

194 Bennet Rd St Clair (NSW) Car Parking Impact Assessment

Client: Ms Margie Mansfield

Prepared by

Evan Boloutis
Director

EB Traffic Solutions Pty Ltd
B.Eng (Civil), MEng Sc (Traffic), MBA

Email: evan@ebtraffic.com.au
Web: www.ebtraffic.com.au
Mobile: 0408 395 729

7 June 2021
Rev B

1. INTRODUCTION

1.1 Purpose of this report

This report sets out an assessment of the parking implications of the proposed development, with specific consideration of the following:

- the existing conditions and a description of the proposal;
- an assessment of the development's car parking requirements;
- adequacy of the on-site and on-street car parking supply to accommodate both the proposal's car parking requirements and the car parking demands anticipated to be generated by the proposal;
- review of the layout of the on-site car park in accordance with the requirements of the Australian Standards; and
- the traffic impact of the proposed development.

1.2 Referenced documents

This report has been based upon a number of sources and references. These include:

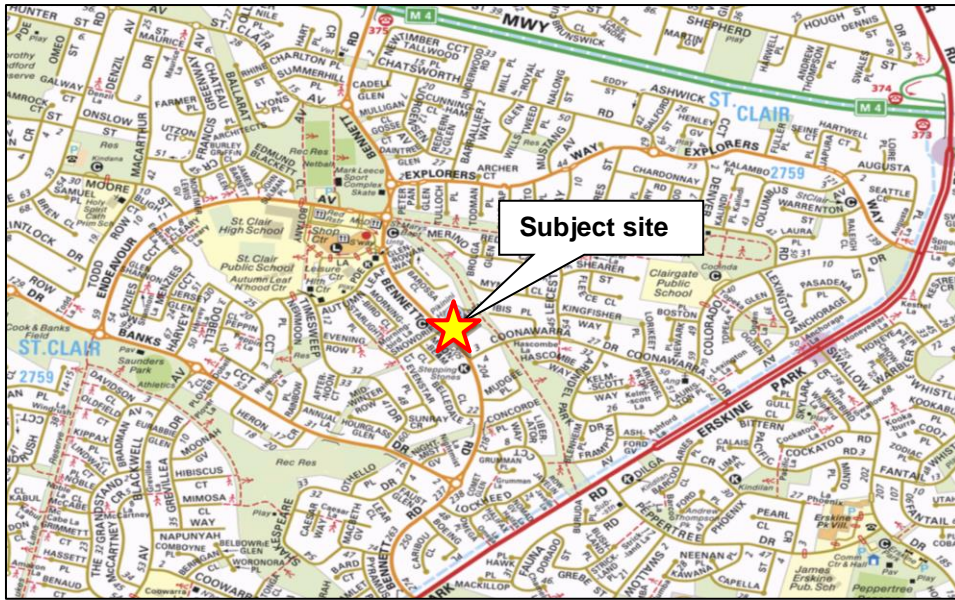
- Discussions between the applicant and officers at the City of Penrith;
- Google maps, nearmap and Melways online;
- Web sites www.transportnsw.info and www.bicycleinfo.nsw.gov.au/;
- City of Penrith, Development Control Plan, (2014) and Penrith Local Environmental Plan, (2010);
- State Environmental Planning Policy (Infrastructure), 2007;
- AutoTURN computer software for swept path analysis (B85 car);
- Australian Standards AS 2890.1 (2004) and AS 2890.6 (2009); and
- Layout plan prepared by Lara's Design, Dwg A1.2, Rev A, dated 25 May 2021.

2. EXISTING CONDITIONS

2.1 Location and Land use

The subject site is currently occupied by a residential dwelling and is located on the north-east corner of Bennet Road and McLaren Grove.

The location of the subject site is shown in **Figure 2.1**.



Source: Copyright Melways Publishing Pty, Ltd. Reproduced from Melways online with permission

Figure 2.1: Road network surrounding the subject site

The site is occupied by a dwelling. The surrounding land uses include the St Clair shopping centre and St Clair Leisure Centre to the immediate north of the site. The applicant also has their current medical practice at 168 Bennet Road approximately 50 m south of the St Clair shopping centre.



