

Our Ref: 21205

11 October 2023

Dee Why 3 Pty & Dee Why 4 Pty Ltd
Level 25, 88 Phillip Street,
Sydney NSW 2000

Attention: Mr Angus Nguyen

Dear Angus,

**RE: 4 DELMAR PARADE AND 812 PITWATER ROAD, DEE WHY
SECTION 4.55 APPLICATION TRAFFIC REPORT**

As requested, please find herein The Transport Planning Partnership (TPPP)'s traffic and parking assessment for the above proposed development.

Background

A development application (DA) has been approved by Northern Beaches Council (Council) for a proposed mixed-use development at 812 Pittwater Road & 4 Delmar Parade, Dee Why.

A Section 4.55 application is to be submitted which would result in a variation in the yields and car parking provision.

The following report assesses the traffic and parking impacts of the amended development.

The architectural plans of the amended layout are provided in **Attachment One** and swept path analysis of the amended layout is provided in **Attachment Two**.

Proposed Development Yields

The approved DA included a provision of 219 residential apartments and 817m² of commercial/ retail floor area over basement car parking containing 334 car spaces.

The amended layout includes a total of 218 residential apartments and 746.7m² of commercial/ retail floor area as detailed in Table 1.

Table 1: Development Yields

Land Use	Buiding A – 4 Delmar Pde	Building B – 812 Pittwater Rd	Total
Residential			
Studio	0 units	0 units	0 units
1-bedroom	51 units	39 units	90 units
2-bedroom	45 units	43 units	88 units
3-bedroom	26 units	14 units	40 units
Total	122 units	96 units	218 units
Commercial/ Retail	365.4 m²	381.3 m²	746.7 m²

The number of car spaces is to remain as 334 car spaces. The loading and access arrangements are to be retained as per the approved layout.

Parking Assessment

Car Parking

The parking requirements relevant to the proposed development are summarised in Table 2.

Table 2: DCP Car Parking Assessment

Parking User	Size	Car Parking Rate	Parking Requirement	Parking Provision
Residential				
1-bedroom	90	0.6 spaces per dwelling	54	258
2-bedroom	88	0.9 spaces per dwelling	79	
3-bedroom	40	1.4 spaces per dwelling	56	
Visitors	-	1 space per 5 units	44	44
Sub-Total	218 units		233	302
Commercial/ Retail	746.7m ²	Commercial: 1 space per 40sqm Retail: 4.2 spaces per 100sqm	19-31	32
Total			252-264	334

The DCP does not specify the above parking rates as a minimum nor a maximum requirement. However, it is noted that the DCP rates for residential development directly match the parking rates recommended by the Apartment Design Guidelines (i.e. from the *Roads and Maritime Guide to Traffic Generating Developments 2002* for a Metropolitan Sub-Regional Centre), which is a minimum requirement.

The parking provision exceeds the DCP requirement for residents. It is considered that this level of parking is acceptable with consideration for the minimum requirements of the Apartment Design Guidelines.

The tenant proposed for the commercial/ retail tenancy is not known at this stage, however, based on the commercial rate, 21 car spaces are required and based on the retail rate, 34

spaces are required. The proposed provision complies with the worst-case scenario with all tenancies occupied by retail uses.

Accessible Parking

Warringah DCP does not provide car parking requirements for accessible spaces.

The Australian Standard for Adaptable Housing (AS4299) requires at least one accessible car parking space to be provided for each adaptable apartment.

The development includes 22 accessible spaces to accommodate 22 adaptable units which complies with the above requirement.

The accessible parking requirement for the commercial/ retail site has been based on the *Disability (Access to Premises-Buildings) Standards 2010* which recommends one space per 50 car spaces for a retail site or one space per 100 car spaces for commercial office site. The development includes one commercial accessible space which complies with this requirement.

Bicycle Parking

The parking assessment based on the Councils DCP is summarised in Table 3.

Table 3: Bicycle Parking

Land Use	Size	DCP Bicycle Rate		Bicycle Parking Required	
		Employee/ Resident	Visitor	Employee/ Resident	Visitor
Residential	218 units	1 per dwelling	1 per 12 dwellings	218	18
Commercial/ Retail	746.7 m ²	1 per 200m ²	1 per 750m ² over 1,000m ²	4	1
Total	-	-	-	222	19

The proposed development is required to provide 242 bicycle parking spaces including 219 spaces for residents, 4 space for employees and 19 spaces for visitors.

Residents are provided with private storage cages that are to be large enough to accommodate bike parking i.e., with a minimum dimension of 715mm wide and 1840mm long.

In addition, 21 bicycle parking racks for staff and visitors are to be provided, including two bike spaces within the public domain on the ground floor and 19 spaces within the basement.

Car Park Layout Review

The basement car park and associated access arrangements have been reviewed for compliance with Australian Standard design requirements, namely AS2890.1:2004, AS2890.2:2002, AS2890.3:2015 and AS2890.6:2009.

The residential and employee car parking spaces are designed to comply with Australian Standard Class 1A parking facilities for residents and employees. Class 1A requires car spaces to have dimensions of 2.4m wide by 5.4m long with an aisle width of 5.8m.

The accessible car spaces have been designed in accordance with AS2890.6 which requires a 2.4m wide shared area adjacent to a 2.4m wide car space or, in accordance with the Australian Standard for Adaptable Housing (AS4299) which requires an adaptable space to be at least 3.8m wide.

A minimum head clearance of 4.5m is provided over the ground floor loading dock, 3.5m for basement 1 and 2.2m for basement level 2, which is compliant with the requirements of AS2890.1 and AS2890.2.

Ramp grades comply with the requirements of AS2890.1 and AS2890.2, which require:

- a maximum grade of 1:6.5 and change in grade of 1:12 for SRVs
- a maximum grade of 1:4 and change in grade of 1:8 for B99 vehicles
- a maximum grade of 1:20 for car parking modules
- a maximum grade of 1:25 for a service bay.

Any remaining minor non-compliances are expected to be resolved prior to Construction Certification.

Swept path analysis of the proposed car park and access is provided in Appendix C.

