



**STANBURY**  
TRAFFIC PLANNING

TRAFFIC, PARKING & TRANSPORT CONSULTANTS

## **UPDATED TRAFFIC & PARKING IMPACT ASSESSMENT**

**PROPOSED SENIORS HOUSING DEVELOPMENT  
16 – 20 BURRAWONG CRESCENT AND 28 MACARTHUR ROAD  
ELDERSLIE**

**PREPARED FOR MORSON ARCHITECTS PTY. LTD.  
OUR REF: 21-234-4**



**NOVEMBER 2023**

**COPYRIGHT: The concepts and information contained within this document, unless otherwise stated, are the property of Stanbury Traffic Planning. All rights are reserved and all materials in this document may not be reproduced without the express written permission of Stanbury Traffic Planning.**

## **TABLE OF CONTENTS**

<b>1. INTRODUCTION</b>	<b>4</b>
<b>1.1 SCOPE OF ASSESSMENT</b>	<b>4</b>
<b>1.2 REFERENCE DOCUMENTS</b>	<b>4</b>
<b>1.3 SITE DETAILS</b>	<b>5</b>
1.3.1 SITE LOCATION	5
1.3.2 SITE DESCRIPTION	6
1.3.3 EXISTING SITE USE	6
1.3.4 SURROUNDING USES	7
<b>2. PROPOSED DEVELOPMENT</b>	<b>8</b>
<b>2.1 BUILT FORM</b>	<b>8</b>
<b>3. SITE ACCESS &amp; INTERNAL CIRCULATION</b>	<b>9</b>
<b>3.1 ACCESS ARRANGEMENTS</b>	<b>9</b>
3.1.1 VEHICLE ACCESS	9
3.1.2 PEDESTRIAN ACCESS	9
<b>3.2 PARKING CONSIDERATIONS</b>	<b>10</b>
3.2.1 PARKING PROVISION	10
3.2.2 DISABLED PARKING PROVISION	10
<b>3.3 INTERNAL CIRCULATION AND MANOEUVRABILITY</b>	<b>11</b>
3.3.1 CAR PARKING AREA ACCESS ROADWAY	11
3.3.2 PASSENGER VEHICLE PARKING AREA	12
3.3.3 MANOEUVRING	12
3.3.4 INTERNAL PEDESTRIAN CIRCULATION	13
3.3.5 SITE SERVICING	13
<b>4. EXISTING TRAFFIC CONDITIONS</b>	<b>14</b>
<b>4.1 SURROUNDING ROAD NETWORK</b>	<b>14</b>
<b>4.2 EXISTING TRAFFIC VOLUMES</b>	<b>15</b>
<b>4.3 EXISTING ROAD NETWORK OPERATION</b>	<b>15</b>
<b>4.4 PUBLIC TRANSPORT</b>	<b>16</b>
4.4.1 BUSES	16
4.4.2 HEAVY RAIL	16
4.4.3 PEDESTRIANS	16

---

## **5. PROJECTED TRAFFIC CONDITIONS** **17**

<b>5.1 TRAFFIC GENERATION</b>	<b>17</b>
5.1.1 EXISTING SITE USES	17
5.1.2 PROPOSED DEVELOPMENT	17
<b>5.2 TRAFFIC IMPACTS</b>	<b>17</b>
<b>5.3 TRANSPORT IMPACTS</b>	<b>18</b>

---

## **6. CONCLUSION** **19**

### **APPENDICES**

- 1. Architectural Plans**
- 2. Swept Path Plans**

## 1. INTRODUCTION

### 1.1 Scope of Assessment

Stanbury Traffic Planning has been commissioned by Morson Architects Pty. Ltd. to prepare a Traffic & Parking Impact Assessment with respect to a proposal to demolish four existing detached residences and the construction of a seniors housing development containing 18 units at 16 – 20 Burrawong Crescent and 28 MacArthur Road, Elderslie (hereafter referred to as the 'subject site').

The aim of this assessment is to investigate and report upon the potential traffic and parking consequences of the proposal and to recommend appropriate ameliorative measures where required. This report provides the following scope of assessment:

- Section 1 provides a summary of the site location, details, existing and surrounding land-uses;
- Section 2 describes the proposed development;
- Section 3 assess the adequacy of the proposed site access arrangements, parking provision, internal circulation and servicing arrangements with reference to relevant Council, Transport for NSW (TfNSW), Australian Standard and State Environmental Planning Policy specifications;
- Section 4 assesses the existing traffic, parking and transport conditions surrounding and servicing the subject development site including a description of the surrounding road network, traffic demands, operational performance and available public transport infrastructure; and
- Section 5 estimates the traffic generating ability of the proposed development and assesses the ability or otherwise of the surrounding road network to be capable of accommodating the altered demand in a safe and efficient manner.

The report has been prepared pursuant to State Environmental Planning Policy (Infrastructure & Transport) 2021.

### 1.2 Reference Documents

Reference is made to the following documents throughout this report:

- *State Environmental Planning Policy (Housing) 2021 (Housing SEPP)*;
- *TfNSW's Guide to Traffic Generating Developments*;
- Australian Standard for *Parking Facilities Part 1: Off-Street Car Parking* (AS2890.1:2004); and
- Australian Standard for *Parking Facilities Part 6: Off-Street Parking for People with Disabilities* (AS2890.6:2022).



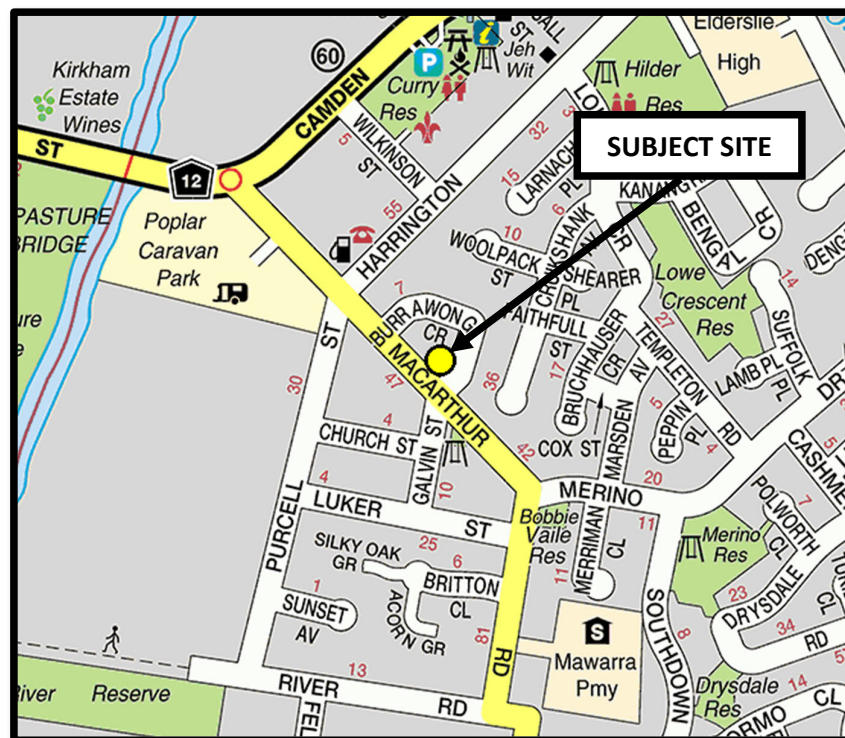
Architectural plans have been prepared by Morson Group and should be read in conjunction with this report, a reduced copy of which is included as **Appendix 1** for reference.

