

# Proposed Seniors Living Development 633-635 Warringah Road, Forestville

## Traffic and Parking Impact Assessment

Ref: 20042

Date: November 2021

Issue: B

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# 1.0 Introduction

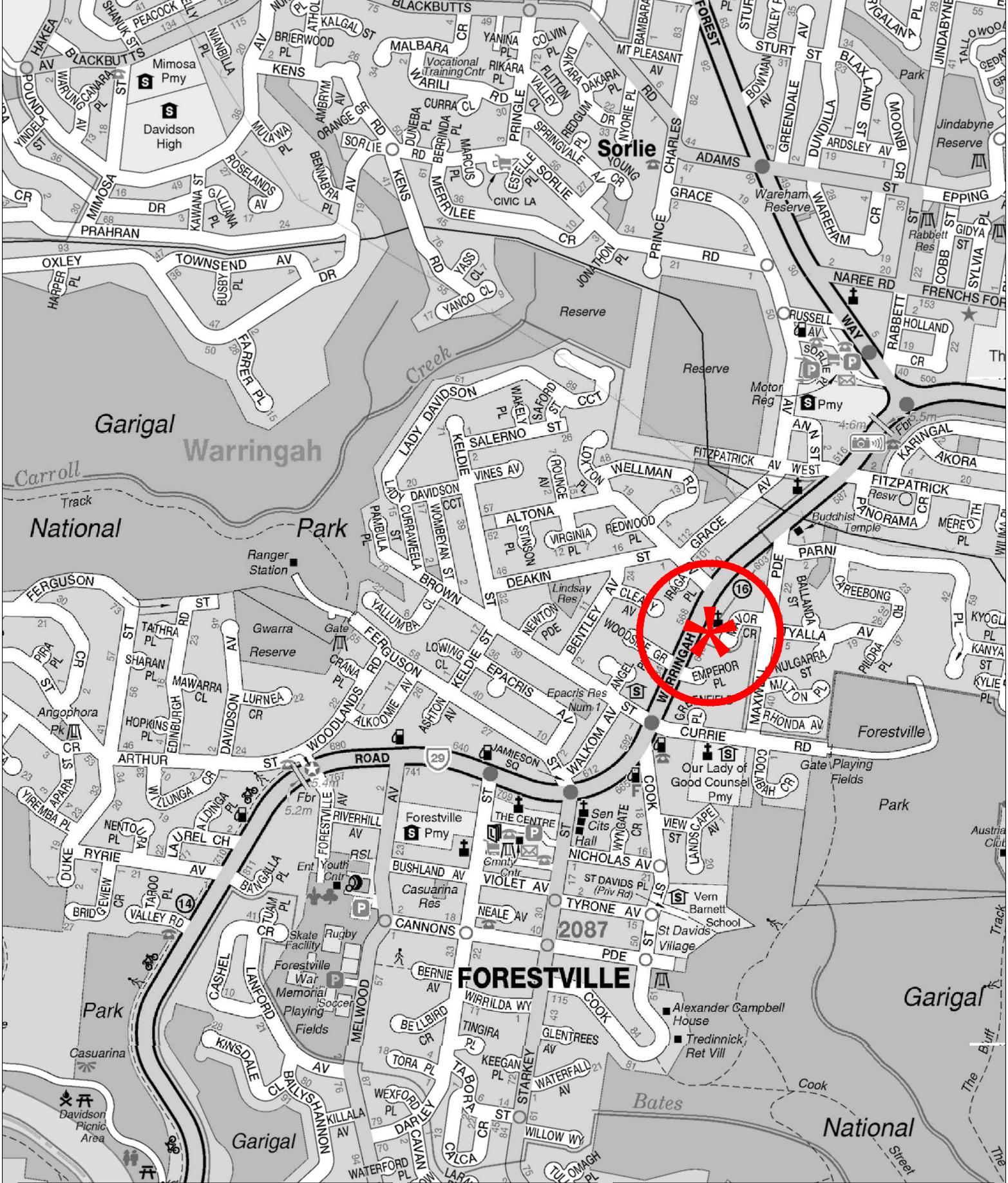
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This report has been prepared to accompany a Development Application to Northern Beaches Council for a proposed development comprising two Seniors Living Complexes at 633 – 635 Warringah Road at Forestville (Figure 1).

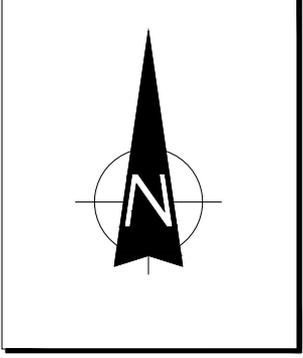
Consent was previously granted by the LEC for two lots of boarding houses, each with 12 rooms plus manager and 7 car spaces each. Vehicle accesses were to be provided at the Warringah Road frontage. The revised proposal now involves 6 townhouses (SEPP Seniors Living) with garage carparking. It is now proposed to provide one combined vehicle access centrally on Warringah Road frontage.

The purpose of this report is to:

- ❖ describe the proposed development scheme
- ❖ describe the existing road network serving the site
- ❖ assess the potential traffic implications
- ❖ assess the adequacy of the proposed parking provisions
- ❖ assess the proposed vehicle access, internal circulation and servicing arrangements.



**LEGEND**



**LOCATION**

**FIG 1**

## 2.0 Proposed Development

---

### 2.1 Site, Context, and Existing Circumstances

The site (Figure 2) is a consolidation of Lot 1 DP28219 and Lot 15 DP212195 and occupies an irregular shaped area of some 1455.1m<sup>2</sup> with a frontage of 41.6m to the eastern side of Warringah Road.

The site is adjoined by residential dwellings while there are a mixture of frontage uses along Warringah Road including service stations while some former residences are being consolidated and redeveloped for medium density apartments.

The entire site has been occupied by a large 2 level veterinary hospital for many years with significant on-site parking provision (i.e., some 14 spaces) with an access driveway located centrally on the Warringah Road frontage.

### 2.2 Approved Development

In 2020, the LEC granted consent to a development that involves two 12-room boarding house complex on the site. A total of 14 car parking spaces was proposed in that scheme with two driveways located on the Warringah Road frontage.

Details of the approved development scheme are provided on the architectural plans in Appendix A.

### 2.3 Revised Proposal

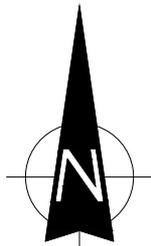
It is proposed to demolish the existing structures and excavate to provide level building platforms for the construction of two residential complexes comprising 6 townhouses with an at-grade garage carparking.



WARRINGAH ROAD

SITE

LEGEND



SITE

FIG 2

## Transport and Traffic Planning Associates

The proposed development will involve 6 three-bedroom townhouses with 9 garaged car parking spaces provided at-grade and accessed via a combined ingress/egress driveway located centrally on the Warringah Road frontage.

Details of the development scheme are provided in the plans prepared by Walsh Architects which accompany the Development Application and are reproduced in part in Appendix B.

