

ENGINEERING JUSTIFICATION REPORT – TRAFFIC & SWEPT PATH MANEUVERABILITY

Subject Property: 97 Sherwood Road, Rocklea QLD 4106

Proposed Development: Material Change of Use (MCU) – Class 1a to Class 1b
(Rooming Accommodation)

Applicable Framework: Brisbane City Plan 2014 (TAPS Planning Scheme Policy) &
AS2890.1:2004 (Parking Facilities — Off-street car parking) [Brisbane City Council City
Plan 2014, Traffic Impact & Swept Path Assessments]

1. Executive Summary & Design Vehicle

This technical justification evaluates the performance, spatial efficiency, and safety of the proposed 4 off-street parking layout servicing the rooming accommodation. The assessment vehicle used to verify geometric compliance is the standard **B85 Design Vehicle Template**, which directly accommodates mid-to-large SUVs, benchmarked against a *Toyota Kluger* profile [Australian Standard AS2890.1].

2. Layout Geometry & Shared Maneuvering Apron

- **Dimensions & Configuration:** The subject site features a total frontage width of **10,000 mm (10.0m)**. Off-street parking is distributed between **Car 1 & Car 2** (positioned internally within the existing approved structural garage footprint) and **Car 3 & Car 4** (positioned symmetrically within the **6,000 mm (6.0m)** front setback).
- **Permanent Central Hatchway Apron:** A foundational design constraint of this parking configuration is the designation of a **permanently clear, non-parking central hatchway corridor** acting as the shared internal driveway. This clear zone provides an unobstructed width of approximately **4.0 metres**, directly feeding all 4 parking spaces.

3. Swept Path Maneuverability Performance

- **Garage Spaces (Car 1 & 2):** Under **AS2890.1 Clause 2.4**, a standard Class 1A/2 parking space requires a minimum perpendicular aisle width of **5.8 metres** to complete a clean reverse maneuver [Australian Standard AS2890.1]. The subject property features an internal driveway maneuvering clearance depth of **6,900 mm (6.9m)** from the garage door line to the property boundary. Because this clearance substantially exceeds the statutory requirement ($6.9\text{m} > 5.8\text{m}$), vehicles in Car 1 and Car 2 can cleanly reverse out of the garage into the central corridor before moving into a forward gear.
- **Setback Spaces (Car 3 & 4) & Open Boundary Exception:** Car 3 and Car 4 are arranged parallel to the property boundaries within the front setback. Because the **entire 10.0-metre frontage is completely open, unfenced, and**

unconstrained, vehicle body sweep envelopes (specifically front and rear overhang tracking) are entirely clear of physical conflict hazards. Vehicles can turn cleanly directly into the spaces from the **One Way** traffic stream of Sherwood Road.

- **Forward-Gear Site Egress:** The combination of the permanently clear central hatchway apron and the unconstrained 10m open frontage functions as an optimal on-site turning envelope. Vehicles reversing out of Spaces 1 or 2 can pivot within the central hatch zone, completing a safe multi-point turn entirely on-site. This satisfies council provisions by ensuring vehicle egress onto Sherwood Road occurs safely in a **forward-gear motion only**, completely eliminating the need to reverse onto the public road.

4. Compliance with Pedestrian Safety & Sightlines

- **Sight Splays:** **AS2890.1 Figure 3.2** mandates a **2.0m x 2.5m pedestrian sight triangle** at the property boundary where driveways meet the footpath [Australian Standard AS2890.1]. Because there is **no front fence structure**, visibility between exiting drivers and pedestrians on the Sherwood Road footpath is entirely unobstructed. The parallel parking arrangement of Car 3 and Car 4 does not introduce visual impediments within the critical sight triangles.

5. Conclusion

The proposed layout safely accommodates 4 off-street B85 design vehicles without crossing structural boundaries or risking collisions with buildings. The open 10m frontage eliminates the spatial constraints typical of fenced boundaries, validating the arrangement as highly functional under the BCC TAPS policy framework.

The house was originally built with the intention of 6 different couple friends enjoy shared living at the retirement to help each other in need and hence the building name was given “FRIENDS”. The owner is now 65+ and wish to communicate the message to his friends for available options with 5 couple friends will live in the house and one room will be dedicated for another young caretaker couple friend to live in for 24hr care giving services

As per owner's understanding from the meeting held with BCC on 22/07/2025 vide application reference A006811728, If 6 couples own 16.7% share each as TIC (Tenant-in-common) then rooming accommodation approval is not required for 12 people to live in as owners. However young caregiver couple friend may not like to live in and continue giving the services as one of the owners and hence at least one room should be allocated to non-owner care giver to rent for 24-hour services and hence rooming accommodation approval is required for a minimum of 12. It is also possible that there will be many friends who would like to join the group but cannot afford to buy but prefer to rent. In that case also rooming accommodation approval for 6 couples would be required or even more say 15 people to live in. More is better since cost of caregiver salary per couple would be reduced. As per report by "Running man fire" maximum 15 people can live in the house subject to approval by relevant city council. However, I would not like to apply for 15. Please concentrate on getting approval for 12.

Minimum 4 on site parking for 6 rooms for 6 couples
Please see the car parking layout for 4 on-site car parks. As per AI this plan is compliant.
Please refer attached AI report on

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FLOOD RISK MANAGEMENT & EMERGENCY EVACUATION PLAN

**And modify
EVACUATION PLAN FOR FLOOD IN LINE WITH
FIRE SAFETY EVACUATION PLAN SUBMITTED BY
“RUNNING MAN FIRE”**

Also, future provision of LIFT and 2nd Kitchen in living area and disabled Toilet in ground floor should be given on the same application for better interest of the residents:

Why 2nd kitchen:

Old age people might be more adamant of not mixing vegetarian and non-vegetarian utensils and cooking area. Therefore, having a 2nd kitchen in upstairs living area would be helpful.

LIFT: This will be essential for old age people when movement becomes restricted since habitable floor is at 1st floor.

Disabled Bathroom:

Ground floor bathroom will be modified as an when required

