

Proposed Residential Development

**188-190 Moore Street,
Liverpool**

TRAFFIC AND PARKING ASSESSMENT REPORT

28 June 2016

Ref 15708

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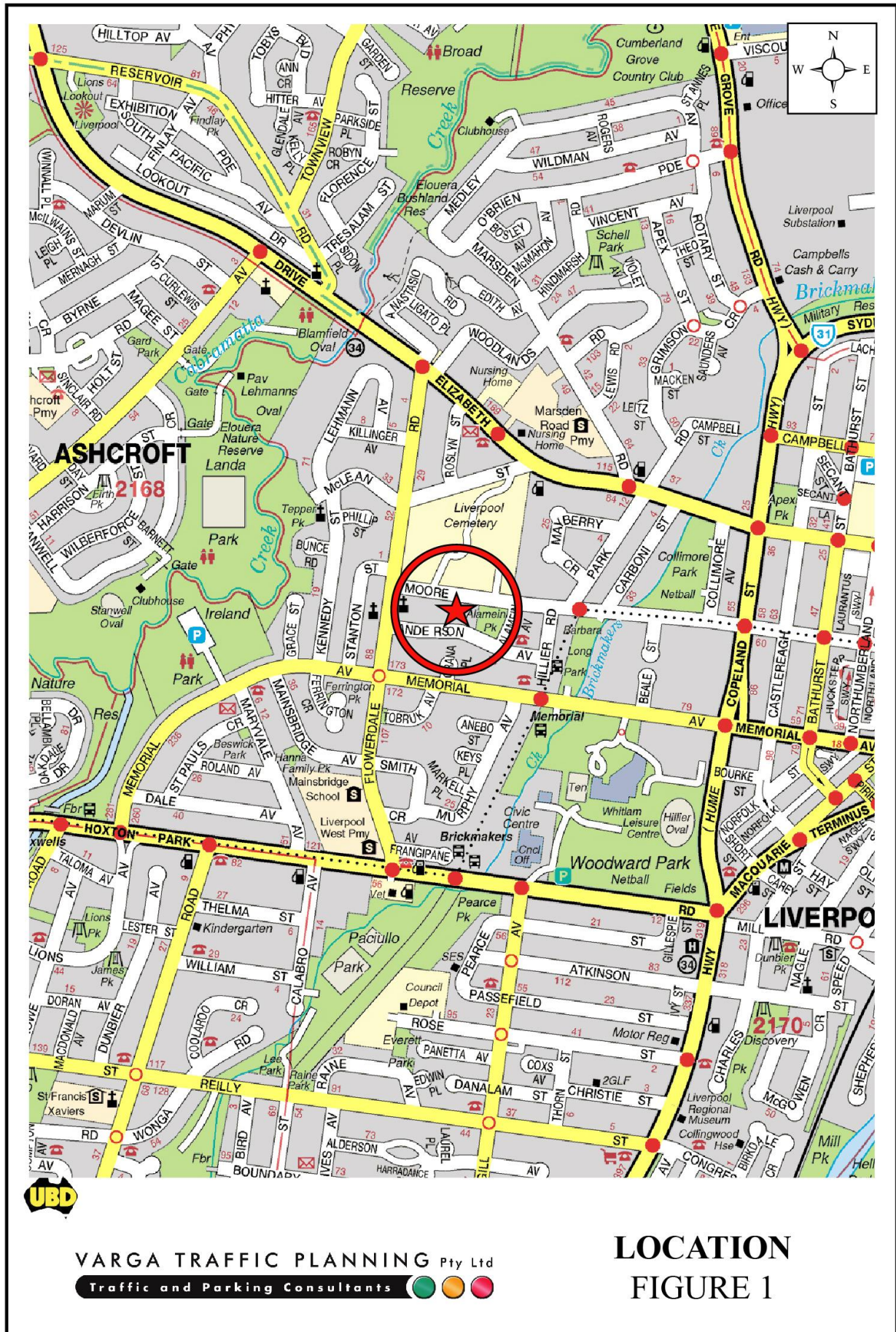
1. INTRODUCTION

This report has been prepared to accompany a Development Application to Liverpool City Council for a residential development proposal to be located at 188-190 Moore Street, Liverpool (Figures 1 and 2).

