



PROPOSED RESIDENTIAL DEVELOPMENT

12-14 GLADYS AVENUE, FRENCHS FOREST

Traffic and Parking Assessment Report

8th August 2025

Ref: 24037

Prepared by

Terraflow Pty Ltd
Traffic and Parking Consultants



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1. INTRODUCTION

This report has been prepared to accompany a development application (DA) to Northern Beaches Council for a proposed Low and Mid Rise (LMR) Housing development on a consolidated site at 12-14 Gladys Avenue, Frenchs Forest (Figures 1 and 2).

The proposed development site is located on the western side of Gladys Avenue approximately 125m north of Frenchs Forest Road West. The site has a total area of 4,704m² with a frontage of 9.39m to Gladys Avenue. The site is zoned R2 Low Density Residential under the controls of Warringah LEP 2011.

The existing site development contains 2 dwellings (one on each lot). The dwellings gain vehicular access to Gladys Avenue via a single width accessway that is approximately 30m long.



Photograph looking west from Gladys Avenue along the accessway

Development Proposal

The development proposal involves the demolition of the existing site development and construction of 28 x Low and Mid Rise Housing apartments and 4 Seniors Living apartments as follows:



- 13 x 2 bedroom apartments
- 15 x 3 bedroom apartments
- 4 x 3 bedroom self contained seniors living apartments

The proposal is served by a two level basement carpark containing a total of 34 resident spaces and 7 visitor spaces as follows:

- 28 x resident parking spaces
- 6 x disabled resident parking spaces
- 7 x visitor parking spaces

In addition to the parking provision are 2 loading bays on the upper basement level that will also be fitted with car washing facilities. The loading bays have been provided to facilitate access to the apartments by couriers and tradesmen. Signage will be provided at the site entry to make these users aware of the off-street parking spaces.

Vehicular access to the proposed development is off Gladys Avenue via a two-way 5.5m wide combined entry/exit driveway. The dual width accessway narrows to a single lane approximately 16m into the site and then widens again approximately 28m into the site. The additional width will include a linemarked waiting bay prior to the entry to the basement. A convex mirror will be provided at the top of the ramp to enhance sight lines between approaching vehicles.

Architectural plans of the development proposal are reproduced in Appendix A.

Public Transport Accessibility

The development site is served by the following bus routes that operate along Frenchs Forest Road West:

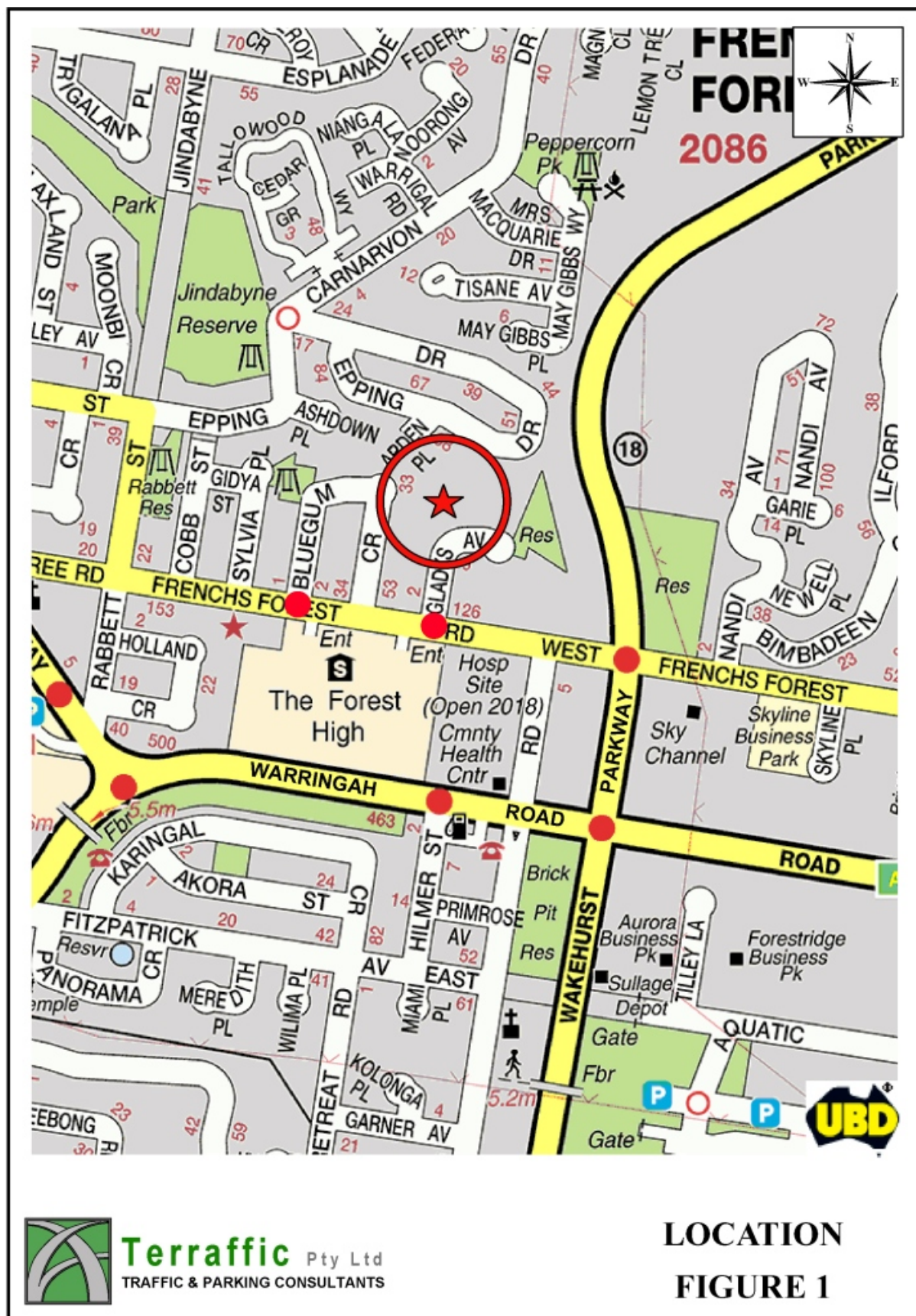
- | | |
|------------------|---|
| Route 141 | Austlink (Belrose) to Manly Wharf via Frenchs Forest, Seaforth and Balgowlah.
Service operates daily |
|------------------|---|

