

Proposed Residential Development

**Lot 401 Nelsons Ridge,
Pemulwuy**

TRAFFIC AND PARKING ASSESSMENT REPORT

3 July 2015

Ref 15424

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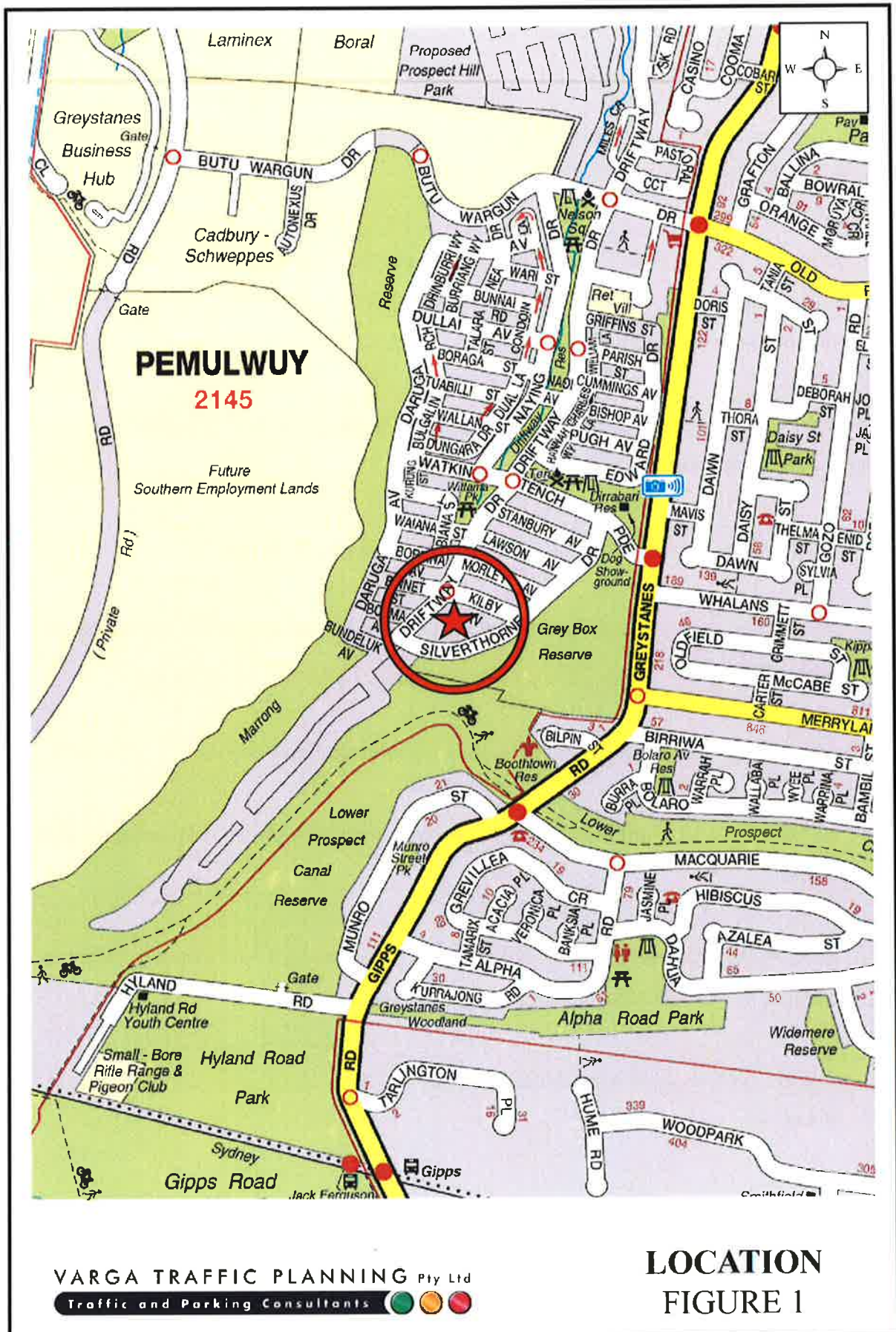
1. INTRODUCTION

This report has been prepared to accompany a Development Application to Holroyd City Council for a residential development proposal to be located at Lot 401 Nelsons Ridge, Pemulwuy (Figures 1 and 2).

The proposed development will involve facilitate the construction of a new residential townhouse development. Car parking is to be provided in two new separate car parking areas 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, and the traffic conditions on that road network
- 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 on the north-eastern corner of the Driftway Drive and Silverthorne Drive intersection. The site has a street frontage approximately 106m in length to Driftway Drive and approximately 228m in length to Silverthorne Drive. It occupies an area of approximately 12,451m².

The subject site is currently vacant.