## 3.0 Road Network and Traffic Conditions

---

### 3.1 Road Network

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

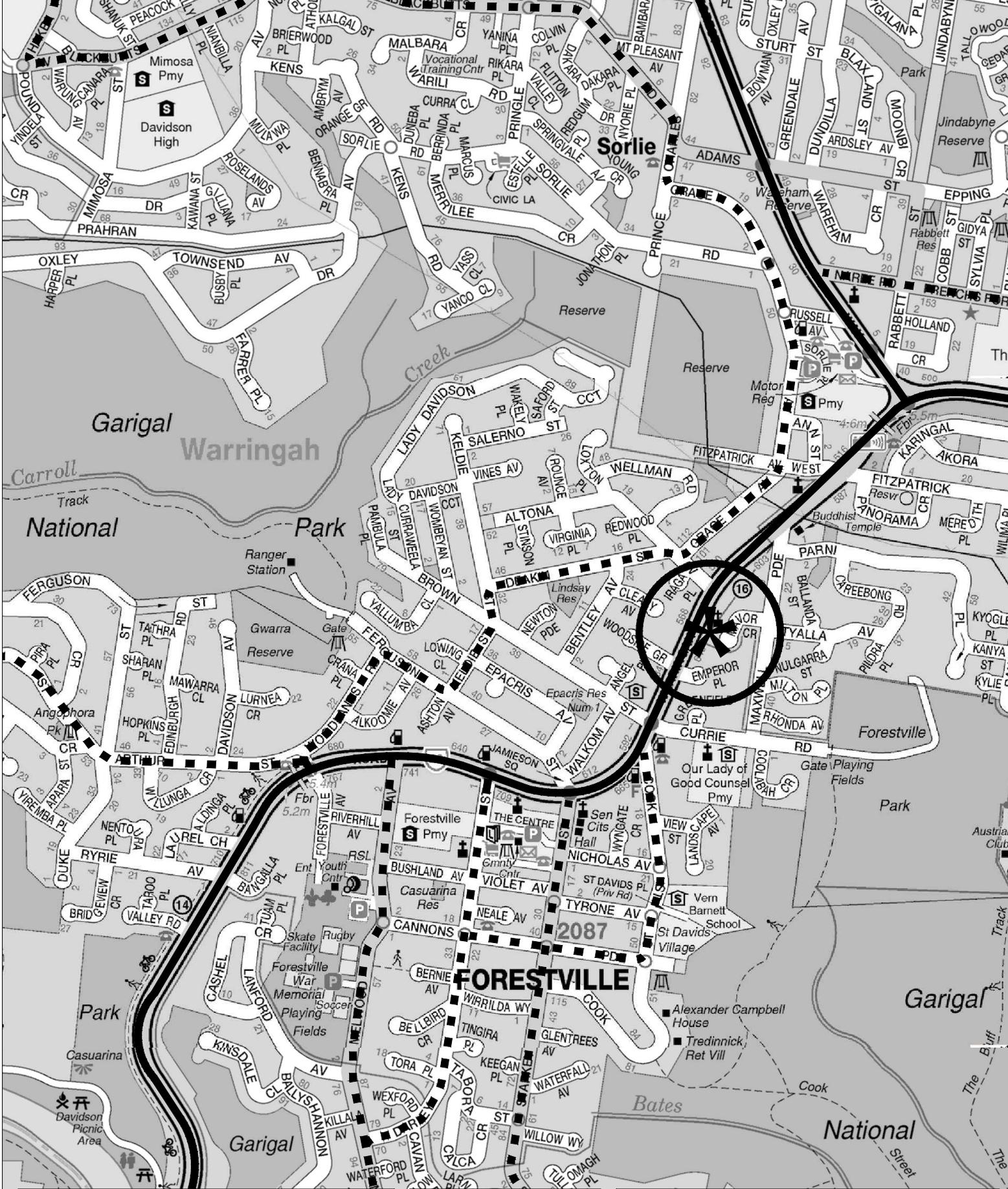
- ❖ *Warringah Road* - a State Highway and arterial route linking between and the City and the northern beaches peninsula
- ❖ *Forest Way* - a State Road and arterial route and arterial route linking between Warringah Road and Mona Vale Road
- ❖ *Starkey Street, Darley Street, and Melwood Avenue* – a collector road system serving the Forestville south area
- ❖ *Arthur Street and Woodlands Road* – a collector road route running along the northern side of Warringah Road

Warringah Road has 3 traffic lanes in each direction with a wide central median island.

### 3.2 Traffic Controls

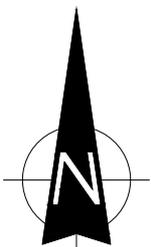
The existing traffic and parking controls in the vicinity of the site (Figure 4) include:

- ❖ the traffic signals along Warringah Road at the Starkey Street, Darley Street, and Currie Road/Brown Street intersections
- ❖ the roundabouts along Starkey Street and Cook Street
- ❖ the CLEARWAY, NO STOPPING, and BUS ZONE restrictions along Warringah Road
- ❖ the central median island along Warringah Road which restricts site access movements to left turn IN/OUT
- ❖ the 60 kmph speed restriction this section of Warringah Road and 50 kmph restrictions along the local and collector road system.



**LEGEND**

-  ARTERIAL
-  COLLECTOR



**ROAD NETWORK**

**FIG 3**



### 3.3 Traffic Conditions

An indication of the prevailing traffic conditions on the road system in the vicinity of the site is provided by data published by RMS and observations undertaken for this study. Data<sup>1</sup> published by RMS is expressed in terms of annual average daily traffic (AADT).

	<b>Volume (AADT)</b>
Warringah Road, East of Daines Parade	50,981

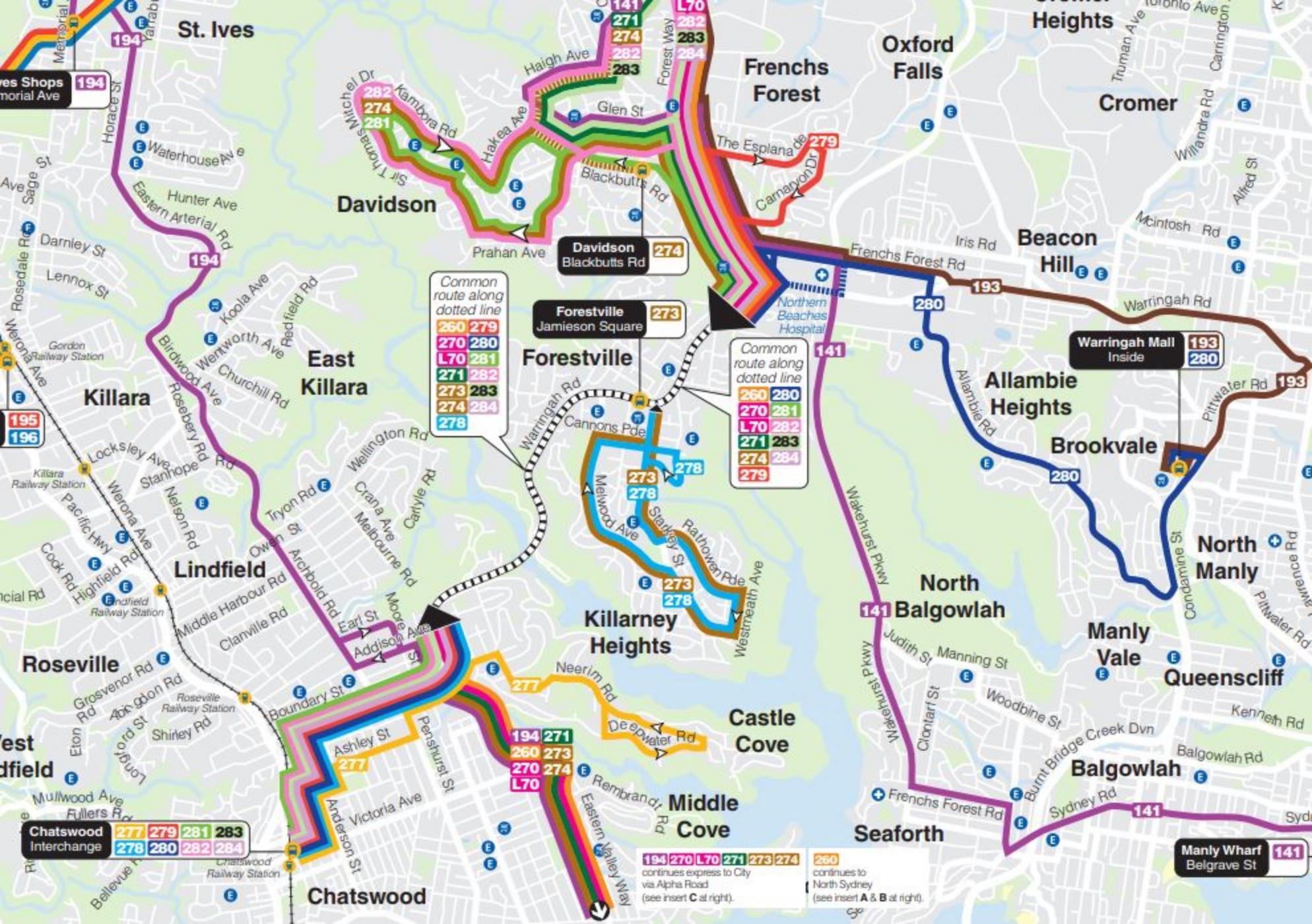
Observations indicate that the road network and access intersections operate relatively satisfactorily with the signal control at intersections along the Warringah Road route providing for pedestrian crossings and gaps in the traffic flows to facilitate vehicle access movements for frontage properties. There are some delays and congestion along Warringah Road during the peak periods and extensive queuing can result when incidents rainy weather occur.

### 3.4 Transport Services

Bus services along Warringah Road (see overleaf) are provided by Forest Coachlines with routes 136, 137, and L60 which provide connection to Chatswood railway station.