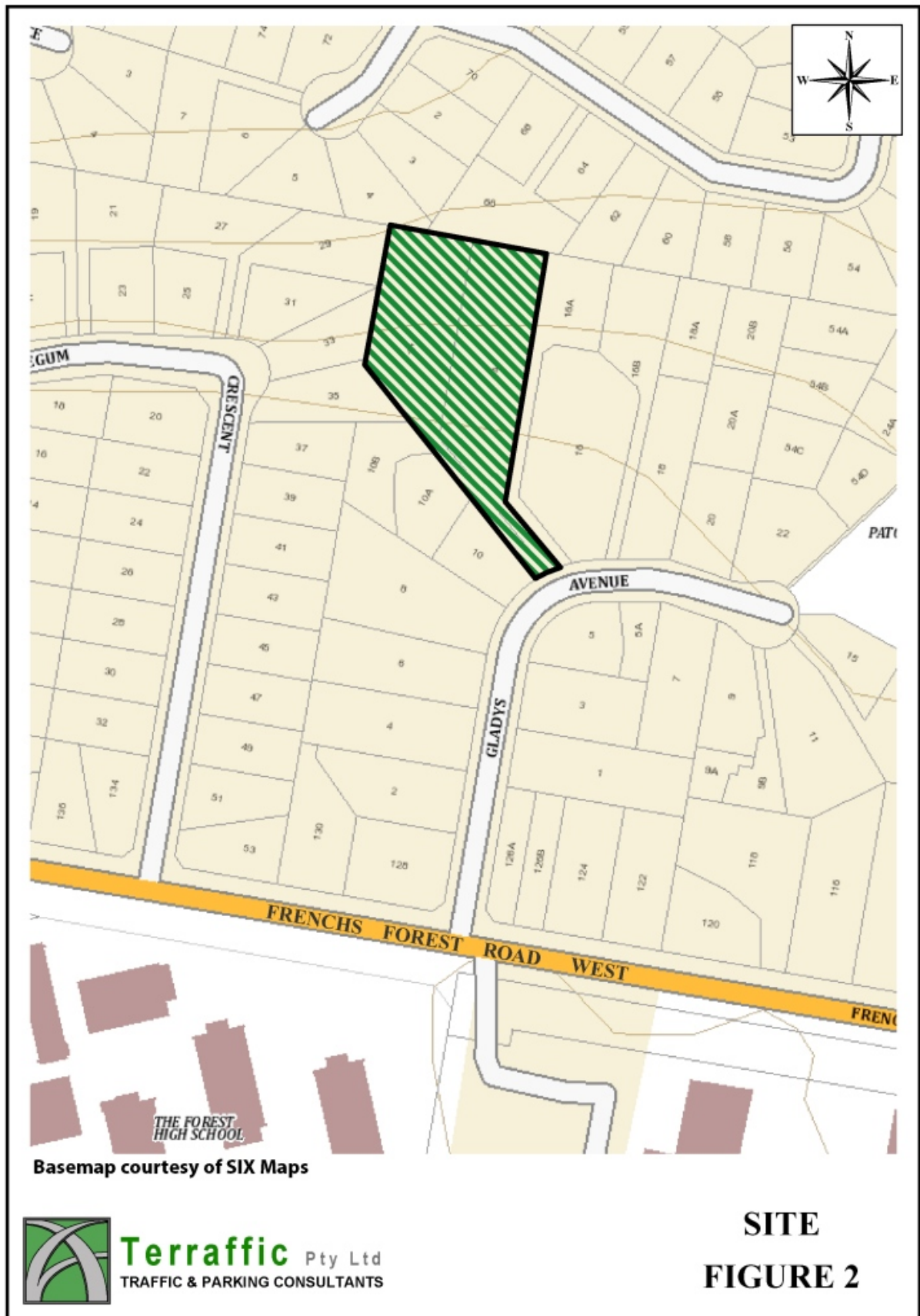


Route 155	Bayview Garden Village to Frenchs Forest via Mona Vale and Narrabeen. Service operates daily
Route 160X	Dee Why to Chatswood via Beacon Hill, Frenchs Forest, Forestville and Roseville. Express service operates daily
Route 166	Frenchs Forest to Manly via Beacon Hill, Narraweena, Dee Why, North Curl Curl and Freshwater. Service operates daily
Route 193	Austlink (Belrose) to Warringah Mall via Frenchs Forest, Beacon Hill, Narraweena and Brookvale. Service operates daily
Route 280	Warringah Mall to Chatswood Station via Allambie Heights, Frenchs Forest, Forestville and Roseville. Service operates daily

Bus stops for these services are located on Frenchs Forest Road West at Gladys Avenue (refer to Figure 4).

The purpose of this report is to assess the traffic and parking implications of the proposed development.







2. PARKING ASSESSMENT

SEPP Housing Parking Requirement – Seniors Living Apartments

Part 5 in Chapter 3 of the State Environmental Planning Policy (Housing) 2021 specifies the following car parking requirements for Seniors Housing:

108 Non-discretionary development standards for independent living units—the Act, s 4.15A

- (2) The following are non-discretionary development standards in relation to development for the purposes of independent living units—
 - (j) for a development application made by, or made by a person jointly with, a social housing provider—at least 1 parking space for every 5 dwellings,
 - (k) if paragraph (j) does not apply—at least 0.5 parking spaces for each bedroom.

Application of those requirements to the proposed self funded apartments yields a total parking requirement of 6 spaces calculated as follows:

4 x 3 bedroom units (12 bedrooms) @ 0.5 spaces per bedroom	6 car spaces
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The proposed development satisfies the SEPP with a total of 6 disabled resident parking spaces.

Seniors Living Parking Space Compliance

Part 1 in Schedule 4 of the State Environmental Planning Policy (Housing) 2021 specifies the following dimensional requirements for resident parking spaces associated with independent living units:

4 Car parking

- (1) If parking spaces attached to or integrated with a class 1 building under the Building Code of Australia are provided for use by occupants who are seniors or people with a disability, at least 1 parking space must—
 - (a) be at least 3.2m wide, and
 - (b) be at least 2.5m high, and



- (c) have a level surface with a maximum gradient of 1:40 in any direction, and
 - (d) be capable of being widened to 3.8m without requiring structural modifications to a building.
- (2) If parking spaces associated with a class 1, 2 or 3 building under the Building Code of Australia are provided in a common area for use by occupants who are seniors or people with a disability, the following applies—
- (a) for a parking space not in a group—the parking space must comply with AS/NZS 2890.6,
 - (b) for a group of 2–7 parking spaces—
 - (i) at least 1 of the parking spaces must comply with AS/NZS 2890.6, and
 - (ii) 50% of the parking spaces must—
 - (A) comply with AS/NZS 2890.6, or
 - (B) be at least 3.2m wide and have a level surface with a maximum gradient of 1:40 in any direction,
 - (c) for a group of 8 or more parking spaces—
 - (i) at least 15% of the parking spaces must comply with AS/NZS 2890.6, and
 - (ii) at least 50% of the parking spaces must—
 - (A) comply with AS/NZS 2890.6, or
 - (B) be at least 3.2m wide and have a level surface with a maximum gradient of 1:40 in any direction.

As the development contains 6 parking spaces for the seniors living apartments, the requirements in Clause 4(2)(b) will apply. Application of the requirements in Clause 4(2)(b) yields a requirement of at least 3 disabled spaces as follows:

6 spaces @ 50% of parking spaces to be AS2890.6 or at least 3.2m wide 3 disabled spaces

The proposal satisfies this requirement with the provision of 6 disabled parking spaces compliant with the Australian Standard AS/NZS2890.6:2022 – “*Off-street parking for people with disabilities*” as follows:

- A 5.4m long x 2.4m wide dedicated (non-shared) parking space
- An adjacent shared area that is also 5.4m long x 2.4m wide
- A minimum headroom of 2.5m above the disabled spaces
- Pavement cross-falls in disabled spaces do not exceed 2.5% (1 in 40) in any direction



SEPP Housing Parking Requirement – LMR Apartments

Part 4 in Chapter 6 of the State Environmental Planning Policy (Housing) 2021 specifies the following car parking requirements for Low and Mid Rise (LMR) Residential Flat Buildings in R2 Zones:

179 Non-discretionary development standards—residential flat buildings and shop top housing in Zone R1 or R2

- (c) if no environmental planning instrument or development control plan that applies to the land specifies a maximum number of car parking spaces per dwelling—a minimum of 0.5 car parking spaces per dwelling,

As the parking requirements in the Warringah Development Control Plan 2011 do not specify a “maximum” parking requirement, the applicable parking rate for the subject development is a minimum 0.5 of a space per dwelling. Application of this requirement to the proposed LMR apartments yields a total parking requirement of 14 spaces calculated as follows:

28 x LMR apartments @ 0.5 spaces per dwelling 14 car spaces

The proposed development clearly satisfies the SEPP with a total of 28 resident parking spaces (1 space per unit).