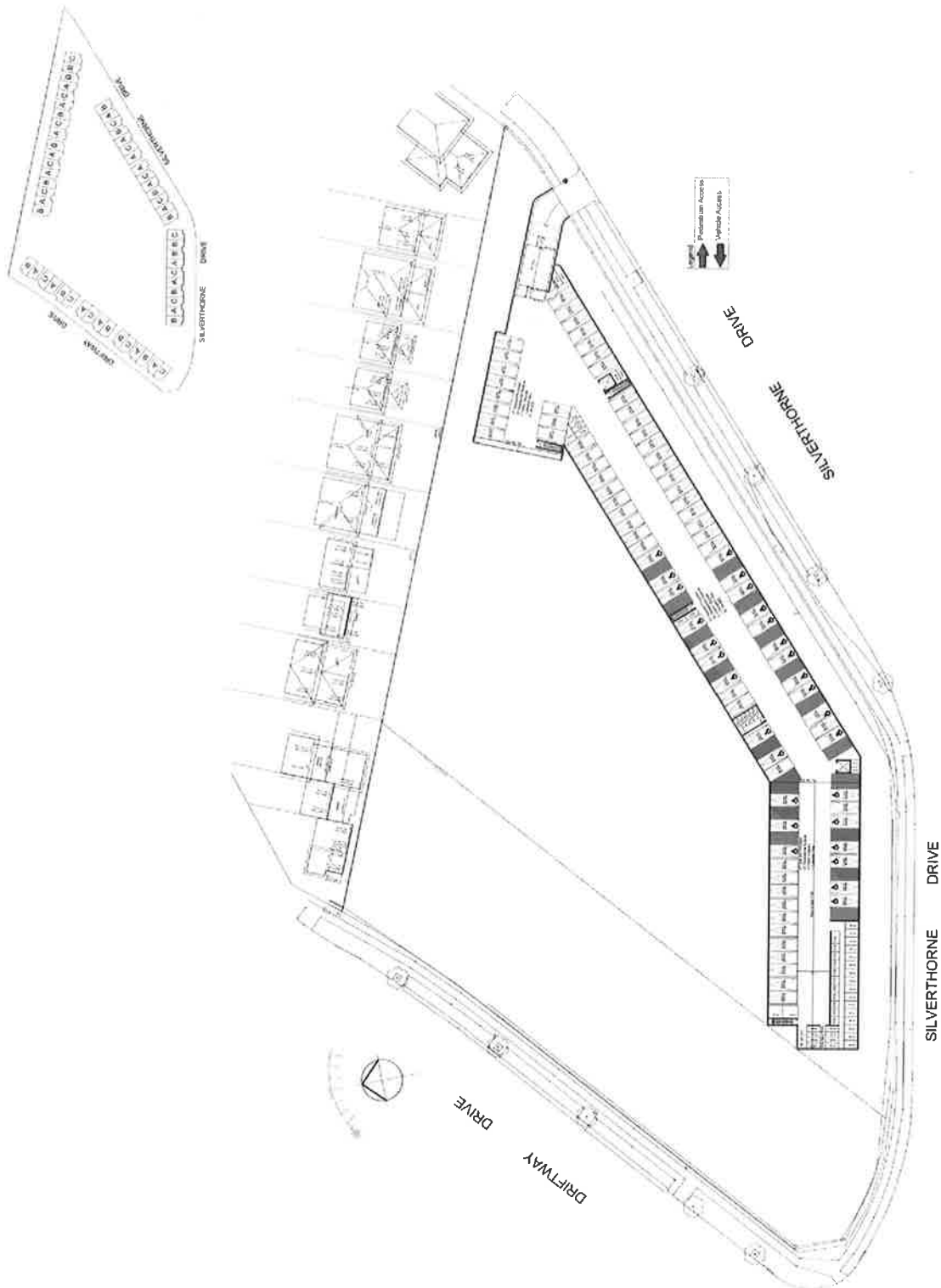
Proposed Development

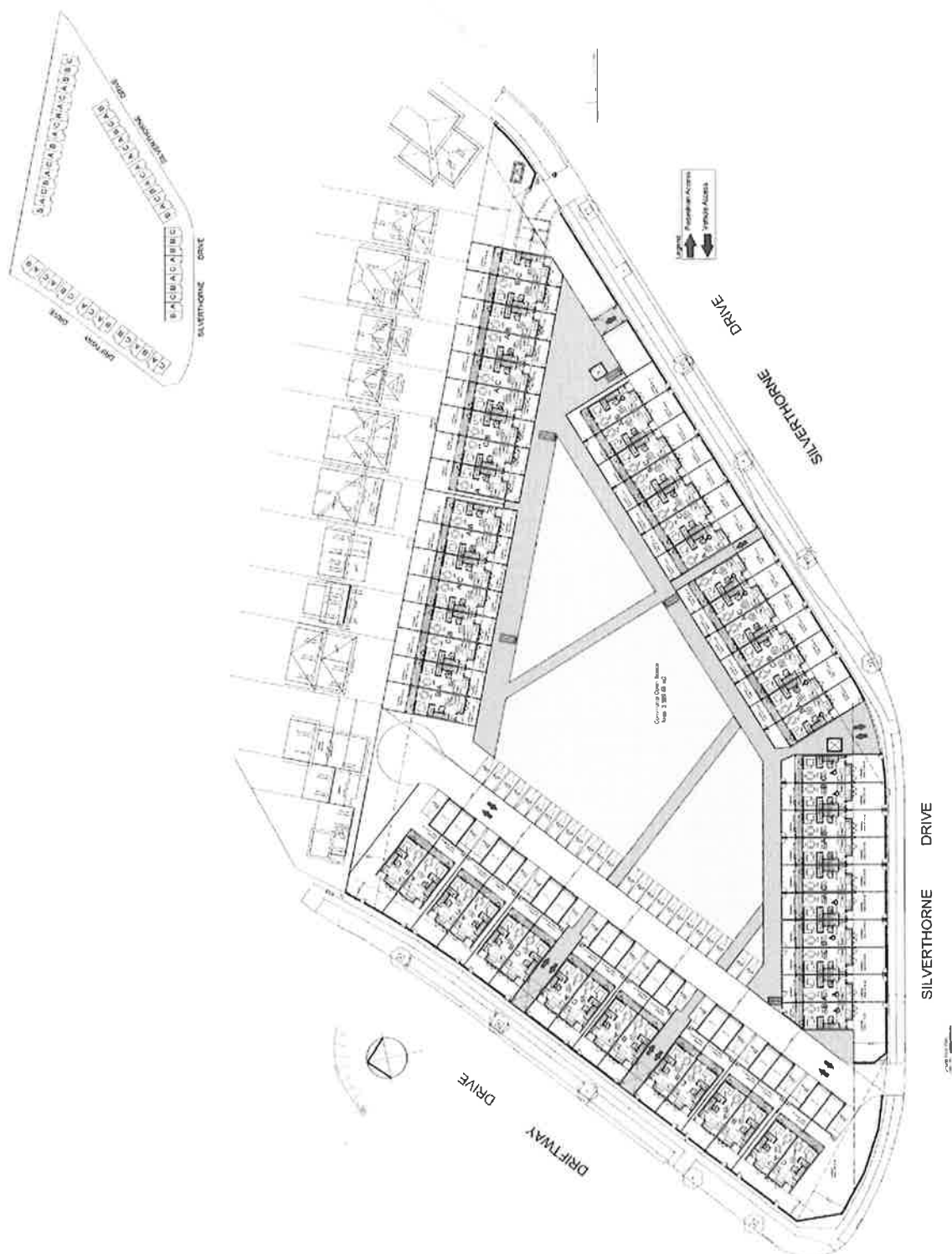
The proposed development will involve the construction of a new residential townhouse development.

A total of 57 x 3 bedroom residential townhouses are proposed in the new development.

Off-street car parking is proposed for a total of 144 cars, comprising 114 residential spaces, 29 visitor spaces and a designated car wash bay, in accordance with Council's requirements in two new separate car parking areas. Vehicular access to the car parking facilities is to be provided via two new separate entry/exit driveways located along the northern and southern end of the Silverthorne Drive site frontage.

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





