Proposed Mixed-Use Development

60-78 Regent Street, Redfern

TRAFFIC AND PARKING ASSESSMENT REPORT

25 November 2014

Ref 14696

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants

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1. INTRODUCTION

This report has been prepared to accompany an Application for a mixed-use development proposal to be located at 60-78 Regent Street, Redfern (Figures 1 and 2).

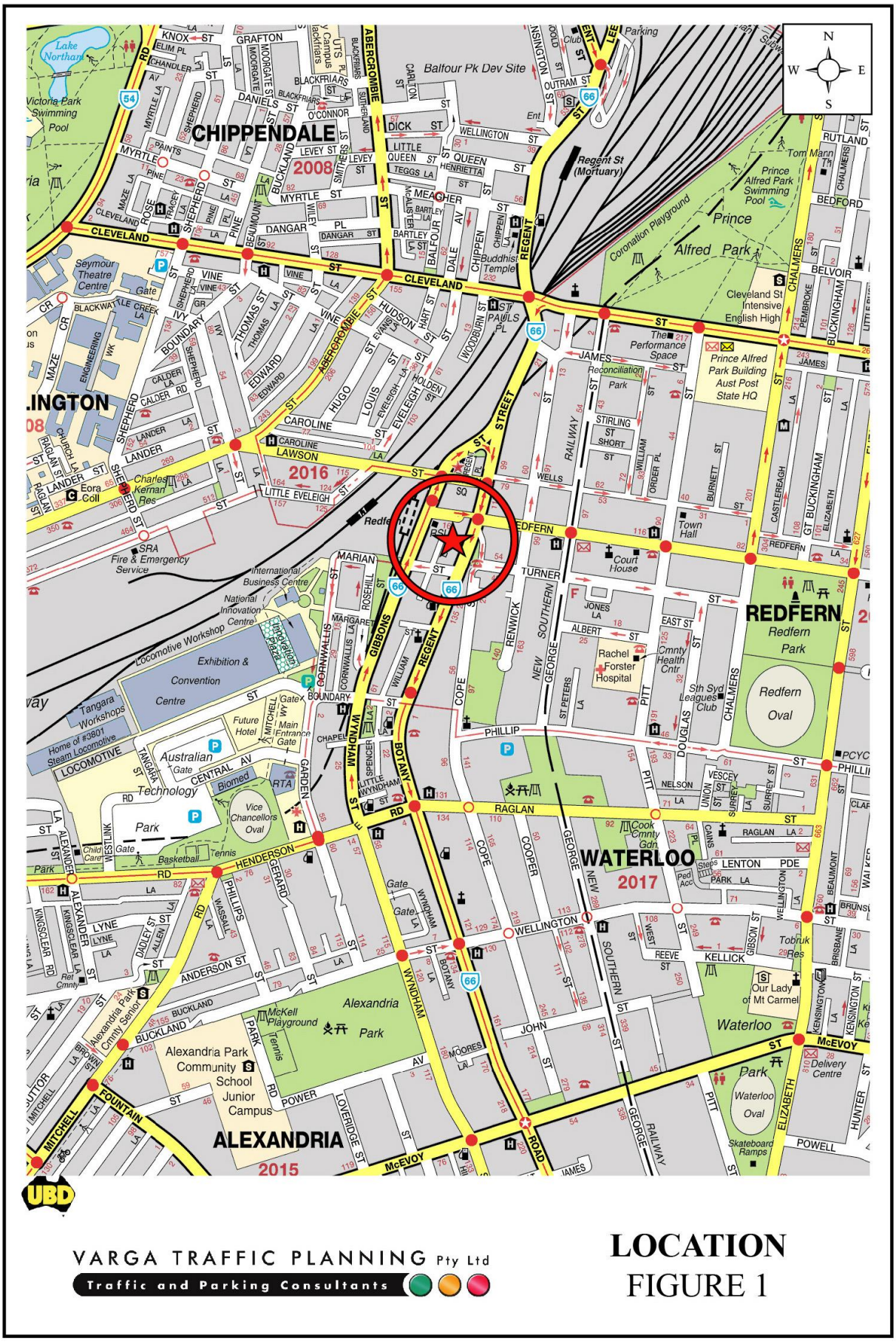
The proposed development will involve the demolition of the existing commercial buildings on the site to facilitate the construction of a new mixed-use development comprising retail uses at street level and student accommodation on the levels above.

There is no car parking to be provided on the site.

The subject site is ideally located to suit the needs of students relying on public transport or alternate forms of transport such as walking and cycling. The site is readily accessible by an extensive range of public transport services as detailed in Chapter 3 of this report. In addition, the subject site is also located within easy walking (or cycling) distance of several tertiary education facilities, including University of Sydney, University of Technology and Sydney TAFE College.

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
- assesses the parking implications of the development proposal



UBD

VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants

LOCATION
FIGURE 1


N
W
E
S
LOUIS ST
CAROLINE ST
EVELEIGH ST
LAWSON ST
LAWSON SQ
REGENT
RENWICK
WELLS ST
REDFERN STATION
REDFERN ST
REDFERN
MARIAN ST
MARIAN ST
LN
WILLIAM ST
MARGARET ST
ROSEHILL
GIBBONS
WILLIAM LN
REGENT
COPE ST
TURNER ST
RENWICK
Road Closure / Unformed Road
VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants
SITE
FIGURE 2

2. PROPOSED DEVELOPMENT

Site

The subject site is located on the western side of Regent Street, between Redfern Street & Marion Street. The site has a street frontage approximately 54m in length to Regent Street, approximately 25m in length to William Lane. The site occupies an area of approximately 1,428m^2.

The site is currently occupied by various commercial buildings (~2400m²). Pedestrian access at the rear of Property Numbers 60-68 is provided via a service laneway that runs along the rear of the site, off Redfern Street. Vehicular access to the rear of Property Numbers 70-78 is provided via William Lane.

Proposed Development

The proposed development will involve the demolition of the existing commercial buildings on the site to facilitate the construction of a new mixed-use development comprising retail shops at street level and student accommodation on the levels above.

A total of 134 student accommodation units are proposed in the new building as follows:

Studio units:	85
4 bedroom units:	4
5 bedroom units:	1
6 bedroom units:	44
TOTAL UNITSS:	**134**

The student accommodation also consists of a reception area, a lounge, a games room, a laundry room, a meeting room, a study room and a media room located on the first floor level. The entry lobby for the student accommodation facility is located at ground floor level, fronting a proposed new through-site pedestrian link which extends between Regent Street, William Lane and Redfern Street.

A number of retail tenancies are also proposed on the ground floor level, fronting Regent Street, with a cumulative floor area of 626m^2.

A dance rehearsal room is also proposed on the ground floor level, fronting William Lane with a cumulative floor area of 113m².

Off-street car parking is not proposed on the site. However, as noted in the foregoing, the subject site is ideally located to suit the needs of students relying on public transport or alternate forms of transport such as walking and cycling. The site is readily accessible by an extensive range of public transport services as detailed in Chapter 3 of this report. In addition, the subject site is also located within easy walking (or cycling) distance of several tertiary education facilities, including University of Sydney, University of Technology and Sydney TAFE College.

Loading/servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles up to and including 9.8m long medium rigid trucks. The loading dock is to be located on the ground floor level. The proposed loading dock will have a minimum width of 6.0m and a depth of approximately 11.0m, and will be capable of accommodating 2 light commercial vehicles such as utilities, "white vans" or small 6.4m long SRV rigid trucks simultaneously, or 1 larger rigid truck up to 9.8m in length such as a commercial garbage collection truck. Vehicular access to the loading dock is to be provided via a site access driveway located at the southern end of the William Lane site frontage.

