

Proposed Student Accommodation Development

**74 Carlton Crescent,
Summer Hill**

TRAFFIC AND PARKING ASSESSMENT REPORT

4 December 2018

Ref 18774

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1. INTRODUCTION

This report has been prepared to accompany a development application to Inner West Council for a student accommodation development proposal to be located at 74 Carlton Crescent, Summer Hill (Figures 1 and 2).

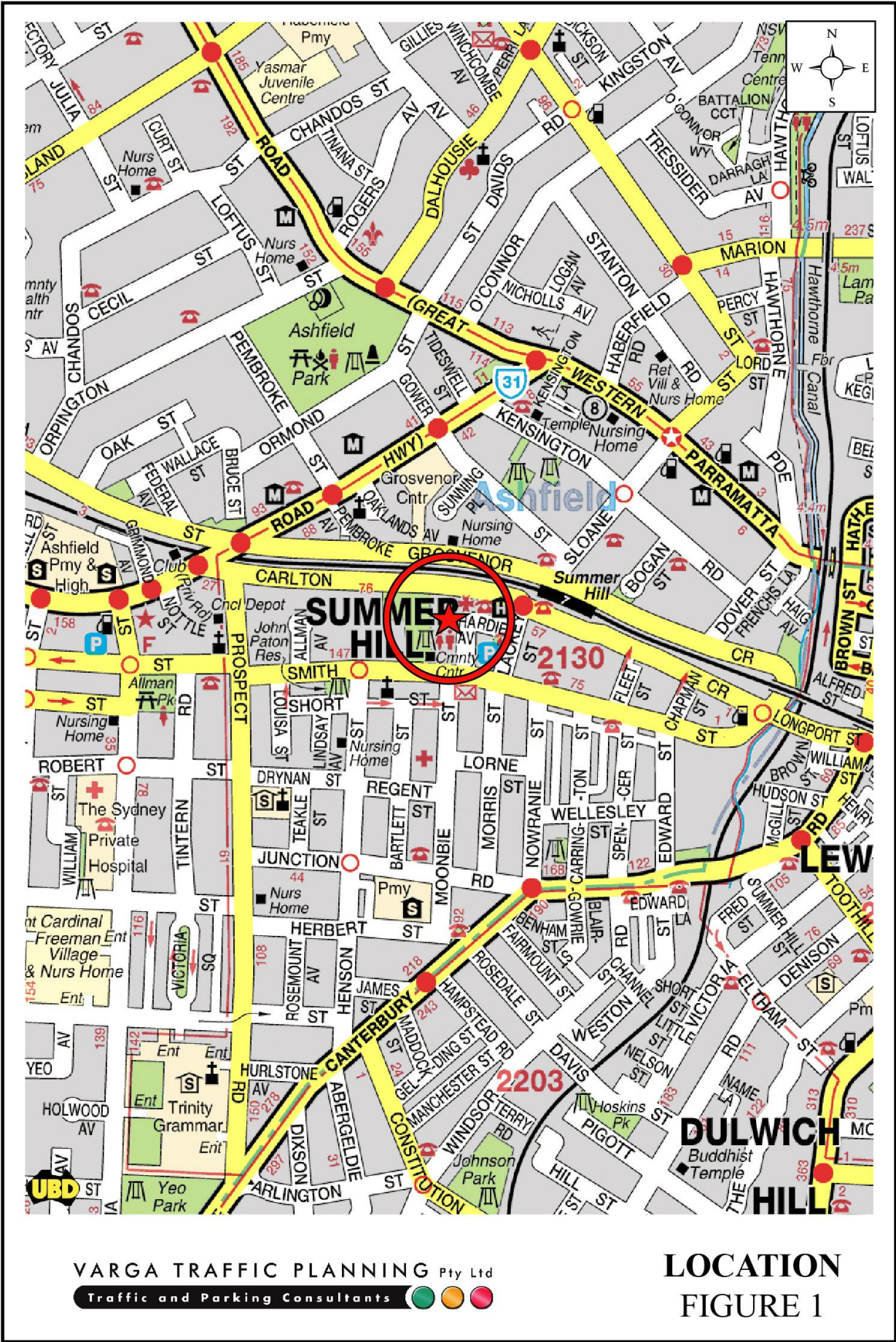
The proposed development will involve demolition of the existing industrial building whilst retaining the former ambulance station building on the site to facilitate the construction of a student accommodation building to be operated by Iglu.

