

Our Ref: SY190226

24 June 2022

Grant Madsen  
Deicorp Pty Ltd  
Suite 301, Level 3  
161 Redfern Street  
REDFERN NSW 2016

PLANNING  
PROJECT MANAGEMENT  
ENGINEERING  
CERTIFICATION

Dear Grant,

### **Tallawong Station Precinct South, Site 1 – Internal Private Access Road Design Compliance (SSD 10425 and BCC conditions issued 11 June 2021).**

This letter is to certify that Barker Ryan Stewart has reviewed Site 1 internal private access road civil engineering design and landscape plans of the proposed mixed-use development at Tallawong Station Precinct South in accordance with the requirements of the Australian Standards (AS/NZS 2890.1-2004, AS 2890.2-2018 and AS/NZS 2890.6-2009), condition B30 of consent issued by the NSW Department of Planning, Industry Environment for SSD 10425 and Blacktown City Council conditions 6.3.3 and 8.20.7 relating to access for waste collection vehicles.

The following Site 1 Civil Engineering Drawings prepared by Robert Bird Group were reviewed:

- 21262C-RBG-XX-XX-DR-CV-83001 SITE GRADING PLAN - SHEET 1, Rev C02, dated 23 June 2022
- 21262C-RBG-XX-XX-DR-CV-83011 GENERAL ARRANGEMENT PLAN - SHEET 1, Rev C01, dated 12 May 2022
- 21262C-RBG-XX-XX-DR-CV-83012, GENERAL ARRANGEMENT PLAN - SHEET 2, Rev C01, dated 12 May 2022
- 21262C-RBG-XX-XX-DR-CV-83101, CIVIL DETAILS, Rev C01, dated 12 May 2022
- 21262C-RBG-XX-XX-DR-CV-83301, LONGITUDINAL SECTION MC01, Rev C01, dated 12 May 2022
- 21262C-RBG-XX-XX-DR-CV-83311, CROSS SECTIONS - MC01, rev C01, dated 12 May 2022

The following Site 1 Landscape Plans prepared by isthmus Landscape Design were reviewed:

- Ground Building A, Project No. IS0295, Draw No. IS0295CCGA, Rev 5, dated 9 May 2022
- Ground Building B, Project No. IS0295, Draw No. IS0295CCGB, Rev 5, dated 9 May 2022

The civil engineering design and landscape plans have been reviewed and assessed for compliance with the following relevant conditions of consent:

**SYDNEY**  
P (02) 9659 0005  
E [sydney@brs.com.au](mailto:sydney@brs.com.au)

**CENTRAL COAST**  
P (02) 4325 5255  
E [coast@brs.com.au](mailto:coast@brs.com.au)

**HUNTER**  
P (02) 4966 8388  
E [hunter@brs.com.au](mailto:hunter@brs.com.au)

**SOUTH EAST QUEENSLAND**  
P (07) 5582 6555  
E [seqld@brs.com.au](mailto:seqld@brs.com.au)

[brs.com.au](http://brs.com.au)

### Condition B30 - Car Parking

B30. Prior to the issue of the relevant Construction Certificate, the Applicant shall submit to the satisfaction of the Certifier plans demonstrating compliance with the following traffic and parking requirements:

- (a) a maximum of 1,361 on-site car parking spaces provided as follows:

Use	Rate
Residential dwellings	1 car space per 1 bedroom 1 car space per 2 bedroom 1.4 car space per 3 bedroom (total of 1,008 spaces)
Residential visitor	0.1 car space per dwelling (total of 99 spaces)
Affordable housing	as per the residential dwelling rates above
Retail/commercial floor area	1 car space/36m <sup>2</sup> GLFA (total of 250 spaces)
Car wash bay	total of 4

- (b) all vehicles should enter and leave the subject site in a forward direction;
- (c) all vehicles are to be wholly contained on site before being required to stop;
- (d) parking associated with the proposal (including driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) should be in accordance with AS 2890.1-2004, AS/NZS 2890.6:2009 and AS 2890.2-2018;
- (e) appropriate pedestrian advisory signs are to be provided at the egress from parking areas;
- (f) all works/regulatory signposting associated with the proposed developments shall be at no cost to the relevant roads authority; and
- (g) the swept path of the longest vehicle (including garbage trucks) entering and exiting the Site, as well as manoeuvrability through the subject Site, shall be in accordance with AUSTROADS.

