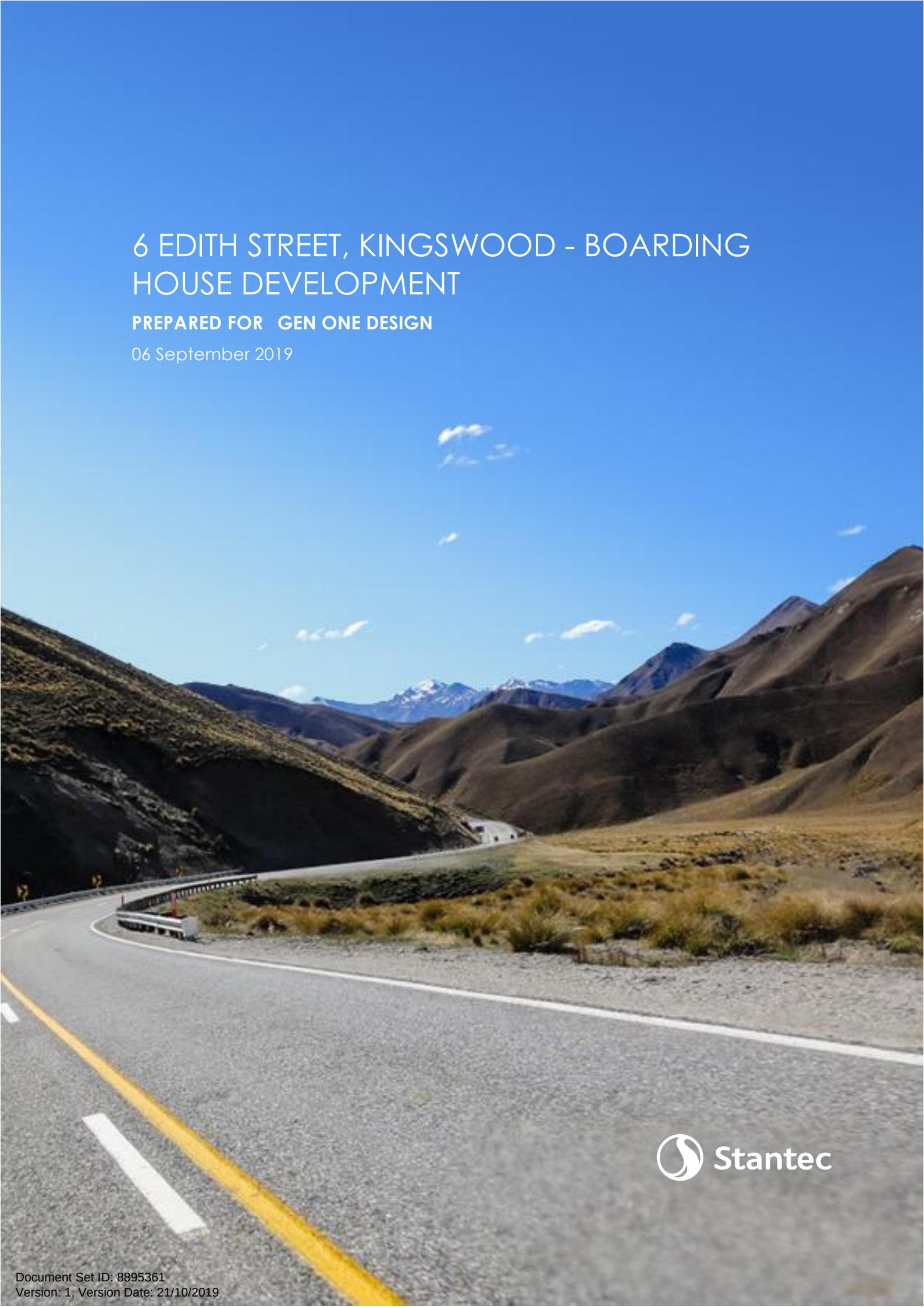
6 EDITH STREET, KINGSWOOD - BOARDING HOUSE DEVELOPMENT

PREPARED FOR GEN ONE DESIGN

06 September 2019



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QUALITY STATEMENT

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CHECKED BY	
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REVIEWED BY	
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APPROVED FOR ISSUE BY	
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REVISION SCHEDULE

Rev No.	Date	Description	Signature or Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
1	31-10-2018	Traffic Report	KM	TG	TG	KM
2	06-09-2019	Traffic Report	KM	DA	DA	KM

Gen One Design

6 Edith Street, Kingswood - Boarding House Development

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1. Introduction

Stantec has been asked by Gen One Design to advise on the parking and traffic matters of the proposed boarding house development at 6 Edith Street, Kingswood.

The proposal involves the construction of a boarding house development, which will contain 14 rooms. Car parking for the development is proposed to be provided within a basement level carpark accessed via Edith Street, comprising a total of eight car parking spaces.

This assessment has been prepared to examine and describe the key traffic and parking effects of the proposal, in particular:

- The site access and egress arrangements and capacity;
- The adequacy of the proposed parking supply;
- The potential traffic generation effects and management of traffic within the site; and
- The arrangements for site loading and servicing.

These and other matters are considered in the assessment that follows. By way of summary, the proposed boarding house development can be accommodated with the mitigation and management measures described, with negligible effects to the prevailing traffic and parking environments.