### 1.3 Site Details

#### 1.3.1 Site Location

The subject site is situated on the north-eastern corner of the intersection of MacArthur Road, Burrawong Crescent and Galvin Street, Elderslie. The site location is illustrated below and overleaf within a local and aerial context by **Figure 1** and **Figure 2**, respectively.

**FIGURE 1**  
**SITE LOCATION WITHIN A LOCAL CONTEXT**



Source: UBD's Australian City Streets – Version 8

**FIGURE 2**  
**SITE LOCATION WITHIN AN AERIAL CONTEXT**



Source: Nearmap (Image date: 29/10/2022)

### 1.3.2 Site Description

The subject site comprises four allotments, providing a real property description of Lots 35 – 38 within DP 36169 and a street address of 16 – 20 Burrawong Crescent and 28 MacArthur Road, Elderslie.

The allotments collectively provide an irregular shaped parcel of land providing approximate frontages of 81m and 29m to Burrawong Crescent and MacArthur Road, respectively. The site area is in the order of approximately 2,737m<sup>2</sup>.

### 1.3.3 Existing Site Use

The subject site currently contains four detached residential dwellings, with 16, 18 and 20 Burrawong Crescent each serviced by separate access driveways connecting with Burrawong Crescent within the eastern boundary of each site allotment. 28 MacArthur Road fronts and is serviced by a separate access driveway connecting with MacArthur Road within the north-western corner of the allotment.

#### 1.3.4 Surrounding Uses

The subject site is adjoined immediately by detached residential dwellings in the north. Similar detached residential dwellings occupy land to the east on the opposite side of Burrawong Crescent.

The subject site is adjoined immediately by residential flat developments to the north-west.

Non-residential development within the subject precinct includes:

- Mawarra Public School is situated approximately 470m to the southeast of the site;
- Elderslie High School is situated approximately 650m to the northeast of the site;
- Elderslie Public School is situated approximately 1km to the east of the site; and
- Camden town centre is situated approximately 1.2km to the north-west of the site.

## 2. PROPOSED DEVELOPMENT

### 2.1 Built Form

The subject application seeks approval to demolish four existing detached residences and the construction of a seniors housing development owned by LAHC to be provided in accordance with the Housing SEPP comprising 18 units as following:

- 8 one-bedroom apartments; and
- 10 two-bedroom apartments.

The development is proposed to be contained within two x two-storey buildings, with Block A building situated within the southern portion of the site and Block B building situated within the north-eastern corner of the site.

**Table 1** below provides a summary of the proposed dwelling yield.

<b>TABLE 1 SUMMARY OF PROPOSED DWELLING YIELD</b>			
<b>Dwelling Type</b>	<b>Block A</b>	<b>Block B</b>	<b>Total</b>
1-bed	4	4	8
2-bed	6	4	10
Total	10	8	18

The development is proposed to be serviced by an at-grade open parking area containing nine passenger vehicle parking spaces, being accessed via a single combined ingress / egress driveway situated within the north-eastern corner of the site.

Two pedestrian access pathways are proposed to provide connectivity between the Blocks and the western Burrawong Crescent footpath being situated to the south of and separate to the abovementioned vehicular access driveway. In addition, a further pedestrian access pathway is proposed to connect the development and the northern MacArthur Road footpath, being situated along the southern boundary.

### 3. SITE ACCESS & INTERNAL CIRCULATION

#### 3.1 Access Arrangements

##### 3.1.1 Vehicle Access

Vehicular access between the development site and Burrawong Crescent is proposed to be provided via a 6.1m wide combined ingress / egress driveway located within the north-eastern corner of the site. The driveway provides direct connectivity to an internal roadway adjoining the at-grade open parking area.

AS2890.1:2004 provides driveway design specifications based on the proposed primary land use, the functional order of the access road and the number of spaces the driveway is to serve. Tables 3.1 and 3.2 of AS2890.1:2004 specify that a Category 1 type driveway is required, providing a combined ingress / egress driveway width of between 3m and 5.5m based on the local (non-arterial) functional order of Burrawong Crescent, the residential land-use and the on-site passenger vehicle parking provision of less than 25 spaces. The proposed 6.1m wide combined ingress / egress driveway therefore exceeds the minimum AS2890.1-2004 specifications and is accordingly considered to be satisfactory.

Swept path plans have been prepared in order to demonstrate the ability of passenger vehicles to enter and exit the site, copies of which are included as **Appendix 2**. These swept paths also indicate that all vehicles are able to enter and exit the site in a forward direction.

The safety and efficiency of access / egress movements are also proposed to be assisted by the following:

- The provision of a relatively level (less than 1:20) grade within the first 6m of the combined ingress / egress driveway inside the property boundary;

No obstructions to visibility adjacent to the egress (northern) side of the driveway facilitating appropriate sight distance between exiting motorists and potential pedestrians travelling along the western Burrawong Crescent footpath; and

- Whilst Burrawong Crescent provides a somewhat variable horizontal alignment within the subject vicinity, observations have indicated that a sight distance exceeding 40m prevails between the frontage road and the driveway locations, exceeding the minimum requirement of 35m as specified by AS2890.1:2004 with respect to observed 85<sup>th</sup> percentile speed of traffic flow past the site of 40km/h.

##### 3.1.2 Pedestrian Access

Pedestrian access is proposed via two pedestrian pathways connecting with the western Burrawong Crescent footpath and one pedestrian pathway connecting to the northern MacArthur Road footpath, separate and to the south of the vehicular driveway providing access to the residential units and the at-grade open parking area.

## 3.2 Parking Considerations

### 3.2.1 Parking Provision

The development is proposed to provide a total of nine on-site passenger vehicle parking spaces (including four disabled spaces), provided in a 90-degree angle arrangement situated within the north-western corner of the site.

The Housing SEPP provides state wide relevant parking requirements for seniors independent living units. Clause 108(2)(J) of the Housing SEPP states the following with respect to car parking:

*108. Non-discretionary development standards for independent living units – the Act, s 4.15*

*(2) The following are non-discretionary development standards in relation to development for the purposes of independent living units -*

*(j) for a development application made by, or made by a person jointly with, a social housing provider – at least 1 parking space for every 5 dwellings if:*

Application of the above parking rate to the development, comprising 18 dwellings, necessitates the provision of 3.6 (adopt 4) spaces. The proposed provision of nine spaces accordingly exceeds the minimum requirements of the Housing SEPP.

The proposed parking provision is accordingly considered to meet or exceed the requirements for seniors living as specified within the Housing SEPP.

### 3.2.2 Disabled Parking Provision

Four disabled parking spaces are provided within the off-street parking area in accordance with the relevant requirements of AS2890.6:2022. Further, the southern-most of the abovementioned parking spaces is capable of being widened to 3.8m should it be required.