### Condition B30 Response

With respect to the Site 1 internal access road the layout of the internal access driveway width (6.5m), grades, turn paths, sight distance requirements and parking bay dimensions (2.1m wide, 6.4m long in bays with obstructed ends, 6.1m long in bays with unobstructed ends and 7.8m long for accessible spaces) have been designed in accordance with AS 2890.1-2004, AS/NZS 2890.6:2009 and AS 2890.2-2018.

Swept path analysis has been conducted to demonstrate that the Blacktown City Council's 11m long Waste vehicle is able to enter, manoeuvre and exit the site in a safe and efficient manner.

The swept paths also show that a B99 vehicle and B85 vehicle are able to pass each other simultaneously in accordance with AS/NZS 2890.1-2004.

The swept path diagrams have been provided at **Appendix A**.

### Blacktown City Council Conditions

#### Condition 6.3.3

The applicant must ensure that access for collection vehicles is designed in accordance with the dimensions indicated on the approved architectural plans, CAD files and vertical clearances (as per Australian Standards), showing adequate truck entry and exit and in all manoeuvring areas to the consent authority's satisfaction.

**Condition 6.3.3 Response**

Swept path analysis has been conducted based on the Blacktown City Council's waste collection vehicle, to demonstrate that these vehicles will be able to enter, manoeuvre and exit the site in a safe and efficient manner. The swept path diagrams have been provided at **Appendix A**.

**Condition 8.20.7**

*Private access roads or right of way driveways shall be designed and constructed in accordance with the nominated engineering plans and generally in accordance with Council's Engineering Guide for Development. This includes parts of MC02 approximately from CH 70 to CH160.*

*NOTE: The proposed private road design, including but not limited to the travel lanes and parking bays, are to be designed and constructed to meet the requirements of the Austroads and Australian Standard requirements as well as provide safety and amenity of pedestrian movement.*

**Condition 8.20.7 Response**

With respect to the Site 1 internal access road the layout of the internal access driveway width (6.5m), grades, turn paths, sight distance requirements and parking bay dimensions (2.1m wide, 6.4m long in bays with obstructed ends, 6.1m long in bays with unobstructed ends and 7.8m long for accessible spaces) have been designed in accordance with AS 2890.1-2004, AS/NZS 2890.6:2009 and AS 2890.2-2018 and Austroads.

Note this certificate does not cover the structural details, pavement design and stormwater drainage components of the plans, these components are to be reviewed and certified by the respective Structural Engineer, Geotechnical Engineer and Civil Engineer.

Note also this certificate does not include an assessment of any work within the public road reserve, including the vehicle crossings. These works can only be approved by the relevant road authority under s138 of the Roads Act.

In summary, we are satisfied that the Site 1 internal private access road design reviewed by us complies with the requirements of Australian Standards AS/NZS 2890.1-2004, AS 2890.2-2018 and AS/NZS 2890.6-2009, Austroads, DPIE SSD 10425 Condition B30 and Blacktown City Council's conditions 6.3.3 and 8.20.7.