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


LAWSON SQUARE
REDFERN STREET LANEWAY
GIBBONS STREET
WILLIAM LANE
MARIAN STREET
REGENT STREET
COPE STREET
LANEWAY
SITE AREA 330SQM
SITE AREA 1427.5SQM
SITE AREA 865SQM
BUS SHELTER
BUS SHELTER
60-78 Regent St
Redfern
Siteplan
PRELIMINARY
NOT FOR CONSTRUCTION
BATESSMART
A01.001[2]


REDFERN STREET LANEWAY
'RAILZ' PUB
56-58 REGENT STREET
2 STOREY BRICK
RENDERED TERRACE
BUILDING
RL. 39.14
REDFERN RSL
157 REDFERN STREET
RL. 96.10
LANEWAY
RETAIL
481sqm
DANCE
REHEARSAL
113sqm
RL. 29.75
FIRE
CONTROL
ROOM
RL. 29.75
IGLU
LOBBY
53sqm
RL. 29.75
RETAIL
145sqm
RL. 29.40
SUBSTATION
RL. 29.20
SWITCH RM
RL. 29.0
LOADING/
SERVICES
RL. 29.00
COMMERCIAL
BIN
STORE
IGLU
BIN
STORE
BIKES
Store
ACC.
Bar
Store
WILLIAM LANE
REGENT STREET
60-78 Regent St
Redfern
Ground Floor Plan
PRELIMINARY
NOT FOR CONSTRUCTION
A02.000[5]
BATESSMART


REDFERN STREET LANEWAY
REGENT STREET
WILLIAM LANE
LANEWAY
REDFERN RSL 157 REDFERN STREET RL. 96.10
56-58 REGENT STREET 2 STOREY BRICK RENDERED TERRACE BUILDING RL. 39.14
SITE 60-78 REGENT STREET
7-9 GIBBONS STREET
88 REGENT STREET
86 REGENT STREET
84 REGENT STREET
82 REGENT STREET
80-88 REGENT STREET
MEDIA 42sqm
MEETING 23sqm
RECEPTION/ OFFICE 50sqm
TERRACE 280sqm
LOUNGE 125sqm
TOWER OVER
VOID
GAMES 72sqm
LAUNDRY 63sqm
COURTYARD 93sqm
STUDY 30sqm
LOUNGE 67sqm
FEMALE WC
MALE WC
Accessible 25sqm
5BED
4000
60-78 Regent St
Redfern
Podium plan
Level 01
A02.001[4]
PRELIMINARY
NOT FOR CONSTRUCTION
BATESSMART.

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.

Regent Street is classified by the RMS as a *State Road* and provides the key southbound road link in the area between Broadway and Botany Road. It typically carries three traffic lanes in a one-way southbound direction in the vicinity of the site.

Gibbons Street is also classified by the RMS as a *State Road* and provides the key northbound road link in the area. It typically carries 3 lanes in a one-way northbound direction in the vicinity of the site.

Cleveland Street is also classified by the RMS as a *State Road* and provides the key east-west road link in the area, linking City Road to Anzac Parade. It typically carries two traffic lanes in each direction in the vicinity of the site with turning bays provided at key locations.

Redfern Street (west of Chalmers Street) is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Restricted kerbside parking is generally permitted on both sides of the road.

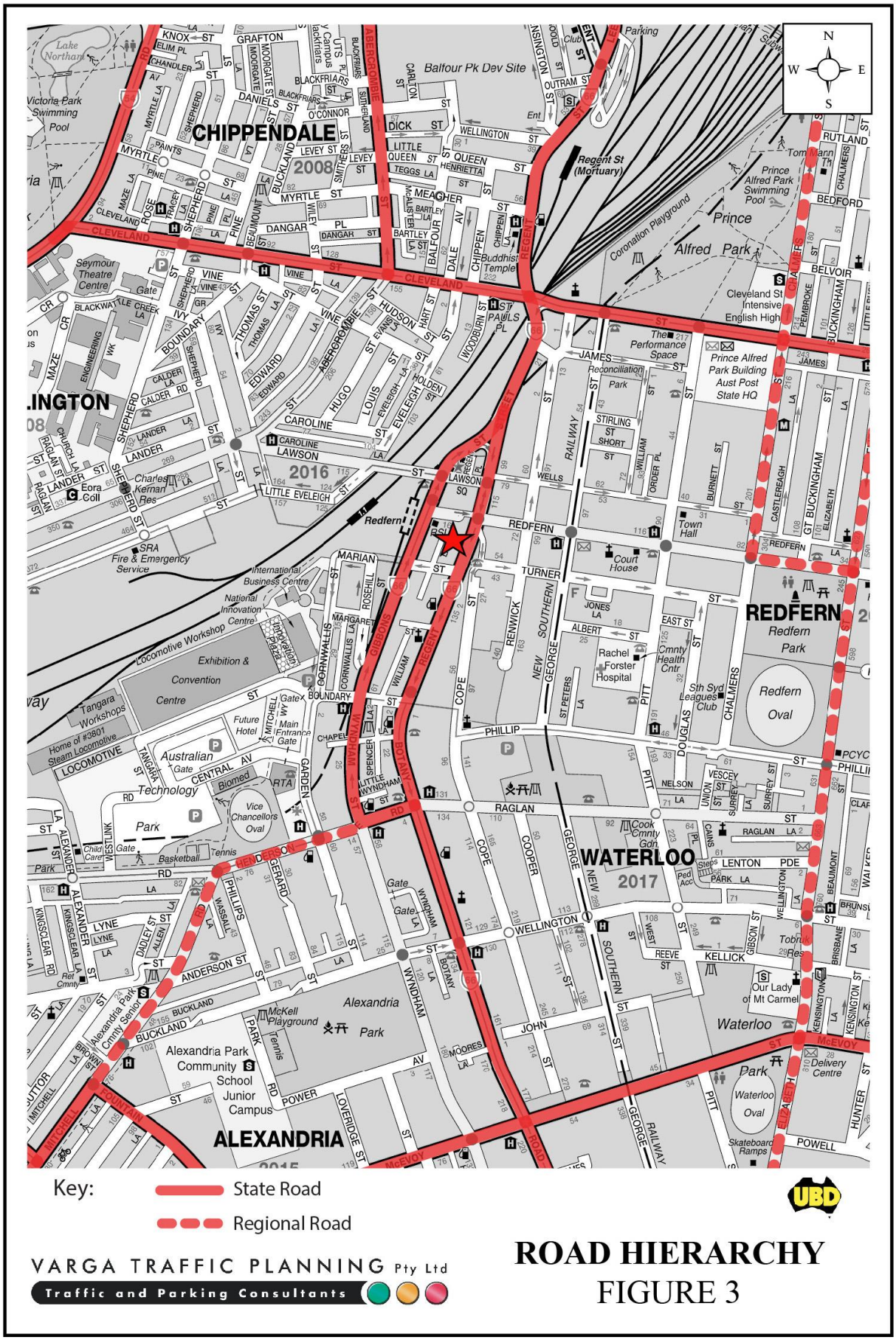
Williams Lane is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties.

