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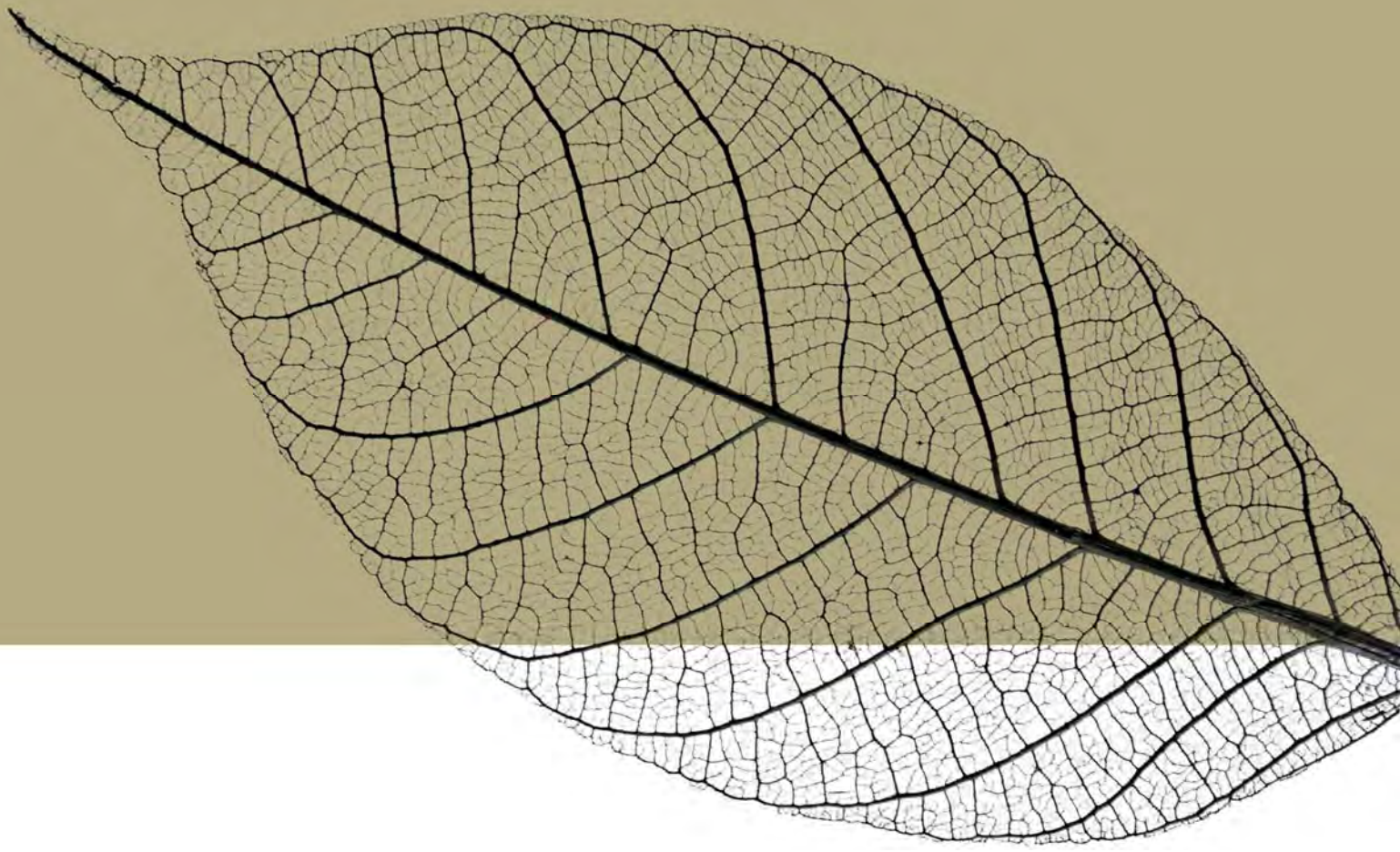
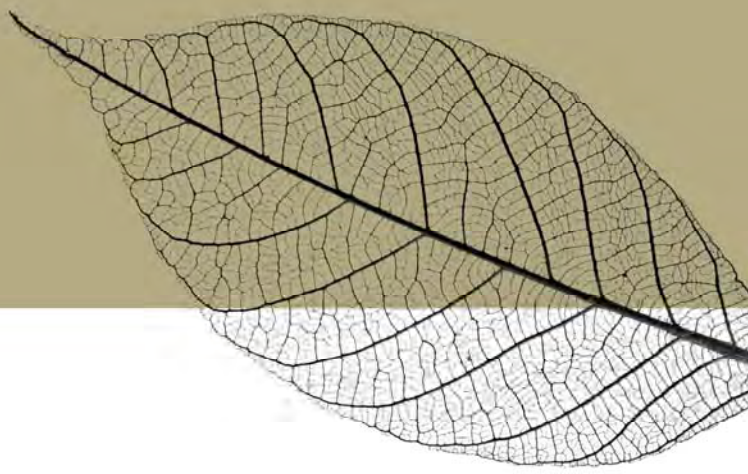


TRAFFIC ENGINEERING ASSESSMENT REPORT

PROPOSED RESIDENTIAL SUBDIVISION AND DEVELOPMENT

189 – 195 TEVIOT ROAD, GREENBANK



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APPENDICES

DOCUMENT CONTROL

4 June 2026

Beth Meehan
Traffic Engineer, BE(Civil)(Hons), RPEQ #8373, FAITPM

1 Introduction

1.1 Purpose of this Report

This report provides an assessment of the traffic engineering and waste services elements of a proposed 1 into 5 lot subdivision and residential development on land located at 189 – 195 Teviot Road, Greenbank. The proposal involves three stages, with Stage 1 being the subdivision and creation of the road network. Stage 2 includes the construction of 15 townhouses on freehold lots, directly accessed via the Kobee Street extension. Stage 3 includes 71 townhouses, which will be part of a Community Title Scheme.

In preparing this report, reference has been made to:

- A review of the site and its surrounds utilising aerial and street view photography.
- Logan City Council's Planning Scheme.
- Economic Development Queensland guidelines, specifically Guideline 6 and Guideline 13.
- Plans of the proposed development prepared by CPO Architects, with a copy of relevant drawings provided at Appendix A.

1.2 Background and Site Context

Planning permission is sought for the development of 189 – 195 Teviot Road, Greenbank, more formally described as Lot 17 on RP210430. This land is currently occupied by a single-unit dwelling and is shown on Figure 1.1.

Of relevance to this Application, direct vehicular access for this site to Teviot Road is not permitted. Connection is to be through the newly established road network created by land the immediate north (Kobee Street), which connects to Teviot Road at a left-in / left-out intersection.

In the future, the local road network will also connect to Leanne Court, noting an Application has been lodged over land to the south which will create this connection. Leanne Court connects to Teviot Road at a signalised, all-movements, intersection.

Kobee Street includes a two-way carriageway of some 8.3m, set within a 15.5m road reserve.

Teviot Road adjacent to the site is a two-way, four-lane, divided carriageway. A pedestrian path exists in the verge adjacent to the site.