The subject site is located less than 150m from Summer Hill Railway Station, in the Summer Hill Town Centre, providing convenient access to a range of shops, restaurants, a supermarket and services as well as easy commute to education establishments around Sydney via public transport.

Off-street car parking is not proposed on the site, consistent with the targeted demographic of the student accommodation facility and sustainable transport objectives.

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
- reviews the sustainable transport options available 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
- assesses the parking implications of the development proposal.





2. PROPOSED DEVELOPMENT

Site

The subject site is located on the southern side of Carlton Crescent, some 200 metres west of the Summer Hill Railway Station. The site has a street frontage approximately 48 metres in length to Carlton Crescent and occupies an area of approximately 2,900m².

The site is located in the Summer Hill Town Centre and has convenient access to a variety of essential shops and services, including a supermarket, medical centres, dentistry, pharmacies, banks, post office, restaurants, delis and cafés.

The site is currently occupied by an industrial building and a former ambulance station building with a combined footprint of approximately 2,000m², and is now vacant. Vehicular access to the site is provided via three separate vehicular entry / exit driveways off Carlton Crescent and a right-of-way access driveway off Hardie Avenue.

A recent aerial photograph of the site and its surroundings is provided below:



Courtesy of Nearmap Imagery 2018

Proposed Development

The proposed development will involve demolition of the existing industrial building whilst retaining the former ambulance station building on the site to facilitate the construction of a student accommodation building comprising a total of 184 studio accommodation rooms, to be operated by Iglu.

The site is ideally located to suit the needs of students relying on public transport, being readily accessible by suburban railway services. Summer Hill Railway Station is located less than 150m walking distance from the site.

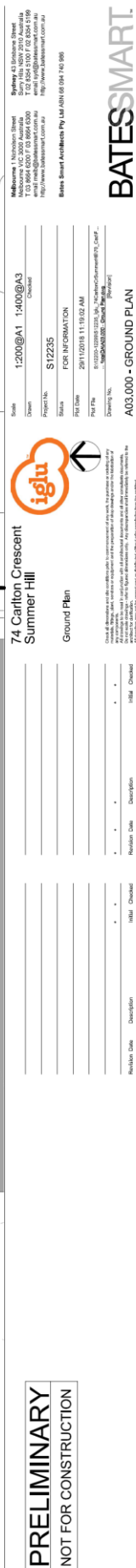
The subject site is also located immediately adjacent to the local Summer Hill shopping centre. Direct pedestrian access will be provided from the rear site to the IGA supermarket which is located next door. A broad range of other shops, restaurants, cafes and services are also located within an easy 150m walking distance of the site to meet the day-to-day needs of students.

The site is therefore ideally located to discourage private car usage and to encourage greater use of public transport and other active forms of transport such as walking and cycling.

Off-street car parking is therefore not proposed on the site, consistent with the targeted demographic of the student accommodation facility and sustainable transport objectives.

Garbage collection will be undertaken from Hardie Avenue by a commercial contractor. Bins will be stored on site and the contractor will have key access to the waste room and remove the bins and replace them after emptying. There will not be any other need for servicing or deliveries to the site, other than garbage collection.

Plans of the proposed development have been prepared by *Bates Smart Pty Ltd* and are reproduced in the following pages.



PRELIMINARY
NOT FOR CONSTRUCTION





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 Hume Highway is classified by the RMS as a *State Road* and provides the key east-west road link in the area. In Sydney, the Hume Highway begins at Parramatta Road in Summer Hill and extends to the M5 and M7 interchange where it continues as Hume Motorway. It is typically configured with two traffic lanes in each direction in the vicinity of the site and lane configuration varies along the entire length of the road.

