rytenskild
Traffic Engineering

TRANSPORT IMPACT ASSESSMENT

PROPOSED MULTIPLE DWELLING DEVELOPMENT

LOT 4088 ON DP1182419 (LOT 80), HUMPHRIES ROAD, BONNYRIGG

(RESPONSE TO INFORMATION REQUEST)

Prepared for:

TRADERS IN PURPLE

13 JUNE 2024

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1.0 INTRODUCTION

Rytenskild Traffic Engineering (RTE) has been engaged by Traders In Purple to prepare a Transport Impact Assessment of its proposed multiple dwelling development at Bonnyrigg.

This report forms part of a Development Application to be lodged with the City of Fairfield. The following issues have been assessed during the study:

- Car parking supply and design;
- Access arrangements;
- Provision for safe pedestrian and cyclist's access;
- Service vehicle access and manoeuvring.

This version of the report reflects the latest drawings which have been amended to address matters raised by Council.

2.0 SUBJECT SITE

As shown in Figure 2.1, the subject site is located on the north eastern side of Newleaf Parade / Bishop Crescent intersection. The site is identified as Lot 80 within the subdivision of Lot 4099 on DP1182418 and has a total site area of approximately 13,238m^2.

The development area is currently zoned as R1 General Residential.

Images of the subject site are shown in Figure 2.1.

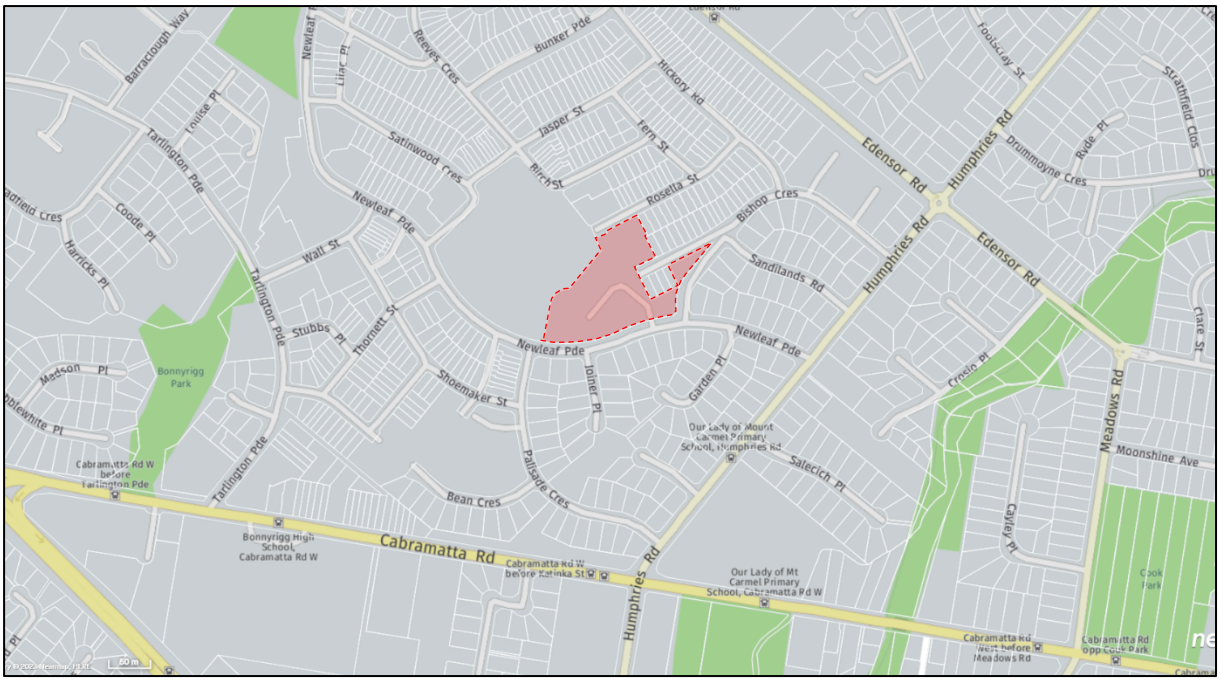

FIGURE 2.1 – LOCATION OF SUBJECT SITE

3.0 DEVELOPMENT PROPOSAL

The proposal is for a multiple dwelling development comprising of 25 apartments including 24x two-bedroom units, and 1x one-bedroom unit.

A total of 27 car parking spaces are proposed over basement level, including four accessible (PWD) spaces. Access is proposed to be gained via a new crossover located towards the eastern end of the Newleaf Parade frontage.

The proposed ground floor and basement plans are shown in Figures 3.1 and 3.2.

FIGURE 3.1 – PROPOSED GROUND FLOOR PLAN

FIGURE 3.2 – PROPOSED BASEMENT PLAN

4.0 CAR PARKING

4.1 Supply

It is noted that the Fairfield City Wide DCP 2013 does not stipulate car parking rates for the Bonnyrigg Living Communities area. Given this, the development has been assessed based on the recommended car parking rates outlined in Appendix D of the GTA TMAP (2018), which are provided below:

Medium Density:
0.6 spaces per one bedroom dwelling
0.9 spaces per two bedroom dwelling
1 visitor space for every five dwellings

Accordingly, the requirements under the TMAP for car parking are as follows.