Visitor Parking Requirement

While the Housing SEPP does not specify a parking requirement for residential visitors, the proposal has made provision for 7 visitor spaces in compliance with Appendix 1 of the Warringah Development Control Plan 2011 as follows:

32 apartments @ 1 visitor space per 5 dwellings 6.4 spaces (rounded to 7 spaces)

The proposal also includes 2 loading bays on the upper basement level to facilitate access to the apartments by couriers and tradesmen. Signage will be provided at the site entry to make these users aware of the off-street parking spaces.



Car Parking and Vehicular Access Compliance

The non-disabled parking spaces and access arrangements have been designed to satisfy the following requirements of the Australian Standard AS/NZS2890.1-2004 – “*Off-Street Car Parking*”:

- Parking spaces are a minimum 5.4m long x 2.4m wide
- An additional 300mm has been provided to parking spaces adjacent a wall
- A minimum aisle width of 5.8m has been provided
- A 1.0m wide blind aisle extension has been provided where necessary
- The accessway has a maximum grade of 5% (1 in 20) for the first 6.0m into the site
- Maximum ramp grades do not exceed 25% (1 in 4)
- Ramp transitions do not exceed 12.5% (1 in 8) over 2.0m
- The two-way sections of the accessway and ramps have a minimum width of 6.1m comprising a 5.5m wide roadway and 2 x 300mm wide kerbs
- The single lane section of the accessway has a minimum width of 3.6m comprising a 3.0m wide roadway and 2 x 300mm wide kerbs
- A minimum headroom clearance of 2.2m has been provided throughout the basement
- Pedestrian sight line triangles have been provided

Swept Path Analysis

The ability of the Australian Standard B99 vehicle (Ford Transitvan) and B85 vehicle (Ford Falcon) to pass on the accessway has been tested using the Autodesk Vehicle tracking software. The path of the B99 vehicle passing a waiting B85 vehicle on ground level (Level 4) is reproduced in Appendix B. As can be seen, these vehicles can adequately pass with the required clearances.



On-Street Loading Zone

In order to facilitate waste collection and deliveries by larger trucks, it is proposed to incorporate an indented loading bay on Gladys Avenue between the driveways of No.10 and 12-14 Gladys Avenue. A plan of the proposed indented loading bay is reproduced in Appendix C which includes a 2.4m wide loading bay designed for access by Council's a 10.5m long Waste Vehicle. A 1.5m wide footpath alongside the loading bay is also proposed.

The new loading bay will require modifications to the layback and shared access driveway to No.10, 10A and 10B Gladys Avenue, along with any associated works in the road reserve. In addition, the loading bay will require approval for the installation of 'LOADING ZONE' signage with additional 'NO PARKING' restrictions to apply between 6am-6pm on waste collection days.

The swept path of the 10.5m long Council waste truck accessing the loading bay and the B85 and B99 vehicles passing a parked waste truck are also reproduced in Appendix C. As can be seen, the Council truck can comfortably access the loading bay while the 2 passing cars can easily pass the parked truck with the required clearances.

In the circumstances, it can be concluded that the proposed development has no unacceptable parking or loading implications.



3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services (RMS) is illustrated on Figure 3 and comprises the following:

State Roads	Regional Roads
Forest Way	nil
Warringah Road	
Wakehurst Parkway	

Naree Road and Frenchs Forest Road West are unclassified *Local Roads* that perform a sub-arterial road function that links Forest Way to the west with Warringah Road to the east. Frenchs Forest Road West carries 4 lanes of traffic (2 in each direction) with 24/7 CLEARWAY restrictions generally applying along both sides of the road.

Gladys Avenue is an unclassified *Local Road* with a primary function of providing access to properties along its length. It has a pavement width of approximately 6.1m with a NO PARKING restriction along the eastern alignment to facilitate passing traffic. The western alignment is unrestricted.

The existing traffic and parking controls in the vicinity of the site are illustrated on Figure 4. As can be seen, the intersection of Frenchs Forest Road and Gladys Avenue is signal controlled and provides access to the Northern Beaches Hospital.

Projected Traffic Generation Potential

An indication of the traffic generation potential of the existing and proposed development is provided by reference to the Roads and Maritime Services Technical Direction TDT2013/04a: “*Guide to Traffic Generating Developments*”. The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the existing and proposed development:



Dwelling House	0.99 weekday peak hour vehicle trips per dwelling
High Density Residential Flat Buildings	0.19 weekday AM peak hour vehicle trips per dwelling 0.15 weekday PM peak hour vehicle trips per dwelling
Housing for Aged or Disabled	0.40 weekday peak hour vehicle trips per dwelling

For the purposes of providing conservative assessment, a traffic generation rate of 0.3vtph per dwelling will be applied to the proposed LMR dwellings.