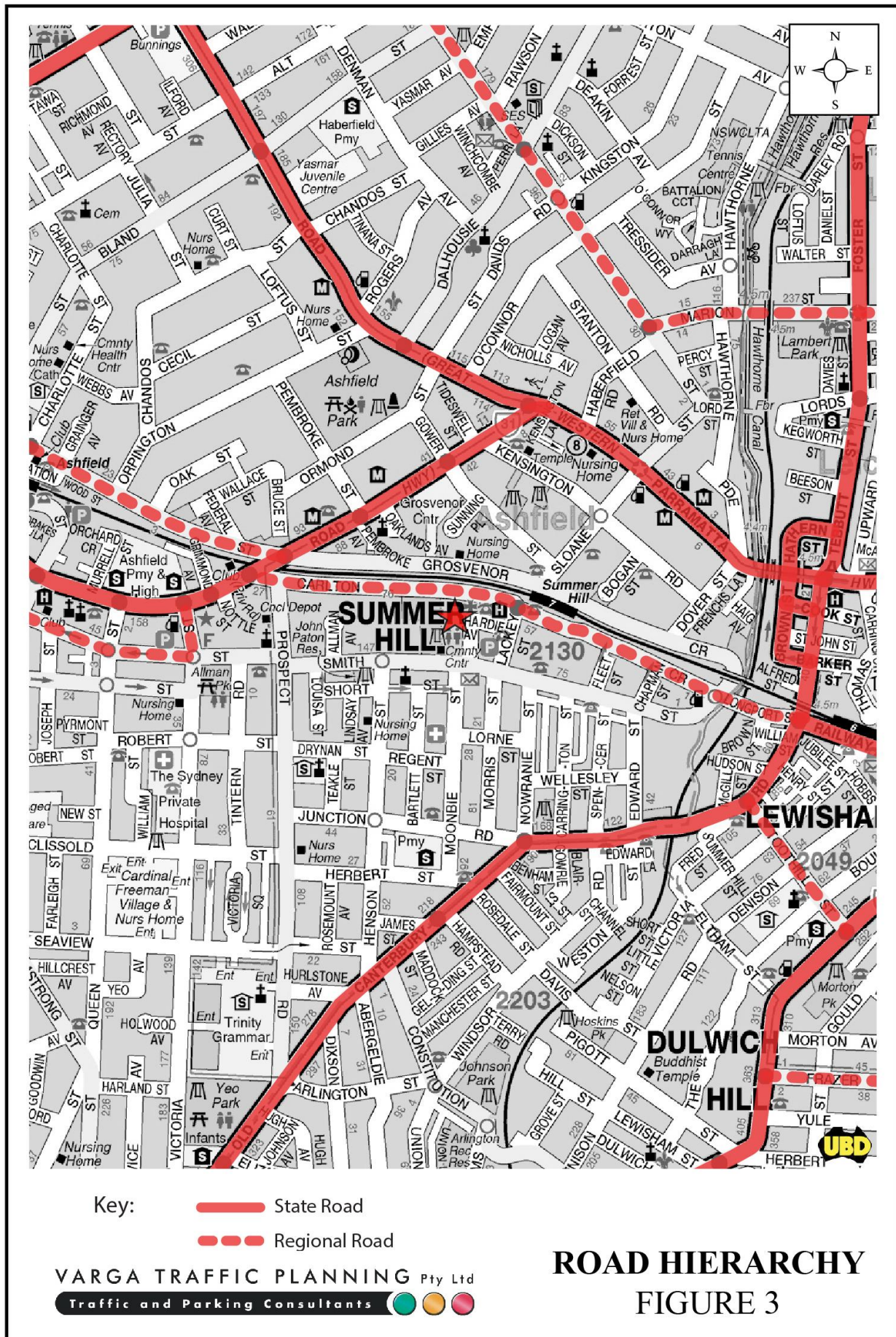
Carlton Crescent is classified by the RMS as a *Regional Road* and provides the key east-west road link in the area, linking Hume Highway and Old Canterbury Road. It typically carries one traffic lane in each direction in the vicinity of the site. Kerbside parking is generally permitted along both sides of the road, subject to sign posted restrictions.

Lackey Street, Smith Street and Hardie Avenue are local, unclassified roads which are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted along both sides of Lackey Street and Smith Street, subject to sign-posted restrictions whereas Hardie Avenue is used to provide vehicular access to the Town Centre car park operated by Council.

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 Carlton Crescent
- a 40 km/h SPEED LIMIT which applies to Lackey Street and also Smith Street
- TRAFFIC SIGNALS in Carlton Crescent where it intersects with Lackey Street





- **RAISED PEDESTRIAN ZEBRA CROSSING** in Lackey Street and also Smith Street.