The proposed development involves the demolition of the existing dwelling house on the site to facilitate the construction of a new residential development in accordance with the *SEPP (Affordable Rental Housing) 2009* for the *Department of Family & Community Services*. Car parking is to be provided in a new single-level car parking area in accordance with the *SEPP* 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
- 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 facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site.





2. PROPOSED DEVELOPMENT

Site

The subject site is located along the southern side of Moore Street, approximately 90m west of Alamein Avenue. The site has a street frontage approximately 30m in length to Moore Street and occupies an area of approximately 1,375m².

The site is currently occupied by a dwelling house with off-street parking in a single garage. Vehicular access to the off-street parking is provided via a single driveway located at the eastern end of the Moore Street site frontage.

Proposed Development

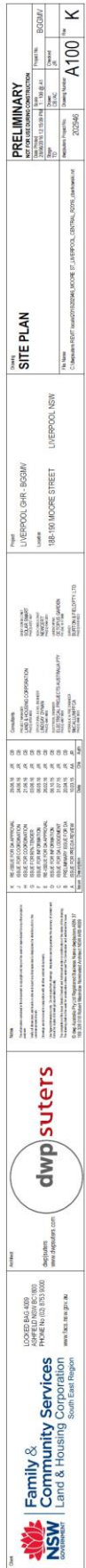
The proposed development involves the demolition of the existing dwelling house on the site to facilitate the construction of a new residential apartment development.

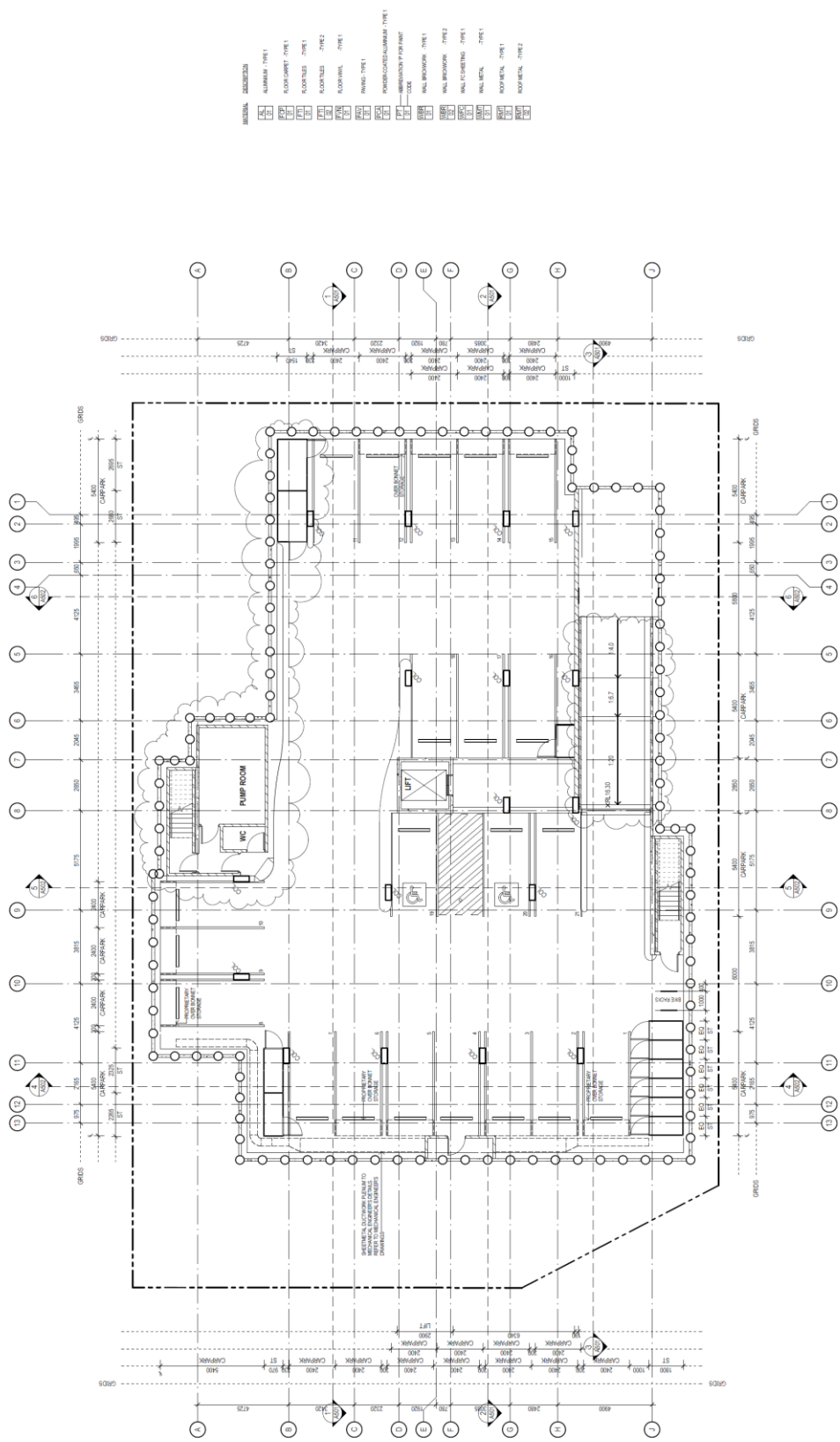
A total of 23 *affordable rental housing* residential apartments are proposed in the new building as follows:

1 bedroom apartments:	15
2 bedroom apartments:	8
TOTAL APARTMENTS:	23

Off-street car parking is proposed for a total of 21 cars in a new single-level basement car parking area in accordance with the *SEPP* requirements. Vehicular access to the car parking facilities is to be provided via a new entry/exit driveway located at the eastern end of the Moore Street site frontage.

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





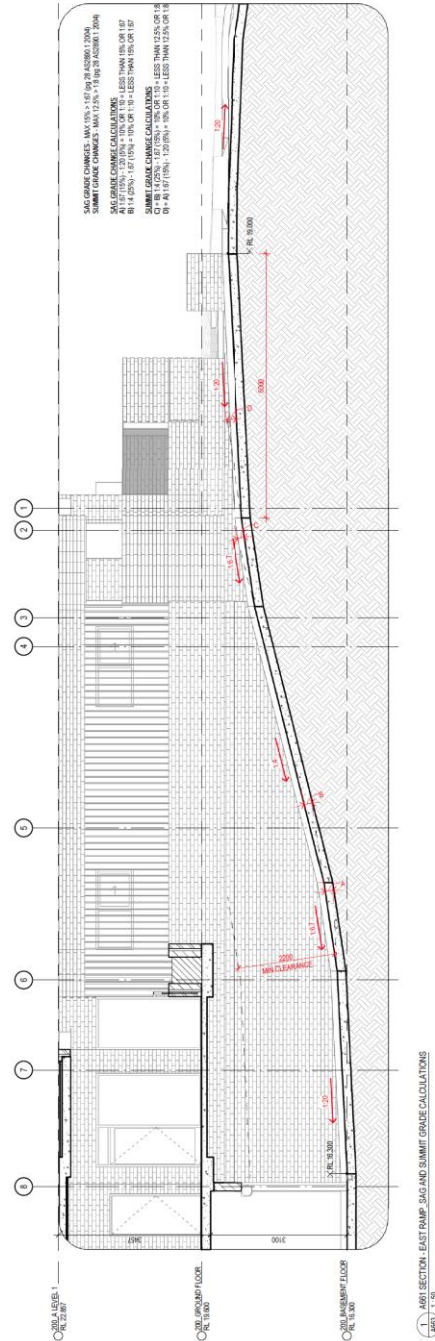


ANALYSIS	DESCRIPTION
1.1	ALUMINUM - TYPE 1
1.2	ALUMINUM - TYPE 2
1.3	ALUMINUM - TYPE 3
1.4	ALUMINUM - TYPE 4
1.5	ALUMINUM - TYPE 5
1.6	ALUMINUM - TYPE 6
1.7	ALUMINUM - TYPE 7
1.8	ALUMINUM - TYPE 8
1.9	ALUMINUM - TYPE 9
1.10	ALUMINUM - TYPE 10
1.11	ALUMINUM - TYPE 11
1.12	ALUMINUM - TYPE 12
1.13	ALUMINUM - TYPE 13
1.14	ALUMINUM - TYPE 14
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1.18	ALUMINUM - TYPE 18
1.19	ALUMINUM - TYPE 19
1.20	ALUMINUM - TYPE 20
1.21	ALUMINUM - TYPE 21
1.22	ALUMINUM - TYPE 22
1.23	ALUMINUM - TYPE 23
1.24	ALUMINUM - TYPE 24
1.25	ALUMINUM - TYPE 25
1.26	ALUMINUM - TYPE 26
1.27	ALUMINUM - TYPE 27
1.28	ALUMINUM - TYPE 28
1.29	ALUMINUM - TYPE 29
1.30	ALUMINUM - TYPE 30