2. Transport Environment

2.1 Site Location

The subject site is located at 6 Edith Street, Kingswood. Figure 1 shows the location of the site in relation to the surrounding transport network.

Figure 1: Site Location[1]

The site is occupied by a single detached residential dwelling, with direct access to Edith Street.

The surrounding land uses are predominantly residential, with the following notable developments in close proximity to the site:

- Western Sydney University is located approximately 300 metres east of the site;
- Nepean Hospital is located 1.1 km north west of the site;
- Kingswood Railway Train Station is located 800 metres north of the site; and
- Kingswood Sports Club is located approximately 500 metres north of the site.

[1] Source: Google Maps (https://www.google.com.au/maps/)

An aerial photograph showing the site and the surrounding area is shown in Figure 2.

Figure 2: Aerial Imagery of the Site[2]

2.2 Transport Network Characteristics

Edith Street is a local road under the care and management of Penrith City Council (Council), and runs in a north-south alignment. It has a carriageway width of approximately 9.0 metres, with unrestricted on-street parking available along both sides of the road. Edith Street has a speed restriction of 50km/h.

Edna Street is a local road under the care and management of Council, that runs in an east-west alignment. It has a carriageway width of approximately 9.0 metres, with on-street parking along both sides of the road. Edna Street has a speed restriction of 50km/h.

Manning Street is a local road under the care and management of Council, that runs in an north to south alignment. It has a carriageway width of approximately 12.0 metres, with on-street parking permitted on both sides of the road. Manning Street has a posted speed limit of 50km/h.

[2] Source: https://maps.six.nsw.gov.au/

2.3 Public Transport

2.3.1 Train

Kingswood Railway Station services the Main Western Line on the Sydney Trains Network. It is located 1.2 km walking distance from the subject site, as shown in Figure 3.

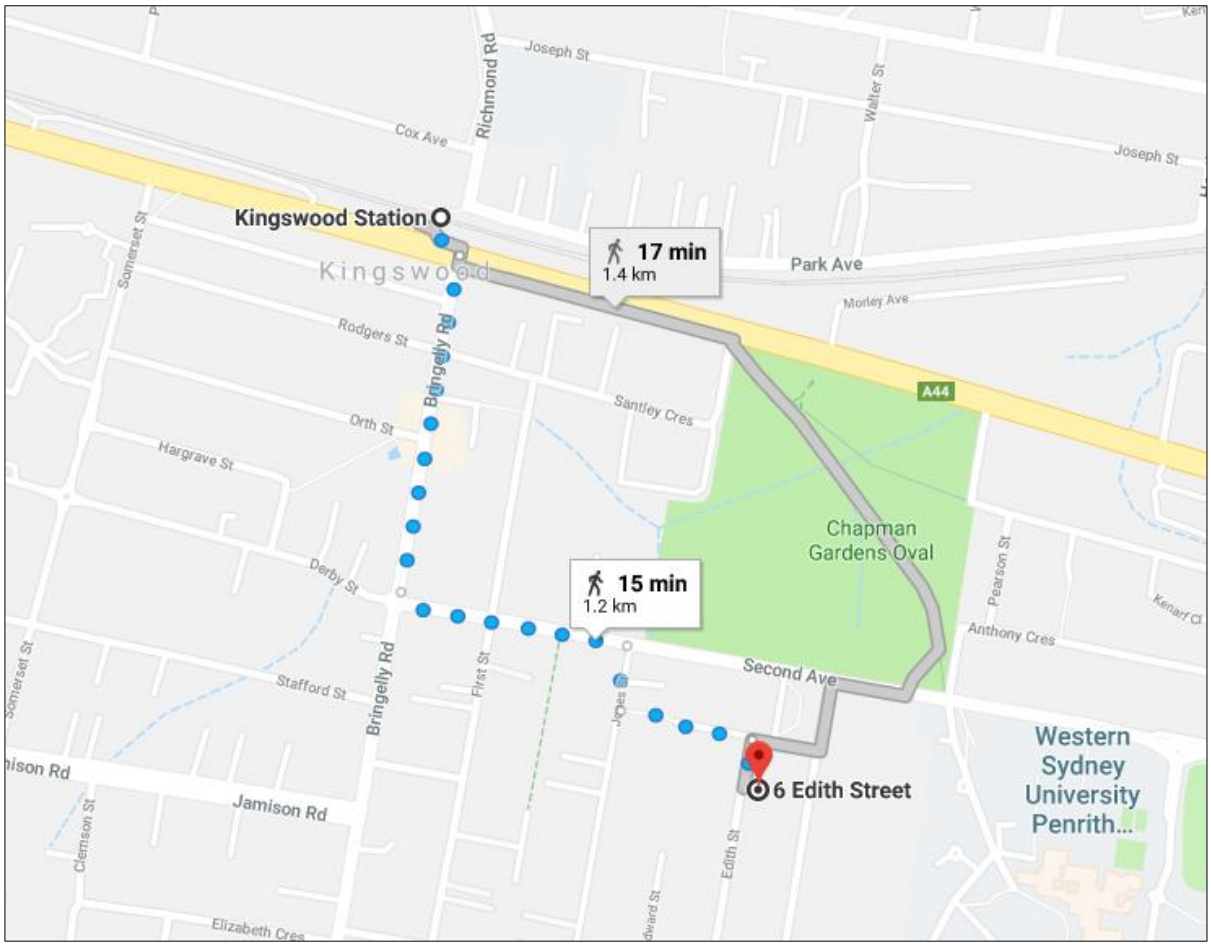


Figure 3: Walking Distance to Kingswood Railway Station[3]

Train services to and from the city operate approximately every 5 to 10 minutes during the morning and evening peak periods.

