

TRAFFIC IMPACT ASSESSMENT

41,47 Edison Crescent, Yarrabilba QLD
4207

Lot 17 and 18 on SP333769

July 2025

Traffic Impact Assessment

41-47 Edison Crescent
Yarrabilba
Warehouse Development

REPORT

PREPARED FOR:



19 June 2025

Reference: 80606

SITE Traffic Pty Ltd

SITE INTEGRATED TRAFFIC ENGINEERING

ABN: 33 651 657 091

a TTS Group company

Brisbane

Level 1, 16 McDougall Street
PO Box 1279
Milton QLD 4064
tel (07) 3554 1364

admin@sitetraffic.com.au | www.sitetraffic.com.au

Gold Coast

Level 15, Corporate Centre One
2 Corporate Court
Bundall QLD 4217
tel (07) 5591 9575

 Brisbane

Level 1, 16 McDougall Street
PO Box 1279
Milton QLD 4064

 **(07) 3554 1364**

 Gold Coast

Level 15, Corporate Centre One
2 Corporate Court
Bundall QLD 4217

 **(07) 5591 9575**

 **admin@sitetraffic.com.au**

 **www.sitetraffic.com.au**

Document Status

Rev No.	Author(s)	Reviewed / Approved		Description	Date
		Name	Signature		
1	Harry Hunt RPEQ 27009	Marko Mrsic		Original issue	19/06/2025

Table of Contents

1.	Introduction	1
2.	Proposed Development	2
3.	Existing Traffic Conditions	3
3.1	Road Network	3
4.	Development Traffic Assessment	4
4.1	Site Access	4
4.1.1	Site Access Design	4
4.1.2	Sight Distance	4
4.2	Parking	5
4.2.1	Parking Supply	5
4.2.2	Parking Design	5
4.3	Servicing	6
4.3.1	Refuse Collection	6
4.4	Active Transport	7
5.	Traffic Impacts	8
5.1	Estimated Traffic Generation	8
5.2	Road Network Impact	8
6.	Summary and Recommendation	9
6.1	Summary	9
6.2	Recommendation	9

Figure Index

Figure 1:	Site Locality	1
Figure 2:	Proposed Development - Site Plan	2
Figure 3:	Edison Crescent	3
Figure 4:	Yarrabilba Drive	3
Figure 5:	RS-051: Heavy Duty Vehicle Crossing – Type B	4
Figure 6:	Access Sight Distance – Edison Crescent	5
Figure 7:	Parking Space Dimensions	5
Figure 8:	Vehicle Swept Path – HRV/MRV	6
Figure 9:	Vehicle Swept Path - RCV	7

Figure 10: Traffic Generation Rates – Business Parks and Industrial Estates

8

Appendices

A Vehicle Swept path Analysis

1. Introduction



ITE Traffic was engaged to prepare this Traffic Impact Assessment for a proposed warehouse development, which addresses all relevant traffic and transport requirements outlined in the Logan City Council (LCC) Planning Scheme.

The proposed development is located at 41-47 Edison Crescent, Yarrabilba, as shown in Figure 1.

