WASTE MANAGEMENT PLAN

PROPOSED LAND LEASE COMMUNITY
COLLEGE DRIVE, FLAGSTONE

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2024/1532

Date: 25 March 2025

Queensland Government

Prepared for Lodge Management
C24005AR002

HURLEY
CONSULTING ENGINEERS

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Revision	Date	Author	Verifier	Approver
A	14/02/2025	CH	SH	CH
B	17/02/2025	CH	SH	CH

Approved for issue for and on behalf of Hurley Consulting Engineers Pty Ltd

Craig Hurley BE(Civil) MIEAust CPEng RPEQ 15957
Director & Principal Civil Engineer

1 INTRODUCTION

Hurley Consulting Engineers has been commissioned by Lodge Management to prepare a Waste Management Plan for a proposed Land Lease Community at College Drive, Flagstone. The project involves the development of a proposed land lease retirement community, to provide between 280 and 310 dwellings and communal facilities as shown on the layout plans prepared by RPS and enclosed in **Appendix A**.

The intent of this report is to review potential waste generation and corresponding waste collection strategies for the development in general accordance with the EDQ Greater Flagstone Priority Development Area scheme requirements. This report responds to the Further Issues from Economic Development Queensland dated 29 of January 2025 relating to development application DEV2024/1532.

2 SITE DESCRIPTION

The subject site is located at College Drive, Flagstone, on land described as Lot 50028 on SP342150. The site has a total area of approximately 12.04 hectares and is located within the Logan City Council (LCC) local government area and the Economic Development Queensland (EDQ) Greater Flagstone Priority Development Area (PDA).