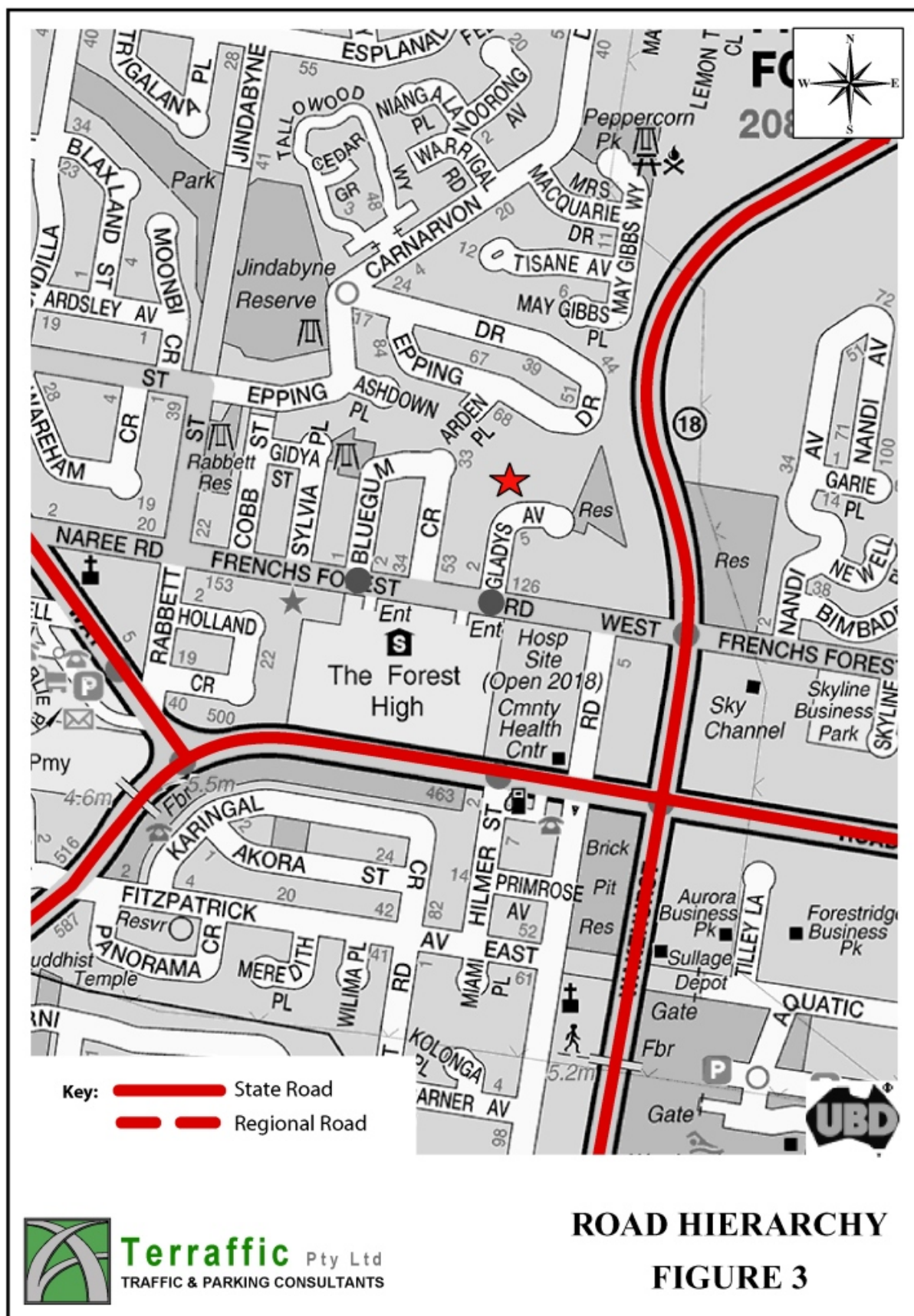
Application of the RMS's traffic generation rates to the **proposed development** yields a traffic generation potential in the order of 10vtph during the weekday AM and PM peak periods calculated as follows:

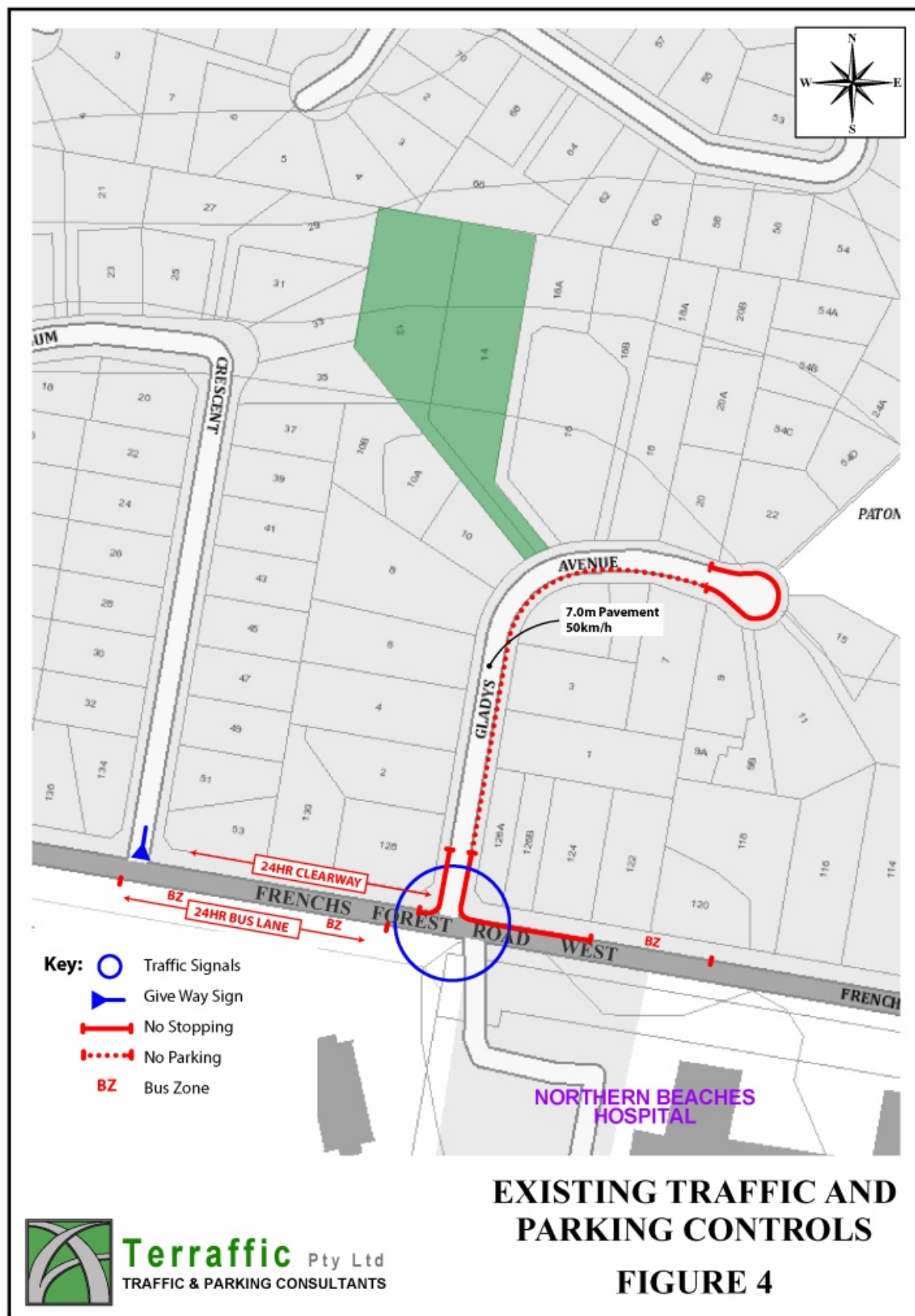
28 x LMR dwellings @ 0.3vtph per dwelling	8vtph (AM: 1 in / 7 out, PM: 7 in / 1 out)
4 x Seniors dwellings @ 0.4vtph per dwelling	2vtph (AM: 0 in / 2 out, PM: 2 in / 0 out)
Total development	10vtph (AM: 1 in / 9 out, PM: 9 in / 1 out)

The traffic generation of the proposed development should be discounted by the traffic generation of the existing dwellings on the site. Based on the RMS's traffic generation rate of 0.99 vehicle trips per dwelling, the **existing site development** would generate in the order of 2vtph during the peak periods. To that end, the proposed development will only generate 8 additional vehicle trips during peak periods.

It will be readily appreciated that the additional traffic generated by the proposed development is relatively minor (8vtph) which will not have any noticeable or unacceptable effect on the road network serving the site in terms of road network capacity or traffic-related environmental effect.

In the circumstances, it can be concluded that the proposed development has no unacceptable traffic implications.







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APPENDIX A

ARCHITECTURAL PLANS



2 LEVEL 3
1:200



NOTES

1. NEVER scale off drawings, use figured dimensions only.
2. Verify all dimensions on site prior to commencement & report discrepancies to the architect.
3. Drawings describe scope of works and general set out. These drawings are not shop drawings. Set out to be undertaken by surveyor on site. Shop drawings should be prepared where required or necessary.
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LEGEND
Refer to the notes page for a legend that includes further notes and an explanation of abbreviations.

