Proposed Industrial Development

Site 2 - 54 Tyrone Place, Erskine Park

TRAFFIC AND PARKING ASSESSMENT REPORT

2 June 2016

Ref 16318

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants

Suite 6, 20 Young Street, Neutral Bay NSW 2089 - PO Box 1868, Neutral Bay NSW 2089 - Ph: 9904 3224

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

Document Verification

Location:	Site 2 - 54 Tyrone Place, Erskine Park	**Job Number**		16318	
Revision	**Details**	**Prepared**		**Approved**	
Final	Final for DA Submission	**By**	**Date**	**By**	**Date**
		DL	9/05/16	RV	2/06/16

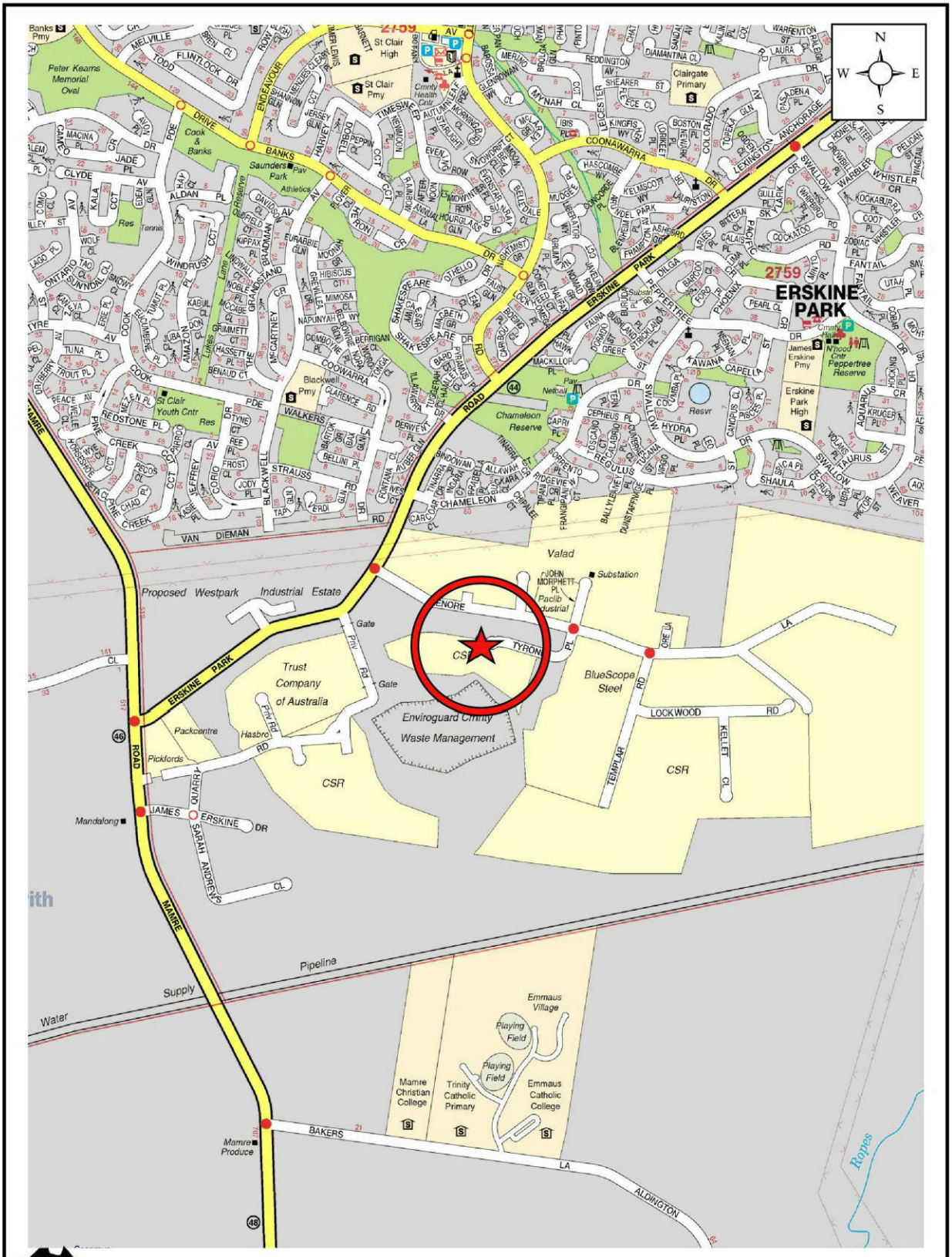
1. INTRODUCTION

This report has been prepared to accompany a development application to Penrith City Council for a warehouse development proposal to be located at 54 Tyrone Place, Erskine Park (Figures 1 and 2).