---

<sup>1</sup> *Traffic Volumes Sydney Region*  
*Roads and Traffic Authority of NSW*



Common route along dotted line

260	279
270	280
L70	281
271	282
273	283
274	284
278	

Common route along dotted line

260	280
270	281
L70	282
271	283
274	284
279	

Chatswood Interchange

277	279	281	283
278	280	282	284

194 270 L70 271 273 274  
 continues express to City via Alpha Road (see insert C at right).

260  
 continues to North Sydney (see insert A & B at right).

Manly Wharf Belgrave St 141



## 4.0 Parking

---

The minimum parking requirements in respect of the proposed development are specified in the SEPP (Seniors Living) as follows:

0.5 car spaces for each room

1 motorcycle space and 1 bicycle space for each 5 rooms

Application of this criteria to the development scheme with a total of 18 bedrooms indicates the following total provision:

18 bedrooms - 9 spaces

It is proposed to provide 9 car spaces in the carpark to satisfy the requirements of the SEPP criteria.

## 5.0 Traffic

---

The TfNSW Development Guidelines do not specify a traffic generation characteristic for a Veterinary hospital; however, there would have been up to 5 staff on the site with some 15 parking spaces and frequent visitation for animal consultation, hospitalisation, and boarding. It is reasonable to assume a peak period generation for this use of between 5 and 10 vtph.

The RMS Technical Direction (TDT 2013/04a) reveals the following peak traffic generation rates for Seniors Living developments:

AM	Not applicable
PM	0.4 vtph per dwelling

Application of the above to the proposal with 6 townhouses would indicate a total peak period traffic generation outcome of some 2 to 3 vtph.

These traffic movements will be somewhat less than that of the previous veterinary use on the site and movements of this minor magnitude will not present any adverse traffic capacity, safety, or environmental-related consequences. The volumes will be of such a minor nature that they will not impact on the operational performance of Warringah Road or the intersections in the vicinity of the site, particularly when the movements will be restricted to left turn IN/OUT only by the central median island.

Vehicle movements generated by the proposed development will readily be able to turn left into and out of Warringah Road with the aid of traffic signal-induced gaps in the westbound Warringah Road traffic flows. Vehicles wishing to turn right (to or from) will be able to do so at the Darley Road intersection and pedestrians will be able to cross Warringah Road (to/from bus stops) at the traffic signal-controlled Currie Road intersection or the pedestrian bridge at Darley Road.

## 6.0 Access, Internal Circulation, and Servicing

---

### 6.1 Access

A single combined 5.5m wide ingress/egress driveway will be provided centrally on the Warringah Road frontage. Warringah Road at this location is straight and relatively level and the sight distances in relation to site access movements will be quite satisfactory. The design of the proposed access driveway will accord with the requirements of AS 2890.1.

### 6.2 Internal Circulation

The design of the parking area will accord with AS 2890.1 and 6, and accordingly the provision for cars to access and manoeuvre in the carpark will comply with the AS requirements.

Details of a turning path assessment for the car park are provided in Appendix C indicating satisfactory for turning and manoeuvring.

### 6.3 Servicing

Refuse will be collected from the street while any occasional service personnel or maintenance vehicles etc. will be reliant on the available on-street parking in the area.

## 7.0 Conclusion

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The development site represents a valuable opportunity for Seniors Living housing development which is compatible with the planning principals for the precinct. The traffic, transport and parking assessment provided in this report indicates that the development will:

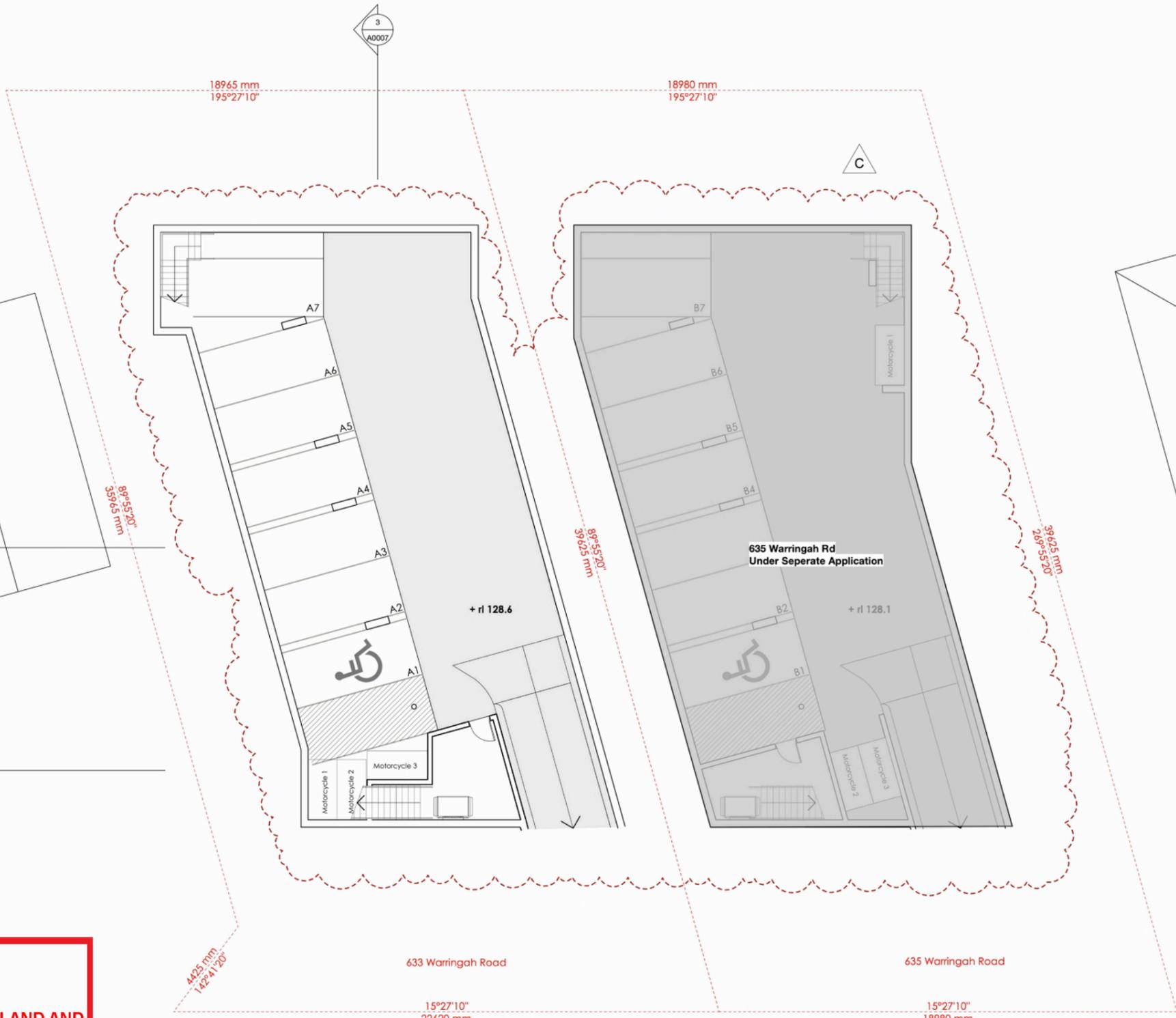
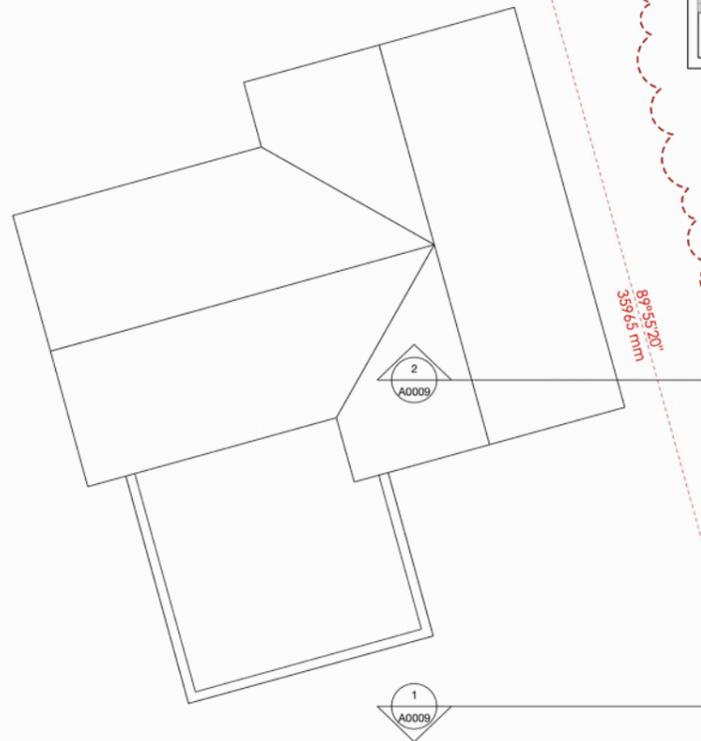
- ❖ not present any unsatisfactory traffic capacity, safety, or environmental related implications
- ❖ incorporate a suitable and appropriate parking provision for the nature of the use
- ❖ incorporate suitable vehicle access, internal circulation, and servicing arrangements.

