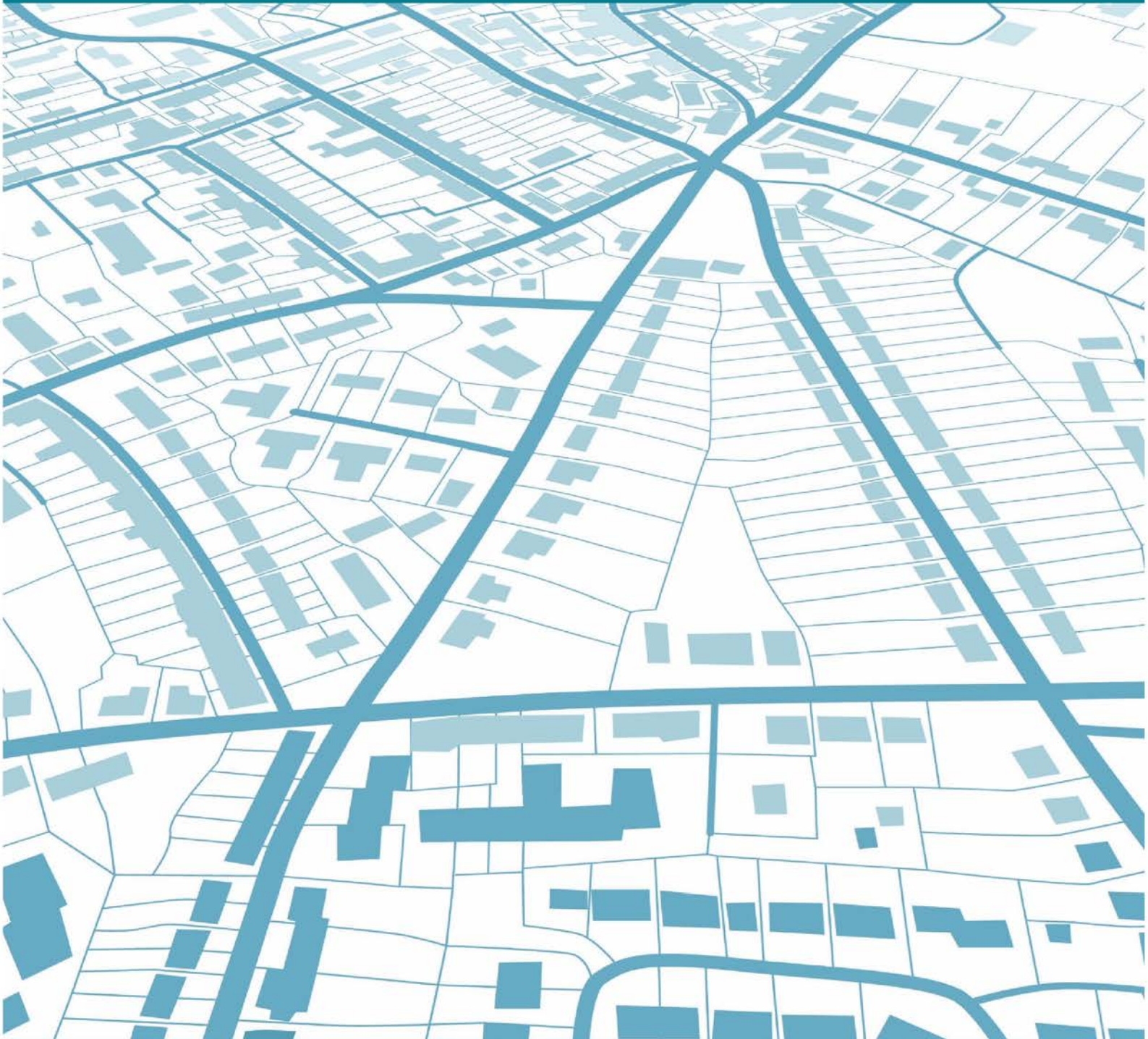




Proposed Shop Top Development 142 – 146 Pitt Road, North Curl Curl

Traffic and Parking Assessment

Ref: 23082

Date: December 2023

Issue: C

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1.0 Introduction

This report has been prepared to accompany a Development Application to Northern Beaches Council for a proposed 'shop top' housing complex in Pitt Road at North Curl Curl (Figure 1).

Sites throughout the Metropolitan Area are undergoing revitalisation with older style retail and commercial buildings being redeveloped for new residential complexes in some cases with retail uses on the ground level street frontage. The existing small complex of retail and commercial uses on Pitt Road represents a typical opportunity for a new shop top residential complex consistent with the adjacent frontages and conveniently located in relation to Warringah Mall and the arterial road system.

The proposed development scheme comprises:

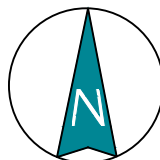
- demolition of the existing building
- 11 apartments
- 5 shops
- basement parking

The purpose of this report is to:

- ❖ describe the site, its context and the development proposal
- ❖ describe the road network and traffic conditions in the area
- ❖ assess the adequacy of the proposed parking provision
- ❖ assess the potential traffic implications
- ❖ assess the proposed vehicle access, internal circulation and servicing arrangements



LEGEND



LOCATION

FIG 1

2.0 Proposed Development Scheme

2.1 Site, Context, and Existing Circumstances

The site (Figure 2) is a consolidation of Lots 28 - 30 in DP394337 being a rectangular shaped area of 1,299 m². The site has a frontage to the northern side of Pitt Road with frontage parking and a ROW connecting to Playfair Road which provides access to the rear of the site.

There is an existing brick building located at the southern part of the site with at-grade frontage parking which comprises:

Ground floor	1 st floor
- 9 small shops (396 m ²)	- 4 apartments (2 x 1 bed, 1 x 2 beds and 1 x 3 beds) - 5 small offices (94 m ²)

There are 13 on-street frontage parking spaces while there is some informal provision for parking at the rear of the building. The site is adjoined to the west by a Liquor Store and a restaurant while single residential dwellings adjoin to the north and east.

2.2 Proposed Development

It is proposed to demolish the existing building and excavate the site to construct a new two-level building over a basement carparking. The proposed development comprises:

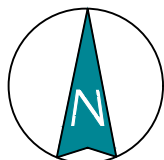
- 9 x three & four bed apartments
- 2 x two bed apartments
- 5 shops (333 m² GLFA)

It is proposed to provide a total of 22 parking spaces in the basement accessed via the ROW to Playfair Road supplemented by the existing on-street frontage parking spaces.

Details of the proposed development are provided on the architectural drawings prepared by Warren and Mahoney Living Australia Architects which accompany the Development Application and are reproduced in part in Appendix A.



LEGEND



SITE

FIG 2

3.0 Road Network and Traffic Conditions

3.1 Road Network

The road network serving the Dee Why site (Figure 3) comprises:

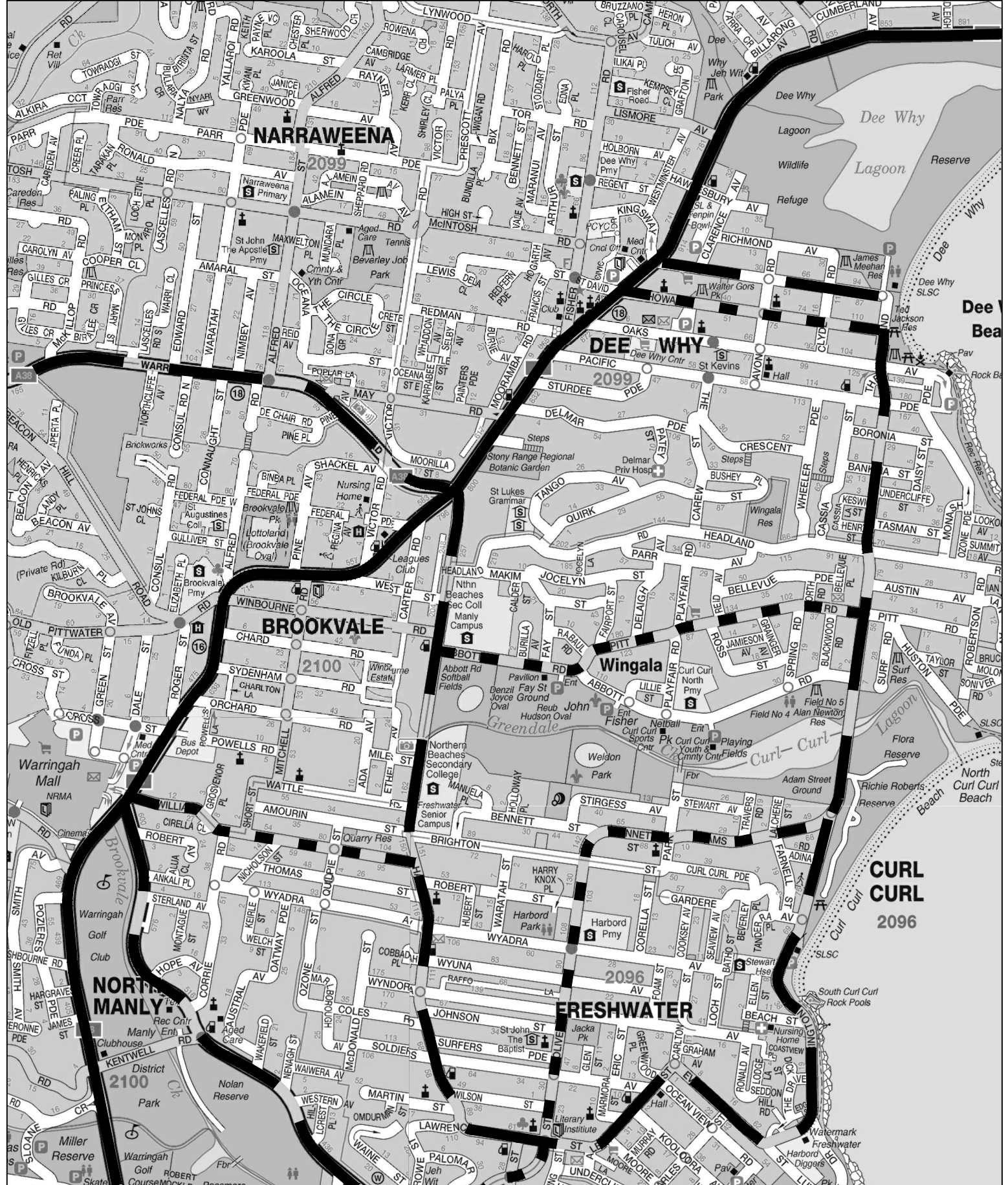
- ❖ Pittwater Road/Condamine Street – a State Road and arterial route linking between the Northern Beaches Peninsula and the Spit Bridge crossing of Middle Harbour
- ❖ Warringah Road – a State Road and arterial route linking between Pittwater Road and the Roseville Bridge crossing of Middle Harbour
- ❖ Harbord Road – a Regional Road and sub-arterial route linking between Pittwater Road/Warringah Road and Queenscliff
- ❖ Dee Why Parade/The Strand/Griffin Road – a Regional Road and major collector route linking between Dee Why and Queenscliff
- ❖ Howard Avenue, Pitt Road, Oliver Street/Bennett Adams Street – minor collector routes
- ❖ Playfair Road – a local access road

Pitt Road has a 12 metre wide, straight and level carriageway while Playfair Road is some 9m wide.