ASSESSMENT PLAN BASEMENT FLOOR
1:100

 Family & Community Services Land & Housing Corporation South Coast Region	 dwpsuters.com.au www.dwp.com.au	Notes 1. ALL DIMENSIONS ARE IN METRES. 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED. 3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 4. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 5. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 6. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 7. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 8. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 9. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 10. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 11. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 12. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 13. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 14. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 15. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 16. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 17. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 18. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 19. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 20. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 21. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 22. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 23. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 24. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 25. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 26. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 27. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 28. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 29. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR. 30. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR.	Scale 1:100	Revision 1.0	Project LIVERPOOL GRR - BODMAY 188-19 MOORE STREET LIVERPOOL NSW	Client LIVERPOOL GRR - BODMAY 188-19 MOORE STREET LIVERPOOL NSW	Drawn 2024/06/01	Checked 2024/06/01	Approved 2024/06/01	PRELIMINARY 2024/06/01
										Project LIVERPOOL GRR - BODMAY 188-19 MOORE STREET LIVERPOOL NSW

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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.

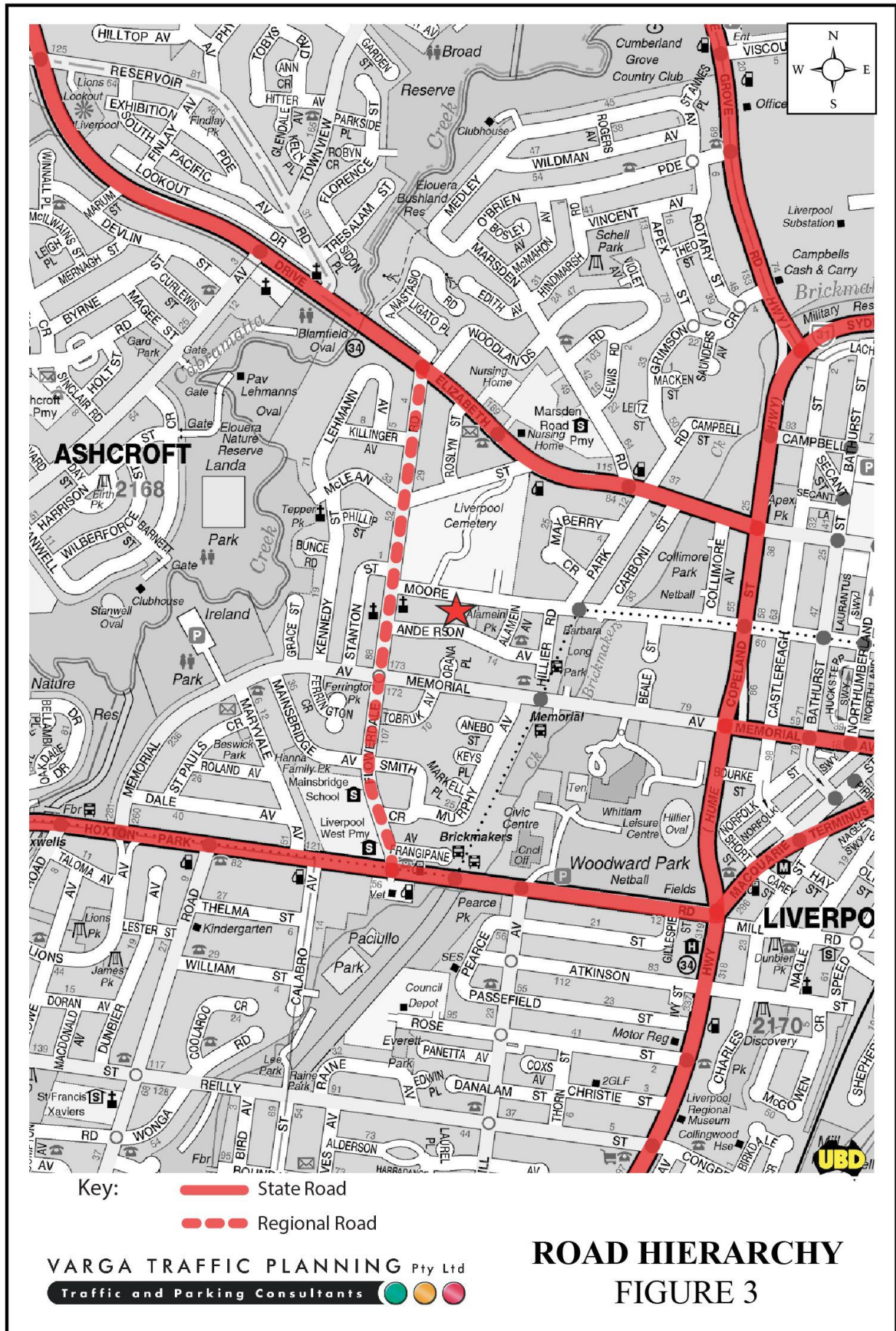
Hume Highway (Copeland Street) is classified by the RMS as a *State Road* and provides the key north-south road link in the area. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island.