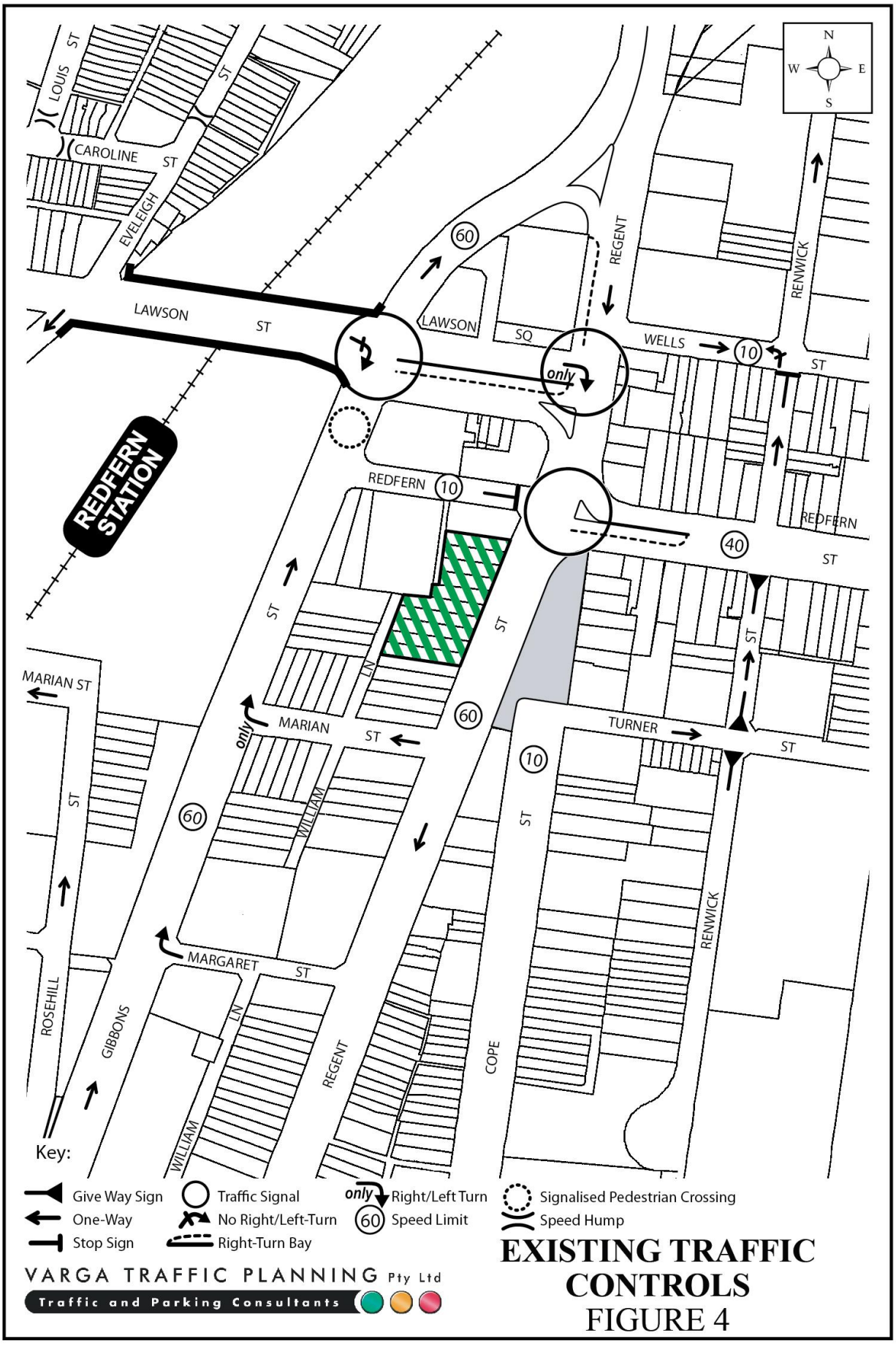
Existing Traffic Controls

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 60 km/h SPEED LIMIT which applies to Regent Street

- a 10km/h SPEED LIMIT which applies to Redfern Street (west of Regent Street)


CHIPPENDALE
2008
2016
2017
REDFERN
WATERLOO
ALEXANDRIA
Redfern
Waterloo
Alexandria
Alexandria Park Community School Junior Campus
Redfern Park
Redfern Oval
Waterloo Oval
Alexandria Park
Prince Alfred Park
Victoria Park Swimming Pool
Prince Alfred Park Swimming Pool
Seymour Theatre Centre
Balfour Pk Dev Site
Regent St (Mortuary)
Coronation Playground
Buddhist Temple
Cleveland St Intensive English High
The Performance Space
Prince Alfred Park Building Aust Post State HQ
Reconciliation Park
Town Hall
Court House
Rachel Forster Hospital
Cmnty Health Cntr
Sth Syd Leagues Club
Cook Cmnty Gdn
Our Lady of Mt Carmel
Delivery Centre
Skateboard Ramps
Charles Kernan Res
Eora Coll
SRA Fire & Emergency Service
International Business Centre
National Innovation Centre
Locomotive Workshop
Exhibition & Convention Centre
Tangara Workshops
Home of #3801 Steam Locomotive
Australian Technology Park
Future Hotel
Vice Chancellors Oval
Biomed
RTA
Child Care
Basketball
Tennis
McKell Playground
Alexandria Park Cmnty Senior
Ref Cmnty
Lake Northam
Parking
Key:
State Road
Regional Road
VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants
UBD
ROAD HIERARCHY
FIGURE 3


N
W
E
S
LOUIS ST
CAROLINE ST
EVELEIGH ST
LAWSON ST
LAWSON SQ
REGENT
RENWICK
WELLS
10
ST
only
REDFERN STATION
REDFERN
60
40
MARIAN ST
MARIAN ST
LN
WILLIAM ST
TURNER ST
ROSEHILL
GIBBONS
MARGARET ST
LN
REGENT
COPE
RENWICK
WILLIAM
Key:
Give Way Sign
One-Way
Stop Sign
Traffic Signal
No Right/Left-Turn
Right-Turn Bay
Right/Left Turn
Speed Limit
Signalised Pedestrian Crossing
Speed Hump
VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants
EXISTING TRAFFIC CONTROLS
FIGURE 4

- a 40km/h SPEED LIMIT which applies to Redfern Street (east of Regent Street)

- TRAFFIC SIGNALS in Regent Street where it intersects with Redfern Street and Lawson Street

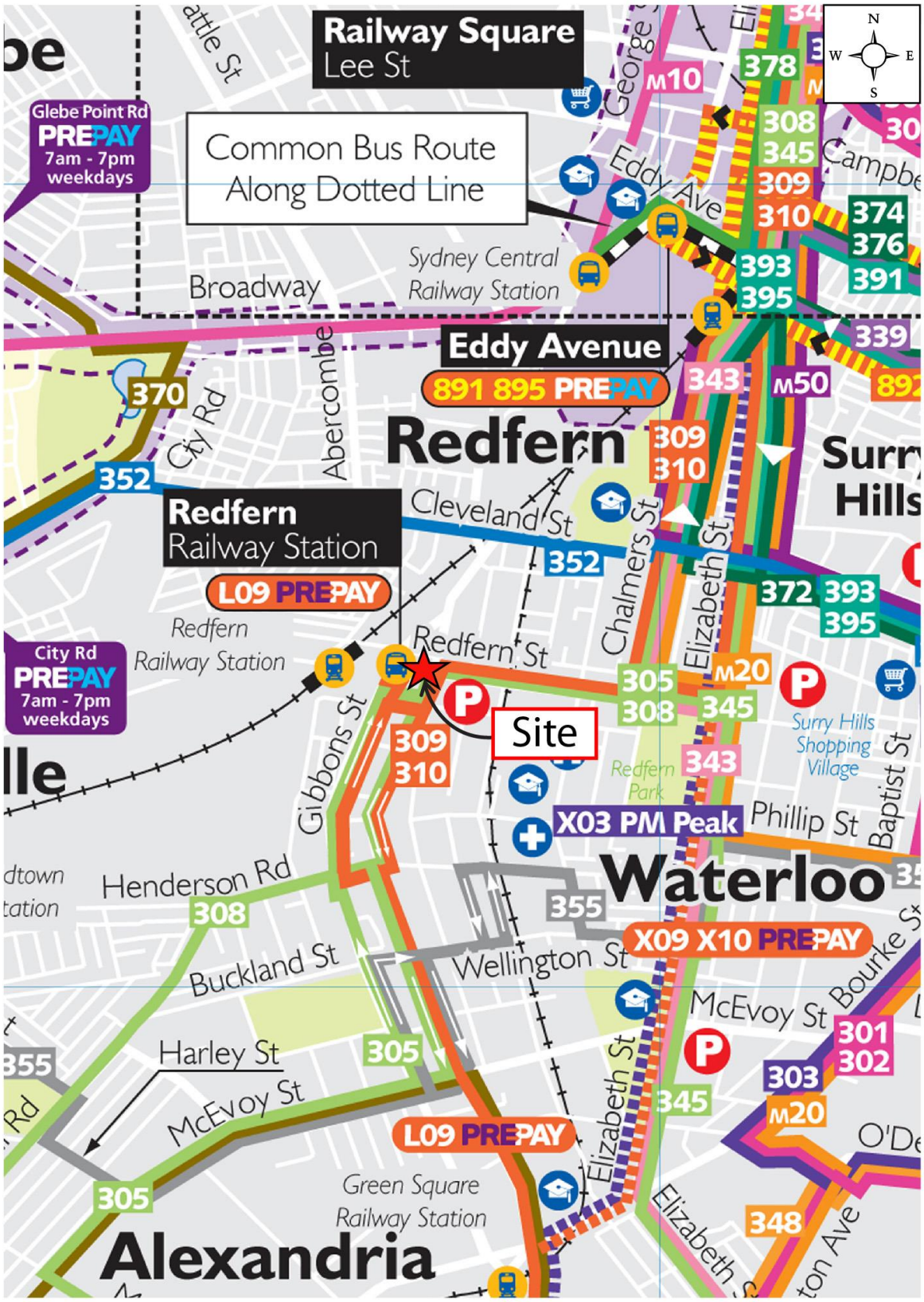
- a STOP SIGN in Redfern Street where it intersects with Regent Street.

Existing Public Transport Services

The existing public transport services available to the site are illustrated on Figure 5. The 305, 308, 309, 310, L09 and N11 bus services all operates along Regent Street and Gibbons Street, with the closet southbound bus stop located just 40m south of the site and the closest northbound bus stop located just 80m west of the site on Gibbons Street, outside Redfern Railway Station.