NOTES REGARDING DEVELOPMENT APPLICATION DRAWINGS

Minor changes to form and configuration may be required when drawings are subsequently prepared for construction purposes after the grant of development consent.
The design is not in a form suitable for use in connection with building work.

PARKING SCHEDULE

Accessible	4
Commercial	2
Resident	2
Visitor	7
	4

VERSION
COORDINATION
REV 09-07-2025 MODEL 24_041 Model LMR-04 - ADDITIONAL LEVELS
DOCUMENT
LEVEL 3

STAGE
COORDINATION
PROJECT
LMR APARTMENTS
12-14 Gladys Avenue
Frenchs Forest
Lot A & B DP939276
88 Republic of Gladys

ARCHITECTURE URBAN PLANNING
M1747 McEvoy St Alexandria NSW 2015
P 02 9516 2022 E email@smithtzannes.com.au
smithtzannes.com.au
Nominated Architect: Peter Smith ARN 7024



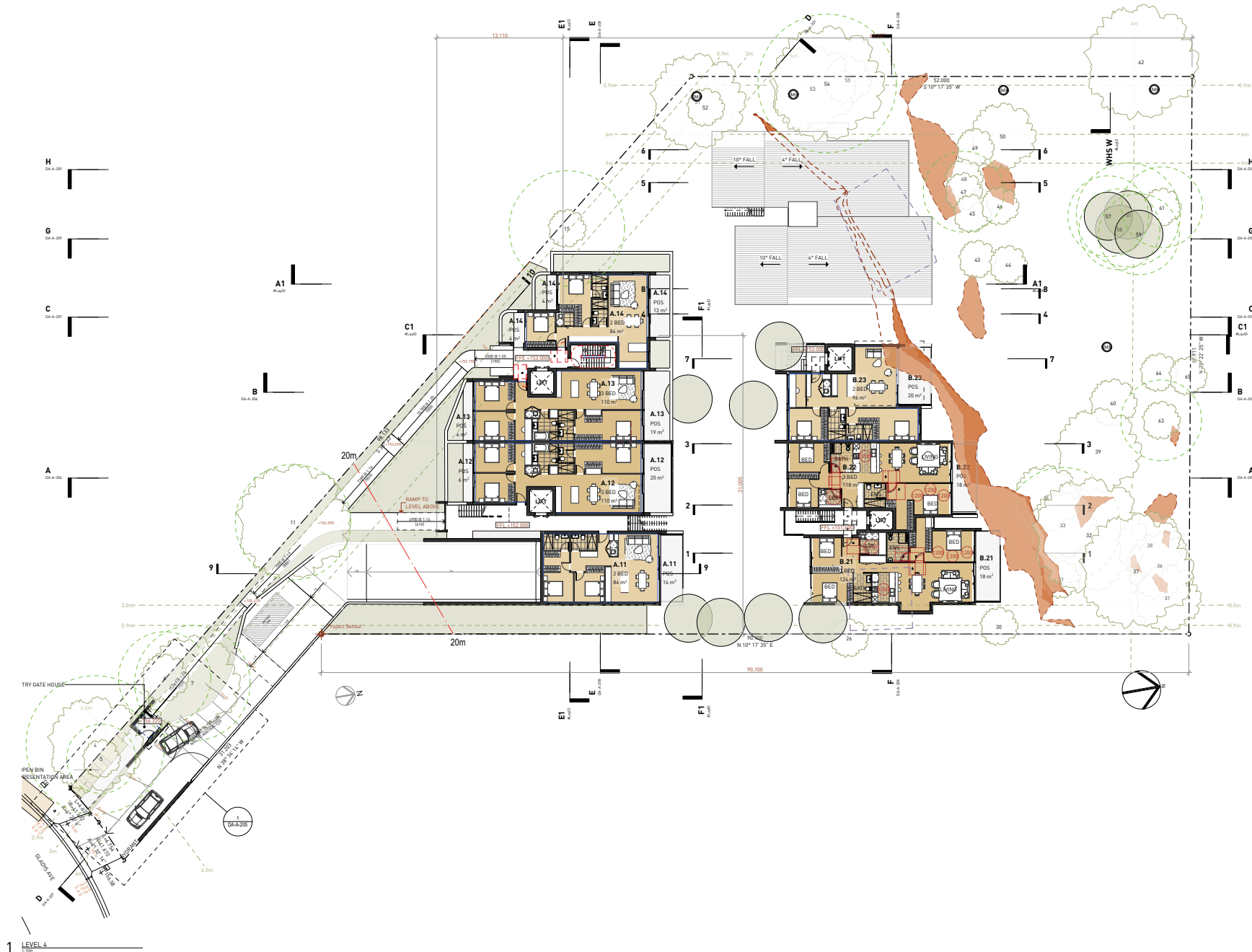
24_041 DA-A-104

Refer to the notes page for a legend that includes further notes and an explanation of abbreviations.

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Accessible
Commercial
Resident
Visitor



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VERSION
FOR DA
REV A 31/07/25
DOCUMENT
LEVEL 4

STAGE
DEVELOPMENT APPLICATION
PROJECT
LMR APARTMENTS
12-14 Gladys Avenue
Frenchs Forest

Lot A & B DP939276
88 Republic of Gladys

ARCHITECTURE URBAN PLANNING
M/1747 McEvoy St Alexandria NSW 2015
P 02 9516 2022 E email@smithtannes.com.au
smithtannes.com.au
Nominated Architect: Peter Smith ARN 7024