Source: google maps

Figure 2.2: Aerial view of the subject site and surrounding area

2.2 Road Network

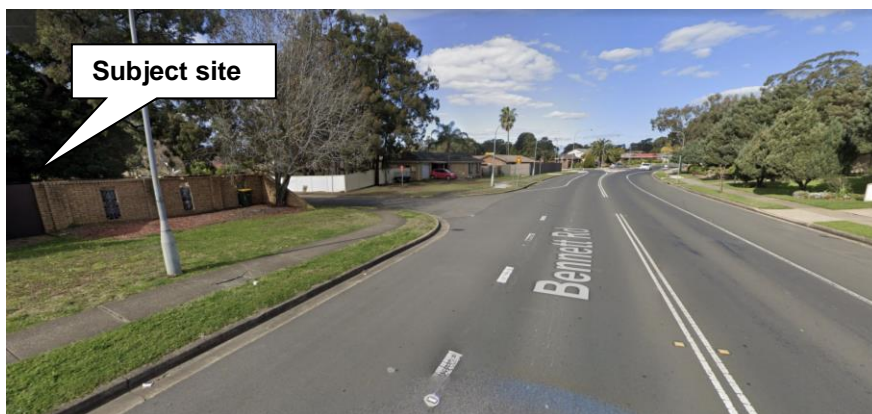
Bennet Road is a local road with an undivided cross section containing one kerbside parking lane and one traffic lane in each direction. Unrestricted parking exists along both sides of the road in the immediate vicinity of the site.

Photos showing the cross section of Bennet Road (looking to the north and south respectively) are shown in **Figure 2.3** and **Figure 2.4**, respectively.



Source: Google maps street view

Figure 2.3: Bennet Road looking north



Source: Google maps street view

Figure 2.4: Bennet Road looking south

McLaren Grove is a local road with an undivided cross section containing one kerbside parking lane and one traffic lane in each direction.

Unrestricted parking exists along both sides of the road in the immediate vicinity of the site with two disabled bays located across the site's frontage.

A photo showing the cross section of McLaren Grove looking to the east is shown in **Figure 2.5**.



Source: Google maps street view

Figure 2.5: McLaren Grove looking east

2.3 Existing Parking Supply and Demand

To establish the existing parking demands in the nearby on-street car parking areas, parking observations were undertaken by the applicant on Thursday 3 December 2020 between 9 am and 6 pm and on Saturday 5 December 2020 between 9 am and 1 pm.

The observations of parking activity indicated that the peak car parking demands typically corresponded to around:

- one to two cars parked along McLaren Grove within 100 metres of the site on a weekday and a weekend day; and
- four to five cars parking along Bennet Road within 100 metres of the site on a weekday and around three to four cars on a weekend day.