The proposed development involves the construction of a new warehouse with ancillary office space. Off-street parking is to be provided in a new outdoor car parking area in accordance with Council's 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 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.



UBD

VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants

LOCATION
FIGURE 1

VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants

SITE
FIGURE 2

2. PROPOSED DEVELOPMENT

Site

The subject site is located at the far western end of the Tyrone Place cul-de-sac, and occupies an area of approximately 6,140m^2.

The subject site is currently vacant.

Proposed Development

The proposed development involves the construction of a new warehouse development on the site which includes an ancillary office space and a wash bay. Floor areas for the proposed new building are as follows:

Warehouse:	468m^2
Ancillary Office:	250m^2
Wash Bay:	132m^2
TOTAL BUILDING AREA:	**850m^2**

Off-street parking is proposed for a total of 15 cars in a new open car parking area to be located on the eastern portion of the site. Vehicular access to the car parking facilities is to be provided via a new entry/exit driveway located at the western end of the Tyrone Place cul-de-sac.

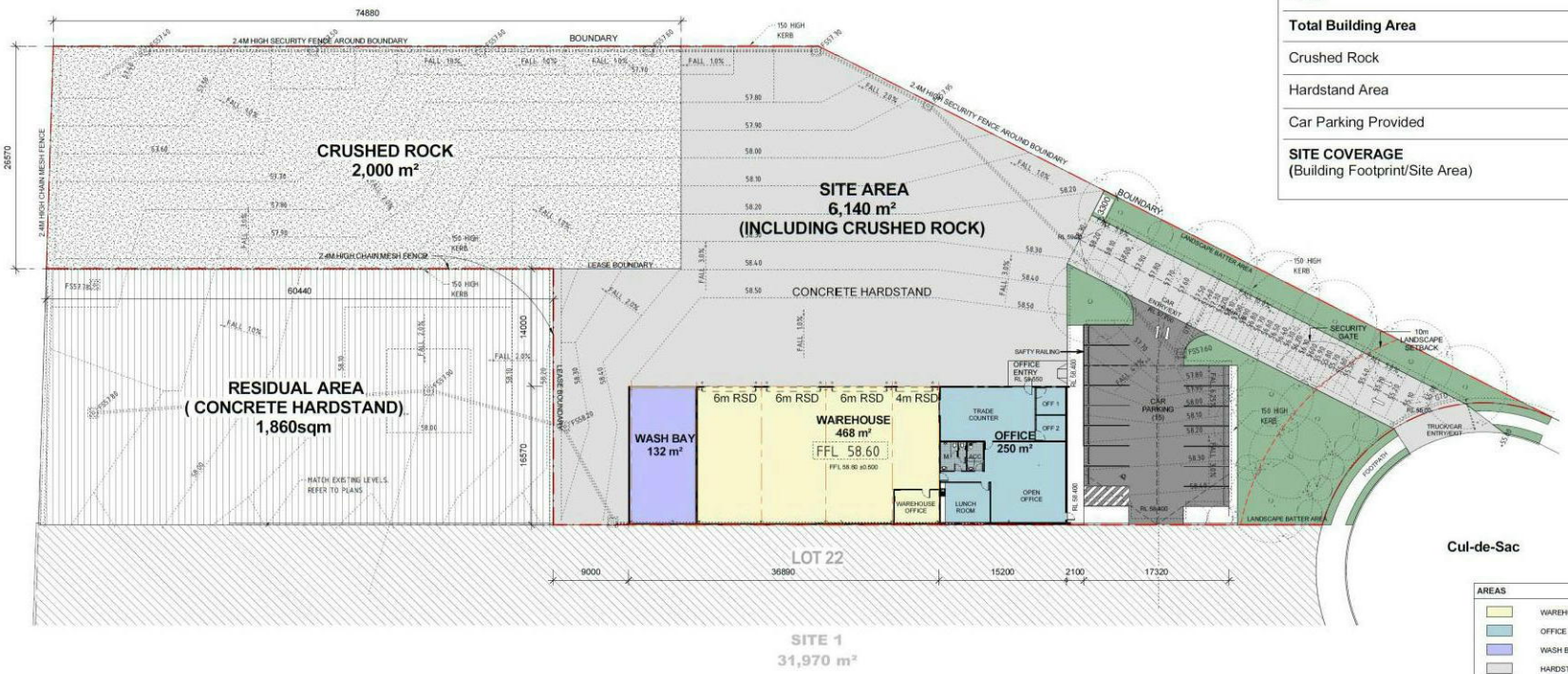
The proposed development is intended to be used by an *equipment hire* company and a storage yard paved with crushed rock is proposed to accommodate the equipment available for hire.