3.2 Traffic Controls

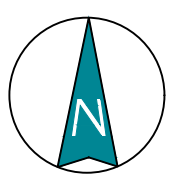
The traffic controls which have been applied to the road system (Figure 4) comprise:

- ❖ the traffic signals intersections along Pittwater Road including Howard Avenue/David Street, Fisher Road, Oaks Avenue, Pacific Parade, Sturdee Parade and Warringah Road/Harborb Road
- ❖ the traffic signals intersections along Harborb Road including Abbott Road, Brighton Street and Amourin Street



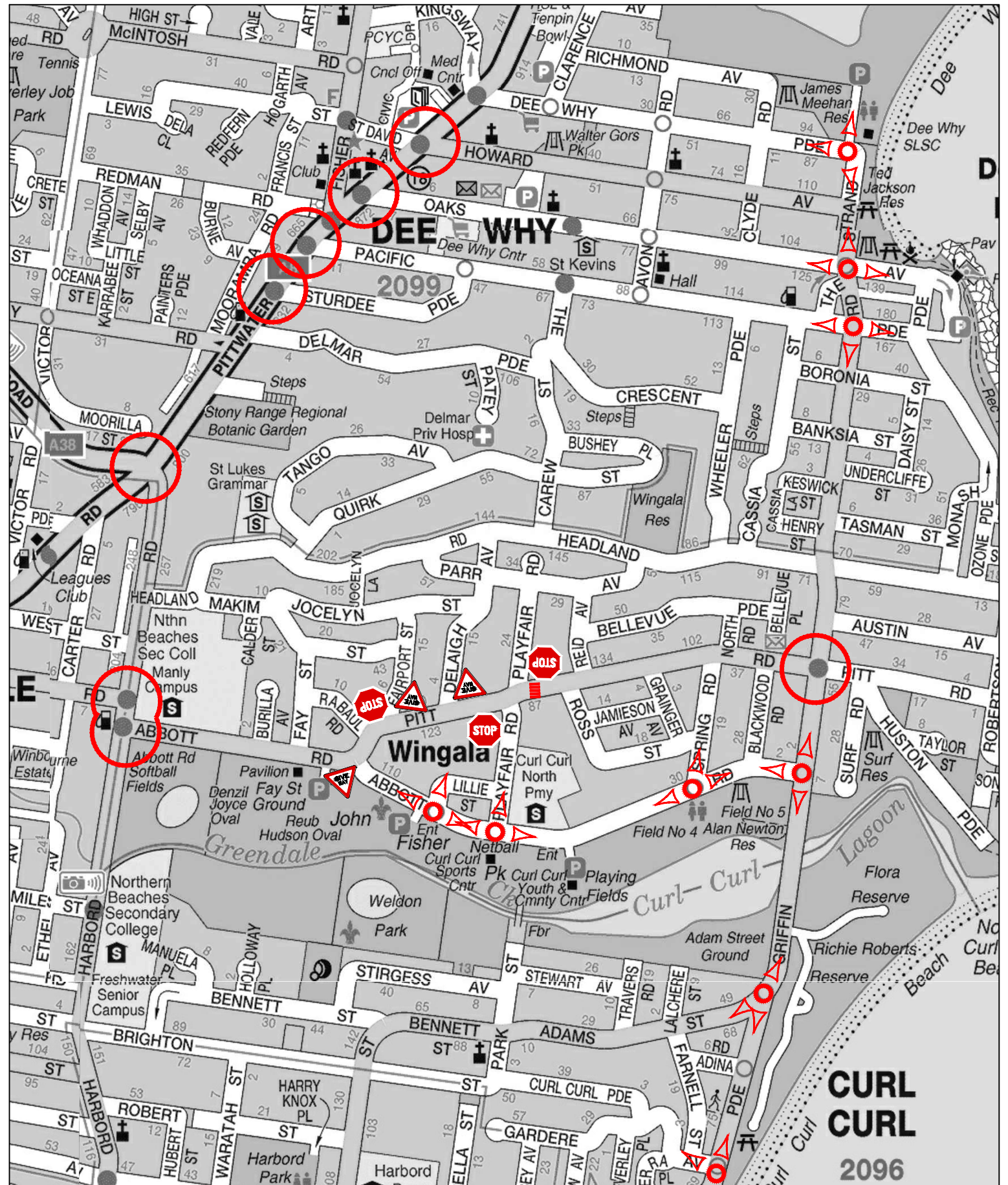
LEGEND

- ARTERIAL**
- SUB-ARTERIAL**
- COLLECTOR**



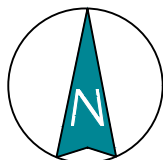
ROAD NETWORK

FIG 3



LEGEND

-  TRAFFIC SIGNAL CONTROL
-  ROUNDABOUT
-  RESTRICTED TURNING MOVEMENT



TRAFFIC CONTROLS

FIG 4

- ❖ the traffic signal control at the Griffin Road and Pitt Road intersection
- ❖ the roundabouts controlling intersections along Griffin Road including Dee Why Parade, Oaks Avenue, Pacific Parade, Abbott Road and Adams Street
- ❖ the roundabouts controlling intersections along Abbott Road including Lillie Street, Playfair Road and Spring Road
- ❖ the raised pedestrian crossing on Pitt Road at Playfair Road

3.3 Traffic Conditions

An indication of traffic conditions on the road system in the area is provided by data published by TfNSW. The TfNSW data is expressed in terms of Annual Average Daily Traffic (AADT) and the latest data is provided in the following:

	AADT
Pittwater Road north of Lismore Avenue	20,283
Condamine Street south of Sloane Cres	20,648

Traffic conditions are relatively satisfactory in the local area while the significant arterial flows on the Pittwater Road are controlled by the SCATS system during the peak periods. Traffic movements on Pitt Road are generally free-flowing during the peak periods, comprising largely local access movements, and there is no apparent capacity constrained observed.

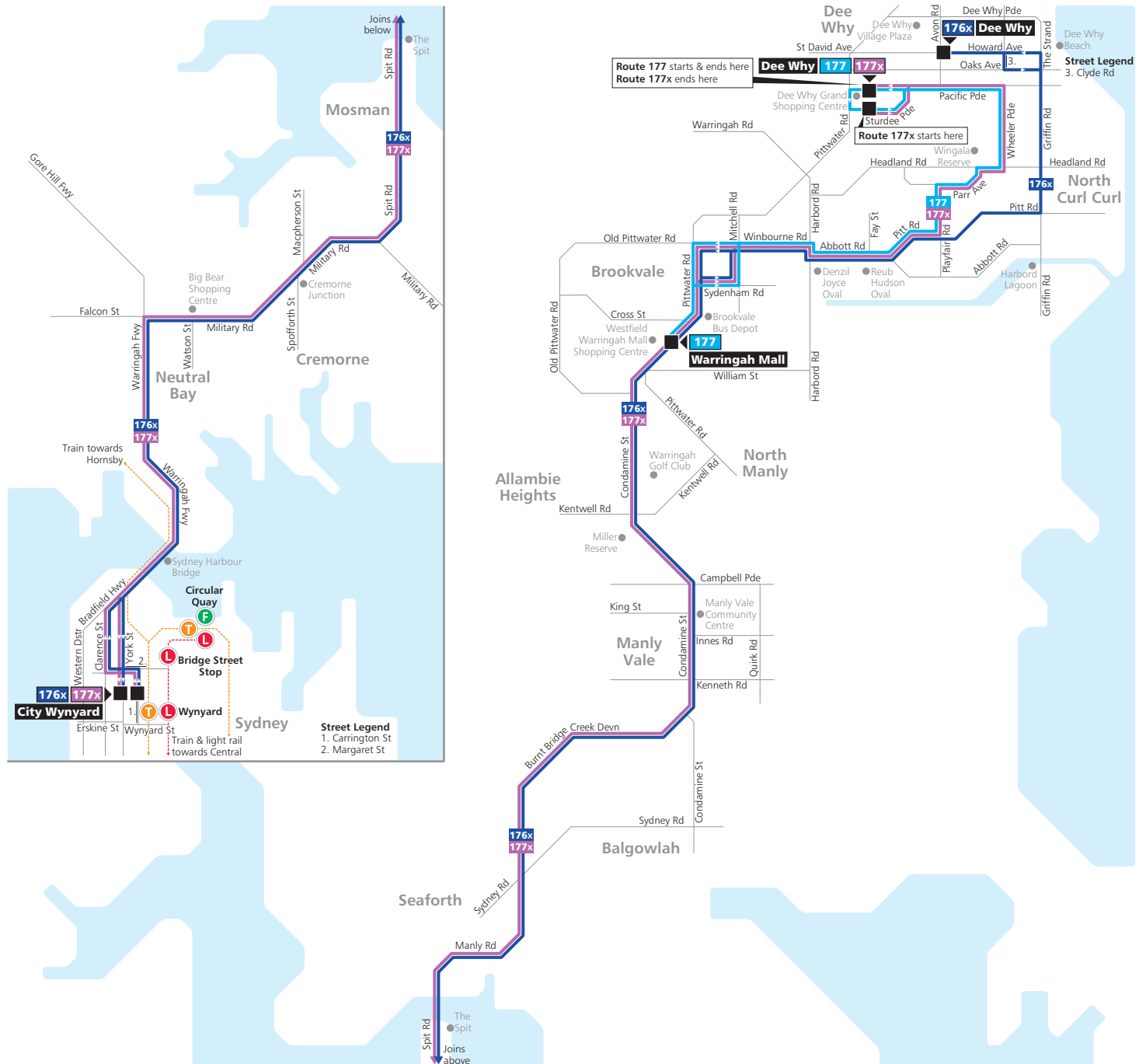
3.4 Transport Services

Bus services operating in the vicinity of the site comprising (see overleaf):

- Routes 176x and 177x operate along Pitt Road connecting between Dee Why, the City, North Curl Curl and Warringah. These services are express services operate on a 15 to 20 minutes frequency during weekday peak hour
- Route 177 operates along Pitt Road and offers connections between Warringah Mall and Dee Why with hourly frequency between 9am to 6pm

Routes 176x, 177, 177x

B



Legend

- Bus route
- Bus route number
- Bus route start/finish
- Train line/station
- Ferry wharf
- Light rail line/stop

