

Proposed Mixed-Use Development

52-54 Powell Street & 125 Parramatta Road
Homebush

TRAFFIC AND PARKING ASSESSMENT REPORT

**STRATHFIELD COUNCIL
RECEIVED**

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19 November 2019**

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Ref 19471

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TABLE OF CONTENTS

1. INTRODUCTION	1
2. PROPOSED DEVELOPMENT	4
3. TRAFFIC ASSESSMENT	9
4. PARKING ASSESSMENT	16

LIST OF ILLUSTRATIONS

Figure 1	Location
Figure 2	Site
Figure 3	Road Hierarchy
Figure 4	Existing Traffic Controls
Figure 5	Existing Public Transport

1. INTRODUCTION

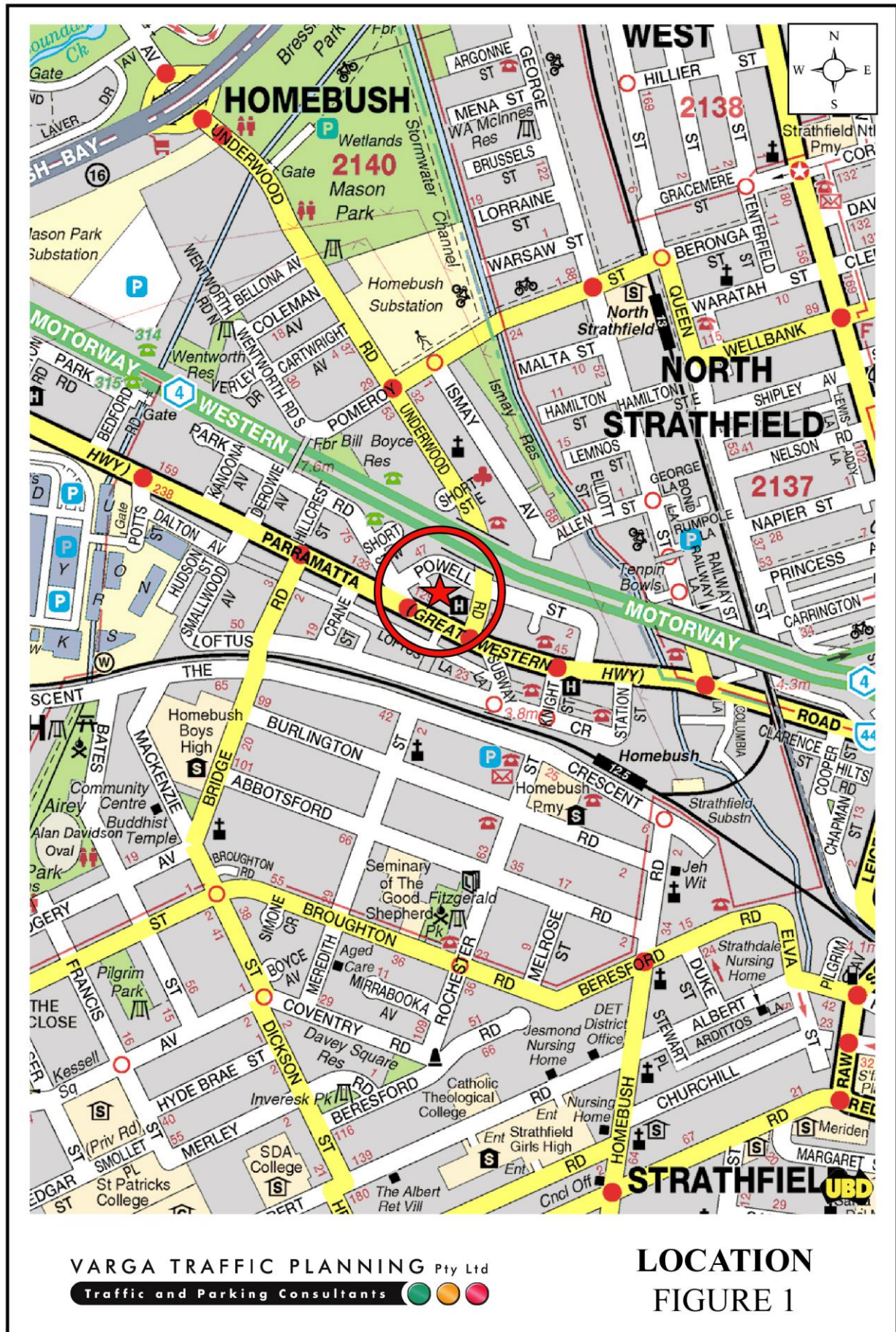
This report has been prepared to accompany a development application to Strathfield Council for a mixed-use development to be located at 52-54 Powell Street & 125 Parramatta Road, Homebush (Figures 1 and 2).