2.3.2 Bus

Bus stops are located along Manning Street and Second Avenue, as shown in Figure 4.

[3] Source: https://www.google.com/maps/

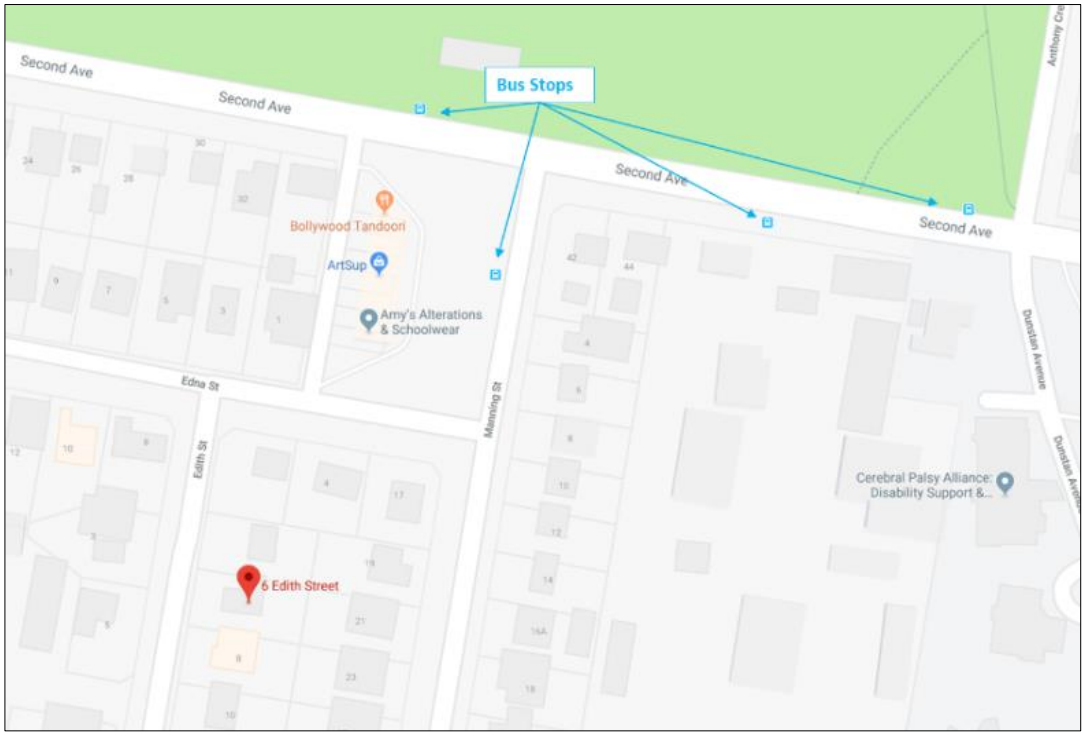


Figure 4: Bus Stop Locations[3]

The nearest bus stop is located approximately 200 metres walking distance from the site.

The bus routes that currently service the bus stops along Manning Street and Second Avenue include:

- Route 770 – Mount Druitt to Penrith via St Marys;
- Route 775 – Mount Druitt to Penrith via Erskine Park; and
- Route 776 – Mount Druitt to Penrith via St Clair.

The Western Sydney Bus Network map is presented in **Figure 5**.

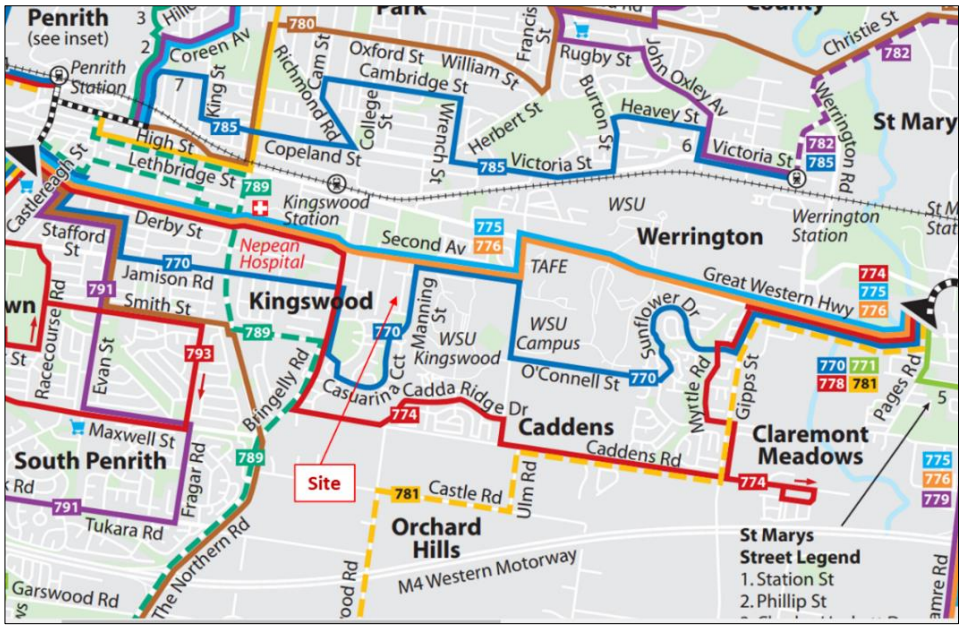


Figure 5: Western Sydney Bus Network Map[4]