2.4 Sustainable Transport Modes

2.4.1 Public Transport

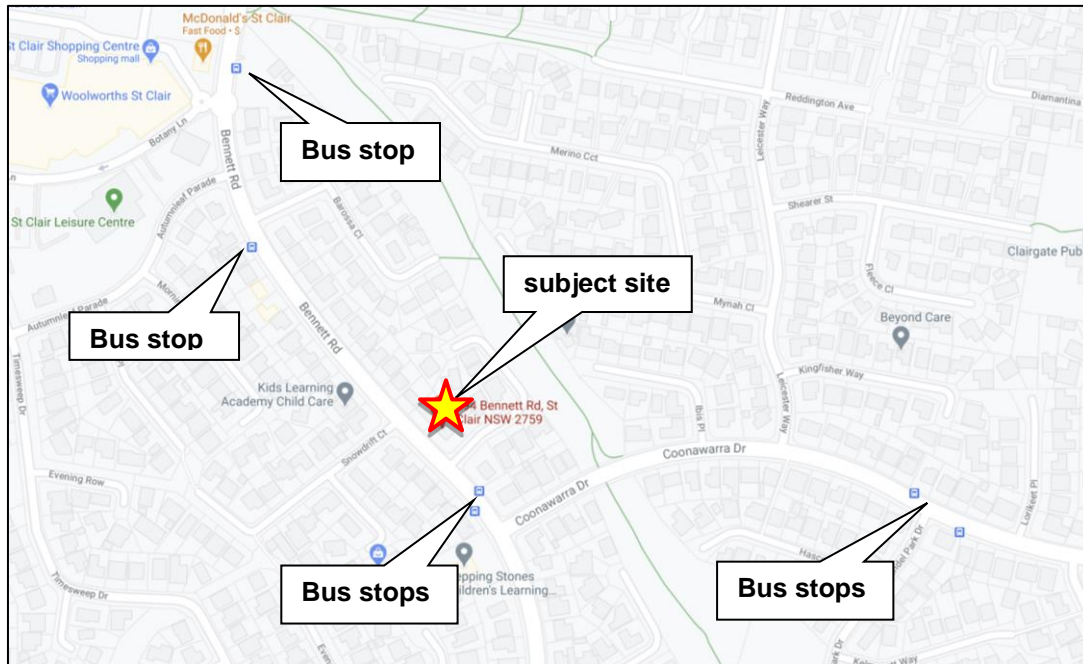
The site has an excellent provision of conveniently located public transport services with three bus routes which operate in the vicinity of the site.

Details of the bus routes are summarised as follows:

- Bus route 775 operates between Mount Druitt to Penrith via Erskine Park;
- Bus route 776 operates between Mount Druitt to Penrith via St Clair; and
- Bus route 835 operates between UWS and Pairiewood.

An assessment of the timetables of the various public transport services indicate that the services operate during the time periods which coincide with the proposed use, that is, during the weekday daytime and Saturday morning/midday periods.

There are a number of bus stops located within close proximity to the site, the location of which are shown in Figure 2.6.



Source: google maps

Figure 2.6: Location of bus stops in close proximity to subject site

3. THE PROPOSAL

It is proposed to refurbish the existing dwelling and construct a single storey building to accommodate a medical centre to accommodate a maximum of two practitioners at any one time.

It is understood from discussions with the applicant that, as currently occurs the medical centre where he currently works, all consultations will be by appointment only with typical appointment durations varying between 10 mins and 30 mins per appointment.

The proposed operating hours will be weekdays between 8 am and 6 pm, on Saturdays between 8 am and 6 pm and on Sundays/public holidays between 8 am and 12 noon.

It is understood that the existing medical clinic at 168 Bennet Road will be relocated to the proposed development site to accommodate a more appropriate site for the business.

It is proposed to provide a total of eight on-site spaces inclusive of a disabled parking space. Three spaces will be allocated to staff and five spaces to visitors, inclusive of an accessible bay.

Access to the main on-site car park will be provided via a proposed crossover along McLaren Grove adjacent to the site's eastern boundary and three staff spaces will be accessed directly from a modified existing crossover in Bennett Road.

The layout of the proposed development and car park accesses are shown in **Attachment A**.

4. CAR PARKING CONSIDERATIONS

4.1 Car Parking Requirements

The car parking requirements for the land use components of the proposed development are set out in the City of Penrith's, "Development Control Plan (2014)", specifically, Chapter 10.5.1, Table C10.2.

Reference to this section indicates that the car parking requirement for a proposed Health Consulting Rooms/Medical Centre is:

3 spaces per health care professional practicing at any one time plus 1 space per receptionist/support staff, plus 1 space per associated dwelling.

Application of the car parking requirement to the proposed development results in a requirement to provide seven spaces for the medical centre.

Further, reference to the Building Code of Australia indicates that, for a medical use there is a requirement to provide one accessible parking space, which is satisfied by the proposed accessible space.

The proposed car parking provision of eight car spaces, inclusive of a disabled parking space, satisfies the requirements of the City of Penrith's, "Development Control Plan (2014)", specifically, Chapter 10.5.1, Table C10.2.

