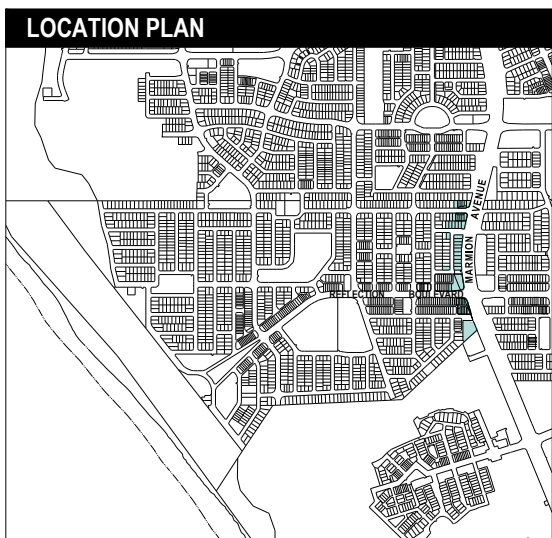


LOCAL DEVELOPMENT PLAN No. 24



LEGEND

- Quiet House Design Required
- 2.5m High Noise Barrier (to be constructed by SPG)
- Visually Permeable Fencing (to be constructed by SPG)
- Primary Dwelling Orientation
- Public Open Space

QUIET HOUSE DESIGN

- Upper Floor Ground Floor
- Not Required
- Package A
- Package B
- Package C
- Package C+

LOCAL DEVELOPMENT PLAN PROVISIONS

Preliminary

The development standards contained in this Local Development Plan (LDP) apply in addition to those development requirements of the *City of Wanneroo District Planning Scheme No.2, Jindalee North Local Structure Plan No.88* and any relevant planning policy (including *Local Planning Policy 4.19 - Medium Density Housing Standards (LPP 4.19)* and the *Residential Design Codes (R-Codes)*).

Notwithstanding the above, as of 10 April 2026, the City's Local Planning Policy 4.19 - Medium Density Housing will no longer apply to lots coded R60, and the Residential Design Codes Volume 1 will prevail unless otherwise approved by the City of Wanneroo.

General Provisions

Quiet House Design

1. Quiet house design requirements are applicable to all noise affected lots identified on this Local Development Plan. Detail of quiet house design requirements (A, B, C & C+) are included as Attachment 1.
2. Modifications to the quiet house design requirements may be approved by the City where it can be demonstrated that proposed development will be provided within the acceptable level of acoustic amenity and subject to the development proposal being accompanied by a Transportation Noise Assessment undertaken by a suitably qualified professional.

Pedestrian Accessway

3. The following provisions are applicable to Lot 27 abutting the Pedestrian Access Way (PAW):
 - Development on Lot 27 shall be setback a minimum distance of 1m from the PAW.
 - Development shall consist of at least one major opening to a habitable room overlooking the PAW.
 - Semi-permeable fencing shall be provided along the boundary adjoining the PAW by the developer.