The proposed development, being assessed under SEPP (Housing) 2021, is required to provide disabled parking spaces in accordance with Schedule 4 Part 1 Clause (5)(a)-(c) of the SEPP (Housing) 2021 which states the following:

#### *5. Private car accommodation*

*If car parking (not being car parking for employees) is provided –*

- (a) car parking spaces must comply with the requirements for parking for persons with a disability set out in AS2890.6, and*
- (b) 10% of the total number of car parking spaces (or at least one space if there are fewer than 10 spaces) must be designed to enable the width of the spaces to be increased to 3.8 metres, and*

*(c) any garage must have a power-operated door, or there must be a power point and an area for motor or control rods to enable a power-operated door to be installed at a later date.*

According to the above, all resident parking spaces required in accordance with Clause 108(2)(J) of the Housing SEPP (previously assessed to be four spaces) are to all be provided in accordance with the parking requirements of AS2890.6 with 10% of the total required parking spaces (being rounded up to one space) being designed to be capable of providing a width of 3.8m.

The proposed provision of four parking spaces designed to comply with AS2890.6:2022 for disabled parking, one of which is capable of being widened to 3.8m, is accordingly considered to be compliant with the relevant design requirements of the Housing SEPP and therefore satisfactory.

### 3.3 Internal Circulation and Manoeuvrability

#### 3.3.1 Car Parking Area Access Roadway

Connectivity between the access driveway and the car parking area is proposed via a roadway, with an east-west alignment running approximately parallel to the northern boundary of the site.

This roadway is to provide a width of 5.5m for approximately 6m inside the site, prior to reducing in width to a minimum of 3m for a length of approximately 20m, before widening to connect with the car parking area circulation aisle.

It is acknowledged that the narrow section of the access roadway is not capable of accommodating two-way traffic movements simultaneously. This roadway however suitably accords with Clause 3.2.2 of AS2890.1:2004, which allows for a two-way driveway and connecting roadway width of 3m, where the two directional traffic volume is less than 30 movements per hour.

Section 5.1 of this report presents that the total development is expected to accommodate in the order of eight peak hour vehicle movements based on a total development yield of 18 dwellings, being significantly less than the abovementioned maximum of 30 movements. Accordingly, the width of the access driveway and connecting roadway is only required to accord with the one-way traffic requirements as specified within Clause 2.5.2 (a) (i) of AS2890.1:2004, which requires a minimum roadway width of 3m. Compliance with this Clause is achieved.

Notwithstanding the above, it is noted that the access driveway and immediately connecting internal roadway has been designed to be capable of accommodating an entering and exiting vehicle simultaneously. Entering vehicles are therefore able to wait wholly within the property in the event of a vehicle exiting the development at the same time.

It should be further noted that the relatively straight alignment of the internal roadway provides adequate sight distance between the parking area and the access driveway, being assisted by a convex mirror situated at the northern end



of the parking area. Internal conflicts between opposing vehicle movements are accordingly not envisaged. In consideration of this and the above discussion, the proposed roadway providing connectivity between the Burrawong Crescent access driveway and the open passenger vehicle parking area is considered to be satisfactory.

### 3.3.2 Passenger Vehicle Parking Area

Passenger vehicle parking spaces within the parking area comprise a single standard 90-degree angled parking row, being serviced by a single adjoining parking aisle, directly connecting with the access roadway. The open parking area has been designed to accord with the requirements of AS2890.1:2004 and AS2890.6:2022, providing the following minimum characteristics:

- Standard vehicular parking space width = 2.4m;
- Disabled vehicular parking space width = 2.4m (plus adjacent 2.4m wide shared area), with the exception of one space, which is capable of being widened to 3.8m to accord with AS4299;
- Standard vehicular parking space length = 5.4m;
- Vehicular parking aisle width adjoining parking spaces = 5.8m;
- Headroom = unrestricted; and
- Aisle extension past the end parking bay = 1.0m.

Safe and efficient internal manoeuvring and parking space accessibility is anticipated to result, taking into consideration the above compliance with the relevant AS2890.1:2004 and AS2890.6:2022 specifications.

### 3.3.3 Manoeuvring

In order to demonstrate the internal passenger vehicle manoeuvrability within the vicinity of these areas and generally throughout the overall parking area, this Practice has prepared a number of swept path plans which are included as **Appendix 2**. The turning paths provided on the plans have been generated using Autoturn software and derived from B85 and B99 vehicle specifications provided within AS2890.1:2004.

Section B4.4 of AS2890.1:2004 states the following with regard to the use of templates to assess vehicle manoeuvring:

*‘Constant radius swept turning paths, based on the design vehicle’s minimum turning circle are not suitable for determining the aisle width needed for manoeuvring into and out of parking spaces. Drivers can manoeuvre vehicles within smaller spaces than swept turning paths would suggest.’*

It would therefore appear that whilst the turning paths provided within AS2890.1:2004 can be utilised to provide a ‘general indication’ of the suitability



or otherwise of internal parking and manoeuvring areas, vehicles can generally manoeuvre more efficiently than the paths indicate. Notwithstanding this, the swept path plans illustrate that passenger vehicles can manoeuvre throughout and enter and exit the most difficult passenger vehicle parking spaces within the parking area.

It is further noted that the open parking area forms a dead-end aisle, without a formalised turnaround bay. No turnaround bay is however required as the parking area is private and no visitor parking is provided. It is however recommended that a sign be placed at the site access driveway advising 'resident parking only' to ensure there is no requirement for internal vehicular turnaround in the event that all parking spaces are occupied. Incorporating this recommendation (detailed within **Appendix 2**), the proposed open parking area as it relates to passenger vehicle manoeuvrability is therefore considered to be satisfactory.

#### 3.3.4 Internal Pedestrian Circulation

Pedestrian access between Block B building and the western Burrawong Crescent footpath is proposed via two pedestrian pathways, located separately and to the south of the abovementioned vehicular access driveway. Pedestrian access between Block A building and the northern MacArthur Road footpath is proposed via a pedestrian pathway, located centrally along the southern site boundary. The pedestrian walkways provide connectivity to the entrance corridors of the residential apartment buildings. Internal pedestrian pathways are also provided between the two buildings and the at-grade parking area.

#### 3.3.5 Site Servicing

The subject development is anticipated to generate the requirement for regular waste collection vehicle servicing. Garbage bins are proposed to be contained within a dedicated holding area located centrally and immediately south of Block B building in close proximity to the pedestrian access pathway connecting with Burrawong Crescent. Bins are to be transported to the adjoining Burrawong Crescent frontage for collection in a similar manner to other properties in the subject vicinity.

## 4. EXISTING TRAFFIC CONDITIONS

### 4.1 Surrounding Road Network

The following provides a description of the local road network surrounding the subject site:

- **Burrawong Crescent** performs a local access road function under the care and control of Camden Council facilitating access to abutting residential developments in a crescent alignment between MacArthur Road in the north-west and south-east.