## Appendix A

# Approved Development Plans

**ROOM SCHEDULE-633 Warringah Rd**

Room No	Persons	Area*	Notes
*not including kitchen or bathroom			
<b>GROUND FLOOR</b>			
1	2	22.6m2	Accessible
2	2	22.6m2	Accessible
3	2	20.3m2	
Manager		34.2m2	Manager
<b>FIRST FLOOR</b>			
4	2	17.6m2	
5	2	17.6m2	
6	2	14.3m2	
7	1	14.6m2	
8	2	16.4m2	
9	2	17.6m2	
10	2	17.6m2	
11	2	17.6m2	
12	2	17.6m2	
<b>23</b>			



**northern beaches council**

**PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW**

**PROCEEDINGS NO: 2020/342804**

**DATED: 3 Septemeber 2021**

issue	date	Revision	by
C1	10/8/21	Reissued	JM
C	27/7/21	Basement Design Amended	JM
B	14/04/21	Amendments as clouded	JM
A	17/07/20	Development Application	JM
1	2/6/20	PRELIMINARY	DS

**ISSUE STATUS**

PREPARED	FOR APPROVAL	FOR CONSTRUCTION	RECORDED
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project  
**New Boarding House**

633 Warringah Road, Forestville  
drawing title  
**Basement Floor Plan**

job no:  
18\_25

1:100  
20/07/20 DA18 DA Drawings  
- 2 Basements - 2  
08:05:wx

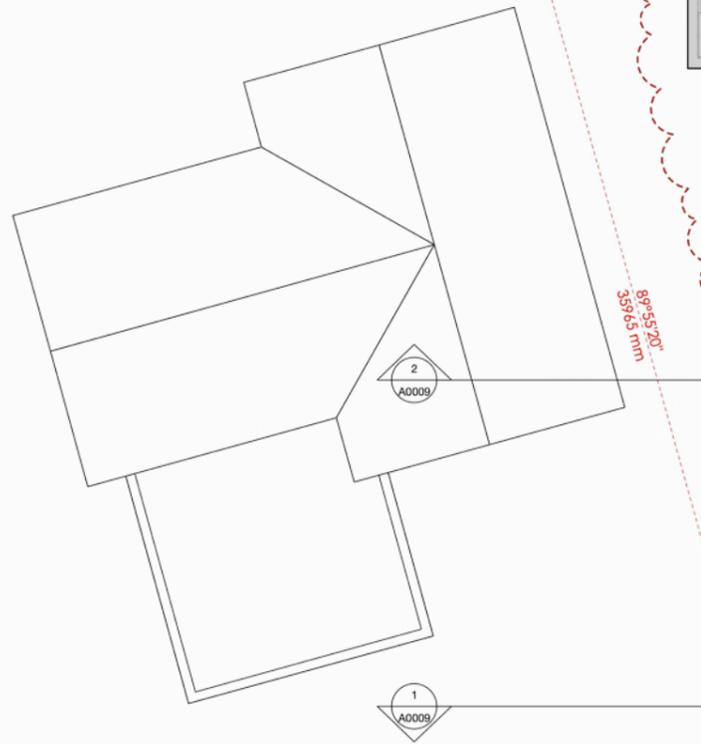
Mon, 9 Aug 2021  
drawn / checked by:  
jm/ds / jm

scale at A3:  
As noted @ A1

**A:0002 C1**

**ROOM SCHEDULE-633 Warringah Rd**

Room No	Persons	Area*	Notes
*not including kitchen or bathroom			
<b>GROUND FLOOR</b>			
1	2	22.6m2	Accessible
2	2	22.6m2	Accessible
3	2	20.3m2	
Manager		34.2m2	Manager
<b>FIRST FLOOR</b>			
4	2	17.6m2	
5	2	17.6m2	
6	2	14.3m2	
7	1	14.6m2	
8	2	16.4m2	
9	2	17.6m2	
10	2	17.6m2	
11	2	17.6m2	
12	2	17.6m2	
23			



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**DATED: 3 September 2021**

issue	date	Revision	by
C1	10/8/21	Reissued	JM
C	27/7/21	Basement Design Amended	JM
B	14/04/21	Amendments as clouded	JM
A	17/07/20	Development Application	JM
1	2/6/20	PRELIMINARY	DS

ISSUE REGISTER

**ISSUE STATUS**

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 FOR CONSTRUCTION  
 RECORD

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project  
New Boarding House