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 (RMS) 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, linking Concord to Emu Plains. 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. All intersections with the M4 Motorway are grade-separated.

The Great Western Highway is also classified by the RMS as a *State Road* and provides another key east-west road link in the area, linking the City to the Blue Mountains. It also typically carries three traffic lanes in each direction in the vicinity of the site, with turning bays provided at key locations.

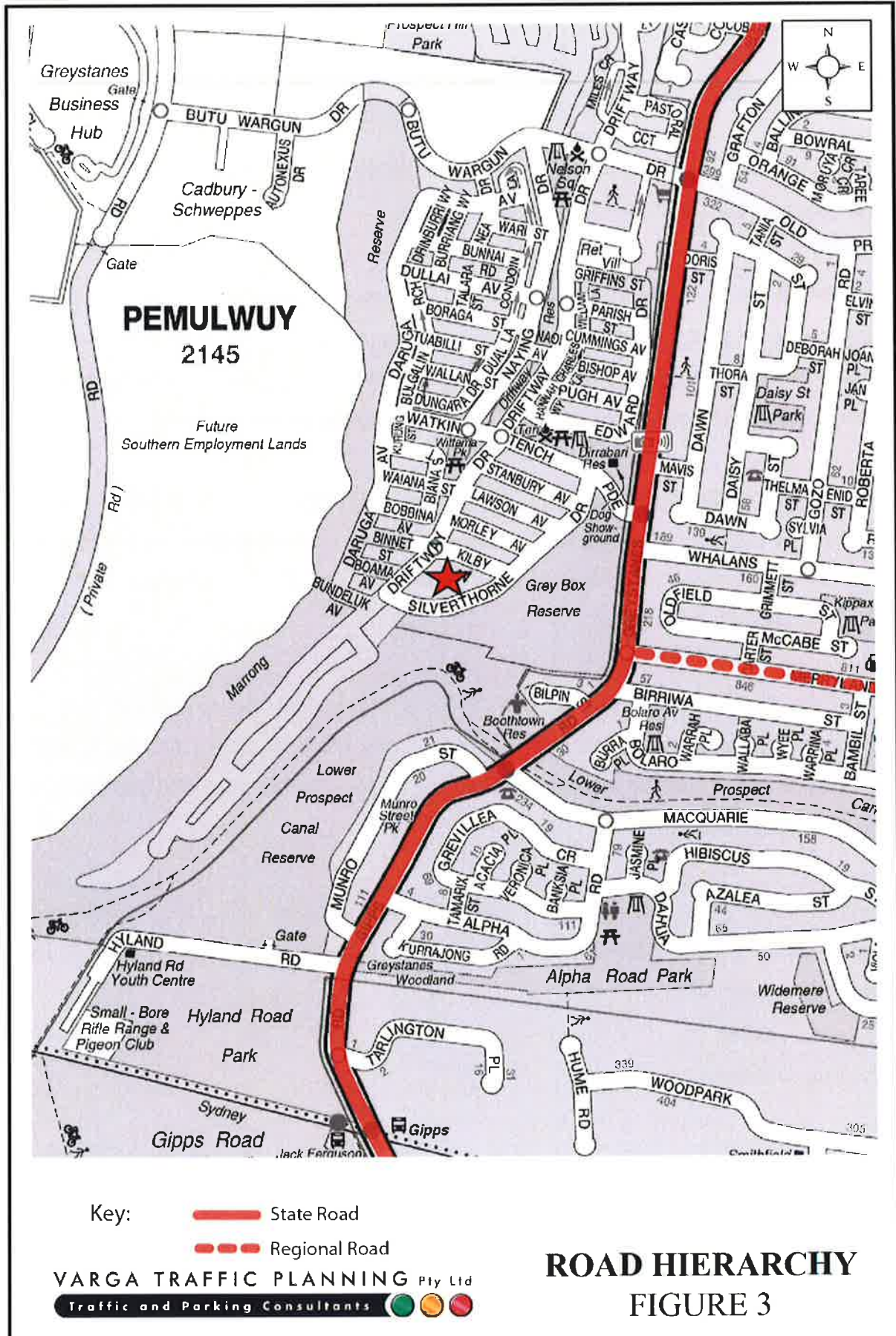
Greystanes Road is also classified by the RMS as a *State Road* and provides the key north-south road link in the area, linking Gipps Road to the Great Western Highway. It typically carries one traffic lane in each direction in the vicinity of the site, with additional lanes provided at key locations.