There are approximately 1000 bus services per day on weekdays operating in the immediate vicinity from the site, as well as approximately 600 bus services per day on Saturdays and approximately 300 bus services per day on Sundays and public holidays, as set out below:

Bus Routes and Frequencies							
Route No.	**Route**	**Weekdays**		**Saturday**		**Sunday**	
		IN	**OUT**	**IN**	**OUT**	**IN**	**OUT**
305	Railway Square to Stamford Plaza Hotel	9	9	-	-	-	-
308	Marrickville Metro to City	34	35	26	26	16	16
309	Port Botany & Eastgardens to City	69	69	43	46	30	29
310	Port Botany & Eastgardens to City	49	54	37	37	26	26
L09	Port Botany & Eastgardens to City	5	11	-	-	-	-
N11	Cronulla to City	19	19	18	18	18	18
M20	Gore Hill to Botany	~60	~60	~37	~37	~37	~37
M50	Drummoyne to Coogee	~58	~58	~37	~37	~37	~37
345	Kingsford to City via Rosebery	1	1	-	-	-	-
372	Coogee to City via Randwick	73	78	53	54	51	49
393	La Perouse & Malabar to City via Anzac Bridge	99	87	57	34	44	38
395	Maroubra to City via Anzac Bridge	30	35	21	21	21	19
TOTAL		**~506**	**~516**	**~329**	**~310**	**~280**	**~269**



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EXISTING PUBLIC TRANSPORT
FIGURE 5

In addition, the site is located approximately less than 2 minutes walking distance from Redfern Railway Station which provides access to all suburban rail services.

Accordingly, it is clear that the subject site is readily accessible by public transport services.

Sydney's Walking Future

Sydney's Walking Future aims to get more people walking by making walking more convenient, particularly for trips under 2km. Walking trips can comprise a "walk only" trip when an entire trip from origin to destination is walked. Walking trips can also comprise walking at either end of a public transport journey.

Encouraging more people to walk is an effective way to free-up capacity on the transport system and to reduce congestion in busy centres. The benefits of walking can include:

- long-term cost savings by incorporating walking infrastructure into major transport projects
- reduce traffic congestion, particularly where walking trips are made during peak periods
- extend the catchment area of public transport services
- public health benefits associated with reduced obesity, and
- reduced greenhouse gas emissions.

Sydney Cycling Future

Sydney's Cycling future aims to encourage more people to ride a bike for transport by making it a more convenient transport option. Measures to grow the number of people riding bicycles include:

- provide facilities which can encourage residents and employees to cycle for short trips, particularly on the most constrained parts of the transport network

- integrating bike riding into the way communities are designed

- delivering local initiatives that make the greatest improvements to safety and local access

- working in partnership with businesses to develop travel plans to encourage residents and employees to ride a bike

- providing improved bicycle access to public transport facilities.

NSW Long-Term Transport Master Plan (2012)

The Master Plan prepared by Transport for NSW sets the direction for transport planning for the next 20 years, providing a framework for transport policy and investment decisions that respond to key challenges.

The plan sets out the transport challenges over the next 20 years:

- integrating modes to meet customer needs
- getting Sydney moving again
- providing essential access for regional NSW
- supporting efficient and productive freight
- addressing state wide challenges across the transport network.

The Master Plan also identifies solutions and actions that integrate, grow, modernise and manage the transport system in the short term (0-5 years) and longer term (10-20 years).

Planning Guidelines for Walking and Cycling

The *Planning Guidelines for Walking and Cycling* identify a number of city-scale design principles that can assist the creation of walkable and cyclable cities and neighbourhoods.

These principles emphasise urban renewal and the creation of compact, mixed use, accessible centres around public transport stops. At the neighbourhood scale, design principles can be reinforced through the creation of local and accessible centres and neighbourhoods with connected street patterns and road design which aim to reinforce local walking and cycling networks.

In particular, the *Guidelines* note that increased population density is an important element in creating a walkable and cyclable city. A compact development brings activities close together, making them more accessible by foot or by bicycle, without the need to use a car. Increased population density also enhances the viability of public transport services.

Work Place Travel Plan

A Work Place Travel Plan aims to manage transport through a series of measures that promote and facilitate more sustainable modes of travel with a view to reducing motor vehicle use. A Work Place Travel Plan establishes travel mode targets in consultation with residents and employees which are to be reviewed on a regular basis. The key tasks of the Work Place Travel Plan Coordinator will include:

- undertake regular surveys to identify the travel modes of building occupants
- maintain and update the information provided in the Transport Access Guide, and
- set new travel mode targets on an ongoing pace in consultation with residents and employees.

Transport Access Guide

The aim of a Transport Access Guide is to ensure that residents and employees are aware of the options available for travel to the subject development by walking, cycling or public transport.

A Transport Access Guide will typically include a map illustrating public transport routes, cycle ways and walking paths, as well as key destinations in the vicinity of the site such as tertiary education facilities.

The Transport Access Guide will be developed in accordance with the principles identified by Transport for NSW and Sydney City Council prior to issue of the Occupation Certificate.

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:

The RMS *Guidelines* are based on extensive surveys of a wide range of land uses. The RMS *Guidelines* do not nominate a traffic generation rate for student accomodation. For the purposes of this assessment therefore, the traffic generation rate nominated in the RMS *Guidelines* for high density residential apartments has been adopted as follows:

> **High Density Residential Flat Buildings**
> 0.29 peak hour vehicle trips

The RMS *Guidelines* do not nominate a traffic generation rate for small, local shops, referring only to major regional shopping centres incorporating supermarkets and department stores. It also does not nominate a traffic generation rate for dance rehearsal rooms. For the purposes of this assessment therefore, the traffic generation rate of 2.0 peak hour vehicle trips/100m^2 GFA nominated in the RMS *Guidelines* for commercial premises has been adopted in respect of the retail component and dance rehearsal room component of the development proposal.

Application of the above traffic generation rates to the various components of the development proposal yields a traffic generation potential of approximately 54 vehicle trips per hour during commuter peak periods as set out below:

Projected Future Traffic Generation

Residential Apartments (134 Apartments):	38.9 peak hour vehicle trips
Commercial Premises (746m^2):	14.9 peak hour vehicle trips
TOTAL TRAFFIC GENERATION POTENTIAL:	**53.8 peak hour vehicle trips**

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 of the site expected to occur as a consequence of the development proposal when compared with the previously approved development on the site.

Application of the abovementioned "commercial premises" traffic generation rate nominated in the RMS *Guidelines* to the existing commercial/retail building on the site (estimated to be approximately 2,400m^2) yields a traffic generation potential of approximately 48 peak hour vehicle trips.

Accordingly, it is likely that the proposed development will result in an *increase* in the traffic generation potential of the site of approximately 6 vph as set out below:

Projected Nett Increase in Peak Hour Traffic Generation Potential of the site as a consequence of the development proposal

Projected Future Traffic Generation Potential:	53.8 vehicle trips
Existing Traffic Generation Potential (Estimated):	-48.0 vehicle trips
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	**5.8 vehicle trips**

That projected "increase" in traffic activity of 6 vph as a consequence of the development proposal is minimal, and will clearly not have any unacceptable traffic implications in terms of road network capacity, as is demonstrated by the following section of this report.

In practice however, it is readily acknowledged that both the existing and proposed future uses of the site would generate very little traffic activity (apart from the occasional service vehicle or delivery vehicle movement) due to the constrained parking provisions on the site.

In particular, the proposed development is not expected to generate *any* traffic activity (apart from the occasional service/delivery vehicle) because:

- it is not proposed to provide any car parking on the site

- there are no unrestricted kerbside parking areas in the vicinity of the site which could be used by students or staff of the retail shops

- car ownership rates amongst students tend to be zero, and

- this site has been chosen because of its excellent accessibility to public transport and tertiary institutions thereby effectively eliminating the need for prospective future residents to own a car.

Accordingly, traffic activity generated by the completed development is expected to comprise only the occasional delivery vehicle. This could be expected to comprise say, 2 service vehicles generating a maximum of approximately 4 vehicles per hour (vph) during commuter peak periods (i.e. 2 vph IN and 2 vph OUT).

That projected level of traffic activity during peak periods is *statistically insignificant* and clearly does not require any traffic surveys or intersection capacity analysis of nearby intersections to demonstrate that those "additional" traffic flows can be accommodated on the existing road network without difficulty.

In particular, it is clear that the proposed development will *not* require any road upgrades or intersection improvements, and it is therefore reasonable to conclude that the proposed development will 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 6 and comprise:

- 1 HOUR PARKING restrictions along the western side of Regent Street, including the site frontage

- NO PARKING restrictions along both sides of William Lane and within the vicinity of the site, including the William Lane site frontage

- BUS ZONES at regular intervals along both sides of Regent Street.

