Proposed Mixed-Use Development

34 - 35 South Steyne, Manly

TRAFFIC AND PARKING ASSESSMENT REPORT

30 June 2022

Ref 22047

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

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LIST OF ILLUSTRATIONS

1. INTRODUCTION

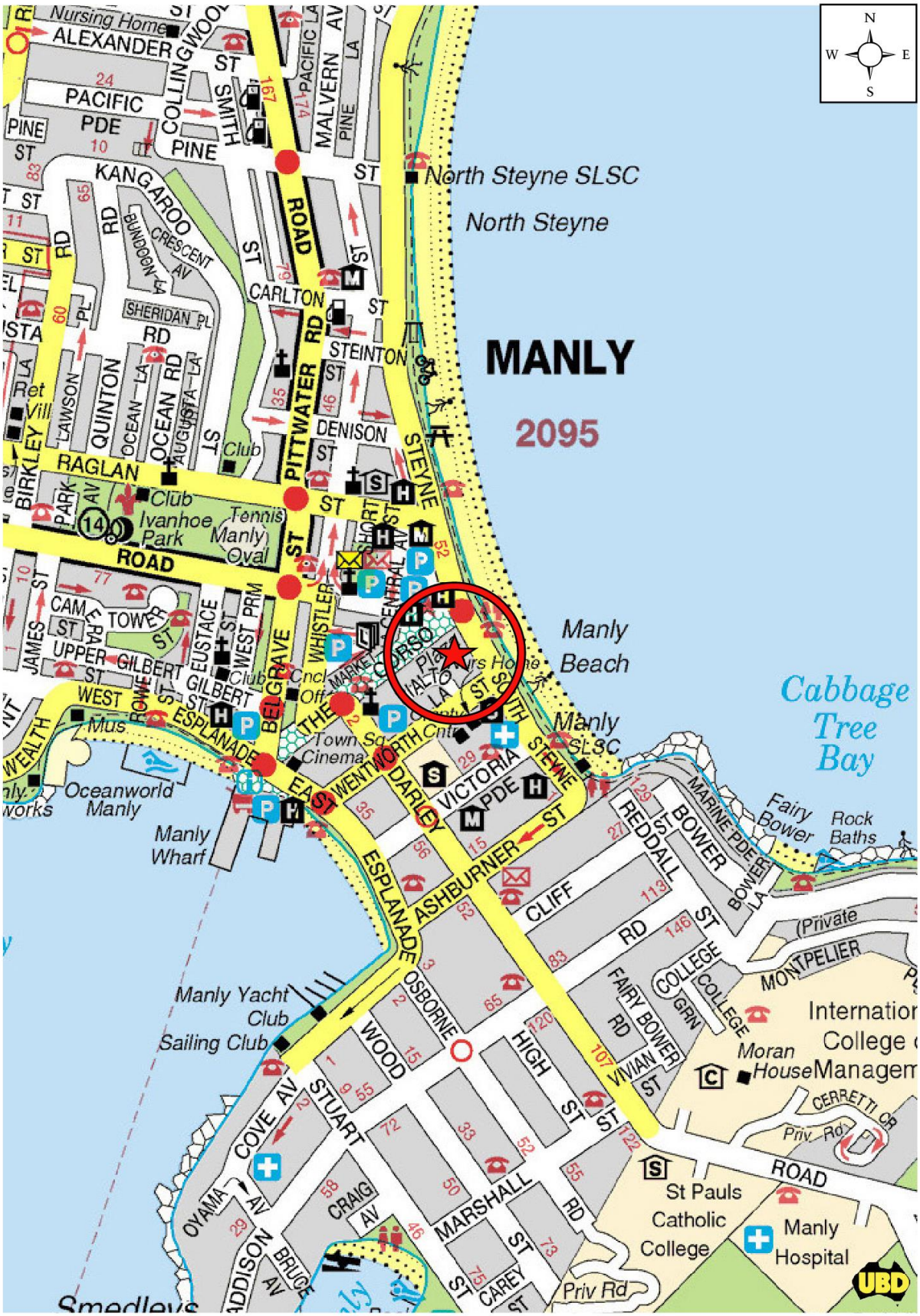
This report has been prepared to accompany a development application to Council for a mixed-use development proposal to be located at 34 - 35 South Steyne, Manly, legally described as Lot B in DP 102407 and Lot 2 in DP 861591 (Figures 1 and 2).

The proposed development involves the demolition of existing structures on the site to facilitate the construction of a new mixed-use building with retail and commercial components.

Off-street parking is to be accommodated in a basement parking area beneath the building in accordance with Council requirements.