The proposed development involves demolition of existing structures on the site to facilitate the construction of a mixed-use residential apartment building with a commercial component.

Off-street parking is to be provided in a multi-level basement car parking area beneath the building in accordance with Council requirements.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- reviews the public transport facilities in the vicinity of the site
- estimates the traffic generation potential of the development proposal
- assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking and loading provided on the site.





2. PROPOSED DEVELOPMENT

Site

The subject site is located on the northern side of Parramatta Road extending through to Powell Street, approximately mid-way between Park Road and Underwood Road. The site has street frontages approximately 30 metres in length to both Parramatta Road and Powell Street, and occupies an area of approximately 3,025m².

The site is currently occupied by a sports goods retail outlet centre with a cumulative floor area of some 1,300m². Off-street parking is currently accommodated in an at-grade, open car parking area at the rear of the building, accessed off Powell Street.

A recent aerial photograph showing the site and its surroundings is provided below.



Courtesy of Nearmap Imagery 2019

Proposed Development

The proposed development involves demolition of existing structures on the site to facilitate the construction of a mixed-use residential apartment building with a commercial component.

A total of 119 residential apartments are proposed in the building as follows:

Studio apartments:	2
1 bedroom apartments:	47
2 bedroom apartments:	70
TOTAL APARTMENTS:	119

A small commercial component is proposed on the ground floor level fronting Parramatta Road with a cumulative floor area of 133m².

Off-street parking is proposed for a total of 121 cars in a multi-level basement car parking area in accordance with Council requirements.

Vehicular access to the off-street car parking facilities is to be provided via an entry / exit driveway located towards the western end of the Powell Street site frontage.

Loading / servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles up to and including 6.4m long Small Rigid Vehicles (SRV trucks). A dedicated service area is to be provided on the upper basement level, and the associated manoeuvring areas has been designed to allow these SRV trucks to always enter and exit the site whilst travelling in a forward direction.

Plans of the proposed development have been prepared by *Urban Link* and are reproduced in the following pages.

[illegible]

