



Reference Number: LDP21/34 - 6036643

20 January 2022

Hatch Roberts Day  
Level 2 442 Murray Street  
PERTH WA 6000

**Local Development Plan - Stage 4 Kara Estate Treeby  
9001L Ghostgum Avenue TREEBY WA 6164**

The Local Development Plan (LDP) received on 14/10/2021 has been approved in accordance with Clause 52 of the Planning and Development (Local Planning Schemes) Regulations 2015.

Please ensure all prospective purchasers of the lots subject to the LDP are made aware of the approval.

You are reminded that in accordance with Clause 57 of the Regulations, the approval has effect for a period of 10 years from the date of this approval.

A signed copy of the document is attached for your records. In the event you have any questions, please contact the undersigned.

Should you require further information, please contact the City's Statutory Planning Department on 9411 3444.

Sincerely,

Milan Nathoo  
**Planning Officer**



**LOCAL DEVELOPMENT PLAN R-CODE VARIATIONS**

**General**

- All lots within this Local Development Plan are coded as per the approved Density Sites Plan or as shown on the Location Plan.
- This LDP relates to lots 30-40 and 600-647, 101-117 and 700. All other lots are shown for illustrative purposes.
- The requirements of the R-Codes and the RMD Codes (as applied through the City's Local Planning Policy *LPP 1.16 - Single House Standards for Medium Density Housing in the Development Zone*) are varied as shown on this plan.
- The requirements of the R-Codes, RMD Codes and Town Planning Scheme No. 3 shall be satisfied in all other matters.
- Consultation with adjoining or other landowners to achieve a variation to the R-Codes, in accordance with the approved Local Development Plan, is not required.

**5.1.6 Building Height**

- Lots 631-647, a minimum two storey building height is required for a portion of the dwelling fronting the Reserve for Recreation.

**5.1.2 Street Setbacks - Terrace lots (lots 30 - 40, 112 - 117 and 631 - 647)**

The following setbacks applies as minimums (no averaging):

- 2.0m / 3.0m minimum front setback to the building as per notations.
- 2.0m minimum front setback for minor projections, including porch, veranda, balconies, piers and/or blade walls.
- 1.5m minimum rear setback to the building and garage
- 2.0m minimum setback for all structures/buildings from the corner truncations.
- 1.0m minimum setback to secondary street for all buildings.

**5.1.3 Lot Boundary setbacks - Terrace lots (lots 30 - 40, 112 - 117 and 631 - 647)**

- Walls up to a lot boundary are permitted to both side boundaries, between the front and rear setback.
- Walls up to a lot boundary shall comply with Building Heights listed in Table 3 (Category B) of the Residential Design Codes

**5.2.3 Street Surveillance**

- Dwellings shall orientate as denoted on the plan as the primary entrance to the dwelling.
- Dwellings shall have at least one major opening from a habitable room fronting the primary street and secondary street.
- The secondary street major opening shall be located as not to be obstructed by solid portions of fencing.

**5.2.4 Street Walls and Fences - all lots**

- Primary street fencing shall wrap around the secondary street boundary for a minimum of 3.0m including truncations.

**5.4.4 C4.6 External fixtures, utilities and facilities**

- Lots 30-40, 112-117 and 631-647 must provide a 1.5m x 1.0m bin pad storage area at the rear of the property. For lots 30-39, 631-647, bin collection will occur in the laneway, in front of the garage.

**OTHER PLANNING CONSIDERATIONS**

**5.3.5 Vehicular Access**

- Note - Where secondary street access is not available due to developer installed retaining walls, primary street access is considered to meet deemed-to-comply criteria of 5.3.5 of the R-Codes.

**Noise Management**

- All lots are located within the Jandakot Airport 'Frame Area' and are to incorporate 6.38mm glazing to habitable rooms. Building Permit plans must clearly indicate that 6.38mm laminated glazing is provided to all relevant windows. Alternative glazing with an equal or greater weighted sound reduction index (noise reduction property) may be used subject to approval by the City.
- For those lots affected by noise emanating from Armadale Road dwellings are to be constructed to comply with the relevant 'Deemed to Comply' Quiet House packages specified below. Quiet House Package requirements are set out in Appendix A.
  - The following Quiet House Packages apply to the ground floor for any development: Package A: Lots 101 & 102, 627 & 628
  - The following Quiet House Packages apply to the first floor and above for any development:  
Package A: Lots 105 - 110, 600 - 602, 609 - 615, 622 - 626 & 630  
Package B: Lots 101 - 104 & 627 - 629
- For lots that require implementation of Quiet House Packages, all plans and supporting documents accompanying the Building Permit applications must clearly demonstrate compliance with the Deemed to Comply requirements, including mechanical ventilation requirements as part of the Building Permit Application.
- Alternative construction methods to those contained in the Deemed to Comply Quiet House packages may be accepted by the City of Cockburn where the alternative design and construction methods are supported by a further site specific acoustic report prepared by a suitably qualified acoustic consultant as part of the Development Application.