Burrawong Crescent provides an approximate pavement width of 7.5m facilitating one lane of traffic in each direction in conjunction with unrestricted parking along both kerb alignments. The limited pavement width of Burrawong Crescent however requires two-way traffic flow to occur under courtesy conditions when kerb-side parking is present along both kerb alignments, whereby a vehicle is required to utilise a break in parking in order to allow an opposing vehicle to pass. Traffic flow within Burrawong Crescent is governed by the local area speed limit of 50km/hr.

Burrawong forms two T-junctions with MacArthur Road whereby both junctions operate under 'Give-Way' signage control with MacArthur Road performing the priority route in both instances.

- **MacArthur Road** performs a collector road function under the care and control of Camden Council providing a north-south alignment facilitating access from Camden Valley Way / Argyle Street in the north and Burrell Road to the south.

MacArthur Road provides an approximate pavement width of 10.5m facilitating travel in both directions in conjunction with marked parallel parking along both kerb alignments. Traffic flow within MacArthur Road is governed by a sign posted speed limit of 50km/h; however, a 40 km/h school zone speed limit applies during prescribed school start / finish times the south of the site, associated with Mawarra Public School.

To the north of the site, MacArthur Road forms a T-junction with Camden Valley Way / Argyle Street operating under traffic signal control.

To the south of the site, MacArthur Road forms a T-junction with a on and off ramp that provides access to Camden Bypass operating under 'Stop' signage control with MacArthur Road performing the priority route.

- **Camden Valley Way** performs a State Road function in the vicinity of the site under the care and control of TfNSW providing an east-west connection between Hume Highway / Campbelltown Road in the east and Argyle Street / MacArthur Road in the west.

In the subject vicinity, Camden Valley Way provides two-lane carriageway facilitating one direction travel in both directions in conjunction with 'No Stopping' parking restrictions along both shoulders.

- **Camden Bypass** performs a State Road function under the care and control of TfNSW providing a north-east to south-west connection between Smeaton Grange in the north-east and Camden South in the south-west.

Camden Bypass provides a combination of a two lane undivided carriageway and a four-lane divided carriageway.

Traffic flow in Camden Bypass is governed by the sign posted speed limit of 80km/h within the subject vicinity.

## 4.2 Existing Traffic Volumes

This Practice has obtained traffic signal detector data for the signalised intersections of Argyle Street / Camden Valley Way and MacArthur Road. The following provides a summary of the peak hour traffic demands obtained from the traffic signal detector data, whilst full details can be provided upon request:

- Directional traffic demands within Argyle Street / Camden Valley Way are approximately 600 – 1,000 vehicles per hour during weekday commuter peak hours; and
- Directional traffic demands within MacArthur Road are approximately 300 – 500 vehicles per hour during weekday commuter peak hours.

Traffic demands within Burrawong Crescent have been observed to be very low, being less than 50 vehicles per hour in each direction.

## 4.3 Existing Road Network Operation

Reference is made to the TfNSW's *Guide to Traffic Generating Developments* in order to undertake an assessment of the operational performance of the surrounding local road network. This publication indicates that a single lane of traffic accommodating peak hour traffic demands of less than 200 vehicles, such as that observed within Burrawong Crescent, provides a level of service 'A'. Such a level service indicates free flow where drivers have freedom to select their desired speed and to manoeuvre within the traffic stream. The low traffic demands accommodated within Burrawong Crescent, in conjunction with the low observed parking demands, is such that motorists are considered to be provided with a level of service 'A', despite the reduced pavement width, whereby impedance / delays to directional traffic flow are extremely minimal.

Whilst traffic demands within MacArthur Road are more notable, regular and extended gaps provided by the traffic signal-controlled junction of Camden Valley Way / Argyle Street ensure that turning movements to / from MacArthur Road occur with a good level of efficiency.

## 4.4 Public Transport

### 4.4.1 Buses

The following bus services operate in the vicinity of the site, with the closest stop situated on MacArthur Road immediately to the west of the site;

- Route 893 between Campbelltown and Narellan via Spring Farm and Elderslie;
- Route 894X between Bridgewater Estate to Campbelltown via Camden Bypass;
- Route 895 between Campbelltown to Camden South via Camden (Loop Service); and
- Route S17 between Narellan to Camden via Spring Farm.

Route 893 provides a service frequency of 30 minutes from Monday to Saturday and an hourly service on Sunday and Public Holidays.

Route 894X provides two services during the weekday peak periods, with 30 minutes in between services.

Route 895 provides a service frequency of 20 – 30 minutes during weekday peak periods, two services on Saturday with one hour in between services, and one service on Sunday and Public Holidays.

Route S17 provides a service frequency of approximately 60 minutes during weekdays. No services are provided on weekends or Public Holidays.

### 4.4.2 Heavy Rail

The site is located approximately 13km west of Macarthur Train Station, access to which is provided by the aforementioned 893 and 895 bus routes. This station provides access to train services which operate along the T8 South Line. Services along these lines provide efficient connectivity to the Airport Line and Sydney metropolitan rail network.

### 4.4.3 Pedestrians

The following pedestrian access and mobility infrastructure is provided within the immediate vicinity of the subject site:

- A footpath is provided along the western side of Burrawong Crescent;
- Footpaths are provided along both sides of MacArthur Road;
- A median refuge on MacArthur Road immediately to the north-west of Burrawong Crescent; and
- Signalised pedestrian crossings are provided over the southern approach of the junction of Camden Valley / Argyle Street and MacArthur Road.

## 5. PROJECTED TRAFFIC CONDITIONS

### 5.1 Traffic Generation

Traffic generation rates for various land-uses have been established through extensive surveys undertaken throughout NSW and published within TfNSW's *Guide to Traffic Generating Developments* and *Guide to Traffic Generating Developments Updated Traffic Surveys Technical Direction TDT 2013/04a*. The following sub-sections provide a summary of the traffic generating potential of the existing and proposed site uses with respect to those rates established by TfNSW.

#### 5.1.1 Existing Site Uses

Section 1.3.3 of this report presented that the subject site currently contains four single detached residential dwellings.

TfNSW's *Technical Direction TDT 2013/04a* states that low density residential dwellings typically generate 0.95 morning peak hour trips and 0.99 evening peak hour trips during weekdays.

For the purposes of this assessment and for reasons of simplicity, a traffic generation rate of 1 peak hour vehicle trip per dwelling has been applied to detached residential dwellings. The current site development is therefore capable of generating up to four vehicle trips to and from the site during weekday commuter peaks periods.

#### 5.1.2 Proposed Development

TfNSW's *Technical Direction TDT 2013/04a* specifies the following average peak hour traffic generation rates for housing for seniors:

*Weekday peak hour vehicle trips = 0.4 per dwelling.*

Based on the above traffic generation rates and the subject development comprising of 16 dwellings, the following calculation is provided:

$$16 \times 0.4 = 6.4 \text{ (adopt 8)}$$

The subject development is therefore expected to generate up to eight peak hour vehicle trips.

### 5.2 Traffic Impacts

The development has been projected to generate in the order of eight vehicle movements to and from the subject site during peak hours, or four additional trips over and above that capable of being generated by the existing detached dwellings located within the subject site.