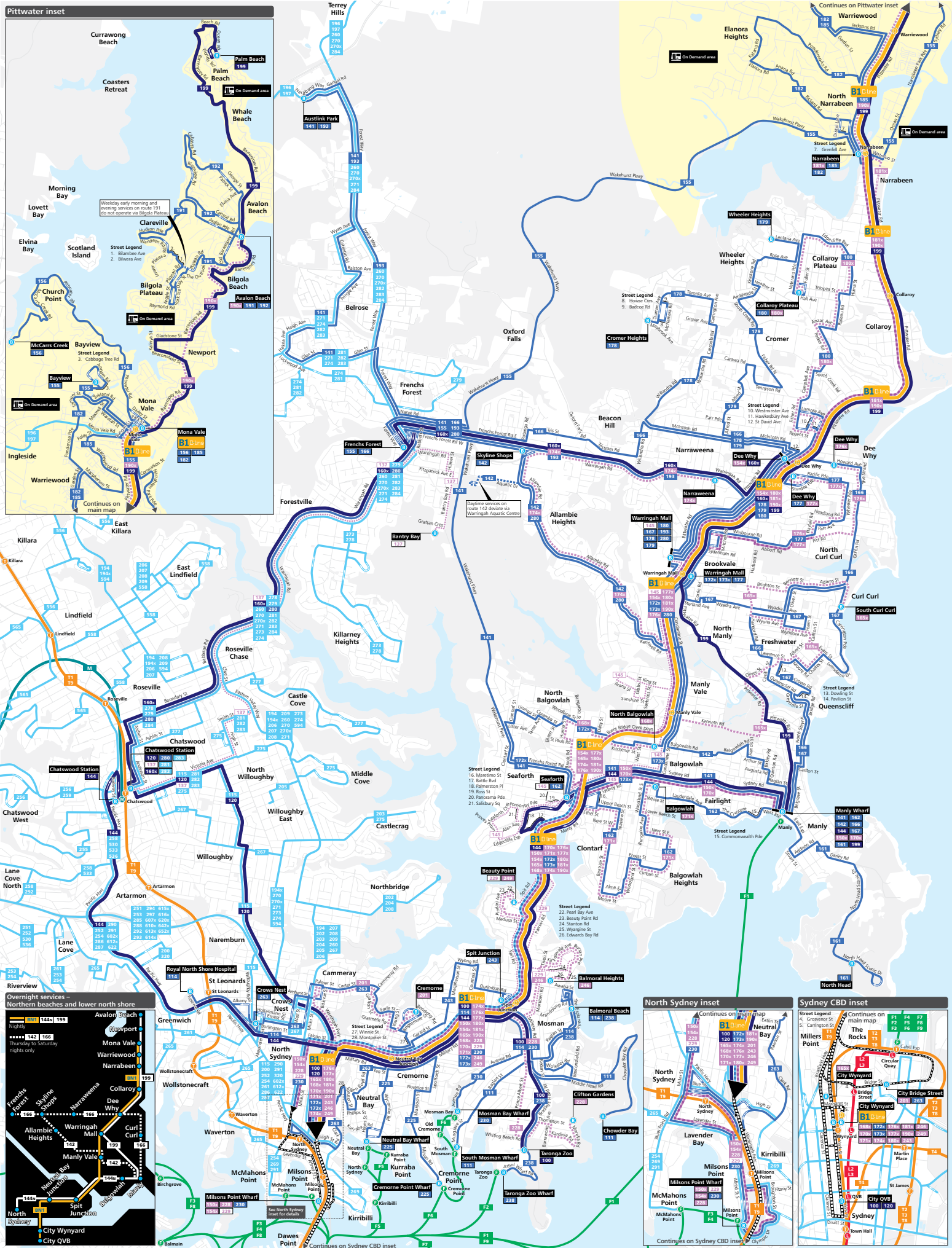
North
Diagrammatic Map
Not to Scale

Routes 176x and 177x to City Wynyard

Picks up and sets down passengers at all stops to Kenneth Road Manly Vale, then Cremorne Junction, Watson Street (Neutral Bay), and Wynyard.

Routes 176x and 177x to Dee Why

Picks up passengers only at Wynyard, then picks up and sets down passengers at Big Bear (Neutral Bay), Cremorne Junction, Kenneth Road Manly Vale, then all stops.



4.0 Parking

Council's DCP specifies the following parking requirements in regard to the existing and proposed developments:

Multi-dwelling &	1.5 spaces per 3 bedroom
Shop-top housing	1.2 spaces per 2 bedroom
	1 space per 1 bedroom
	plus 1 visitor space per 5 units
Retail	6.1 spaces per 100 m ² GLFA
Office	1 space per 40 m ² GFA

Application of the above criteria to the existing uses would indicate the following:

2 x one-bedroom	2 spaces
1 x two-bedrooms	1.2 spaces
1 x three-bedrooms	1.5 spaces
visitor	1 space
Retail (396 m ²)	24.1 spaces
Office (94 m ²)	2.35 spaces
Total	32.15 (32) spaces

There is essentially no formal parking provision on the site while there are 13 on-street frontage spaces and accordingly there is an existing parking shortfall of 32 spaces (or 19 spaces if the on-street parking is counted).

Application of the above criteria to the proposed development would indicate the following minimum requirement:

9 x three + bedroom @ 1.5	13.5 spaces
2 x two-bedrooms @ 1.2	2.4 spaces
Visitors	2.0 spaces
Total	15.9 (16 spaces)
Retail (333 m ² GLFA)	20.3 spaces
Total	36.2 (36 spaces)

It is proposed to provide a total of 22 spaces in the basement for residents and visitors in satisfaction of the DCP requirement.

Due to the constraint of a single-lane basement access, no parking is proposed for the retail use in the basement. The retail floor space will undergo a reduction, from 396 m² to 333 m², compared to the existing retail space. However, the parking circumstances for this (i.e., existing non-provision/13 on-street spaces) will remain unchanged, contributing to an improvement in on-street parking conditions in the vicinity of the site.

It is proposed to modify the on-street parking to formalize the provision of 1 accessible space (AS2890.6) and 1 loading/refuse collection space.

Council's DCP also specifies the following provision for bicycles:

- | | |
|---------------------------|---|
| Residential Accommodation | - 1 space per dwelling (11) |
| (3 or more dwellings) | - plus 1 per 12 dwellings for visitor space (1) |
| Retail | - 1 space per 200m ² GFA (2) |
| | - plus 1 per 600 m ² GFA for visitor space (-) |

It is proposed to provide a total of 26 bicycle spaces which is considered to be an appropriate quantum of spaces for the size and nature of the proposed development.

5.0 Traffic

The existing and proposed development uses are as follows:

Existing

- 9 small shops (396 m²)
- 4 apartments
- 5 small offices (94 m²)

Proposed

- 5 shops (333 m²)
- 11 apartments

Given that the proposal is to provide basement parking for the 11 apartments and retain the on-street parking for the retail use the projected additional traffic generation will essentially only comprise that of the new apartments (less that of the existing apartments and offices).

An indication of the traffic generation potential of these apartments is provided by the RMS Development Guidelines which indicate the following peak period generations:

Medium Density Residential

Two-bedroom	0.4 – 0.5 vtp/h
Three-bedroom or more	0.5 – 0.65 vtp/h

Application of this criteria would indicate an additional generation of 6 -7 vtp/h in peak periods which is quite minor (particularly if discounted by that of the existing apartment and office uses) and it is apparent therefore that the proposed development will not result in any unsatisfactory traffic capacity or safety circumstances.

6.0 Access, Internal Circulation and Servicing

Access

Vehicle access will be provided by the existing combined ingress/egress driveway on Playfair Road frontage, where good sight distances are available, which provides for the existing 3.0m wide ROW.

Internal Circulation

It is proposed to provide a 3.0m wide vehicle access ramp for the basement carpark. This one lane/2-way ramp will be controlled by a traffic signals/sign system which will operate as follows:

- auto. revert and dwell on “green” for ingressing cars (red to “egress”)
- cars waiting to egress will be detected and the signal for ingress would change to “red” and after a short clearance time, a “green” will be displayed for egress
- after a pre-set clearance time, the egress signal would change to “red” and “green” displayed for ingress.

The internal circulation design provisions including ramp grades, aisle widths, bay dimensions etc. accord with the requirements of AS2890. Details of the turning path assessment undertaken are provided in Appendix B indicating that satisfactory provision will be made for circulation and manoeuvring.

Servicing

Refuse will be collected from the street by Council’s service (residential) and private contractor (retail), while small delivery and service vehicles will be able to use basement visitor parking provision, and the occasional large vehicle will be reliant on the on-street parking provision.

7.0 Conclusion

Assessment of the proposed 'shop top' housing complex at North Curl Curl has confirmed that:

- ❖ there will not be any unsatisfactory traffic implications
- ❖ the proposed parking provision will be appropriate to the circumstances
- ❖ the proposed vehicle access, internal circulation and servicing arrangements will be suitable and practical.

Appendix A

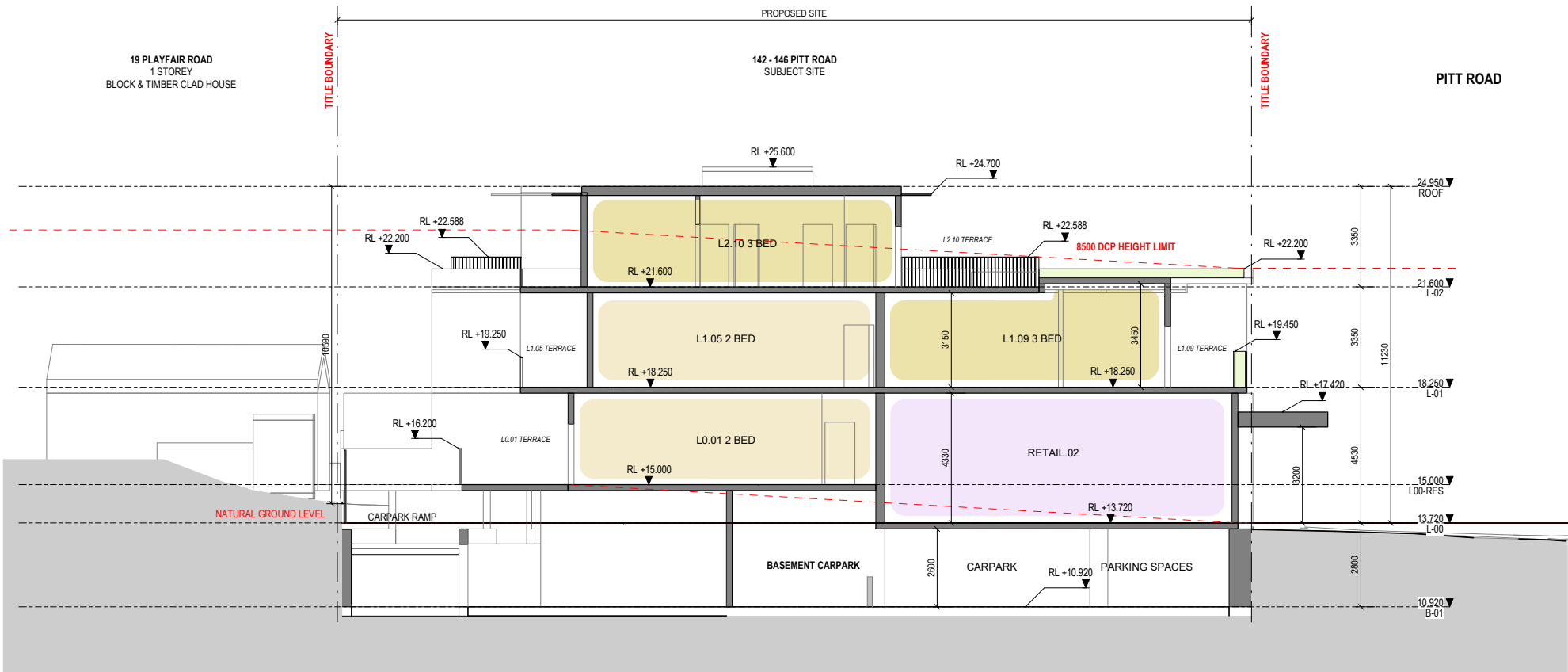
Development Plans



Revisions

A	20/11/2	Drawing Freeze
	023	
B	24/11/2	DA Submission
	023	

Notes



SECTION A

1:100

Consultants

Project Manager

Structural Engineer

IGS

Mechanical Engineer

E-LAB

Fire Engineer

IGS

Electrical Engineer

Client

Grant Price - Balito Investments

Warren and Mahoney Living Australia Pty Ltd

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Nominated Architect:
Sven Ollmann ARB NSW 11123