**HATCH | RobertsDay**

SIZE A3 1:1250

0 metres 12.5 25 37.5 50 62.5

I	UPDATE TO 5.2.4	220117	SJ	TT
H	REMOVE NO VEHICLE ACCESS	220114	SJ	TT
G	UPDATED PROVISIONS	220112	SJ	TT
F	CANDY LN ACCESS, NOTE 5.1.2.1	211213	SJ	TT
E	TEXT MODS, RCODES	211207	SJ	TT
D	TEXT MODS, RCODES	211201	SJ	TT
C	TEXT MODS, RCODES	211130	SJ	TT
REV	DESCRIPTION	YYMMDD	DRAWN	APPR'D

REF NO.  
**LWP TRE**

DRAW NO.  
**RD1 035**

REV.  
**I**

STAGE 4 LDP  
**Kara Estate, Treeby**  
City of Cockburn

**CITY OF COCKBURN  
LOCAL DEVELOPMENT PLAN**

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Plan 2 of 6**

*Lloyd George Acoustics*

**Appendix A**

**Quiet House Packages**

# **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 Windows	Facing	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 28</math>):                             <ul style="list-style-type: none"> <li>Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing;</li> <li>Sealed awning or casement windows with minimum 6mm glass.</li> </ul> </li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 31</math>):                             <ul style="list-style-type: none"> <li>Sealed awning or casement windows with minimum 6mm glass.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 25</math>):                             <ul style="list-style-type: none"> <li>Sliding or double hung with minimum 6mm single or 6mm-12mm-6mm double insulated glazing;</li> </ul> </li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 28</math>);</li> <li>Up to 80% floor area (<math>R_w + C_{tr} \geq 31</math>).</li> </ul>
	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"> <li>Fully glazed hinged door with certified <math>R_w + C_{tr} \geq 28</math> rated door and frame including seals and 6mm glass.</li> </ul>	<ul style="list-style-type: none"> <li>Doors to achieve <math>R_w + C_{tr} \geq 25</math>:                             <ul style="list-style-type: none"> <li>35mm Solid timber core hinged door and frame system certified to <math>R_w 28</math> including seals;</li> <li>Glazed sliding door with 10mm glass and weather seals.</li> </ul> </li> </ul>
	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"> <li><math>R_w + C_{tr} \geq 45</math>:                             <ul style="list-style-type: none"> <li>Two leaves of 90mm thick clay brick masonry with minimum 20mm cavity; or</li> <li>Single leaf of 150mm brick masonry with 13mm cement render on each face; or</li> <li>One row of 92mm studs at 600mm centres with:                                     <ul style="list-style-type: none"> <li>Resilient steel channels fixed to the outside of the studs; and</li> <li>9.5mm hardboard or fibre cement sheeting or 11mm fibre cement weatherboards fixed to the outside;</li> <li>75mm thick mineral wool insulation with a density of at least <math>11\text{kgkg/m}^3</math>; and</li> <li>2 x 16mm fire-rated plasterboard to inside.</li> </ul> </li> </ul> </li> </ul>	
Roofs and Ceilings	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 35</math>:                             <ul style="list-style-type: none"> <li>Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard.</li> </ul> </li> </ul>	
Outdoor Living Areas		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.	

## Quiet House Package B

59-62 dB L<sub>Aeq</sub>(Day) & 54-57 dB L<sub>Aeq</sub>(Night)