4.2 Bicycle Parking Requirements

The bicycle parking requirements for the land use components of the proposed development are set out in the City of Penrith's, "Development Control Plan (2014)", specifically, Chapter 10.7, section 2 (c), which requires that:

Applicants should comply with the suggested bicycle parking provision rates for different land use types in the document 'Planning Guidelines for Walking and Cycling (NSW Government 2004)'.

This clause seeks to encourage cycling as a mode of transport with the provision of secure, accessible and convenient bicycle parking spaces.

The bicycle parking requirement stipulated within 'Planning Guidelines for Walking and Cycling (NSW Government 2004)' for 'Health and Medical Centres' is 5-10 % of the parking supply for staff and 5-10 % of the parking supply for visitors.

Application of the rate to the proposed use results in a bicycle parking requirement of one bicycle space for staff and one bicycle space for visitors for the proposed medical practice.

Having regard to the above, it is recommended that one bike rack be provided within the car parking area (to accommodate two bikes) for staff and patients who cycle to the facility.

The provision of this facility is anticipated to encourage staff and patients to cycle to and from the proposal and the immediate area.

4.3 Car park layout and access

4.3.1 Dimensions of car accommodation

It is proposed to provide a total of eight car parking spaces, inclusive of a disabled parking space with five spaces provided in the main car park and three staff parking bays located at the front of the development site accessed directly via the existing crossover in Bennet Road.

The parking spaces have been provided at a width varying between 2.4 m and 2.6 m and a length of 5.4 m with an aisle width in excess of 5.8 m, which accords with the requirements specified in AS 2890.1:2004.

Offset clearances of 0.3 m have generally been provided adjacent to bays located next to end walls as required by AS 2890.1:2004.

The parking space within the garage should technically be provided at a minimum width of 3 m, which consists of a 2.4 m wide bay and 300 mm offset clearances on either side of the bay, however given that the garage is existing, it is considered that the internal width of 2.9 m will allow a staff member to safely park their vehicle within the garage and have sufficient clearance to enter/exit their vehicle.

The disabled bay is proposed to be provided at a width of 2.4 m with the adjacent shared/manoeuvring space provided at a width of 2.4 m with a length of 5.4 m and with a centrally located column in the shared space off-set 800 mm from the accessway, which accords with Clause 2.4 of the Australian Standards, AS 2890.6 (2009).

It is however recommended that disabled parking signage and pavement markings be installed for the disabled bay.

4.3.2 Access to/from car spaces

The swept paths of vehicles entering and exiting the respective car spaces on the development site have been assessed with the use of the AutoTURN computer software for a B85 car, the analysis of which is shown in **Attachment B**.

The analysis indicates that to enable a motorist to safely access the on-site spaces, reverse from the spaces and exit from the main car parking area in a forward manner to McLaren Grove.

4.3.3 Width of internal access

To determine the width of the accessway, reference is made to Clause 3.2.1 of AS 2890.1 (2004) which states that, for user class 3/3a developments (with a local road frontage) which contain less than 25 on-site spaces, a minimum accessway width of between 3 m and 5.5 m is required to be provided.

Reference to the layout plans indicate that the width of the main car park access has been provided at a width of 5.5 m, which facilitates two way vehicular flow at the entrance to the main car park.

It is proposed to widen the existing crossover along Bennet Road to provide access to the staff spaces.

The width of the two car park access points satisfy the requirements of AS 2890.1 (2004).

4.3.4 Sight lines for exiting motorists

Figure 3.3 of the Australian Standard for off-street car parking, AS 2890.1 (2004) specifies that the minimum sight lines for pedestrian safety along a circulation driveway or domestic driveway.

The minimum sight lines are specified as clear sight line triangles which extend 2 m along the frontage road from the edge of an exit lane and 2.5 metres along the exit lane from the frontage. The sight line triangles are required to be clear of visual obstructions to provide the exiting motorist with a clear view of pedestrians on the footpath of the frontage road (and vice versa).