STZ
SMITH & TZANNES

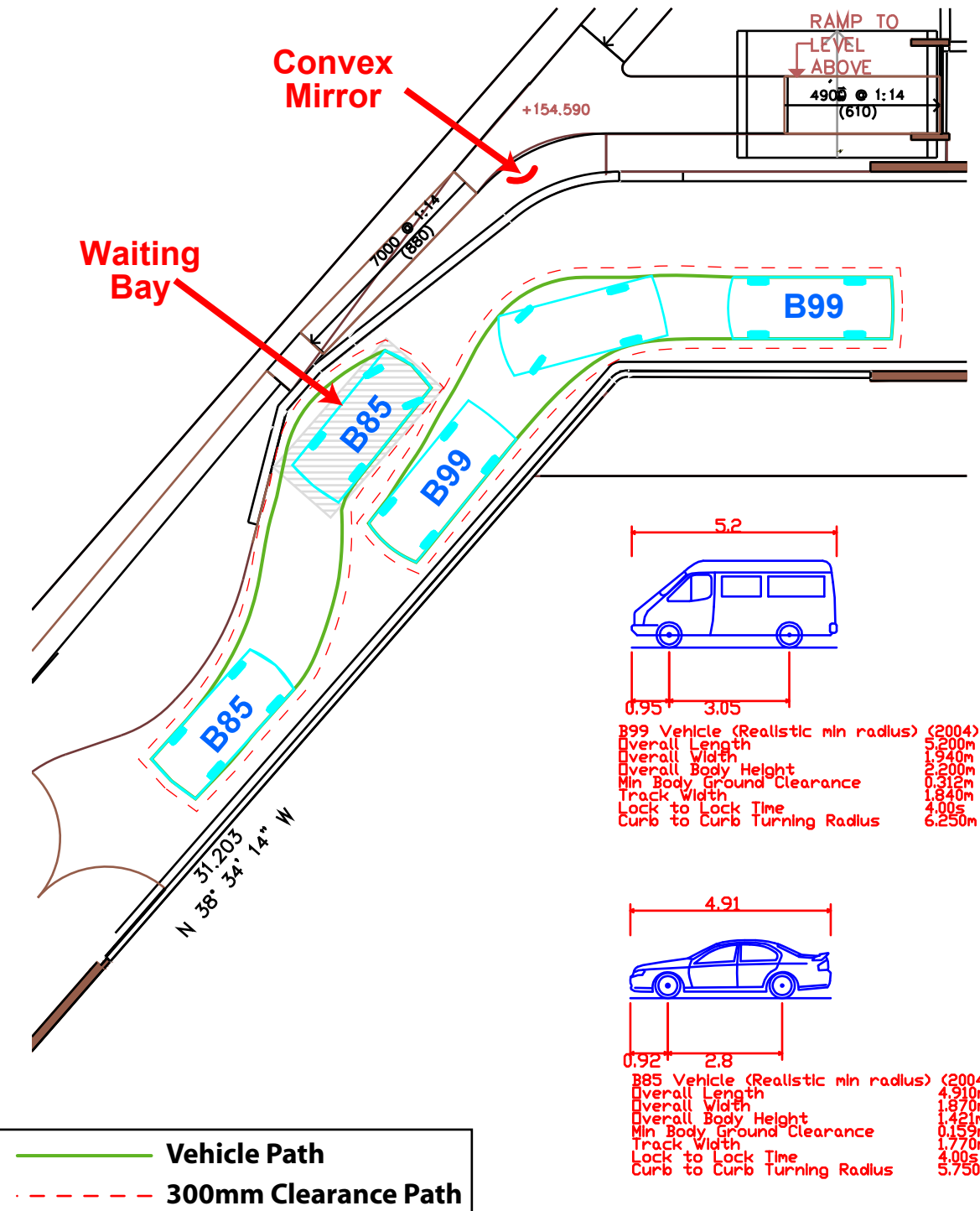
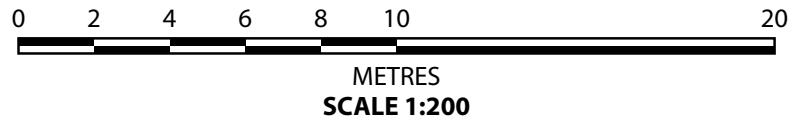
24_041 DA-A-103



APPENDIX B

SWEPT PATH ANALYSIS

Path prepared using
Autodesk Vehicle Tracking



**Manoeuvring Path of Australian
Standard AS/NZS2890.1:2004
B99 Vehicle and B85 Vehicle
Passing on Accessway**

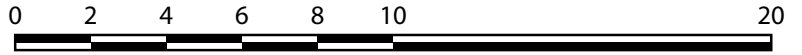


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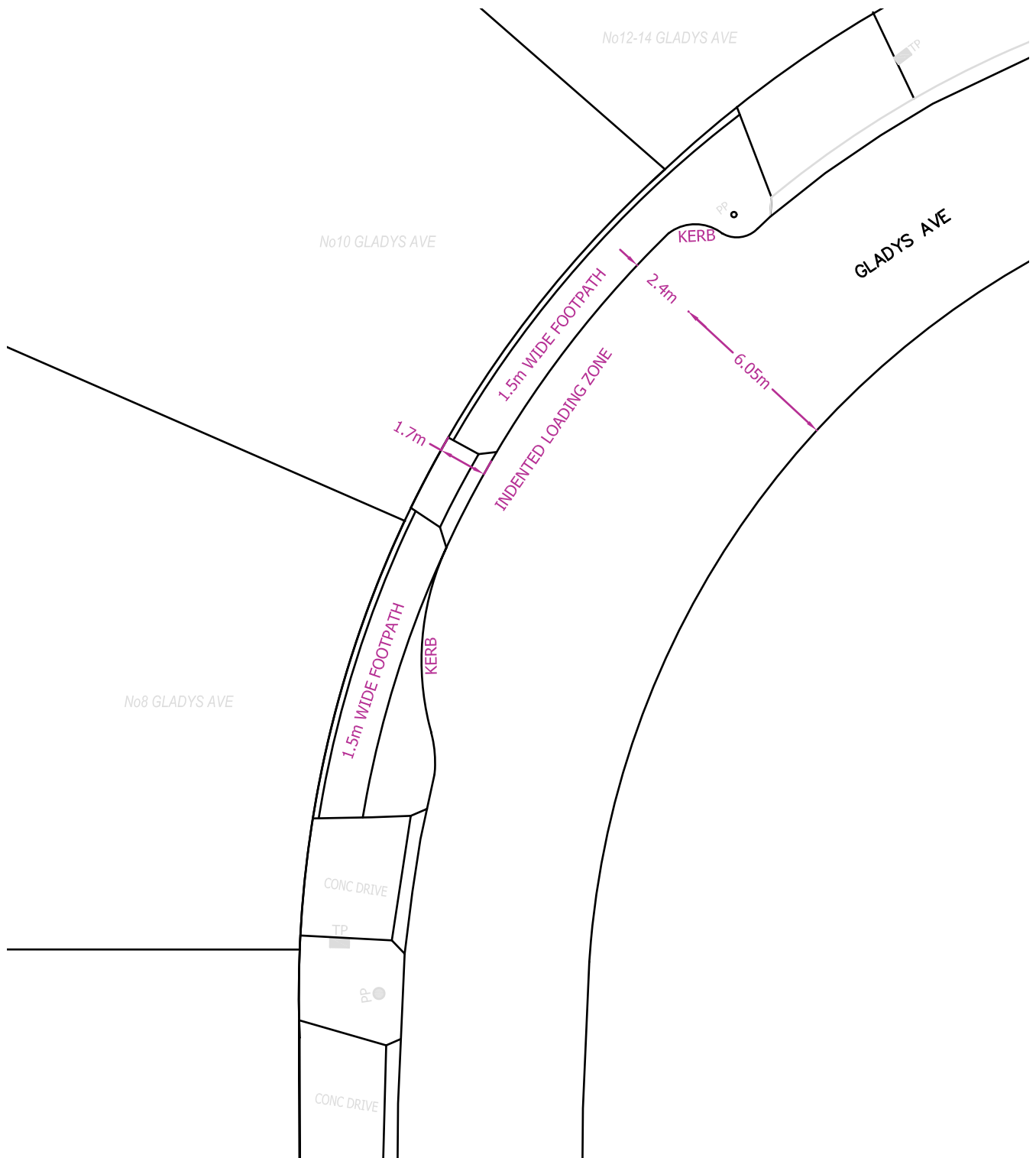


