

EDEN BEACH

LOCAL DEVELOPMENT PLAN No. 1 JINDALEE

PROVISIONS

Unless provided for below, the provisions of the City of Wanneroo District Planning Scheme No 2, the Jindalee North Local Structure Plan No. 88 and the R-Codes apply.

NOISE AFFECTED LOTS

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.

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.



LEGEND

 Quiet House Design Required

QUIET HOUSE DESIGN

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

NOISE BARRIER


-  2.5m High Noise Barrier
(to be constructed by SPG)
-  Visually Permeable Fencing
(to be constructed by SPG)

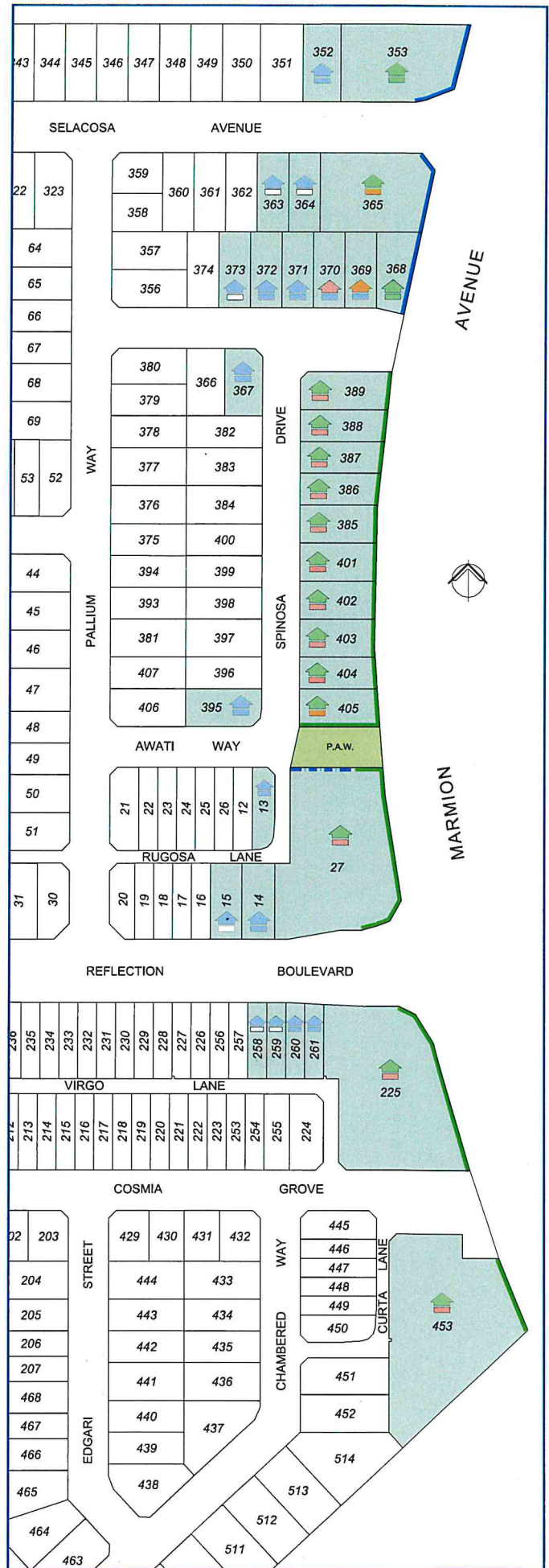
PEDESTRIAN ACCESSWAY

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.

ENDORSEMENT TABLE

 23.1.19
Manager Approvals Services Date
City of Wanneroo
This Local Development Plan has been approved by Council under clause 52(1)(a) of the deemed provisions of District Planning Scheme No. 2.



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

Package A: (more than 60dB (Aeq Day) and 55dB (Aeq Night))		
Area	Orientation to Road Corridor	Noise Control Measures
Bedrooms	Facing	<ul style="list-style-type: none"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_p 28$) – 6mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.
	Side	<ul style="list-style-type: none"> Window systems: As above.
	Opposite	No requirements
Other Habitable Rooms Including Kitchens	Facing	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 60% of floor area (minimum $R_w + C_p 28$) – 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	<ul style="list-style-type: none"> Window systems: As above.
	Opposite	No requirements
General	Any	<ul style="list-style-type: none"> Walls (minimum $R_w + C_p 45$) – Two leaves of 90mm thick brick with minimum 50mm cavity. Roof and ceiling (minimum $R_w + C_p 35$) – Standard roof construction with 10mm plasterboard ceiling and minimum R2.5 insulation between ceiling joists. Eaves to be closed using 4mm compressed fibre cement sheet. Mechanical ventilation – refer Mechanical Ventilation Requirements below.
Outdoor Living Area		<ul style="list-style-type: none"> Boundary wall to be a minimum 2m high; or Located on the side of the building that is opposite to the corridor; or Located within alcove area so that the house shields it from the corridor.