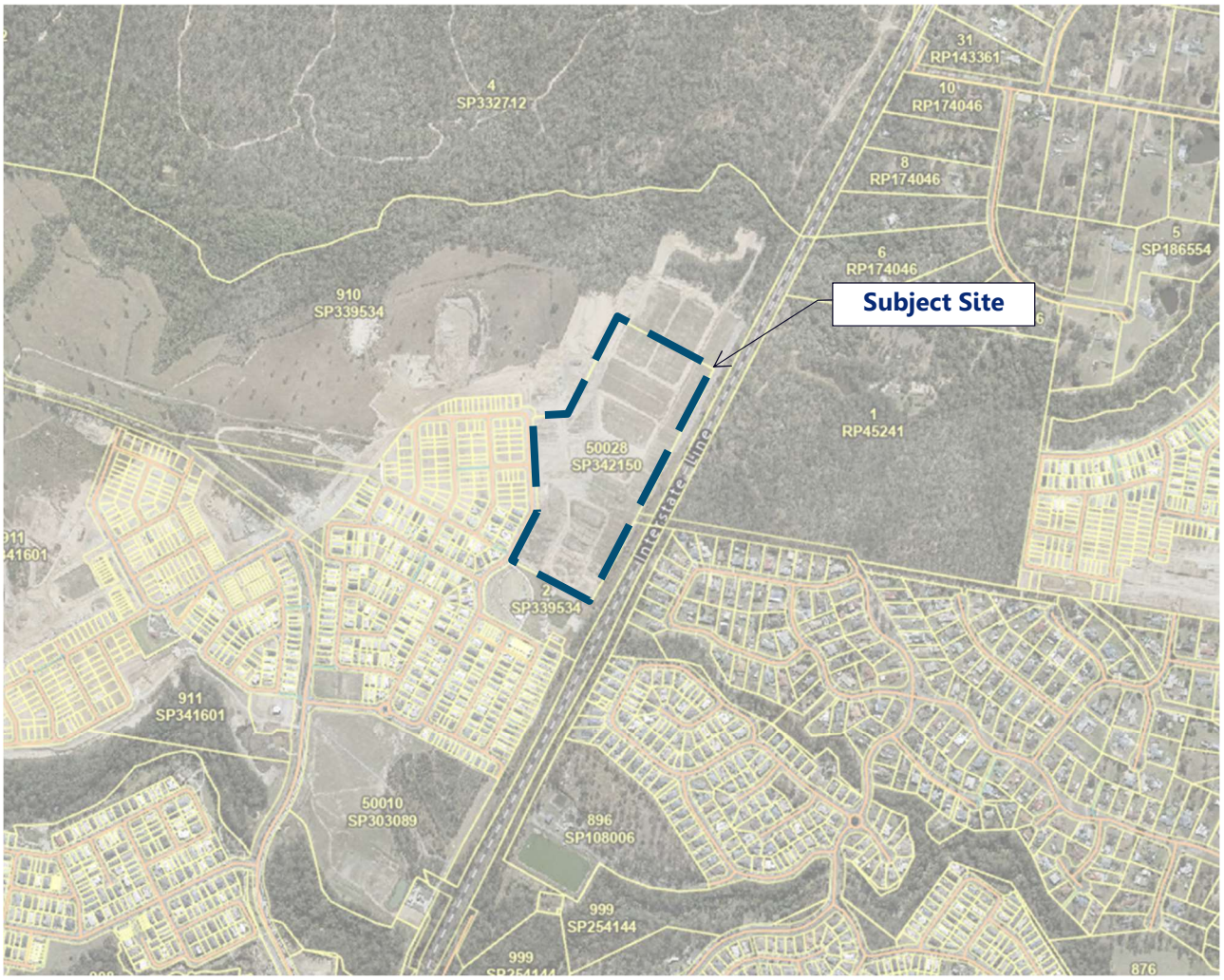

Figure 2.1 – Locality Plan
Image Source: QLD Globe 2024

The site forms part of the overall master development plan delivered by PEET and the site is endorsed under EDQ approval DEV2012/403/72. The site is bounded by the Interstate railway line along the eastern boundary, the recently constructed drainage reserve in public land to the south and the adjacent PEET residential development to the west and north.

Refuse collection services for the surrounding residential areas are provided by Logan City Council via kerbside wheelie bins.

3 OPERATIONAL PHASE

3.1 WASTE GENERATION

The proposed development creates detached dwellings with a typical occupancy rate of approximately 1.7 people per dwelling. This is below the typical occupancy rate of approximately 2.7-2.9 people per dwelling for detached freehold residential houses. Waste generation is expected to be lower on a per dwelling basis for the proposed development than for typical freehold residential houses.

Based on the above and given that all dwellings have direct frontage to the internal circulation roads, refuse collection for the proposed dwellings will be via 140L or 240L general waste bins collected weekly and 140L or 240L recycling bins collected fortnightly. There is minimal green waste generated from low-maintenance communities of this nature and therefore green waste bins are not proposed to be provided to the residents.

3.2 BIN STORAGE & COLLECTION

Bin storage for each dwelling will occur on each lot. There is ample space available to store bins in the side setbacks adjacent to each house or, if preferred by the individual resident, within the garage. Refuse storage areas for each unit will be screened from public view.

Prior to the scheduled servicing of the development, residents will place their bins in front of their homes for collection by the refuse service provider. Residents will also be responsible for returning bins once collected. The waste collection servicing procedure will be managed and controlled through each residents Community Site Agreement.

The internal roadways have been designed to accommodate the swept path of a Logan City Council or Brisbane City Council RCV Side Loading refuse collection vehicle as per standard drawing BSD-3004. Internal roads are typically 5.5m-6m wide with 6m radius kerb returns, which is demonstrably adequate for refuse collection vehicles. Indicative travel paths for the refuse collections vehicle are shown in **Figure 3.2.1**.