[4] Source: http://www.busways.com.au/blacktown/travelling-with-us/route-maps

2.4 Walking and Cycling

Pedestrian footpaths are established along the eastern side of Manning Street. Wide grass berms are provided in the vicinity of the site on both sides of the roads along Edith Street and Edna Street.

Figure 6 shows the existing cycle routes within the vicinity of the site, and highlights that there are existing on-road cycle routes along Second Avenue.

Cycle routes near the site is classified as 'low' difficulty. These cycle routes form part of Roads and Maritime Services' (RMS) strategic shared path network.

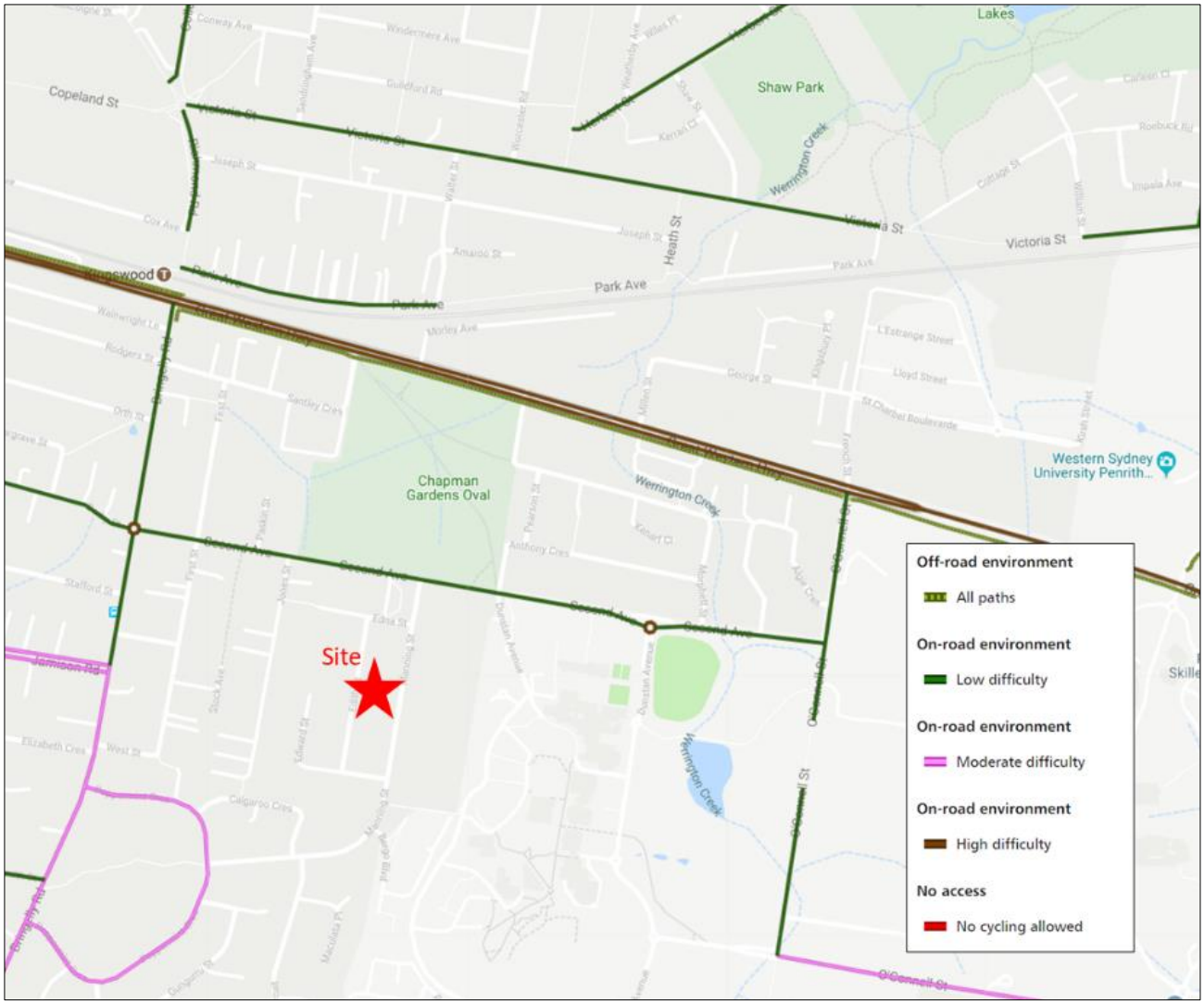


Figure 6: RMS Cycle Network[5]

[5] Source: Transport Roads and Maritime Services Website (http://www.rms.nsw.gov.au/roads/bicycles/cyclewayfinder/index.html)

3. Proposed Development

It is proposed to demolish the existing building on the subject site and construct a boarding house development at 6 Edith Street, Kingswood.