Traffic Impact

A comparison of the estimated traffic generation of the approved development and the modified development is summarised in Table 4.

Table 4: Traffic Generation Assessment

Land Use	Size	Trip Rate (per unit/ 100m ²)		Trips (vehicle trips per hour)	
		AM	PM	AM	PM
Approved DA				60	70
Proposed DA					
Residential	218 units	0.19	0.15	41	33
Commercial/ Retail	746.7 m ²	2.3	4.6	17	34
Proposed Total	-	-	-	58	67

Based on Table 4, the proposed modifications would have a negligible difference in traffic generation to the site with a difference of 1-2 vehicles.

Summary and Conclusion

The above addendum traffic report assesses the traffic and parking impact of the amended development at 812 Pittwater Road & 4 Delmar Parade, Dee Why. The key findings of the assessment are:

- The development requires 235 residential car spaces and 19-32 commercial/ retail spaces.
- The proposed provision of 302 residential spaces and 32 non-residential spaces is adequate.
- The proposed development complies with the DCP's bicycle parking requirement.
- The loading and access arrangements are to be retained as per the approved layout. Notwithstanding, a review of the access and car park layout has been undertaken which indicates that the layout is compliant with AS2890, notwithstanding some minor non-compliances that would be addressed prior to Construction Certification.
- The net traffic impact of the proposed development is negligible.

We trust the above is to your satisfaction. Should you have any queries regarding the above or require further information, please do not hesitate to contact the undersigned on 8437 7800.

Yours sincerely,

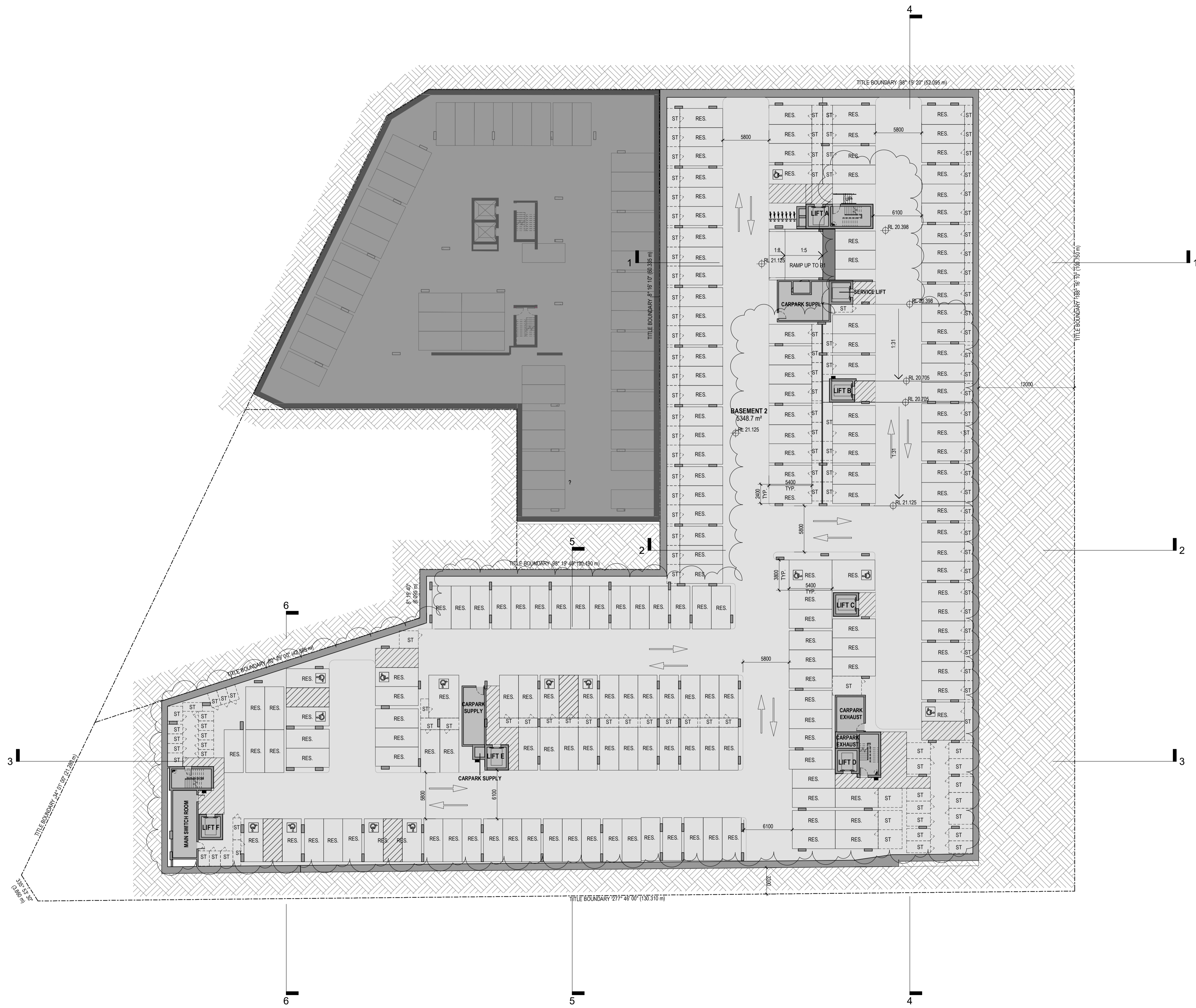


Ken Hollyoak
Director

Encl. Attachment One – Architectural Plans
Attachment Two – Swept Paths

Attachment One

Architectural Plans



Revisions			
C	07.12.2022	COUNCIL SUBMISSION	JC
D	16.02.2023	COUNCIL UPDATE	JC
E	03.03.2023	COUNCIL SUBMISSION	JC
F	20.03.2023	CLIENT ISSUE	JC
G	18.09.2023	MODIFICATION SUBMISSION	JC

Client / **Dee Why 3 Pty Ltd & Dee Why 4 Pty Ltd**
 Project / **4 Delmar Pde & 812 Pittwater Rd, Dee Why**