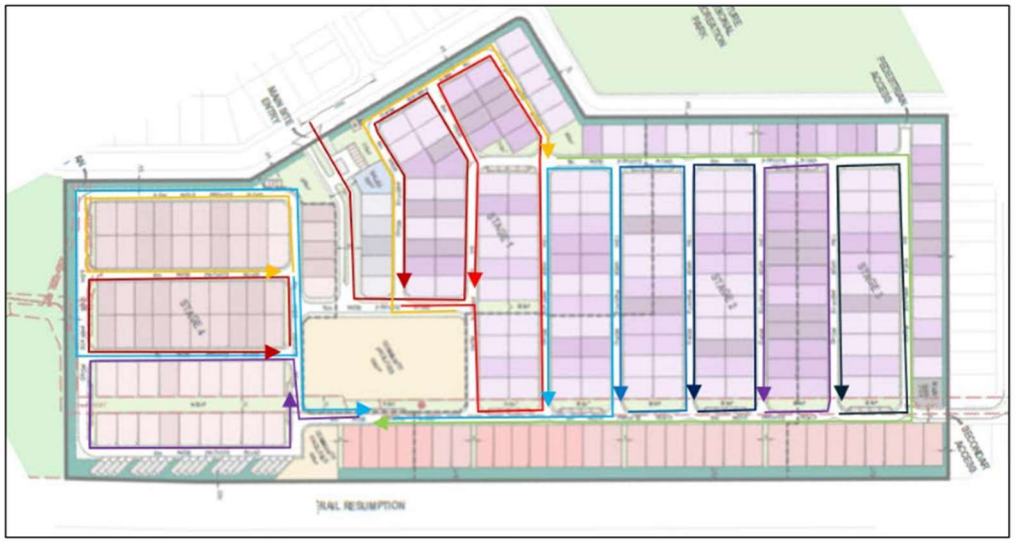

Figure 3.2.1 – Indicative Refuse Collection Paths

In response to EDQ's request to demonstrate the road allocations are adequate in the four key intersections highlighted in **Figure 3.2.2** as to not encroach on green space adjoining the road reserve, **Figure 3.2.3** has been provided to demonstrate that this does not occur.