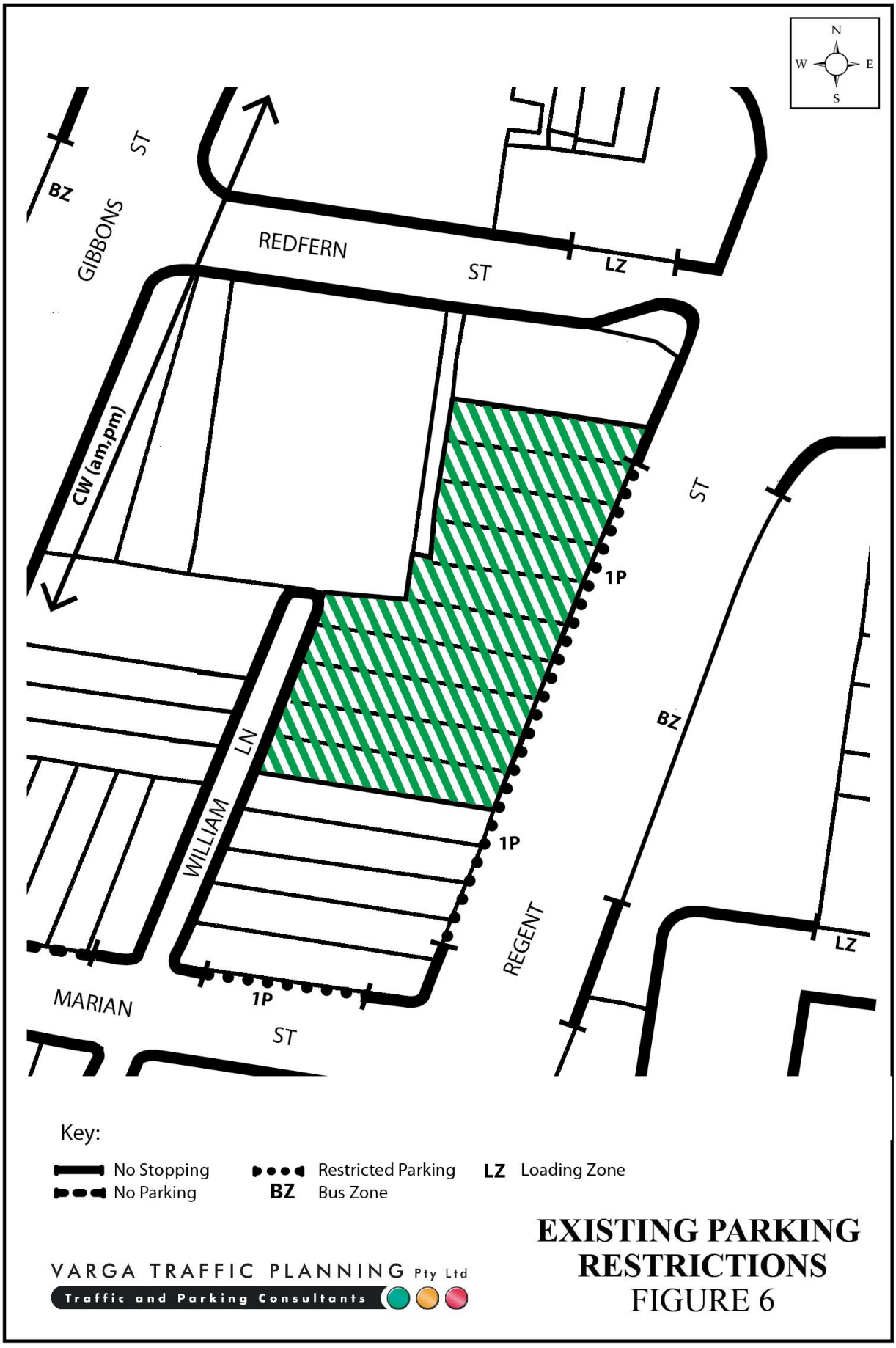
Off-Street Parking Provisions

The off-street parking requirements for most sites located in the Sydney LGA are specified in Council's *Sydney LEP 2012*. However, the *Sydney LEP 2012* does *not* apply to the subject site.

The subject site is zoned *Business Zone (E) – Mixed Use* under the *State Environmental Planning Policy (Major Development) 2005* and is identified as a *Redfern-Waterloo Authority* Site. Part 5 of the *SEPP (Major Development) 2005* does not specify any off-street parking requirements, and notes that:

> **3 Relationship with other environmental planning instruments**
>
> All other environmental planning instruments do not apply to the Redfern-Waterloo Authority Sites, except for other State environmental planning policies.

In summary, off-street parking is not required by the planning controls which apply to the site, and accordingly, off-street parking is not proposed on the site.


N
W
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BZ
GIBBONS ST
REDFERN ST
LZ
CW (am,pm)
1P
WILLIAM LN
1P
MARIAN ST
1P
REGENT ST
BZ
LZ
Key:
No Stopping
No Parking
Restricted Parking
BZ Bus Zone
LZ Loading Zone
VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants
EXISTING PARKING RESTRICTIONS
FIGURE 6

By way of comparison, ***if*** the *Sydney LEP 2012* was applicable to the site, the site would most likely be located in *Category B* for the student accommodation component and in *Category D* for the retail component. The *Sydney LEP 2012* specifies the following *maximum* number of parking spaces permitted to be provided on the site for residential and retail uses respectively:

7.5 Residential flat buildings, dual occupancies and multi dwelling housing

(1) The maximum number of car parking spaces for residential flat buildings, dual occupancies and multi dwelling housing is as follows:
(b) on land in category B:
(i) for each studio dwelling – 0.2 spaces
(ii) for each 1 bedroom dwelling – 0.4 spaces, and
(iii) for each 2 bedroom dwelling – 0.8 spaces,. And
(iv) for each 3 or more bedroom dwelling – 1.1 spaces

7.7 Retail premises

(1) This clause does not apply to a building if the building has more than 2,000 square metres of gross floor area used for the purposes of retail premises.

(2) The maximum number of car parking spaces for a building used for the purposes of retail premises is as follows:

(d) if the building is on land in category D and has a floor space ratio greater than 3.5:1, the following formula is to be used:

M = (G x A) : (50 x T)

Where
M is the maximum number of parking spaces, and
G is the gross floor area of all retail premises in the building in square metres, and
A is the site area in square metres, and
T is the total gross floor area of all buildings on the site in square metres.

It is noted however, that the Sydney LEP does not nominate a parking rate specifically for student accommodation units, referring only to residential flat buildings.

Application of the above *maximum* parking rates to the proposed development indicates that the *maximum* number of parking spaces permitted to be provided on the site is 73 spaces as set out in the table below:

Maximum Number of Parking Spaces Permitted Under the Sydney LEP 2012	
Residential Component:	70.9 spaces
Retail Component:	1.8 spaces
Maximum Parking Permitted:	**72.7 spaces**

The proposed development satisfies the parking rates specified in the *Sydney LEP 2012*, in that the number of parking spaces proposed on the site (i.e. zero spaces) does *not* exceed the *maximum* parking provisions permitted under the LEP where it is applicable to the site.

Loading/Servicing Provisions

The proposed new mixed-use building is expected to be serviced by a variety of light commercial vehicles such as utilities, "white vans" and small 6.4m long SRV rigid trucks, and on some occasions, by larger rigid trucks such as a 9.8m long commercial garbage truck.