Driftway Drive / Silverthorne Drive are local, unclassified roads which are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of both roads.

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 Driftway Drive, Silverthorne Drive and all other local roads in the area





- a GIVE-WAY SIGN in Silverthorne Drive where it intersects with Driftway Drive
- a ROUNDABOUT in Driftway Drive where it intersects with Kilby Avenue
- CENTRAL MEDIAN ISLANDS along Driftway Drive.

Projected Traffic Generation

An indication of the traffic generation potential of the development proposal is provided by reference to the former 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:

Medium Density Residential Flat Buildings

0.5-0.65 peak hour vehicle trips per 3-bedroom dwelling

The RMS *Guidelines* also make the following observation in respect of medium density residential flat buildings:

Definition

A medium density residential flat building refers to a building containing at least 2 but less than 20 dwellings. This includes villas, town houses, flats, semi-detached houses, terrace of row houses and other medium density developments, but does not include aged or disabled persons housing.

Application of the above traffic generation rates to the 57 new residential townhouses outlined in the development proposal yields a traffic generation potential of approximately 37 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 rezoning objectives of the area, and will clearly not have any unacceptable traffic implications in terms of road network capacity or traffic-related environmental effects.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 5 and comprise:

- NO STOPPING restrictions within the vicinity of the site, including a small section along the Driftway Drive and Silverthorne Drive intersection site frontage
- generally UNRESTRICTED kerbside parking throughout the local area, including the rest of the site frontage
- BUS ZONES located at regular intervals along both sides Driftway Drive and along the southern side of Silverthorne Drive.