Registered Architects and Designers
www.warrenandmahoney.com

Project Title

142-146 PITT ROAD

North Curl Curl, NSW, 2099

Drawing Title

SECTION - AA BB

Drawing Status

Development Application

Drawing Details

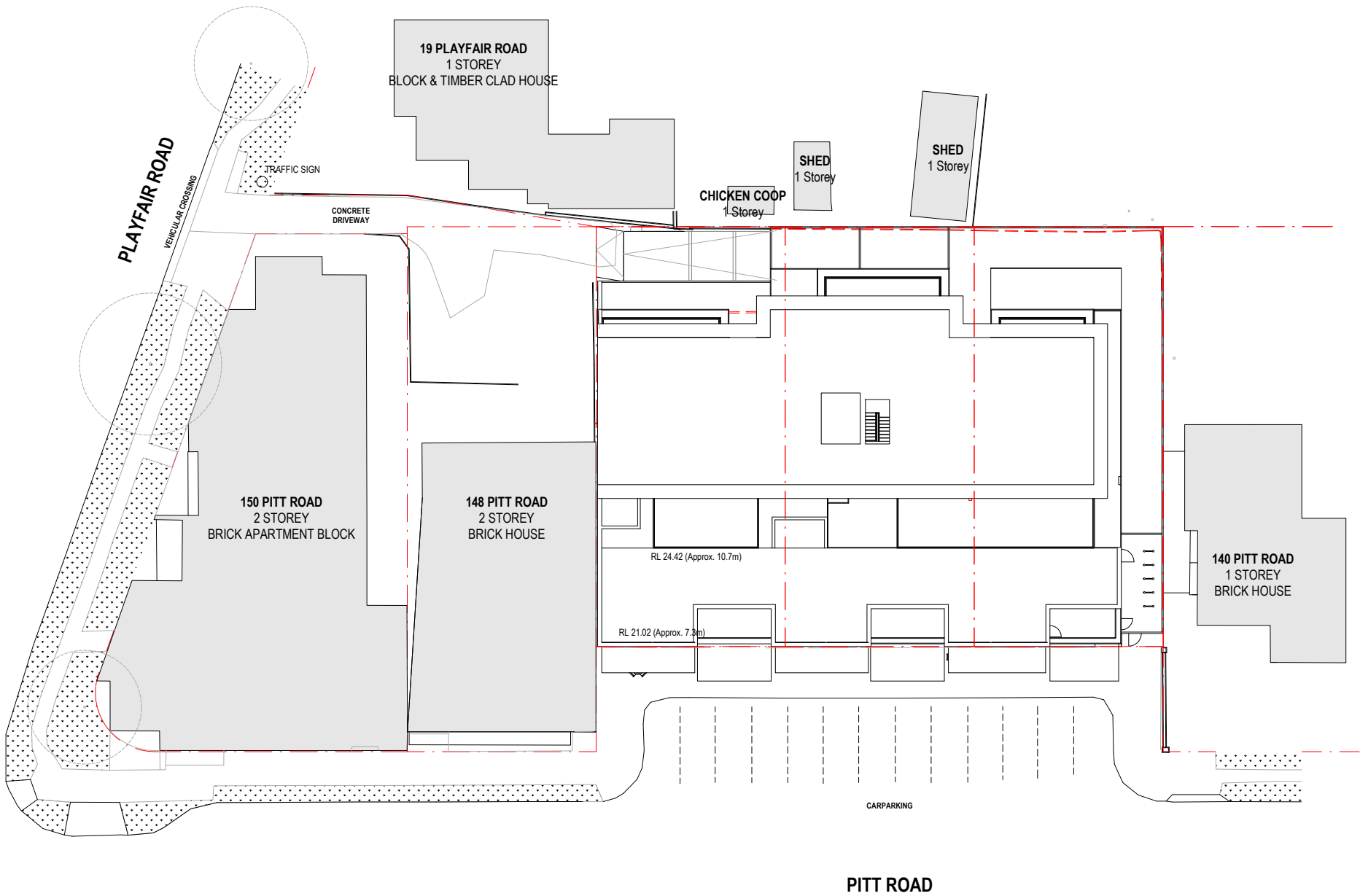
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Checked	Checker

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Revision

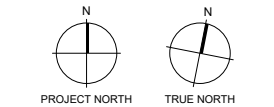
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All dimension to be verified on site before producing shop drawings or commencing any work. Do not scale. The copyright of this drawing remains with Warren and Mahoney Australia Living Pty Ltd.

Revisions		
A	20/11/2023	Drawing Freeze
B	24/11/2023	DA Submission

Notes



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Project Title
142-146 PITT ROAD

North Curl Curl, NSW, 2099

Drawing Title
SITE
PLAN_PROPOSED

Drawing Status
Development Application

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Checked	MM

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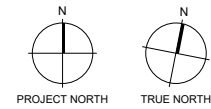


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Revisions

A	20/11/2023	Drawing Freeze
B	24/11/2023	DA Submission

Notes



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Project Title

142-146 PITT ROAD

North Curl Curl, NSW, 2099

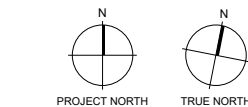
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Drawing Status
Development Application

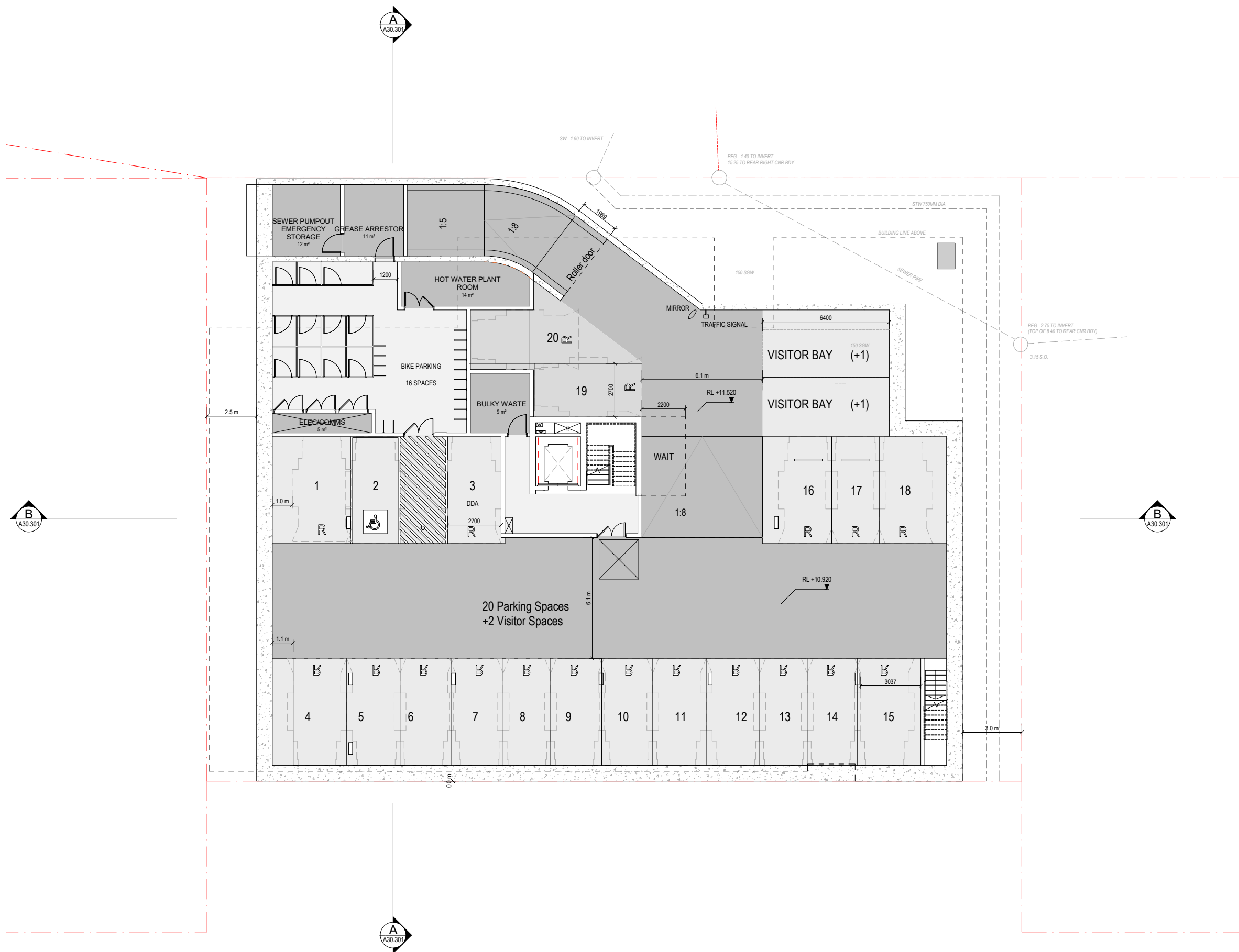
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Revision B