More specifically, the development proposal includes:

- 14 one-bedrooms;
- A basement level car park accommodating the following:
  - Seven car parking spaces (including two accessible bays); Four bicycle parking and three motorbike parking spaces in dedicated parking areas; and
  - Vehicular access to the basement car park provided via Edith Street.

Figure 7 shows the proposed basement level parking and access arrangement from Edith Street.

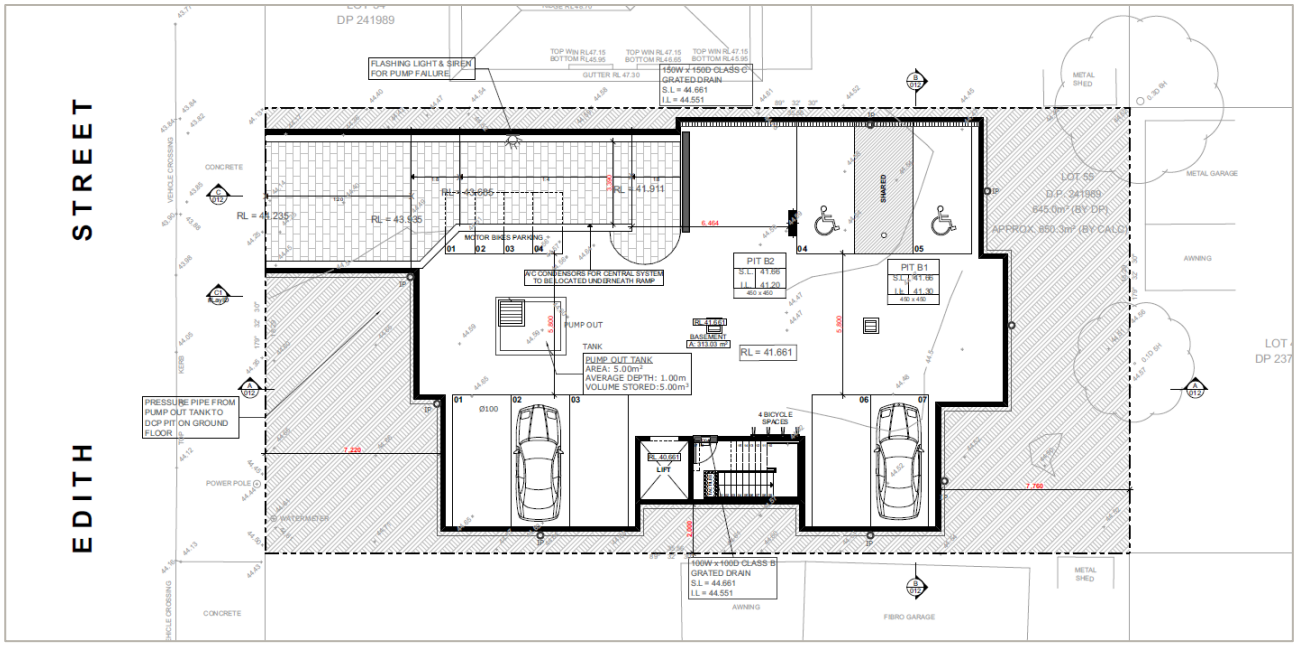


Figure 7: Proposed Basement Level Plan

Architectural plans have been prepared by Gen One Design and are presented for reference in Appendix A.

4. Car Parking Assessment

4.1 Council DCP Car Parking Requirements

The Penrith Council's Development Control Plan (DCP) 2014 does not specify parking rates for boarding house developments. The 'Affordable Rental Housing State Environmental Planning Policy (2009)' (ARHSEPP) has been used to determine the number of car parking spaces required to be provided on site, as detailed in Section 4.2.

4.2 State Environmental Planning Policy (SEPP) Parking Requirements

On 1 June 2018, car parking standards were increased for boarding houses delivered under the State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARHSEPP). The car parking rates is specified below:

- 0.5 car spaces per boarding room in all locations;
- At least one parking space provided for each person employed in connection with the development and who is resident on the site; and
- One bicycle parking space and one motorcycle parking space per 5 boarding rooms.

Table 1 presents the car parking requirements for the proposed development in accordance with the State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARHSEPP).

Table 1: ARHSEPP Car Parking Rates and Supply

Parking Type	Number of bedrooms	Parking Rates	Parking Requirements	Parking Provisions
Vehicle Parking	14	0.5 car parking space per room	7	7
Bicycle parking		1 bicycle per 5 boarding rooms	2.8 (Round up to 3)	4
Motor cycle parking		1 motorcycle parking per 5 boarding rooms	2.8 (round up to 3)	3
Total			**13**	**14**

The total car, bicycle and motorcycle parking requirements for the proposed development is 13 parking spaces. A total of 15 parking spaces are provided on-site. The parking provision meets the requirements of the ARHSEPP car parking requirements.