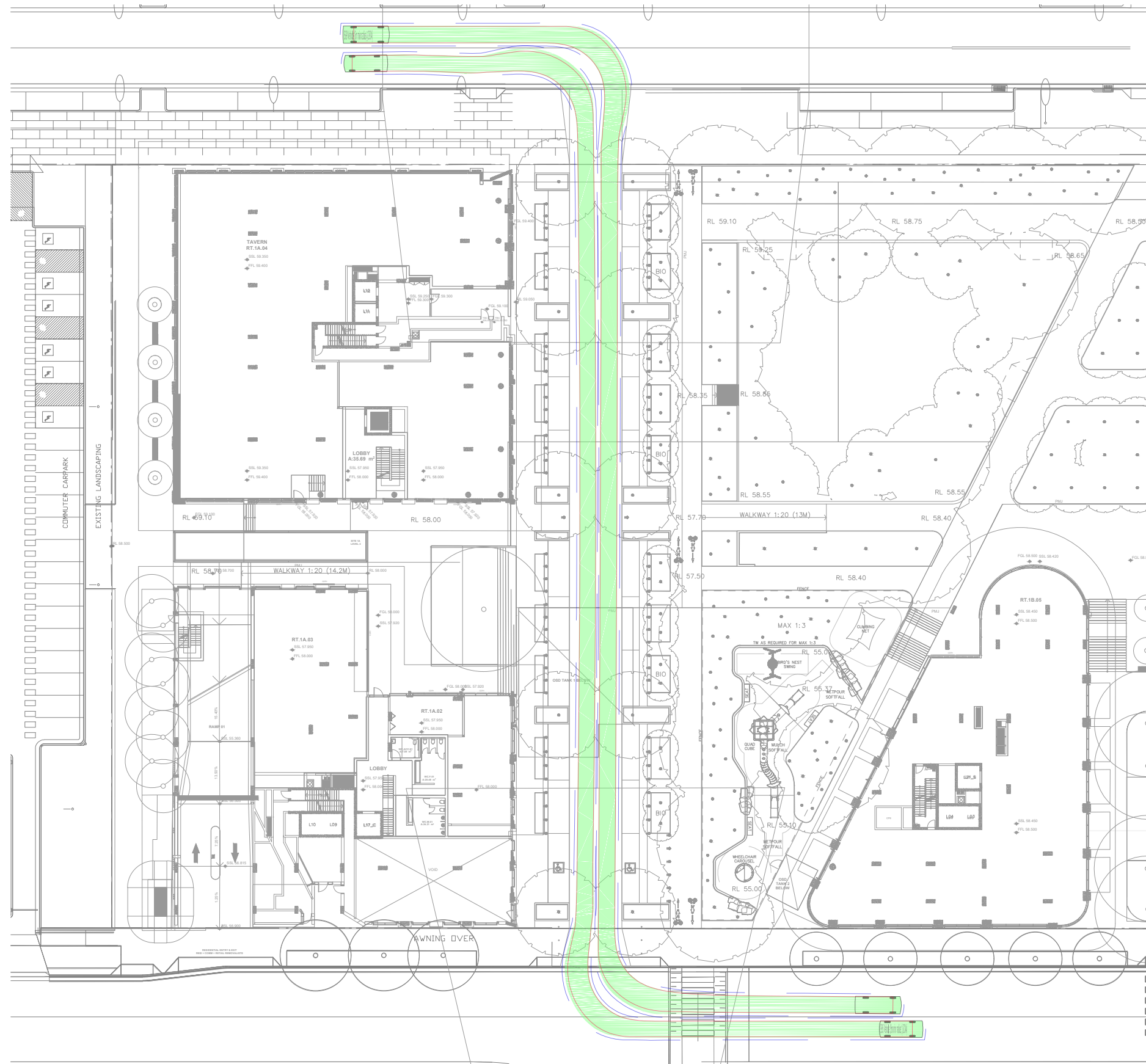
Should you require any further information regarding this certification, please contact me.