Figure 1.1: Subject Site and Surroundings

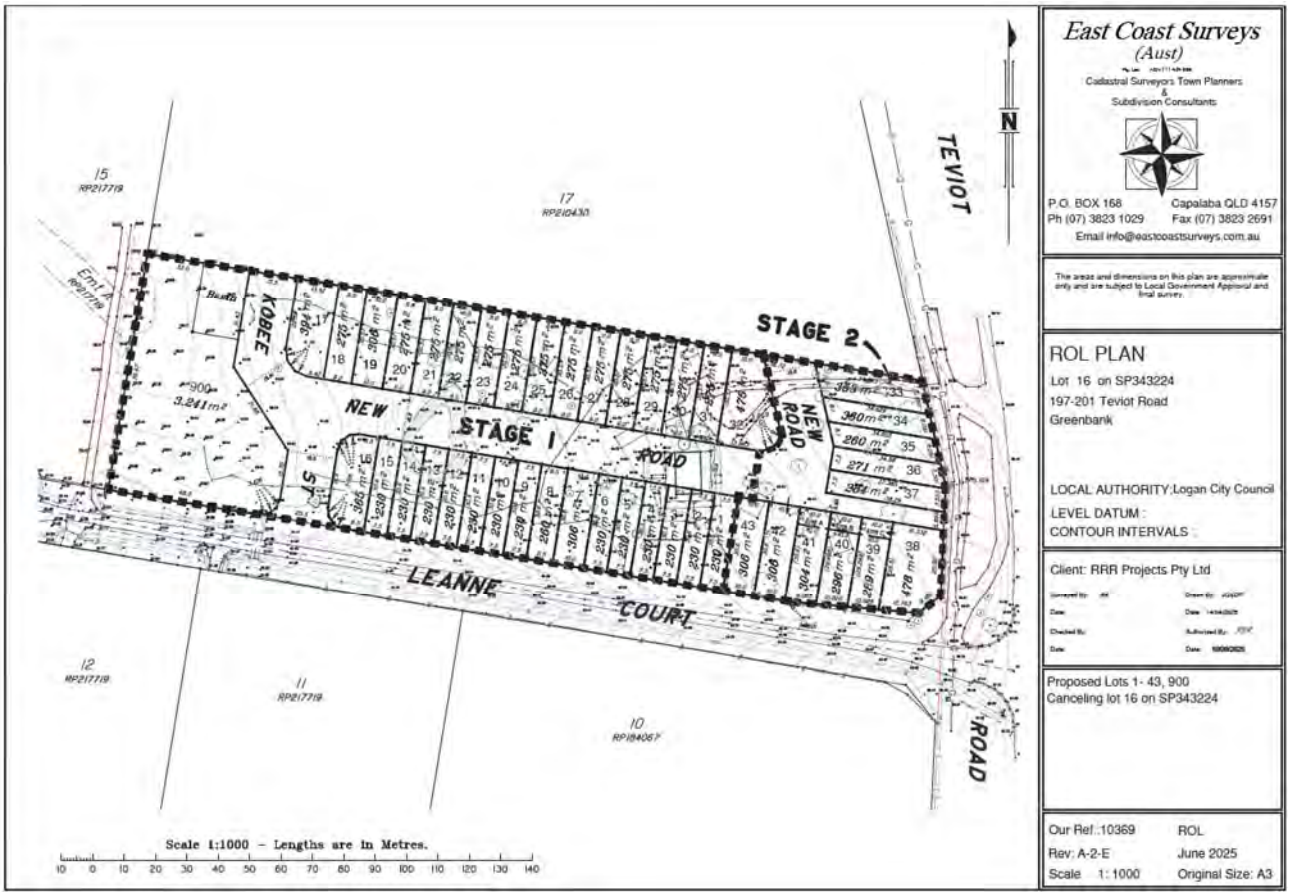
Source: NearMap (Image Date Saturday 20 December 2025)

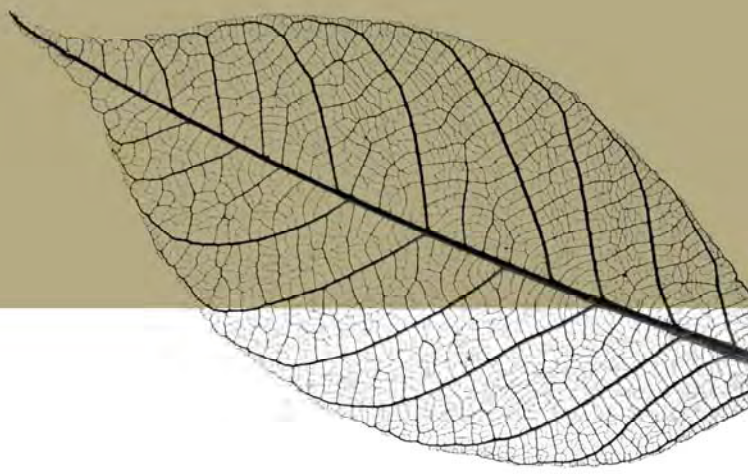
1.3 Application Over Adjacent Sites

It is understood that a 1 into 43 subdivision has been lodged for the site to the immediate south of the subjec site. This will continue the Kobee Street construction, providing connection to Leanne Court.

A copy of the proposed subdivision layout, prepared by East Coast Surveys and dated June 2025, is provided in Figure 1.2.

Figure 1.2: Proposed Subdivision of Site to South





2 Development Proposal

2.1 Overview and Staging

It is proposed to stage the development, as follows:

- Stage 1: Creation of internal road and 1 into 5 lot subdivision.
- Stage 2: Creation of freehold lots and 15 townhouses, fronting Kobee Street.
- Stage 3: Creation of 71 townhouses within a Community Title Scheme.

From a Staging perspective, as long as Stage 1 is completed first, there is no traffic engineering requirement for Stage 2 to be constructed prior to Stage 3 (provided that the roadway remains open for access during construction).

2.2 Stage 2: Freehold Lots

Each of the proposed 15 townhouses on freehold lots includes the following:

- A double garage.
- Refuse storage in a screened enclosure in front of the dwelling.
- Front door access, separate to the garage.

The majority of Townhouses have a 4.8m wide crossover, the exception being TH72 and TH75. At narrower crossovers, vehicles may need to reverse into the driveways to access both garage positions.

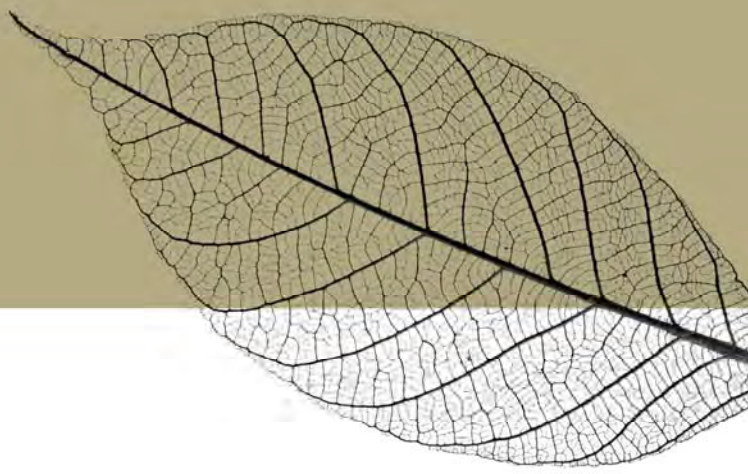
As part of the Kobee Street road extension, on street parking is proposed adjacent to the park dedication frontage. A total of five (5) car parking bays at 90 degrees to the roadway are proposed.

2.3 Stage 3: Community Title Lots

The Community Title Scheme's development is to be accessed via a modified 7.0m wide Type B crossover (generally as per IPWEA RS-051) to Kobee Street. The modification to the standard is for the 1.5m (W) x 1.8m (D) wing to not be constructed, due to its interaction with adjacent driveways in Kobee Street.

The proposed Community Title Lot includes a total of 71 townhouses, all of which will comprise four bedrooms. The following design elements are included:

- An internal loop road which is 6.5m wide.
- Dedicated pedestrian connection to Kobee Street adjacent, but separate to, the main access, as well as a pedestrian connection to Teviot Road. The pedestrian path continues as a marked pedestrian zone on the internal roadway throughout the development.
- A double garage for each dwelling, with the ability to store a bicycle within each garage.
- Internal visitor parking for 17 cars.
- A shared visitor / vehicle wash bay.
- Central refuse and recycling storage and collection areas.



3 Parking Assessment

3.1 Council Requirements

Cars

At Table 9.4.7.3.2 of the Logan Planning Scheme 2015, the following car parking requirement rates are listed for four-bedroom dwellings:

- Resident: 2.0 spaces per four bedroom dwelling.
- Visitors: 1.0 space per four dwellings.
- Vehicle wash bay: 1 space where more than 15 dwellings.

The Freehold Lots at Stage 2 are required to provide:

- 2 resident parking spaces per lot.
- 4 visitor parking spaces.

The proposed Community Title Scheme development at Stage 3 is therefore required to provide:

- 142 resident parking spaces.
- 18 visitor parking spaces.
- 1 vehicle wash bay.

Bicycles

A multiple dwelling development is required to provide the following bicycle parking:

- Resident: 1 space / 3 dwellings.
- Visitor: 1 space / 12 dwellings.

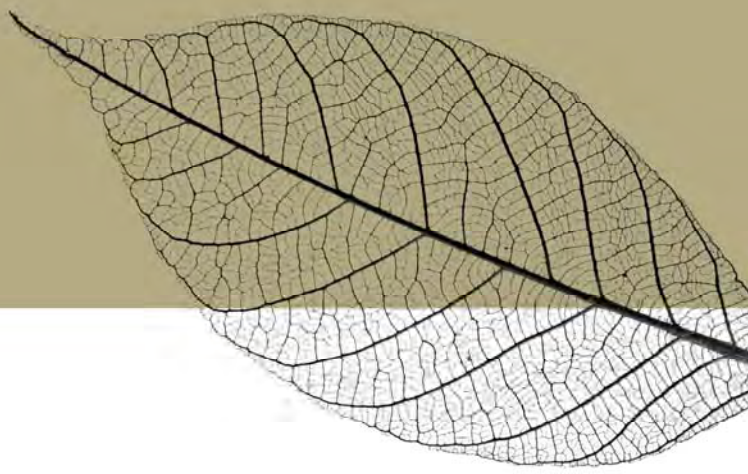
The proposed 71 Community Title townhouses are therefore required to provide 24 resident and 6 visitor bicycle parking spaces.