Drawing / **BASEMENT 2**

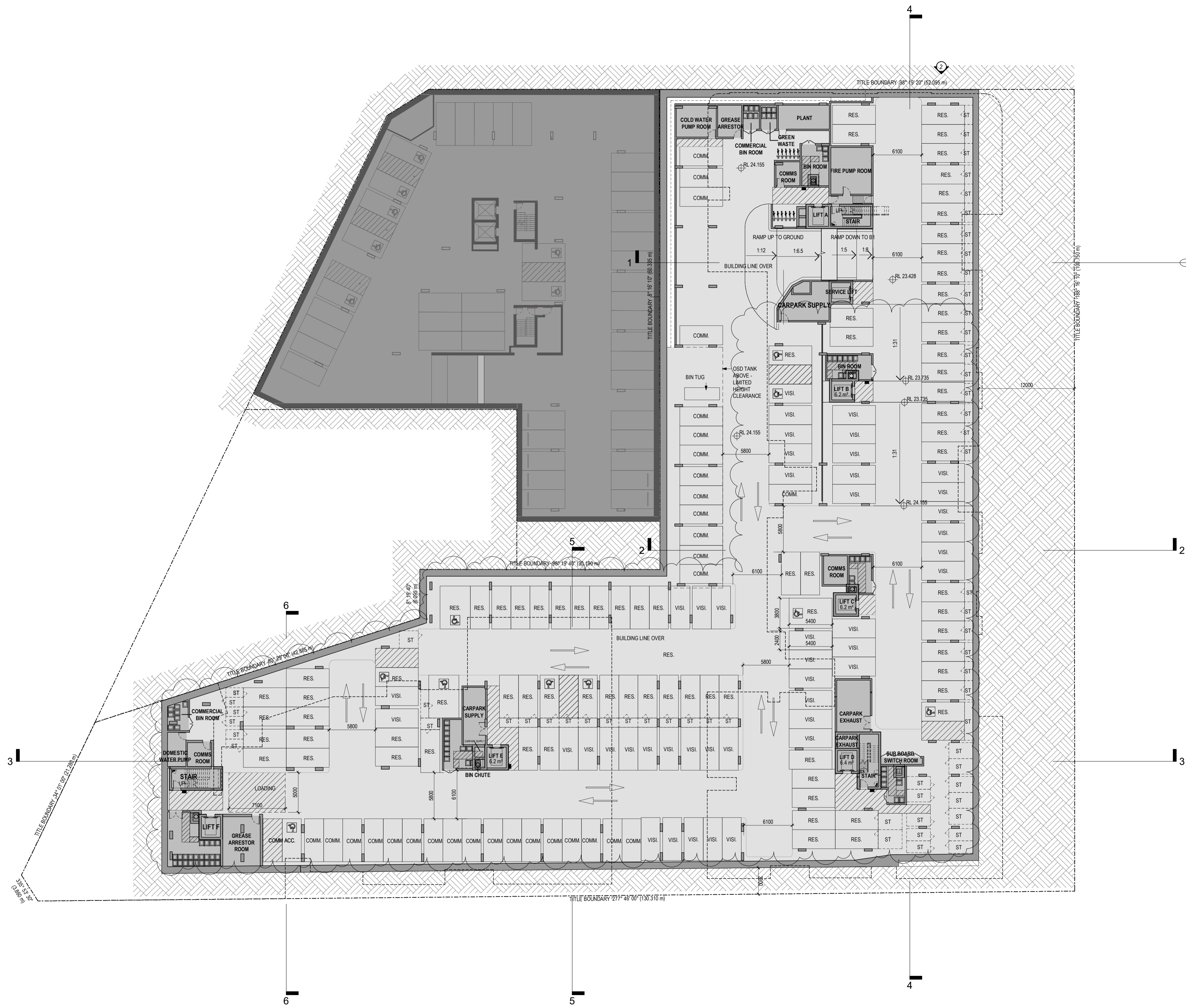
Project No / **221054** Date / **18.09.2023** Author / **BR** Scale: @ A1 / **1 : 250**

Drawing No. / **TP01.01 G**



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Revisions	Date	Description	Author
C	07.12.2022	COUNCIL SUBMISSION	JC
D	16.02.2023	COUNCIL UPDATE	JC
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F	20.03.2023	CLIENT ISSUE	JC
G	18.09.2023	MODIFICATION SUBMISSION	JC

Client / **Dee Why 3 Pty Ltd & Dee Why 4 Pty Ltd**
 Project / **4 Delmar Pde & 812 Pittwater Rd, Dee Why**

Drawing / **BASEMENT 1**

Project No / **221054** Date / **18.09.2023** Author / **BR** Scale: @ A1 / **1 : 250**

Drawing No. / **TP01.02 G**



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Revisions	Date	Description	Author
D	16.02.2023	COUNCIL UPDATE	JC
E	03.03.2023	COUNCIL SUBMISSION	JC
F	24.03.2023	COUNCIL SUBMISSION	JC
G	29.03.2023	COUNCIL SUBMISSION	JC
H	18.09.2023	MODIFICATION SUBMISSION	JC

Client / **Dee Why 3 Pty Ltd & Dee Why 4 Pty Ltd**
 Project / **4 Delmar Pde & 812 Pittwater Rd, Dee Why**

Drawing / **GROUND**

Project No / **221054** Date / **18.09.2023** Author / **DM** Scale: @ A1 / **1 : 250**