Off-Street Parking Provisions

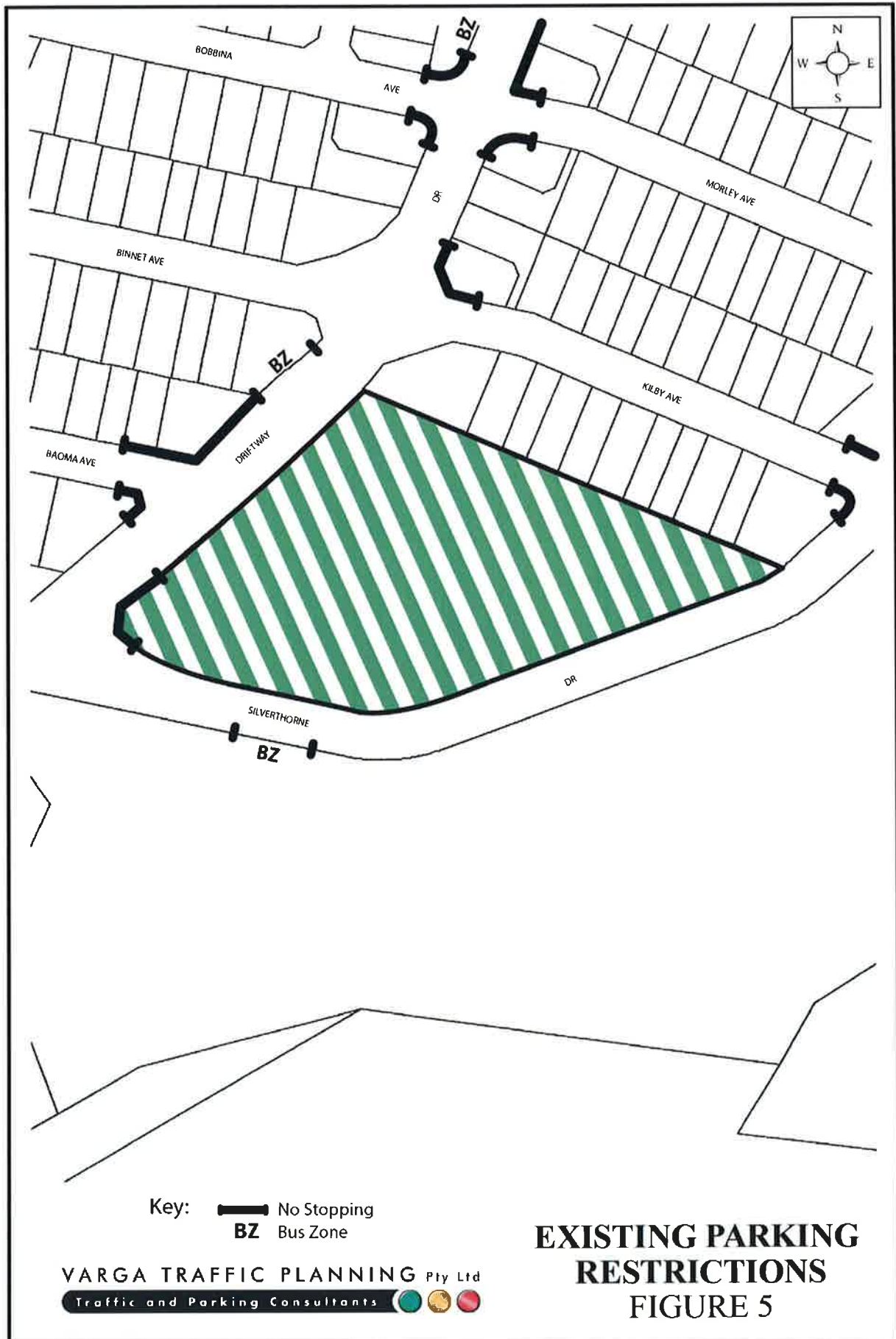
The off-street parking requirements applicable to the development proposal are specified in Council's *Development Control Plan 2013, Part A, Section 3.0 – Car Parking* document which specifies the off-street parking requirements applicable to the development proposal in the following terms:

Multi Dwelling Housing

Three bedroom dwelling:	1.2 spaces per dwelling (min) to 2.0 spaces per dwelling (max)
Visitors:	0.2 spaces per dwelling (min) to 0.5 spaces per dwelling (max)

Application of the above parking requirements to the residential components outlined in the development proposal yields an off-street parking requirement of between 82 parking spaces and 144 parking spaces as set out below:

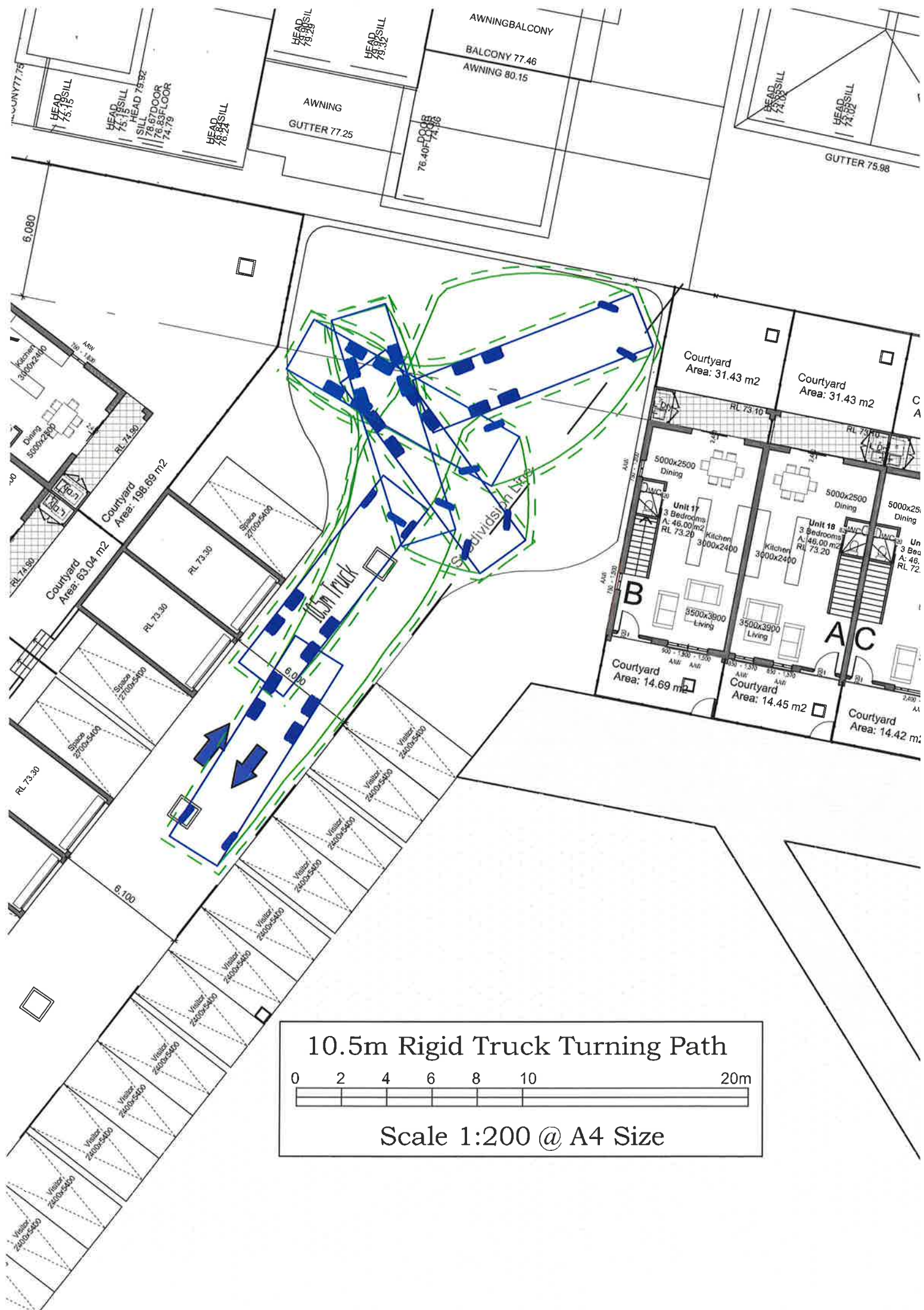
	Minimum	Maximum
Residential (57 Townhouses):	69.0 spaces (min)	114.0 spaces (max)
Visitors:	12.0 spaces (min)	29.0 spaces (max)
Car Wash Bay:	1.0 space (min)	1.0 space (max)
TOTAL:	82.0 spaces (min)	144.0 spaces (max)