4.3 Car Parking Layout

Part 22 of Council's DCP does not list any specific car park dimensional requirements, and as such the proposed car parking layout has been assessed against AS/NZS 2890.1:2004.

Table 2 identifies the characteristics of the proposed parking and access layout with respect to the relevant design requirements and guidelines. The last column identifies the compliance of each design aspect.

Table 2: Car Parking and Access Requirements

Design Aspect	Australian Standards (AS2890)	Proposed Provision	Compliance
Parking space length: Standard bay	5.4 metres	5.4 metres	Complies with AS2890
Parking space width: Standard bay	2.4 metres	2.4 metres	Complies with AS2890
Parking space length: Accessible Bay	5.4 metres	5.4 metres	Complies with AS2890
Parking space width: Accessible Bay	4.8 metres (including shared area)	4.8 metres (including shared area)	Complies with AS2890
Aisle Width: Parking aisle	5.8 metres	5.8 metres	Complies with AS2890
Blind Aisle	1 metre beyond the last parking space	1 metre (minimum) beyond the last parking space	Complies with AS2890
Height Clearance: General Min.	2.2 metres	2.2 metres (minimum)	Complies with AS2890
Height Clearance: Accessible Bay	2.5 metres	2.5 metres	Complies with AS2890
Driveway Width	3.0 to 5.5 metres	3.0 to 5.0 metres	Refer to Section 4.4
Parking envelope clearance – Column adjacent to bay	Located between 0.75m and 1.75m of aisle	Located between 0.75m and 1.75m of aisle	Complies with AS2890
Driveway Grades	Up to 20m long – maximum 1 in 4 (25%)	25%	Complies with AS2890
Access Driveway	First 6m from the property boundary shall be a maximum of 5.0%	First 6m from the property boundary is 5.0%	Complies with AS2890

The proposed car park design and access arrangements have been designed in accordance with the requirements of AS/NZS 2890.1:2004, and is therefore considered acceptable.

In addition, an evaluation of the basement car park has been undertaken using the software package 'AutoTurn'. The assessment reviewed the ability of a vehicle to manoeuvre in and out of the basement carpark, as provided in Appendix B.

Despite the car park layout meeting the dimensional requirements of the Australian Standards (AS/NZS 2890.1:2004), the entry into the western side of the basement car park will require a three-point turn maneuver.

It is noted there are three parking spaces allocated on the western side of the basement carpark.

Given the size of the development and peak hour vehicle trips of seven trips (approximately one vehicle every eight minutes as detailed in section 6 of the report), it is not expected for the three-point entry movements into the western side of the carpark to have any adverse impacts.

4.4 Driveway Access Arrangement

The proposed driveway is two way traffic merging into one way traffic flow into the basement car park. This is considered to be acceptable due to the size of the proposed development and the low traffic volumes expected to be generated during both the morning and evening peak periods, as detailed further in Section 6 of this report.

5. Service Vehicles

Service vehicles, deliveries and refuse collection will be accommodated kerbside along Edith Street. Given the scale and nature of the development it is anticipated that there will be very low and infrequent service vehicle demands for this site. The use of the adjacent kerbside parking is appropriate to meet the needs of the proposed development.

6. Traffic Impacts

The RTA (RMS) 'Guide to Traffic Generating Development Version 2.2 (2002)' specifies land use traffic generation rates for different types of developments. These guidelines do not specify the traffic generation rates for boarding house developments.

Traffic generation rates for medium density residential flat buildings is provided, which can be approximated to generate a similar level of traffic to boarding house developments. Accordingly, medium density residential flat building traffic generation rates have been adopted for the purposes of this assessment.

The expected traffic generation for the development is provided in Table 3.

Table 3: RMS Traffic Generation Rates

Land Use	RTA Traffic Generation Rates (Peak Hour Vehicle Trips)	Peak Hour Vehicle Trips
Medium Residential Dwelling (14 rooms)	Weekday peak hour vehicle trips – up to 2 two bedrooms 0.4 to 0.5 per dwelling	7 vehicles

Application of the RMS traffic rates of 0.5 vehicle trips per dwelling results in the proposed development generating up to seven vehicle movements during the morning and evening peak periods. Therefore, it is considered that this level of traffic will have a negligible impact on the road network capacity or the traffic environment.

7. Conclusion

Stantec has assessed the potential traffic and parking effects of the proposed boarding house development at 6 Edith Street Kingswood.