3.2 Economic Development Queensland Requirements

Within *Economic Development Queensland's* Guideline 7 document, the following car parking requirement rates are listed for four-bedroom dwellings:

- Resident: 2.0 spaces per four bedroom dwelling.
- Visitors: 1.0 space per four dwellings.
- Vehicle wash bay: 1 space where more than 15 dwellings.

These requirement rates are the same as the Logan Planning Scheme.



3.3 Suitability of Parking Provision

Cars

Each freehold townhouse at Stage 2 includes a double garage, which meets the resident parking requirement.

On-street parking within Kobee Street meets the Stage 2 visitor parking requirement, with five (5) car parking spaces at 90 degrees to the roadway, adjacent to the park dedication.

The Community Title Scheme development, at Stage 3, generally meets the car parking requirement of the Planning Scheme (assuming the shared use of the visitor / car wash bay) with:

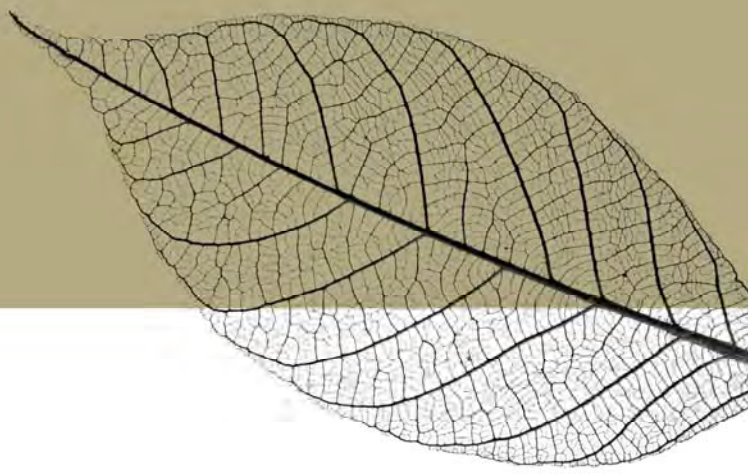
- 2 spaces per dwelling.
- 17 dedicated visitor parking spaces.
- 1 shared visitor parking bay / car wash bay.

Bicycles

The development plans show a provision of:

- 1 bicycle space per dwelling, with a storage hook provided in each garage.
- 6 visitor bicycle parking spaces for visitors within the Community Title Lot.

This is expected to meet the needs of the development, exceeding the requirements.



4 Traffic Impact Assessment

The subject site is located within the Greater Flagstone Development Scheme area, zoned as *Urban Living*. The existing zoning recognises that the land has previously been earmarked for residential development.

There are a number of land parcels which will ultimately gain access to Teviot Road between Taylor Road to the north and Leanne Court to the south. The connections include:

- Priority-controlled left-in / left-out access at the intersection of Taylor Road / Teviot Road, noting that this road connection is currently available.
- Future connection via Leanne Court to the signalised intersection of Leanne Court / Teviot Road.

Noting the site's zoning, the above connections to the external road network would have been planned with future development of this site in mind. The abovementioned intersections will ultimately provide connection for:

- 40 freehold dwelling lots on land to the north.
- The subject development, including a total of 86 townhouse dwellings (mix of freehold dwellings and community title).
- 43 lots to be created to the immediate south of the site (Subject to Approval).
- Other future development to the south of the subject site, between Leanne Court and Pub Lane.

5 Assessment of Site Layout

5.1 Car Parking

A review of the proposed car parking design elements against the requirements of the Australian Standard for Off Street Car Parking (AS/NZS2890.1-2004) is summarised in Table 5.1.

Table 4.1: Car Parking Layout Review Summary

Design Element	**Design Requirement : Australian Standard**	**Complies**	**Comment**
Car bay width and length (Visitor 90 degrees)	2.4m (W) x 5.4m (L) 0.3m clear of obstruction on side	✓	
Double Garage	5.4m (W) x 5.7m (L) [1]	✓	
Internal Roadway Width	6.5m (EQD guideline)	✓	
Height Clearance	2.2m cars / 4.5m trucks	✓	The 2.2m height clearance relates to the opening of the garage doors.

[1] Length requirement not specified in Australian Standard and derived from 5.4m typical bay length, plus 0.3m clearance for enclosure on both sides.

Further to the above, swept path assessments have been undertaken to test accessibility by the 99th percentile passenger vehicle (B99) defined by the Australian Standard for the internal roadway within the Community Title Scheme. Garage accessibility has been tested utilising the 85th percentile passenger vehicle (B85).

These assessments, provided at Appendix B to this report, confirm appropriate accessibility of tested design elements.

5.2 Gradients

Contours on the Site Plan indicate that Kobee Street will fall from the north to south at a relatively steady gradient, at a gradient of less than 1:20.

The proposed internal road within the Community Title Lot has a maximum annotated 1:34 gradient. This is suitable for the movement of passenger and service vehicles, for movement and parking, without a need to transition. It is suggested that **a Condition of Approval require a typical maximum 1:25 gradient on the internal roadway, with the PWD parking bay and shared zone a maximum of 1:40 gradient**.

5.3 Community Title Vehicle Access

Design

Vehicle access is proposed via a 7.0m wide crossover approximately central to the site frontage. This includes a modified *Type B* crossover, as per IPWEA's Standard Drawing RS-051. The modification to the standard is for the 1.5m (W) x 1.8m (D) wing to not be constructed, due to its interaction with adjacent driveways in Kobee Street.

Sight Distance

Kobee Street is subject to a 50km/hr speed limit. The sight distance requirement for vehicle access to a road with a 50km/hr speed limit, as per AS/NZS2890.1-2004, is as follows:

- Desirable sight distance: 69m.
- Minimum sight distance: 45m.

The approach to the access is on a straight horizontal alignment, falling from north to south. As such, it is expected that the sight distance requirement will be met.

5.4 New Roadway

Road Design

Kobee Street includes an 8.3m carriageway within a 15.5m road reserve, which is consistent with the constructed road network to the north, to which it connects.

As the width between crossovers on the new road is not sufficient to accommodate kerbside parking, indented 90 degree parking is proposed on the park dedication frontage.

Local Area Traffic Management is encouraged to manage vehicle speeds and is recommended to form a Condition of Approval.

Access

Economic Development Queensland sets the following design requirements for Low Rise Building vehicle access in PDA Guideline No. 07, dated May 2015:

- 4.8m maximum crossover width for double garages.
- 3.0m maximum crossover width for single garages.
- Minimum 3.0m separation of crossovers.

The proposal meets the above criterial, with a 4.8m maximum width of crossovers, with a 3.8m separation.

There are two narrower crossovers, due to the presence of stormwater infrastructure, with accessibility of the affected garages tested utilising swept path assessments. These assessments are provided at Appendix B to this report, noting that vehicles may need to reverse into the driveway to access both garage positions.

5.5 Pedestrian Access

A pedestrian path is provided on the eastern side of Kobee Street, which continues the pathway which has been constructed on the road to the north.

Pedestrian connection to the Community Title Lot includes:

- A separated path on the northern side of the access to Kobee Street.
- A separated path connecting to Teviot Road.
- Contrasting pavement on the internal road network throughout the remainder of the development.

5.6 Servicing

Stage 2: Temporary Turn Around

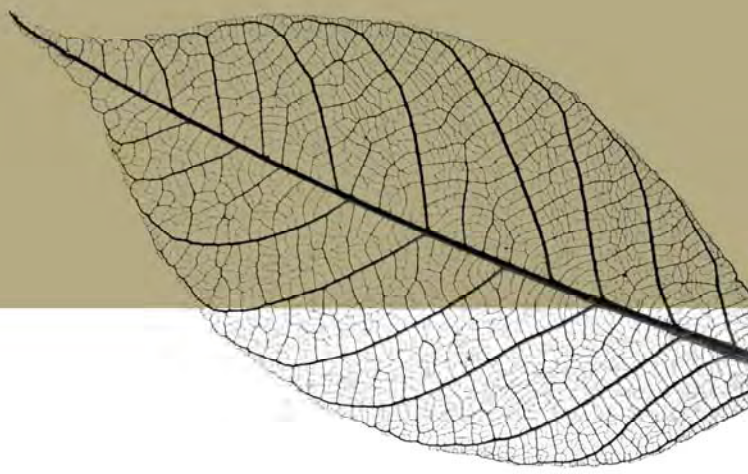
Swept path assessments have been prepared to indicate the use of the Stage 3 access driveway for the temporary turnaround of a 12.5m Heavy Rigid Vehicle, as per the Australian Standard. The results of the swept path assessment are provided at Appendix B and show the extent of roadway noted constructed at Stage 2 is sufficient to facilitate the temporary turnaround.