APPENDIX C

PROPOSED ON-STREET INDENTED LOADING BAY AND SWEEP PATHS



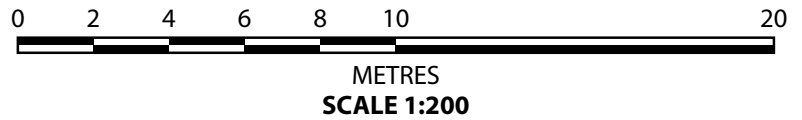
METRES
SCALE 1:200



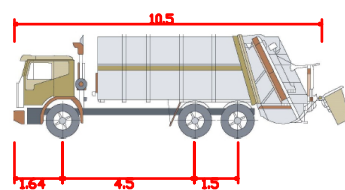
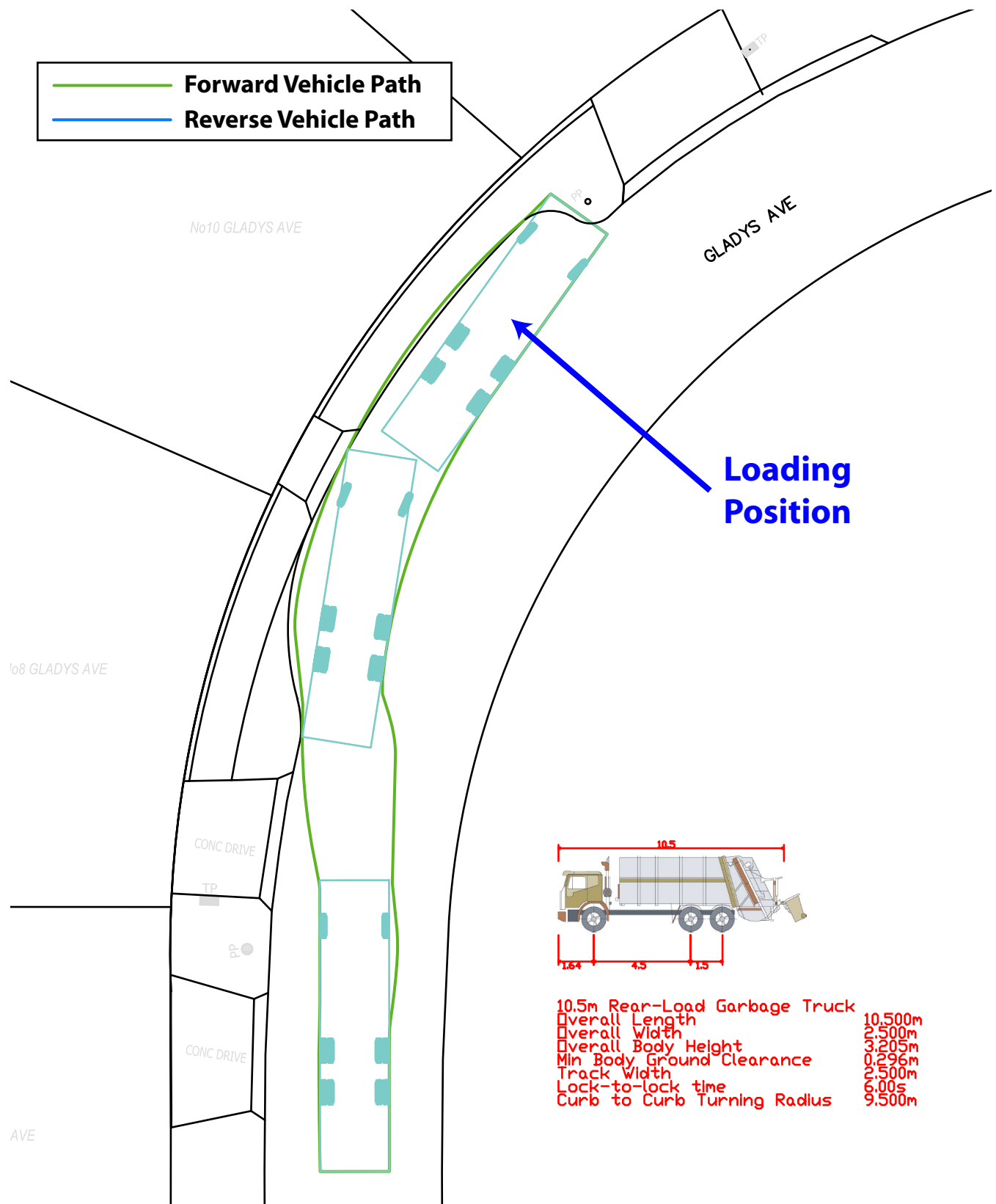
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**Proposed Gladys Avenue
Time Restricted
LOADING ZONE**

Path prepared using
Autodesk Vehicle Tracking



Forward Vehicle Path
Reverse Vehicle Path



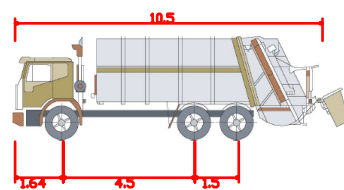
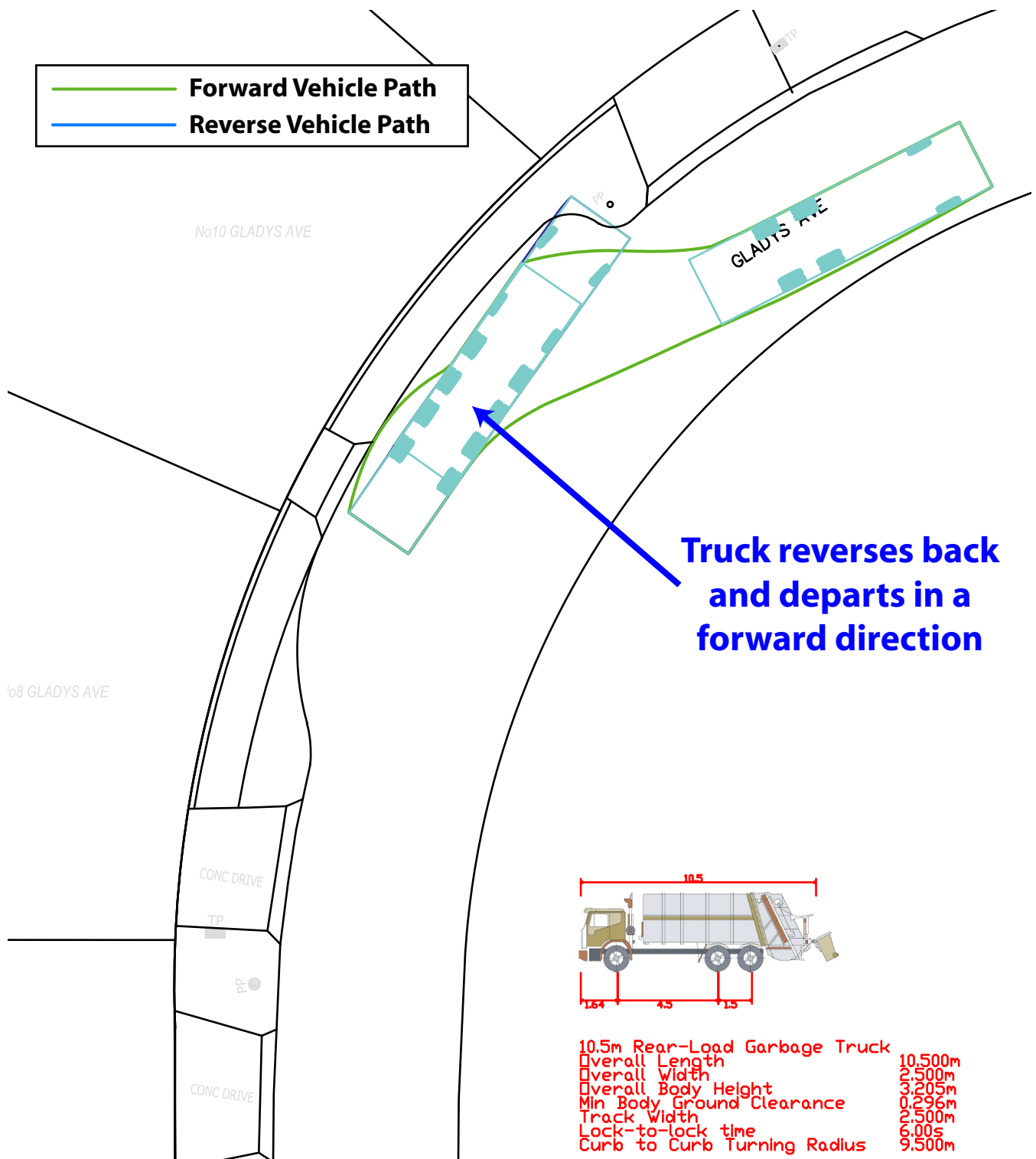
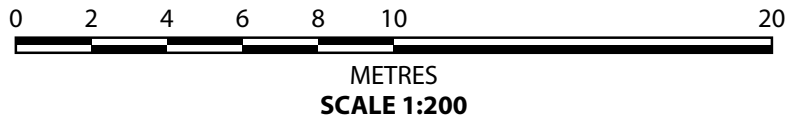
10.5m Rear-Load Garbage Truck
Overall Length 10.500m
Overall Width 2.500m
Overall Body Height 3.205m
Min Body Ground Clearance 0.296m
Track Width 2.500m
Lock-to-lock time 6.00s
Curb to curb Turning Radius 9.500m

