

## LOCAL DEVELOPMENT PLAN 4

### PRELIMINARY

This Local Development Plan has been prepared in accordance with Condition 27 of WAPC subdivision approval 164267 dated 26 March 2024.

Unless provided for below, the provisions of the City of Armadale Town Planning Scheme No. 4, the Anstey-Keane Urban Development Precinct East Structure Plan, PLN3.10 Residential Design Codes Variations & R-MD Codes and the Residential Design Codes Volume 1 (R-Codes) apply. This Local Development Plan (LDP) operates in conjunction with the requirements of the R-Codes by applying additional controls or by varying 'Deemed-to-comply' requirements. Where this LDP varies any requirements of the R-Codes, compliance shall be deemed to constitute 'Deemed-to-comply'.

#### Garages (Lots 501, 506, 525, 525, 527, 530, 542, 547, 550, 553, 556 & 559)

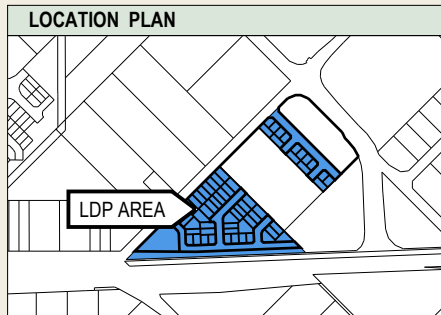
1. Vehicular access to onsite car parking spaces is permitted from the primary street frontage, and garage locations may be provided where identified on the LDP.

#### Setbacks / Easement (Lots 506-514, 546 & 547)

2. No buildings, including porches, verandahs, or equivalent are to be constructed within the 2m wide transmission line easement along Allen Road, where identified on this LDP.

#### Noise (Lots 501-505, 523-532, 540-545 & 565)

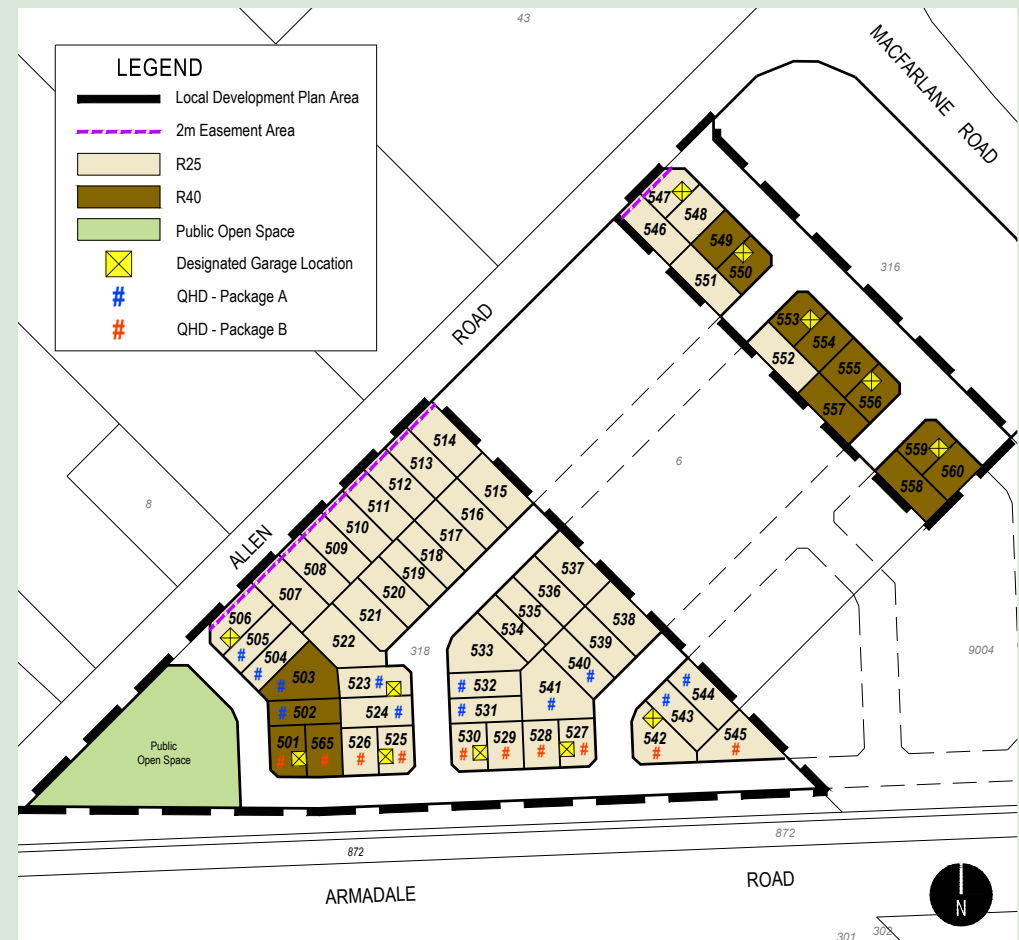
3. Buildings on the LDP identified as being noise affected (QHD) must be designed and constructed in accordance with the 'Acoustic Assessment' prepared by Herring Storer Acoustics dated 8 March 2023 and Attachment 1.