Stage 3: Community Title Lot

The internal roadway can accommodate vehicles up to and including an 12.5m Heavy Rigid Vehicle (HRV), entering and exiting in a forward gear. Accessibility has been tested utilising the computer program AutoTRACK, with the vehicle tested being the 12.5m HRV defined by the Australian Standard.

There is no building proposed over the driveway, which will be open to the sky.

The swept path assessment is provided at Appendix B to this report.



6 Refuse and Recycling

6.1 Generation and Storage Requirement

As the City of Logan does not list refuse and recycling generation rates, reference has been made to City of Moreton Bay's (COMB's) Waste Policy. At the Appendices of the COMB document, the following generation rates are nominated for all medium density residential dwelling sizes:

- 120L / dwelling / week for refuse.
- 60L / dwelling / week for recycling.

Adopting the above to the proposed 71 townhouses within the Community Title Lot, the following total generation is expected:

- 8,520L refuse / week.
- 4,260L recycling / week or 8,520L recycling / fortnight.

On this basis, the following are proposed:

- 8 x 1,100L receptacles for refuse, collected weekly.
- 8 x 1,100L receptacles for recycling, collected fortnightly.

A total of 16 bins are shown on the development drawings, noting kerbing within the bin store may be helpful to prevent bins bunching together and to maintain independent bin accessibility.

Bin wash capabilities and drainage can form a Condition of Approval.

6.2 Vehicle Accessibility

Swept path assessments have been undertaken to confirm accessibility of the internal roads by a 12.5m Heavy Rigid Vehicle (HRV), travelling in a forward gear. This is notably larger than Council's 9.691m long Refuse Collection Vehicle (RCV) nominated in Table 2.6.6 of the Waste Management Policy. As the development can accommodate the 12.5m long HRV, access is also anticipated for the smaller RCV.

The swept path assessments are provided at Appendix B.

As such, the proposal is capable of being serviced by a Refuse Collection Vehicle.

7 Conclusions

Following the assessment and analyses presented in this report, it is concluded that:

- For the Freehold lots, each lot is capable of accommodating two resident cars in a double garage, meeting the resident parking requirement. Indented 90 degree parking along the park dedication for five (5) cars is to accommodate the visitor parking requirement.
- For the Community Title Lots, the car parking requirement for the 71 townhouses is 142 resident and 18 visitor spaces, plus one car wash bay. These requirements are accommodated, noting the proposal seeks for one visitor parking bay to share the car wash bay.
- The Community Title Scheme's bicycle parking requirement is 24 resident and 6 visitor spaces and this requirement is met.
- Accessibility of key car parking spaces has been tested for the B85 passenger car and swept path assessments confirm appropriate accessibility.
- The internal vehicle access is appropriate for the development, accommodating two-way B99 passenger vehicle traffic flow.
- Kobee Street continues the existing dimensions for the road to which it connects, in terms of its 8.3m carriageway and 15.5m road reserve.
- The crossover to the Community Title Lot is a 7.0m wide modified Type B crossover, with a 60^{o} angle to be constructed as per the IPWEA Standard Drawing RS-051 (wings are not to be included).
- Appropriate forward-in / forward-out on-site servicing has been demonstrated for a 12.5m HRV.
- Pedestrians are accommodated on the eastern side of Kobee Street, consistent with the existing road to which it connects.
- Pedestrian connection for the Community Title Scheme is accommodated with direct connections to Kobee Street and Teviot Road. Generally throughout the development, pedestrians will share the roadway, which is appropriate given the size and nature of the development and noting contrasting pavement for pedestrian awareness is proposed.

Appendix A

Development Plans

legend

- LANDSCAPING
- PRIVATE OPEN SPACE
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- PROPOSED STORMWATER LINE
- RETAINING WALL

G GROUND FLOOR PLAN - STAGE 2

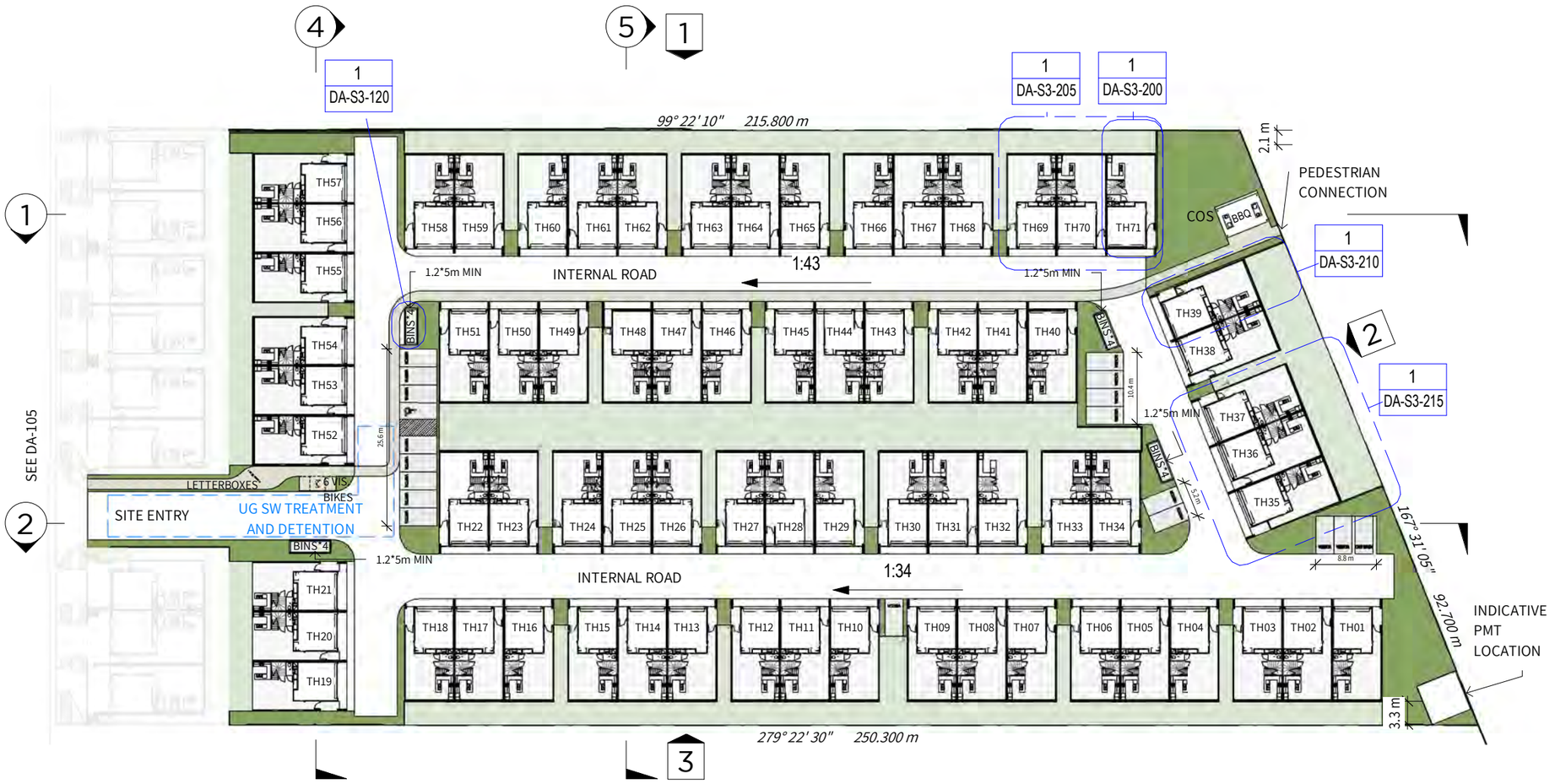
1 : 750 @ A3

CPO ARCHITECTS

dwg no. DA-S2-100
job no. 20250015
revision E

legend

- LANDSCAPING
- PRIVATE OPEN SPACE
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- PROPOSED STORMWATER LINE
- RETAINING WALL