Drawing No. / **TP01.03 H**

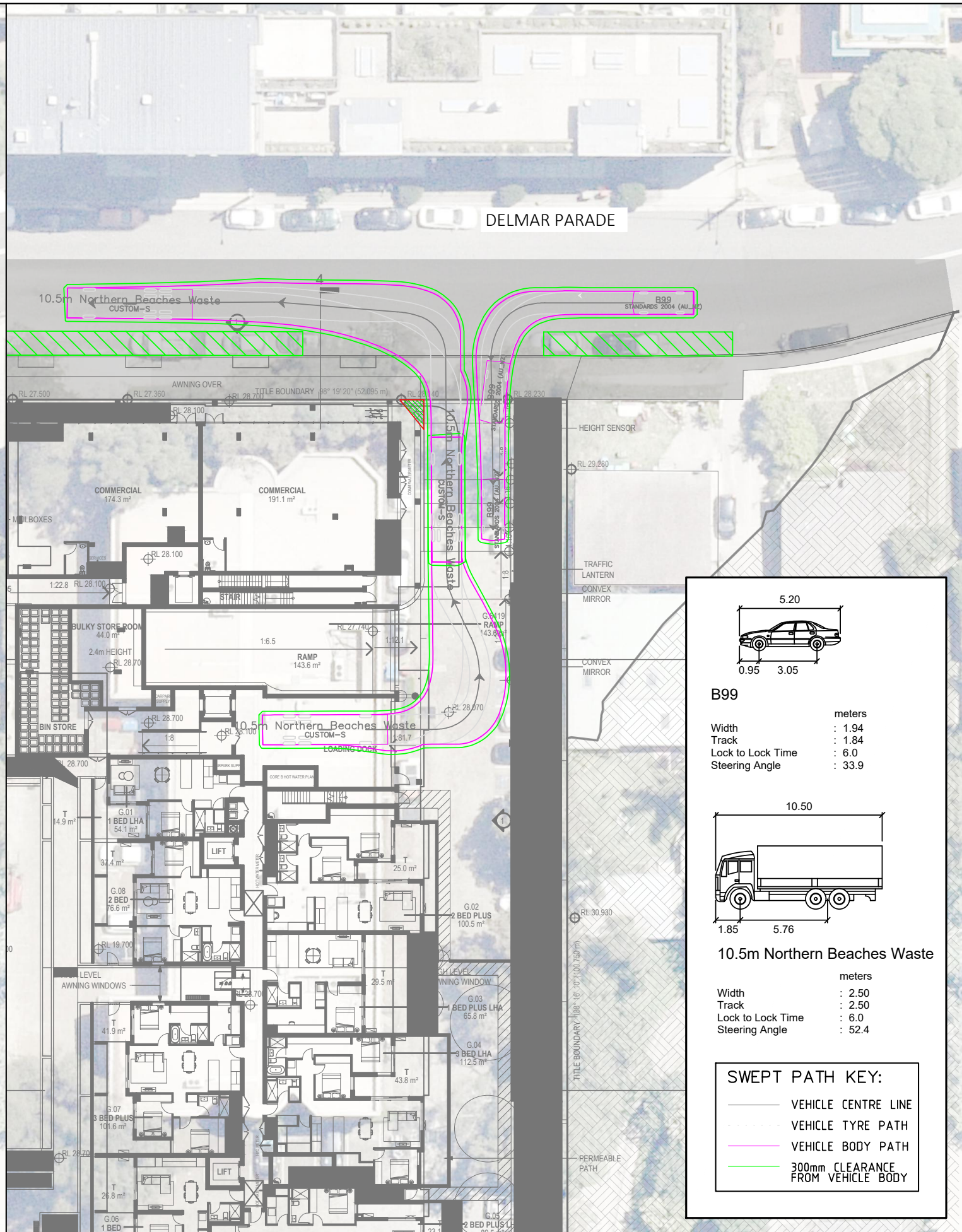
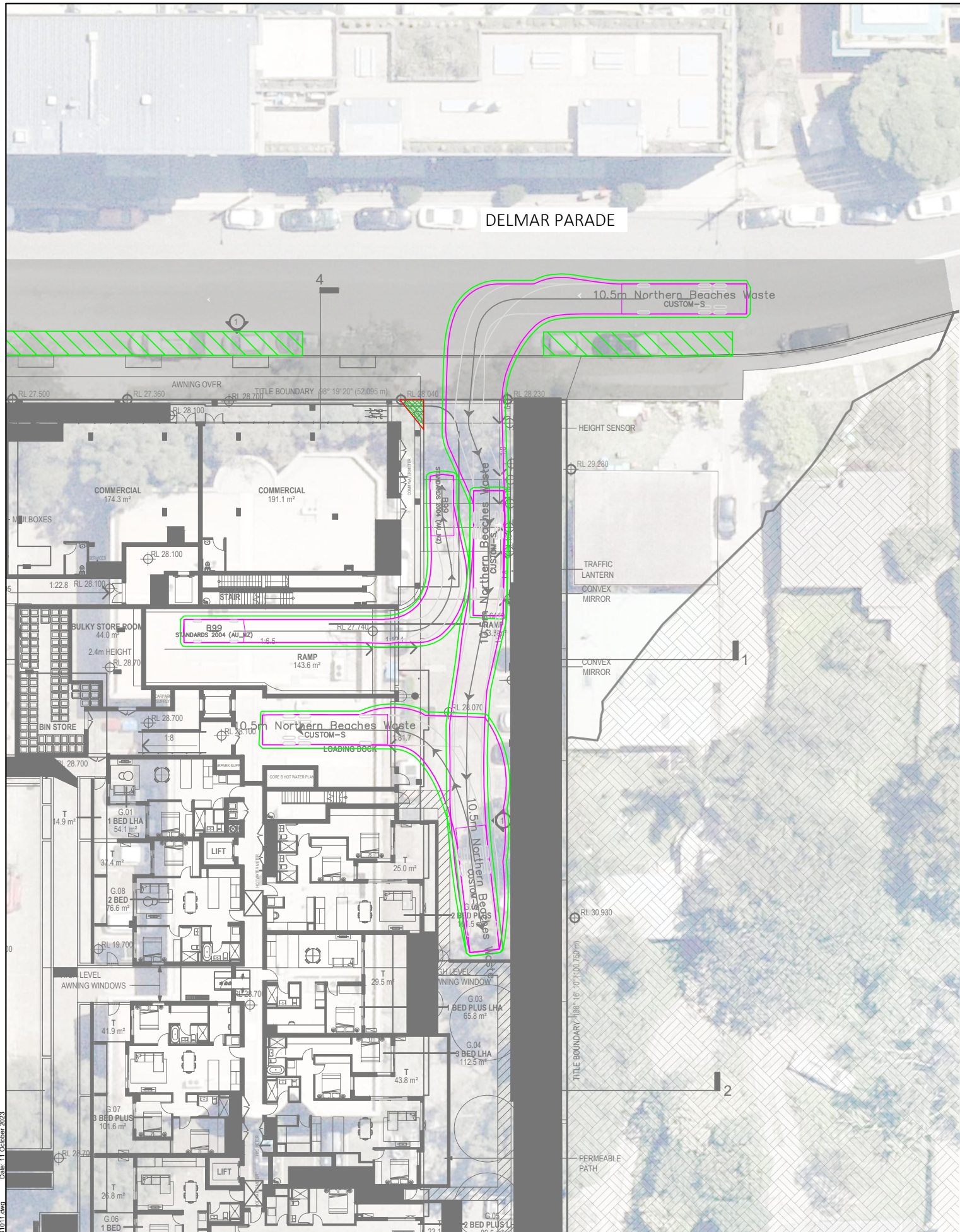