A DEVELOPMENT APPLICATION	DT1119	04
Site Description	Date	April
Project		

**POWELL ST APARTMENTS
MIXED USE MULTI RESIDENTIAL**
52-54 Powell St. & 125 Parramatta Rd.
Homebush NSW 2135 AUSTRALIA



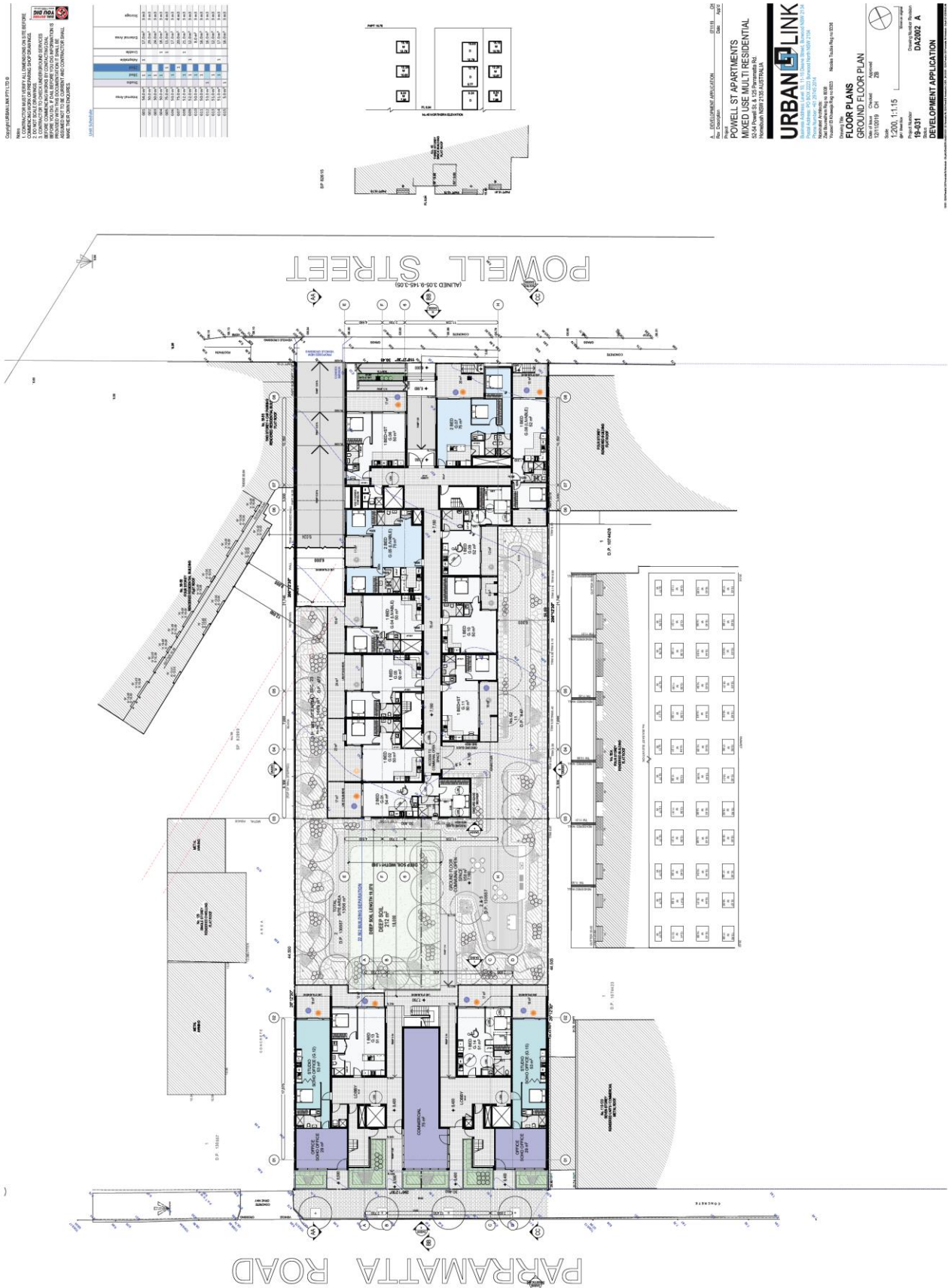
Business Address: Level 10, 1-15 Chancery Street, Burnside NSW 2156
Postal Address: PO BOX 2223 Burnside North NSW 2156
Phone Number: +61 29545 2014
Business Website:
222 Burnside North Way No 3038
Musical PO Boxville Bay No 6032
Musica To La Riga No 3036

Creating Tile FLOOR PLANS

<div> <div>BASEMENT 01</div> <div> <div>Date of Issue</div> <div>19/11/2019</div> </div> <div> <div>Checked</div> <div>CH</div> </div> <div> <div>Approved</div> <div>ZB</div> </div> </div>	
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Scales
1:200
April 3, 1964

Project Number	19-031	Contract Number	DA2001 A
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3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

The M4 Motorway is classified by the RMS as a *State Road* and provides the key east-west road link in the area, which extends from Concord in Sydney's inner west to Lapstone at the foothills of the Blue Mountains. It typically carries two traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island. All intersections with the M4 Motorway are grade-separated.