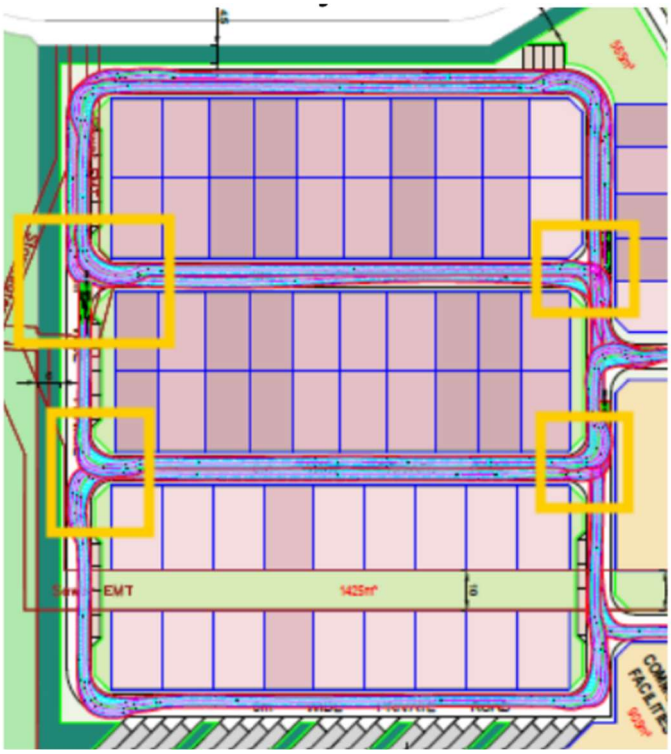

Figure 3.2.2 – EDQ Request for Swept Path Assessments

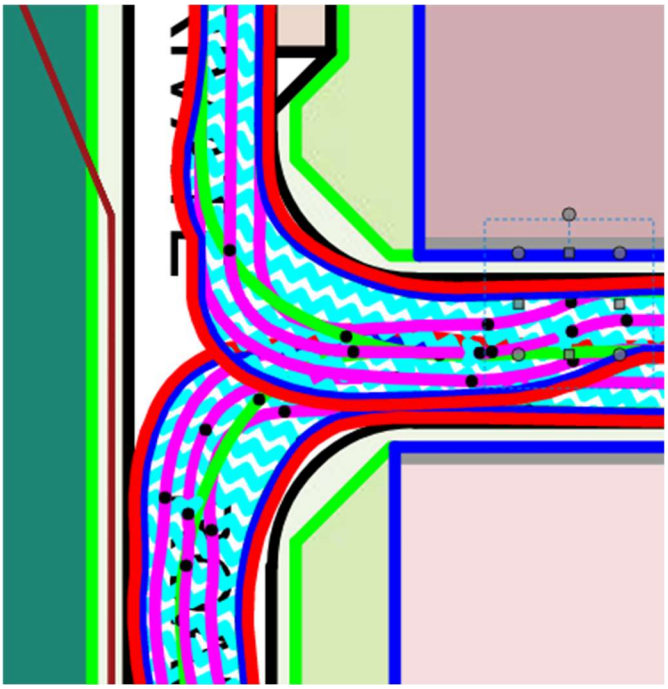

Figure 3.2.3 – Typical Intersection RCV Swept Path

There are two instances where residents on dead end streets will be responsible for transporting their own bins from their property to the end of the street for collection. This is to minimise the service vehicle reversing in public spaces and reduce risk to safety for the residents. There is ample space available for bin storage for collection at these intersections to as shown on the swept paths prepared by Bitzios Consulting enclosed in **Appendix B**.

3.3 COMMUNAL FACILITIES

The communal facilities are not an independent commercial use but are ancillary to the surrounding land lease community. The communal facilities are available for the exclusive use of residents and their guests and are otherwise not open to the public.

Communal facilities in other similar developments are generally used for lower intensity uses (e.g. swimming, pickleball and happy hour drinks) with occasional larger gatherings (e.g. catered lunches on special occasions). This means that waste generation is generally relatively low with occasional greater refuse generation.

The applicant, based on experience with other similar developments, intends to operate the communal facilities with four 360L kerbside wheelie bins, being two general waste and two recycling bins, collected weekly. Additional refuse from occasional parties can be managed via one-off private collection if necessary (e.g. with a small trailer mounted skip bin). This approach has proven adequate for other similar developments, and it will be the responsibility of the operator to monitor performance and adjust, if necessary, based on site-specific waste generation.

Provision has been made for a refuse storage area at the internal road level at the southern end of the main communal facilities building as shown in **Figure 3.3.1**. Additional space has been provided in the refuse storage area for bulk bins if found to be necessary in the future. Bins will be transported from the bin storage area to the internal street for collection.

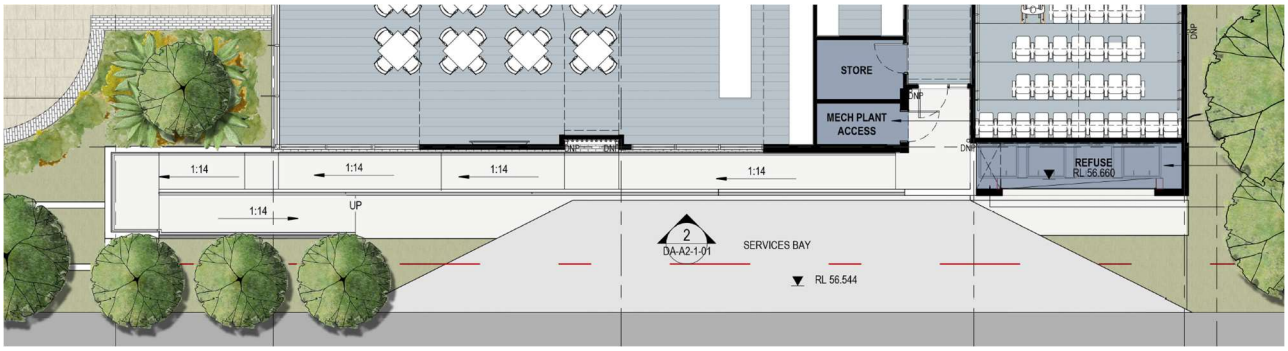

Figure 3.3.1 – Communal Building Refuse Storage and Services Bay

The site manager will be responsible for the following ongoing operational measures related to the communal facilities:

- Collecting rubbish from any bins in other smaller, less formal communal areas, if necessary, and transporting to the bins stored at the communal facilities.
- Transporting the bins from the storage area to the street on collection days and returning the bins to the storage area following collection.
- Monitoring of refuse loads, and bin capacity based on site-specific waste generation and use of the communal facilities. If refuse loads are higher than anticipated, then consider additional or larger bins or more frequent collection. Provision has been made in the refuse storage room for additional refuse capacity if necessary.
- Organising private refuse collection if necessary for occasional larger gatherings within the communal facilities.