Such a level of additional traffic is not projected to, in itself, result in any unreasonable impacts on the existing operational performance of the surrounding local road network. Burrawong Crescent has previously been presented to provide motorists with a good level of service in the immediate vicinity of the site, being assisted by low traffic demands during weekday commuter peak periods.

Whilst it is acknowledged that traffic demands within the surrounding regional and arterial road network are more considerable, the presence of positive intersection control in the vicinity of the precinct access points provide motorists with safe and efficient means with which to access and exit the subject precinct.

In consideration of the above, the impact of the development is most likely to be a result of the safety and efficiency with which motorists are capable of entering and exiting the development. The low traffic demands within Burrawong Crescent, combined with the acceptable sight distance provisions between the frontage road and the driveway location is such that it is envisaged that motorists will be capable of entering and exiting the site in a safe and efficient manner.

### 5.3 Transport Impacts

The subject site is located within easy walking distance of regular bus services operating along MacArthur Road. It is accordingly expected that a portion of the future occupants of the development will utilise the surrounding public transport infrastructure to access destinations throughout the greater Sydney metropolitan area. The capacity of the existing public transport system is however not envisaged to be measurably affected by any additional demand associated with the development, given its limited scale.

## 6. CONCLUSION

This report assesses the potential traffic and parking implications associated with a seniors housing development containing 18 dwellings at 16 – 20 Burrawong Road and 28 MacArthur Road, Elderslie. Based on this assessment, the following conclusions are now made:

- The proposed site access arrangements are projected to result in motorists being capable of entering and exiting the subject site in a safe and efficient manner;
- The proposed off-street vehicular parking provision satisfies the minimum requirements specified by the Housing SEPP;
- The internal passenger vehicle circulation arrangements are capable of providing for safe and efficient internal manoeuvring;
- The subject development has been projected to generate up to eight peak hour vehicle trips to and from the subject site or four movements over and above that capable of being generated by the existing site development; and
- It is considered that the adjoining road network is capable of accommodating the traffic projected to be generated by the subject development in a safe and efficient manner.

It is considered, based on the contents of this report and the conclusions contained herein, there are no traffic or parking related issues that should prevent approval of the subject application.

## **APPENDIX 1**



# Seniors Housing Development

16-20 Burrawong Crescent & 28 Macarthur Road, Elderslie 2570

LOT 35, 36, 37, 38 DP36169

Job Number: BGYDK

DEVELOPMENT DETAILS		
Site Area	2735.7m <sup>2</sup>	
Gross Floor Area (GFA)	1464m <sup>2</sup>	
	Allowable	Proposed
Floor Space Ratio (FSR)*	n/a	0.535:1
Total Storeys	2	2

Landscape Area	35m <sup>2</sup> per dwelling as per Housing SEPP 2021	951.8m <sup>2</sup>
Deep Soil Zones	15% of the site area and 65% of the DSZ at the rear.	700m <sup>2</sup> 25.6%

\*LEP REQUIREMENT

UNITS TYPES	
Type	Count
1B	8
2B	10

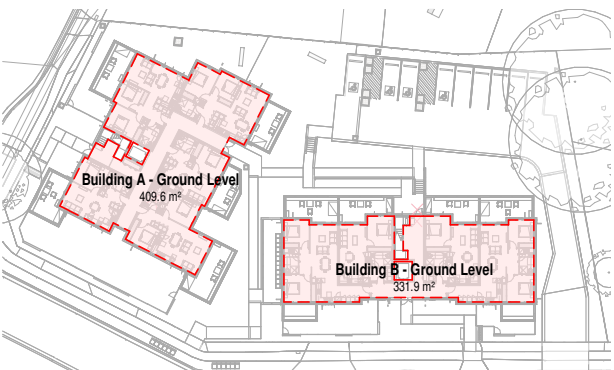
GROSS FLOOR AREA	
Level	Area

GROUND LEVEL Burrawong	331.9 m <sup>2</sup>
GROUND LEVEL Burrawong	409.6 m <sup>2</sup>
LEVEL 1 Burrawong	321.0 m <sup>2</sup>
LEVEL 1 Burrawong	401.7 m <sup>2</sup>
	1464.3 m <sup>2</sup>

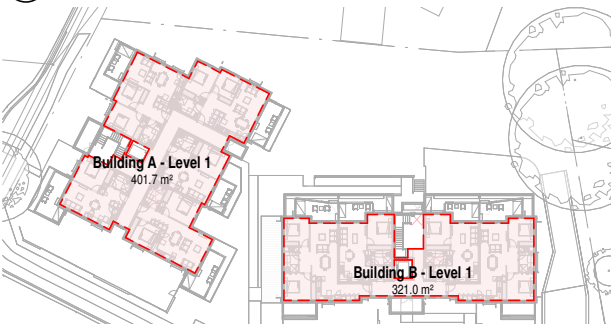
CAR SPACES - TYPES	
Type	Number

Class 1a - 2400w x 5400d (Resident/Employee)	5
Class 4 - 2400w x 5400d (Disabled)	4
	9

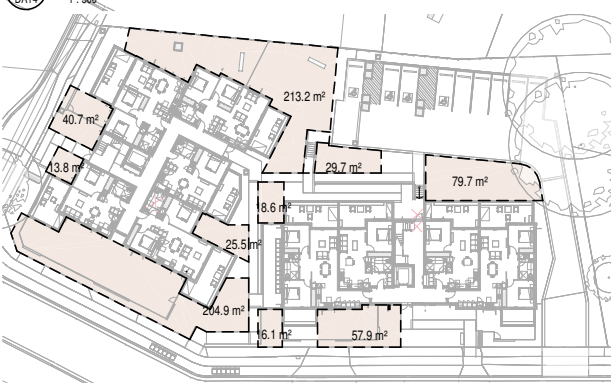
DESIGN COMPLIANCE TABLE				
SITE AREA		2735.7m <sup>2</sup>		
	CONTROL		REQUIRED OR ALLOWED	PROPOSED
FSR	DCP		Not applicable	0.535
	H. SEPP 2021		0.5:1	
HEIGHT	LEP		9.5m / two storeys (attic rooms allowed and not considered a storey)	9.405m
	H. SEPP 2021		9.5m	
UNITS MIX	LAHC		9 x 1bed + 9 x 2bed (18 units) -All units to be accessible: either a lift for each block, either a bridge connection between blocks.	8 x 1bed 10 x 2bed (18 units)
SETBACK	DCP	FRONT	Macarthur R. 6m - Burrawong C. 4.5m Consistent with the prevailing setback established by adjacent development. Calculated as being the average distance of the setbacks of the nearest two dwelling houses having a boundary with the same primary road.	Macarthur Road GL: 6m / 2.77m (terraces) L1: 6m / 3.65m (balconies)
		SIDE	GL: 3m L1: 3m	GL: 3.56m / 2.4m (terrace) L1: 3.56m / 2.8m (balcony)
		REAR	GL: 4m L1: 6m	GL: 6.37m / 6.27m (terrace) L1: 6.37m
CAR PARKING	Housing SEPP 2021 Accesible area		1 parking space for every 5 dwellings	4 car spaces required 9 car spaces provided (4 accesible car spots)
LANDSCAPING	H. SEPP 2021		35m <sup>2</sup> per dwelling (630.0m <sup>2</sup> )	951.8m <sup>2</sup> / 35% - Comply
	DCP		-30% of the site (820.5m <sup>2</sup> ) -At least 1.5m wide. -At least 40% of the front setback	
DEEP SOIL	Housing SEPP 2021		-15% of the site (410.3m <sup>2</sup> ) -3m - minimum dimension -65% is to be located at rear (410.3*0.65=266.7m <sup>2</sup> )	700.0m <sup>2</sup> / 25.6% - Comply  341.2m <sup>2</sup> - Comply
PRIVATE OPEN SPACE	Housing SEPP 2021		GF - <b>15m<sup>2</sup></b> / 3metre dim. FF - <b>6m<sup>2</sup></b> / 2m dim. 1bed FF - <b>10m<sup>2</sup></b> / 2m 2+ beds	Comply
SOLAR ACCESS	Housing SEPP 2021		70% required 2hrs POS/ 2hrs Living	77.8% - Comply
COMMUNAL OPEN SPACE			Not required	112.9m <sup>2</sup>