635 Warringah Road, Forestville

drawing title  
Basement Floor Plan

job no:  
18\_25

scale  
As noted

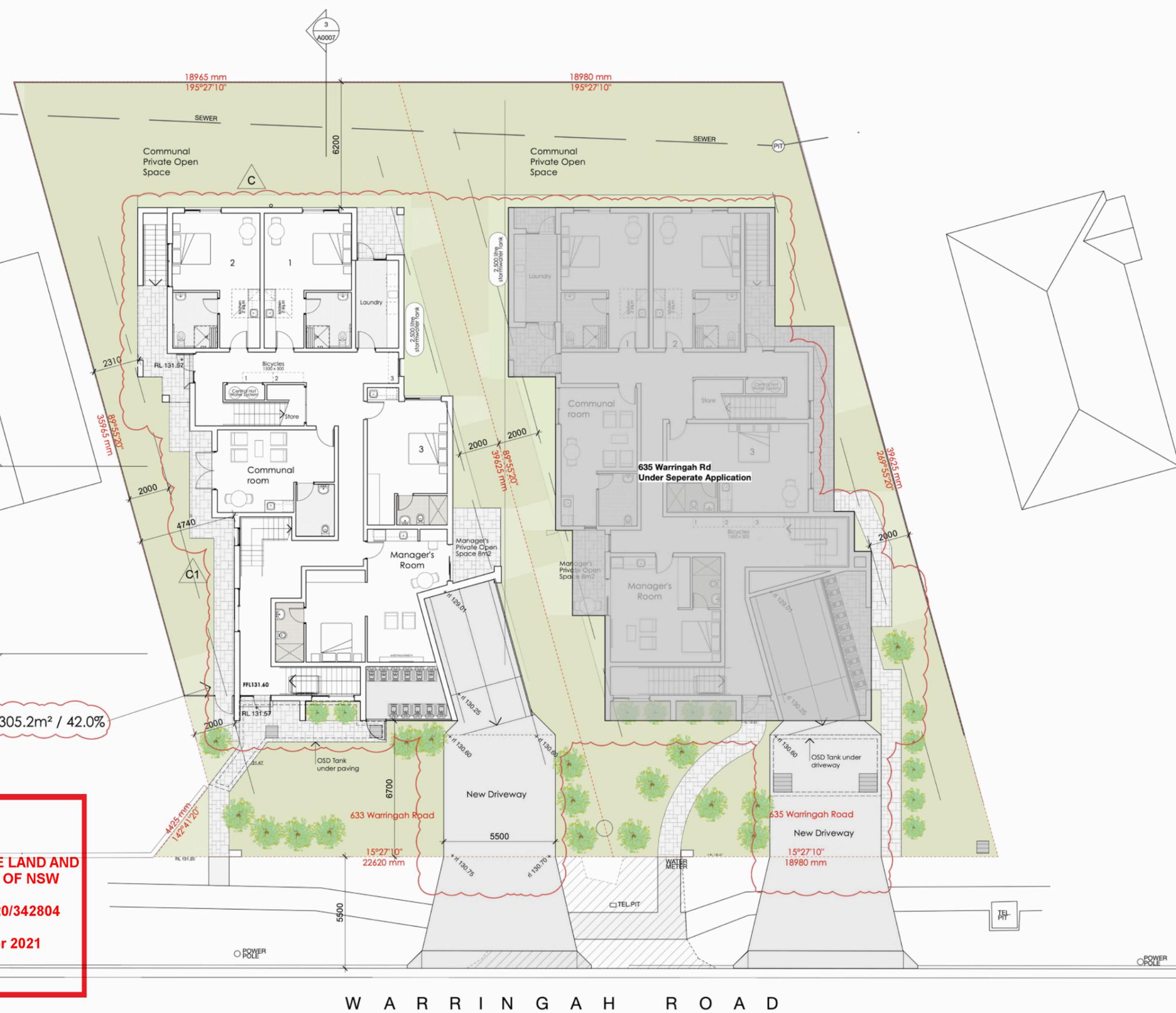
drawn / checked by:  
jm/ds / jm

scale at A3:  
As noted @ A1

**A:1002 C1**



ROOM SCHEDULE-633 Warringah Rd			
Room No	Persons	Area*	Notes
*not including kitchen or bathroom			
<b>GROUND FLOOR</b>			
1	2	22.6m <sup>2</sup>	Accessible
2	2	22.6m <sup>2</sup>	Accessible
3	2	20.3m <sup>2</sup>	
Manager		34.2m <sup>2</sup>	Manager
<b>FIRST FLOOR</b>			
4	2	17.6m <sup>2</sup>	
5	2	17.6m <sup>2</sup>	
6	2	14.3m <sup>2</sup>	
7	1	14.6m <sup>2</sup>	
8	2	16.4m <sup>2</sup>	
9	2	17.6m <sup>2</sup>	
10	2	17.6m <sup>2</sup>	
11	2	17.6m <sup>2</sup>	
12	2	17.6m <sup>2</sup>	
23			



Green Space - 305.2m<sup>2</sup> / 42.0%

**northern beaches council**

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**PROCEEDINGS NO: 2020/342804**

**DATED: 3 Septemeber 2021**

ISSUE STATUS			
NO.	DATE	BY	REVISION
1	18/25/20	JM	Basement Design Amended
2	14/04/21	JM	Amendments as clouded
3	17/07/20	JM	Development Application
4	2/6/20	DS	PRELIMINARY

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project  
**New Boarding House**

633 Warringah Road, Forestville

drawing title  
**Ground Floor Plan**

job no:  
18\_25

date:  
20/07/20

drawn / checked by:  
jm/ds / jm

scale at A3:  
As noted @ A1

**A:0003 C1**

issue	date	Revision	by
C1	3/8/21	Egress path from rear fire stair added.	JM
C	27/7/21	Basement Design Amended	JM
B	14/04/21	Amendments as clouded	JM
A	17/07/20	Development Application	JM
1	2/6/20	PRELIMINARY	DS

ISSUE REGISTER

WARRINGAH ROAD

**ROOM SCHEDULE-635 Warringah Rd**

Room No	Persons	Area*	Notes
*not including kitchen or bathroom			
<b>GROUND FLOOR</b>			
1	2	21.6m2	Accessible
2	2	22.7m2	Accessible
3	2	17.6m2	
Manager		25.5m2	
<b>FIRST FLOOR</b>			
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11	2	17.6m2	
12	2	17.6m2	
23			



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**PLANS APPROVED BY THE LAND AND ENVIRONMENT COURT OF NSW**

**PROCEEDINGS NO: 2020/342803**

**DATED: 3 September 2021**

**2** Ground Floor Plan  
Scale: 1:100

**ISSUE STATUS**

PREP	FOR APPROVAL	FOR CONSTRUCTION	RECORD
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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project  
**New Boarding House**

635 Warringah Road, Forestville  
drawing title  
**Ground Floor Plan**

job no:  
18\_25

date:  
20/07/21

drawn / checked by:  
jm/ds / jm

scale at A3:  
As noted @ A1

**A:1003 C1**

**ISSUE REGISTER**

issue	date	Revision	by
C1	3/8/21	Egress path from rear fire store added.	JM
C	27/7/21	Amended Basement Plans	JM
B	11/11/20	Amended Plan for Planning Meeting	JM
A	07/07/20	Development Application	JM
1	11/6/20	Development Application	DS

## Appendix B

# Proposed Development Plans

WARRINGAH ROAD



C-C  
DA201

D-D  
DA201

A-A  
DA200

B-B  
DA200

A-A  
DA200

B-B  
DA200

C-C  
DA201

D-D  
DA201

No.631 WARRINGAH ROAD  
2 STOREY  
CLAD DEWLLING

No.11 MAVOR CRES  
2 STOREY  
BRICK DEWLLING

No.10 MAVOR CRES  
2 STOREY  
BRICK DEWLLING

No.637 WARRINGAH ROAD  
SINGLE STOREY  
CLAD DEWLLING



Building 3.3/1 Dairy Rd,  
Fyshwick ACT 2609  
E: scott@walsharchitects.com.au  
P: 0466 049 880  
Nominated Architect - Scott Walsh  
ACT 2624 | NSW 10366



REV NO. A  
DESCRIPTION ISSUE FOR DA APPROVAL  
REV DATE 24.11.2021

GROUND FLOOR PLAN  
SHEET NUMBER DA101  
REVISION A  
SCALE @ A1 1 : 100  
633-635 WARRINGAH RD FORESTVILLE



## Appendix C

# Turning Path Assessment

\\tpa\_nas\TPA\_DATA\WORK\2020042 - 633-635 WARRINGAH ROAD, FORESTVILLE\DRAWINGS\20042-V1.2-SP.dwg

Plotted by Prasanth

633-635 WARRINGAH ROAD, FORESTVILLE  
PROPOSED SENIORS LIVING DEVELOPMENT  
CAR PARK LAYOUT  
DRAWING REF NO. 20042-V1.2-SP