A 20/11/2023	Drawing Freeze
B 24/11/2023	DA Submission



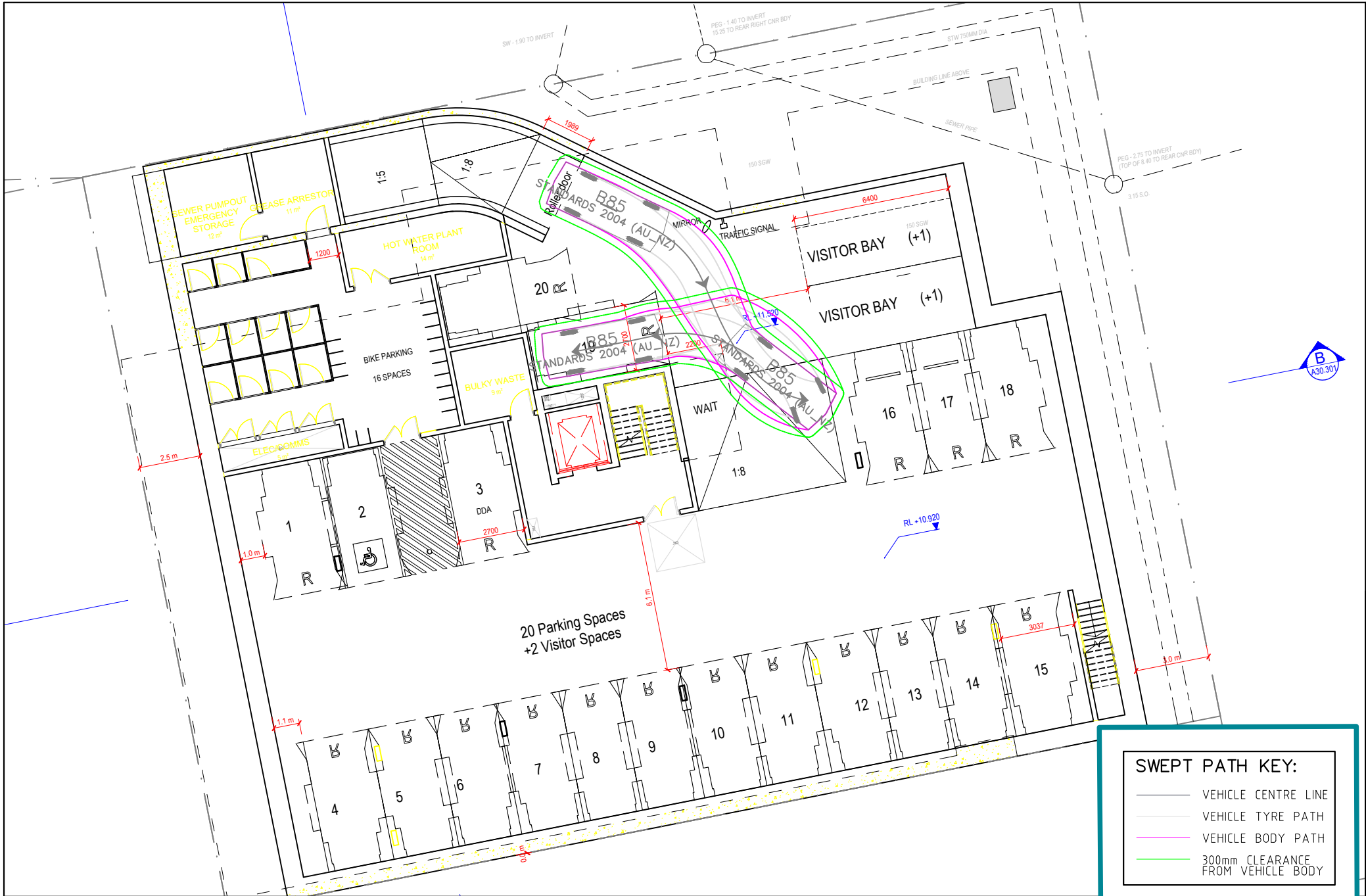
WARREN AND MAHONEY



Appendix B

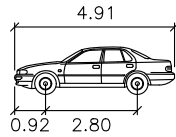
Turning Path Assessment





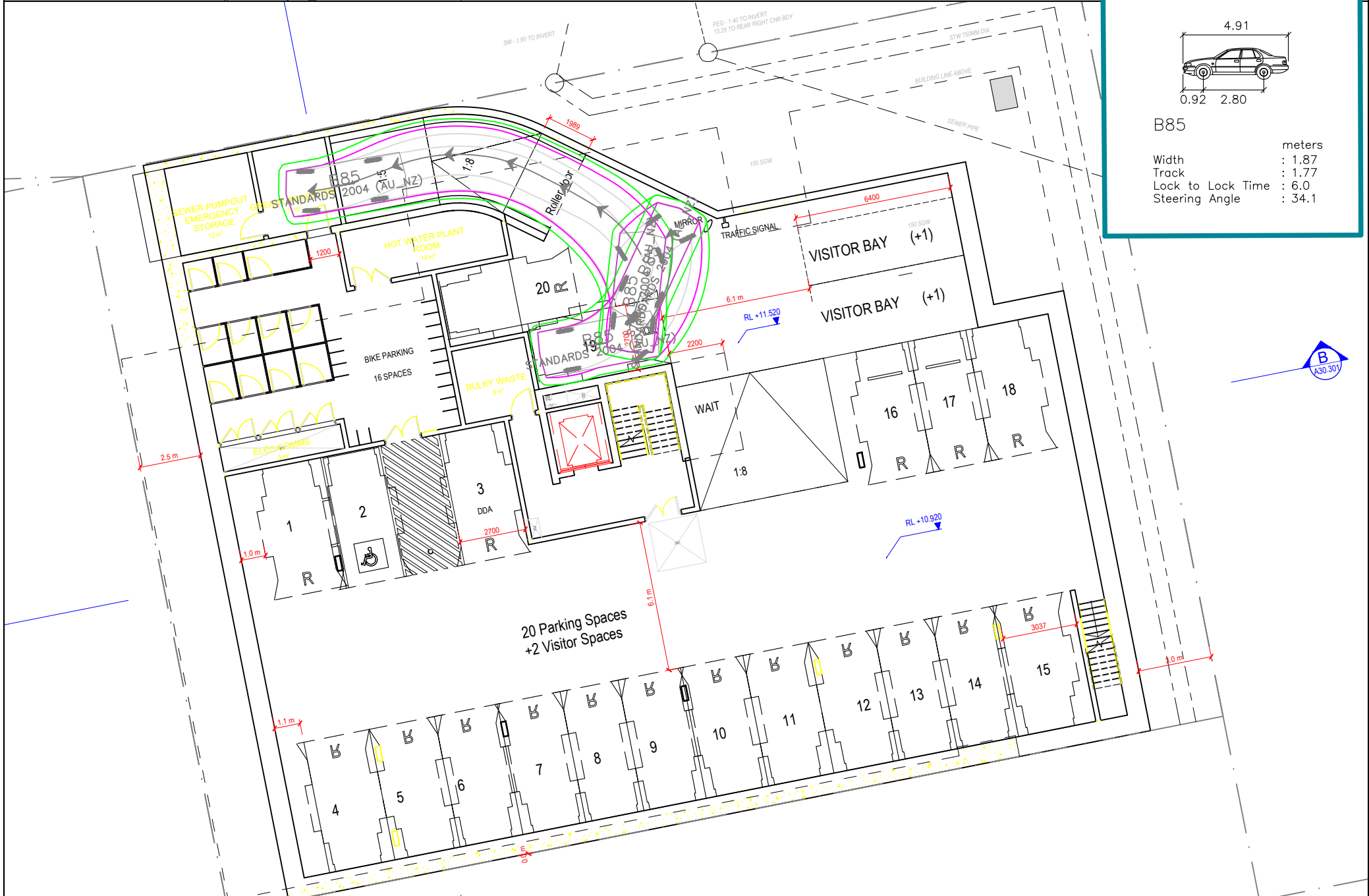
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- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B85

Width	1.87	meters
Track	1.77	
Lock to Lock Time	6.0	
Steering Angle	34.1	



142-146 PITT RD, NORTH CURL CURL NSW 2099
A B85 VEHICLE ENTERING AND EXITING THE PARKING SPACE
SWEPT PATH ASSESSMENT

DRAWING REF NO. 23082-V1.3-SP SHEET NO. 02 OF 07 ISSUE DATE 30 November 2023

DESIGNED BY V.DAU

DISCLAIMER

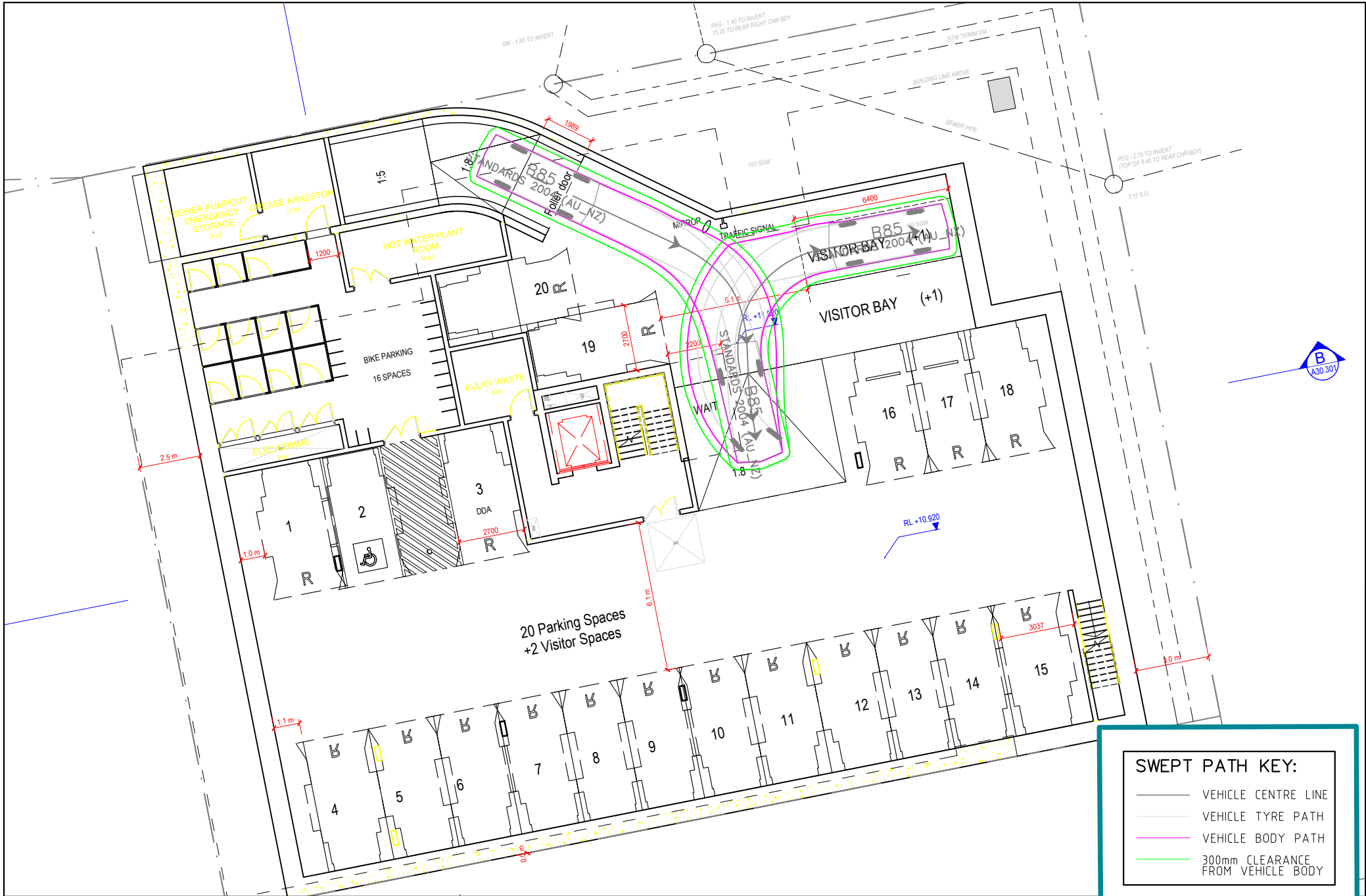
This drawing has been prepared using vehicle modelling computer software AutoTurn Pro V11.0 in conjunction with AutoCAD 2018. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.



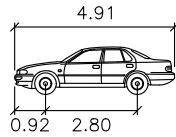
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Established 1994

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P: (02) 9411 5660 E: info@ttpa.com.au W: www.ttpa.com.au

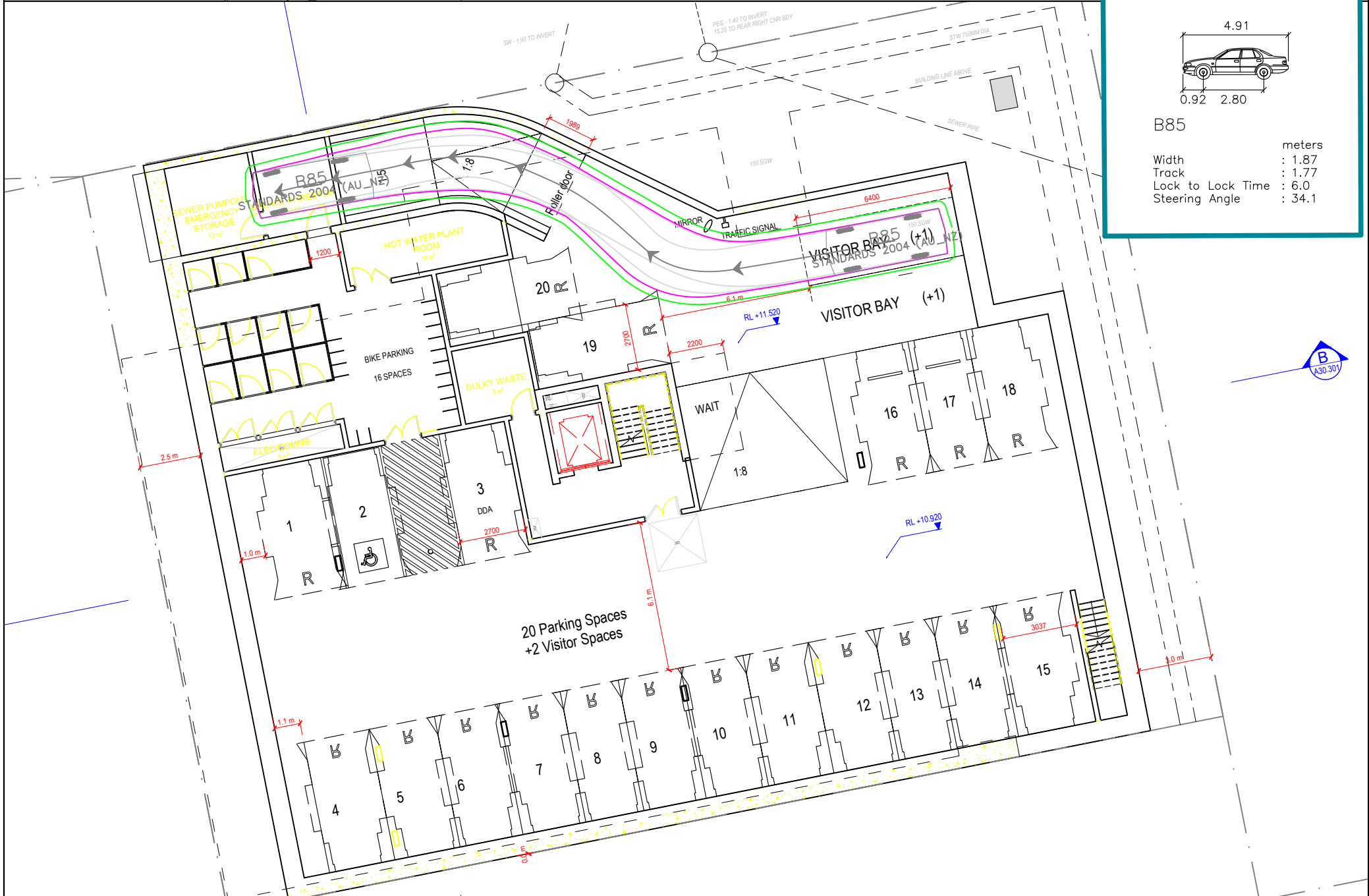
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	VEHICLE TYRE PATH
	VEHICLE BODY PATH
	300mm CLEARANCE FROM VEHICLE BODY