This Local Development Plan has been approved by the City of Armadale pursuant to Clause 51 (1)(a) of the Planning and Development (Local Planning Schemes) Regulations 2015.

Manager Statutory Planning  
City of Armadale

Date



# LOCAL DEVELOPMENT PLAN 4

**Road Traffic and Passenger Rail  
Quiet House Requirements**  
(Based on Table 3 of State Planning Policy 5.4.2019)

Exposure Category	Orientation to corridor	Acoustic rating and example constructions					Mechanical ventilation / air conditioning considerations
		Walls	External Doors	Windows	Roofs and ceilings of highest floors	Outdoor living areas	
<p style="text-align: center;"><b>A</b></p> <p style="text-align: center;">Quiet House A</p>	Facing	<p>Bedroom and Indoor Living and work areas to <math>R_w + C_{tr}</math> 45dB</p> <p>Stud frame walls</p> <ul style="list-style-type: none"> <li>One row of 92mm studs at 60mm centres with:</li> <li>Resilient steel channels fixed to the outside of the studs; and</li> <li>9.5mm hardboard or 9mm fibre cement weatherboards or one layer of 19mm board cladding fixed to the outside of the channels; and</li> <li>75mm glass wool (11kg/m<sup>3</sup>) insulation, positioned between the studs; and</li> <li>Two layers of 16mm fire-protective grade plasterboard fixed to the inside face of the studs.</li> </ul> <p>Brick Walls</p> <ul style="list-style-type: none"> <li>Single leaf of 150mm brick masonry with 13mm cement render on each face: OR</li> <li>Double brick: two leaves of 90mm clay brick masonry with a 20mm cavity between leaves.</li> </ul>	<p>Bedrooms:</p> <ul style="list-style-type: none"> <li>Fully glazed hinged door with certified <math>R_w + C_{tr}</math> 28dB rated door and frame including seals and 6mm glass.</li> </ul> <p>Other external doors:</p> <ul style="list-style-type: none"> <li>35mm solid core timber hinged door and frame system certified to <math>R_w</math> 28dB including seals: OR</li> <li>Glazed sliding door with 10mm glass and weather seals.</li> </ul>	<p>Bedrooms:</p> <ul style="list-style-type: none"> <li>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 (<math>R_w + C_{tr}</math> 28dB). Sealed awning or casement windows may use 6mm glazing instead: OR</li> <li>Up to 60% floor area: as per above but must be sealed awning or casement type windows (<math>R_w + C_{tr}</math> 31dB).</li> </ul> <p>Indoor Living and work areas</p> <ul style="list-style-type: none"> <li>Up to 40% of floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (<math>R_w + C_{tr}</math> 25dB): OR</li> <li>Up to 60% floor area: As per Bedrooms at up to 40% area (<math>R_w + C_{tr}</math> 28dB): OR</li> <li>Up to 80% floor area: As per Bedrooms at up to 60% area (<math>R_w + C_{tr}</math> 31dB).</li> </ul>	<p>To <math>R_w + C_{tr}</math> 35dB:</p> <ul style="list-style-type: none"> <li>Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling.</li> </ul>	<ul style="list-style-type: none"> <li>At least one outdoor living area located on the opposite side of the building from the transport corridor and/or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2 metres height above ground level.</li> </ul>	<ul style="list-style-type: none"> <li>Acoustically rated openings and ductwork to provide a minimum sound reduction performance of <math>R_w</math> 40dB into sensitive spaces.</li> <li>Evaporative systems require attenuated ceiling air vents to allow closed windows.</li> <li>Refrigerant-based systems need to be designed to achieve National Construction Code fresh air ventilation requirements.</li> <li>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.</li> </ul>
	Side On	<p>As per 'Facing' above, except <math>R_w + C_{tr}</math> values may be 3dB less, eg. glazed sliding door with 10mm glass and weathr seals for bedrooms.</p>	<p>As above, except <math>R_w + C_{tr}</math> values may be 3dB less, or max % area increased by 20%.</p>				
	Opposite	No specific requirements	No specific requirements				

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(Based on Table 3 of State Planning Policy 5.4.2019)**