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 31</math>):                             <ul style="list-style-type: none"> <li>Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing.</li> </ul> </li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 34</math>):                             <ul style="list-style-type: none"> <li>Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 28</math>):                             <ul style="list-style-type: none"> <li>Sliding or double hung with 6mm-12mm-10mm double insulated glazing;</li> <li>Sealed awning or casement windows with minimum 6mm glass.</li> </ul> </li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 31</math>);</li> <li>Up to 80% floor area (<math>R_w + C_{tr} \geq 34</math>).</li> </ul>
	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"> <li>Fully glazed hinged door with certified <math>R_w + C_{tr} \geq 31</math> rated door and frame including seals and 10mm glass.</li> </ul>	<ul style="list-style-type: none"> <li>Doors to achieve <math>R_w + C_{tr} \geq 28</math>:                             <ul style="list-style-type: none"> <li>40mm Solid timber core hinged door and frame system certified to <math>R_w 32</math> including seals;</li> <li>Fully glazed hinged door with certified <math>R_w + C_{tr} \geq 28</math> rated door and frame including seals and 6mm glass.</li> </ul> </li> </ul>
	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"> <li><math>R_w + C_{tr} \geq 50</math>:                             <ul style="list-style-type: none"> <li>Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester (24kg/m<sup>3</sup>). Resilient ties used where required to connect leaves.</li> <li>Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m<sup>3</sup>).</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> <li>Single leaf of 90mm clay brick masonry with:                                     <ul style="list-style-type: none"> <li>A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres;</li> <li>A cavity of 25mm between leaves;</li> <li>50mm glasswool or polyester insulation (11kg/m<sup>3</sup>) between studs; and</li> <li>One layer of 10mm plasterboard fixed to the inside face.</li> </ul> </li> </ul> </li> </ul>	
Roofs and Ceilings	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 35</math>:                             <ul style="list-style-type: none"> <li>Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling with R3.0+ fibrous insulation.</li> </ul> </li> </ul>	
Outdoor Living Areas		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 2.4 metres height above ground level.	



### **Mechanical Ventilation requirements**

In implementing the acceptable treatment packages, the following mechanical ventilation / air-conditioning considerations are required:

- Acoustically rated openings and ductwork to provide a minimum sound reduction performance of  $R_w$  40 dB into sensitive spaces;
- Evaporative systems require attenuated ceiling air vents to allow closed windows;
- Refrigerant based systems need to be designed to achieve National Construction Code fresh air ventilation requirements;
- 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.

### **Notification**

Notifications on title advise prospective purchasers of the potential for noise impacts from major transport corridors and help with managing expectations.

The Notification is to state as follows:

*This lot is in the vicinity of a transport corridor and is affected, or may in the future be affected, by road and rail transport noise. Road and rail transport noise levels may rise or fall over time depending on the type and volume of traffic.*

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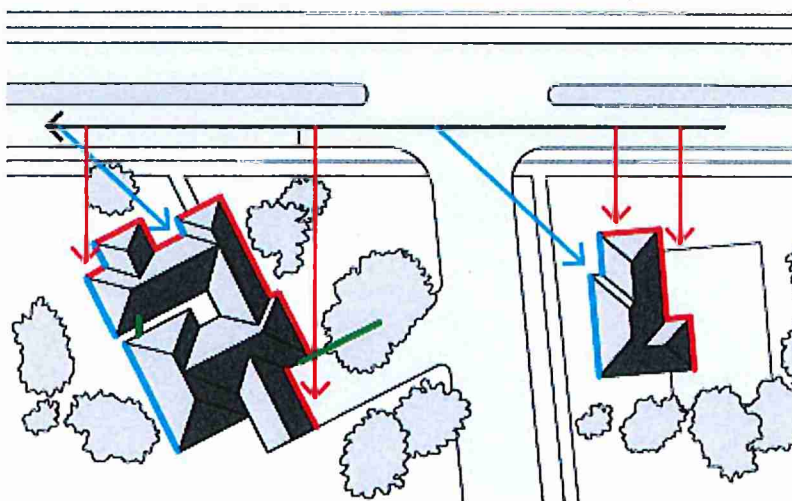
The packages and information provided on the following pages are taken from *Road and Rail Noise Guidelines* (September 2019).

Where outdoor and indoor noise levels received by a noise-sensitive land-use and/or development exceed the policy's noise target, implementation of quiet house requirements is an acceptable solution.

The quiet house packages are not the only solution to achieving acceptable internal transport noise levels. A suitably qualified acoustical engineer or consultant may also determine more tailored acoustic design requirements for buildings in a transport noise corridor by carrying out acoustic design in accordance with relevant industry standards. This includes the need to meet the relevant design targets specified in AS/NZS 2107:2016 for road traffic noise.

With regards to the packages, the following definitions are provided:

- **Facing** the transport corridor (red): Any part of a building façade is 'facing' the transport corridor if any straight line drawn perpendicular (at a 90 degree angle) to its nearest road lane or railway line intersects that part of the façade without obstruction (ignoring any fence).
- **Side-on** to transport corridor (blue): Any part of a building façade that is not 'facing' is 'side-on' to the transport corridor if any straight line, at any angle, can be drawn from it to intersect the nearest road lane or railway line without obstruction (ignoring any fence).
- **Opposite** to transport corridor (green): Neither 'side on' nor 'facing', as defined above.



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