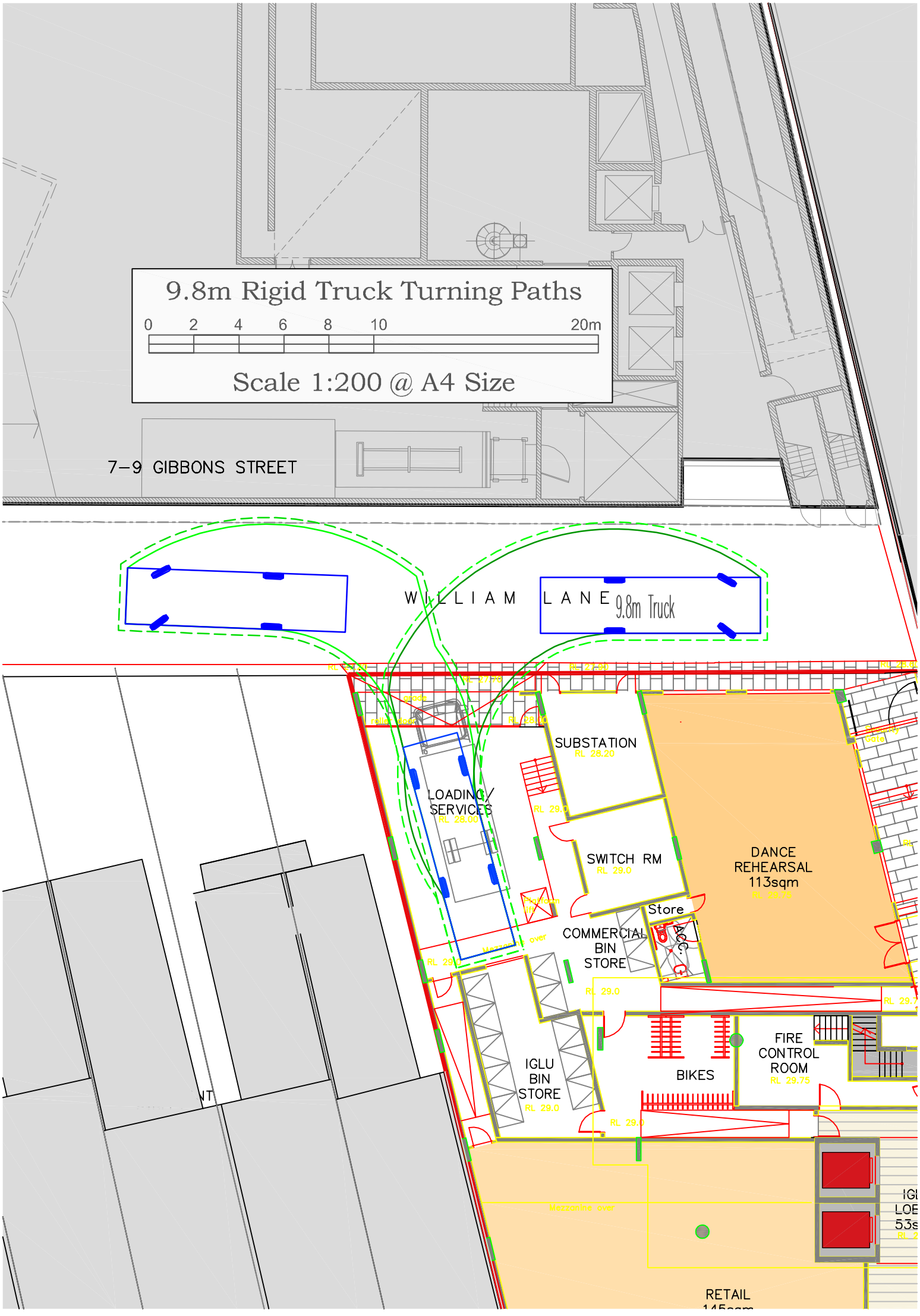
The proposed loading dock is to be located at ground floor level at the rear of the site, along the William Lane frontage of the site.

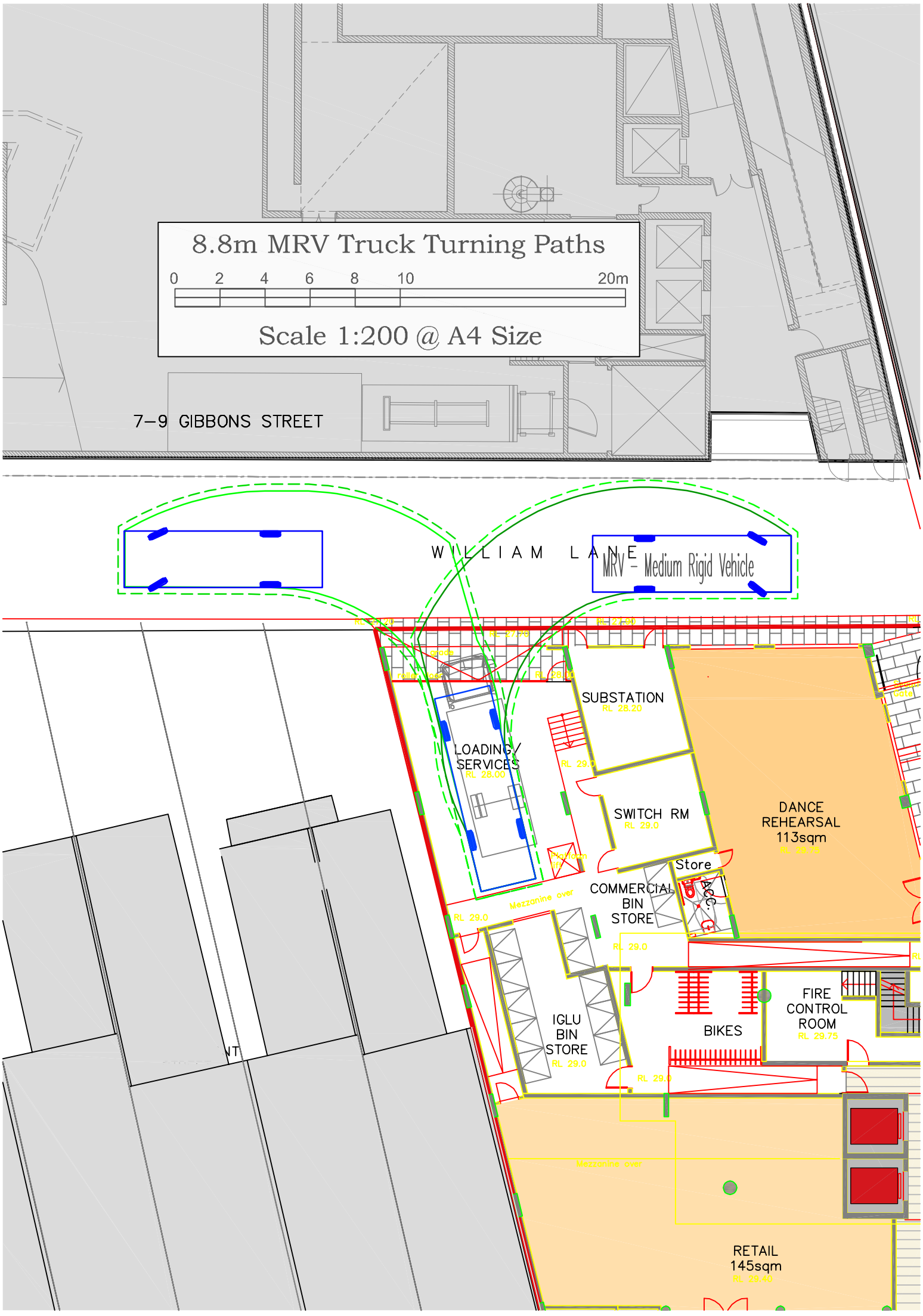
The loading dock has been designed to accommodate 2 light commercial vehicles simultaneously, or a large 9.8m long rigid truck such as a commercial garbage truck. The manoeuvring area has been designed to accommodate the swept turning path requirements of these medium rigid trucks, allowing them to enter the site in a reverse direction and exit the site in a forward direction at all times.