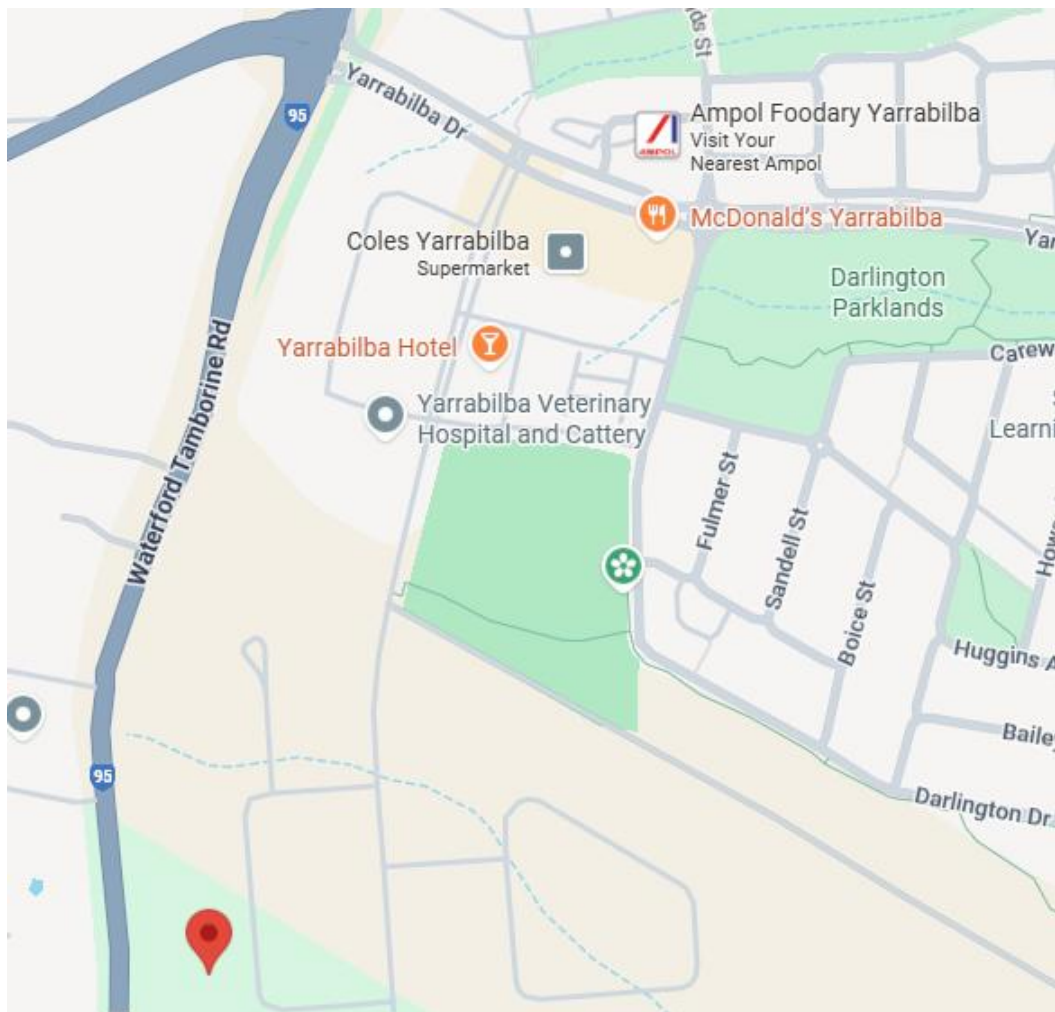


Figure 1: Site Locality

2. Proposed Development

The proposed development is for a warehouse facility with ancillary office space, comprised of 2 separate tenancies over 2 Lots, with the total gross floor area (GFA) of approximately 3,222m², as shown in Figure 2.

The proposed development is located within LCC's priority development area and provides 2 separate accesses from Edison Crescent to service each Lot.