Table 4.1: TMAP requirement for Car Parking

Component	Acceptable Outcome
Multiple Dwelling: 24x two-bedroom units 1x one-bedroom unit	 21.6 (22) spaces 0.6 (1) spaces
Visitors: 25x units	5 spaces
Total:	**27.2 spaces**

The proposed layout provides a total of 27 residential car parking spaces.

4.2 Design

The geometric layout of the proposed parking facilities has generally been designed to comply with the relevant requirements specified in the AS2890.1: 2004.

The proposed car parking layout has the following dimensions:

Table 4.2 – Car Parking Design Characteristics

Design Aspect	Minimum AS2890.1 Standard	Proposed Provision	Compliance
Parking space length: - General - PWD Bay	 5.4 metres 5.4 metres	 5.4 metres 5.4 metres	 Compliant Compliant
Parking space width: - General - PWD Bay	 2.6 metres 2.4 metres	 Min 2.5 metres 2.4 metres	 Compliant Compliant
Aisle Width: - Parking aisle - Circulation aisle	 5.8 metres 5.8 metres	 > 6.2 metres Min 6.6 metres	 Compliant Compliant
Maximum Gradient - Parking Bay - Parking Aisle - PWD Bay	 1:20 (5.0%) 1:16 (6.25%) 1:40 (2.5%)	 <1:20 (5.0%) <1:20 (5.0%) <1:40 (2.5%)	Compliant
Maximum Change in Grade	1:8 (12.5%) summit 1:6.67 (15.0%) sag	<1:8 (12.5%) summit <1:8 (12.5%) sag	Compliant
Height Clearance - General Min. - Absolute Min.	 2.2 metres N/A	 N/A	 Compliant
Parking Aisle Extension	1 metre beyond last bay	1 metre beyond last bay	Compliant

A swept path analysis of the proposed car park indicates that the required design vehicle will be able to access and manoeuvre within the facility satisfactorily.

Typical parking dimensions are shown in Figure 4.1 and 4.2.

Swept paths for B85 vehicles are shown in Figures 4.3 and 4.6.