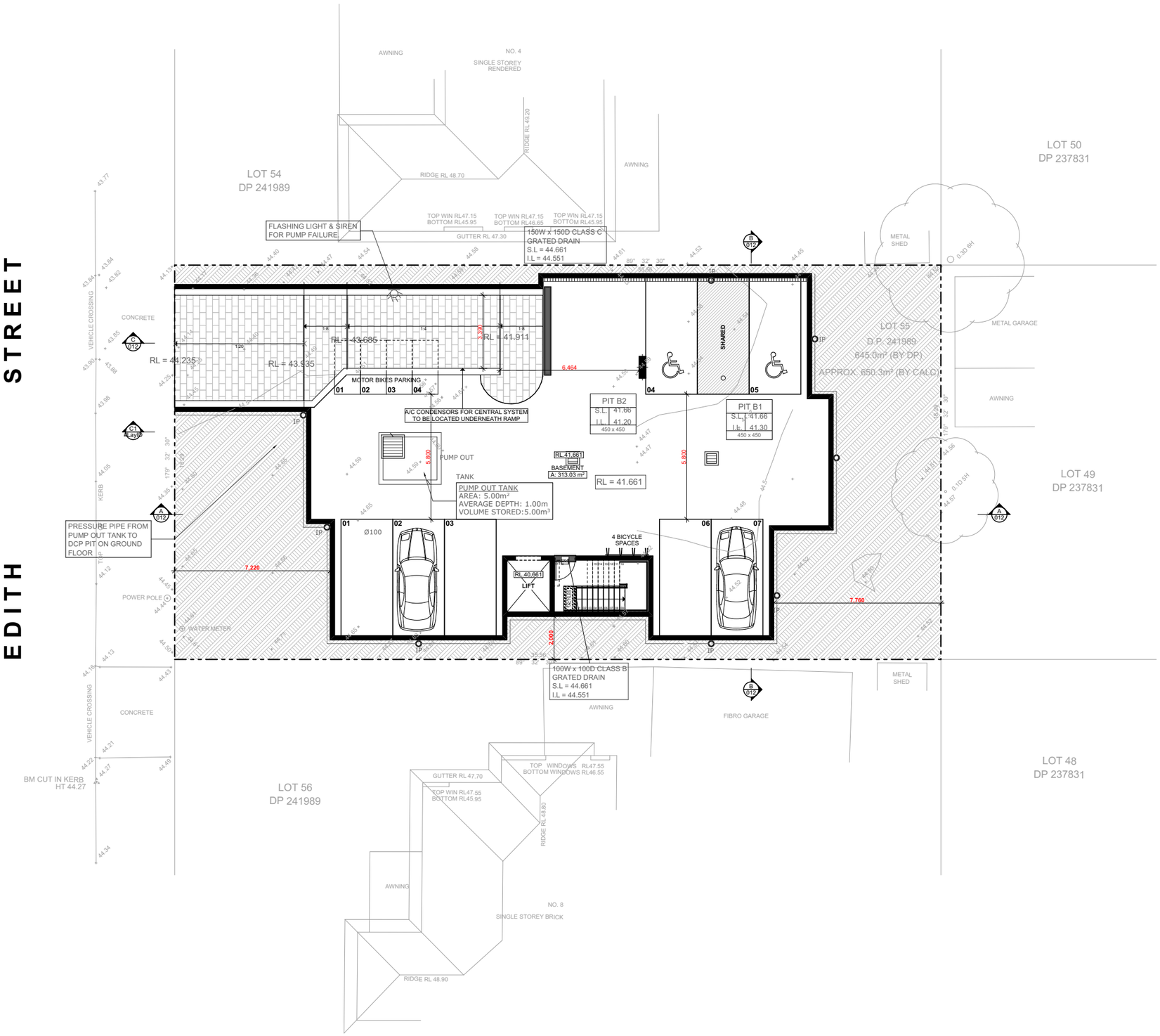
Based on the above assessment, it is concluded that:

- The proposed car parking provision meets the car parking requirements of the State Environmental Planning Policy (Affordable Rental Housing) 2009 Parking Requirements;
- The proposed car park layout complies with the Australian Standards (AS 2890). A swept path assessment has been prepared for the proposal, which demonstrates that vehicles are able to manoeuvre in and out the basement car park; and
- The negligible level of traffic movements expected to be generated by the proposed development is not expected to result in any material change to the continued safe and efficient operating performance of the local road network or intersections.

Overall, the proposed boarding house development is expected to have a negligible impact on the existing local traffic and parking environments.

Appendices

Appendix A Site Plans



BASEMENT FLOOR PLAN
1:200

GEN ONE
BUILDING DESIGNERS AUSTRALIA NSW
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Parramatta NSW 2150
P.O. Box 3249 North Parramatta NSW1750
Office: +612 9630 1151
Mobile: 0404 044 954
E-mail: admin@genone.com.au
Web: www.genone.com.au

NORTH

Pg. 005
B
A3

DA

www.dialbeforeyoudig.com.au
DIAL1100 BEFORE YOU DIG

SCALE BAR 1:100
0 1 2 3 4 5

PROJECT
BOARDING HOUSE

CLIENT
MR. SIMON SASSINE

LGA:	PENRITH CITY COUNCIL
SCALE:	AS SHOWN
REF:	2018 - 065
DATE:	Sept - 2019
DRAWN BY:	W.H
ADDRESS	**LOT 55** **DP 241989** **LOT SIZE 650.3m²**
	6 EDITH STREET, KINGSWOOD NSW 2747

ISSUE A: Client Approval	18/08/2019
ISSUE B: DA	02/09/2019

Appendix B Swept Path Analysis

FLASHING LIGHT & SIREN FOR PUMP FAILURE.