Existing Public Transport Services

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

The Summer Hill Railway Station is located within less than 150 metres or 2 minutes walking distance to / from the site servicing the T2 Inner West & Leppington Line operating between Leppington or Parramatta and Sydney CBD. Trains typically arrive / depart the station at less than 10-minute intervals during commuter peak periods and generally 15-minute intervals at other times.

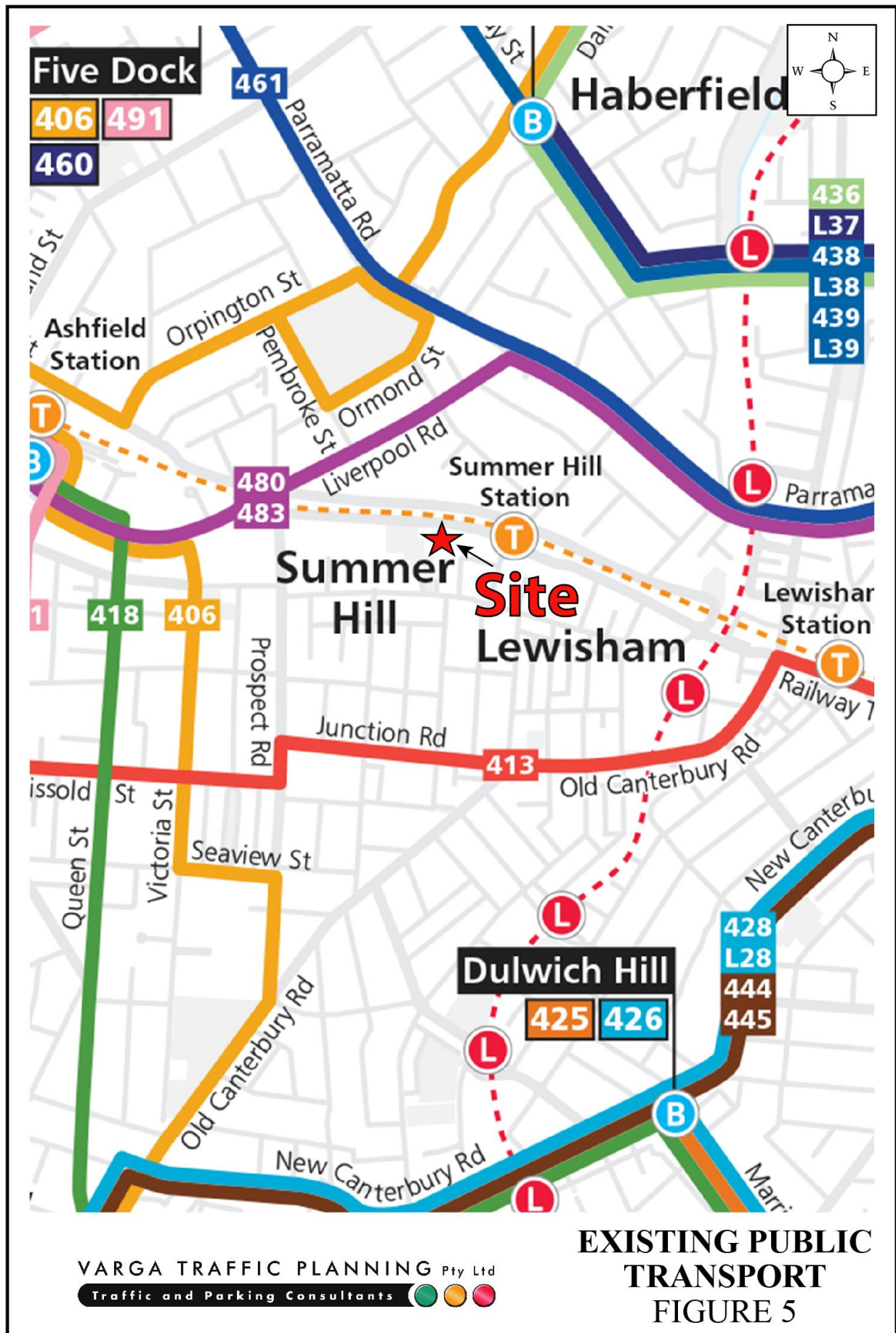
This level of public transport servicing frequency will allow commuters to turn up and go without relying on a timetable promoting greater use of sustainable and active modes of transport.