G GROUND FLOOR PLAN - STAGE 3

1 : 750 @ A3

CPO ARCHITECTS

dwg no. DA-S3-100
job no. 20250015
revision D

legend

- LANDSCAPING
- PRIVATE OPEN SPACE
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- PROPOSED STORMWATER LINE
- RETAINING WALL

development data

LOT 17 ON RP210430

SITE AREA (SITE)	20005 m²
SITE AREA (STAGE 3 ONLY)	14306 m²
SITE COVER (SITE)	9268m² (46%)
SITE COVER (STAGE 3 ONLY)	7605m² (53%)
LANDSCAPING/COS (SITE)	2621m² (13%)
COS (STAGE 3 ONLY)	516m² (3%)
ROADWAY (KOBEE ST)	1333m² (6%)
INTERNAL ROAD (STAGE 3)	3014m² (21%)

building data

TOWNHOUSES

4- BED TOWNHOUSES	
- STAGE 2 (FREEHOLD)	15
- STAGE 3	71
TOTAL TOWNHOUSES	**86**

parking data

CAR PARKING RATIO REQUIRED	**198**	BIKE PARKING REQUIRED	
RESIDENT (STAGE 2/STAGE3)	30/142	RESIDENT 1 PER	
VISITOR (STAGE 2/STAGE 3)	8/18	VISITOR (STAGE 3)	1 PER 12
	1 CAR WASHING BAY		
CAR PARKING RATIO PROVIDED	**201**	BIKE PARKING PROVIDED	
STAGE 2			
GARAGED	30 RESIDENT	RESIDENT	1 PER
DRIVEWAY	6 VISITOR		
ON-STREET	5 VISITOR		
STAGE 3			
GARAGED	142 RESIDENT	RESIDENT	1 PER
INTERNAL ROAD	18 VISITOR	VISITOR	6
	1 CAR WASHING BAY		

189-195 Teviot Road, Greenbank QLD 4124

refuse data

REFUSE RATIO REQUIRED	
- STAGE 3 71 x 120L/WK REFUSE)	8520L (8x1100L)
- STAGE 3 71 x 120L/FTN RECYCLED)	8520L (8x1100L)
- STAGE 2	WHEELIE BINS

1 SITE PLAN
1 : 750 @ A3

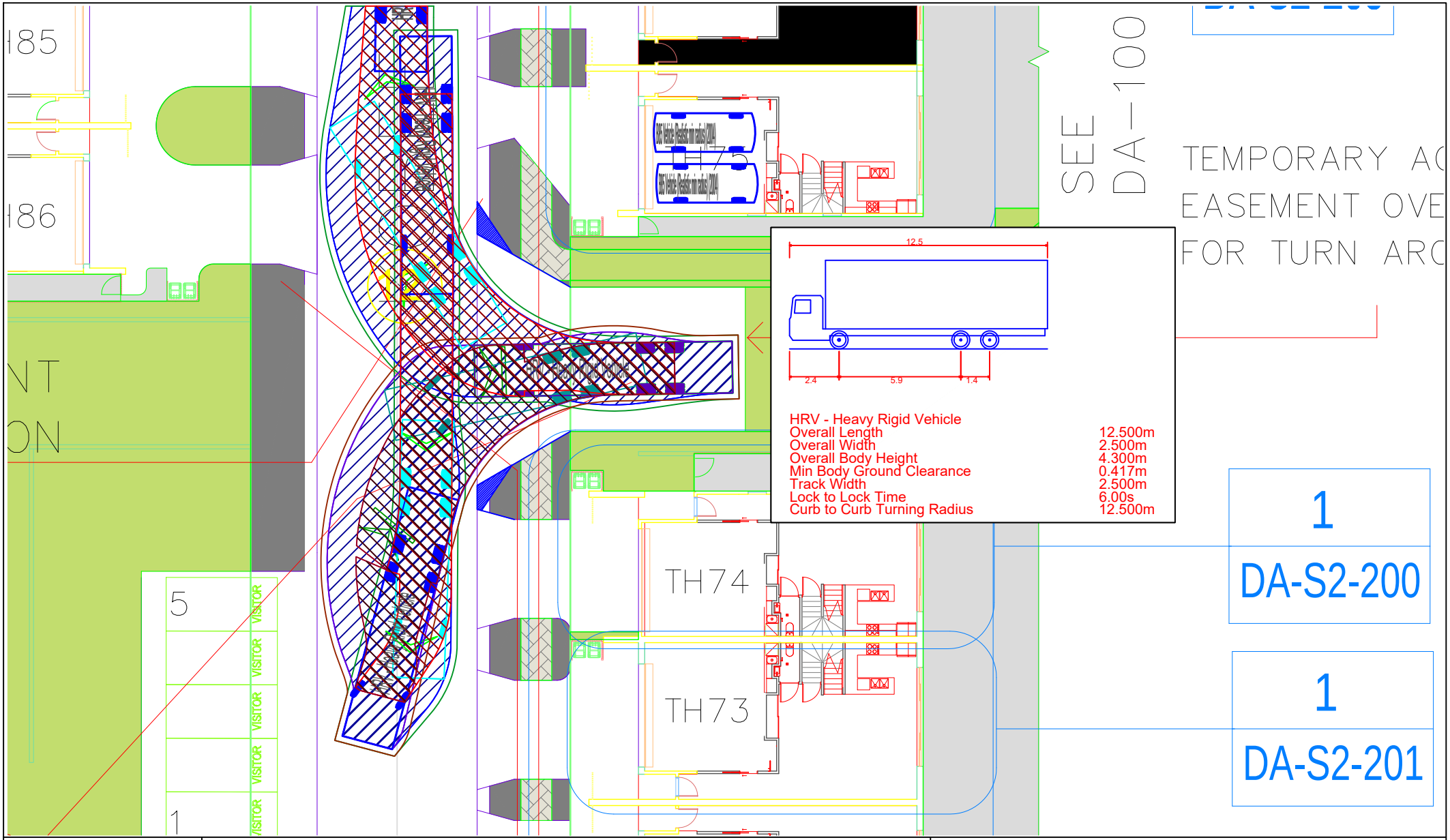
TYPE A — GFA 191.47m²
TYPE B (REAR BALCONY) — GFA 191.06m²
TYPE C (FRONT BALCONY) — GFA 191.06m²
TYPE C V2 (FRONT BALCONY) — GFA 210.80m²
TYPE D (TWO BALCONIES) — GFA 191.06m²

CPO ARCHITECTS

dwg no. DA-090
job no. 20250015
revision F

Appendix B

Swept Path Assessments



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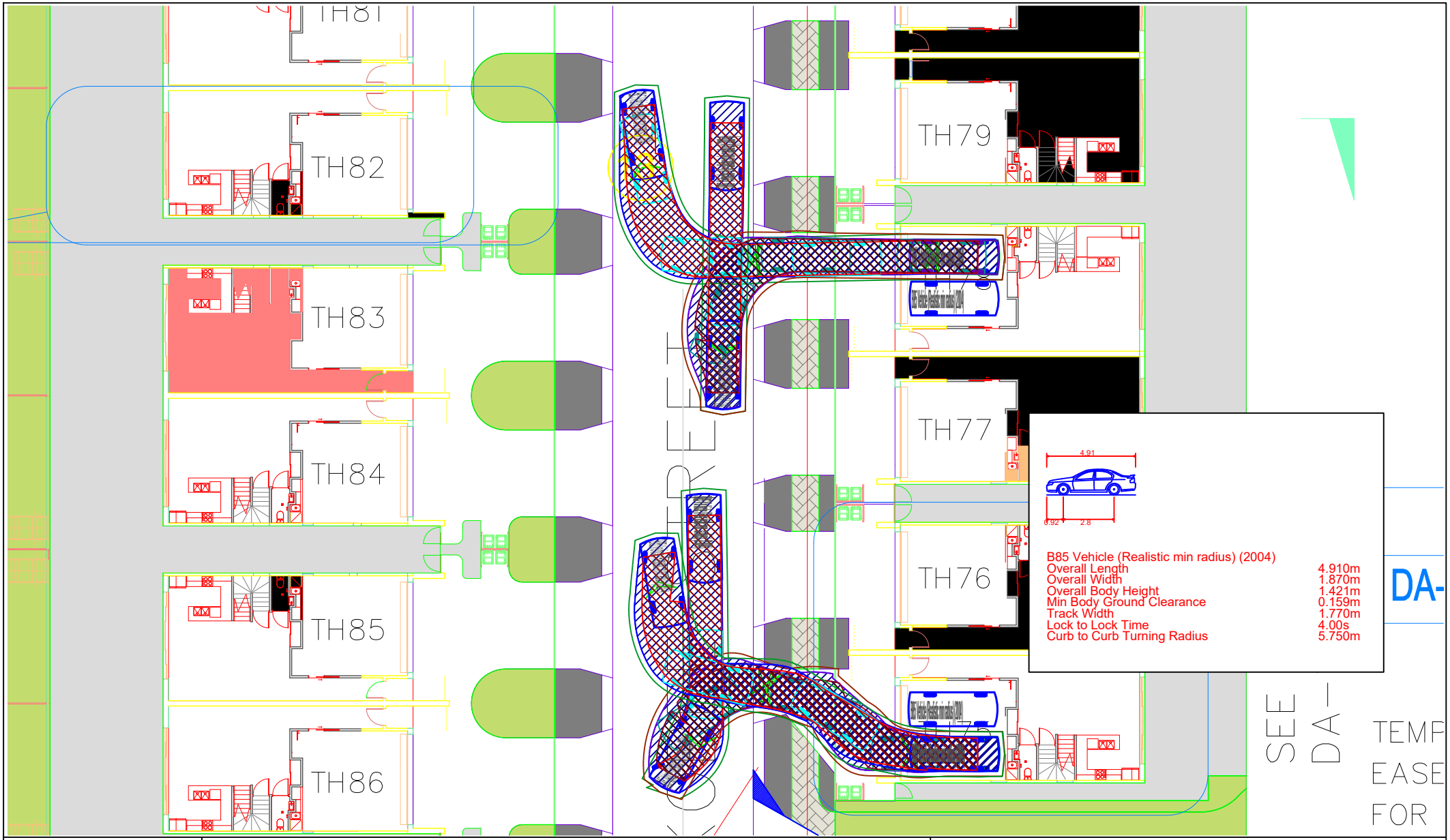
12.5m Heavy Rigid Vehicle
Australian Standard AS/NZS2890.2:2002
Note Driveway Design Detail