Loading/servicing for the proposed development is expected to be undertaken primarily by small to medium sized rigid trucks, however the proposed site layout has been designed to accommodate the *swept turning path* requirements of large 19m long semi-trailers, should the need ever arise.

A wash bay is proposed for cleaning of returned hire equipment.

Plans of the proposed development have been prepared by *Reid Campbell Architect* and are reproduced in the following pages.

DEVELOPMENT AREA SCHEDULE	
Total Site Area	**Approx 6,140 m²**
Building Areas	
Warehouse	468 m²
Washbay	132 m²
Office	250 m²
Total Building Area	**850 m²**
Crushed Rock	2000 m²
Hardstand Area	2330 m²
Car Parking Provided	15
SITE COVERAGE (Building Footprint/Site Area)	**20.2%**



AREAS
- WAREHOUSE AREA
- OFFICE AREA
- WASH BAY AREA
- HARDSTAND AREA
- LIGHTDUTY AREA
- LANDSCAPE AREA

LEGEND
- OVERALL SITE BOUNDARY
- TUTT BRYANT LEASE SITE BOUNDARY
- BUILDING SETBACK

ALL LEVELS ARE INDICATIVE AND SHOULD BE READ IN CONJUCTION WITH CIVIL ENGINEER'S DRAWINGS FOR FINAL LEVELS AND EARTHWORKS.

SURVEY DETAILED INFORMATION REFER TO SURVEY DRAWING FOR FURTHER INFORMATION

ALL LEVELS ARE TO BE +/- 500mm

0m 5m 10m 15m 20m 25m
VISUAL SCALE 1:250 @ A1

REIDCAMPBELL
Architecture, Interiors, Project Management

DA APPLICATION

FIFECAPITAL

David Tubb
Tubb & Associates Pty Ltd

INDUSTRIAL FACILITY FOR TUTT BRYANT

2/06/2016 12:04:36 PM

SITE PLAN

115110_A DA-003 2

VARGA TRAFFIC PLANNING PTY LTD

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.

Erskine Park Road is classified by the RMS as a *State Road* and provides the key north-south road link the area, linking Mamre Road and M4 Western Motorway. It typically carries two traffic lanes in each direction with opposing traffic flows separated by a central median island, and narrows to one traffic lane in each direction north of Lenore Drive. Turning bays are provided at key locations.