Primary Dwelling Orientation

4. Primary dwelling orientation shall be provided as identified on this LDP.



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

N. DeVecchis 27 October 2025
 Manager Approval Services Date

Local Development Plan Expiry Date: 27 October 2035

ATTACHMENT 1 - QUIET HOUSE DESIGN

PROVISIONS IN ACCORDANCE WITH LLOYD GEORGE TRANSPORTATION NOISE ASSESSMENT, DATED MARCH 2025

Quiet House Package A

56-58 dB $L_{Aeq}(\text{Day})$ & 51-53 dB $L_{Aeq}(\text{Night})$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	<ul style="list-style-type: none"> Up to 40% floor area ($R_w + C_{tr} \geq 28$): <ul style="list-style-type: none"> Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing; Sealed awning or casement windows with minimum 6mm glass. Up to 60% floor area ($R_w + C_{tr} \geq 31$): <ul style="list-style-type: none"> Sealed awning or casement windows with minimum 6mm glass. 	<ul style="list-style-type: none"> Up to 40% floor area ($R_w + C_{tr} \geq 25$): <ul style="list-style-type: none"> Sliding or double hung with minimum 6mm single or 6mm-12mm-6mm double insulated glazing; Up to 60% floor area ($R_w + C_{tr} \geq 28$); Up to 80% floor area ($R_w + C_{tr} \geq 31$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	No specific requirements	
External Doors	Facing	<ul style="list-style-type: none"> Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass. 	<ul style="list-style-type: none"> Doors to achieve $R_w + C_{tr} \geq 25$: <ul style="list-style-type: none"> 35mm Solid timber core hinged door and frame system certified to $R_w 28$ including seals; Glazed sliding door with 10mm glass and weather seals.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less.	
	Opposite	No specific requirements	
External Walls	All	<ul style="list-style-type: none"> $R_w + C_{tr} \geq 45$: <ul style="list-style-type: none"> Two leaves of 90mm thick clay brick masonry with minimum 20mm cavity; or Single leaf of 150mm brick masonry with 13mm cement render on each face; or One row of 92mm studs at 600mm centres with: <ul style="list-style-type: none"> Resilient steel channels fixed to the outside of the studs; and 9.5mm hardboard or fibre cement sheeting or 11mm fibre cement weatherboards fixed to the outside; 75mm thick mineral wool insulation with a density of at least 11kg/m^3; and 2 x 16mm fire-rated plasterboard to inside. 	
Roofs and Ceilings	All	<ul style="list-style-type: none"> $R_w + C_{tr} \geq 35$; Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard. 	

ATTACHMENT 1 - QUIET HOUSE DESIGN

PROVISIONS IN ACCORDANCE WITH LLOYD GEORGE TRANSPORTATION NOISE ASSESSMENT, DATED MARCH 2025

Quiet House Package B

59-62 dB $L_{Aeq}(\text{Day})$ & 54-57 dB $L_{Aeq}(\text{Night})$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	<ul style="list-style-type: none"> Up to 40% floor area ($R_w + C_{tr} \geq 31$): <ul style="list-style-type: none"> Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. Up to 60% floor area ($R_w + C_{tr} \geq 34$): <ul style="list-style-type: none"> Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing. 	<ul style="list-style-type: none"> Up to 40% floor area ($R_w + C_{tr} \geq 28$): <ul style="list-style-type: none"> Sliding or double hung with 6mm-12mm-10mm double insulated glazing; Sealed awning or casement windows with minimum 6mm glass. Up to 60% floor area ($R_w + C_{tr} \geq 31$); Up to 80% floor area ($R_w + C_{tr} \geq 34$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	<ul style="list-style-type: none"> Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass. 	<ul style="list-style-type: none"> Doors to achieve $R_w + C_{tr} \geq 28$: <ul style="list-style-type: none"> 40mm Solid timber core hinged door and frame system certified to $R_w 32$ including seals; Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	<ul style="list-style-type: none"> $R_w + C_{tr} \geq 50$: <ul style="list-style-type: none"> Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester (24kg/m^3). Resilient ties used where required to connect leaves. Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). Single leaf of 220mm brick masonry with 13mm cement render on each face. 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. Single leaf of 90mm clay brick masonry with: <ul style="list-style-type: none"> A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; A cavity of 25mm between leaves; 50mm glasswool or polyester insulation (11kg/m^3) between studs; and One layer of 10mm plasterboard fixed to the inside face. 	
Roofs and Ceilings	All	<ul style="list-style-type: none"> $R_w + C_{tr} \geq 35$: <ul style="list-style-type: none"> Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling with R3.0+ fibrous insulation. 	

ATTACHMENT 1 - QUIET HOUSE DESIGN

PROVISIONS IN ACCORDANCE WITH LLOYD GEORGE TRANSPORTATION NOISE ASSESSMENT, DATED MARCH 2025

Quiet House Package C

63-66 dB L_{Aeq}(Day) & 58-61 dB L_{Aeq}(Night)