SHEET NO. 01 OF 06

ISSUE DATE 25 November 2021

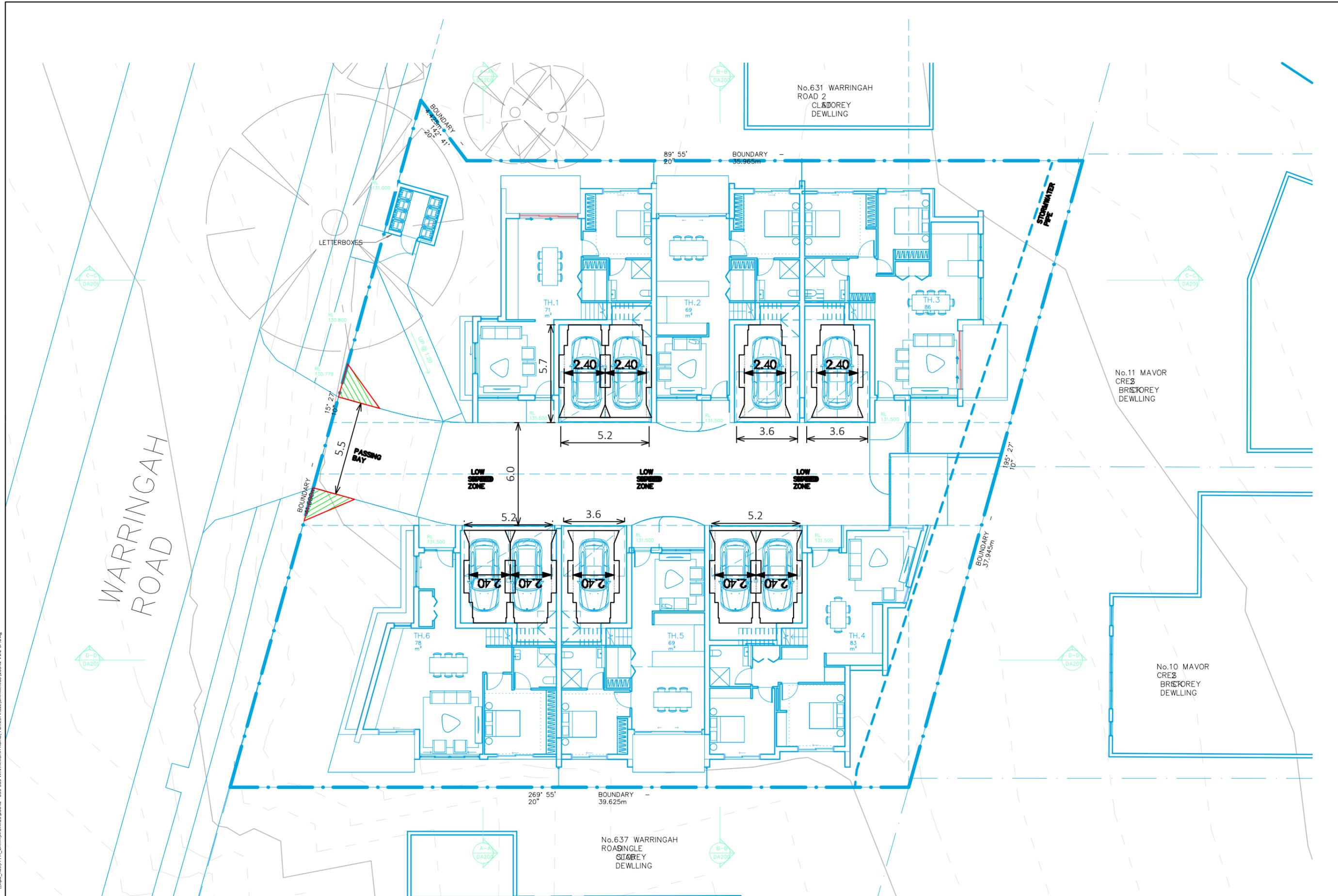
DESIGNED BY P.PRATTHIGADAPA  
REVIEWED BY B.LO  
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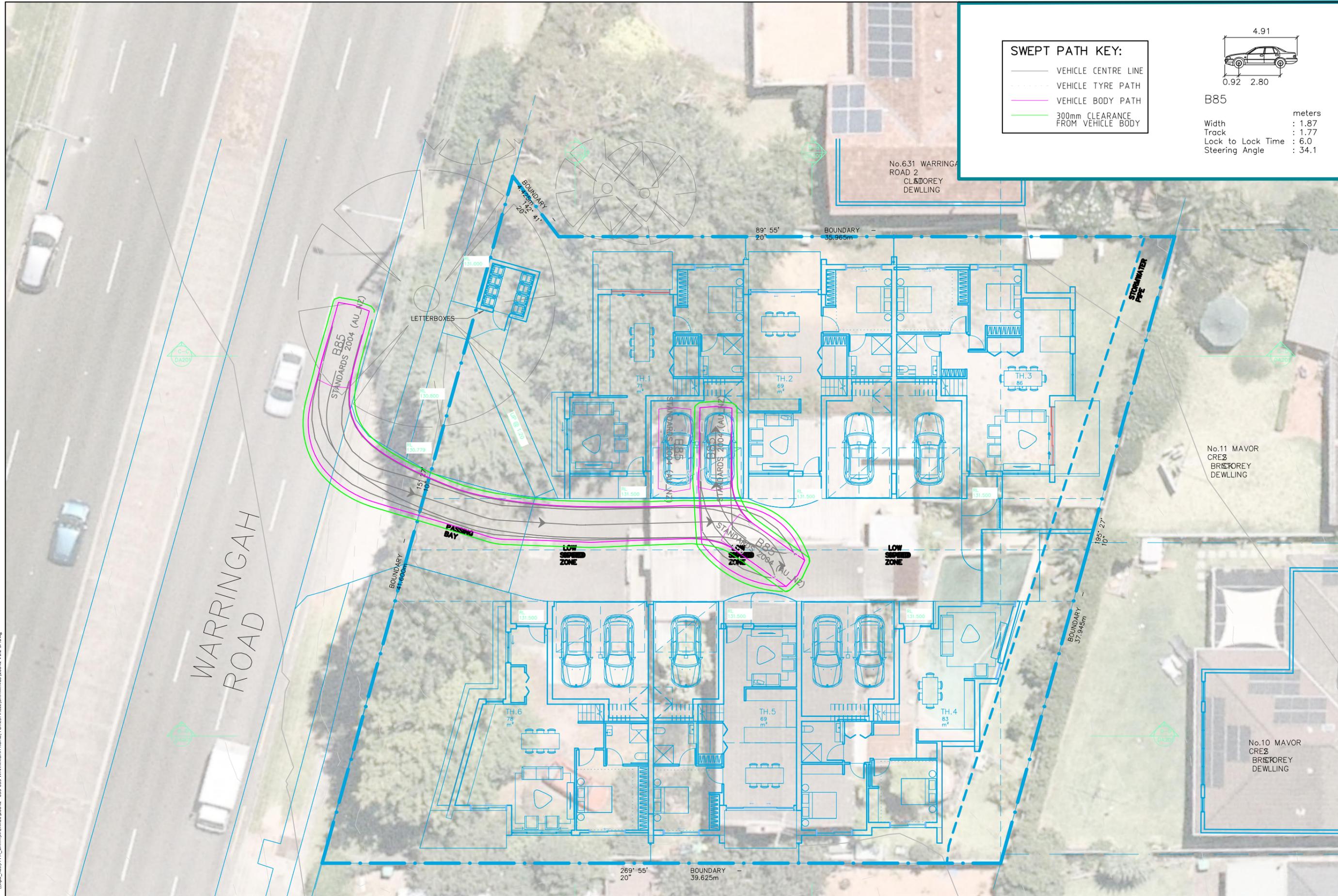


**PRELIMINARY PLAN**  
FOR DISCUSSION PURPOSES  
ONLY SUBJECT TO CHANGE  
WITHOUT NOTIFICATION

**WARNING**  
THE LOCATIONS OF UNDERGROUND SERVICES  
ARE APPROXIMATE ONLY.  
THE EXACT LOCATIONS SHALL BE PROVIDED ON SITE.  
ALL EXISTING SERVICES SHOWN ARE NOT GUARANTEED.

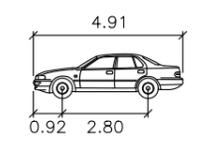
**ttpa** TRANSPORT AND TRAFFIC PLANNING ASSOCIATES  
Established 1994  
Address: Level 5, Suite 502 / 282 Victoria Ave, Chatswood NSW 2067  
P: (02) 9411 5660 E: info@tpa.com.au W: www.tpa.com.au





**SWEPT PATH KEY:**

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



**B85** meters

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

633-635 WARRINGAH ROAD, FORESTVILLE  
 PROPOSED SENIORS LIVING DEVELOPMENT  
 SWEPT PATH OF A B85 ENTERING THE GARAGE

DRAWING REF NO. 20042-V1.2-SP

SHEET NO. 02 OF 06

ISSUE DATE 25 November 2021

DESIGNED BY P.PRATTHIGADAPA  
 REVIEWED BY B.LO

SCALE A3 0 2.0 4.0 1:200



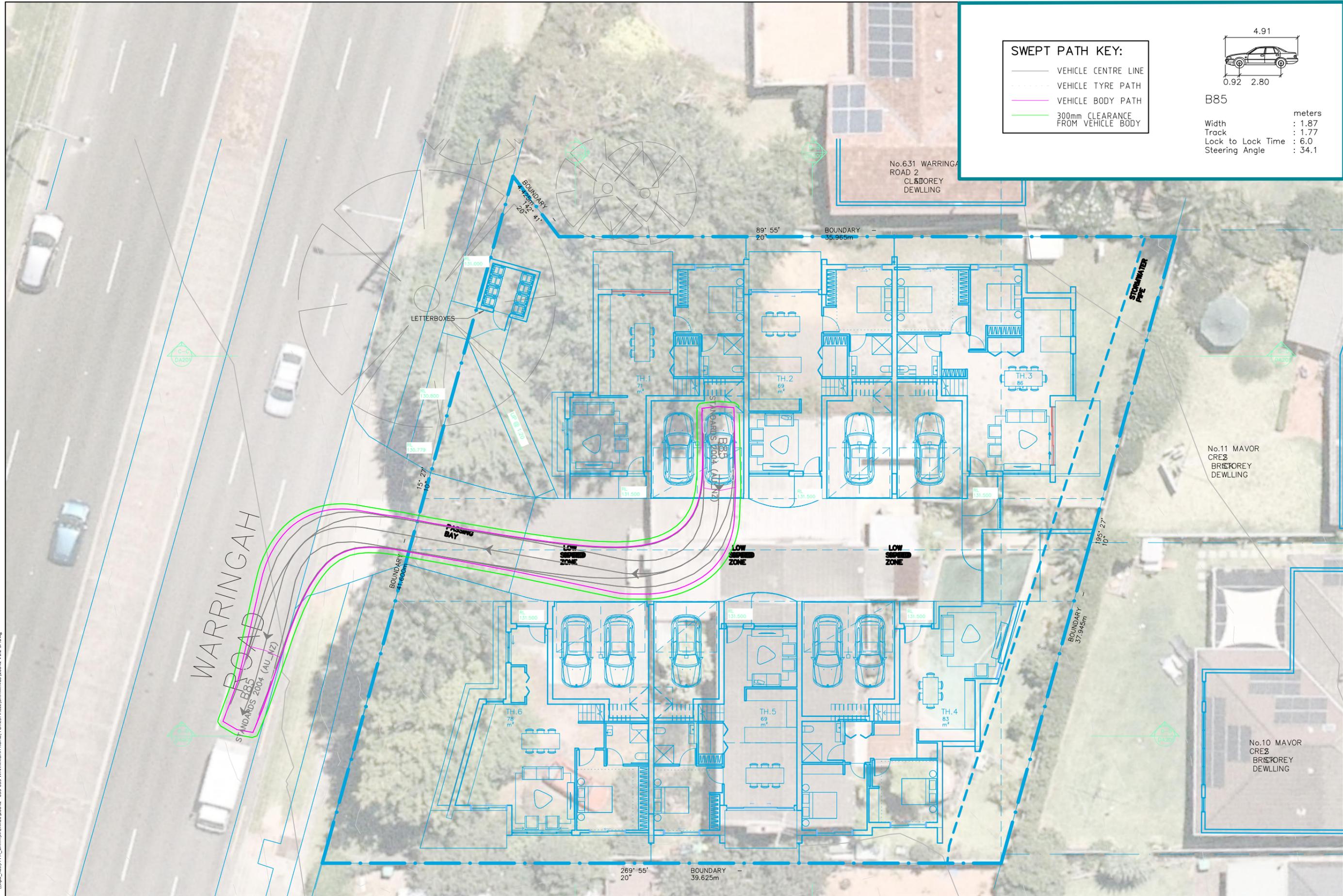
**PRELIMINARY PLAN**  
 FOR DISCUSSION PURPOSES  
 ONLY SUBJECT TO CHANGE  
 WITHOUT NOTIFICATION