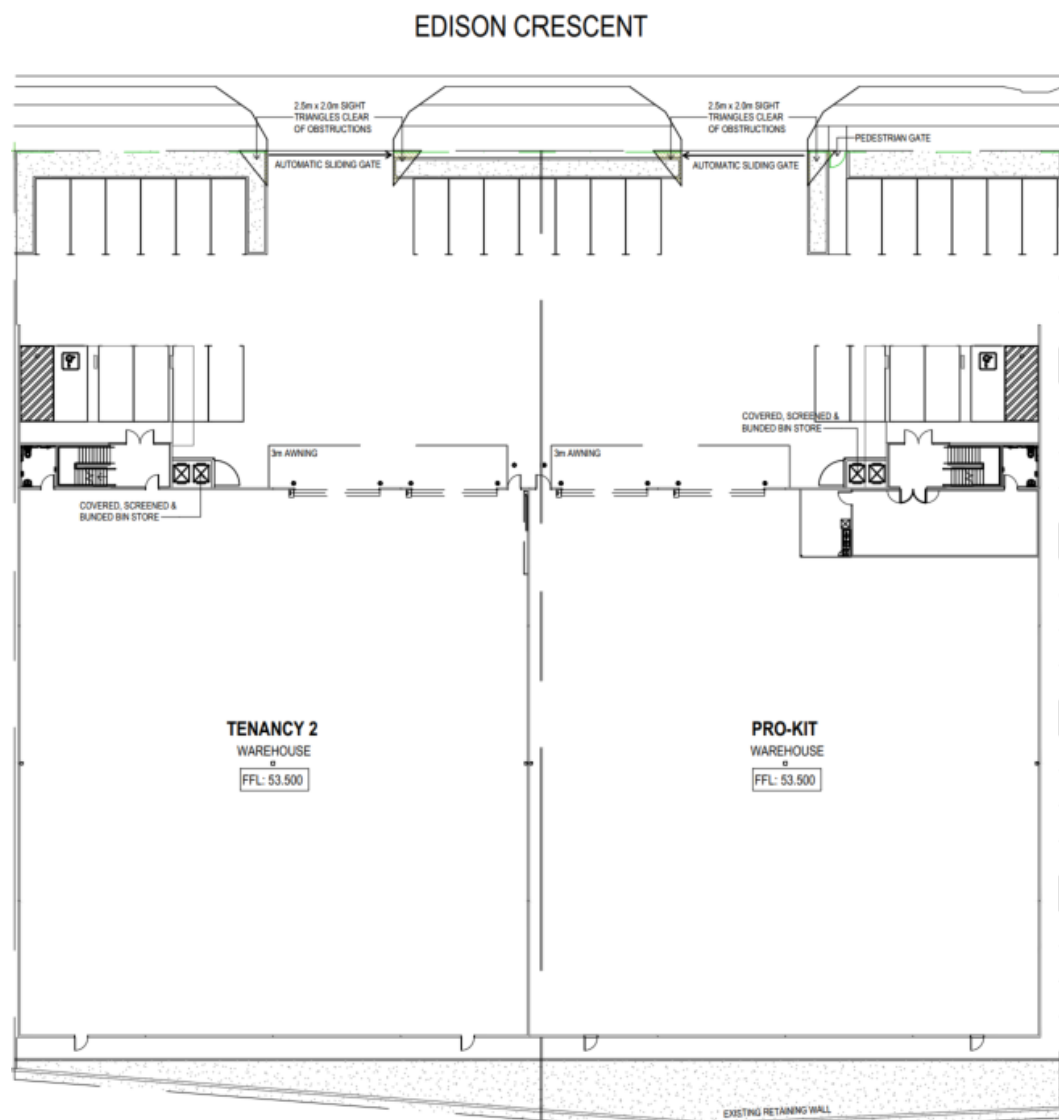


Figure 2: Proposed Development - Site Plan

3. Existing Traffic Conditions

3.1 Road Network

The road network surrounding the site is managed by LCC with details as follows:

► **Edison Crescent:**

- Council controlled unclassified (local) road.
- 2-way road with parking both sides.
- Pedestrian footpaths on both sides of the road.
- Assumed 50km/h speed limit.

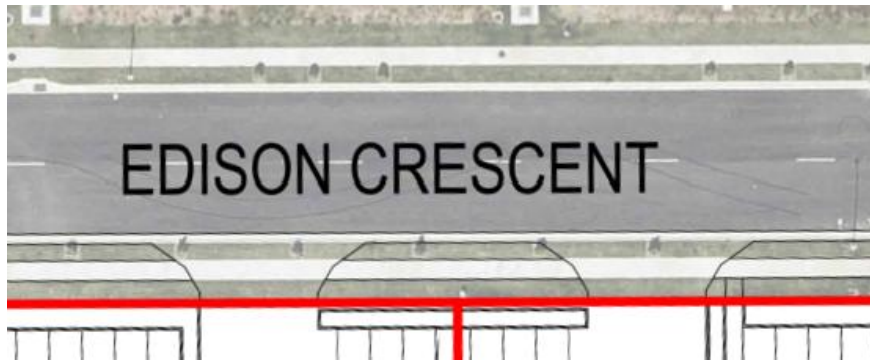


Figure 3: Edison Crescent

► **Yarrabilba Drive:**

- Council controlled Urban Collector.
- 4-lane dual carriageway with no parking on either side of the road.
- Bicycle lanes and footpaths on both sides of the road.
- 60km/h speed limit.



Figure 4: Yarrabilba Drive

4. Development Traffic Assessment

4.1 Site Access

4.1.1 Site Access Design

As outlined in the LCC Planning Scheme, access to the proposed development is to be designed in accordance with IPWEA standard drawing RS-051, as shown in Figure 5, with details as follows:

- ▶ Driveway type B at a minimum width of 6-9m.