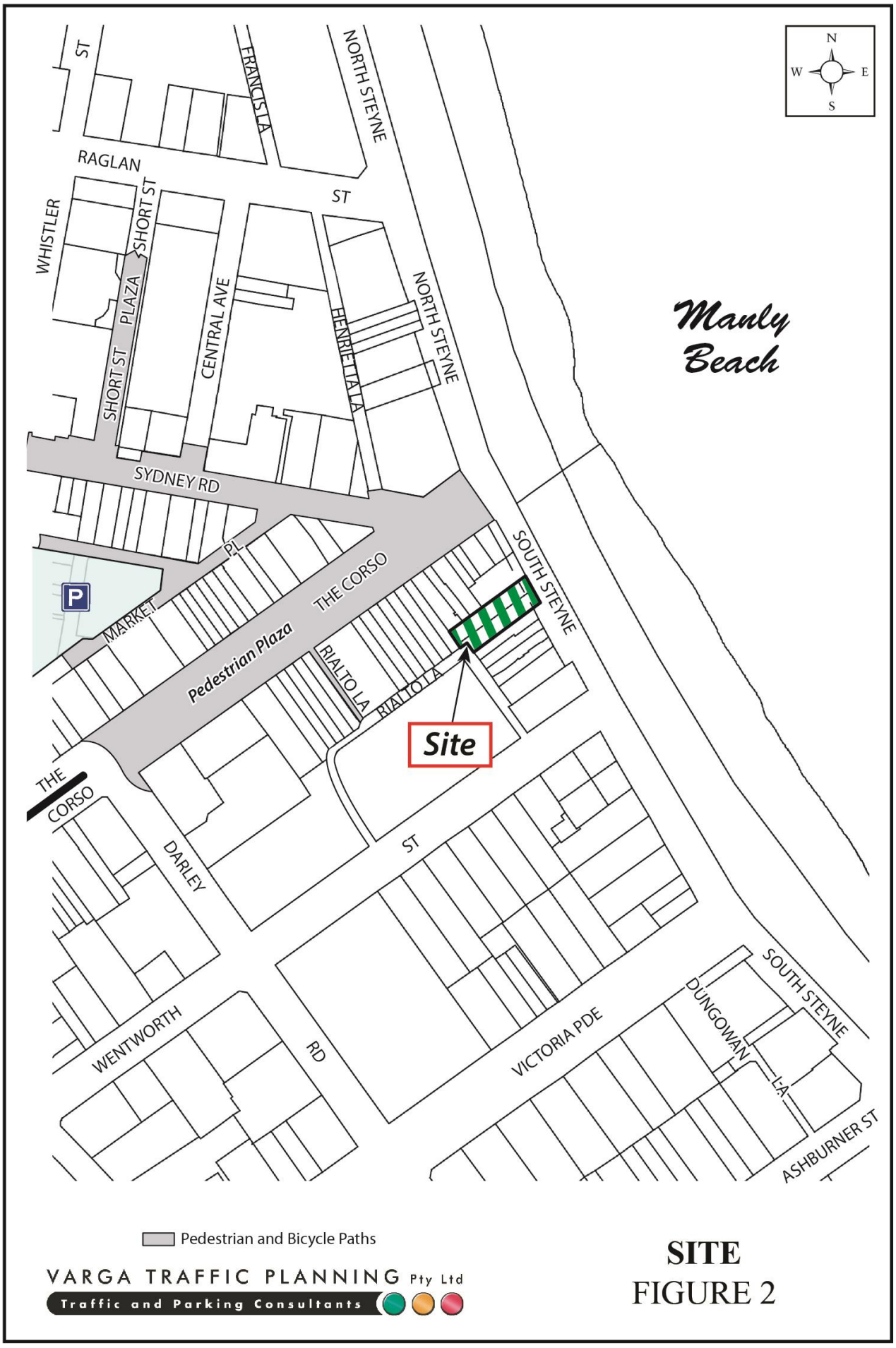
The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- 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.



VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants

LOCATION
FIGURE 1


N
W
E
S
Manly Beach
ST
FRANCIS LA
NORTH STEYNE
RAGLAN ST
WHISTLER
SHORT ST
PLAZA
SHORT ST
CENTRAL AVE
HENRIETTA LA
NORTH STEYNE
SYDNEY RD
PL
MARKET
THE CORSO
Pedestrian Plaza
SOUTH STEYNE
RIALTO LA
RIALTO LA
Site
THE CORSO
DARLEY ST
WENTWORTH RD
VICTORIA PDE
DUNGOWAN LA
SOUTH STEYNE
ASHBURNER ST
Pedestrian and Bicycle Paths
VARGA TRAFFIC PLANNING Pty Ltd
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SITE
FIGURE 2

2. PROPOSED DEVELOPMENT

Site

The subject site is located on the western side of South Steyne, extending through to Rialto Lane, some 50 metres south of The Corso.