**WARNING**  
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 THE EXACT LOCATIONS SHALL BE PROVIDED ON SITE.  
 ALL EXISTING SERVICES SHOULD BE NOT GUARANTEED.

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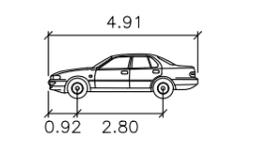
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Plotted by Prasanth \\tpa\_nas\TPA\_DATA\WORK\20042 - 633-635 WARRINGAH ROAD, FORESTVILLE\DRAWINGS\20042-V1.2-SP.dwg



**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

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**633-635 WARRINGAH ROAD, FORESTVILLE**  
**PROPOSED SENIORS LIVING DEVELOPMENT**  
**SWEPT PATH OF A B85 EXITING THE GARAGE**  
 DRAWING REF NO. 20042-V1.2-SP

SHEET NO. 03 OF 06

ISSUE DATE 25 November 2021

DESIGNED BY P.PRATTHIGADAPA  
 REVIEWED BY B.LO  
 SCALE A3 0 2.0 4.0 1:200



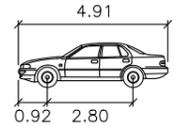
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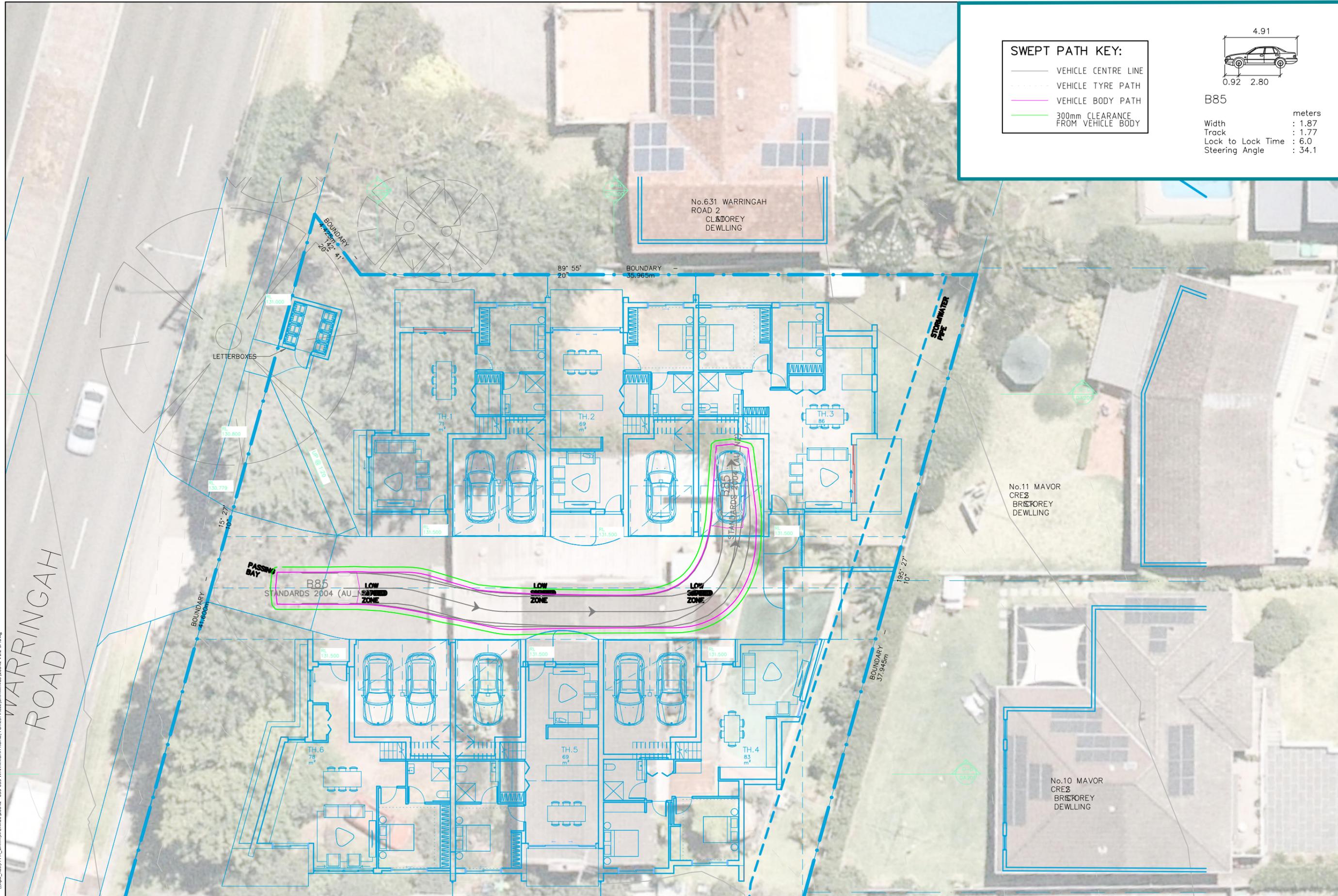
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	VEHICLE TYRE PATH
	VEHICLE BODY PATH
	300mm CLEARANCE FROM VEHICLE BODY



**B85**

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



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**633-635 WARRINGAH ROAD, FORESTVILLE**  
**PROPOSED SENIORS LIVING DEVELOPMENT**  
**SWEPT PATH OF A B85 ENTERING THE GARAGE**  
 DRAWING REF NO. 20042-V1.2-SP

SHEET NO. 04 OF 06

ISSUE DATE 25 November 2021

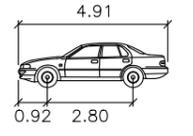
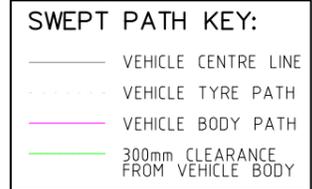
DESIGNED BY P.PRATTHIGADAPA  
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 SCALE A3 0 2.0 4.0 1:200