Cycling Infrastructure

Travelling by bicycle is healthy and good for the planet, not to mention transportation cost savings when compared to driving. The existing cycleways in the vicinity of the site is shown in Figure 6.

There is also a smart phone app “Bike Citizens - Bicycle GPS” available for download designed to help cyclists in urban areas and provides the following features:

- **Routing Profile** - The route navigation feature can adapt to suit personal needs and cyclists are able to choose between leisurely, fast or convenient route.
- **Bicycle Type** - The route navigation feature takes the cyclists type of bicycle into account. For example, if a person is riding a road bike, roads with tram tracks or cobblestones are avoided.





Gradient Profile - Bike Citizens always highlights the route with the most suitable gradient. More or less tolerance will be allowed depending on the routing profile.

- **Surfaces** - The cycling app searches for the most suitable route in accordance with the type of bicycle that is selected and avoids surface features such as cobblestones or unsurfaced routes.
- **Offline Map Material** – Once the map material has been downloaded, cyclists do not need an internet connection to use the navigation tool. This means that the phone battery will last longer and avoiding potential high roaming charges.

The Bike Citizens app can be downloaded via the following links (valid as of 8/11/18):

- Link to App Store: <https://itunes.apple.com/app/bikecityguide/id517332958>
- Link to Google Play: <https://play.google.com/store/apps/details?id=org.bikecityguide>

Sustainable Transport Access to Nearby Universities

University of New South Wales (UNSW)

Students have convenient to UNSW via the Sydney Trains T2 line stopping at Central Station to then transfer to bus routes 393, 370, 392 or 891 that stops in front of UNSW.

University of Sydney

Students have convenient access to University of Sydney via the Sydney Trains T2 line stopping at Redfern Station plus a short 800 metres walk to the university.

University of Technology Sydney (UTS)

Students have convenient access to UTS via the Sydney Trains T2 line stopping at Central Station plus a short 550 metres walk to UTS.

Students can also catch bus routes 461, 480 and 483 accessible within a short 450 metres (about 6 minutes) walk to bus stops on Parramatta Road that stops directly in front of UTS.

Other Colleges

There are also many other tertiary education establishments and colleges in Sydney positioned in key transport nodes where it can be conveniently accessed via public transport services.

In any event, it should be appreciated that on-site students have chosen to stay at this location because it is convenient for them to travel to their respective education institution and also providing them with convenient access to a wide range of essential shops and services located in the Summer Hill CBD.

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.

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

However, neither the RMS *Guidelines* nor its *Technical Direction* nominate a traffic generation rate for student accommodations. In any event, it should be noted that the proposed development does not provide *any* off-street car parking spaces and that *all* students will rely on public transport services or walk / cycle for their daily travel needs.

It is therefore reasonable to conclude that the traffic generation potential of the proposed development will be minimal, if any, during both the AM and PM peak hours.

By way of comparison, the adaptive reuse of the existing buildings for industrial purposes could be expected to generate in the order of up to 20 vph during peak periods when assessed in accordance with the traffic generation rates nominated in the RMS *Guidelines* for the existing industrial building floor space on the site.

Accordingly, it is clear that the proposed development would result in a *nett reduction* in the traffic generation potential of the site, thereby contributing to a nett positive transport planning outcome which 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 are illustrated on Figure 7 and comprise:

- UNRESTRICTED PARKING on the northern side of Carlton Crescent
- NO STOPPING restriction on the southern side of Carlton Crescent
- 2 HOUR PARKING restrictions elsewhere along the southern side of Carlton Crescent
- NO STOPPING restrictions in Hardie Avenue.