Scale 1:250 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR01 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026



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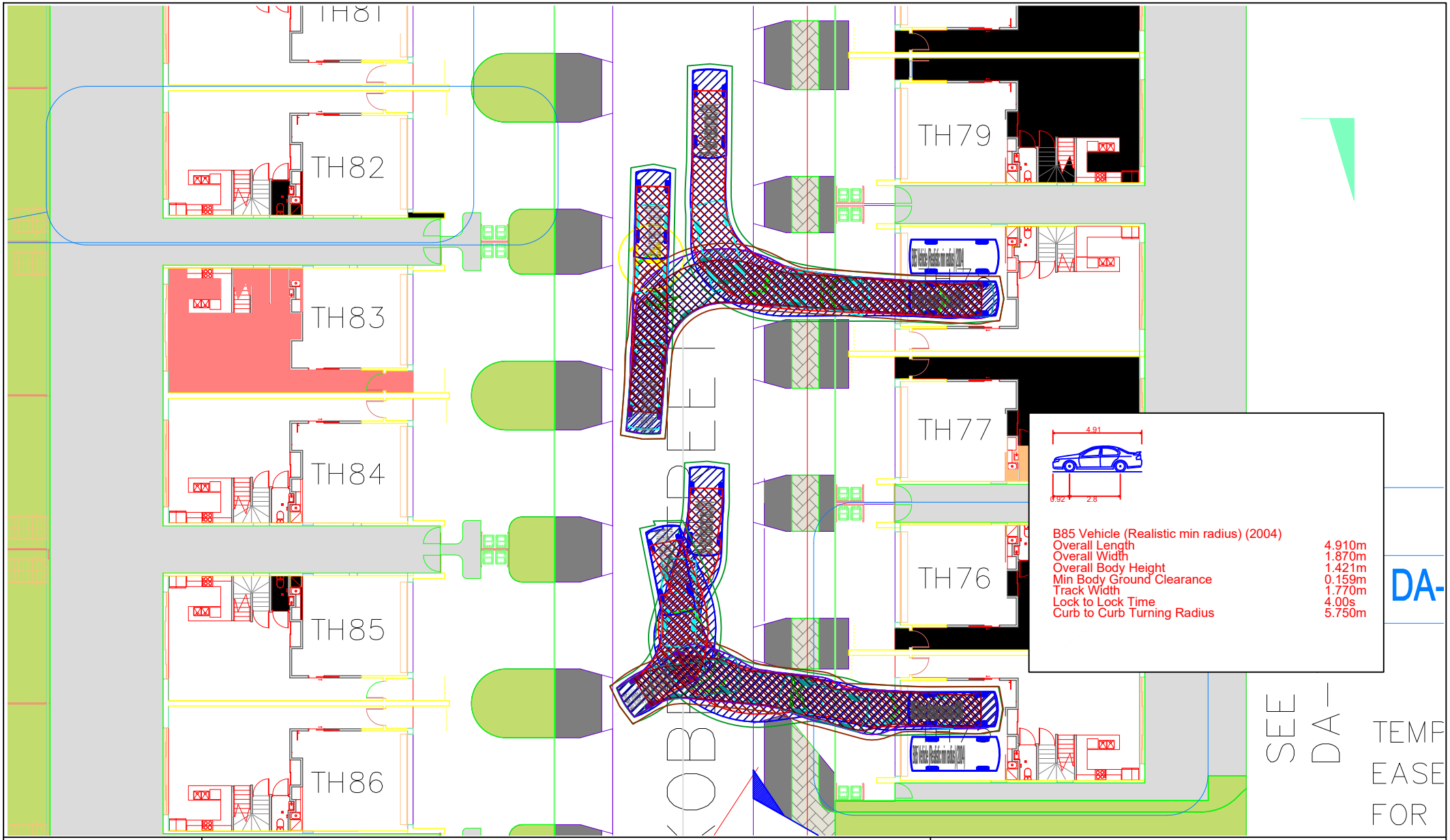
B85 Passenger Car Access
Australian Standard AS/NZS2890.1:2004

Scale 1:250 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR02 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026



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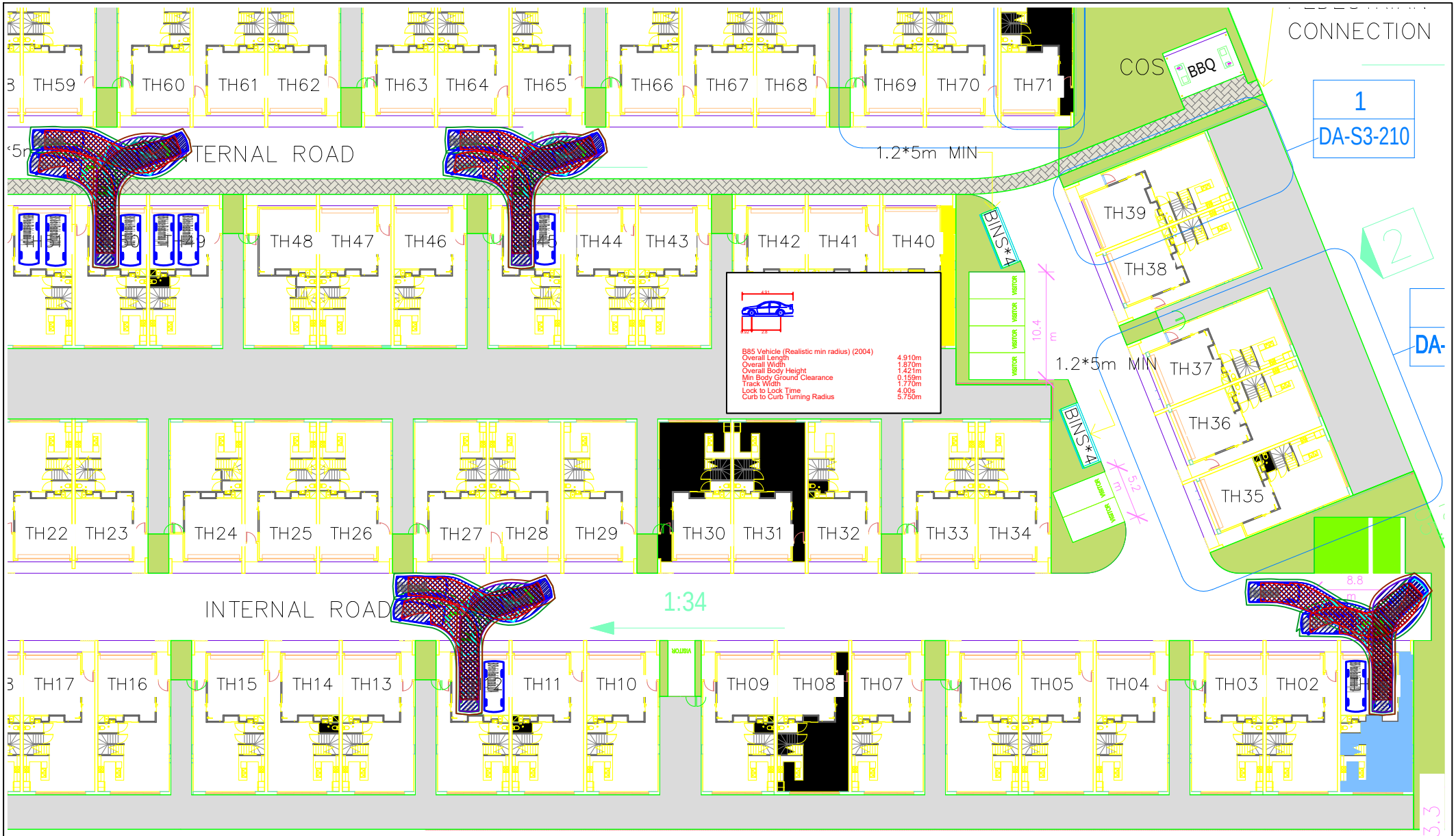
B85 Passenger Car Access
Australian Standard AS/NZS2890.1:2004