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	<ul style="list-style-type: none"> Up to 20% floor area ($R_w + C_{tr} \geq 31$): <ul style="list-style-type: none"> Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. Up to 40% floor area ($R_w + C_{tr} \geq 34$): <ul style="list-style-type: none"> Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing. 	<ul style="list-style-type: none"> Up to 40% floor area ($R_w + C_{tr} \geq 31$): <ul style="list-style-type: none"> Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. Up to 60% floor area ($R_w + C_{tr} \geq 34$): <ul style="list-style-type: none"> Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	<ul style="list-style-type: none"> Not recommended. 	<ul style="list-style-type: none"> Doors to achieve $R_w + C_{tr} \geq 30$: <ul style="list-style-type: none"> Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass; 40mm Solid timber core side hinged door, frame and seal system certified to $R_w 32$ including seals. Any glass inserts to be minimum 6mm.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	<ul style="list-style-type: none"> $R_w + C_{tr} \geq 50$: <ul style="list-style-type: none"> Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). Resilient ties used where required to connect leaves. Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m^3). Single leaf of 220mm brick masonry with 13mm cement render on each face. 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. Single leaf of 90mm clay brick masonry with: <ul style="list-style-type: none"> A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; A cavity of 25mm between leaves; 50mm glasswool or polyester insulation (11kg/m^3) between studs; and One layer of 10mm plasterboard fixed to the inside face. 	
Roofs and Ceilings	All	<ul style="list-style-type: none"> $R_w + C_{tr} \geq 40$: <ul style="list-style-type: none"> Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibrous insulation between steel sheeting and roof battens; R3.0+ insulation batts above ceiling; 2 x 10mm plasterboard ceiling or 1 x 13mm sound-rated plasterboard affixed using steel furring channel to ceiling rafters. 	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	

ATTACHMENT 1 - QUIET HOUSE DESIGN

PROVISIONS IN ACCORDANCE WITH LLOYD GEORGE ROAD TRAFFIC NOISE ASSESSMENT, DATED JULY 2018

Package C+

Area	Orientation to Road or Rail Corridor	Package C+ (More Than 66 dB $L_{Aeq(Day)}$ and 61 dB $L_{Aeq(Night)}$)
Bedrooms	Facing	<ul style="list-style-type: none"> Windows systems: Glazing up to 20% of floor area (minimum $R_w + C_{tr}$ 36) – Double glazed unit consisting 10mm / 16mm air gap / 10.5mm VLam Hush glass in fixed sash, awning or casement opening with seals to openings.
	Side	<ul style="list-style-type: none"> Windows systems: Glazing up to 40% of floor area (minimum $R_w + C_{tr}$ 36) – Double glazed unit consisting 10mm / 16mm air gap / 10.5mm VLam Hush glass in fixed sash, awning or casement opening with seals to openings.
	Opposite	<ul style="list-style-type: none"> Windows systems: Glazing up to 20% of floor area (minimum $R_w + C_{tr}$ 30) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.
Other Habitable Rooms Including Kitchens	Facing	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 40% of floor area (minimum $R_w + C_{tr}$ 36) – Double glazed unit consisting 10mm / 16mm air gap / 10.5mm VLam Hush glass in fixed sash, awning or casement opening with seals to openings. Doors to be hinged 40mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to be minimum 10mm thick. Sliding glass doors not permitted.
	Side	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 60% of floor area (minimum $R_w + C_{tr}$ 36) – Double glazed unit consisting 10mm / 16mm air gap / 10.5mm VLam Hush glass in fixed sash, awning or casement opening with seals to openings. Doors to be hinged 40mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to be minimum 10mm thick. Sliding glass doors not permitted. Sliding glass doors to have laboratory certificate confirming $R_w + C_{tr}$ 34 performance.
	Opposite	<ul style="list-style-type: none"> Windows systems: Glazing up to 40% of floor area (minimum $R_w + C_{tr}$ 30) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.
General	Any	<ul style="list-style-type: none"> Walls (minimum $R_w + C_{tr}$ 50) – Two leaves of 90mm thick brick with minimum 50mm cavity. Cavity to include 25mm thick, 24kg/m³ insulation and where wall ties are required, these are to be anti-vibration/resilient type. Roof and Ceiling: Clay roof tiles with sarking and 10mm plasterboard ceiling. 4mm fibre cement sheeting fixed to the roof purlins and 2x10mm plasterboard ceiling. Eaves to be closed using 6mm thick compressed fibre cement sheet. Mechanical ventilation – Refer following pages.
Outdoor Living Area		<ul style="list-style-type: none"> Locate on the side of the building that is opposite to the corridor; or 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.

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

Mechanical Ventilation Requirement

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 positioning facing away from the transport corridor where practicable.
- Ductwork needs to be provided with adequate silencing to prevent noise intrusion.