Manoeuvring Path of Council
10.5m Long Waste Truck
Entering Loading Zone



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Path prepared using
Autodesk Vehicle Tracking



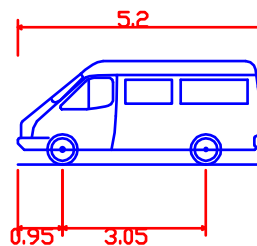
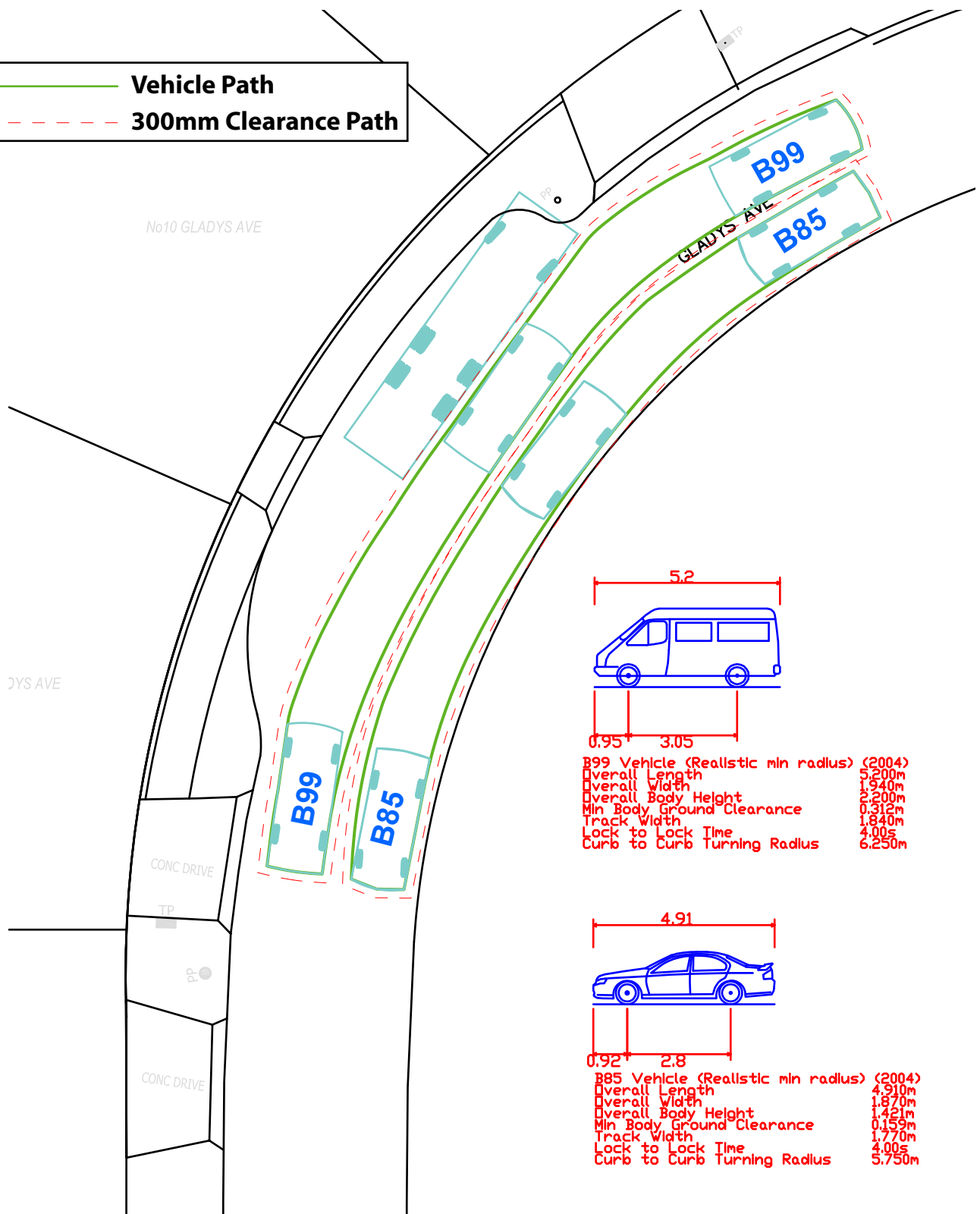
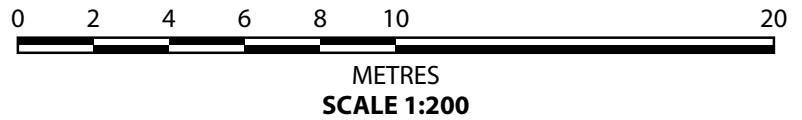
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Track Width 2.500m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 9.500m

**Manoeuvring Path of Council
10.5m Long Waste Truck
Exiting Loading Zone**

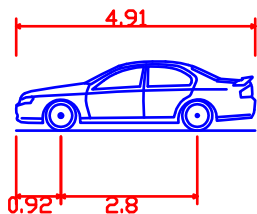


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Path prepared using
Autodesk Vehicle Tracking



B99 Vehicle (Realistic min radius) (2004)
Overall Length 5.200m
Overall Width 3.050m
Overall Body Height 2.200m
Min Body Ground Clearance 0.312m
Track Width 1.840m
Lock to Lock Time 4.00s
Curb to Curb Turning Radius 6.250m



B85 Vehicle (Realistic min radius) (2004)
Overall Length 4.910m
Overall Width 2.800m
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 5.750m

**Manoeuvring Path of Australian
Standard AS/NZS2890.1:2004
B99 and B85 Vehicles
Passing Loading Truck**



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