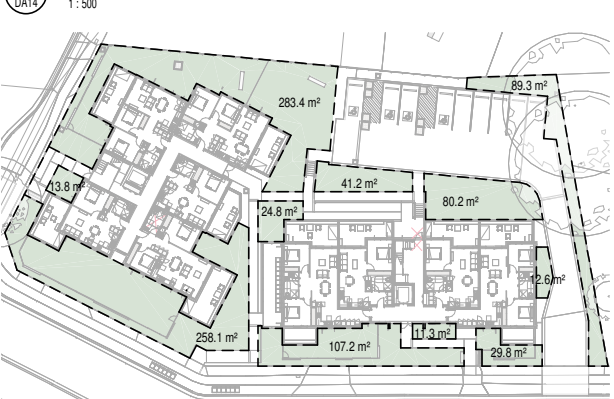
GROUND LEVEL - GFA  
DA14 1:500



LEVEL 1 - GFA  
DA14 1:500



DEEP SOIL PLAN  
DA14 1:500



LANDSCAPE PLAN  
DA14 1:500

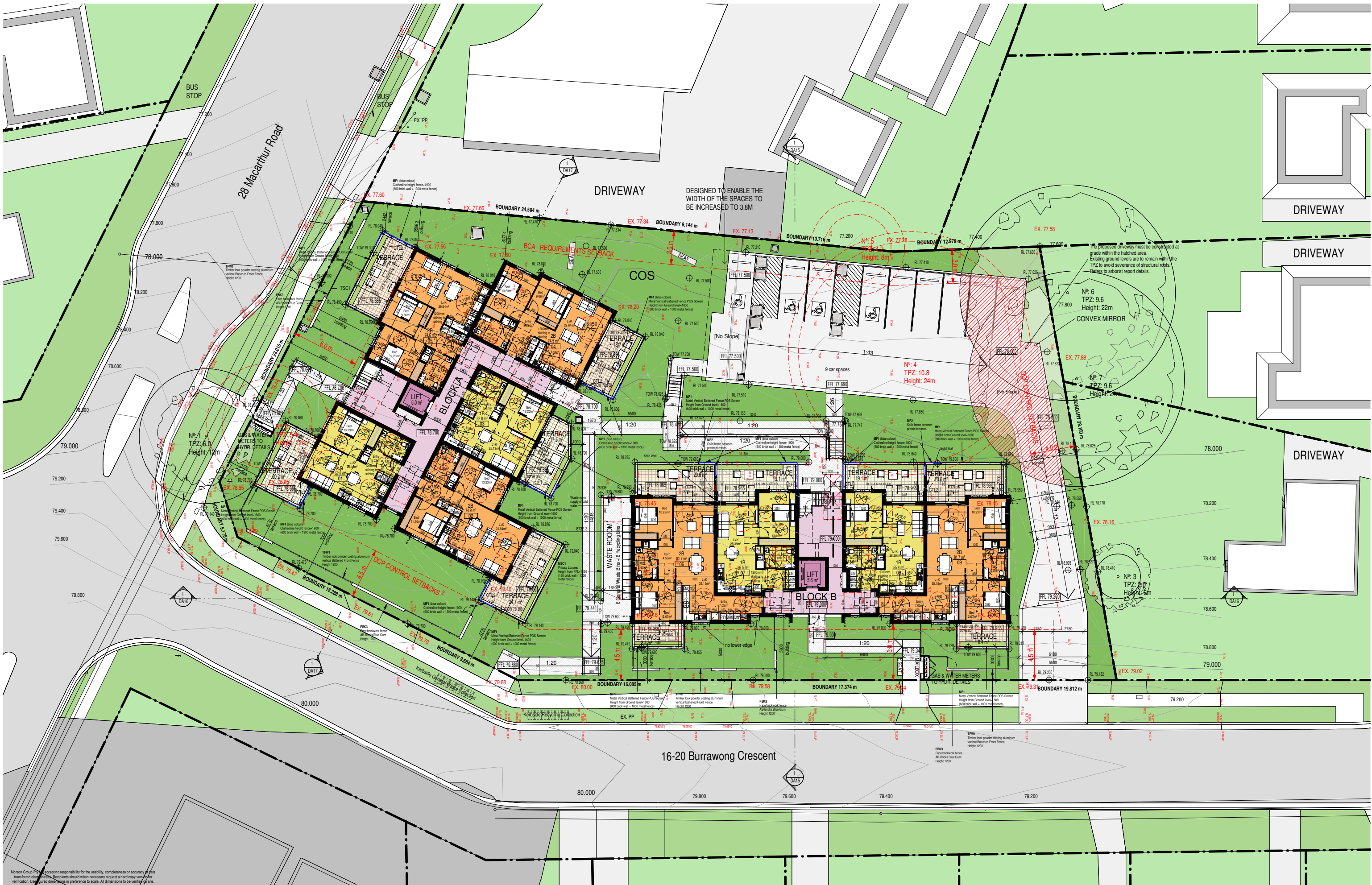


Morson Group Pty Ltd accept no responsibility for the usability, completeness or accuracy of data transferred electronically. Recipients should when necessary request a hard copy version for verification. Use figured dimensions in preference to scale. All dimensions to be verified on site.

Morson Group Pty Ltd © Copyright  
These drawings and designs and the copyright therein are the property of Morson Group Pty Ltd and must not be used, retained or copied without the written permission of Morson Group.  
ABN 41 159 480 056 NOMINATED ARCHITECT: P Morson(8100)

ISSUE	DATE	AMENDMENT	 CUBH NSW LAHC LOOKED BAG 9022 PARRAMATTA NSW 2124 PHONE: 1800 758 718		PROJECT <b>Seniors Housing Development</b> ADDRESS 16-20 Burrawong Crescent & 28 Macarthur Road, Elderslie 2570 LOT 35, 36, 37, 38 / DP36169	PROJECT No. <b>21039</b>  CLIENT LAHC	 NOMINATED ARCHITECT - P MORSON REGISTRATION NUMBER 8100 ACN 159 480 056 ABN 41 159 480 056 www.morsongroup.com.au (02) 9380 4746 PO Box 170, North Point, NSW 1535	SHEET SIZE: A1 NAME: <b>COVER + DATA TABLES</b>  SCALE: As indicated	DRAWING No. <b>DA01</b>  ISSUE No. <b>P15</b>
P12	08-05-2023	CLIENT REVISION							
P13	10-05-2023	CLIENT REVISION							
P14	18-09-2023	CLIENT REVISION							
P15	11-10-2023	CLIENT REVISION							









Morson Group Pty Ltd accept no responsibility for the usability, completeness or accuracy of data transferred electronically. Recipients should when necessary request a hard copy version for verification. Unplanned dimensions in preference to scale. All dimensions to be verified on site.

