19-23 Douglas Street & 6 Neal Place, Wallsend Traffic Impact Assessment

Prepared for:

NSW Land and Housing Corporation

27 April 2023

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Client: NSW Land and Housing Corporation

Version: V06

Date: 27 April 2023

TTPP Reference: 21148

Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature	
V01	8/02/21	Sokan Chhoun	Oasika Faiz	Wayne Johnson	DRAFT	
V02	8/08/22	Sokan Chhoun	Oasika Faiz	Wayne Johnson	Final	
V03	20/09/22	Sokan Chhoun	Oasika Faiz	Wayne Johnson	Final	
V04	20/09/22	Sokan Chhoun	Oasika Faiz	Wayne Johnson	Final	
V05	10/01/23	Sokan Chhoun	Oasika Faiz	Wayne Johnson	Final	
V06	27/04/23	Sokan Chhoun	Oasika Faiz	Wayne Johnson	WEhm	



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- A. ARCHITECTURAL PLANS
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1 Introduction

The Transport and Planning Partnership (TTPP) has prepared this transport impact assessment (TIA) report to accompany an application for a two-storey residential development comprising of 19-23 Douglas Street and 6 Neal Place, Wallsend, New South Wales.

The development is an initiative of the NSW Land and Housing Corporation (LAHC) and involves the construction of twenty residential flat dwellings, consisting of 1-bedroom and 2-bedrooms units.



2 Existing Conditions

2.1 Site Description

The subject site comprises of 19-23 Douglas Street (Lot 58 and Lot 59 DP35087) and 6 Neal Place (Lot C and D, DP35096), Wallsend. The development site falls within the local government area of Newcastle City Council.

The site is currently occupied by four low-density residential dwellings, which comprises a total area of 2,422 m².

The location of the site and its surrounding environment are presented in Figure 2.1.

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Figure 2.1: Site Context

Source: Google Maps

2.2 Surrounding Road Network

Douglas Street is a two-way road, connecting with Sandgate Road to the north and Newcastle Road to the south. It consists of two lanes and a posted speed limit of 50 km/h. On-street parking is permitted with no parking restrictions in place.



Neal Place is a 7m wide, two-way road that connects to Curry Street to the east and Douglas Street to the west. It is a short road (approximately 60m long) and provides access to the properties, 4 and 6 Neal Place.

Newcastle Road is a two-way, divided State Road, aligned in an east-west direction. The road consists of two lanes in each direction, plus auxiliary lanes at intersections. It has a posted speed limit of 60km/h. Kerbside parking is permitted in the vicinity of the site.

Cameron Street is a two-way road intersecting with Douglas Road, north of the site. It is a two-lane undivided road with a posted speed limit of 60 km/h. On-street public parking is not permitted along Cameron Street, however, multiple bus stops are provided.

2.3 Public Transport Services

The subject site is surrounded by a number of bus stops as shown in Figure 2.1. The nearest stop is within a 100m walking distance, at the intersection of Douglas Street and Curry Street. Another bus stop near the subject site is located approx. 400m walking distance, along Cameron Street. The services of these stops are summarised in Table 2.1.

Table 2.1: Bus Stops within 400m

Closest Bus Stop	Walking Distance	Route	Hours of Operation	Weekday Frequency	Weekend Frequency
Douglas St at Curry St (Stop ID: 2287176)	100 m	24 (Wallsend to Marketown)	Weekday: 5:20am – 10:26pm Weekend: 6:45am – 6:30pm	Peak: every 30 minutes Off-peak: every 1 hour	Every 1 hour
Cameron St after Douglas St (Stop ID: 2287181)	400 m	27 (Wallsend to Broad Meadow)	Weekday: 5:45am – 10:36pm Weekend: 7:50am – 7:39pm	Peak: every 30 minutes Off-peak: every 1 hour	Every 1 hour

Reference: TfNSW

In addition, several other bus services can also be found along Newcastle Road within a 550m walking distance.

Bus stop ID 2287176 and 2287181, which serve bus route 24 and 27 are situated within 400 m walking distance from the subject site. Based on the schedule in Table 2.1, the site meets the 'accessible area' requirements of the *State Environmental Planning Policy (Housing)* 2021 (Housing SEPP), which states that an accessible area includes land within:

(c) 400 metres walking distance of a bus stop used by a regular bus service (within the meaning of the Passenger Transport Act 1990) that has at least one bus per hour servicing the bus stop between 06.00 and 21.00 each day from Monday to Friday (both days inclusive) and between 08.00 and 18.00 on each Saturday and Sunday.



Bus route 24 and 27 operates everyday with a weekday frequency of one hour during the off-peak period and 30 minutes during the peak period, while the weekend service runs hourly. Also, the service starts before 6:00 am on weekdays, 8:00 am on weekends and finishes after 9:00 pm and 6:00 pm on weekdays and weekends respectively. Therefore, the site meets the 'accessible area' criteria of the Housing SEPP.