Elizabeth Drive is also classified by the RMS as a *State Road* and provides the key east-west road link in the area between Luddenham and Liverpool. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island.

Hoxton Park Road, Macquarie Street, Terminus Street and Newbridge Road are also classified by the RMS as a *State Road* which provides another key east-west road link in the area, linking Chipping Norton and Hoxton Park. The route typically carries two traffic lanes in each direction in the vicinity of the site and widens to three traffic lanes in each direction along Macquarie Street. Clearway restrictions apply along both sides of the road during commuter peak periods.

Flowerdale Road is classified by the RMS as a *Regional Road* which follows a north-south alignment between Elizabeth Drive and Hoxton Park Road. It typically carries one traffic lane in each direction in the vicinity of the site with kerbside parking generally permitted.

Moore Street is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on 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:

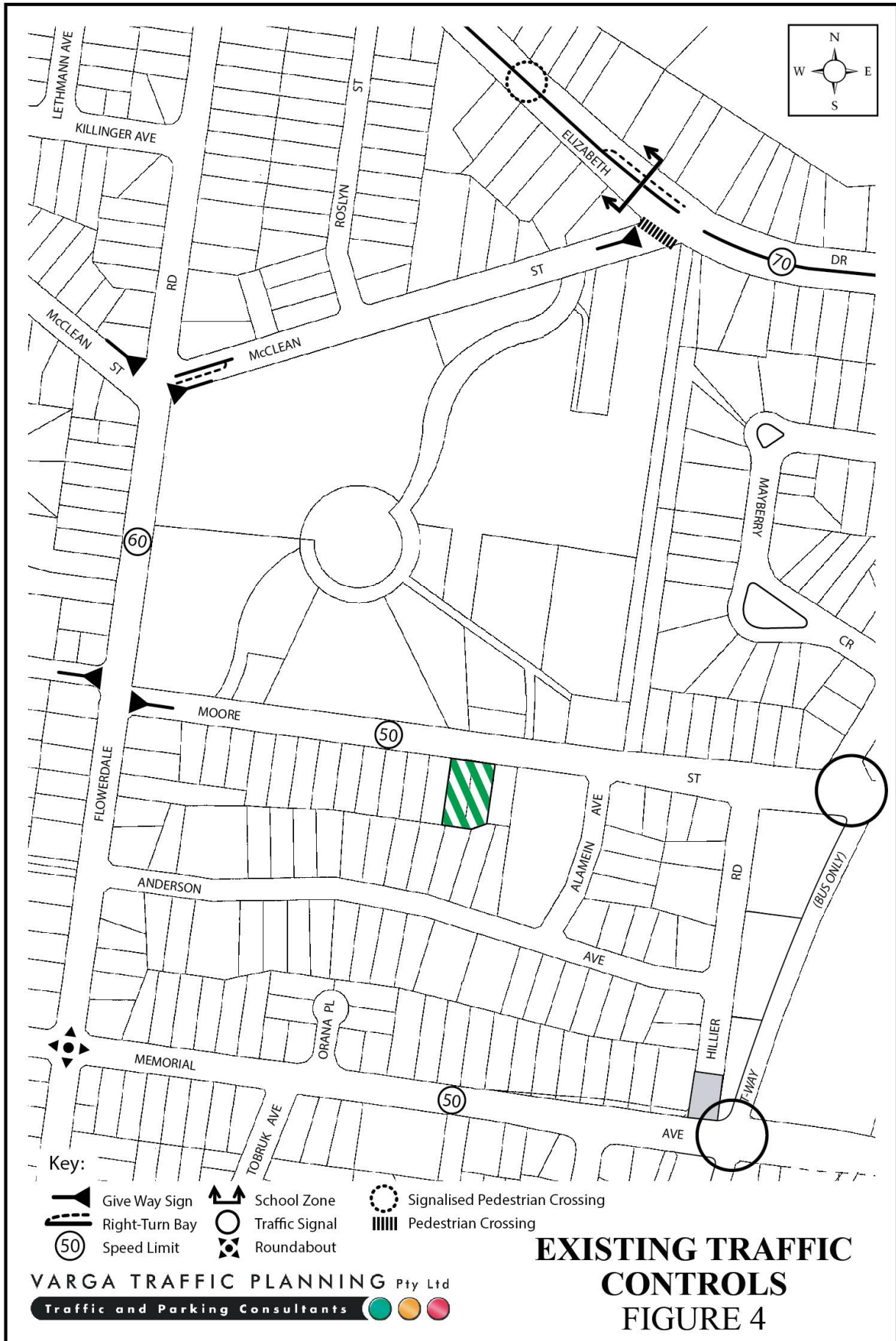
- a 70 km/h SPEED LIMIT which applies to Elizabeth Drive
- a 50 km/h SPEED LIMIT which applies to Moore Street and all other local roads in the area
- a GIVE WAY SIGN in Moore Street where it intersects with Flowerdale Road
- TRAFFIC SIGNALS in Moore Street where it intersects with Park Road