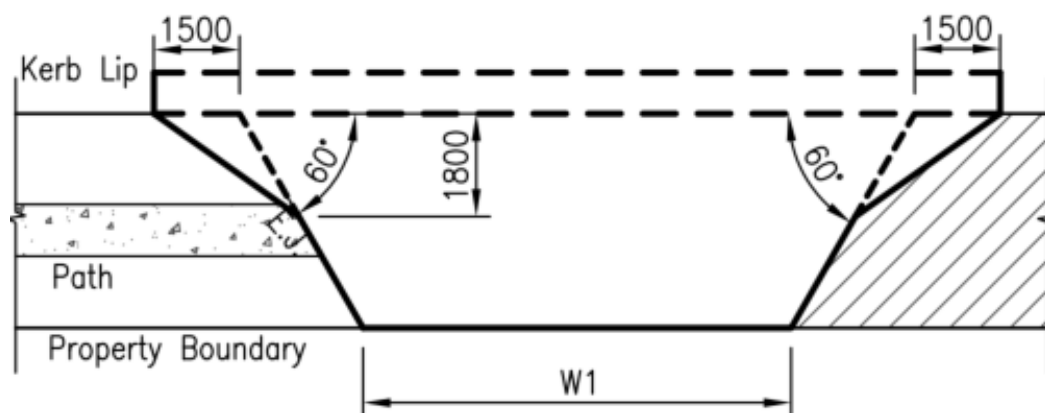


Figure 5: RS-051: Heavy Duty Vehicle Crossing – Type B

The proposed development provides 2 new access driveways from Edison Crescent at approximately 9m wide, which complies with the above requirements.

4.1.2 Sight Distance

As outlined in the LCC Planning Scheme, the minimum sight distance for commercial vehicles entering a public roadway is in accordance with AS 2890.2, outlined as follows:

- ▶ 69m, based on a 50km/h speed environment.

The available sight distance measured from the proposed worst case access to the south of the site is approximately 167m to the north and 69m to the south, as shown in Figure 6, which complies with the above requirements.



Figure 6: Access Sight Distance – Edison Crescent

4.2 Parking

4.2.1 Parking Supply

As outlined in the LCC Planning Scheme, the minimum number of off-street parking spaces required for the proposed development is:

- ▶ Warehouse – 1 space per 100m² of GFA plus a loading bay.

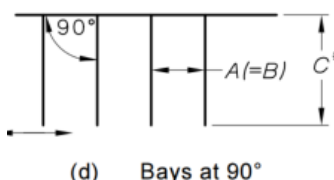
Application of the above rate yields a parking requirement for 32.2 (say 33) off-street parking spaces.

The proposed development provides a total of 29 off-street parking spaces, including 2 PWD spaces. While there is a technical shortfall of up to 4 parking spaces, the proposed parking supply for the site is deemed suitable to cater for the demands of the development due to the following:

- ▶ The development is comprised of 2 separate tenancies with a shared carpark which can accommodate fluctuations in parking demand between tenancies.
- ▶ There will be approximately 6 on-street parking spaces available along the sites frontage to accommodate overflow parking, if required.

4.2.2 Parking Design

As outlined in the LCC Planning Scheme, the minimum dimensions for staff (user class 1A) and visitor (user class 2) parking spaces are to be in accordance with AS 2890, as shown in Figure 7.



(d) Bays at 90°

User class (Note 1)	A (Note 3)	B	C ₁	C ₂	C ₃	Aisle width (Note 4)
1	2.4	2.4	5.4	4.8	5.4	6.2
1A	2.4	2.4	5.4	4.8	5.4	5.8
2	2.5	2.5	5.4	4.8	5.4	5.8
3	2.6	2.6	5.4	4.8	5.4	5.8
3A	2.6	2.6	5.4	4.8	5.4	6.6
3A	2.7	2.7	5.4	4.8	5.4	6.2
4	(See Note 5)					

Figure 7: Parking Space Dimensions

The proposed development provides off-street parking spaces at 2.5m x 5.4m, which complies with the above requirements.

4.3 Servicing

As outlined in the LCC Planning Scheme, the minimum class of service vehicle to be accommodated on-site is:

- ▶ Warehouse – Articulated vehicle (AV)/Heavy Rigid Vehicle (HRV)

A vehicle swept path analysis has been undertaken which demonstrates that the proposed development is able to cater for safe access and manoeuvring for a HRV, as shown in Figure 8 and Appendix A, which complies with the above requirements.