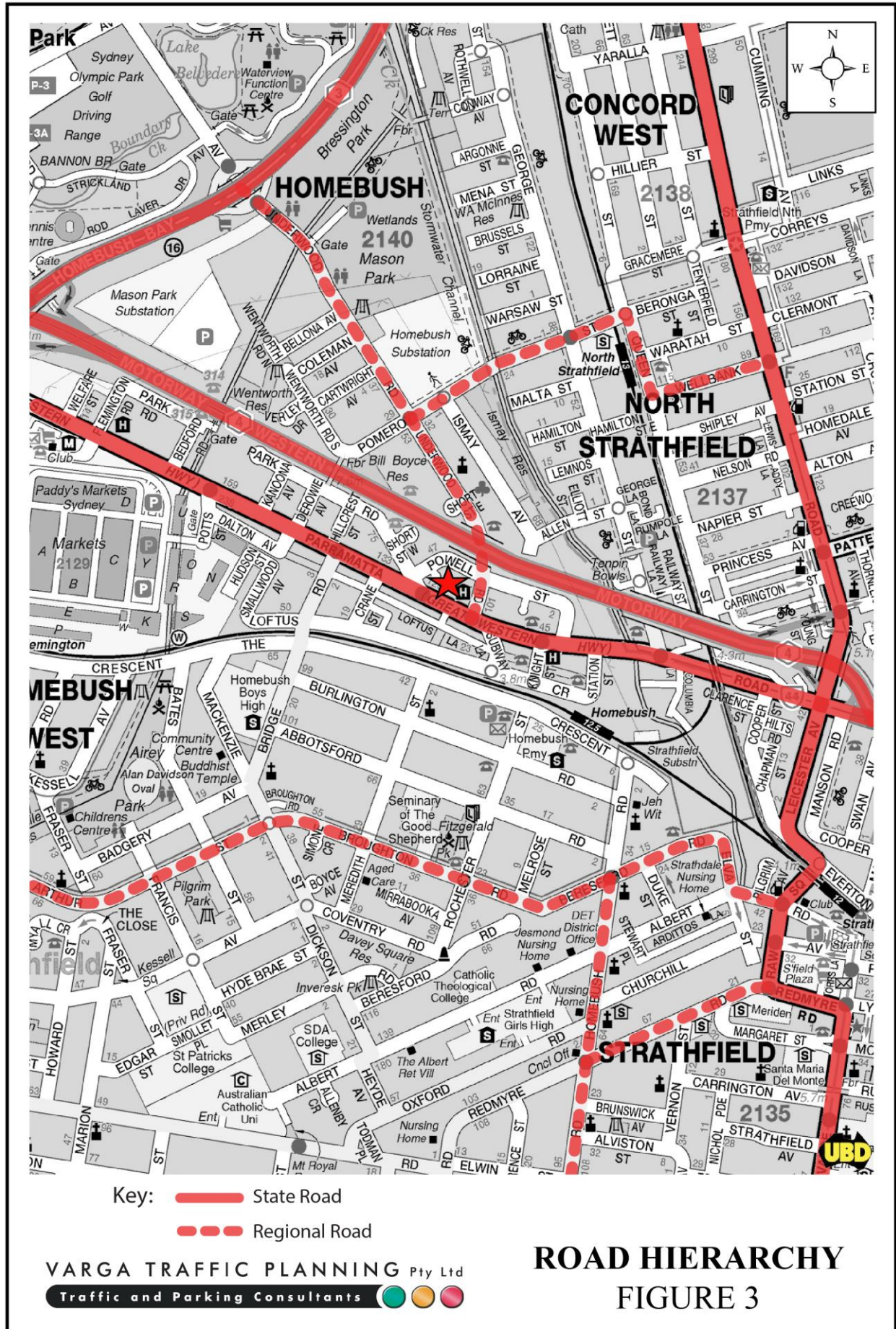
Parramatta Road is also classified by the RMS as a *State Road* and provides another key east-west road link in the area, linking Sydney CBD and Granville. It typically carries three traffic lanes in each direction in the vicinity of the site, with Clearway restrictions applying along both sides of the road during commuter peak periods.