2.4 Pedestrian and Cycling Infrastructure

Pedestrian footpaths are generally provided along the roads surrounding the site, including on both sides of Douglas Street. In addition, signalised pedestrian crossings are provided along Newcastle Road which provide safe crossing opportunities to the bus stops along Newcastle Road.

The cycling infrastructure surrounding the site is shown in Figure 2.2.

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Figure 2.2: Cycling Infrastructure



3 Proposed Development

The proposed development involves demolition of existing dwellings and construction of two-storey residential flat building, comprising of 20 residential units at 19-23 Douglas Street and 6 Neal Place, Wallsend.

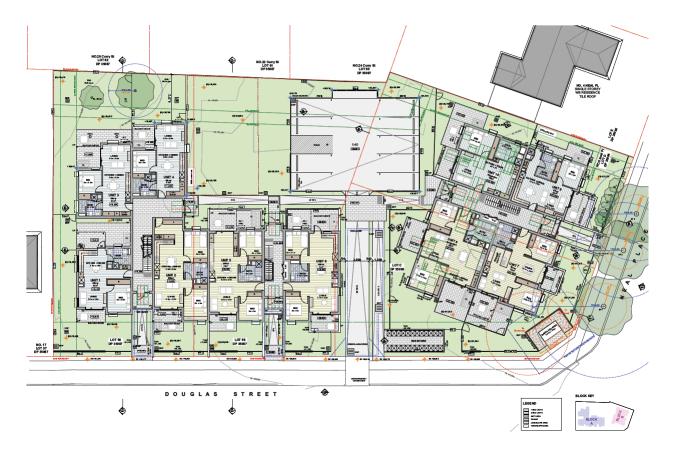
A breakdown of the development is as follows:

- 10 one-bedroom units
- 10 two-bedrooms units.

The site also consists of a one-lane, 3m wide driveway access, connecting to nine car spaces at the rear of the site, including two accessible spaces.

The proposed ground floor layout is presented in Figure 3.1 below.

Figure 3.1: Proposed Ground Floor Layout





4 Parking Assessment

4.1 Car Parking Requirements

It is noted that the assessment and approval of the proposed development will be undertaken by Land and Housing Corporation (LAHC). As such, requirements set out in Division 6 (Residential Development – Land and Housing Corporation) of *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) applies and prevail over any Council Development Control Plan.

Division 6 of Housing SEPP states that residential development with height of 9m or less and with 60 dwellings or less should provide the minimum parking spaces:

- for development on land in an accessible area
 - o 0.4 parking spaces for each dwelling containing 1 bedroom;
 - o 0.5 parking spaces for each dwelling containing 2 bedrooms; and
 - o 1 parking space for each dwelling containing 3 or more bedrooms
- Or, for development that is not in an accessible area
 - 0.5 parking spaces for each dwelling containing 1 bedroom;
 - o 1 parking space for each dwelling containing 2 bedrooms;
 - o 1.5 parking spaces for each dwelling containing 3 or more bedrooms.

It is noted that the proposed development is located within an "accessible area" as defined in Housing SEPP. In addition, the building is proposed to be under 9.0m in height. As such, the first parking requirement applies, which means 0.4 parking spaces are required for each 1-bedroom unit and 0.5 parking spaces are required for each 2-bedroom unit.

Based on the above, the proposed development comprises ten 2-bedroom units and ten 1-bedroom units must not be refused if at least nine car parking spaces are provided.

It is proposed to provide nine car parking spaces on-site, which satisfies the Housing SEPP requirements.

4.2 Car parking Design Compliance

The subject site is accessed via Douglas Street via a 3m wide driveway. The driveway is generally flat with a maximum grade of 1:304. Swept path analysis of the proposed driveway has been undertaken and is provided in Appendix B.

The proposed access is classified as a Category 1 driveway in accordance with AS2890.1: 2004 Table 3.1 (i.e. access with frontage along local road that serves less than 25 parking



spaces). AS2890.1 specifies a minimum driveway width of 3m to 5.5m for combined Category 1 driveway. Therefore, the proposed driveway width satisfies the AS2890.1 requirement.

AS2890.1:2004 indicates that residential parking should be provided as Class 1A parking. The proposed at-grade parking spaces satisfy the design requirements for 90-degree Class 1A which require minimum 2.4m width, 5.4m length and a 5.8m aisle width.

AS2890.6:2009 requires accessible parking spaces to be provided as 2.4m wide by 5.4m long with an adjoining shared area of equal dimensions. The accessible parking space complies with this requirement.



5 Transport Assessment

Transport for New South Wales (TfNSW) provides traffic generation rates for different land uses in their *Guide to Traffic Generating Developments* (Guide) and in their technical direction TDT 2013/04a containing revised rates.