B85	
Width	1.87 meters
Track	1.77
Lock to Lock Time	6.0
Steering Angle	34.1



142-146 PITT RD, NORTH CURL CURL NSW 2099
A B85 VEHICLE ENTERING AND EXITING THE PARKING SPACE
SWEPT PATH ASSESSMENT

DRAWING REF NO. 23082-V1.3-SP SHEET NO. 03 OF 07 ISSUE DATE 30 November 2023

DESIGNED BY V.DAU

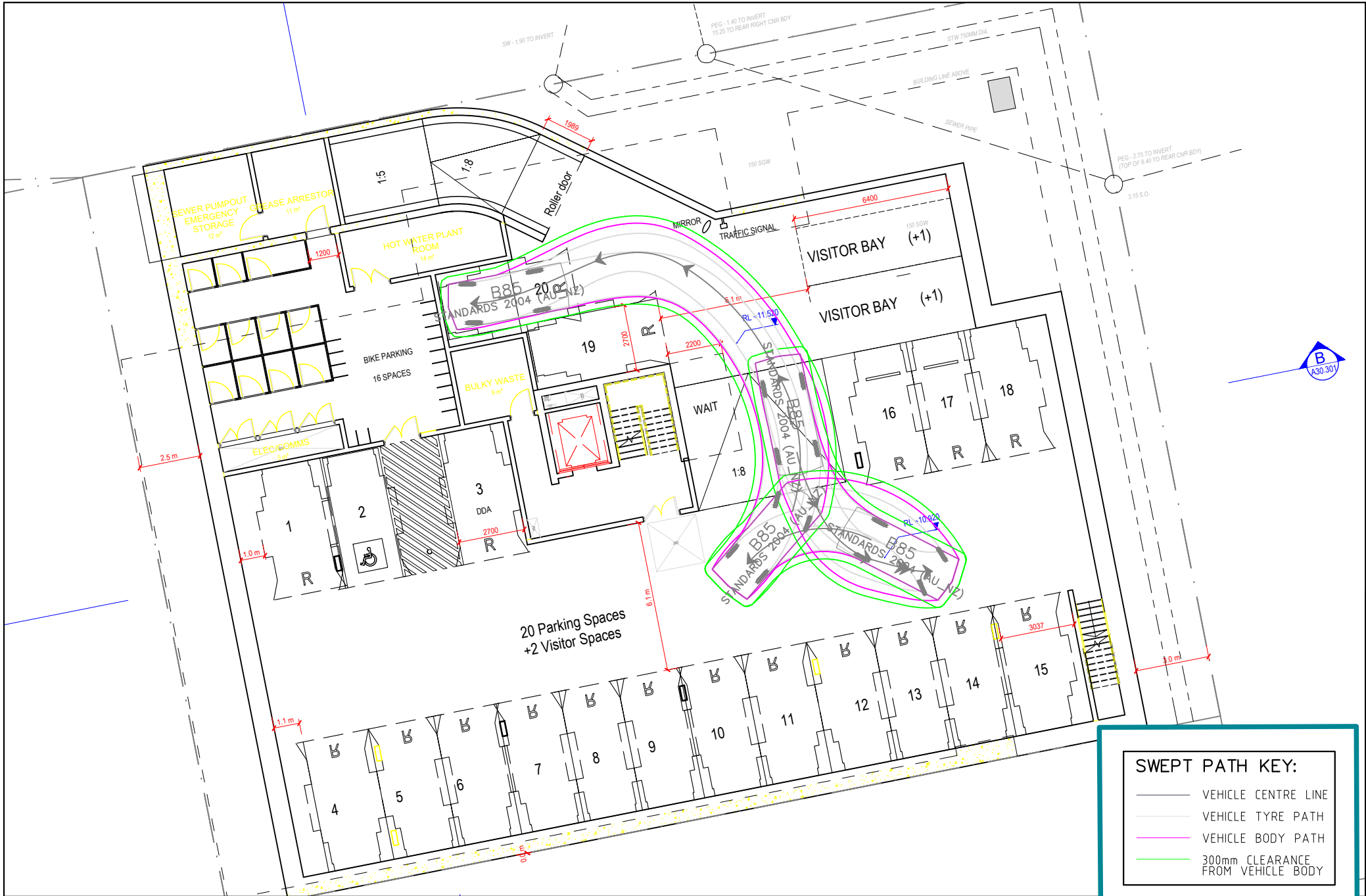
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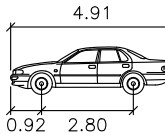
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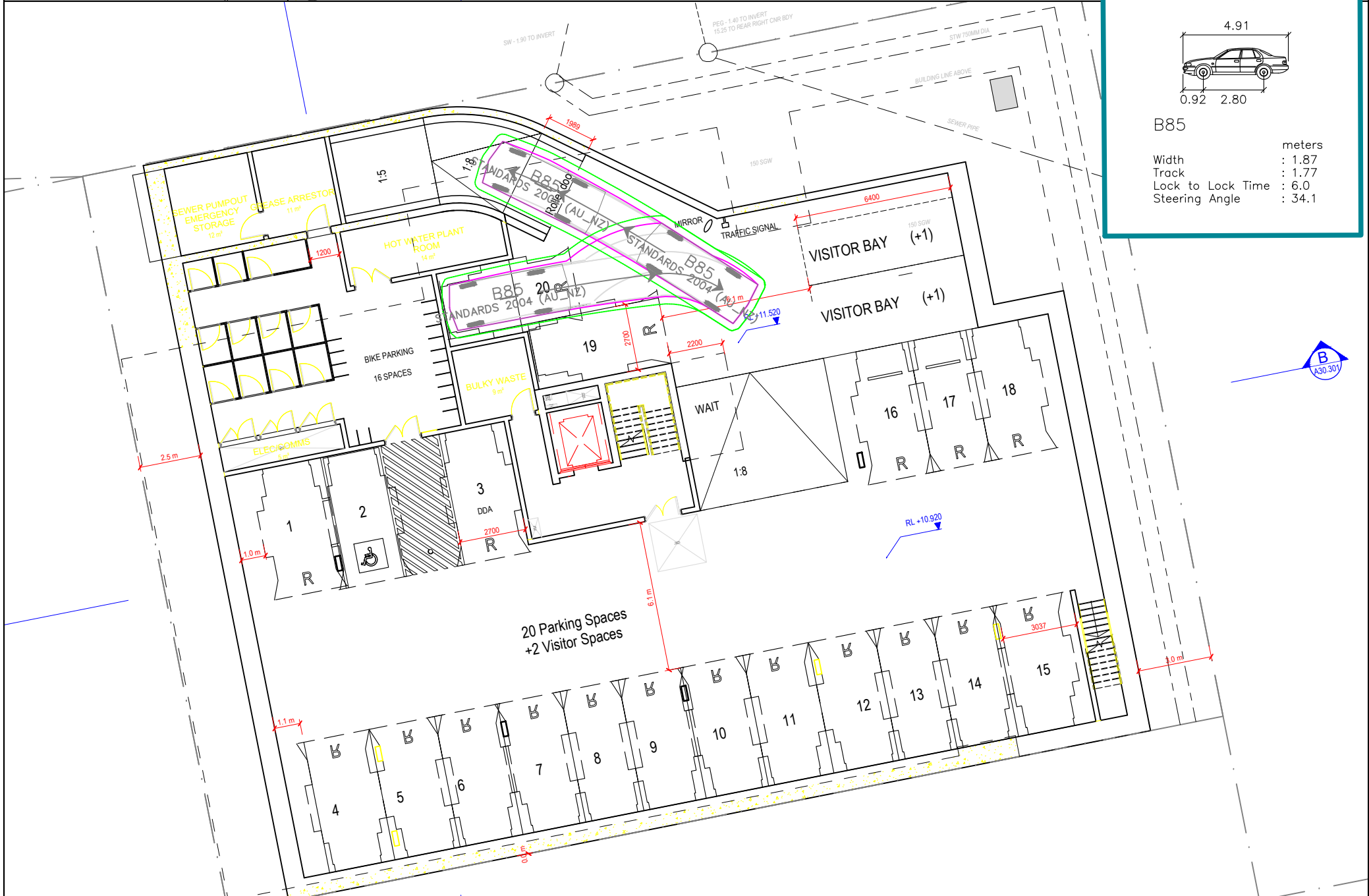


SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B85
Width : 1.87 meters
Track : 1.77
Lock to Lock Time : 6.0
Steering Angle : 34.1