Exposure Category	Orientation to corridor	Acoustic rating and example constructions					Mechanical ventilation / air conditioning considerations
		Walls	External Doors	Windows	Roofs and ceilings of highest floors	Outdoor living areas	
<b>B</b> Quiet House B	Facing	<p>Bedroom and Indoor Living and work areas to <math>R_w + C_{tr}</math> 50dB</p> <p>Single leaf of 90mm clay brick masonry with:</p> <ul style="list-style-type: none"> <li>A row of 70 mm x 35 mm timber studs or 64 mm steel studs at 600 mm centres;</li> <li>A cavity of 25 mm between leaves;</li> <li>50 mm glass wool or polyester cavity insulation (R2.0+) insulation between studs; and</li> <li>One layer of 10mm plasterboard fixed to the inside face.</li> <li>Single leaf of 220mm brick masonry with 13mm cement render on each face</li> <li>150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face.</li> </ul> <p>Double brick: two leaves of 90mm clay brick masonry with:</p>	<p>Bedrooms:</p> <ul style="list-style-type: none"> <li>Fully glazed hinged door with certified <math>R_w + C_{tr}</math> 31dB rated door and frame including seals and 10mm glass.</li> </ul> <p>Indoors living and work areas:</p> <ul style="list-style-type: none"> <li>35mm solid core timber hinged door and frame system certified to <math>R_w</math> 28dB including seals: OR</li> <li>Glazed sliding door with 10mm glass and weather seals.</li> </ul>	<p>Bedrooms:</p> <ul style="list-style-type: none"> <li>Total external door and window system area up to 40% of room floor areas: Fixed sash, awning or casement with minimum 6mm single or 6mm 12mm 6mm double insulated glazing (<math>R_w + C_{tr}</math> 31dB).</li> <li>Up to 60% floor area: as per above but must be minimum 10mm single or 6mm 12mm 10mm double insulated glazing (<math>R_w + C_{tr}</math> 34dB).</li> </ul> <p>Indoor Living and work areas</p> <ul style="list-style-type: none"> <li>Up to 40% floor area; Sliding or double hung with minimum 6mm single pane or 6mm 12mm 6mm double insulated glazing (<math>R_w + C_{tr}</math> 28dB). Sealed awning or casement windows may use 6mm glazing instead. : OR</li> <li>Up to 60% floor area: As per Bedrooms at up to 40% area (<math>R_w + C_{tr}</math> 31dB). : OR</li> <li>Up to 80% floor area: As per Bedrooms at up to 60% area (<math>R_w + C_{tr}</math> 34dB).</li> </ul>	<p>To <math>R_w + C_{tr}</math> 35dB:</p> <ul style="list-style-type: none"> <li>Concrete or terracotta tile sarking and at least 10mm plasterboard ceiling, R3.0+ insulation.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Metal sheet roof, sarking and at least 10mm plasterboard ceiling, R3.0+ insulation.</li> </ul>	<ul style="list-style-type: none"> <li>At least one outdoor living area located on the opposite side of the building from the corridor and/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.</li> </ul>	<ul style="list-style-type: none"> <li>Acoustically rated openings and ductwork to provide a minimum sound reduction performance of <math>R_w</math> 40dB into sensitive spaces.</li> <li>Evaporative systems require attenuated ceiling air vents to allow closed windows.</li> <li>Refrigerant-based systems need to be designed to achieve National Construction Code fresh air ventilation requirements.</li> <li>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.</li> </ul>
	Side On	<ul style="list-style-type: none"> <li>A 50mm cavity between leaves</li> <li>50mm glass wool or polyester cavity insulation (R2.0+).</li> <li>Resilient ties where required to connect leaves.</li> </ul> <p>Double brick: two leaves of 110mm clay brick masonry with</p> <ul style="list-style-type: none"> <li>50mm cavity between leaves and R2.0+ cavity insulation.</li> </ul>	<p>Bedrooms:</p> <ul style="list-style-type: none"> <li>Fully glazed hinged door with certified <math>R_w + C_{tr}</math> 28dB rated door and frame including seals and 6mm glass.</li> </ul> <p>Indoor Living and work areas:</p> <ul style="list-style-type: none"> <li>35mm solid core timber hinged door and frame system certified to <math>R_w</math> 28dB including seals: OR</li> <li>Glazed sliding door with 10 mm glass and weather seals.</li> </ul>	<p>Bedrooms:</p> <ul style="list-style-type: none"> <li>Total external door and window system area up to 40% of room floor area: Sliding or double hung with minimum 10 mm single or 6mm-12mm-10mm double insulated glazing (<math>R_w + C_{tr}</math> 28 dB). Sealed awning or casement windows may use 6 mm glazing instead. : OR</li> <li>Up to 60% floor area: as per above but must be sealed awning or casement type windows (<math>R_w + C_{tr}</math> 31dB).</li> </ul> <p>Indoor Living and work areas</p> <ul style="list-style-type: none"> <li>Up to 40% floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm 12mm 6mm double insulated glazing (<math>R_w + C_{tr}</math> 25dB). : OR</li> <li>Up to 60% floor area: As per Bedrooms at up to 40% area (<math>R_w + C_{tr}</math> 28 dB) : OR</li> <li>Up to 80% floor area: As per Bedrooms at up to 60% area (<math>R_w + C_{tr}</math> 31 dB).</li> </ul>			
	Opposite		<ul style="list-style-type: none"> <li>As above, except <math>R_w + C_{tr}</math> values may be 3dB less, or max % area increased by 20%.</li> </ul>	<ul style="list-style-type: none"> <li>As above, except <math>R_w + C_{tr}</math> values may be 3dB less, or max % area increased by 20%.</li> </ul>			