The site has street frontages approximately 15m in length to South Steyne and approximately 9m in length to Rialto Lane, and occupies an area of 690.7m^2. The site is currently occupied by a mix of commercial premises, and is estimated to comprise a cumulative floor area of approximately 1,400m^2.

Off-street car parking for the site is currently provided for 6 cars in a tandem arrangement in a rear parking hardstand area accessed via Rialto Lane.

A recent aerial image of the site and its surrounding environs is reproduced below:

Source: Nearmap

Proposed Development

The proposed development involves the demolition of existing structures on the site to facilitate the construction of a new mixed-use building with retail and commercial components.

The proposed development will therefore comprise the following components:

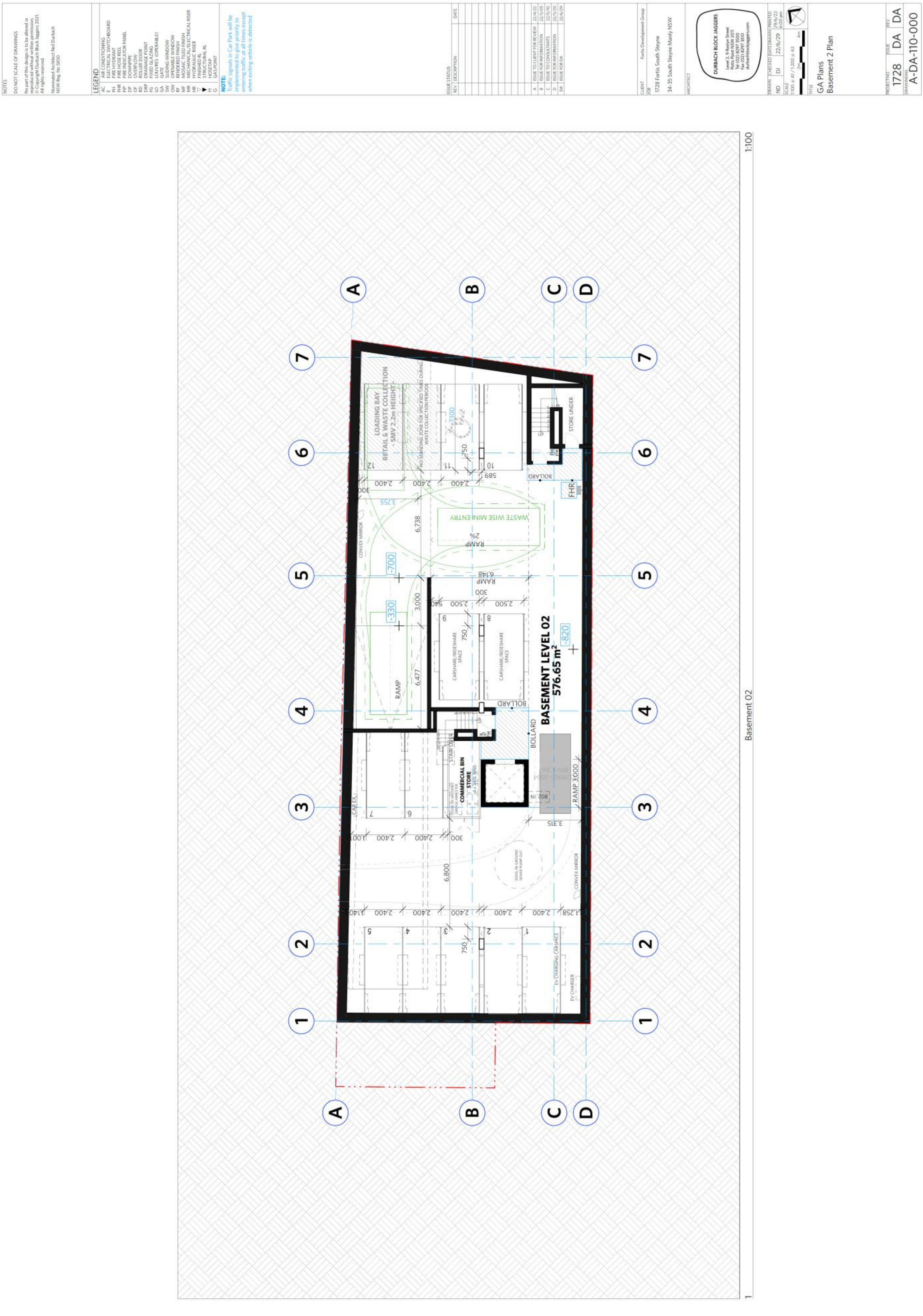
- 152.04m^2 of basement level 1 commercial premise
- 370.54m^2 of ground floor food & beverage retail (including 199.4m^2 of serviced area), and
- 1,234.46m^2 of commercial offices on upper floor levels