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Attachment Two

Swept Paths



B99

Width : 1.94 meters
Track : 1.84 meters
Lock to Lock Time : 6.0
Steering Angle : 33.9

10.5m Northern Beaches Waste

Width : 2.50 meters
Track : 2.50 meters
Lock to Lock Time : 6.0
Steering Angle : 52.4

SWEPT PATH KEY:

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
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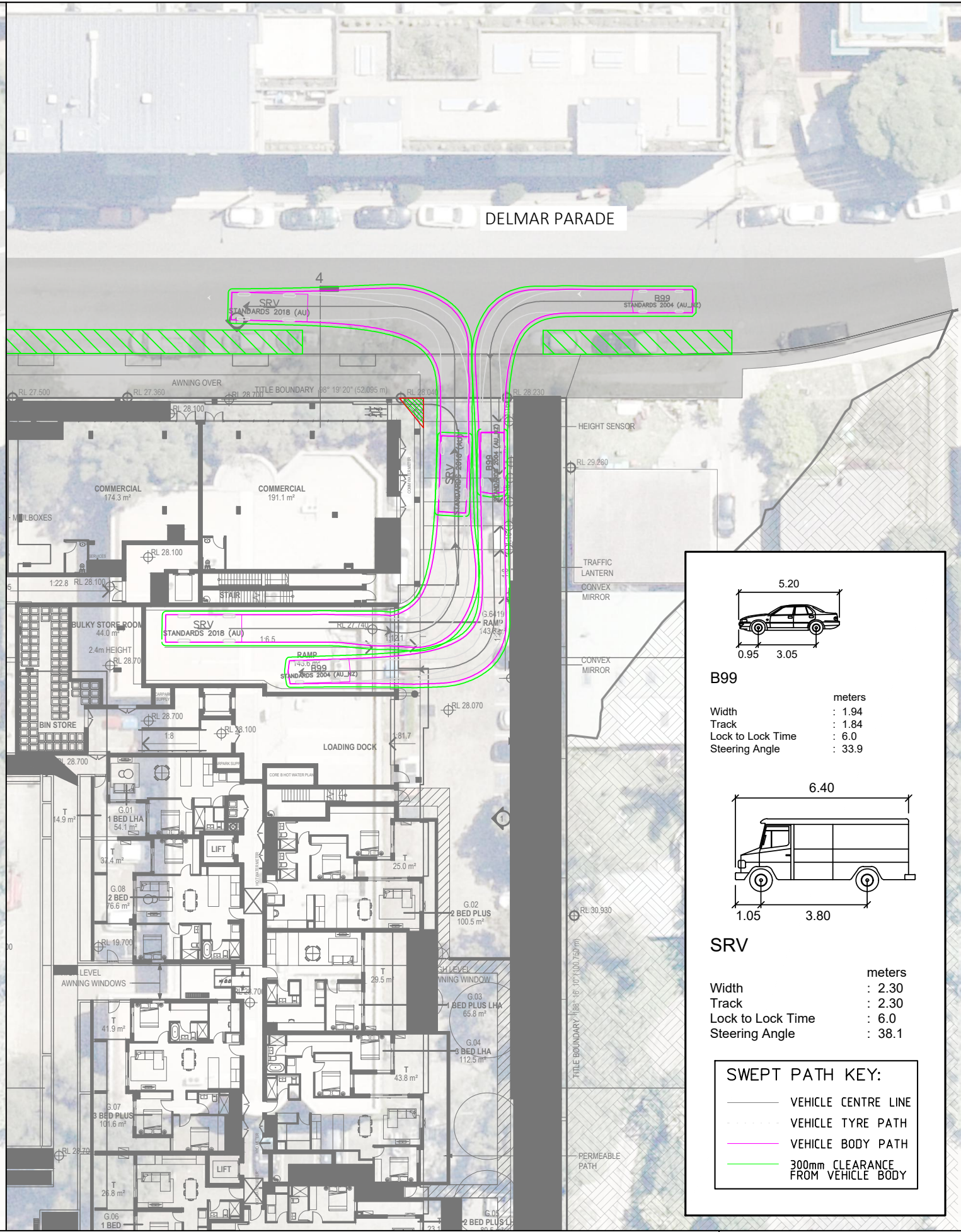
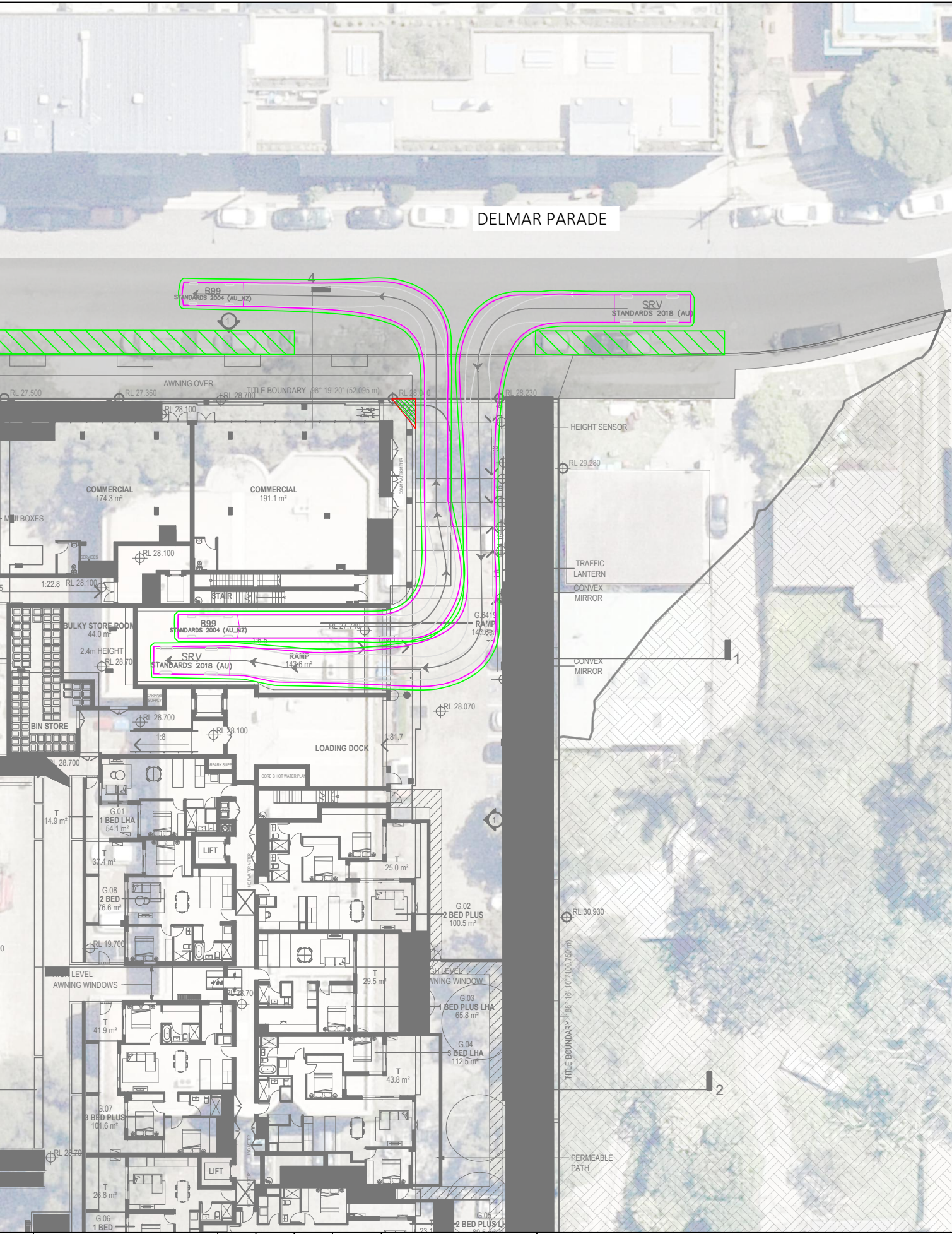


