessment dated 4 July 2019 are required for the following:</p> <p>Ground Floor: Lot 2096 and Lots 2137-2139 as per Package 'A'</p> <p>Upper Floor: Lot 2096 as per Package 'B' and Lots 2136-2139, 2292-2294 as per Package 'A'</p> <p>Details of the Quiet House Design Requirements are included in Attachment 1.</p>

Legend

- Extent of Local Development Plan
- Retaining Walls (by developer)
- Primary Dwelling Orientation
- Lots Subject to Quiet House Design Requirements
- Secondary Dwelling Orientation



Endorsement Table

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

Manager, Approval Services
City of Wanneroo

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	<input type="checkbox"/> Windows systems: Glazing up to 40% of floor area (minimum R _w + C _{tr} 28) – 6mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.
	Side	<input type="checkbox"/> Windows systems: As above.
	Opposite	No requirements
Other Habitable Rooms Including Kitchens	Facing	<input type="checkbox"/> Windows and external door systems: Glazing up to 60% of floor area (minimum R _w + C _{tr} 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.
	Side	<input type="checkbox"/> Windows and external door systems: As above.
	Opposite	No requirements
General	Any	<input type="checkbox"/> Walls (minimum R _w + C _{tr} 45) – Two leaves of 90mm thick brick with minimum 50mm cavity <input type="checkbox"/> Roof and ceiling (minimum R _w + C _{tr} 35) – Standard roof construction with 10mm plasterboard ceiling and minimum R2.5 insulation between ceiling joists. <input type="checkbox"/> Eaves to be closed using 4mm compressed fibre cement sheet. <input type="checkbox"/> Mechanical ventilation – Refer following pages.
Outdoor Living Area		<input type="checkbox"/> Boundary wall to be minimum 2m high; or <input type="checkbox"/> Locate on the side of the building that is opposite to the corridor; or <input type="checkbox"/> Locate within alcove area so that the house shields it from corridor.

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	<input type="checkbox"/> Windows systems: Glazing up to 40% of floor area (minimum R _w + C _{tr} 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.
	Side	<input type="checkbox"/> Windows systems: As above.
	Opposite	<input type="checkbox"/> Windows systems: Glazing up to 40% of floor area (minimum R _w + C _{tr} 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.
Other Habitable Rooms Including Kitchens	Facing	<input type="checkbox"/> Windows and external door systems: Glazing up to 60% of floor area (minimum R _w + C _{tr} 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 R _w + C _{tr} 31 performance. Alternative, change to hinged door with perimeter acoustic seals and 10mm thick glass.
	Side	<input type="checkbox"/> Windows and external door systems: Glazing up to 60% of floor area (minimum R _w + C _{tr} 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.
	Opposite	No requirements
General	Any	<input type="checkbox"/> Walls (minimum R _w + C _{tr} 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. <input type="checkbox"/> Roof and ceiling (minimum R _w + C _{tr} 35) – Standard roof construction with 10mm plasterboard ceiling and minimum R2.5 insulation between ceiling joists. <input type="checkbox"/> Eaves to be closed using 4mm thick compressed fibre cement sheet. <input type="checkbox"/> Mechanical ventilation – Refer following pages.
Outdoor Living Area		<input type="checkbox"/> Boundary wall to be minimum 2.4m high; or <input type="checkbox"/> Locate on the side of the building that is opposite to the corridor; or <input type="checkbox"/> Locate within alcove area so that the house shields it from corridor.

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.