142-146 PITT RD, NORTH CURL CURL NSW 2099 A B85 VEHICLE ENTERING AND EXITING THE PARKING SPACE SWEPT PATH ASSESSMENT

DRAWING REF NO. 23082-V1.3-SP SHEET NO. 04 OF 07 ISSUE DATE 30 November 2023

DESIGNED BY V.DAU

DISCLAIMER

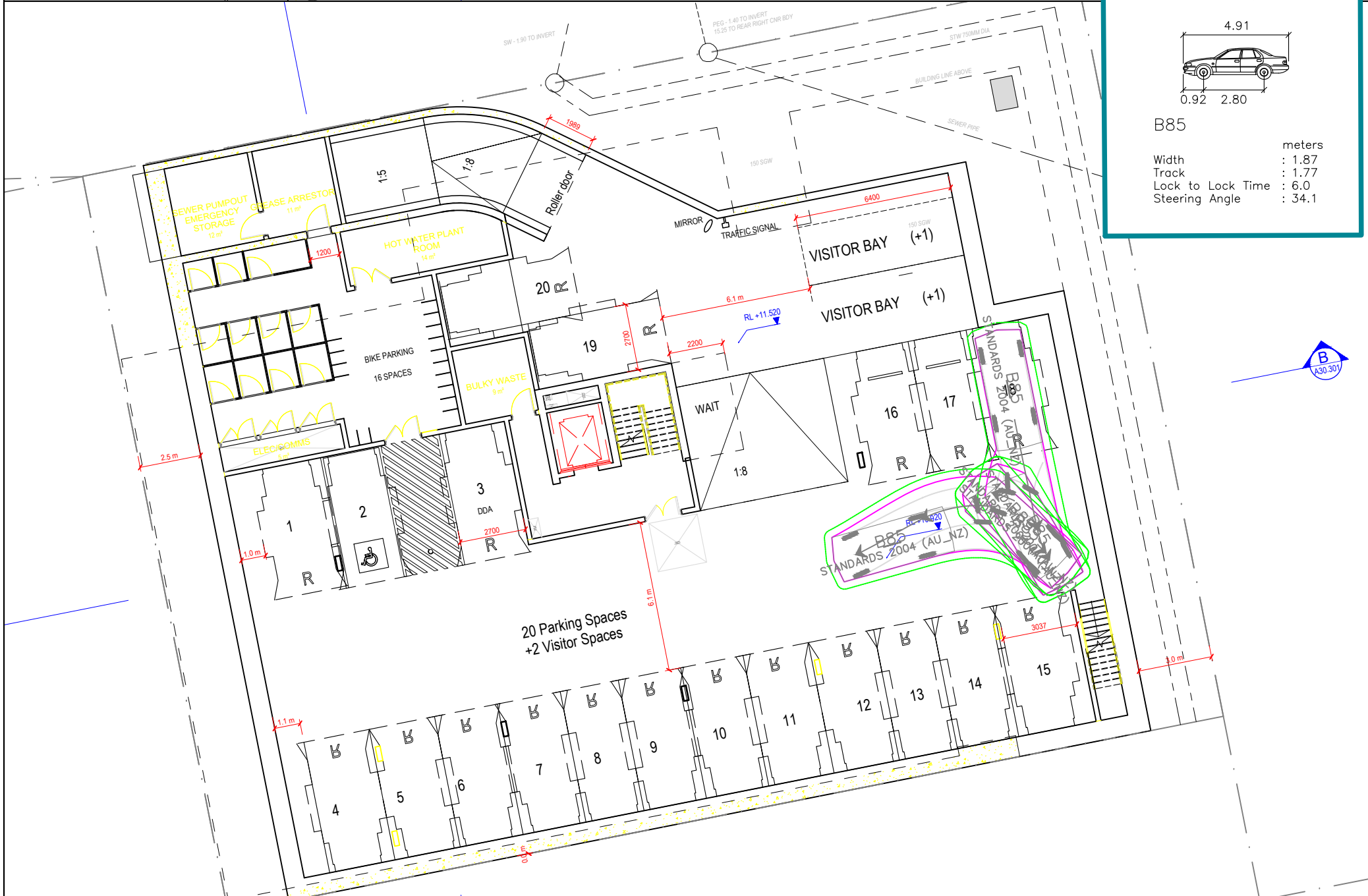
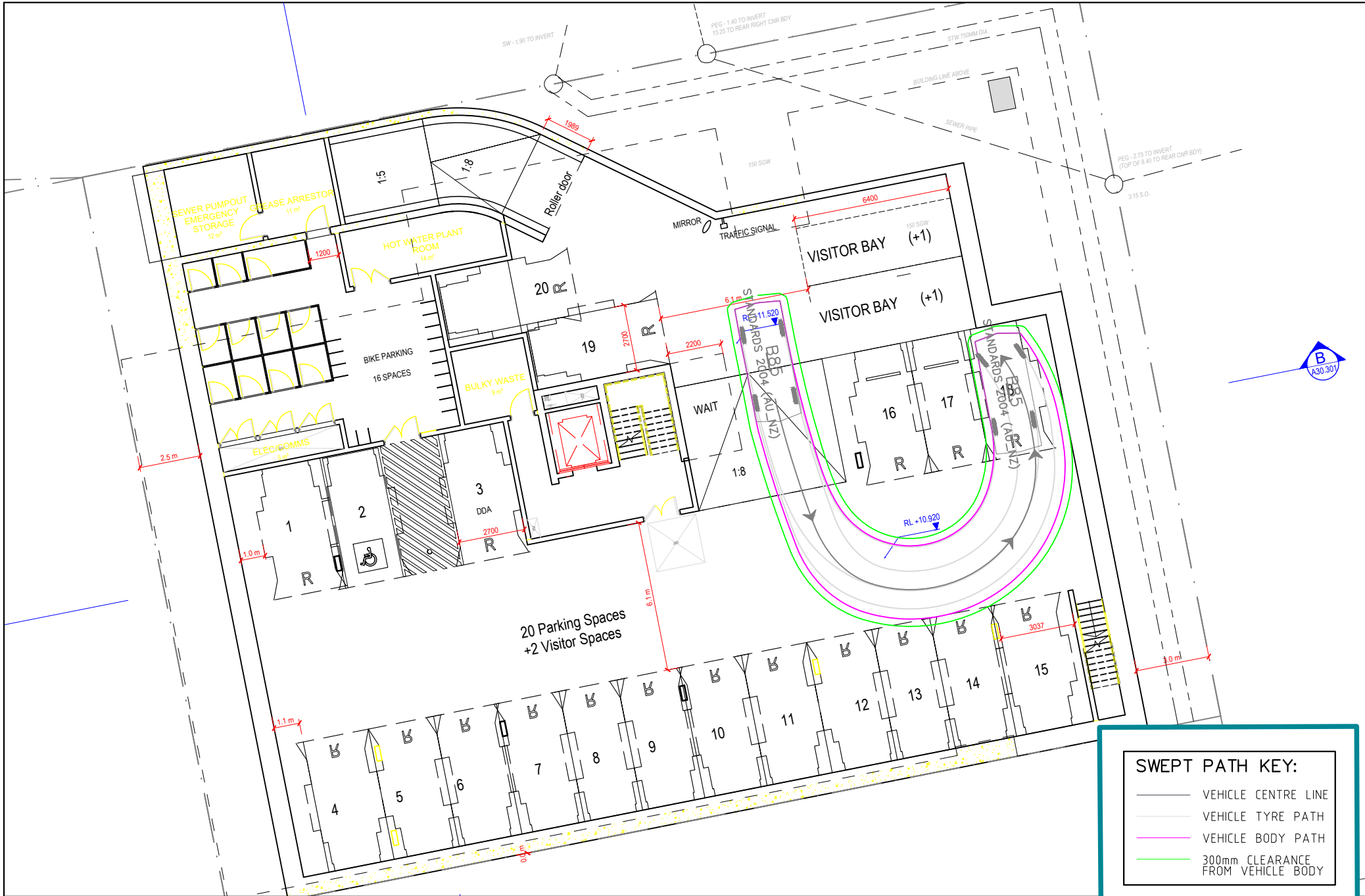
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SCALE 0 2.0 4.0 1:202



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142-146 PITT RD, NORTH CURL CURL NSW 2099
A B85 VEHICLE ENTERING AND EXITING THE PARKING SPACE
SWEPT PATH ASSESSMENT

DRAWING REF NO. 23082-V1.3-SP SHEET NO. 05 OF 07 ISSUE DATE 30 November 2023

DESIGNED BY V.DAU

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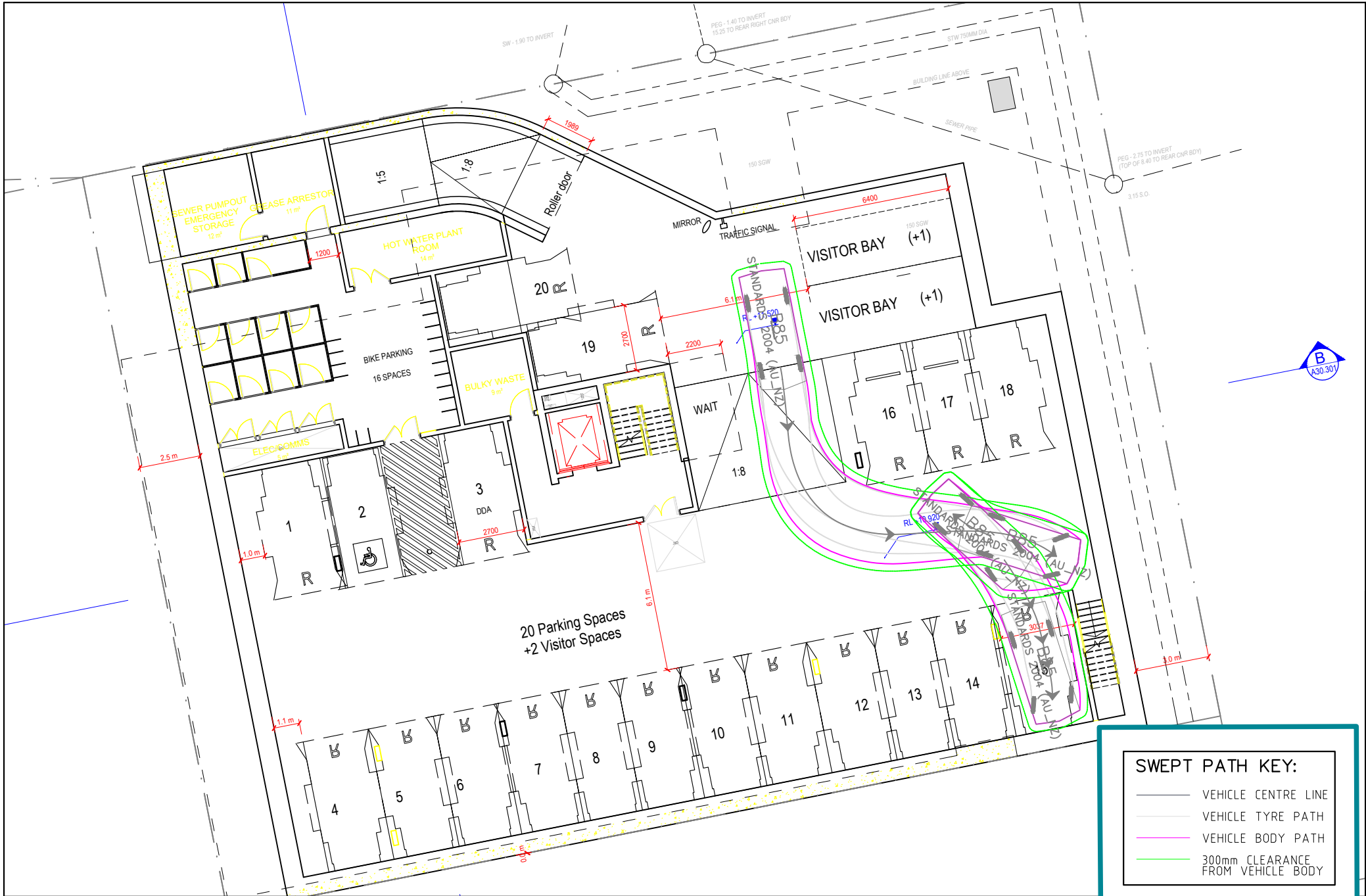
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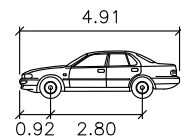