Yours sincerely,

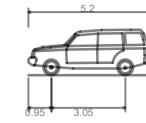


Glenn Barker | Senior Traffic Engineer | Director  
Barker Ryan Stewart Pty Ltd

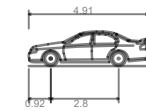
## **Appendix A - Swept Path Plans**



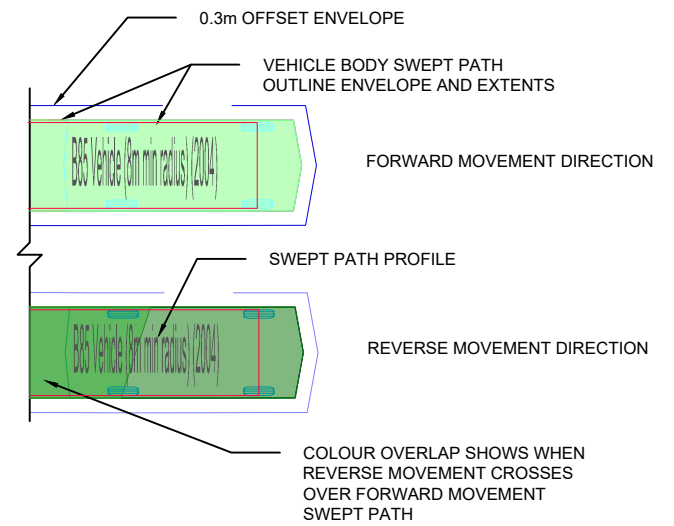
**LEGEND**



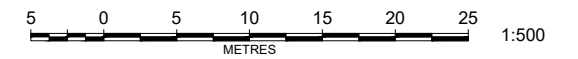
**B99 Vehicle (8m min radius) (2004)**  
 Overall Length 5.200m  
 Overall Width 1.940m  
 Overall Body Height 1.878m  
 Min Body Ground Clearance 0.272m  
 Track Width 1.840m  
 Lock-to-lock time 4.00s  
 Curb to Curb Turning Radius 8.000m



**B85 Vehicle (8m min radius) (2004)**  
 Overall Length 4.910m  
 Overall Width 1.870m  
 Overall Body Height 1.421m  
 Min Body Ground Clearance 0.159m  
 Track Width 1.770m  
 Lock-to-lock time 4.00s  
 Curb to Curb Turning Radius 8.000m



**PLAN**  
SCALE 1:1500



REV	AMENDMENT	ISSUED	DATE
A	FIRST ISSUE	JH	21/04/2022

**BARKER RYAN STEWART**  
 TOTAL PROJECT SOLUTIONS  
 ENGINEERING | PLANNING | PROJECT MANAGEMENT | SURVEYING | CERTIFICATION

SYDNEY P: 02 9659 0005  
 CENTRAL COAST S.E. QLD P: 07 5582 6555

HUNTER P: 02 4966 8388  
 S.E. QLD P: 07 5582 6555

www.brs.com.au  
 mail@brs.com.au  
 ABN: 26 134 067 842

Client: **DEICORP Pty Ltd.**

**TALLAWONG STATION PRECINCT SOUTH TRAFFIC ANALYSIS**

SWEPT PATH ANALYSIS - SHEET 1

Designed: JH  
 Drawn: JH  
 Checked: GB

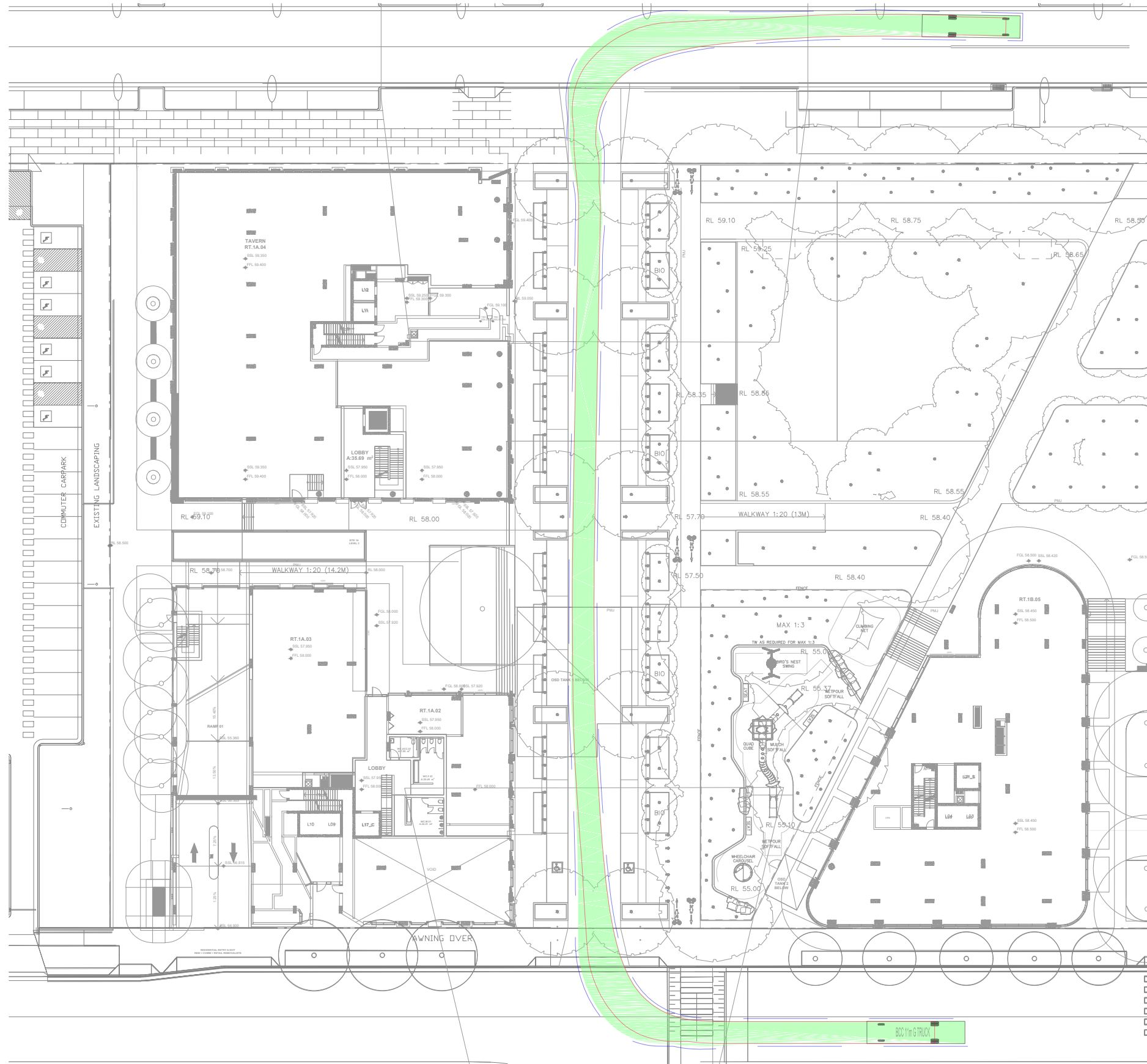
Scales: Plan 1:500@A3  
 Horiz. -  
 Vert. -  
 X-Sect. -