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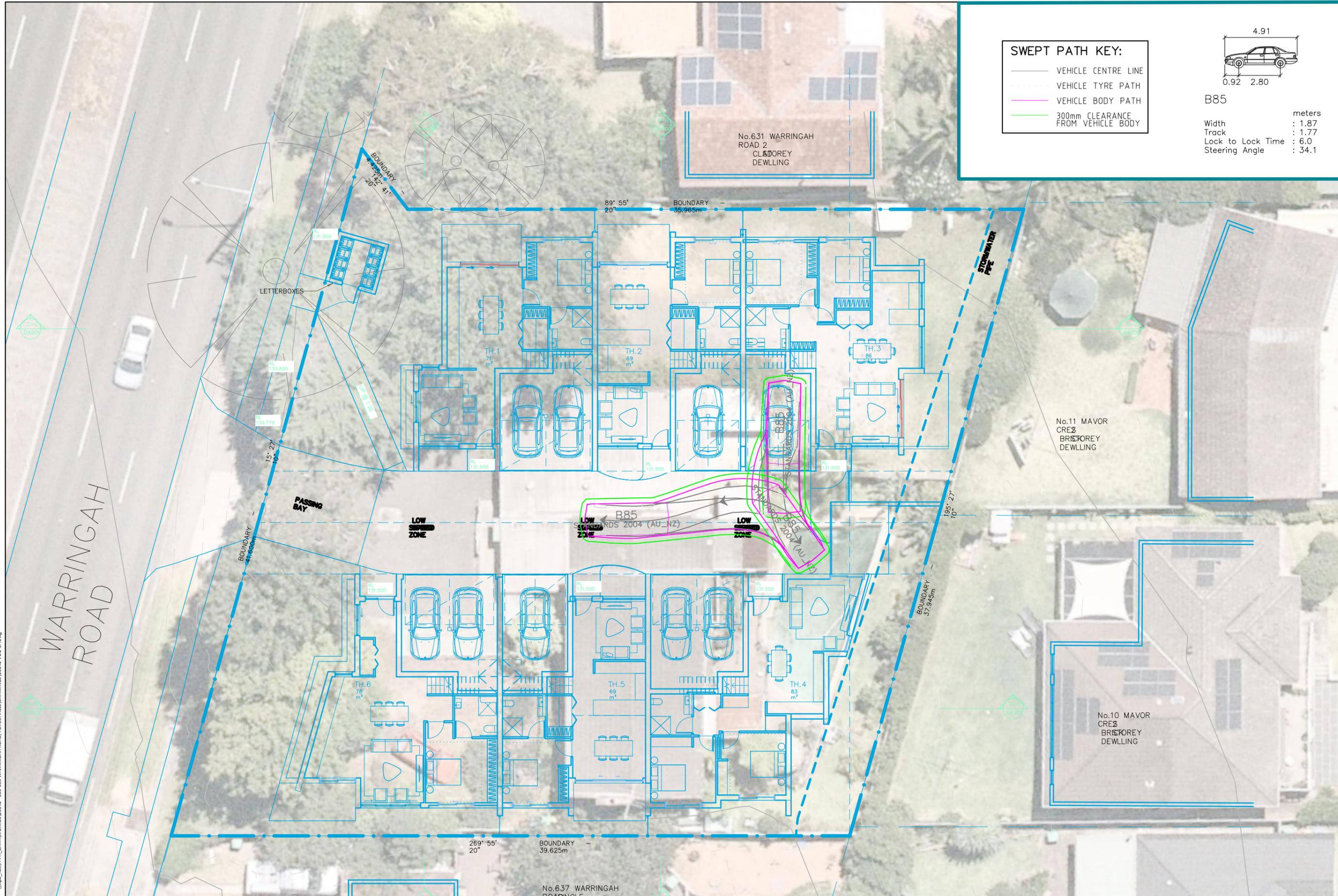
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**B85**

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



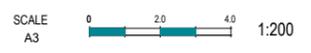
**633-635 WARRINGAH ROAD, FORESTVILLE  
 PROPOSED SENIORS LIVING DEVELOPMENT  
 SWEPT PATH OF A B85 EXITING THE GARAGE**

DRAWING REF NO. 20042-V1.2-SP

SHEET NO. 05 OF 06

ISSUE DATE 25 November 2021

DESIGNED BY P.PRATTHIGADAPA  
 REVIEWED BY B.LO



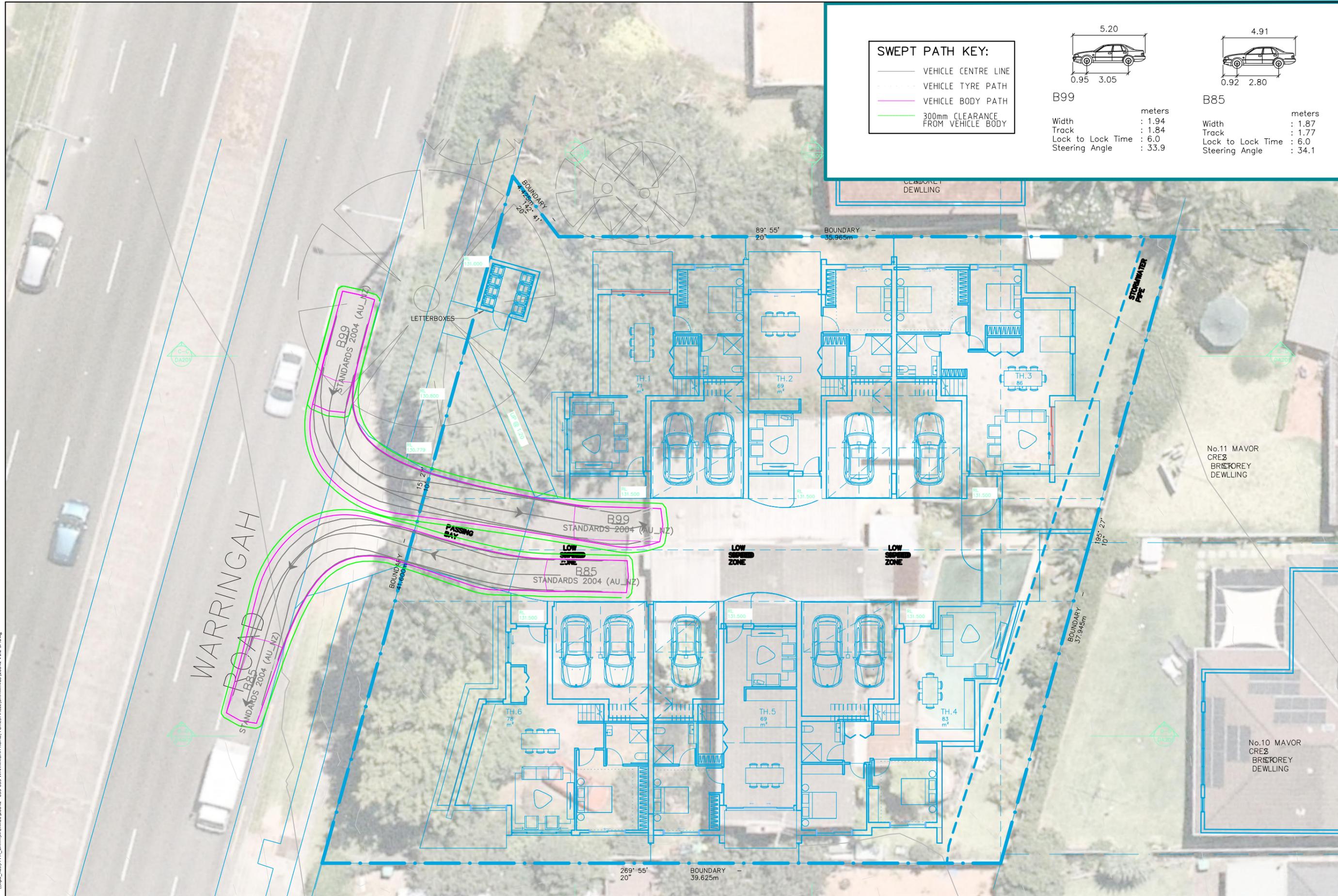
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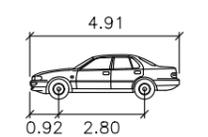
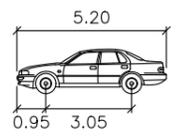
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**SWEPT PATH KEY:**

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



Vehicle	Width (meters)	Track (meters)	Lock to Lock Time (meters)	Steering Angle (degrees)
B99	1.94	1.84	6.0	33.9
B85	1.87	1.77	6.0	34.1

Plotted by Prasanth  
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**633-635 WARRINGAH ROAD, FORESTVILLE**  
**PROPOSED SENIORS LIVING DEVELOPMENT**  
**SWEPT PATH OF B85 AND B99 VEHICLES PASSING AT DRIVEWAY ENTRANCE**  
 DRAWING REF NO. 20042-V1.2-SP SHEET NO. 06 OF 06

ISSUE DATE 25 November 2021

DESIGNED BY P.PRATTHIGADAPA  
 REVIEWED BY B.LO  
 SCALE A3 0 2.0 4.0 1:200



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