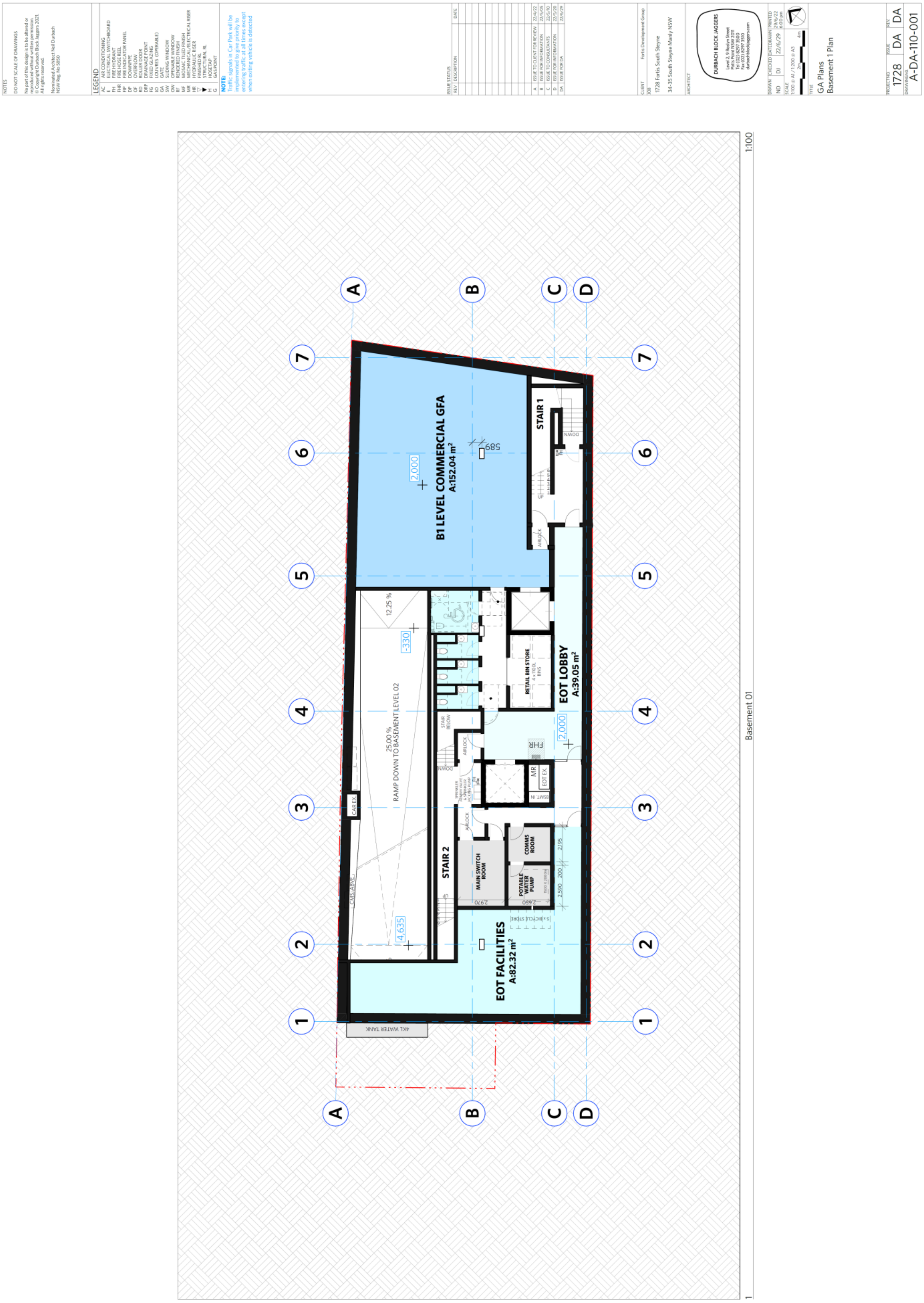
Off-street parking for the proposed development is to be provided for a total of 12 cars and 5 bicycles in a basement parking area beneath the building. The proposed car parking area will be on basement level 2, while bicycle parking area and end-of-trip (EOT) facilities will be located on basement level 1.