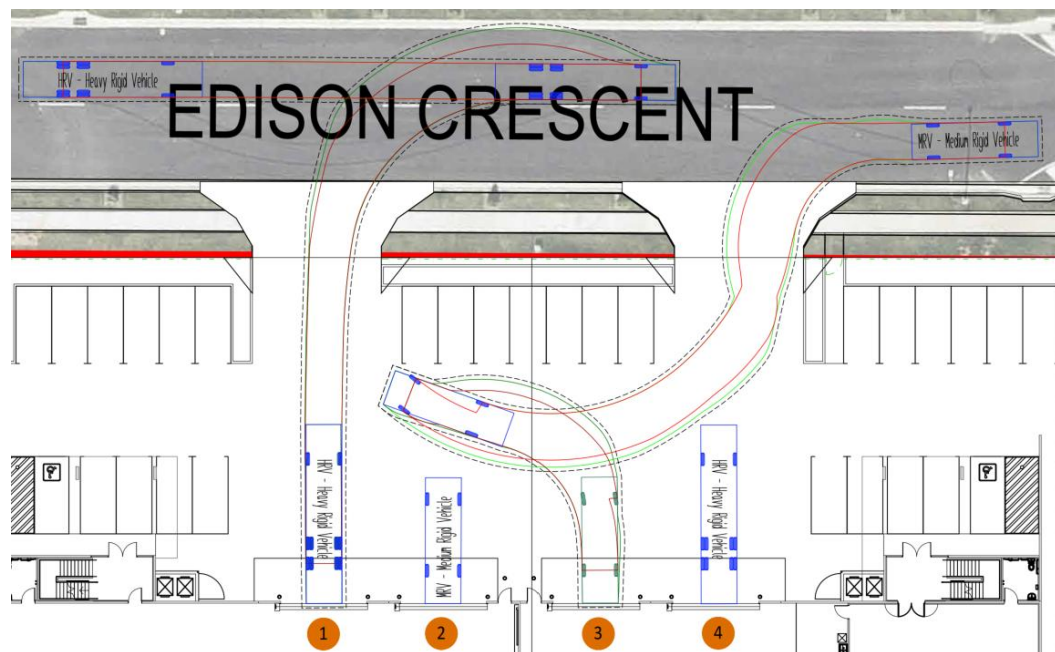


Figure 8: Vehicle Swept Path – HRV/MRV

It is noted that a HRV is only able to service loading docks 1 and 4, reversing in from Edison Crescent (which is a minor road). Loading docks 2 and 3 are only accessible by a MRV, which can enter and exit the site in a forward direction.

4.3.1 Refuse Collection

The proposed development provides screened refuse collection areas to be serviced on-site.

A vehicle swept path analysis has been undertaken which demonstrates that the proposed development is able to cater for safe access and manoeuvring for a refuse collection vehicle (RCV), as shown in Figure 9 and Appendix A.

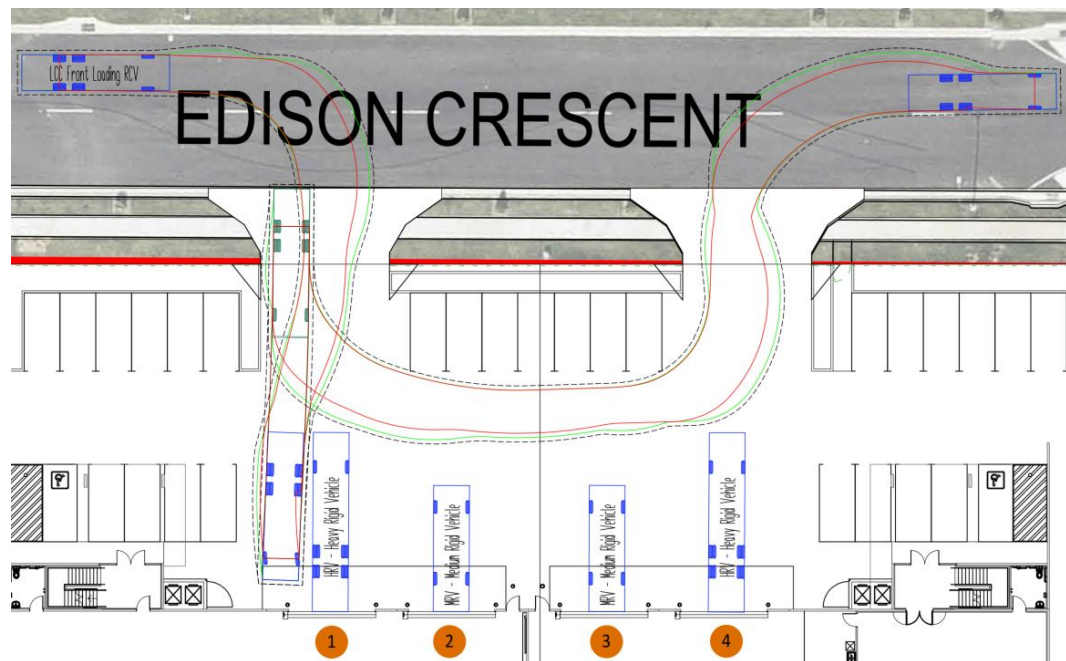


Figure 9: Vehicle Swept Path - RCV

4.4 Active Transport

As outlined in the LCC Planning Scheme, the minimum requirements for bicycle parking facilities are:

- ▶ Warehouse – No minimum.