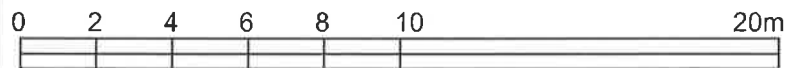
The proposed development makes provision for a total of 144 off-street parking spaces, comprising 114 residential spaces, 29 visitor spaces and a designate car wash bay, thereby satisfying Council's Parking Code requirements.

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.

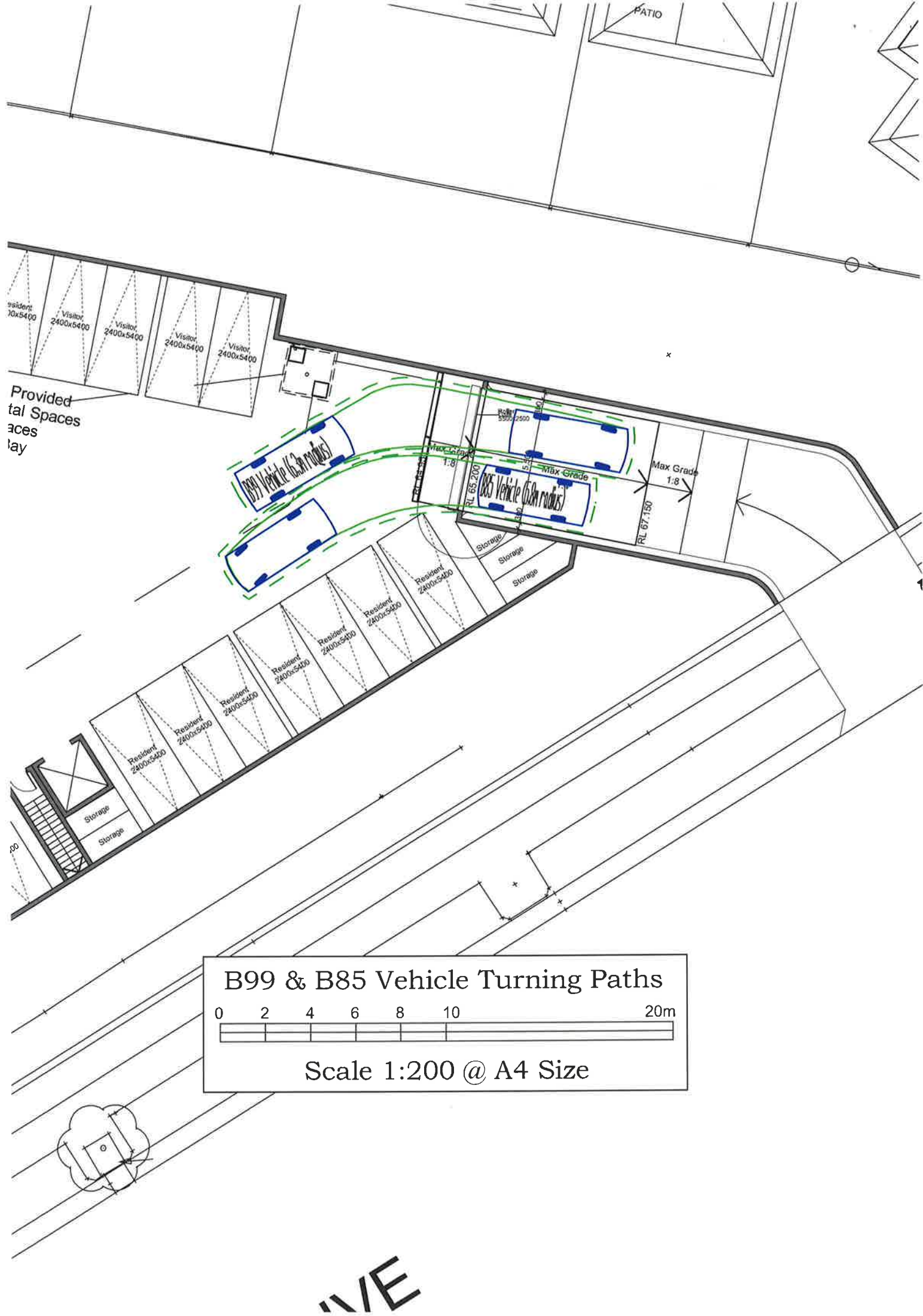
In summary, the proposed parking facilities satisfy the relevant requirements specified in both Council's Parking Code as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking implications.