Scale 1:250 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR03 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026



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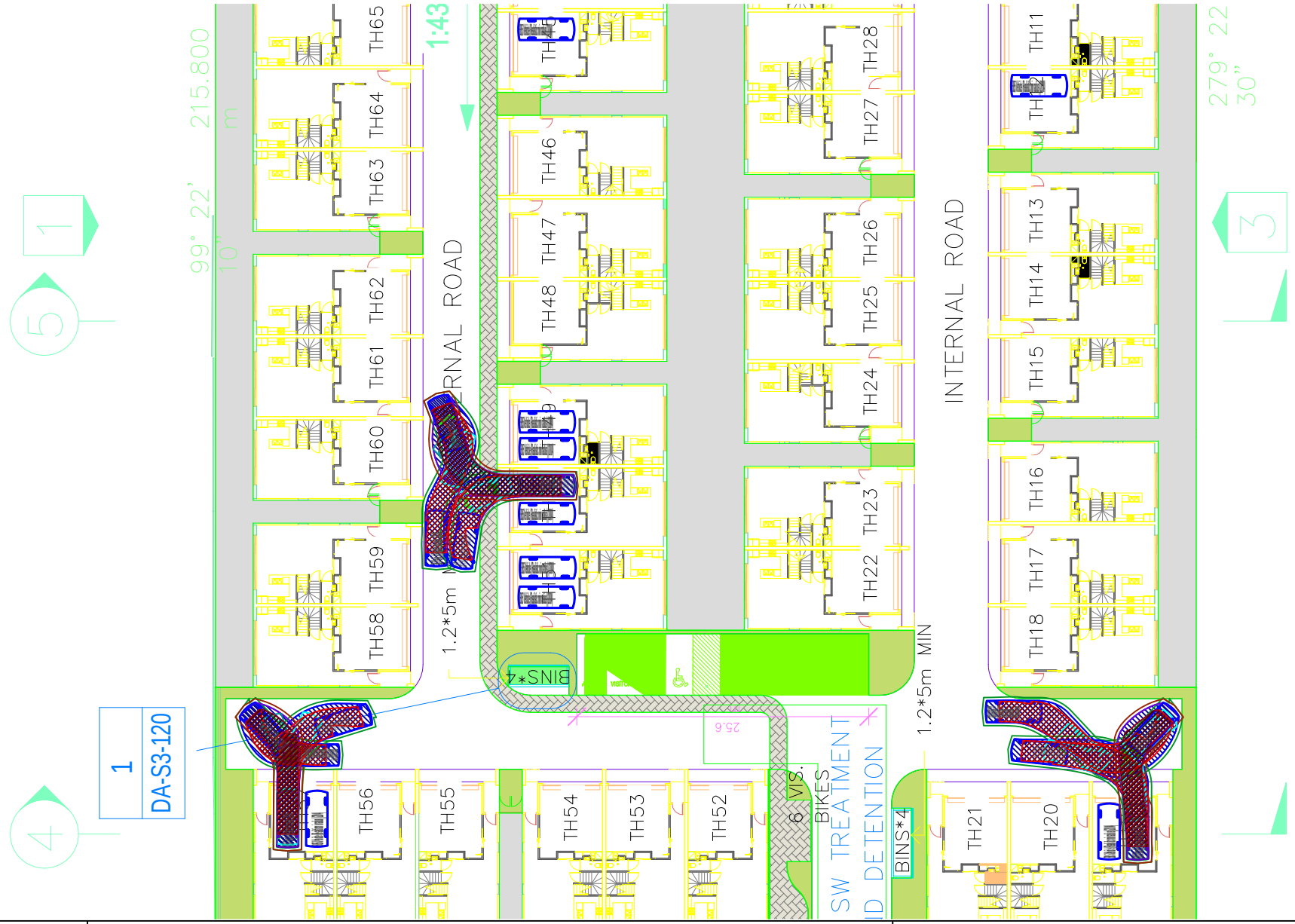
B85 Passenger Car Access
Australian Standard AS/NZS2890.1:2004

1:500 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR04 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026



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B85 Passenger Car Access
Australian Standard AS/NZS2890.1:2004

Scale 1:500 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR05 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026

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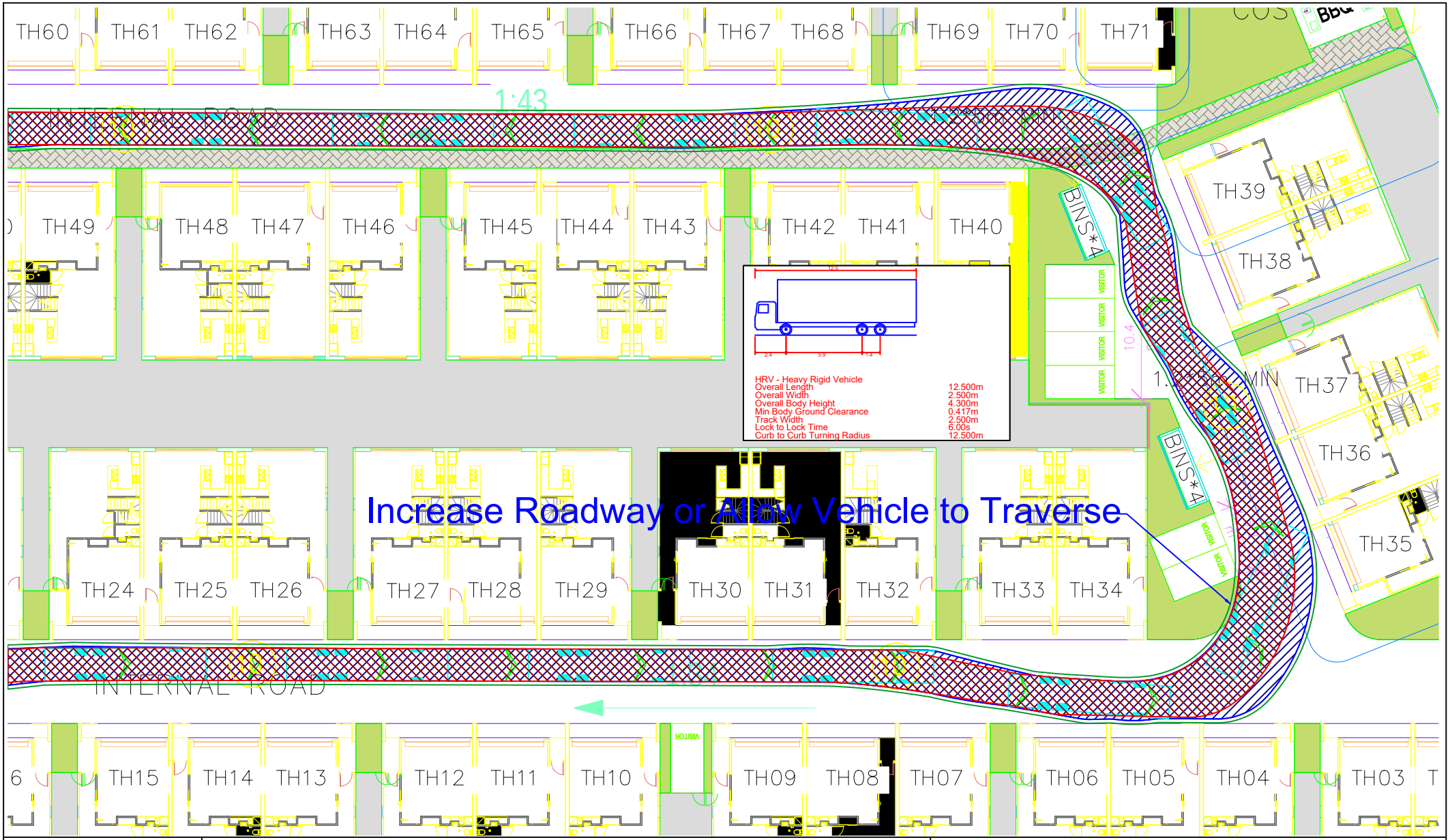
B99 Passenger Car Access
Australian Standard AS/NZS2890.1:2004