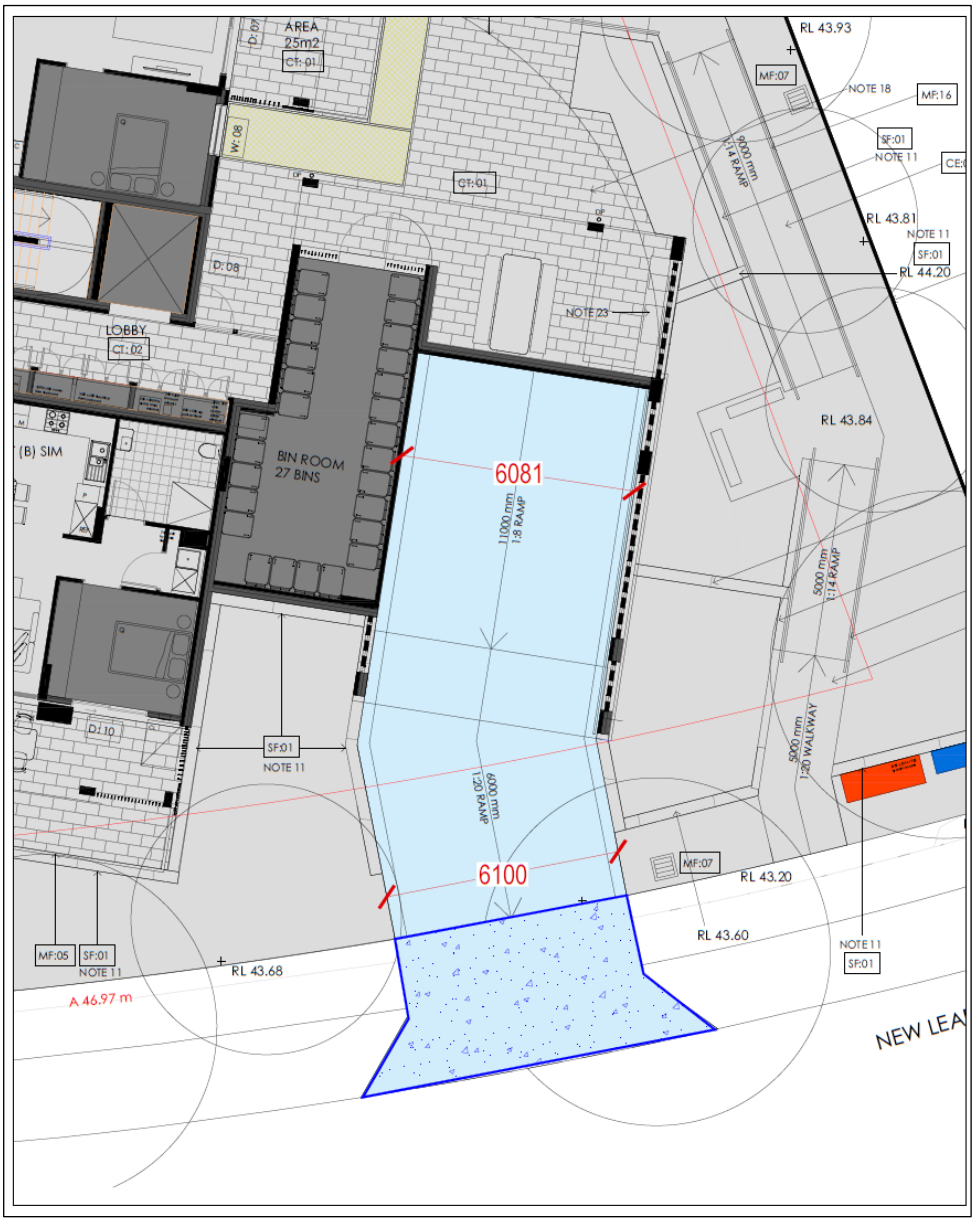

FIGURE 4.1 – PROPOSED CAR PARKING DIMENSIONS

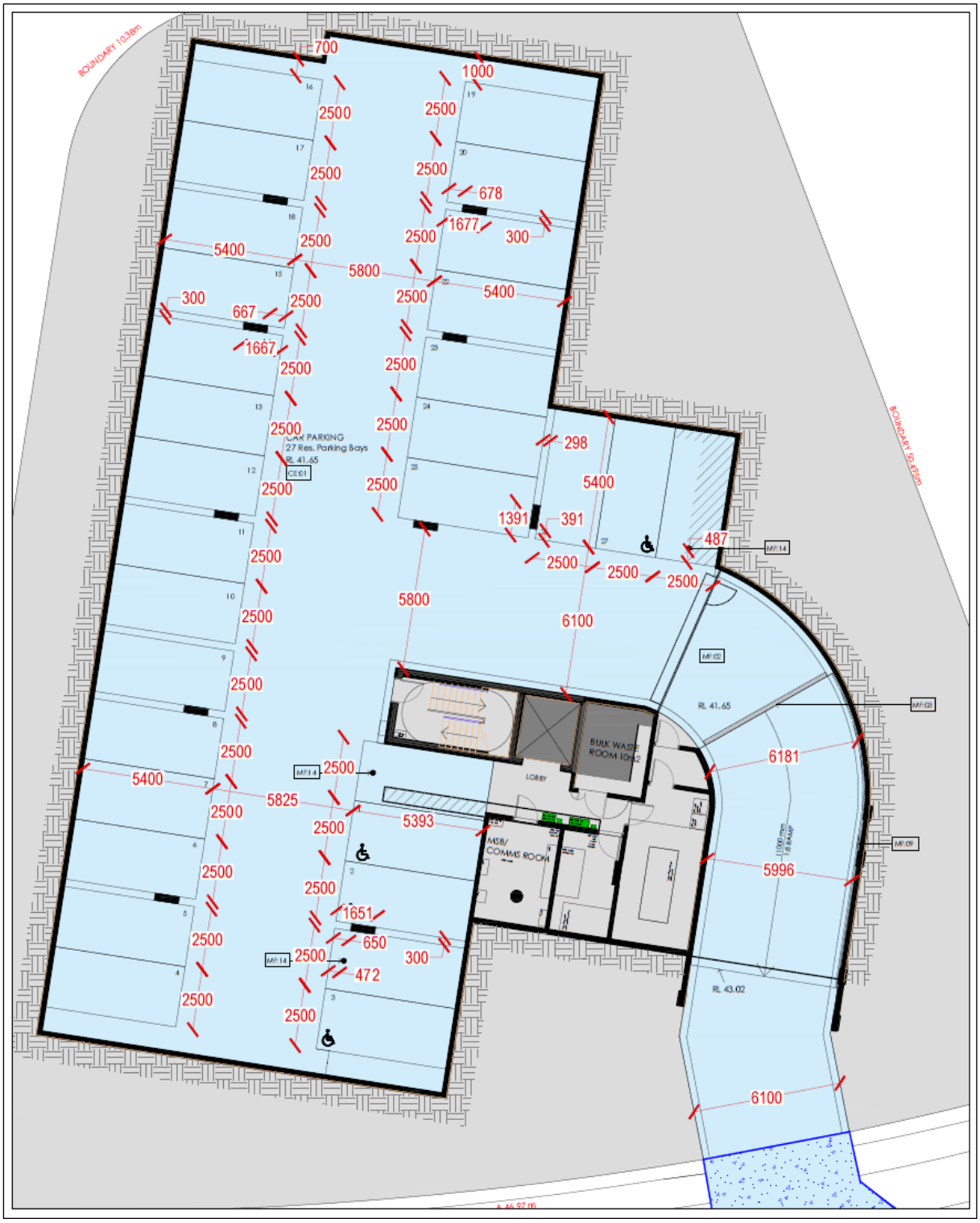

FIGURE 4.2 – PROPOSED CAR PARKING DIMENSIONS

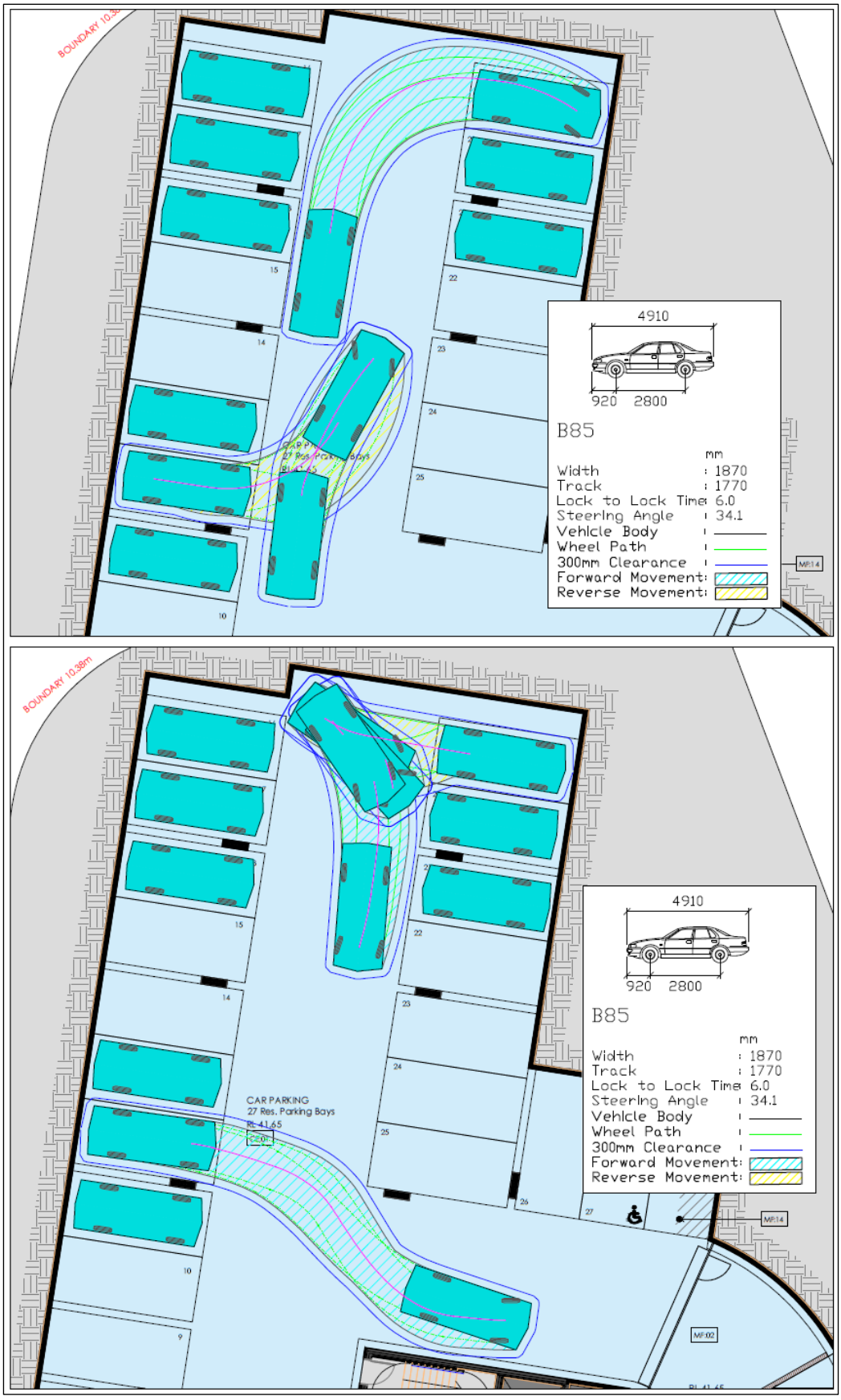