150W x 150D CLASS C GRATED DRAIN
S.L = 44.661
I.L = 44.551

RL = 43.68

RL = 41.911

RL = 43.935

1:8

3,390

6,464

MOTOR BIKES PARKING
01 02 03 04

A/C CONDENSORS FOR CENTRAL SYSTEM TO BE LOCATED UNDERNEATH RAMP

PIT B2
S.L. 41.66
I.L. 41.20
450 x 450

PIT B1
S.L. 41.66
I.L. 41.30
450 x 450

SHARED

04 05

IP

5,800

BASEMENT
A: 313.03 m²

01 02 03 06 07

Ø100

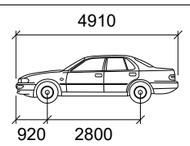
4 BICYCLE SPACES

RL 40.661
LIFT

7,760

2,000

100W x 100D CLASS B GRATED DRAIN
S.L = 44.661
I.L = 44.551



B85

	mm
Width	: 1870
Track	: 1770
Lock to Lock Time	: 6.0
Steering Angle	: 34.1

Tuesday, September 10, 2019 1:13:54 PM

REV	DATE	DRN	CHK	DESCRIPTION
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6 Edith Street, Kingswood

Swept Path Assessment

B85 Entry / Exit

DRAWN: DA	---	---
DATE: 06-09-19	STATUS: ---	
SCALE: 1:150 @ A3		
DWG NO:15888 - 01SD		

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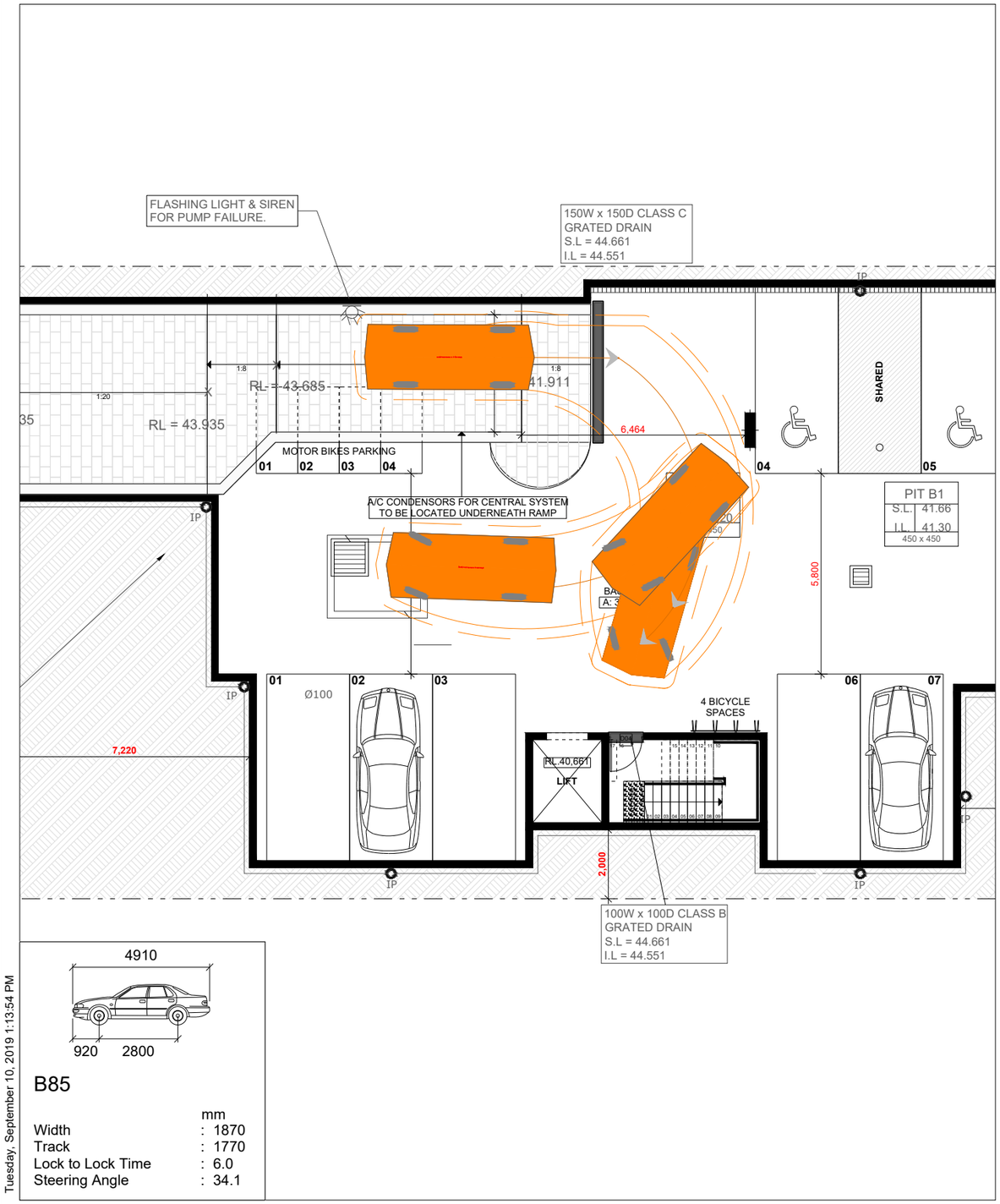

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6 Edith Street, Kingswood

Swept Path Assessment

B85 Entry / Exit

DRAWN: DA	---	---
DATE: 06-09-19	STATUS: ---	
SCALE: 1:150 @ A3		
DWG NO:15888 - 01SD		

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2

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