**Morson Group Pty Ltd © Copyright**  
These drawings and designs and the copyright thereof are the property of Morson Group Pty Ltd and must not be used, retained or copied without the written permission of Morson Group.  
ABN 41 159 480 056 NOMINATED ARCHITECT: P. Morson(8100)

ISSUE	DATE	AMENDMENT	CLIENT	PROJECT	PROJECT No.	MORSON GROUP	SHEET	SHEET	DRAWING No.
P15	14-06-2023	CLIENT REVISION	NSW LAHC	Seniors Housing Development	21039	NOMINATED ARCHITECT - P.F.	SIZE: A1	NAME: LEVEL 1	DA11
P16	23-08-2023	CLIENT REVISION	LOCKED BAG 5922	ADDRESS		MORSON REGISTRATION NUMBER 8103			
P17	18-09-2023	CLIENT REVISION	PARRAMATTA NSW 2124	16-20 Burrawong Crescent & 28 Macarthur Road, Elderslie 2570		ACN 139 480 056 ABN 41 159 480 056			
P18	11-10-2023	CLIENT REVISION	PHONE 1800 738 718	LOT 35, 36, 37, 38 / DP96169		www.morsongroup.com.au	SCALE:		ISSUE No. P18
						823 9 360 4046	1:150		
						PO Box 175, Potts Point, NSW 1535			

11/10/2023 10:16:53


C:\Users\hfrub\MG Dropbox\Ruben Hernandez Fernandez\21039 - 16-20 Burrawong Cres\Architecture\CAD\21039 - 16-20 Burrawong Cres\_DA\_20231003\_RH.rvt

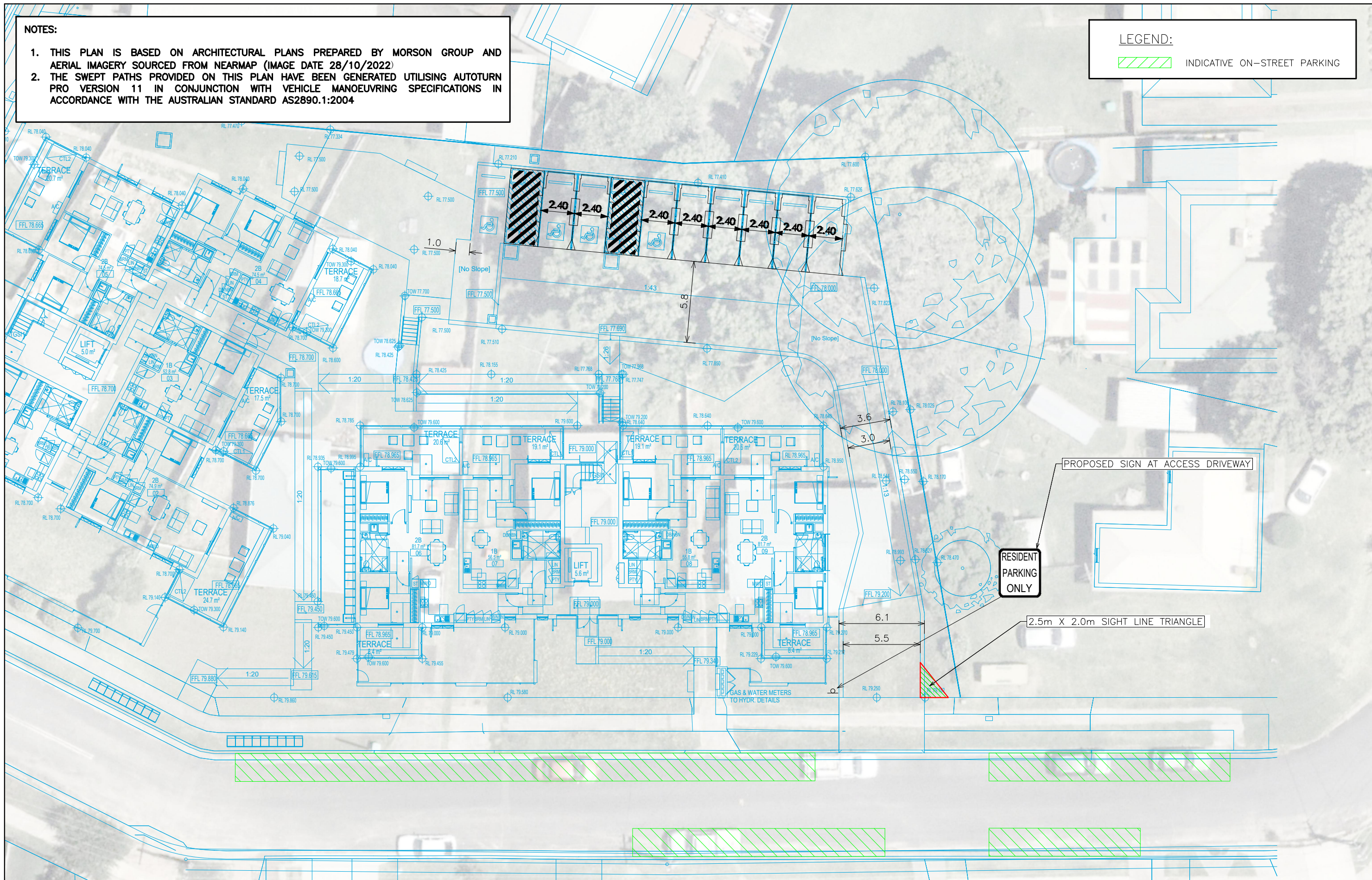
## **APPENDIX 2**



- NOTES:
- 1. THIS PLAN IS BASED ON ARCHITECTURAL PLANS PREPARED BY MORSON GROUP AND AERIAL IMAGERY SOURCED FROM NEARMAP (IMAGE DATE 28/10/2022)
  - 2. THE SWEEP PATHS PROVIDED ON THIS PLAN HAVE BEEN GENERATED UTILISING AUTOTURN PRO VERSION 11 IN CONJUNCTION WITH VEHICLE MANOEUVRING SPECIFICATIONS IN ACCORDANCE WITH THE AUSTRALIAN STANDARD AS2890.1:2004

LEGEND:

 INDICATIVE ON-STREET PARKING

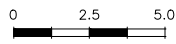


**STANBURY**  
**TRAFFIC**  
**PLANNING**  
TRAFFIC, PARKING & TRANSPORT CONSULTANTS

ADDRESS: 401/380 HARRIS ST, PYRMONT  
PH: (02) 8971 8314  
EMAIL: info@stanburytraffic.com.au  
WEBSITE: www.stanburytraffic.com.au