FIGURE 4.3 – B85 VEHICLE SWEPT PATHS

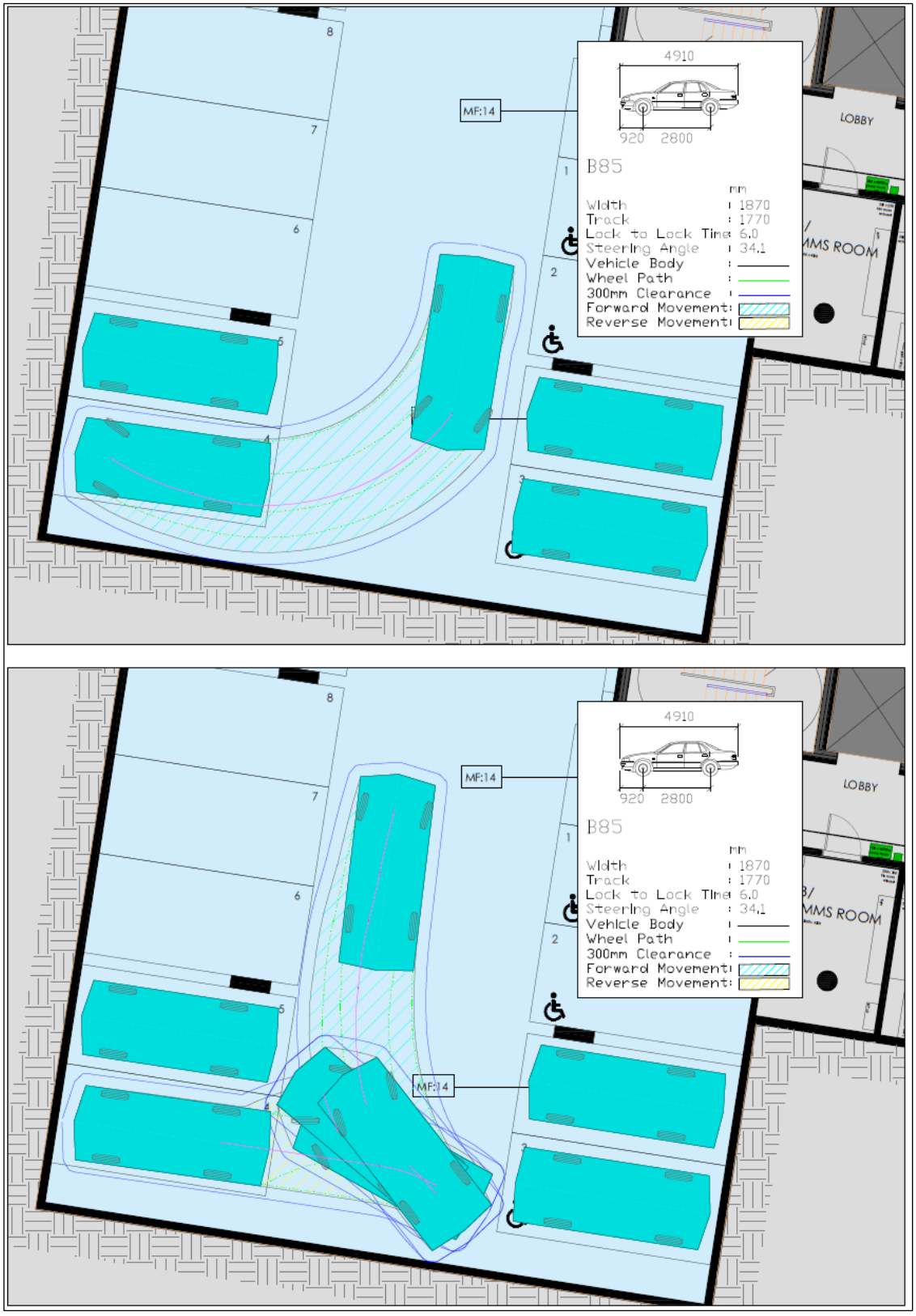

FIGURE 4.4 – B85 VEHICLE SWEPT PATHS

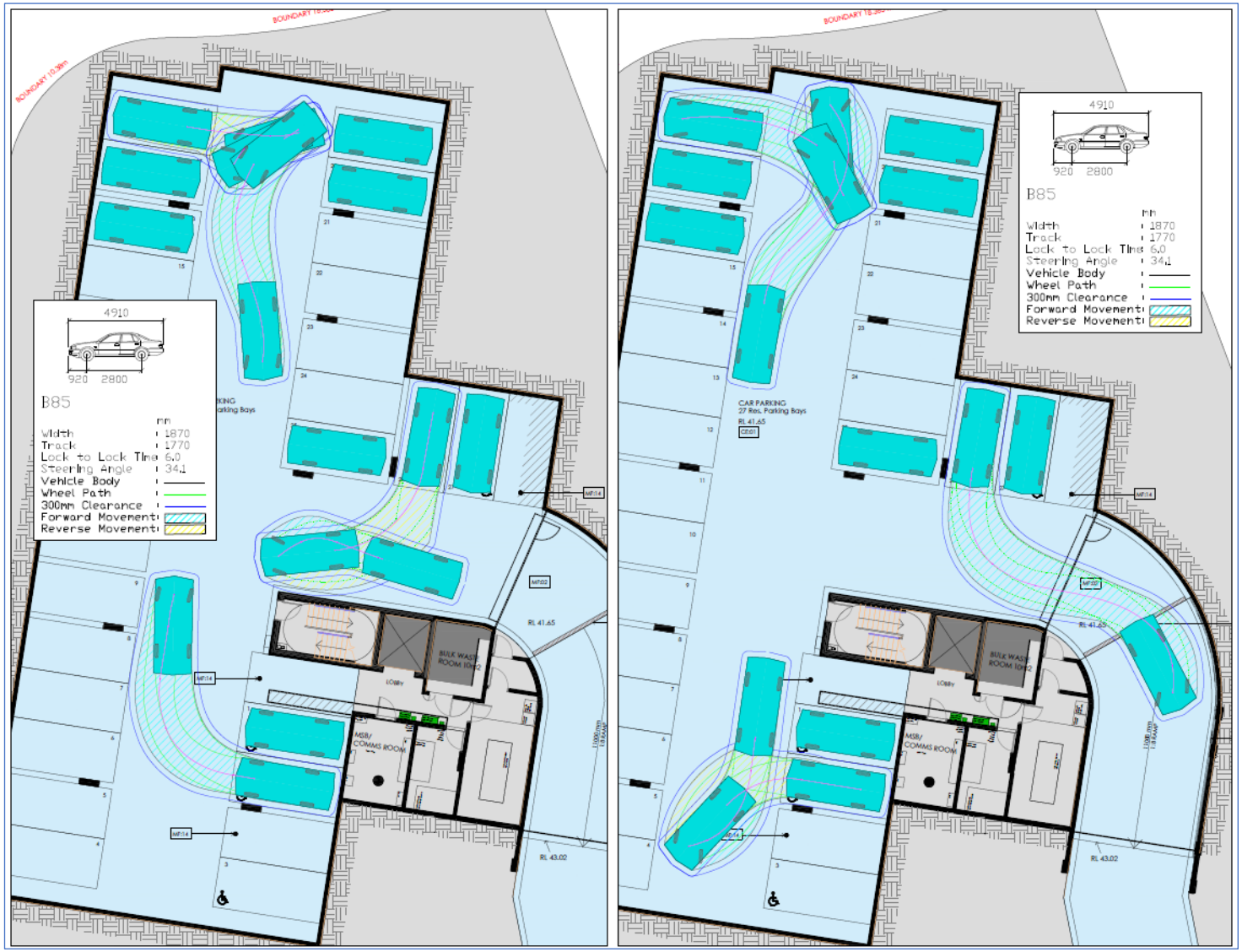