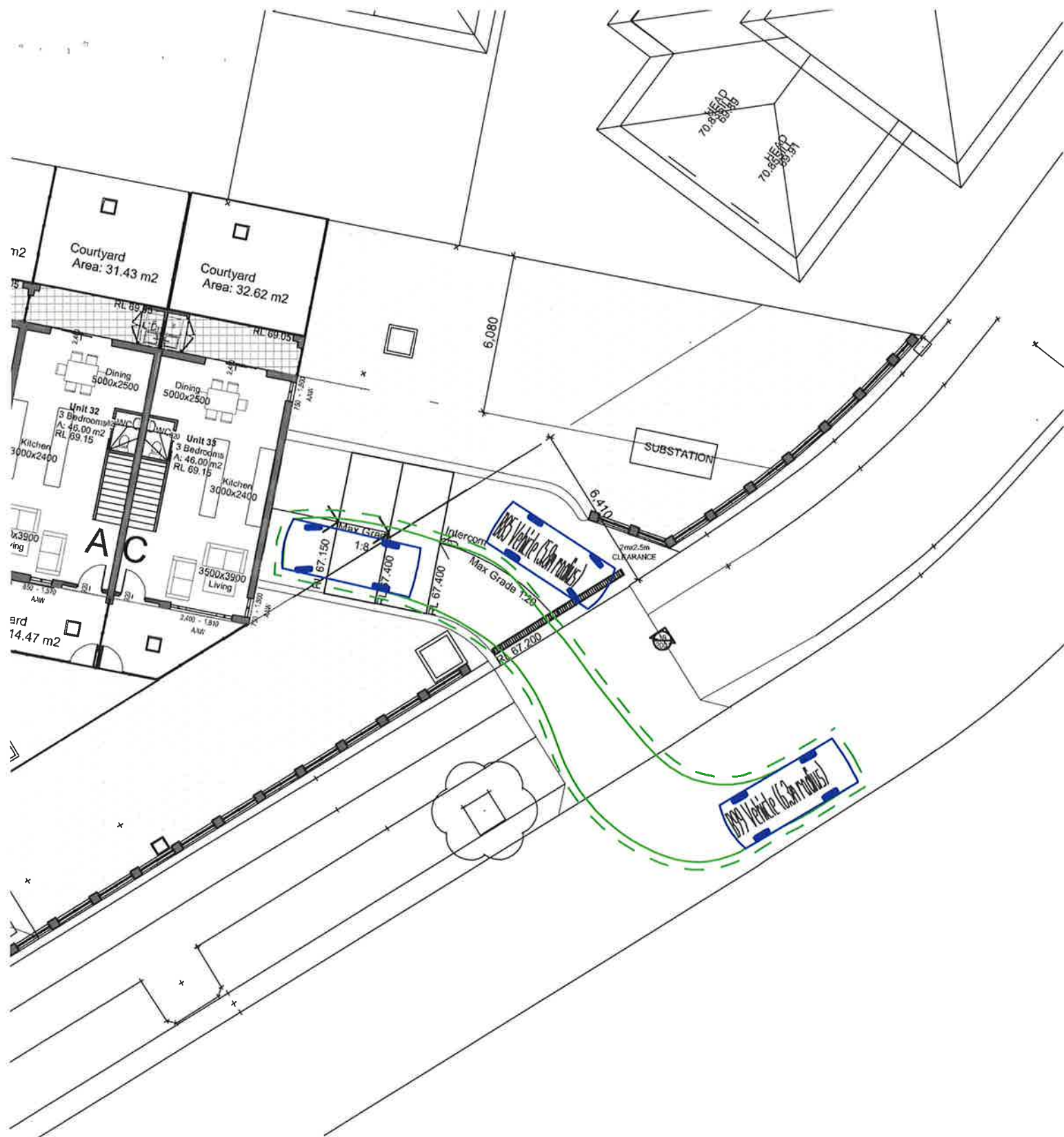


10.5m Rigid Truck Turning Path

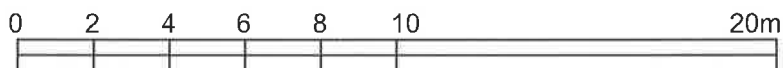


Scale 1:200 @ A4 Size



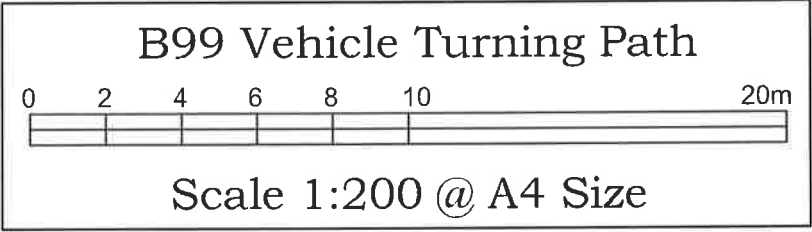