Scale 1:500 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR06 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026



BMC TRAFFIC

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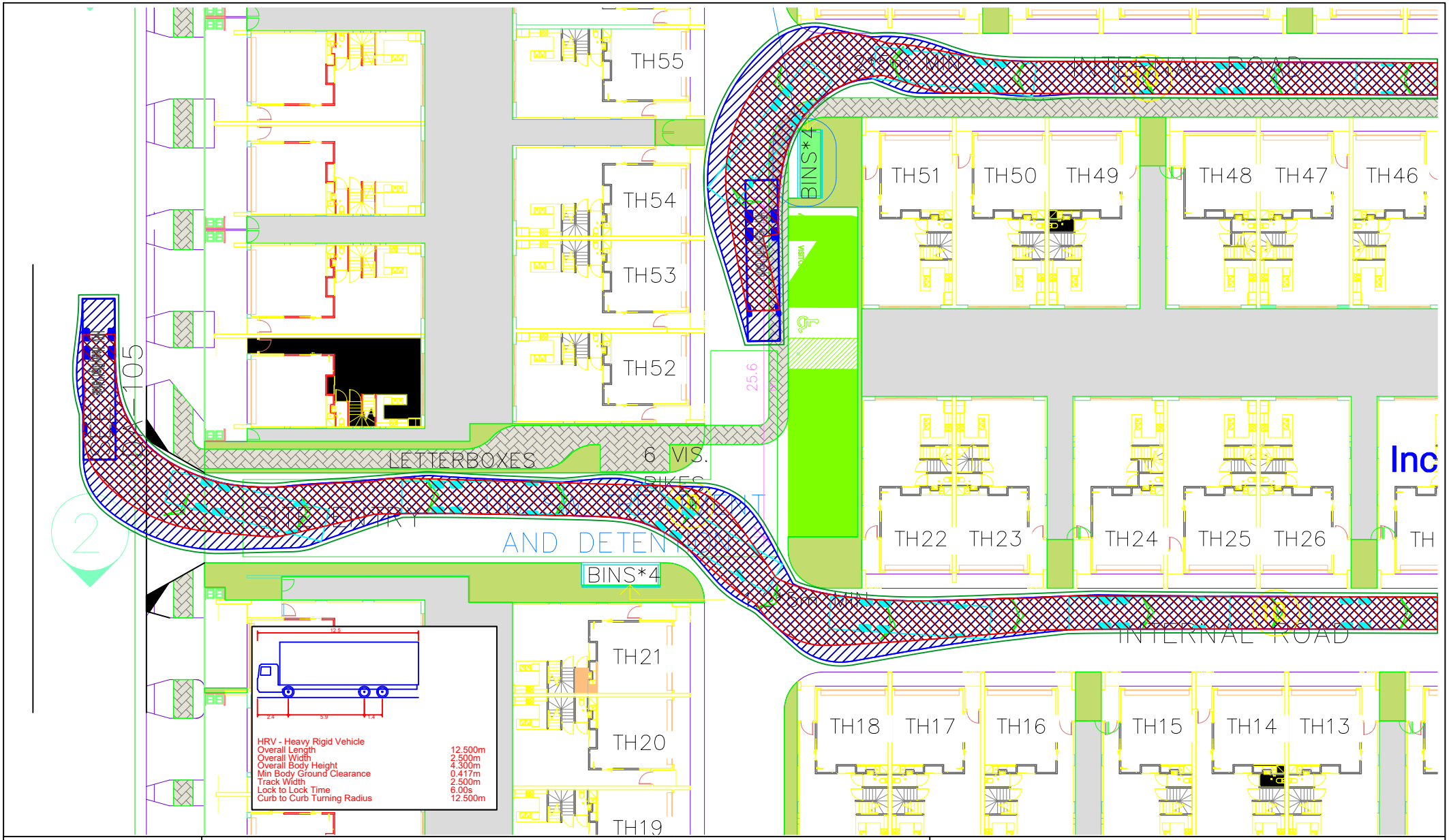
12.5m Heavy Rigid Vehicle
Australian Standard AS/NZS2890.2:2002

Scale 1:400 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR07 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026



BMC TRAFFIC

(07) 3398 4649
www.bmctraffic.com.au

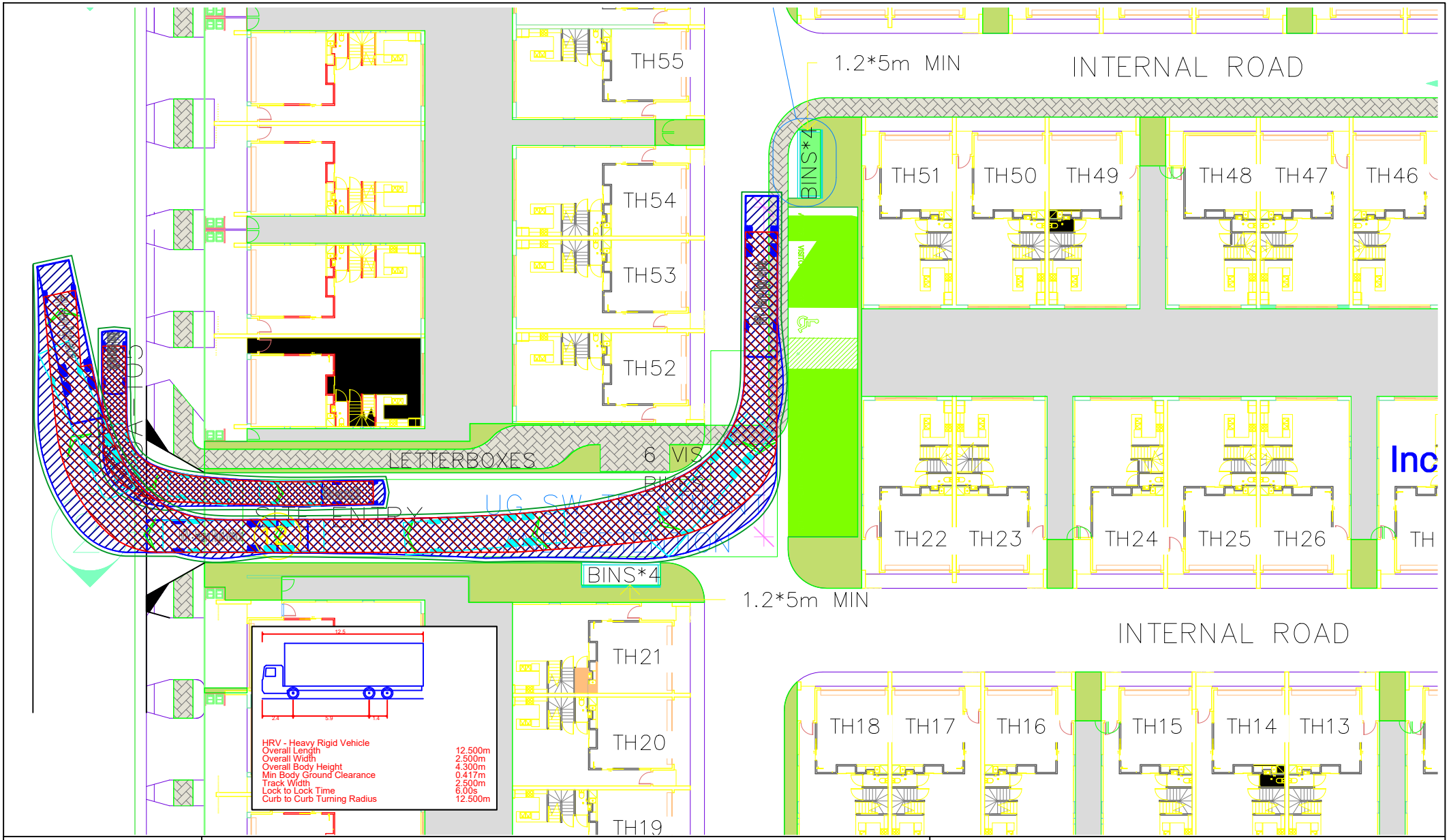
12.5m Heavy Rigid Vehicle
Australian Standard AS/NZS2890.2:2002

Scale 1:400 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR08 Version: 1

Prepared By: Beth Meehan RPEQ #8373 Date: 3/06/2026



BMC TRAFFIC

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12.5m Heavy Rigid Vehicle
Australian Standard AS/NZS2890.2:2002

Scale 1:400 at A4

189-195 Teviot Rd, Greenbank

Drawing No: BMC26035-ATR09 Version: 1

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