Reference to the layout plans indicate that clear sight line triangles have been provided on either side of the access on Bennet Road.

It is noted that no footpath is provided along the north side of McLaren Grove adjacent to the development site.

Notwithstanding the above, to ensure maximum sight lines are provided for exiting motorists to motorists travelling along McLaren Grove and to any pedestrians walking along the north side McLaren Grove, it is recommended that a convex mirror be provided on the west side of the McLaren Grove access adjacent to the title boundary.

Further, any obstructions within the sight line triangles on either side of the accessway at the title boundary (eg mail boxes, landscaping), are required to be less than a maximum height of 900 mm.

5. OTHER

5.1 Commercial vehicles

Discussions with the applicant indicates that, based upon her experience at the medical practice where she works, deliveries associated with the proposed medical practice are anticipated to be predominantly undertaken by small courier vehicles, which could be accommodated within the on-site car park.

5.2 Refuse

The refuse bins are proposed to be stored along the side of the medical centre and would be wheeled to the Bennet Road kerbside area to be serviced by a private contractor.

6. TRAFFIC IMPACT

The level of traffic anticipated to be generated at the development access points are considered minimal and will not represent any adverse impact upon the operation of the surrounding road network.

7. CONCLUSIONS AND RECOMMENDATIONS

Having regard to the above, it is concluded that:

- The proposed car parking provision of eight car spaces, inclusive of a disabled parking space, satisfies the requirements of the *City of Penrith's, "Development Control Plan (2014)"*, specifically, Chapter 10.5.1, Table C10.2;
- The on-site car park has been generally designed in accordance with the requirements stipulated in the Australian Standard, AS 2890.1 – 2004; and
- The level of traffic anticipated to be generated at the development access points are considered minimal and will not represent any adverse impact upon the operation of the surrounding road network

Further, it is recommended that:

- one bike rack be provided within the car parking area (to accommodate two bikes) for staff and patients who cycle to the facility;
- disabled parking signage and pavement markings be installed for the disabled bay;
- a convex mirror be provided on the west side of the McLaren Grove access adjacent to the title boundary; and
- any obstructions within the sight line triangles on either side of the accessway at the title boundary, are required to be less than a maximum height of 900 mm.