5. Traffic Impacts

Details of the proposed development's expected traffic impacts on the surrounding road network are outlined as follows.

5.1 Estimated Traffic Generation

According to the Guide to traffic generating developments – RMS 2013, the traffic generation rates for business parks and industrial estates are shown in Figure 10.

Weekday Rates	Sydney Average	Sydney Range	Regional Average	Regional Range
AM peak (1 hour) vehicle trips per 100 m ² of GFA.	0.52	0.15-1.31	0.70	0.32-1.20
PM peak (1 hour) vehicle trips per 100 m ² of GFA.	0.56	0.16-1.50	0.78	0.39-1.30
Daily total vehicle trips	4.60	1.89-10.47	7.83	3.78-11.99

Figure 10: Traffic Generation Rates – Business Parks and Industrial Estates

The following directional splits are typical of industrial developments for the AM and PM peak movements:

- ▶ AM Peak: 80% In, 20% Out
- ▶ PM Peak: 30% In, 70% Out

Application of the above trip generation rates and direction splits results in the following estimated peak hour directional traffic flows of the proposed development, as shown in Table 1.

Table 1: Estimated Development Traffic Generation

	GFA (m ²)	AM Peak		PM Peak	
		In	Out	In	Out
Warehouse	3,222	14	3	5	13

5.2 Road Network Impact

The estimated traffic generation outlined above shows that the expected maximum intensity is during the inbound AM peak with approximately 1 vehicle every 4 minutes.

All of these movements will be accessing the site from Edison Crescent, which is within a future industrial area. The additional traffic generation estimated for the proposed development was found to be minimal and not expected to adversely impact the safe and efficient function of the surrounding road network.

6. Summary and Recommendation

6.1 Summary

This document presents the findings of a Traffic Impact Assessment for a warehouse development situated at 41-47 Edison Crescent, Yarrabilba. This assessment addresses all relevant traffic and transport items in the Logan City Council Planning Scheme, which is summarised as follows:

- ▶ The development provides 2 separate access driveways from Edison Crescent at approximately 9m wide, designed in accordance with relevant standards.
- ▶ The development provides a total of 29 off-street parking spaces, including 2 PWD spaces, designed in accordance with relevant standards.
- ▶ The development is located along a minor road and is able to cater for access and manoeuvring by a HRV, MRV and RCV.
- ▶ The proposed development is not expected to adversely impact the safe and efficient function of the surrounding road network.

6.2 Recommendation

Based on our findings of this assessment, and following the implementation of any recommended design amendments, the proposed development will not create any notable traffic impacts to the area and is recommend to be approved based on traffic and transport grounds.

~~~~~  
**REPORT CERTIFIED BY:**



**HARRY HUNT**

*Associate Director | Senior Traffic Engineer*

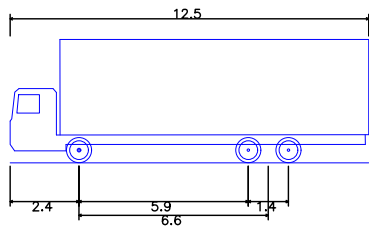
**RPEQ # 27009**

**19 June 2025**  
~~~~~

Appendix A

VEHICLE SWEPT PATH ANALYSIS

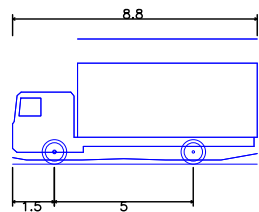
DESIGN VEHICLE



HRV – Heavy Rigid Vehicle

Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

DESIGN VEHICLE

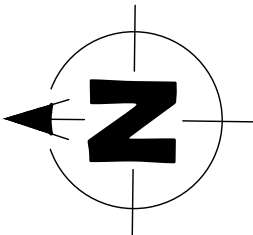


MRV

Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	4.500m
Min Body Ground Clearance	0.150m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.000m

SWEPT PATH KEY:

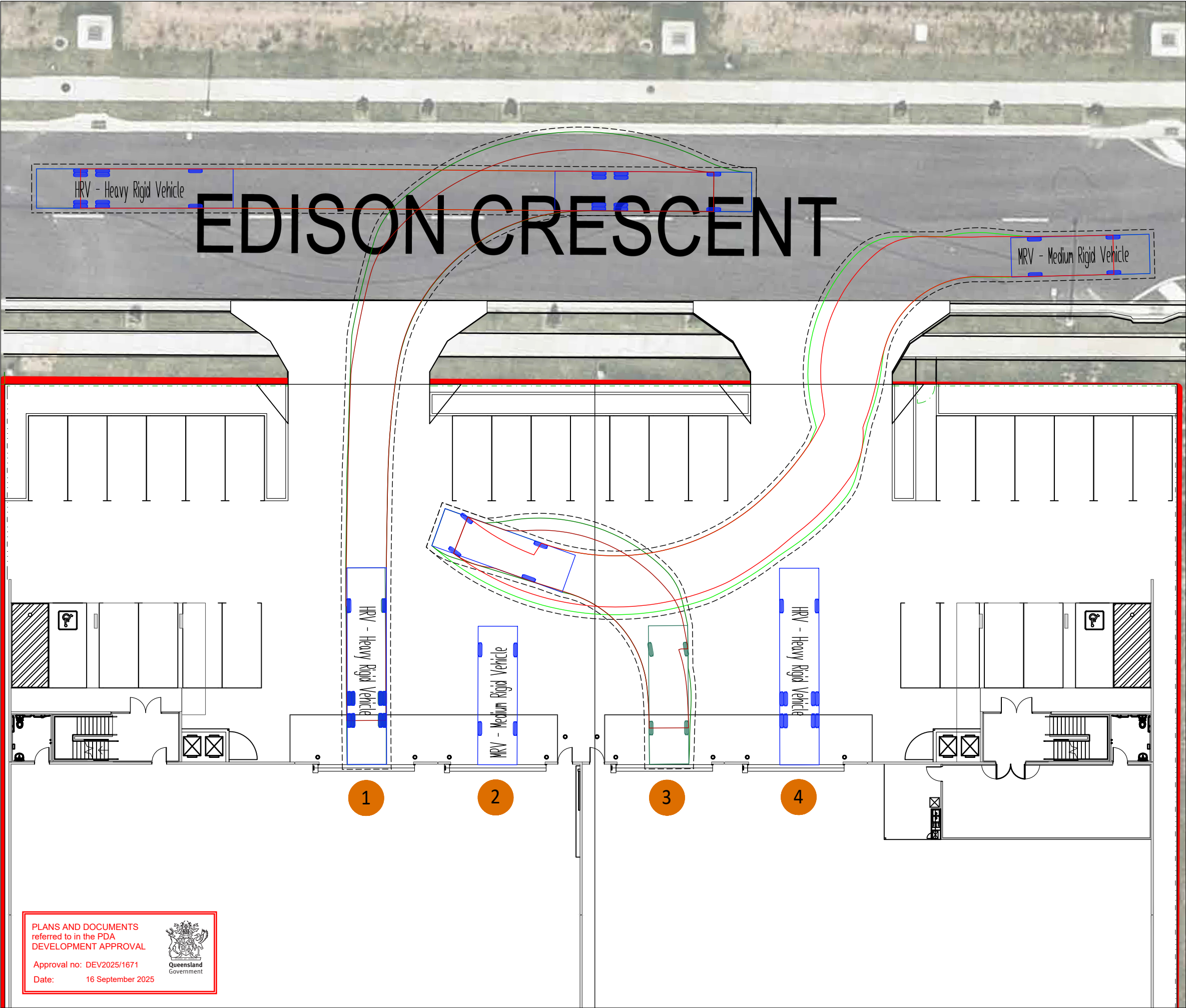
- VEHICLE OUTLINE
- VEHICLE OVERHANG
- WHEEL TRACK
- 0.3m VEHICLE CLEARANCE



PLAN NUMBER	CERTIFIED	19.06.2025
80606 - SK1	H HUNT	RPEQ 27009

PROJECT NAME
41-47 EDISON CRESCENT, YARRABILBA

VEHICLE SWEPT PATH PLAN

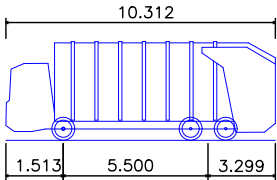


PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2025/1671
Date: 16 September 2025

Queensland
Government

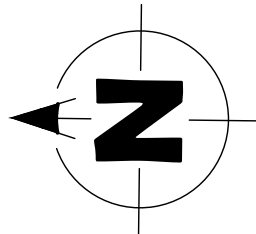
DESIGN VEHICLE



LCC Front Loading RCV
Overall Length 10.312m
Overall Width 2.500m
Overall Body Height 4.300m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock-to-lock time 6.00s
Kerb to Kerb Turning Radius 10.300m