4 CONSTRUCTION PHASE

Management of waste generated during construction will be the responsibility of the civil contractor and building contractor. Waste management strategies will be documented in the respective construction management plans, which should consider the following high-level principals for construction waste management.

- Provide accessible waste disposal facilities on site to enable workers to dispose of waste appropriately.
- Minimise waste generation by optimising material quantities and minimising cutting needs / excess material.
- Select materials with high efficiency and reusability potential where possible.
- Implement proper site management practices to prevent unnecessary waste creation.
- Identify and stockpile reusable materials on-site for future use.
- Properly segregate waste streams to facilitate efficient recycling where possible.

5 CONCLUSION

Hurley Consulting Engineers has been commissioned by Lodge Management to prepare a Waste Management Plan for a proposed Land Lease Community at College Drive, Flagstone. The project involves the development of a proposed land lease retirement community, to provide between 280 and 310 dwellings and communal facilities as shown on the layout plans prepared by RPS and enclosed in **Appendix A**.

The intent of this report is to review potential waste generation and corresponding waste collection strategies for the development in general accordance with the EDQ Greater Flagstone Priority Development Area scheme requirements. This report responds to the Further Issues from Economic Development Queensland dated 29 of January 2025 relating to development application DEV2024/1532.

Waste generated by the development will be collected in kerbside bins from the new internal roads. Each dwelling will be provided with two 140L or 240L bins (one general waste and one recycling). Space is available for storage of bins on each individual site and the internal roadways have been designed to accommodate the swept path of a Logan City Council refuse collection vehicle. Additional management measures for the communal facilities and construction phase are discussed in **Sections 3.3 & 4** respectively.

Based on our review, refuse collection arrangements are adequate for the proposed development subject to the recommendations in this report.

Appendix A – Masterplan by RPS

Indicative Land Budget		
Land Use	**Area**	**%**
Site Area	12.04ha	100.0%
Residential Sites	7.15ha	59.4%
Sales Office	0.03ha	0.2%
Community Facility	0.60ha	5.0%
Embellishment / Open Space	0.65ha	5.4%
Landscape Buffer	0.79ha	6.6%
Services (PMT, MSB)	0.01ha	0.1%
Private Road (incl. Verge)	2.81ha	23.3%

Legend

- Site Boundary
- Stage Boundary
- Entry Boulevard
- Community Boulevard
- Primary Street
- Secondary Street
- Secondary Street - Esplanade
- Secondary Street - Caravan Parking
- Laneway
- Visitor Carparking - 59 spaces
- Caravan Parks - 20 spaces
- Existing Easements
- Sewer Rising Main Vent
- Indicative Bin Pad Location

Note:

All dimensions and areas are approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Road linemarkings and turn slots are indicative only and subject to detailed design.

Source Information:
Base Information: PEET.