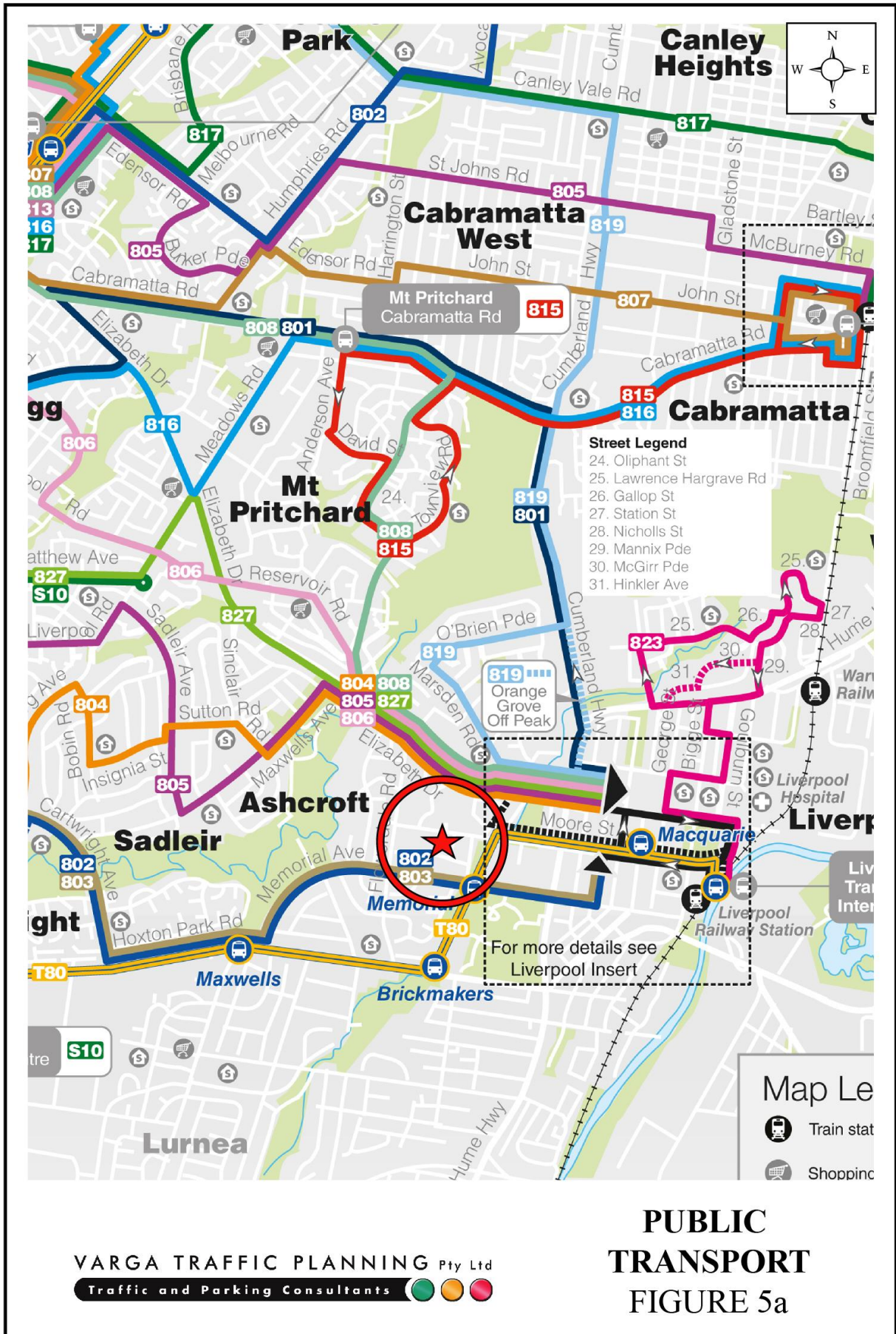
Existing Public Transport Services

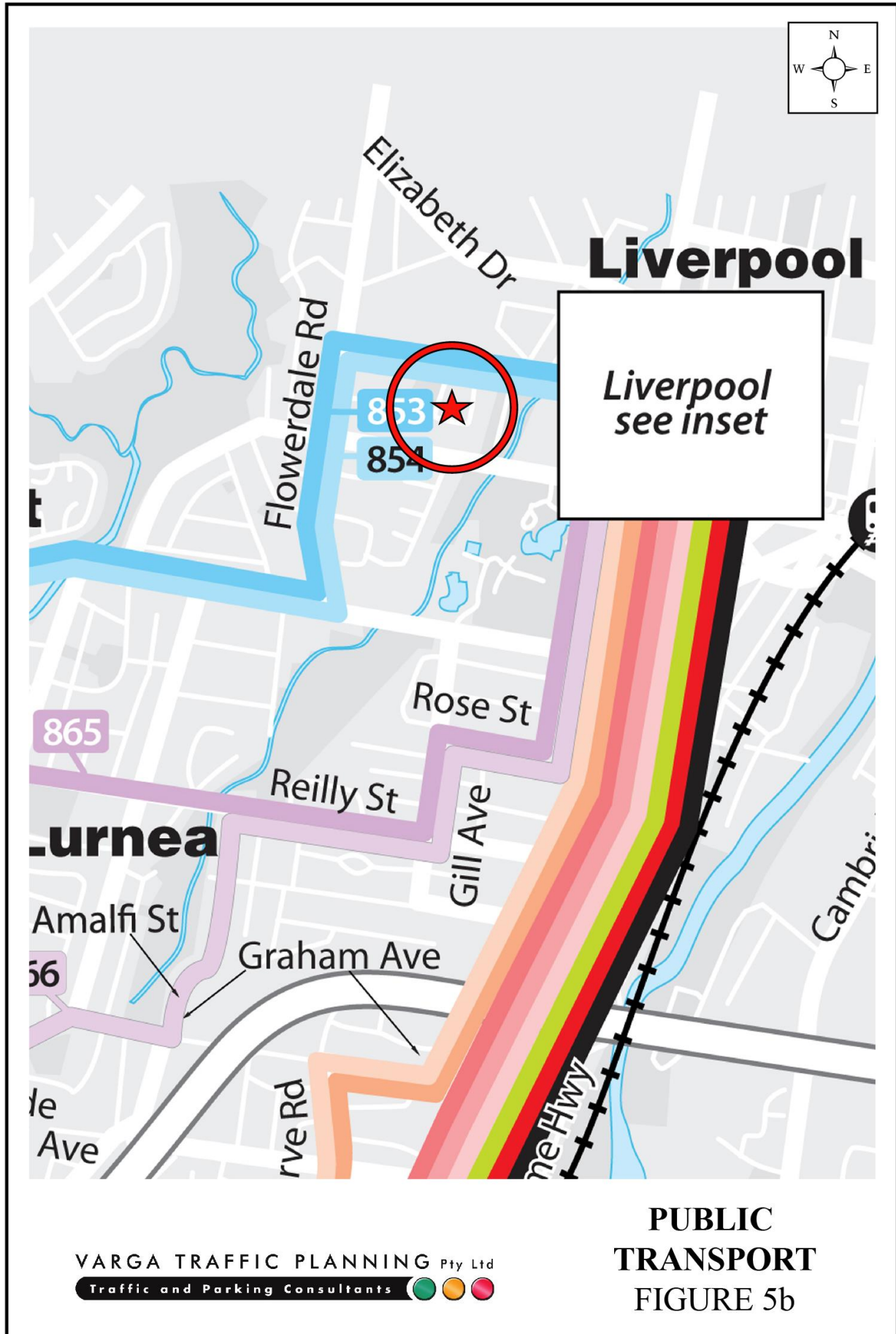
The existing public transport services available to the site are illustrated on Figures 5a and 5b. There are currently two bus routes travelling along Moore Street directly in front of the subject site. Bus stops for the 853 & 854 routes are located approximately 100m walking distance from the site. A further bus route is available at the end of Hillier Road (entrance to the T-way Bus Lanes) which is approximately 400m walking distance from the site.