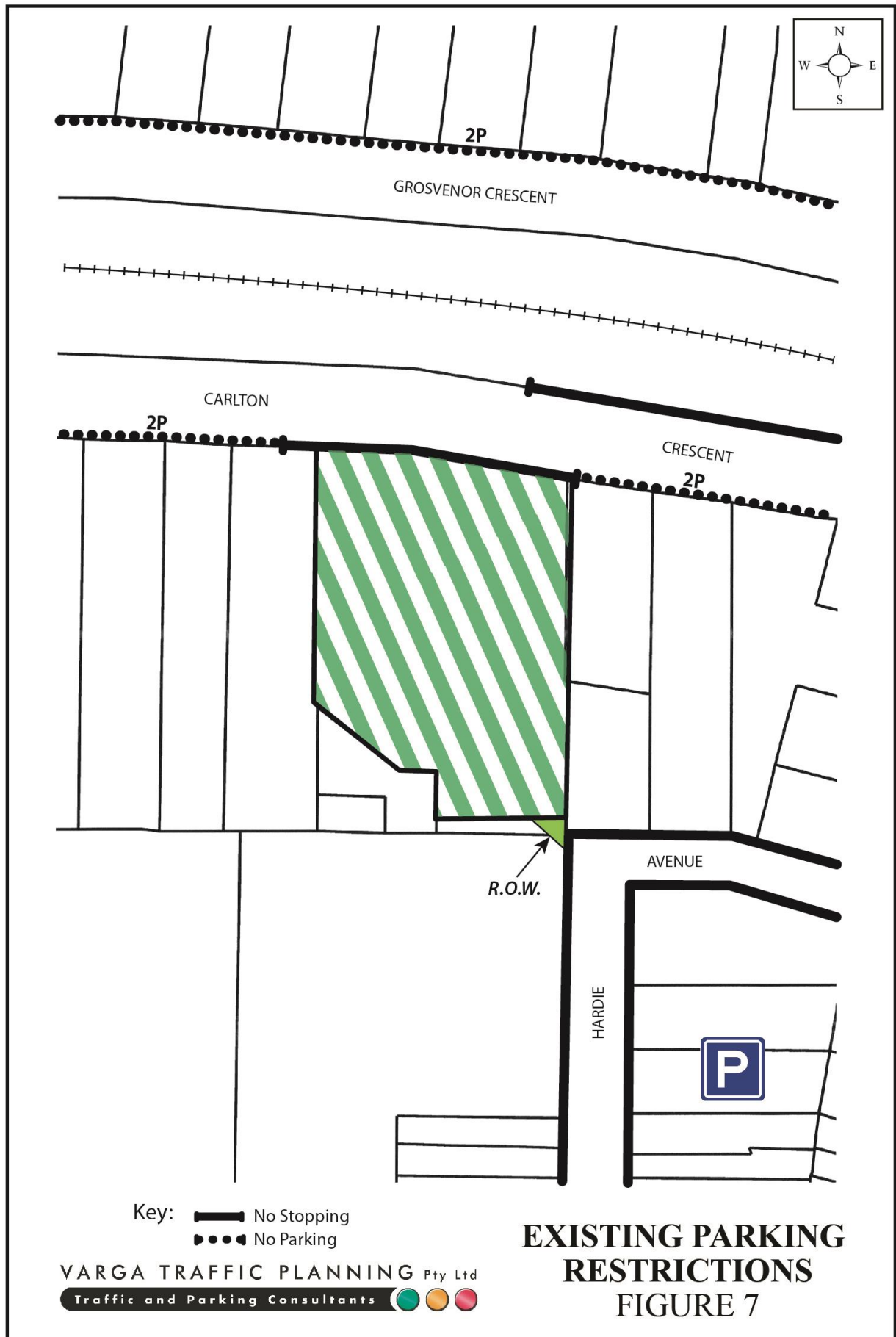
Off-Street Parking Provisions

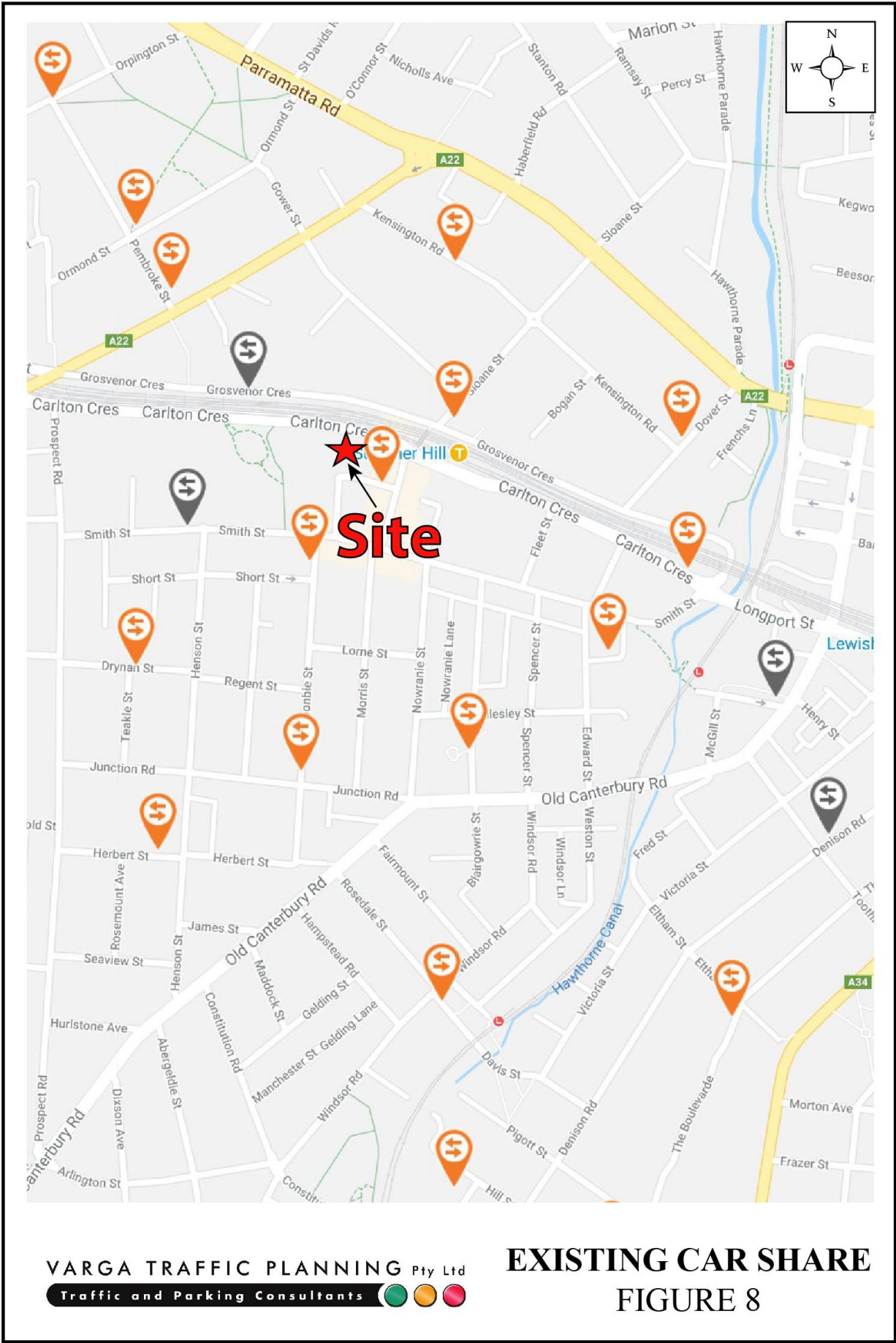
The off-street car parking requirements applicable to the site is provided in the *Inner West Comprehensive Development Control Plan (DCP) 216 for Ashbury, Ashfield, Croydon, Croydon Park, Haberfield, Hurlstone Park and Summer Hill, Section 2, Chapter A, Part 8 Parking* document.

However, the DCP does not nominate a car parking requirement for student accommodation developments.

The targeted demographic of the proposed purpose-built student accommodation building comprises environmentally aware students seeking to stay in a convenient and highly accessible location that allows them to move about the local area on foot or bicycle, and will utilise train / bus services to travel to more distant destinations.

Should any students require a private vehicle, they can conveniently rent a *car share* vehicle provided by services such as *GoGet* or *Car Next Door* without hassle which are readily available in the nearby area as indicated on Figure 8.





Similarly, the future staff working in the building will find it very convenient to travel to / from work by using public transport or simply by walking / cycling and therefore will not require a car parking space. Driving to work in inner Sydney locations is of the past and is a luxury that no longer exist for the general working population. The State Government's commitment to continuously improve sustainable transport infrastructure seeks to address this very issue, and with a site located next to a suburban railway station, there is no need to provide staff car parking consistent with these sustainable transport objectives.