PLAN REF: AU14602-06E
DATE: 10 FEBRUARY 2025
CLIENT: LAND LEASE PROPERTY
DRAWN BY: MD
CHECKED BY: MD

0 20 40 60 80 100 1 : 1,500 @ A2

FLAGSTONE
LAND LEASE COMMUNITY
INDICATIVE SITE PLAN

URBAN DESIGN
Level 8
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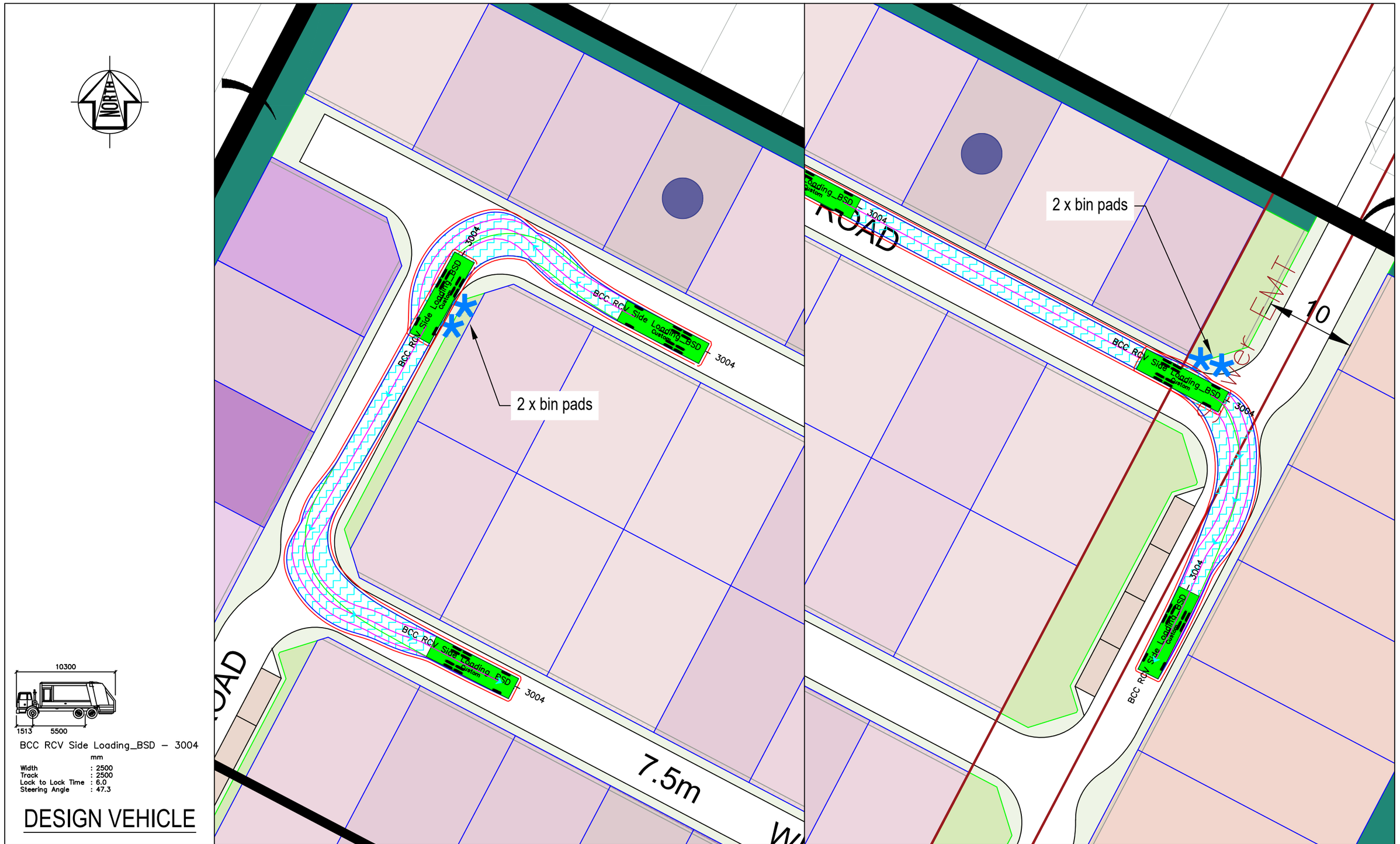
Fortitude Valley QLD 4006
T +61 7 3539 9500
W rpsgroup.com

Appendix B – Swept Path Diagrams



BCC RCV Side Loading_BSD – 3004

mm

Width	: 2500
Track	: 2500
Lock to Lock Time	: 6.0
Steering Angle	: 47.3

DESIGN VEHICLE

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Suite 26, 58 Riverwalk Avenue, Robina QLD 4226
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REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	IR ISSUE	J.K	07.02.2025
002	IR ISSUE	J.K	11.02.2025
003	IR ISSUE	J.K	12.02.2025

Scale @ A3 0 4 8 12 16 20 1:400

ENGINEERING CERTIFICATION (RPEQ)

Name	Signature	No.	Date

Project: College Drive Flagstone Retirement Village TIA

Title: Bin Pad Locations and Refuse Collection Manoeuvres

Design	Drawn	Checked
J.K	J.K	N.E

CONCEPT ONLY

Date: 12.02.2025

Project Number	Sheet Number	Issue
P6519	1	003