The Guide stipulates the following trip generation rates for medium density residential flat buildings:

- weekday peak hour vehicle trips (up to 2 bedrooms): 0.4-0.5 per dwelling
- weekday peak hour vehicle trips (3 or more bedrooms): 0.5-0.65 per dwelling

By using the trip rates presented above, the proposed development is anticipated to generate approximately 8-10 vehicles per hour during the weekday peak periods.

In addition, TDT 2013/04a indicates that low density residential dwellings generate 0.95-0.99 vehicle trips per dwelling during the weekday peak hours. Therefore, the existing three (3) dwellings on site are estimated to generate three vehicles per hour during the weekday peak hours.

On this basis, the proposed development is anticipated to generate a net additional peak traffic of 5-7 vehicles.

The above traffic generation estimate is considered to be minimal and is not expected to have an impact on the surrounding road network.



6 Conclusion

This report presents the traffic and parking implications of the proposed affordable multidwelling housing development at 19-23 Douglas Street and 6 Neal Place, Wallsend. The key findings of the report are presented below:

- The proposed car parking supply meets the minimum Housing SEPP requirement of nine car parking spaces.
- The proposed car park and vehicle access layout complies with the design requirements specified in AS2890.1:2004 and AS4299:1995.
- Traffic generation of the existing and proposed development has been estimated using the rates stipulated in TfNSW Services Guide to Traffic Generating Developments (Guide) and in their technical direction TDT 2013/04a. Based on these rates, the proposed development is anticipated to generate between 8-10 vehicle trips per hour or net additional 5-7 vehicle trips per hour during the weekday peak periods.
- The estimated trip generation is considered minimal and is not expected to have a noticeable impact on the surrounding road network.