Evan Boloutis
Director
EB Traffic Solutions Pty Ltd

B.Eng (Civil), MEng Sc (Traffic), MBA

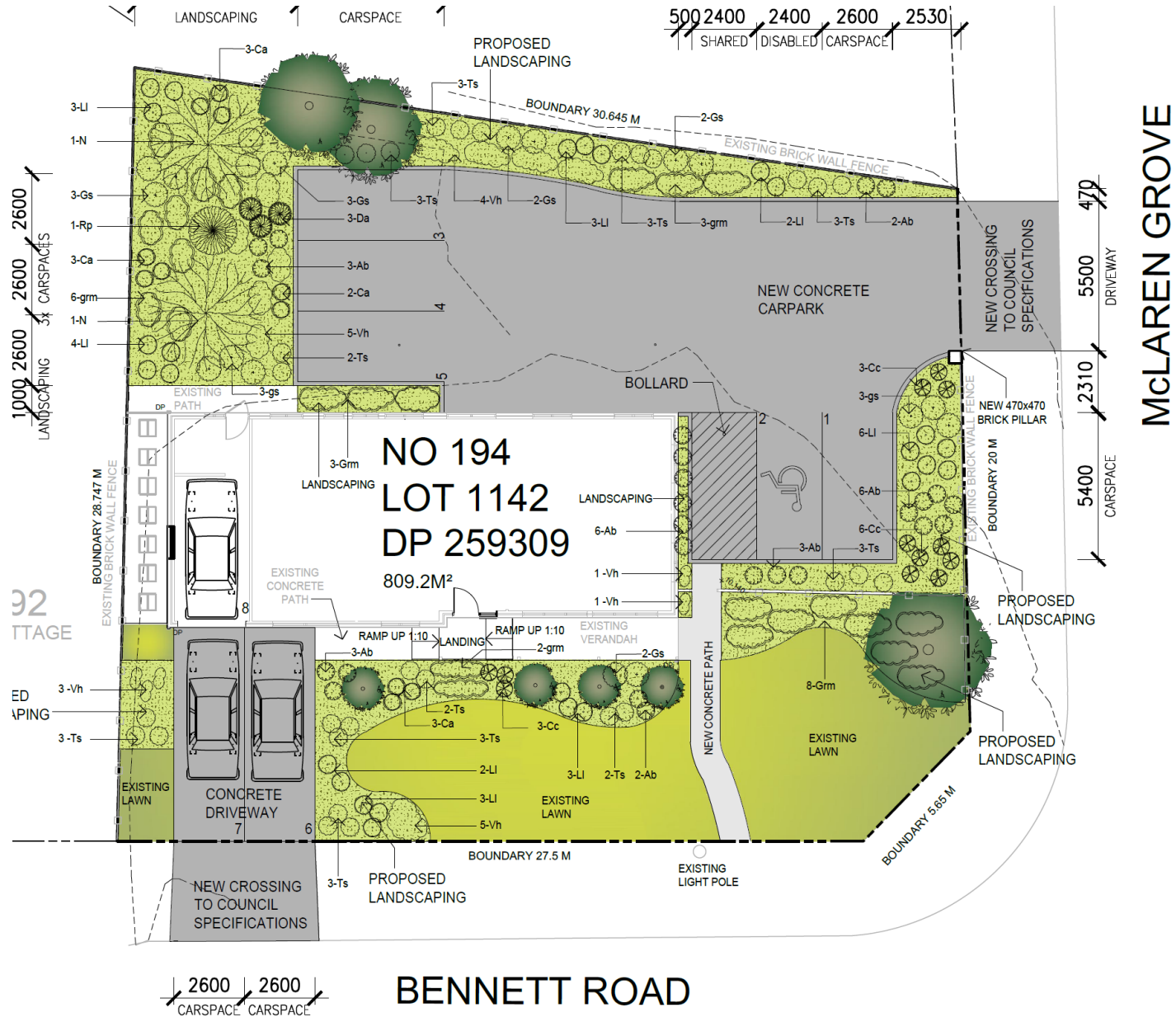
Copyright

The information contained in this report is confidential and intended for the use of the client specified on the front of the report. No representation is made or is implied to be made to any third party. No part of this report may be reproduced or used without the written permission of EB Traffic Solutions Pty Ltd. Any unauthorised use of this report will constitute an infringement of copyright.

Disclaimer

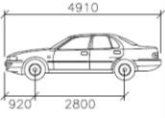
EB Traffic Solutions Pty Ltd takes no responsibility in any way to any person or organisation, other than that for which the report has been prepared, in respect of the information contained in this report, including any omissions or errors.