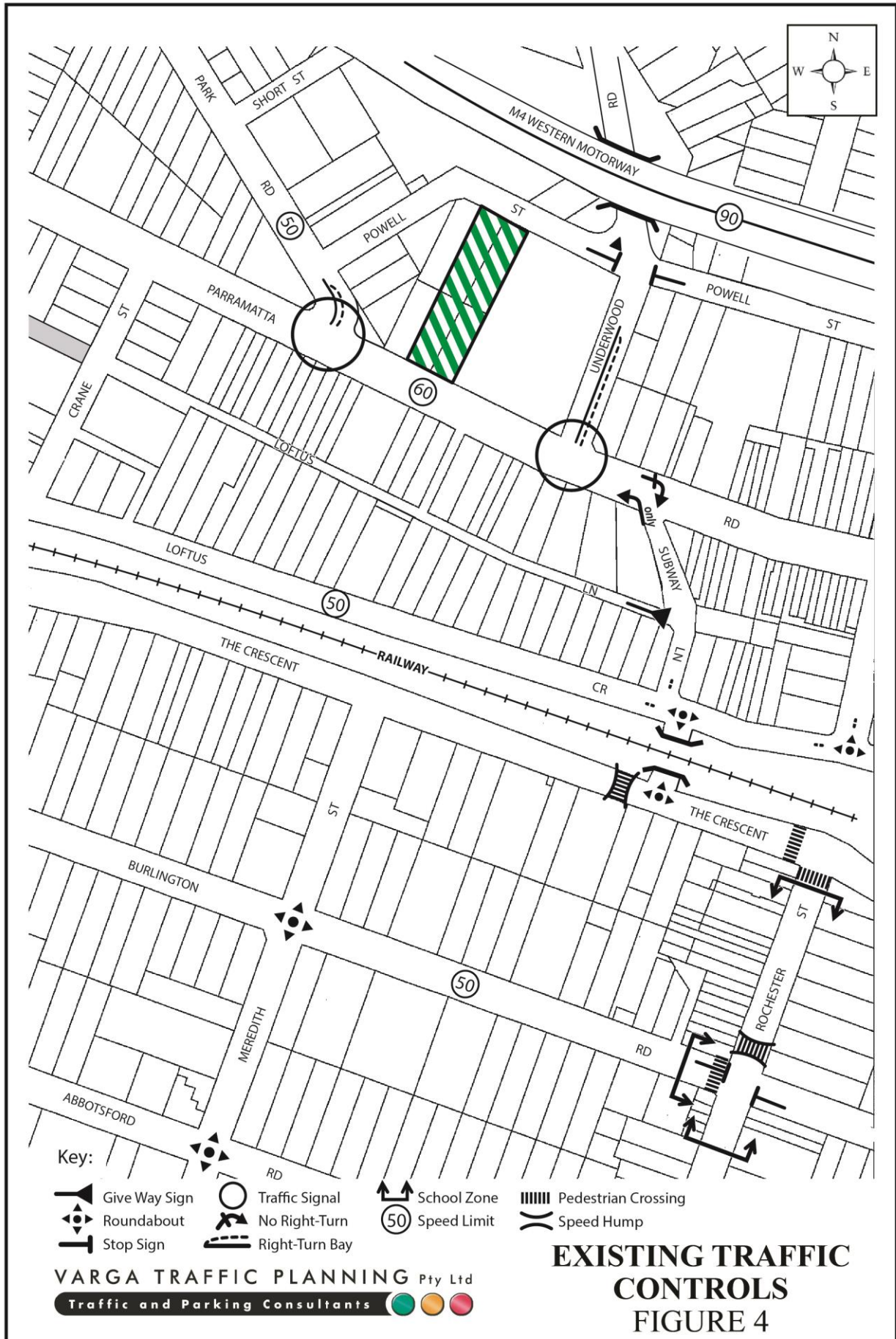
Powell Street is a local, unclassified road that is primarily used to provide vehicular access to those properties with street frontage to Parramatta Road. Unrestricted kerbside parking is generally permitted along both sides of the road.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 90 km/h SPEED LIMIT which applies to the M4 Motorway
- a 60 km/h SPEED LIMIT which applies to Parramatta Road
- a 50 km/h SPEED LIMIT which applies to all local roads in the area





- TRAFFIC SIGNALS in Parramatta Road where it intersects with Park Road and Underwood Road
- STOP SIGNS in Powell Street onto Underwood Road.

Existing Public Transport

The existing public transport services available within the vicinity of the site are illustrated on Figure 5.

The Homebush Railway Station is located within 700 metres walking distance (approx. 9 minutes) to / from the site servicing the T2 inner West & Leppington Line travelling between Parramatta or Leppington to City. Train services typically arrive / depart the station at 5-10 minute intervals during commuter peak periods and at 15 minute intervals at other times.