There are more than 300 bus services per day travelling within 400m walking distance of the site on weekdays, decreasing to approximately 160 bus services per day on Saturdays and 130 services on Sunday and public holidays, as set out below:

Bus Routes and Frequencies							
Route No.	Route	Weekdays		Saturday		Sunday	
		IN	OUT	IN	OUT	IN	OUT
853	Carnes Hill to Liverpool	30	30	15	15	7	13
854	Carnes Hill to Liverpool	34	35	15	15	8	12
T80	Parramatta to Liverpool	90	84	50	54	47	47
TOTAL		154	149	80	84	62	72







The abovementioned bus services can also be used to interchange with the suburban rail network at Liverpool and Parramatta Stations.

The site is therefore considered to be well served by public transport services.

Projected Traffic Generation

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)*.

The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rate which is most applicable to the development proposal:

Medium Density Residential Flat Buildings

0.4-0.5 peak hour vehicle trips per 1 & 2 bedroom dwelling

Application of the above traffic generation rates to the 23 residential apartments outlined in the development proposal yields a traffic generation potential of approximately 10 vehicle trips per hour during commuter peak periods.

That projected increase in traffic activity as a consequence of the development proposal is *minimal*, is consistent with the zoning objectives of the site and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

Given the residential nature of Moore Street and the surrounding area, there is generally no kerbside parking restrictions which apply in the vicinity of the site, including along the site frontage.

Off-Street Parking Provisions

The off-street parking requirements applicable to the development proposal are specified in *State Environmental Planning Policy (Affordable Rental Housing) 2009* in the following terms:

Division 1 In-fill affordable housing

14 Standards that cannot be used to refuse consent

(2) General

A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:

(a) parking

if:

- (i) in the case of a development application made by a social housing provider for development on land in an accessible area, at least 0.4 parking spaces are provided for each dwelling containing 1 bedroom, at least 0.5 parking spaces are provided for each dwelling containing 2 bedrooms and at least 1 parking space is provided for each dwelling containing 3 or more bedrooms, or
- (ii) in any other case-at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom, at least 1 parking space is provided for each dwelling containing 2 bedrooms and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms

The Department of Family & Community Services is a social housing provider and application of the *SEPP (Affordable Rental Housing) 2009* parking rates to the 23 apartments outlined in the development proposal yields an off-street car parking requirement of 10 parking spaces as the application is being made by a social housing provider.

The proposed development makes provision for a total of 21 off-street parking spaces, thereby satisfying the *SEPP* requirements.

The geometric design layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1 - 2004* in respect of parking bay dimensions, ramp gradients and aisle widths.

In summary, the proposed parking facilities satisfy the relevant requirements specified in the *SEPP (Affordable Rental Housing) 2009* as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking implications.