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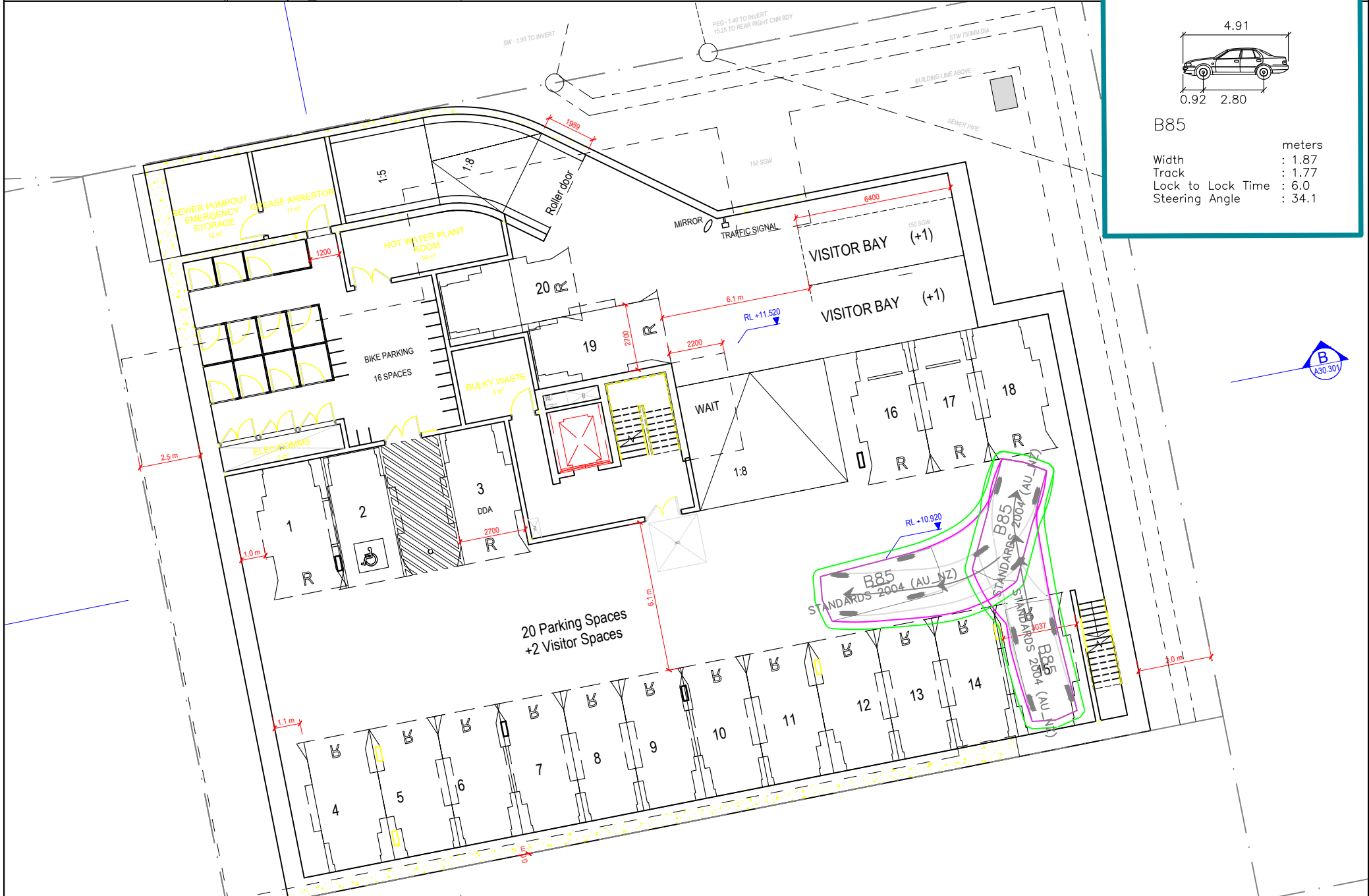
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SWEPT PATH KEY:	
	VEHICLE CENTRE LINE
	VEHICLE TYRE PATH
	VEHICLE BODY PATH
	300mm CLEARANCE FROM VEHICLE BODY



B85	
Width	1.87 meters
Track	1.77
Lock to Lock Time	6.0
Steering Angle	34.1



142-146 PITT RD, NORTH CURL CURL NSW 2099
A B85 VEHICLE ENTERING AND EXITING THE PARKING SPACE
SWEPT PATH ASSESSMENT

DRAWING REF NO. 23082-V1.3-SP SHEET NO. 06 OF 07 ISSUE DATE 30 November 2023

DESIGNED BY V.DAU

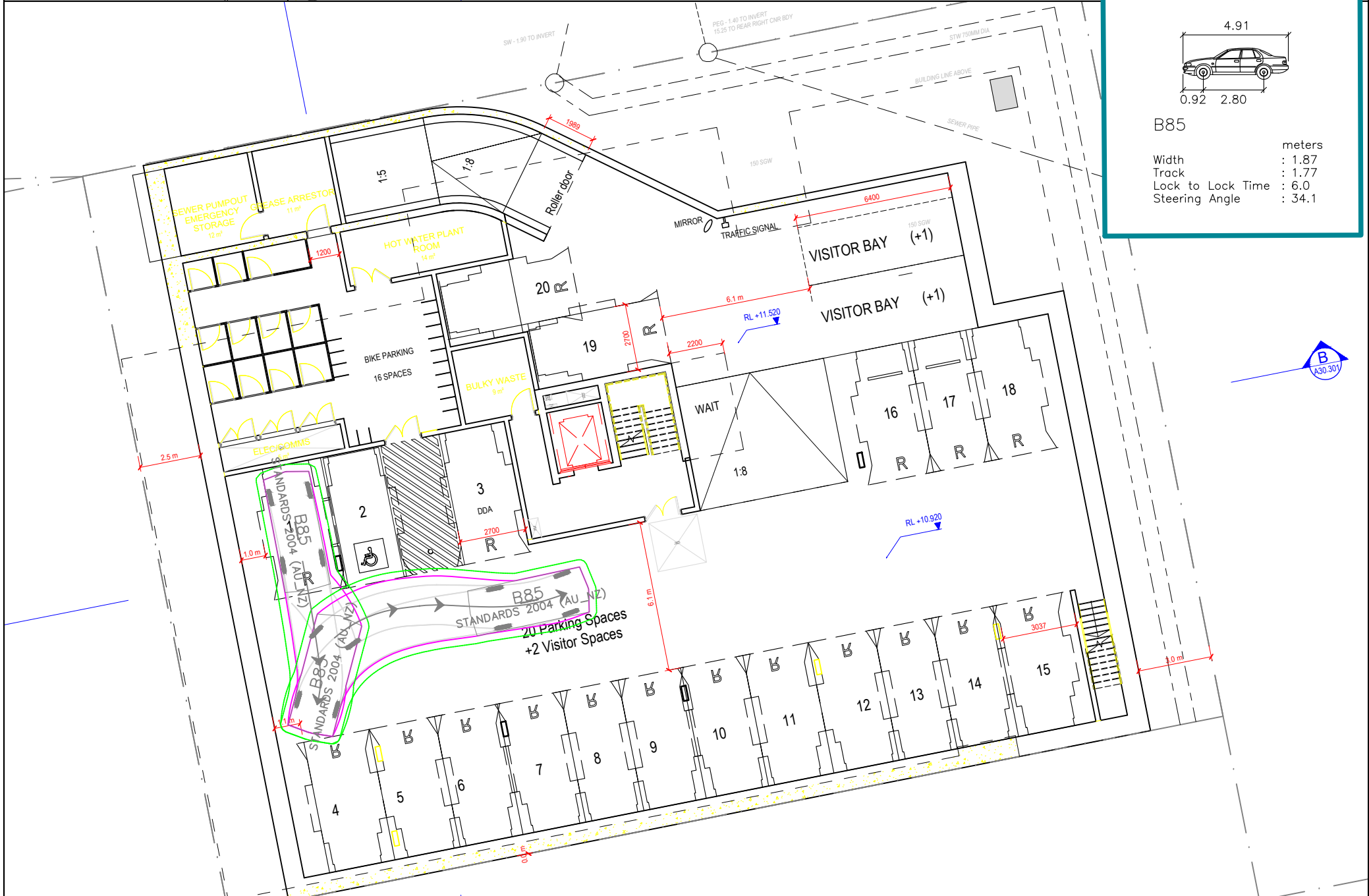
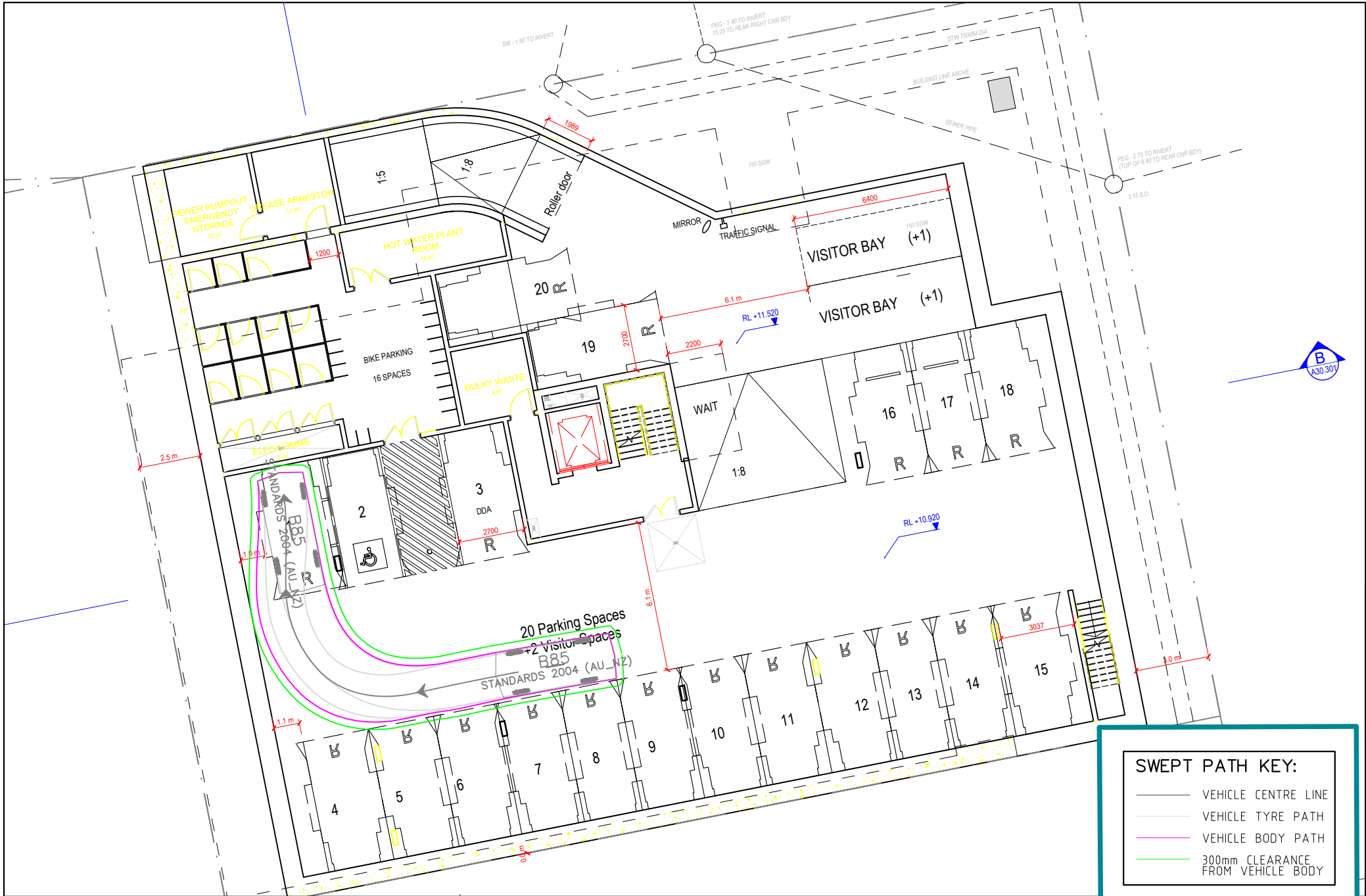
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142-146 PITT RD, NORTH CURL CURL NSW 2099
A B85 VEHICLE ENTERING AND EXITING THE PARKING SPACE
SWEPT PATH ASSESSMENT

DRAWING REF NO. 23082-V1.3-SP SHEET NO. 07 OF 07 ISSUE DATE 30 November 2023

DESIGNED BY V.DAU

DISCLAIMER

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SCALE 0 2.0 4.0 1:202



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