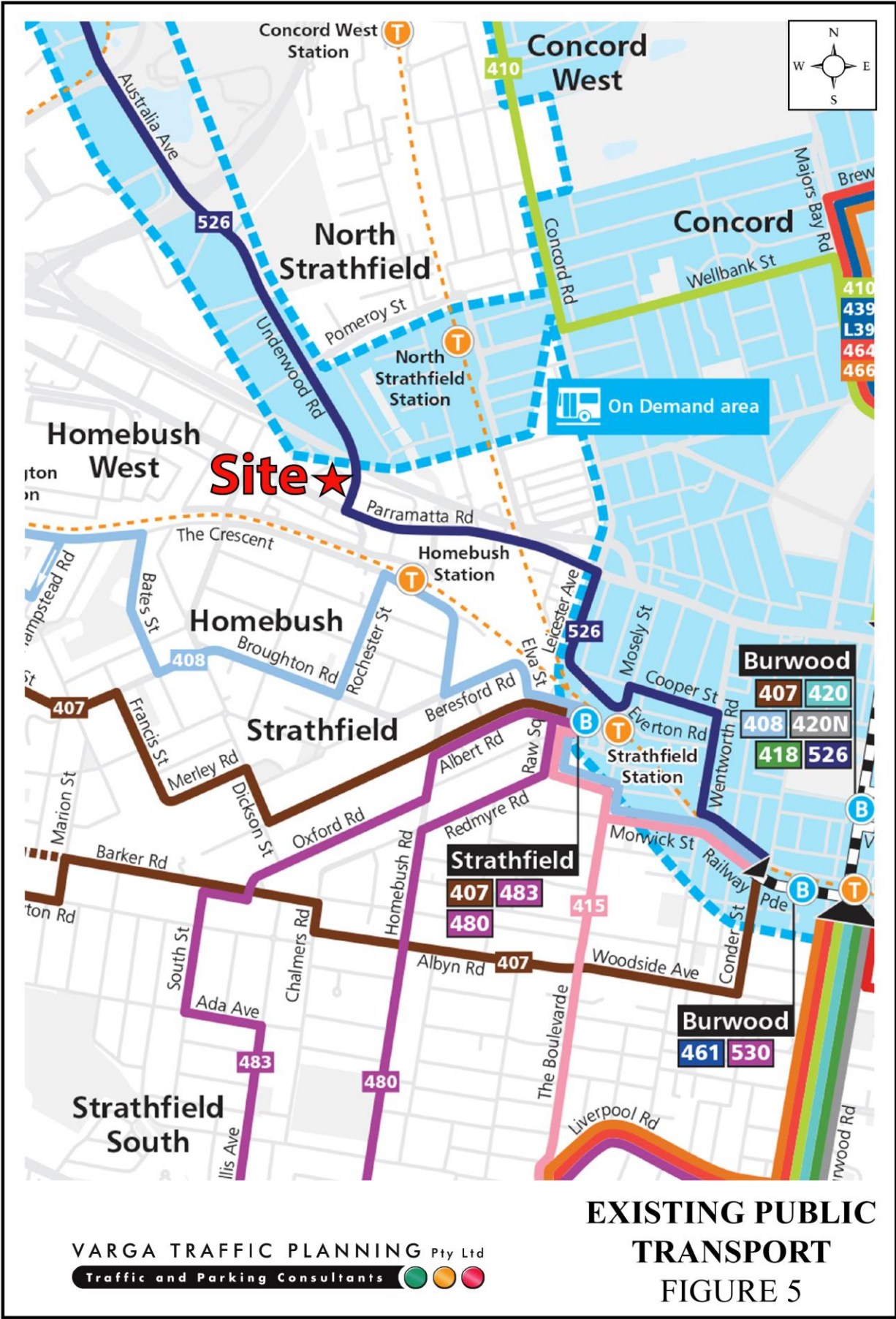
The nearest bus stop on Parramatta Road is located within a convenient 250 metres walking distance (approx. 3 minutes) to / from the site servicing bus route 525 (Parramatta to Burwood via Sydney Olympic Park) and bus route 526 (Burwood to Rhodes Shopping Centre).

On the above basis, it is clear that the site is readily accessible by existing public transport services and is ideally located to facilitate travel by sustainable modes of transport.

Projected Traffic Generation

The traffic implications of a development proposal primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network during the weekday morning and afternoon commuter peak periods.

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the RMS *Technical Direction (TDT 2013/04a)* document.



The RMS *Technical Direction* document specifies that it replaces those sections of the RMS *Guide* indicated, and that it must be followed when RMS is undertaken trip generation and/or parking demand assessments.

The RMS *Guidelines* and *Technical Direction* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the development proposal:

High Density Residential Flat Dwellings

AM: 0.19 peak hour vehicle trips per unit

PM: 0.15 peak hour vehicle trips per unit

Commercial Premises

AM: 1.6 peak hour vehicle trips per 100m² GFA

PM: 1.2 peak hour vehicle trips per 100m² GFA

Application of the above traffic generation rates to the various components of the development proposal yields a traffic generation potential of approximately 25 vehicle trips per hour (vph) during the AM peak hour and 20 vph during the PM peak hour, as set out below:

Projected Future Traffic Generation Potential

	AM	PM
Residential (119 apartments):	22.6 vph	17.9 vph
Commercial (133m ²):	2.1 vph	1.6 vph
TOTAL TRAFFIC GENERATION POTENTIAL:	24.7 vph	19.5 vph

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected of the site to occur as a consequence of the development proposal.