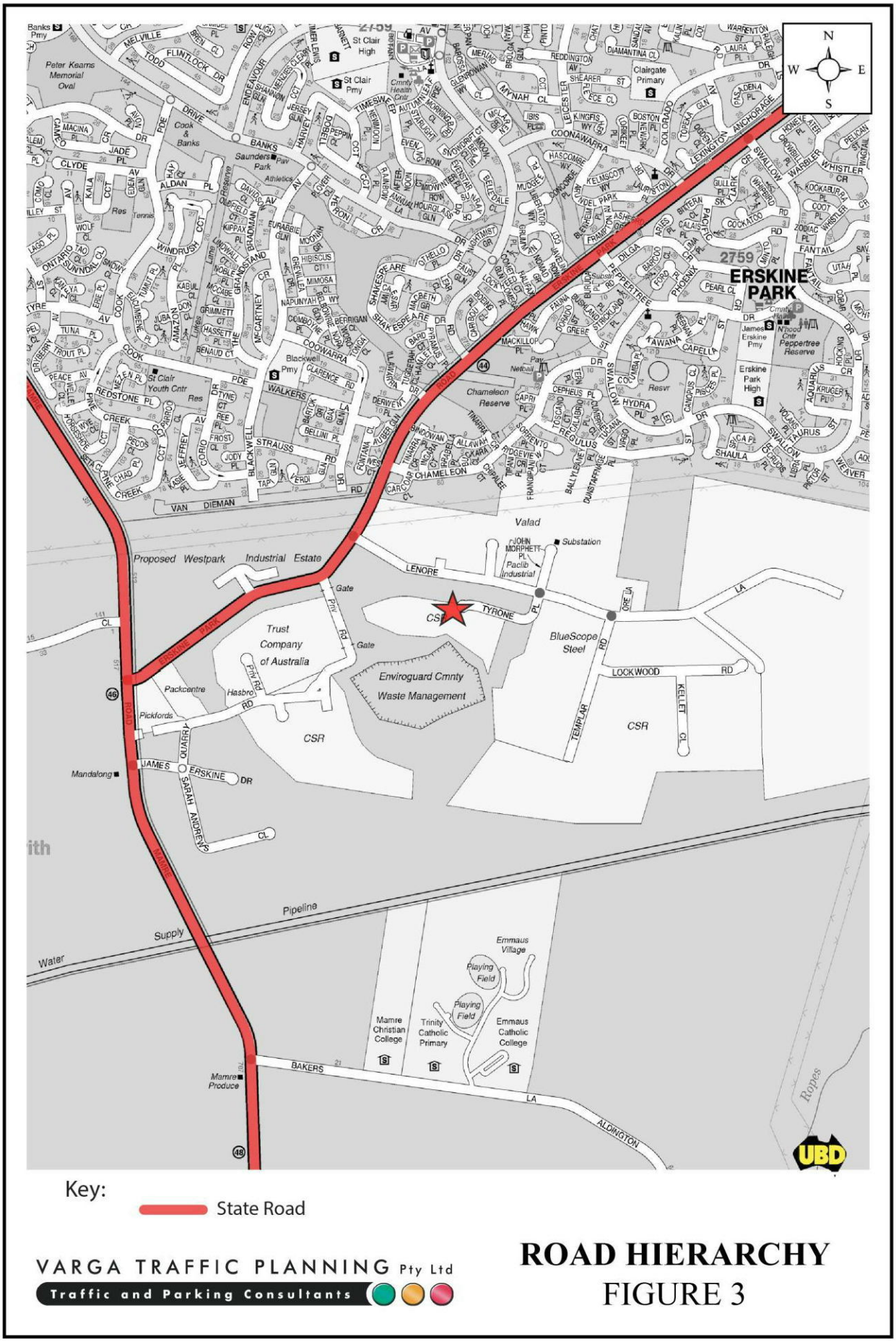
Lenore Drive is a local, unclassified road which functions as an east-west *collector route*, linking Erskine Park Road and Old Wallgrove Road. It typically carries two traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island.