FIGURE 4.5 – B85 VEHICLE SWEPT PATHS

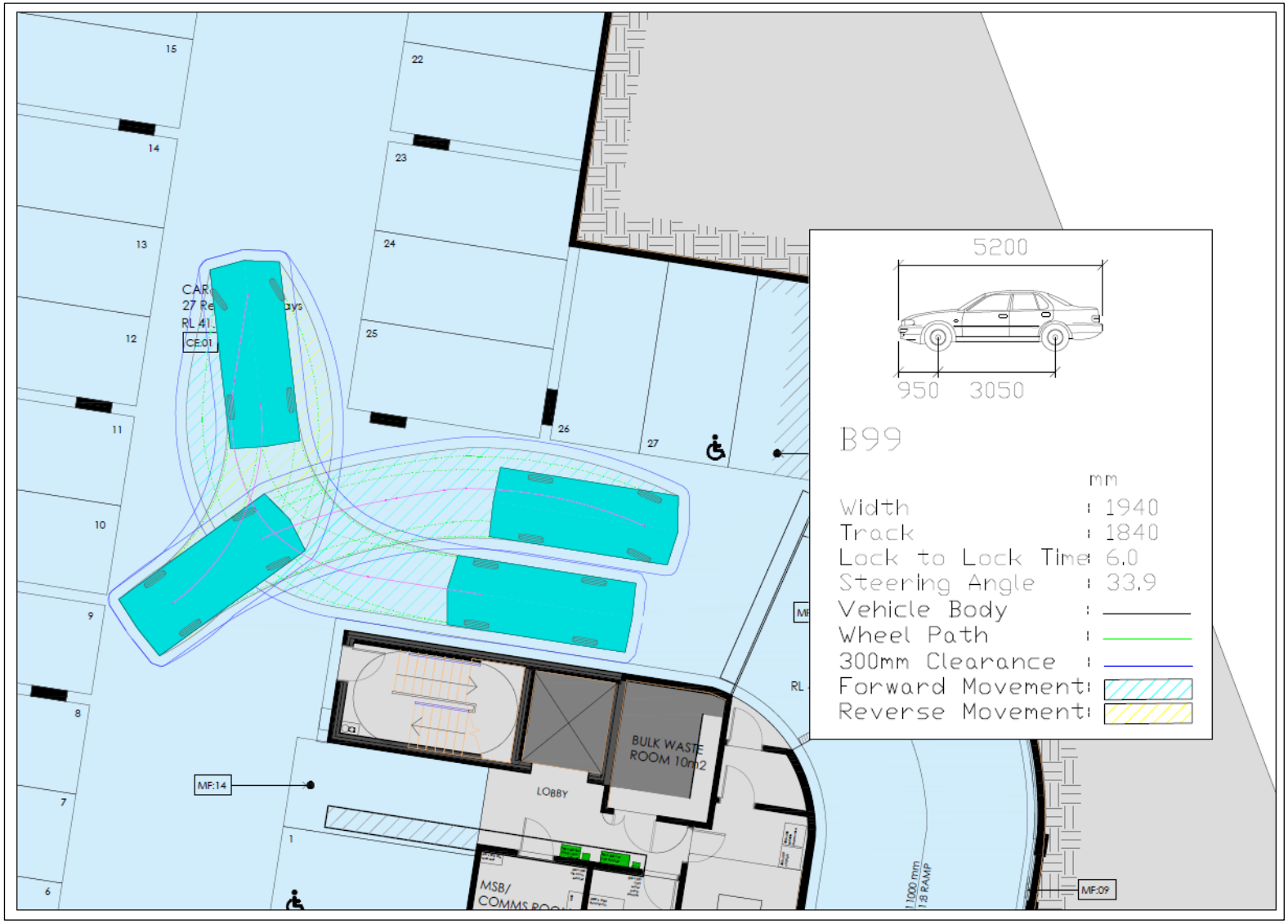

FIGURE 4.6 – B99 VEHICLE SWEPT PATHS

5.0 VEHICLE ACCESS ARRANGEMENTS

The location of the proposed crossover in relation to Joiner Court is shown in Figure 5.1. As shown, the proposed driveway will be directly opposite Joiner Court and therefore provide for satisfactory turning arrangements to both the access and Joiner Court.