The RMS *Guidelines* and *Technical Direction* nominate the following traffic generation rates which are applicable to the existing uses of the site:

Discount Department Stores

AM: *Assume 20% of PM peak hour

PM: 5.1 peak hour vehicle trips per 100m²

Application of the above traffic generation rates to the existing retail premises of 1,300m² yields a traffic generation potential of approximately 13 vph during the AM peak hour and 66 vph during the PM peak hour.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential of the site of approximately 11 vph during the AM peak hour and a *nett reduction* of 47 vph during the PM peak hour, as set out below:

Projected Nett Change in Peak Hour Traffic Generation Potential of the Site as a Consequence of the Development Proposal		
	AM	PM
Projected Future Traffic Generation Potential:	24.7 vph	19.5 vph
Less Existing Traffic Generation Potential:	-13.3 vph	-66.3 vph
NETT CHANGE IN TRAFFIC GENERATION POTENTIAL:	11.4 vph	-46.8 vph

That projected *nett change* in the traffic generation potential of the site as a consequence of the development proposal is minimal and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site include:

- CLEARWAY / NO STOPPING restrictions on both sides of Parramatta Road including along the site frontage
- generally UNRESTRICTED PARKING on both sides of Powell Street.

Off-Street Car Requirements

The off-street parking requirements applicable to the subject site are specified in *Strathfield Development Control Plan No. 20 – Parramatta Road Corridor Area (in force from May 2006)*. The DCP 20 nominates the following parking rates which could be applicable to the development proposal:

A. Retail Development

Retail / commercial development to provide parking generally in accordance with Council's DCP No. 4 except as varied below:

- For shops less than 500m² GFA, one space per 50m².

D. Mixed use Developments

Where a proposed development includes both commercial and residential uses, the following parking provisions for the residential component will be applied.

- 1 space per 1 and 2 bedroom unit.
- 1.5 spaces per 3 or more bedroom unit.
- Visitor parking:

It is considered appropriate to maximise use of any commercial parking spaces on site as well as nearby kerbside parking supply and part of any public off-street public parking areas for use by visitors. Council will require some provision of visitor parking on-site in accessible locations for large scale residential buildings in excess of 20 units. In this regard 1 parking space per 5 units for visitors is required.

Application of the above residential parking rates to the various components of the development proposal yields an off-street car parking requirement of 146 spaces as set out below:

Residential (119 apartments):	119.0 spaces
Visitors:	23.8 spaces
Commercial (133m ²):	2.7 spaces
TOTAL:	145.5 spaces

Notwithstanding the above, the subject site is located within 800 metres of a railway station in the Sydney metropolitan area, and therefore the residential component of the development is also subject to the parking requirements specified in the *State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development (Amendment No 3), 2015* in the following terms:

30 Standards that cannot be used to refuse development consent or modification of development consent

- (1) If an application for the modification of a development consent or a development application for the carrying out of development to which this Policy applies satisfies the following design criteria, the consent authority must not refuse the application because of those matters:

- a) if the car parking for the building will be equal to, or greater than, the recommended minimum amount of car parking specified in Part 3J of the Apartment Design Guide.

Reference is therefore made to the *Apartment Design Guide 2015, Section 3J – Bicycle and Car Parking* document which nominates the following car parking requirements:

Objective 3J-1

Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas

For development in the following locations:

- on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or

- on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre

the minimum car parking requirements for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.

The car parking needs for a development must be provided off street.

Comparison therefore needs to be drawn between the off-street car parking requirements for residential flat buildings outlined in the Council's *DCP* and also the RMS *Guidelines* to determine the *lesser* requirement. The relevant car parking rates outlined in the RMS *Guidelines* are reproduced below:

High Density Residential Flat Buildings

0.6 spaces per 1 bedroom unit

0.9 spaces per 2 bedroom unit

1.4 spaces per 3 bedroom unit

1 space per 5 units for visitor parking

Accordingly, the minimum off-street car parking requirement applicable to the residential component of the development is 116 spaces, comprising 92 residential spaces and 24 visitor spaces as set out below:

	Council DCP	RMS Guidelines
Residential:	119.0 spaces	92.4 spaces
Visitors:	23.8 spaces	23.8 spaces
Total:	142.8 spaces	116.2 spaces

The total minimum off-street parking requirement applicable to the proposed development is therefore 119 spaces as set out below:

Residential (51 apartments):	92.4 spaces (RMS)
Visitors:	23.8 spaces (RMS)
Retail shops (342m ²):	2.7 spaces (DCP)
TOTAL:	118.9 spaces

The proposed development makes provision for a total of 121 car spaces, thereby satisfying Council's car parking code requirements.

The geometric design layout of the proposed car parking facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 – Off-Street Car Parking AS2890.1* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6* in respect of parking bay dimensions, ramp grades / transitions and aisle / driveway widths.