PROJECT: 4 DELMAR PARADE & 812 PITWATER ROAD, DEE WHY

TITLE: GROUND - SWEPT PATH ASSESSMENT

DWG No.	21205CAD019	
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DATE STAMP	11 OCTOBER 2023	
PROJECT No.	SCALE	REV.
21205	1:400 @A3	A

Date: 11 October 2023
Filename: 21205CAD019_SweptPath_211011.dwg



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

SRV

	meters
Width	: 2.30
Track	: 2.30
Lock to Lock Time	: 6.0
Steering Angle	: 38.1

SWEPT PATH KEY:

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	XD	OF	KH	11/10/23

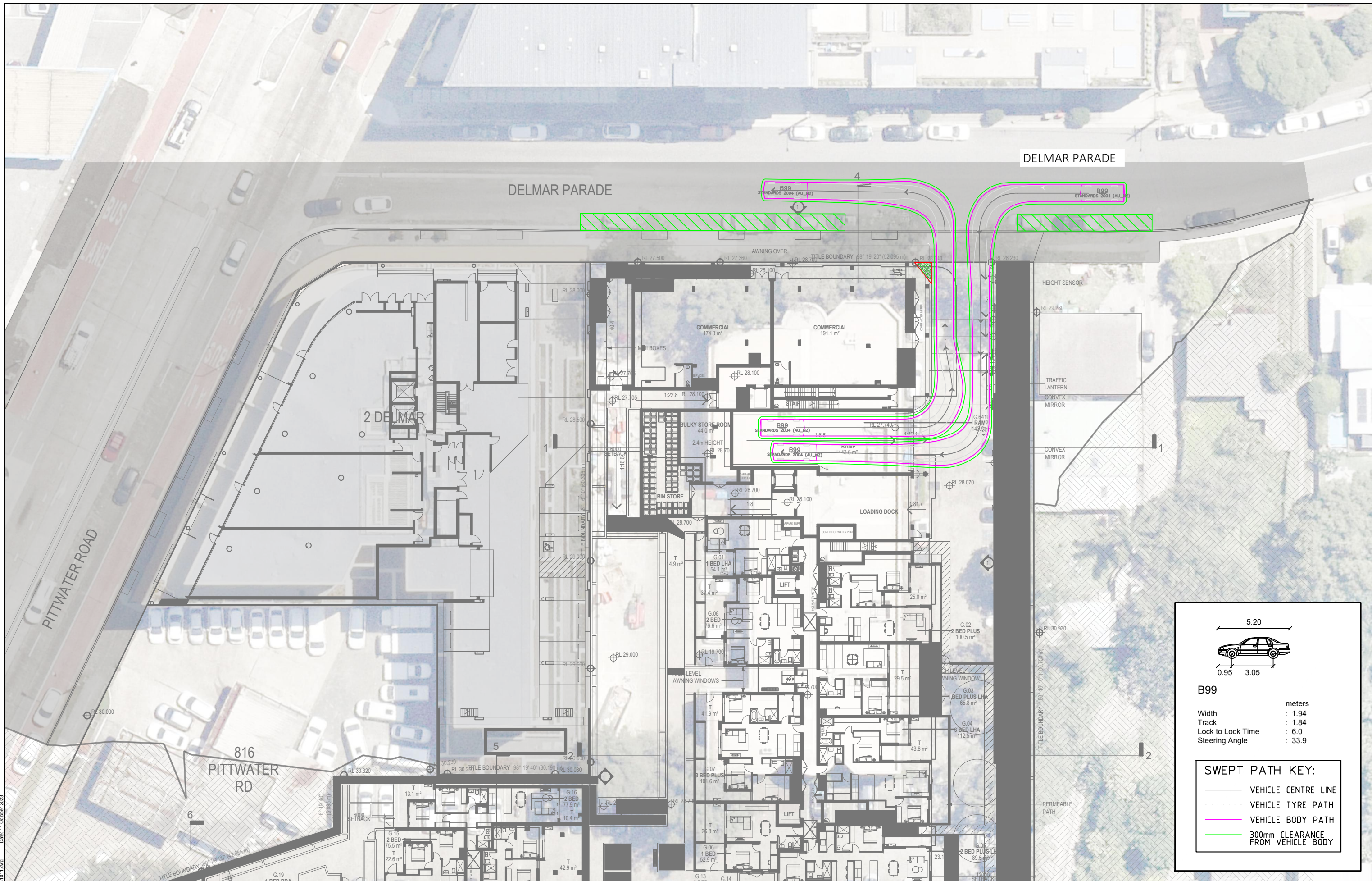


4 DELMAR PARADE & 812 PITTWATER ROAD, DEE WHY

GROUND - SWEPT PATH ASSESSMENT

DWG No. 21205CAD019	
FIGURE 5	
DATE STAMP 11 OCTOBER 2023	
PROJECT No. 21205	SCALE 1:400 @A3
REV. A	

File name: 21205CAD019_SweptPath_211011.dwg Date: 11 October 2023