SWEPT PATH KEY:

- VEHICLE OUTLINE
- VEHICLE OVERHANG
- WHEEL TRACK
- 0.3m VEHICLE CLEARANCE

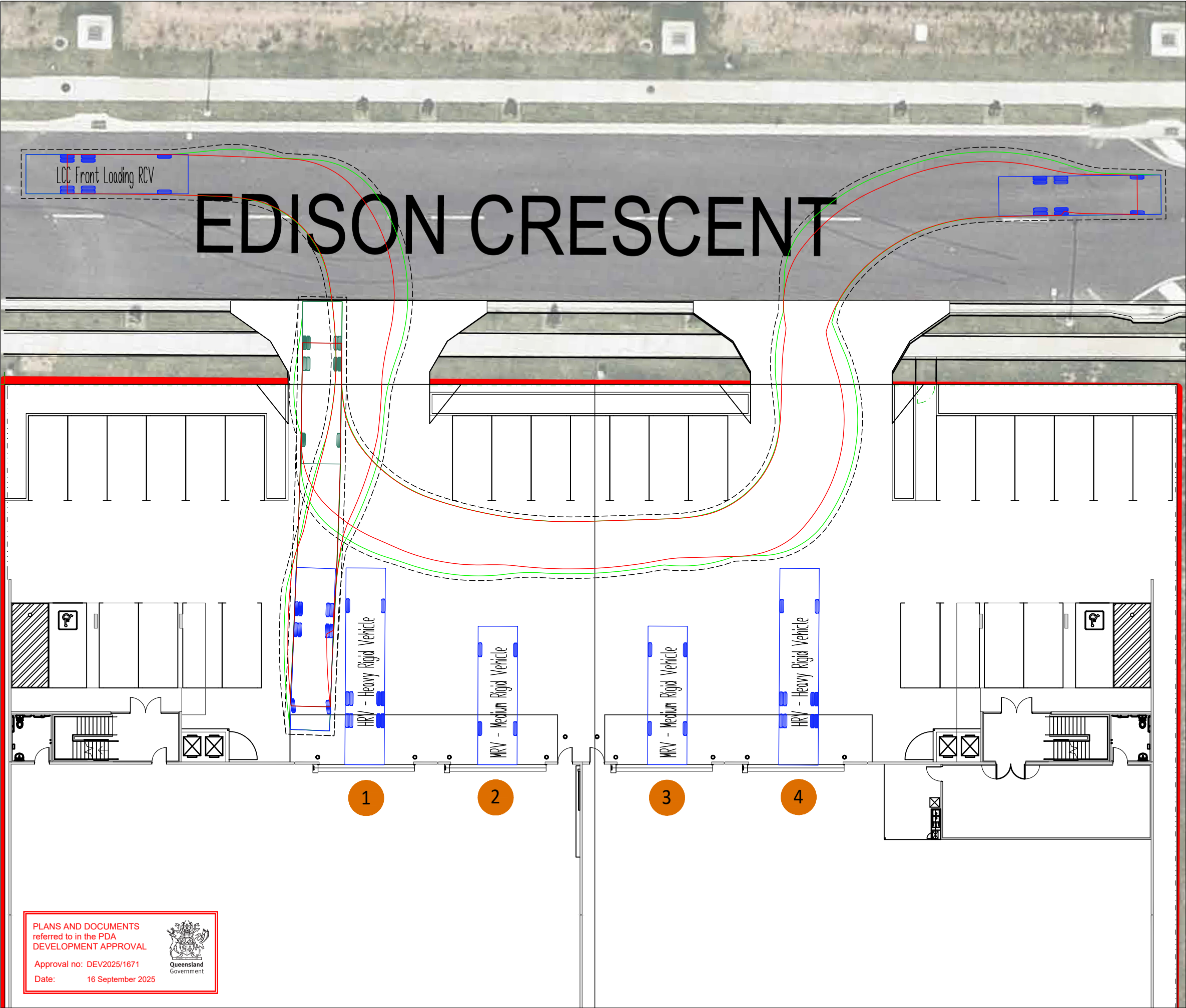


PLAN NUMBER
80606 - SK2

CERTIFIED
H HUNT
19.06.2025
RPEQ
27009

PROJECT NAME
41-47 EDISON CRESCENT, YARRABILBA

VEHICLE SWEPT PATH PLAN



PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2025/1671
Date: 16 September 2025

Queensland
Government