ATTACHMENT A
DEVELOPMENT LAYOUT PLAN

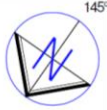


ATTACHMENT B
SWEPT PATH ANALYSIS

Design Vehicle

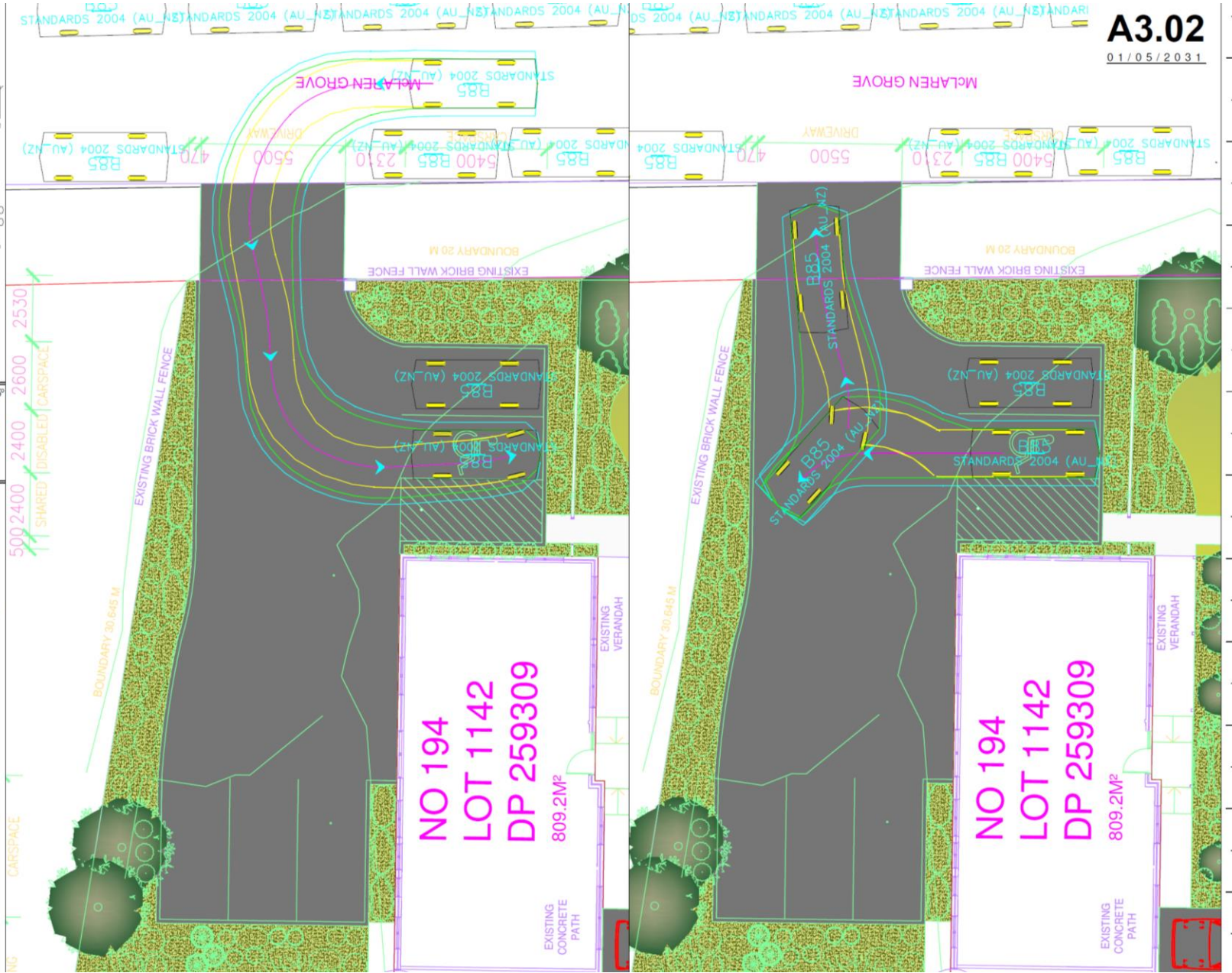


B85 mm
 Width : 1870
 Track : 1770
 Lock to Lock : 6.0
 Steering Angle : 38.5



194 Bennet Road, St Clair (NSW)

Scale 1:125 @ A3
 Swept Path Diagram (B85 Car)
 Plan prepared by EB Traffic Solutions Pty Ltd