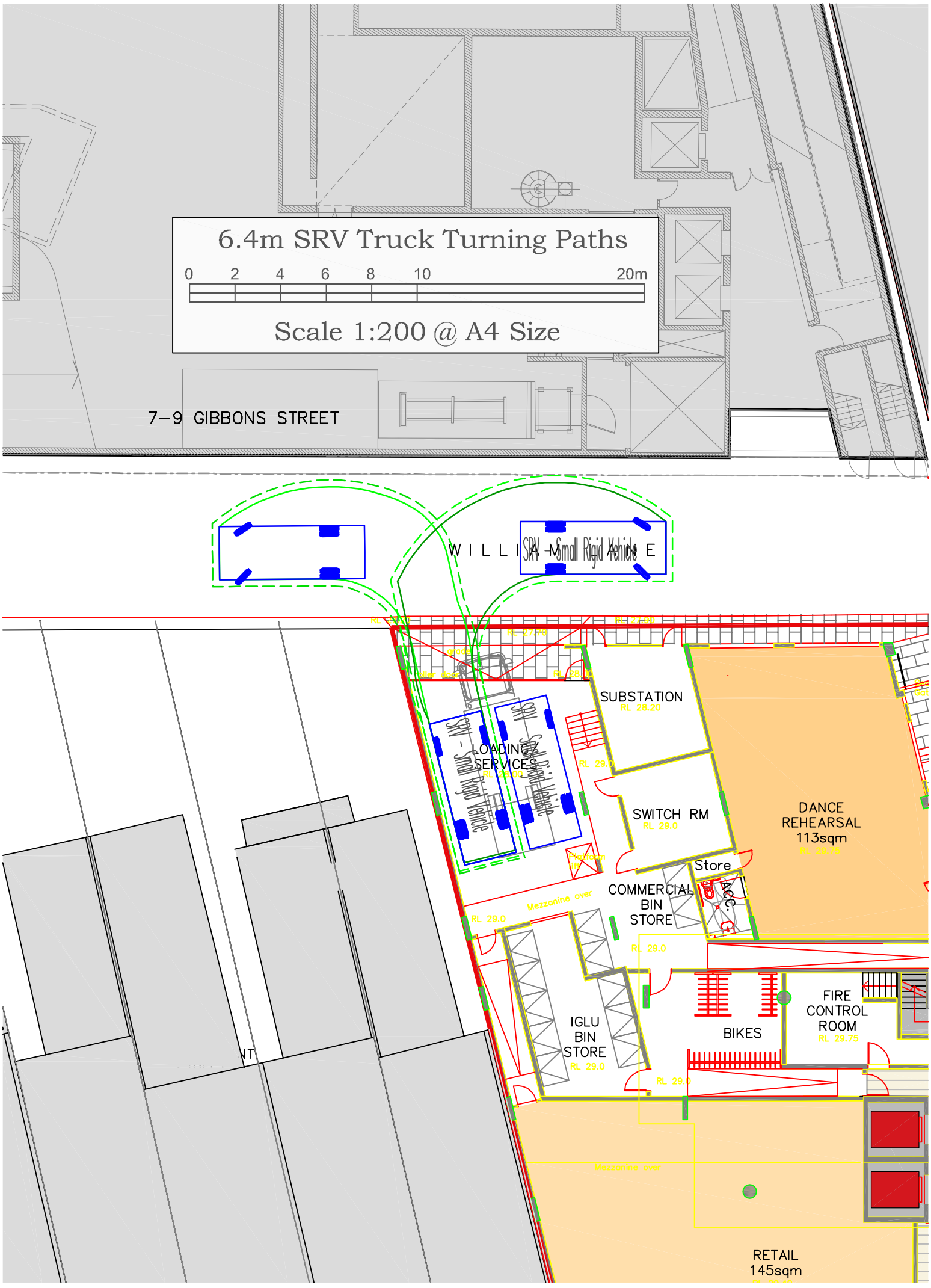
Swept turning path diagrams illustrating the manoeuvring requirements of the various light commercial vehicles and rigid trucks expected to service the site are reproduced in the following pages, confirming that these vehicles will be able to service the site using the proposed loading dock without difficulty.

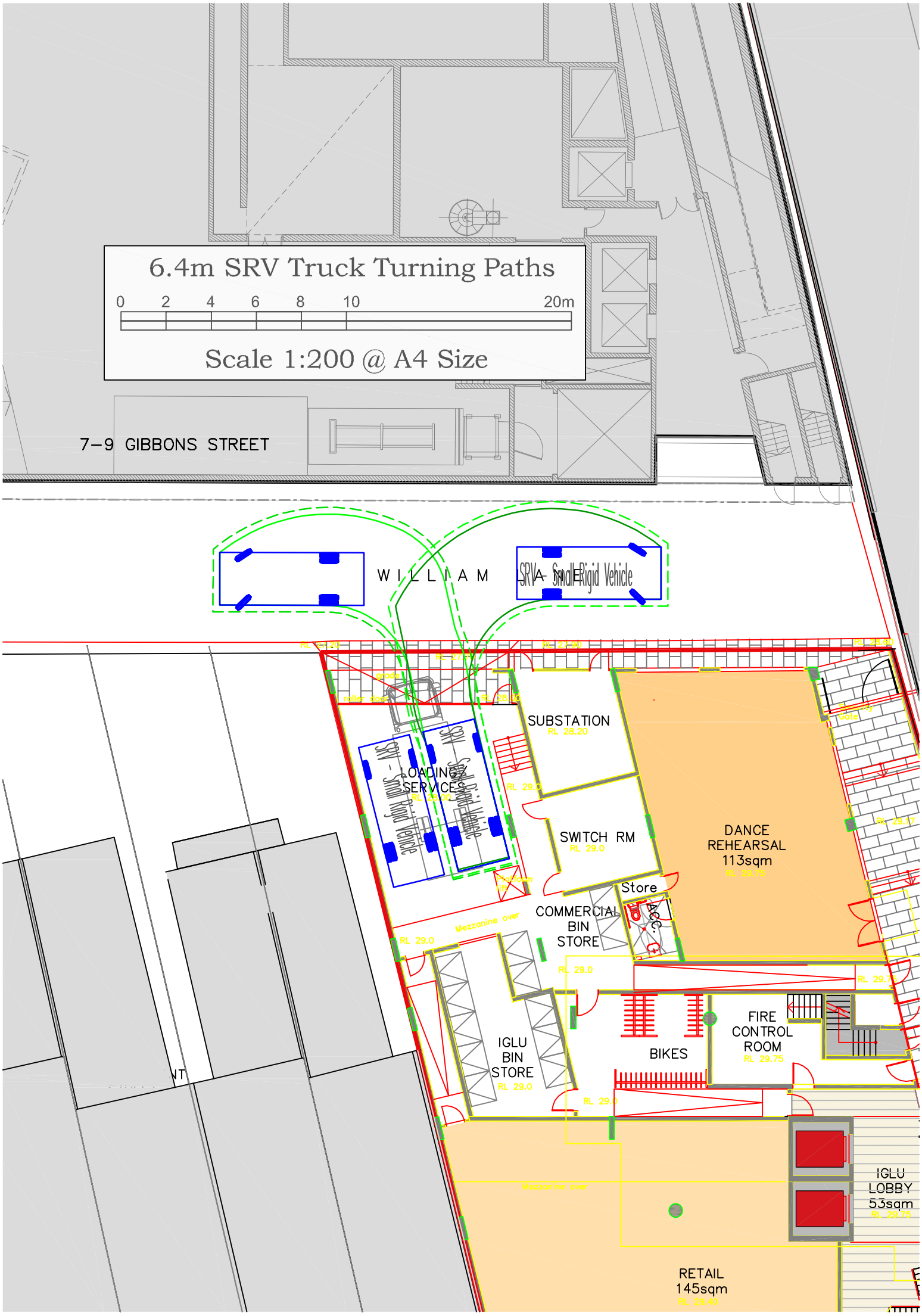
The geometric design layout of the proposed loading facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2:2002* in respect of loading dock dimensions and service area requirements for 9.8m long rigid trucks.

In summary, the proposed loading 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 loading implications.


9.8m Rigid Truck Turning Paths
0 2 4 6 8 10 20m
Scale 1:200 @ A4 Size
7–9 GIBBONS STREET
WILLIAM LANE
9.8m Truck
SUBSTATION
RL 28.20
LOADING / SERVICES
RL 28.00
SWITCH RM
RL 29.0
DANCE REHEARSAL
113sqm
RL 29.75
Store
COMMERCIAL BIN STORE
IGLU BIN STORE
RL 29.0
BIKES
FIRE CONTROL ROOM
RL 29.75
Mezzanine over
RETAIL


8.8m MRV Truck Turning Paths
0 2 4 6 8 10 20m
Scale 1:200 @ A4 Size
7–9 GIBBONS STREET
WILLIAM LANE
MRV - Medium Rigid Vehicle
SUBSTATION
RL 28.20
LOADING / SERVICES
RL 28.00
SWITCH RM
RL 29.0
DANCE REHEARSAL
113sqm
RL 29.75
Store
COMMERCIAL BIN STORE
Mezzanine over
RL 29.0
IGLU BIN STORE
RL 29.0
BIKES
FIRE CONTROL ROOM
RL 29.75
RETAIL
145sqm
RL 29.40


6.4m SRV Truck Turning Paths
0 2 4 6 8 10 20m
Scale 1:200 @ A4 Size
7–9 GIBBONS STREET
WILLIAM
SRV - Small Rigid Vehicle
SRV - Small Rigid Vehicle
SRV - Small Rigid Vehicle
SUBSTATION
RL 28.20
LOADING & SERVICES
RL 29.0
SWITCH RM
RL 29.0
DANCE REHEARSAL
113sqm
Store
COMMERCIAL BIN STORE
Mezzanine over
RL 29.0
IGLU BIN STORE
RL 29.0
BIKES
FIRE CONTROL ROOM
RL 29.75
RETAIL
145sqm


6.4m SRV Truck Turning Paths
0 2 4 6 8 10 20m
Scale 1:200 @ A4 Size
7–9 GIBBONS STREET
W I L L I A M
SRV - Small Rigid Vehicle
SUBSTATION
RL 28.20
SWITCH RM
RL 29.0
LOADING & SERVICES
DANCE REHEARSAL 113sqm
Store
COMMERCIAL BIN STORE
IGLU BIN STORE
RL 29.0
BIKES
FIRE CONTROL ROOM
RL 29.75
IGLU LOBBY 53sqm
RETAIL 145sqm
RL 29.40
Mezzanine over

5. CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Construction Schedule

The construction activities are expected to be undertaken over a duration of approximately 18 months and will involve between 3 and 20 staff as set out below. Working hours are proposed from 7:00am to 5:00pm Monday-Friday and 8:00am-12 noon on Saturday. No work is to be carried out on Sundays or Public Holidays.