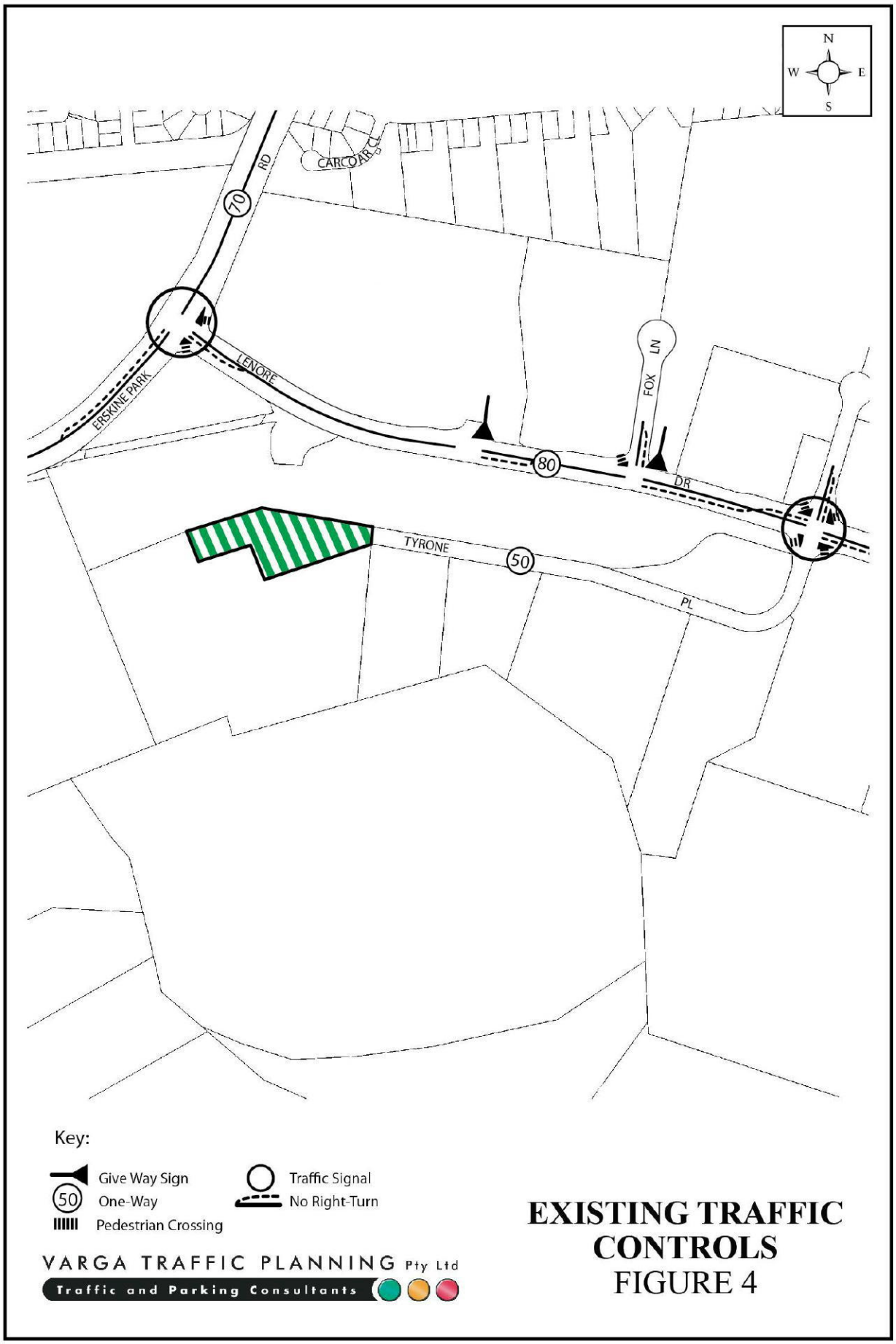
Tyrone Place is a local, unclassified road which is primarily used to provide vehicular access to frontage properties. The road terminates at its western end with a cul-de-sac. Kerbside parking is generally permitted on both sides of the road.

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 50 km/h SPEED LIMIT which applies to Tyrone Place
- a 70 km/h SPEED LIMIT which applies to Erskine Park Road
- a 80 km/h SPEED LIMIT which applies to Lenore Drive





TRAFFIC SIGNALS in Lenore Drive where it intersects with Erskine Park Road and also Tyrone Place, with all turning movements permitted at both intersections.

Projected Traffic Generation

The traffic implications of development proposals 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.

An indication of the traffic generation potential of the proposed development 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 rates which are applicable to the development proposal:

Warehouses
0.5 peak hour vehicle trip per $100m^2$ GFA

Application of the above traffic generation rate to the cumulative warehouse/office floor area of $718m^2$ outlined in the development proposal yields a traffic generation potential of approximately 6 vehicle trips per hour during commuter peak periods.

That projected increase in traffic activity as a consequence of the development proposal is *minimal*, consistent with the land 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 industrial nature of the local area and Tyrone Place being a cul-de-sac, there are generally no kerbside parking restrictions which apply along both sides of Tyrone Place.

Off-Street Car Parking Provisions

The off-street car parking requirements applicable to the development proposal are specified in the *Penrith Development Control Plan 2014, Part C10: Transport Access and Parking* document in the following terms:

> **Warehouses, including Ancillary Office**
> 1 space per 100m^2 GFA

Application of the above car parking requirements to the cumulative warehouse/office floor area of 718m^2 outlined in the development proposal yields an off-street car parking requirement of 8 spaces.

The proposed development makes provision for a total of 15 off-street car parking spaces, thereby comfortably satisfying Council's car parking 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* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6* in respect of parking bay dimensions, ramp gradients and aisle widths.

Loading/Servicing Provisions

The proposed development is expected to be serviced by a variety of rigid trucks, however the site layout has been designed to accommodate the *swept turning path* requirements of

large 19m long semi-trailers, should the need ever arise, as demonstrated by the attached *swept turning path* diagram.

The geometric design layout of the proposed loading facilities have 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 gradients and service area requirements.

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.