Loading / Servicing Provisions

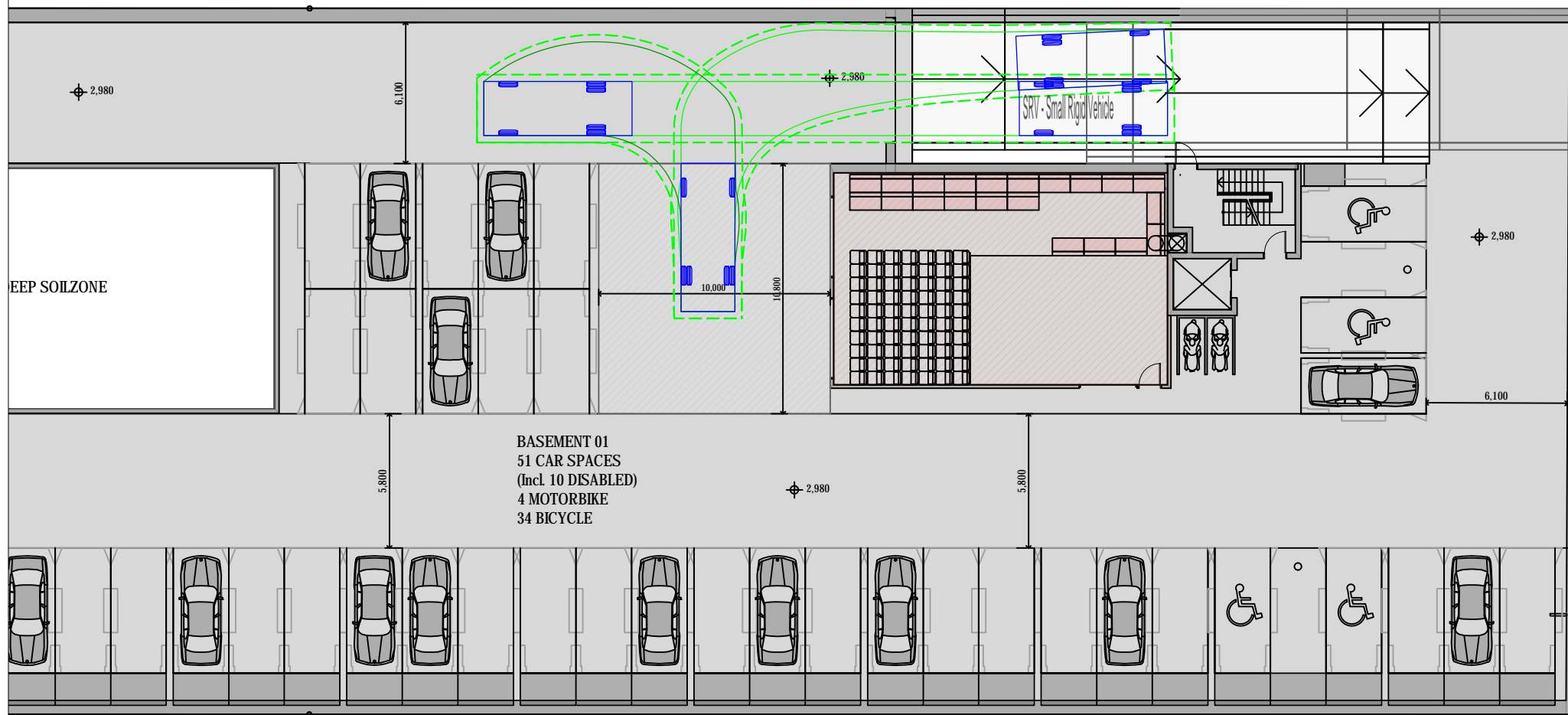
The proposed new mixed-use building is expected to be serviced by a variety of commercial vehicles up to and including 6.4 metres long SRV trucks.

A dedicated service area will be provided on the upper basement level. The manoeuvring areas has been designed to accommodate the *swept turning path* requirements of these SRV trucks, allowing them to enter and exit the site whilst driving in forward direction at all times, as demonstrated by the attached *swept turning path* diagram.

The geometric design layout of the proposed loading / service area has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2* in respect of loading bay dimensions and manoeuvring requirements for SRV trucks.

Conclusion

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in both Council's requirements as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking or loading implications.



BASEMENT 01
51 CAR SPACES
(Incl. 10 DISABLED)
4 MOTORBIKE
34 BICYCLE

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PROJECT
MIXED-USE DEVELOPMENT

DRAWING TITLE
TURNING PATHS 191112

ADDRESS
52-54 Powell Street
125 Parramatta Road
Homebush

PROJECT NO.
19471
REVIEWED
RV

1:250 @ A4
DATE DRAWN
2019-10-28
PREPARED
TY

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants