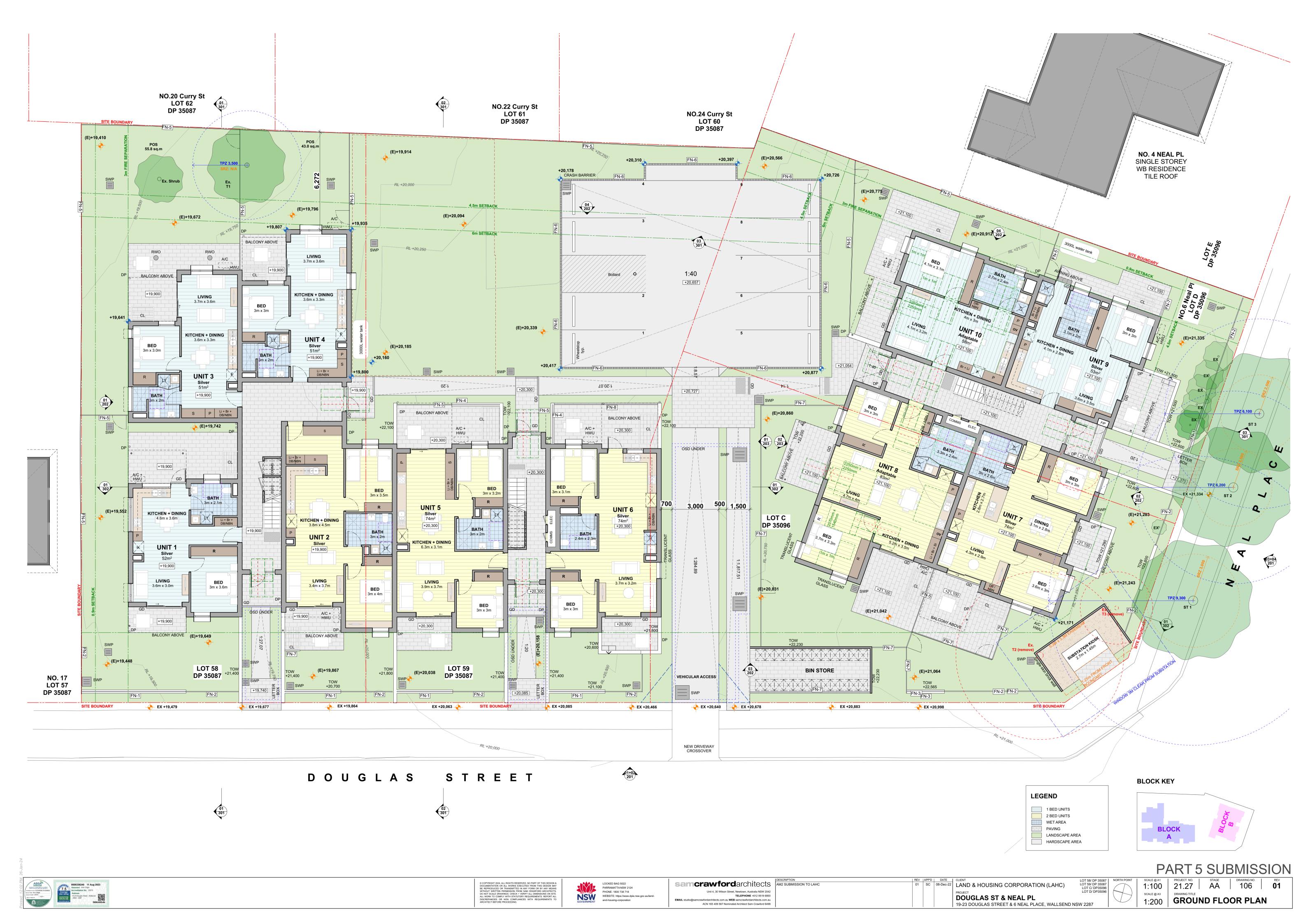
Appendix A

Architectural Plans

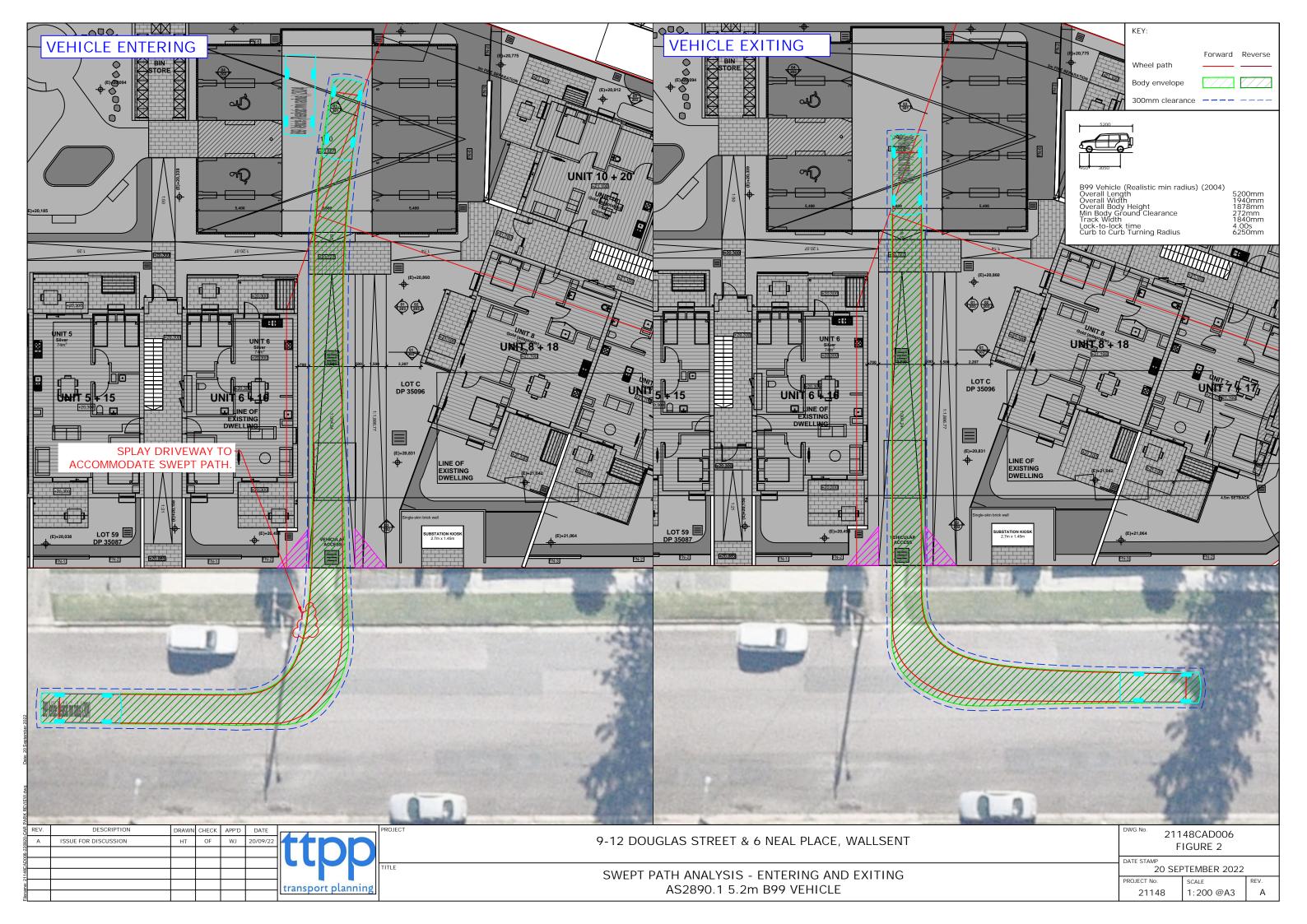


Appendix B

Swept Paths







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