Datum: A.H.D.

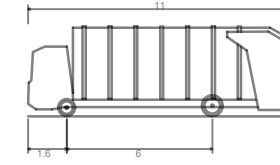
Plan No. **SY190226-TR04-101**

File Ref. SY190226

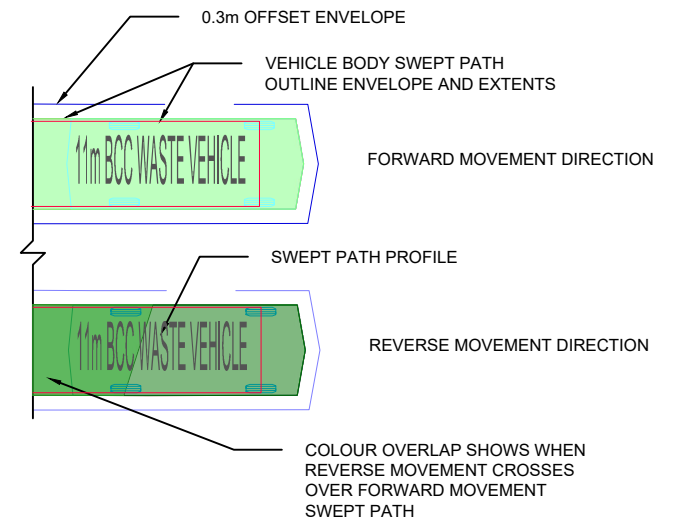
REV. **A**



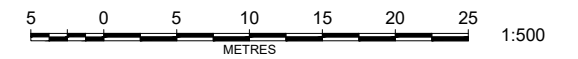
**LEGEND**



BCC 11m G TRUCK	
Overall Length	11.000m
Overall Width	2.500m
Overall Body Height	3.704m
Min Body Ground Clearance	0.256m
Max Track Width	2.445m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m



**PLAN**  
SCALE 1:1500



REV	AMENDMENT	ISSUED	DATE
A	FIRST ISSUE	JH	21/04/2022

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Client: **DEICORP Pty Ltd.**

**TALLAWONG STATION PRECINCT SOUTH TRAFFIC ANALYSIS**

SWEEP PATH ANALYSIS - SHEET 2

Designed: JH  
Drawn: JH  
Checked: GB

Scales: Plan 1:500@A3  
Horiz. -  
Vert. -  
X-Sect. -

Datum: A.H.D.

Plan No. **SY190226-TR04-102**

File Ref. SY190226

REV. **A**