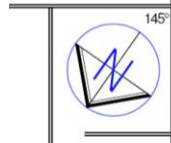


A3.02
 01/05/2021

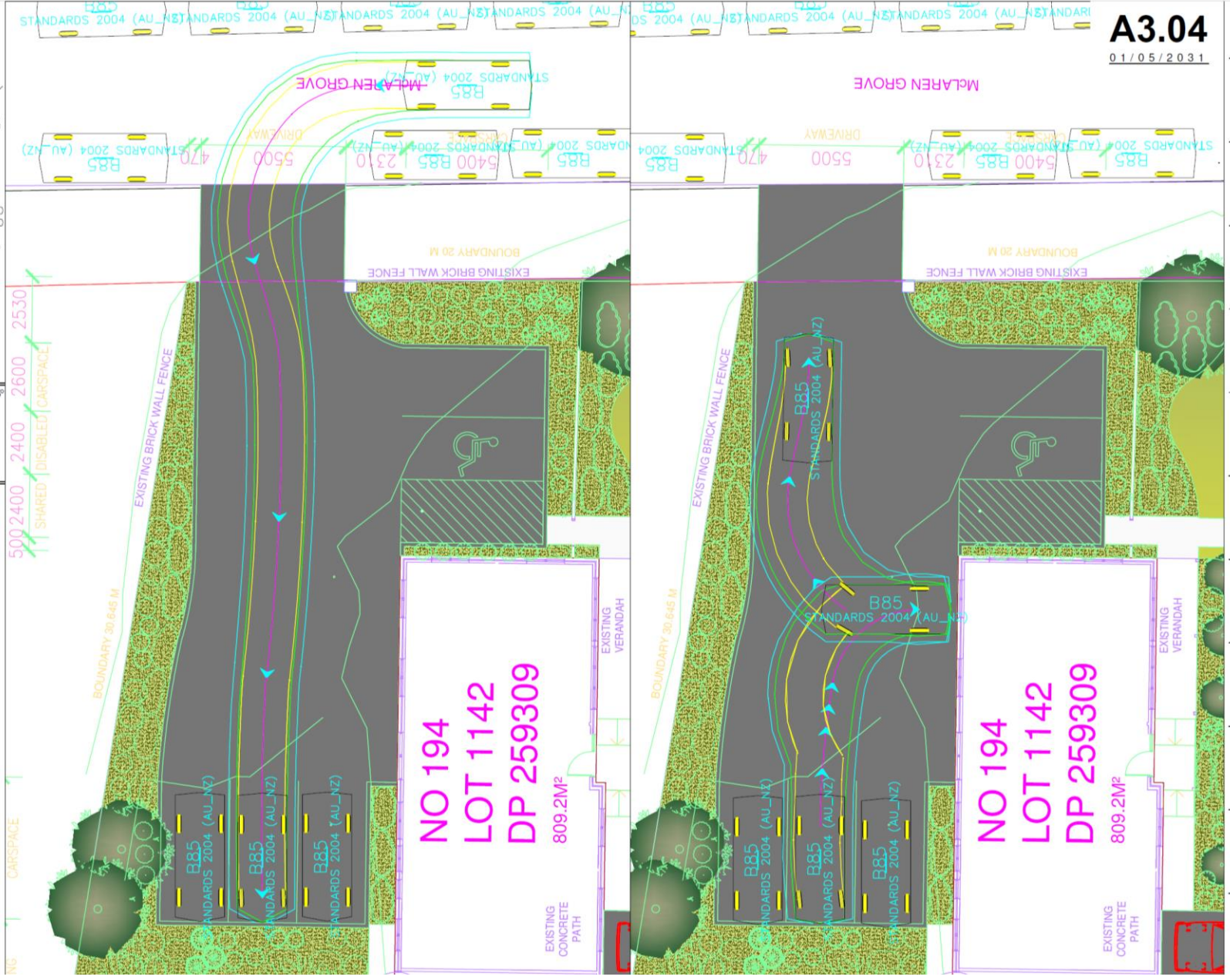
B Traffic Solutions
Design Vehicle

B85 mm
 Width : 1870
 Track : 1770
 Lock to Lock : 6.0
 Steering Angle : 38.5

A3.04
 01/05/2031

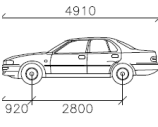


194 Bennet Road, St Clair (NSW)
 Scale 1:125 @ A3
 Swept Path Diagram (B85 Car)
 Plan prepared by EB Traffic Solutions Pty Ltd





Design Vehicle



B85 mm
Width : 1870
Track : 1770
Lock to Lock : 6.0
Steering Angle : 38.5

194 Bennet Road, St Clair (NSW)

Scale 1:125 @ A3
Swept Path Diagram (B85 Car)
Plan prepared by EB Traffic Solutions Pty Ltd