CONSTRUCTON PROGRAM - DURATION AND STAFFING LEVELS			
Stage	**Work**	**Duration**	**Number of Staff**
1	Demolition	1 month	3 - 8
2	Excavation	3 months	3 - 8
3	Construction	14 months	3 - 20

Demolition & Excavation Stage

All spoil will be loaded wholly within the site, with all trucks to enter and exit the site whilst travelling in a forward direction at all times, using either the Regent Street or William Lane frontages of the site.

All truck movements across the footpath will be undertaken under the supervision of an authorised RMS-accredited *traffic controller* whose primary responsibility will be to ensure the safety of pedestrian movements along the site frontage.

Works Zone

A *Works Zone* is proposed along the Regent Street frontage of the site. *Works Zones* are provided for the use of vehicles associated with construction activities, such as the delivery of materials or the removal of waste materials, and are *not* permitted to be used by construction employees' private vehicles.

The proposed *Works Zone* will be approximately 42m in length and is to be located in an existing *indented* parking bay. The *indented* parking bay is *not* subject to any clearway restrictions. The existing parking restrictions in the *indented* parking bay comprise 1 Hour

Parking restrictions between 8:30am-5:00pm Monday-Friday and 8:30am-12:00pm on Saturdays. Kerbside parking in the *indented* parking bay is unrestricted at other times.

The proposed *Works Zone* will result in the *temporary* loss of 7 kerbside parking spaces which are currently subject to the 1 Hour time limit during business hours, as detailed above.

The *temporary* loss of these kerbside parking spaces is not expected to have any adverse effects, particularly given that the adjacent shops which the kerbside parking is intended to serve will have been demolished.

Construction Truck Routes

All heavy vehicles involved in the demolition, excavation and construction of the proposed development would approach and depart the site via Regent Street or Gibbons Street as indicated on Figure 7.

Construction Traffic Activity

The *maximum* traffic activity expected to be generated by the development proposal during demolition and construction is expected to be in the order of 10 vph (i.e. 5 vph TO and 5 vph FROM the site) and is expected to occur during the demolition phase and during major concrete pours.

Traffic activity generated at other times during the construction phase of the development will be lower and is expected to comprise approximately 6 vph (i.e. 3 vph TO and 3 vph FROM the site).

That level of traffic activity during the demolition and construction phases of the proposed development is minimal, and will clearly not have any unacceptable traffic implications in terms of road network capacity.

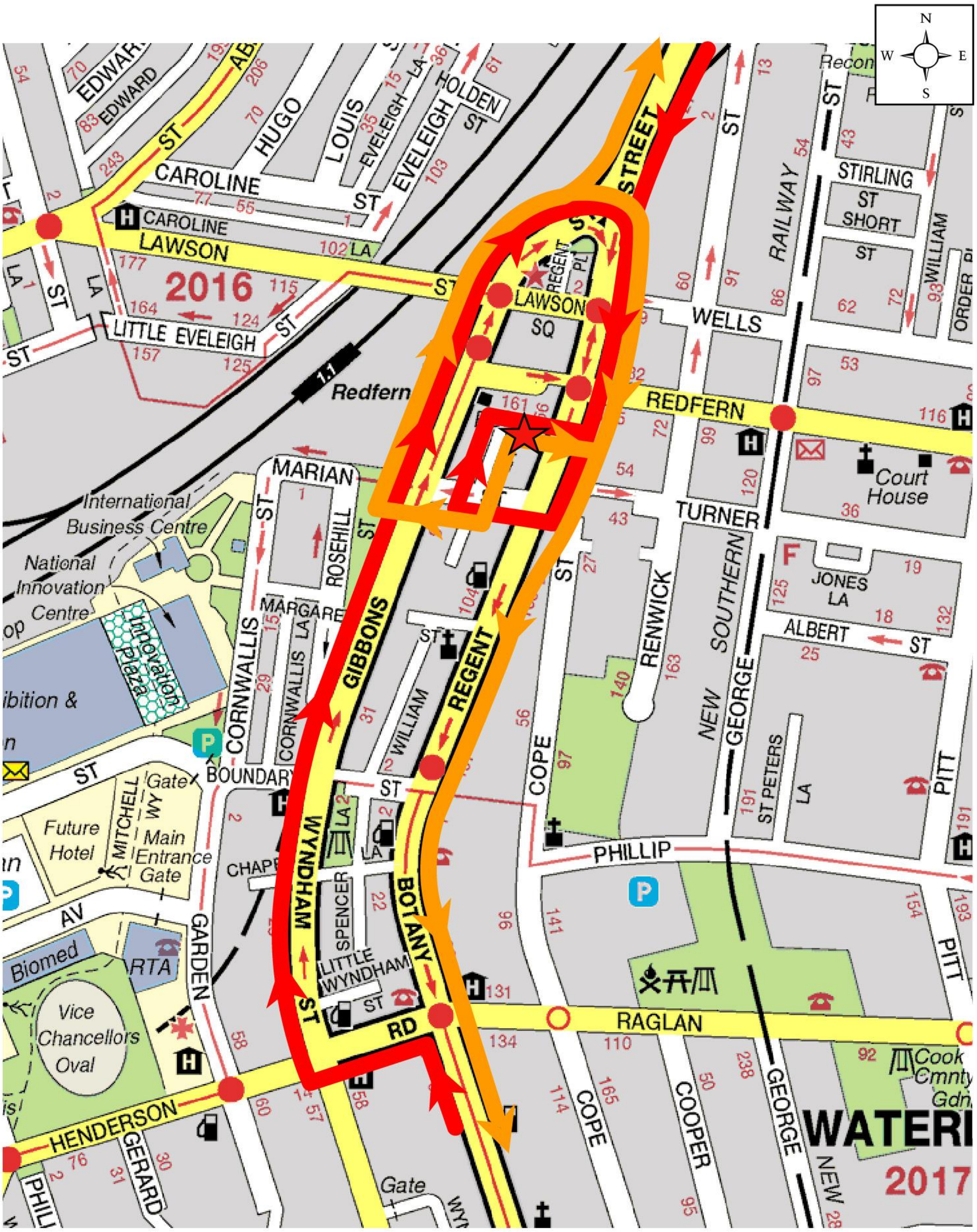
In particular, it is clear that the traffic activity generated by the proposed demolition and construction activities will *not* require any road improvements or intersection upgrades to accommodate the "additional" traffic flows that may be generated by the site.

Authorised Traffic Controller

An authorised traffic controller will be required to supervise the movement of all vehicles across the footpath during the demolition and excavation stages of the project. An authorised traffic controller will also be required during the construction stage of the project to facilitate major deliveries to the site, such as concrete pours.

Tradesmen and Contractor Car Parking

Tradesmen and contractors will not be permitted to park their private vehicles on the site or in the proposed *Works Zone*. All contractors and tradesmen will be encouraged to travel to/from work by public transport for the duration of construction activities.


N
W
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EDWARD
ABERCROMBIE
HUGO
LOUIS
EVELEIGH LA
EVELEIGH
HOLDEN ST
CAROLINE
ST
CAROLINE
LAWSON
LA
2016
LITTLE EVELEIGH
ST
REGENT PL
LAWSON
SQ
STREET
WELLS
RAILWAY
STIRLING ST
SHORT ST
WILLIAM
ORDER
Redfern
REDFERN
Court House
MARIAN
ST
ROSEHILL
ST
TURNER
International Business Centre
National Innovation Centre
Innovation Plaza
MARGARET
CORNWALLIS
CORNWALLIS LA
GIBBONS
REGENT
WILLIAM
COPE
ST
RENWICK
NEW SOUTHERN
GEORGE
JONES LA
ALBERT
ST
BOUNDARY
ST
Future Hotel
MITCHELL WY
Gate
Main Entrance Gate
WYNDHAM
ST
CHAPEL
SPENCER
LITTLE WYNDHAM ST
BOTANY
PHILLIP
ST PETERS
LA
PITT
AV
Biomed
RTA
GARDEN
Vice Chancellors Oval
RD
RAGLAN
HENDERSON
GERARD
COPE
COOPER
GEORGE
NEW
WATERLOO
Cook Cmnty Gdn
2017
Gate

Approaching Traffic

Departing Traffic

VARGA TRAFFIC PLANNING Pty Ltd

Transport, Traffic and Parking Consultants

HEAVY VEHICLE ROUTE MAP

FIGURE 7