## STANBURY TRAFFIC PLANNING

16-20 BURRAWONG CRESCENT & 28 MACARTHUR ROAD, ELDERSLIE  
CAR PARK COMPLIANCE REVIEW  
CONCEPT LAYOUT  
GROUND

SCALE  1:250@A3

DRAWING NO. 21-234-01-V3

DATE 8 June 2023

CREATED BY  
Y.H

APPROVED BY  
M.S

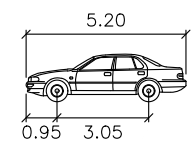
SHEET  
01 / 03



- NOTES:
1. THIS PLAN IS BASED ON ARCHITECTURAL PLANS PREPARED BY MORSON GROUP AND AERIAL IMAGERY SOURCED FROM NEARMAP (IMAGE DATE 28/10/2022)
  2. THE SWEEP PATHS PROVIDED ON THIS PLAN HAVE BEEN GENERATED UTILISING AUTOTURN PRO VERSION 11 IN CONJUNCTION WITH VEHICLE MANOEUVRING SPECIFICATIONS IN ACCORDANCE WITH THE AUSTRALIAN STANDARD AS2890.1:2004

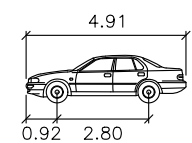
SWEPT PATH KEY:

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



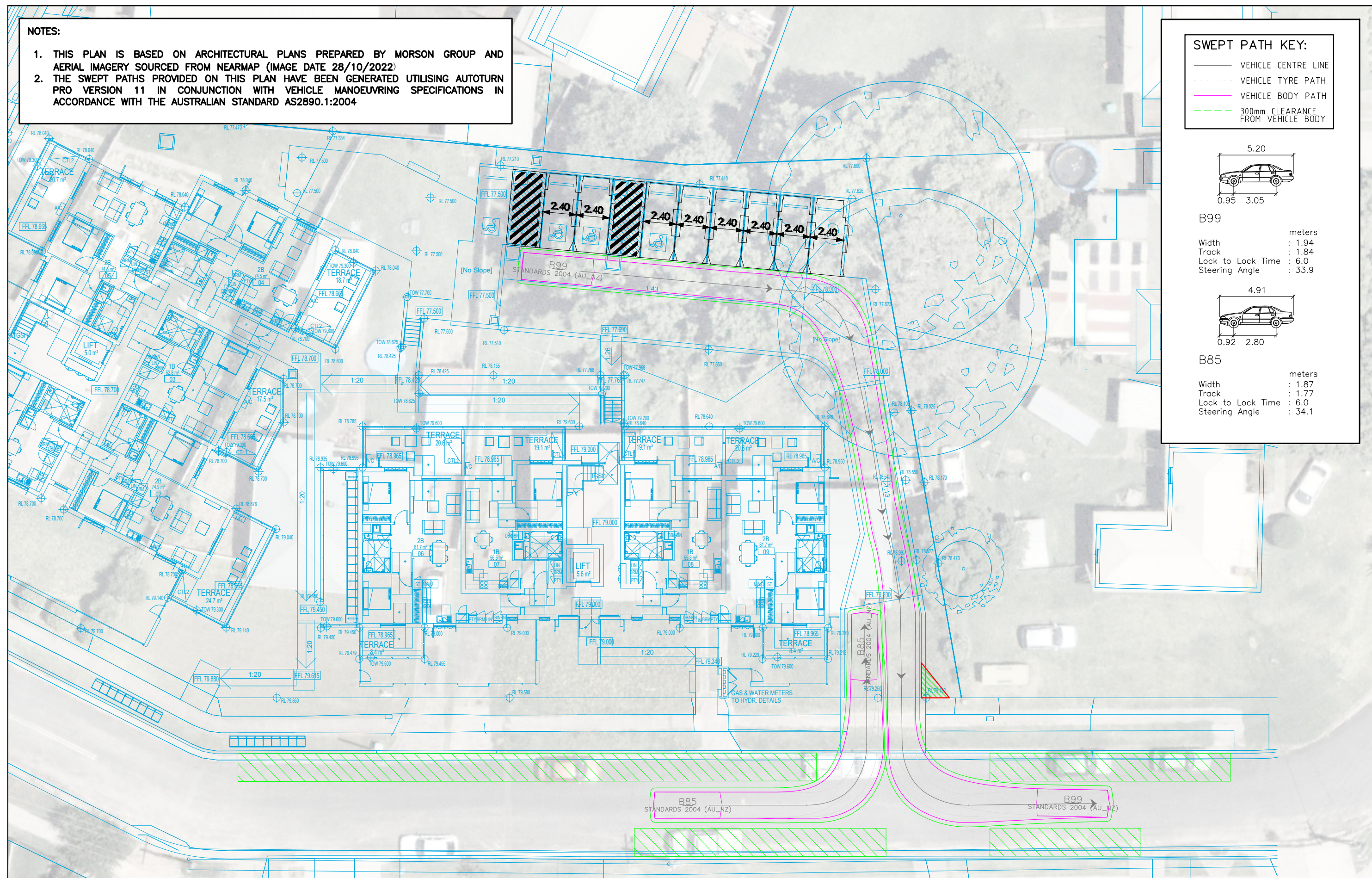
B99

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



B85

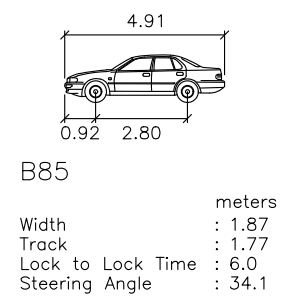
Width : 1.87 meters  
Track : 1.77  
Lock to Lock Time : 6.0  
Steering Angle : 34.1





- NOTES:
1. THIS PLAN IS BASED ON ARCHITECTURAL PLANS PREPARED BY MORSON GROUP AND AERIAL IMAGERY SOURCED FROM NEARMAP (IMAGE DATE 28/10/2022)
  2. THE SWEEP PATHS PROVIDED ON THIS PLAN HAVE BEEN GENERATED UTILISING AUTOTURN PRO VERSION 11 IN CONJUNCTION WITH VEHICLE MANOEUVRING SPECIFICATIONS IN ACCORDANCE WITH THE AUSTRALIAN STANDARD AS2890.1:2004

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



ADDRESS: 401/380 HARRIS ST, PYRMONT  
PH: (02) 8971 8314  
EMAIL: info@stanburytraffic.com.au  
WEBSITE: www.stanburytraffic.com.au

STANBURY TRAFFIC PLANNING

16-20 BURRAWONG CRESCENT & 28 MACARTHUR ROAD, ELDERSLIE

CAR PARK COMPLIANCE REVIEW

SWEPT PATH ASSESSMENT

GROUND

SCALE 0 2.5 5.0 1:250@A3

DRAWING NO. 21-234-01-V3

DATE 8 June 2023

CREATED BY Y.H

APPROVED BY M.S

SHEET 03 / 03