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
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REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	XD	OF	KH	11/10/23

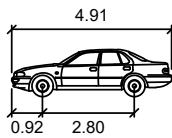


PROJECT
4 DELMAR PARADE & 812 PITTWATER ROAD, DEE WHY

TITLE
GROUND - SWEPT PATH ASSESSMENT

DWG No. 21205CAD019	
FIGURE 6	
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REV. A	

File name: 21205CAD019_SweptPath_231011.dwg Date: 11 October 2023



B85

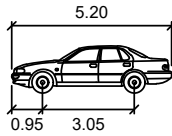
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Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 34.1



B99

meters

Width : 1.94

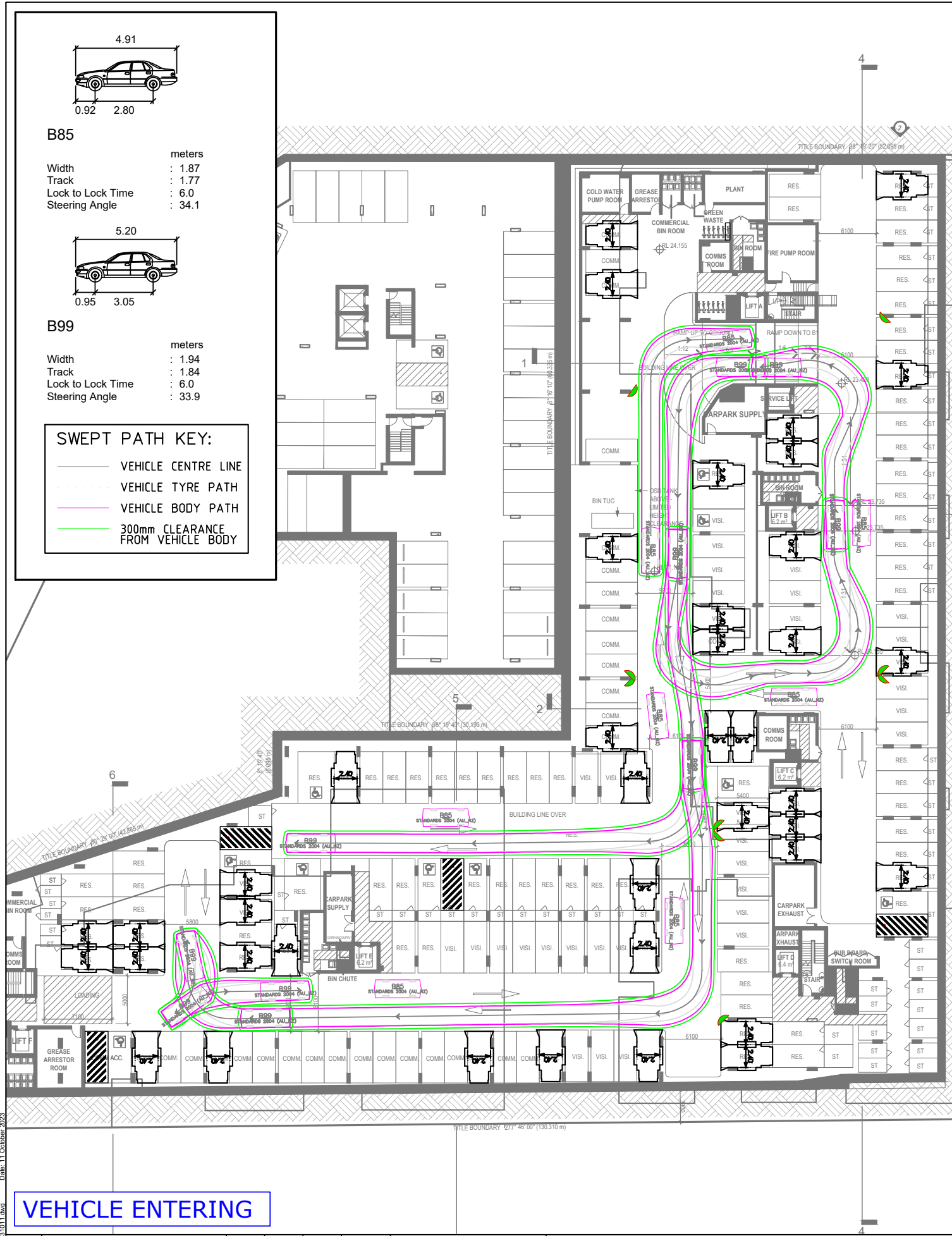
Track : 1.84

Lock to Lock Time : 6.0

Steering Angle : 33.9

SWEPT PATH KEY:

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



VEHICLE ENTERING



VEHICLE EXITING

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	XD	OF	KH	11/10/23

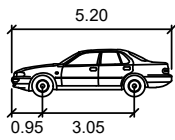


PROJECT
4 DELMAR PARADE & 812 PITTSWATER ROAD, DEE WHY

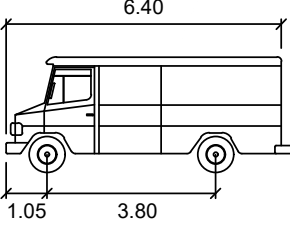
TITLE
BASEMENT 1 - SWEPT PATH ASSESSMENT

DWG No.	21205CAD019	
	07/07/23	
DATE STAMP	11 OCTOBER 2023	
PROJECT No.	SCALE	REV.
21205	1:500 @A3	A

Date: 11 October 2023
Filename: 21205CAD019_SweptPath.txd



B99
 meters
 Width : 1.94
 Track : 1.84
 Lock to Lock Time : 6.0
 Steering Angle : 33.9



SRV
 meters
 Width : 2.30
 Track : 2.30
 Lock to Lock Time : 6.0
 Steering Angle : 38.1

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



VEHICLE ENTERING



VEHICLE EXITING

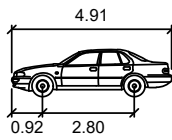
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PROJECT	4 DELMAR PARADE & 812 PITTSWATER ROAD, DEE WHY
TITLE	BASEMENT 1 - SWEPT PATH ASSESSMENT

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DATE STAMP	11 OCTOBER 2023		
PROJECT No.	21205	SCALE	1:500 @A3

Date: 11 October 2023
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B85

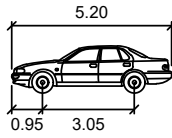
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Width : 1.87

Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 34.1



B99

meters

Width : 1.94

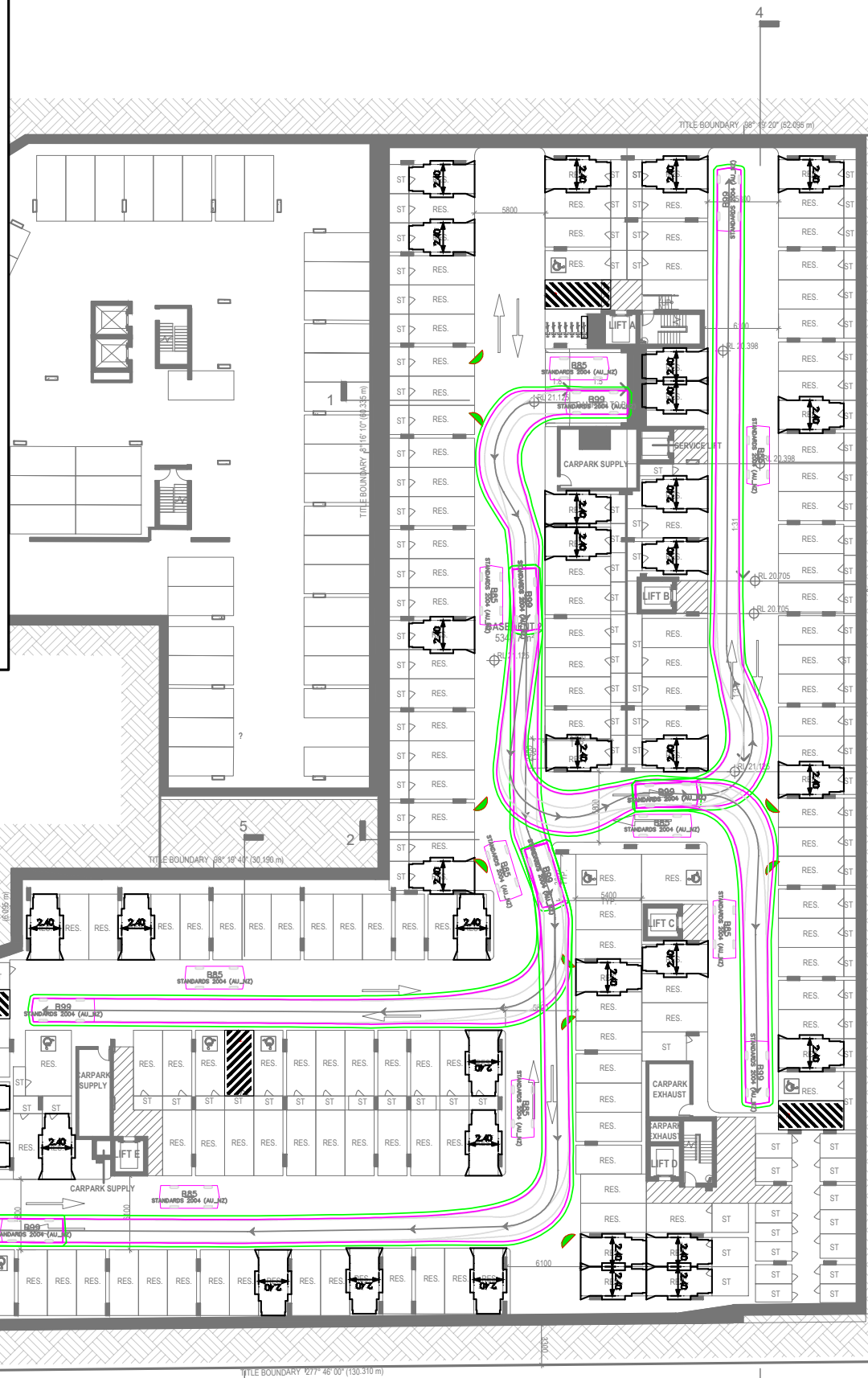
Track : 1.84

Lock to Lock Time : 6.0

Steering Angle : 33.9

SWEPT PATH KEY:

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



VEHICLE ENTERING

VEHICLE EXITING

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	XD	OF	KH	11/10/23



PROJECT: 4 DELMAR PARADE & 812 PITWATER ROAD, DEE WHY

TITLE: BASEMENT 2 - SWEPT PATH ASSESSMENT

DWG No.	21205CAD019	
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