Package B: (more than 63dB (Aeq Day) and 58dB (Aeq Night))		
Area	Orientation to Road Corridor	Noise Control Measures
Bedrooms	Facing	<ul style="list-style-type: none"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_p 31$) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.
	Side	<ul style="list-style-type: none"> Window systems: As above.
	Opposite	<ul style="list-style-type: none"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_p 25$) – 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	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 60% of floor area (minimum $R_w + C_p 31$) – 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 $R_w + C_p 31$ performance. Alternatively, change to hinge door with performance acoustic seals and 10mm thick glass.
	Side	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 60% of floor area (minimum $R_w + C_p 28$) – 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	<ul style="list-style-type: none"> Walls (minimum $R_w + C_p 50$) – Two leaves of 90mm thick brick with minimum 50mm cavity. Cavity to include 24kg/m³ insulation and where wall ties are required, these are to be anti-vibration/resilient type. Roof and ceiling (minimum $R_w + C_p 35$) – Standard roof construction with 10mm plasterboard ceiling and minimum R2.5 insulation between ceiling joists. Eaves to be closed using 4mm compressed fibre cement sheet. Mechanical ventilation – refer Mechanical Ventilation Requirements below.
Outdoor Living Area		<ul style="list-style-type: none"> Boundary wall to be a minimum 2.4m high; or Located on the side of the building that is opposite to the corridor; or Located within alcove area so that the house shields it from the corridor.



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

Package C: (more than 65dB LAeq (Day) and 60dB LAeq (Night)).		
Area	Orientation to Road Corridor	Noise Control Measures
Bedrooms	Facing	<ul style="list-style-type: none"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_i$ 34) – 10.5mm thick VLam Hush glass in fixed sash, awning or casement opening with seals to openings.
	Side	<ul style="list-style-type: none"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_i$ 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings.
	Opposite	<ul style="list-style-type: none"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_i$ 28) – 6mm 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 $R_w + C_i$ 31) – 10mm thick glass (monolithic, toughened or laminated) in fixed sash, awning or casement opening with seals to openings. Doors to be either 40mm thick solid timber core door with full perimeter acoustic seals. Glazed inserts to match the above. Sliding glass doors to have laboratory certificate confirming $R_w + C_i$ 31 performance. Alternatively, change to hinge door with performance acoustic seals and 10mm thick glass.
	Side	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 60% of floor area (minimum $R_w + C_i$ 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 certified to R_w 30. Glazed inserts to match the above. Sliding glass doors to have laboratory certificate confirming $R_w + C_i$ 31 performance. Alternatively, change to hinge door with performance acoustic seals and 10mm thick glass.
	Opposite	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 60% of floor area (minimum $R_w + C_i$ 28) – 6mm 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 $R_w + C_i$ 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 (minimum $R_w + C_i$ 40) – Standard roof construction with 2 x 10mm plasterboard ceiling and minimum R3.0 insulation between ceiling joists. Eaves to be closed using 6mm compressed fibre cement sheet. Mechanical ventilation – refer Mechanical Ventilation Requirements below.
Outdoor Living Areas		<ul style="list-style-type: none"> Located on the side of the building that is opposite to the corridor; or Located within alcove area so that the house shields it from the corridor.



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

Package C+ (more than 66dB LAeq (Day) and 61dB LAeq(Night))		
Area	Orientation to Road Corridor	Noise Control Measures
Bedrooms	Facing	<ul style="list-style-type: none"> Window systems: Glazing up to 20% of floor area (minimum $R_w + C_p$ 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"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_p$ 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"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_p$ 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 $R_w + C_p$ 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 to have laboratory certificate confirming $R_w + C_p$ 34 performance.
	Side	<ul style="list-style-type: none"> Windows and external door systems: Glazing up to 60% of floor area (minimum $R_w + C_p$ 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 to have laboratory certificate confirming $R_w + C_p$ 34 performance.
	Opposite	<ul style="list-style-type: none"> Window systems: Glazing up to 40% of floor area (minimum $R_w + C_p$ 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 $R_w + C_p$ 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 compressed fibre cement sheet. Mechanical ventilation – refer Mechanical Ventilation Requirements below.
Outdoor Living Areas		<ul style="list-style-type: none"> Located on the side of the building that is opposite to the corridor; or Located within alcove area so that the house shields it from the 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 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.