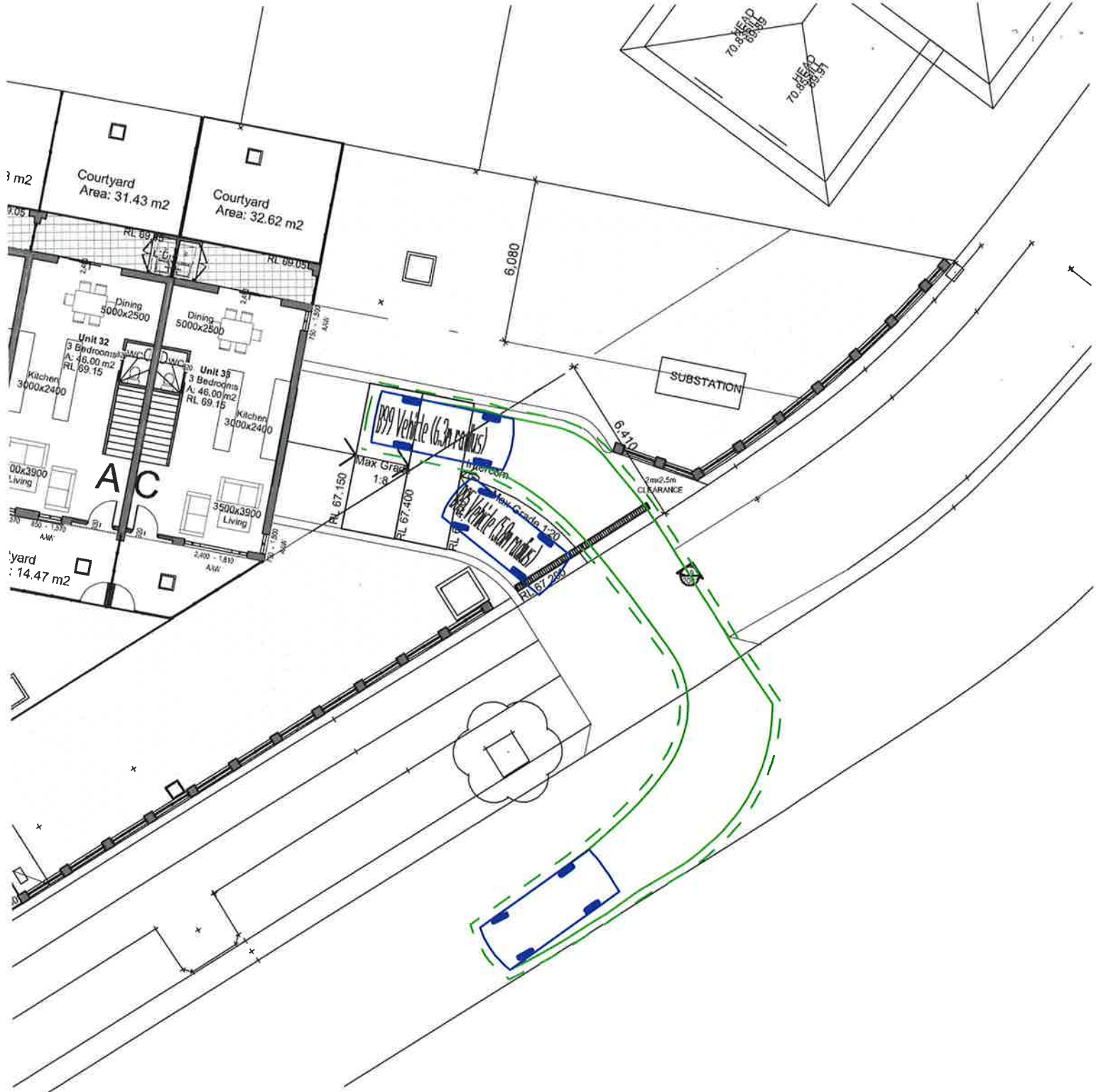


B99 Vehicle Turning Path



Scale 1:200 @ A4 Size

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