Further reference is made to the RMS' travel demand management principles to contribute to sustainable transport initiatives and reduce congestion:

"As part of the State Plan the NSW Government is pursuing a range of initiatives to reduce car dependence and manage travel demand. Roads and Maritime Services supports the principles of moderating traffic growth by encouraging people to reduce car use and maximise the capacity of the existing road network. Priorities include managing and developing the road network and its use in a way that balances the needs of public transport passengers, cyclists, motorcyclists, pedestrians, motorists and commercial operators."

Accordingly, a *restrictive* off-street car parking provision at this location for a student accommodation development is an effective method of travel demand management, and will assist in reducing traffic and parking demands in the Summer Hill Town Centre, contributing to an overall positive transport planning outcome.

Bicycle Parking

The DCP does not nominate an off-street bicycle parking requirement for student accommodation developments.

Iglu currently operates 8 similar student accommodation facilities in Brisbane, Sydney and Melbourne. All of the Iglu student accommodation facilities are purpose designed, having been opened within the past 5 years, and provide student accommodation ranging from 98 beds to 770 beds, all with ample bicycle parking facilities.

However, the take-up of bicycle parking spaces by students tends to be relatively low because:

- Iglu student accommodations are located within *very easy walking distance* of tertiary education facilities and/or public transport facilities, making bicycle usage unnecessary and redundant
- many of the students are international students who cannot take their bicycles home at the end of the semester/course, and have no need for a bicycle during their stay in Australia because they have chosen accommodation within walking distance of a train station and/or the University they are attending.

Surveys of the *Iglu* student accommodation facilities operated by the Applicant throughout eastern Australia have found that the typical bicycle parking requirement equates to approximately 2.5% - 5% of total student numbers, as set out below:

1. Iglu Central – 98 beds – bicycle parking space usage varies from 2% to 5%
2. Iglu Chatswood – 395 beds – bicycle parking space usage varies from 0.8% to 2.1%
3. Iglu Central Park – 770 beds – bicycle parking space usage varies from 2.8% to 4.2%
4. Iglu Broadway – 271 beds – bicycle parking space usage approx. 2.2%
5. Iglu Redfern I – 370 beds – bicycle parking space usage approx. 3.5%
6. Iglu Brisbane City – 414 beds – bicycle parking space usage approx. 4.9%
7. Iglu Kelvin Grove – 454 beds – bicycle parking space usage varies between 6% and 8%
8. Iglu Melbourne City Stage 1 – 139 beds – bicycle parking space usage approx. 6.5%

On a pro-rata basis, the proposed development could be expected to generate a bicycle parking demand of 5 to 9 bicycle parking spaces.

That projected bicycle parking demand is comfortably satisfied by the proposed provision of 52 bicycle parking spaces at ground floor level.

Conclusion

Based on the analysis and discussions presented in this Traffic and Parking Assessment Report, the following conclusions are made:

- the site is located less than 150m walking distance from Summer Hill Railway Station, in the Summer Hill Town Centre, with convenient access to public transport services as well as a wide range of essential shops and services
- the subject site is also located immediately adjacent to the local Summer Hill shopping centre. Direct pedestrian access will be provided from the site to the IGA supermarket which is located next door
- a broad range of other shops, restaurants, cafes and services are also located within an easy 150m walking distance of the site to meet the day-to-day needs of students
- the site is therefore ideally located to discourage private car usage, and to encourage greater use of public transport and other active forms of transport such as walking and cycling
- the proposed development will involve the demolition of the existing industrial building on the site to facilitate the construction of a purpose-built student accommodation building
- the new student accommodation building will feature a total of 184 studio accommodation rooms
- no off-street car parking is proposed to reduce private vehicle usage and encourage sustainable and active modes of transport
- a *restrictive* off-street car parking provision at this location for a student accommodation building is an effective method of travel demand measurement, and will assist in reducing traffic and parking demands in the Summer Hill Town Centre, contributing to an overall positive transport planning outcome

- the proposed development is expected to result in a *nett reduction* of some 20 vph in the traffic generation potential of the site during both the AM and PM peak hour when compared with a potential adaptive reuse of the existing industrial building on the site, thereby contributing to a nett positive transport planning outcome, and will clearly not have any unacceptable traffic implications in terms of road network capacity

On the above basis, it is concluded that the proposed student accommodation development is supportable on traffic planning grounds, and is therefore recommended for approval.