Swept paths for a B99 design vehicle entering and exiting the site is shown in Figure 5.2.

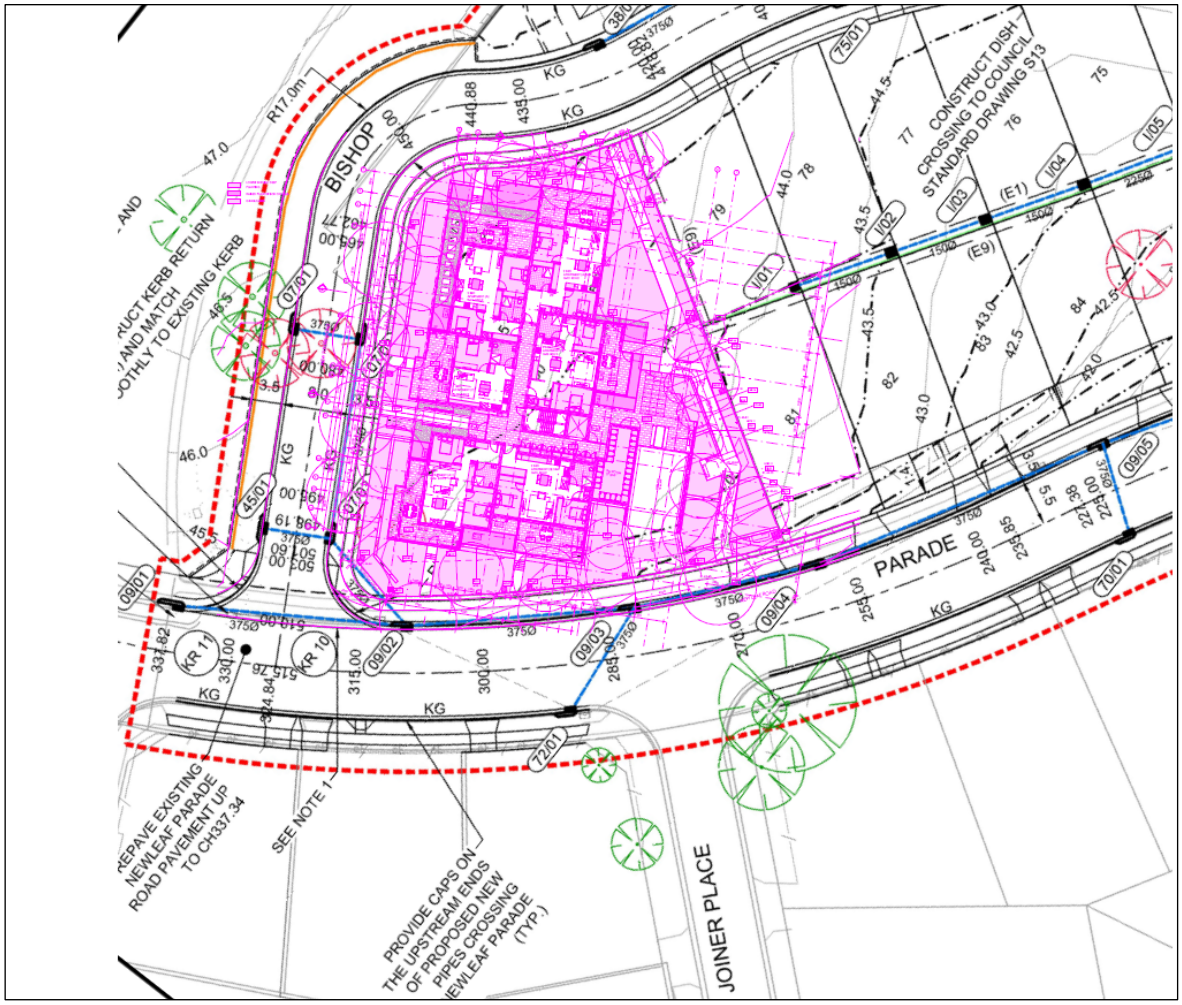

FIGURE 5.1 – PROPOSED ACCESS ARRANGEMENTS

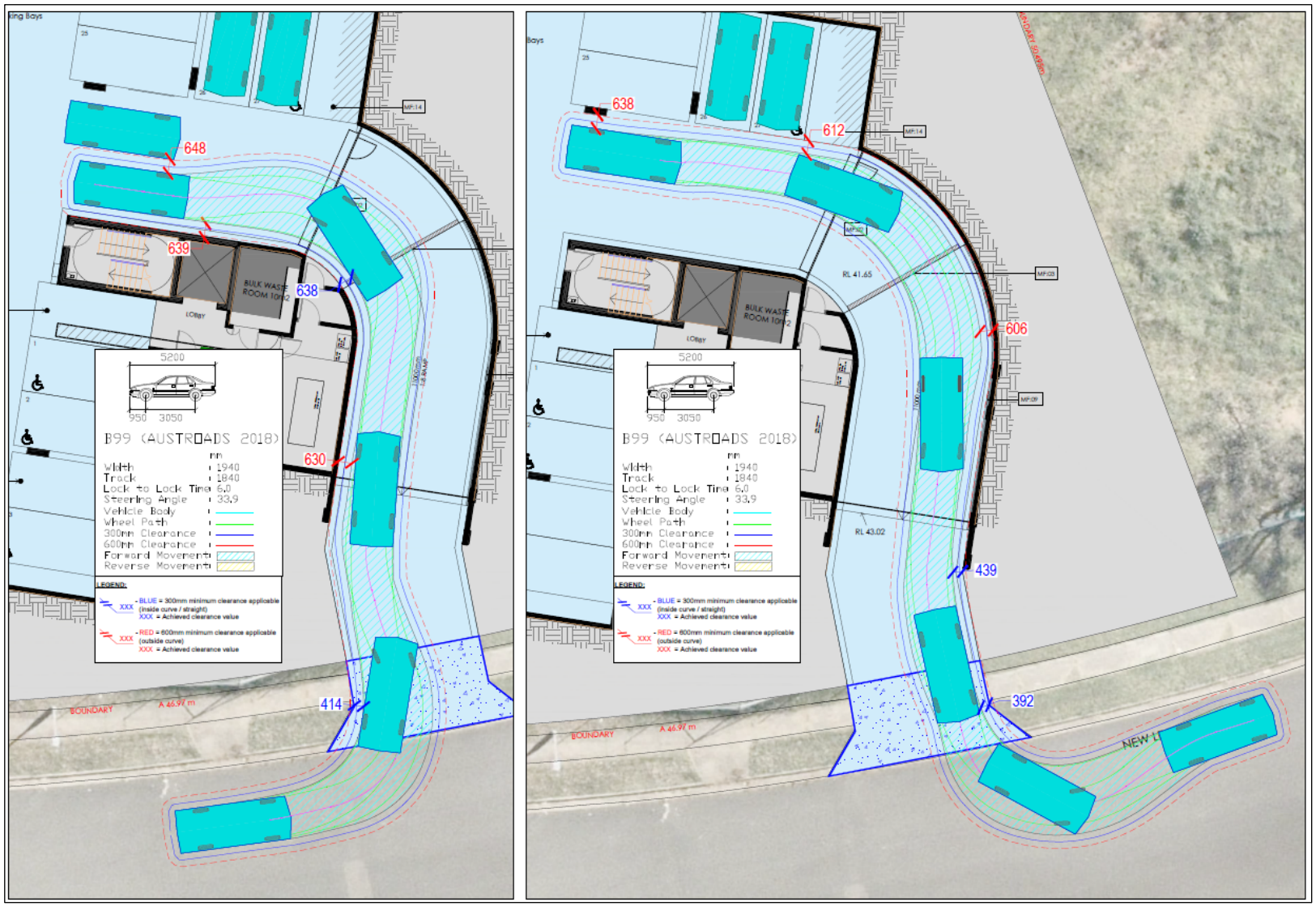

FIGURE 5.2 – SWEPT PATHS FOR A B99 DESIGN VEHICLE ENTERING / EXITING THE SITE

6.0 PROVISION FOR SERVICE VEHICLES

Waste collection and other services are proposed to be carried out kerbside. This is considered satisfactory given that the site is located on a corner block and thus has ample street frontage for the provision of kerbside servicing.

7.0 PROVISION FOR PEDESTRIANS AND BICYCLES

A pedestrian pathway has been provided along the New Leaf Road frontage and provides direct access to the site.

The Fairfield City Wide DCP (2013) does not stipulate bicycle parking requirements for residential uses.

8.0 SUMMARY OF CONCLUSIONS & RECOMMENDATIONS

- The subject site is located on the north eastern side of Newleaf Parade / Bishop Crescent intersection. The site is identified as Lot 80 within subdivision of Lot 4099 on DP1182418 and has a total area of approximately 13,238m^2. The development area is currently zoned as R1 General Residential.

- The proposal is for a multiple dwelling development comprising of 25 apartments including 24x two-bedroom units, and 1x one-bedroom unit.

- Application of the car parking recommendations outlined in Appendix D of the GTA TMAP (2018) to the proposal results in a car parking requirement of 27.2 car parking spaces for residents. The proposed layout provides a total of 27 residential car parking spaces.

- The geometric layout of the proposed parking facilities has generally been designed to comply with the relevant requirements specified in the AS2890.1: 2004.

- The proposed vehicle crossover has been designed in accordance with IPWEA Standard Drawing RS-051. A pedestrian sight splay in accordance with AS2890.1:2004. has been provided on the exit side of the vehicle crossover.

- Waste collection and other services are proposed to be carried out kerbside. This is considered satisfactory given that the site is located on a corner block and thus has ample street frontage for the provision of kerbside servicing.

- A pedestrian pathway has been provided along the New Leaf Road frontage and provides direct access to the site.

- The Fairfield City Wide DCP (2013) does not stipulate bicycle parking requirements for residential uses.