Vehicular access to the off-street parking facilities is to be provided via a new combined entry and exit driveway off Rialto Lane.

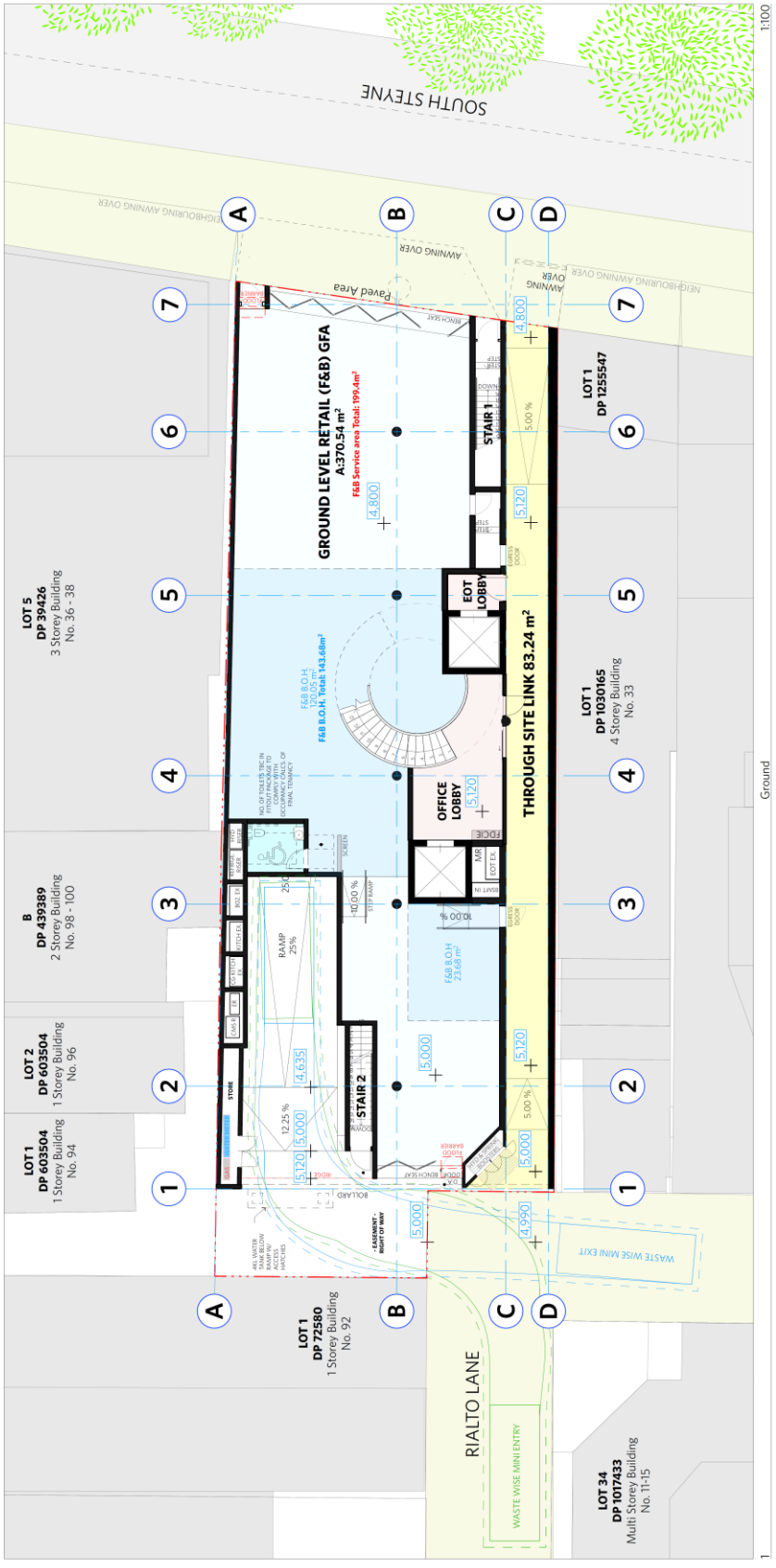
Loading and servicing for the proposed development will be undertaken by a variety of commercial vehicles such as the *Hyundai iLoad* or similar white vans, and small trucks up to and including the 6.4m long *Waste Wise Mini Garbage Truck* which requires an overhead clearance of 2.08m. Commercial vehicles will be accommodated in the proposed loading bay in the basement parking area, which has been designed in accordance with Australian Standards in respect of swept turning path and overhead clearance requirements.

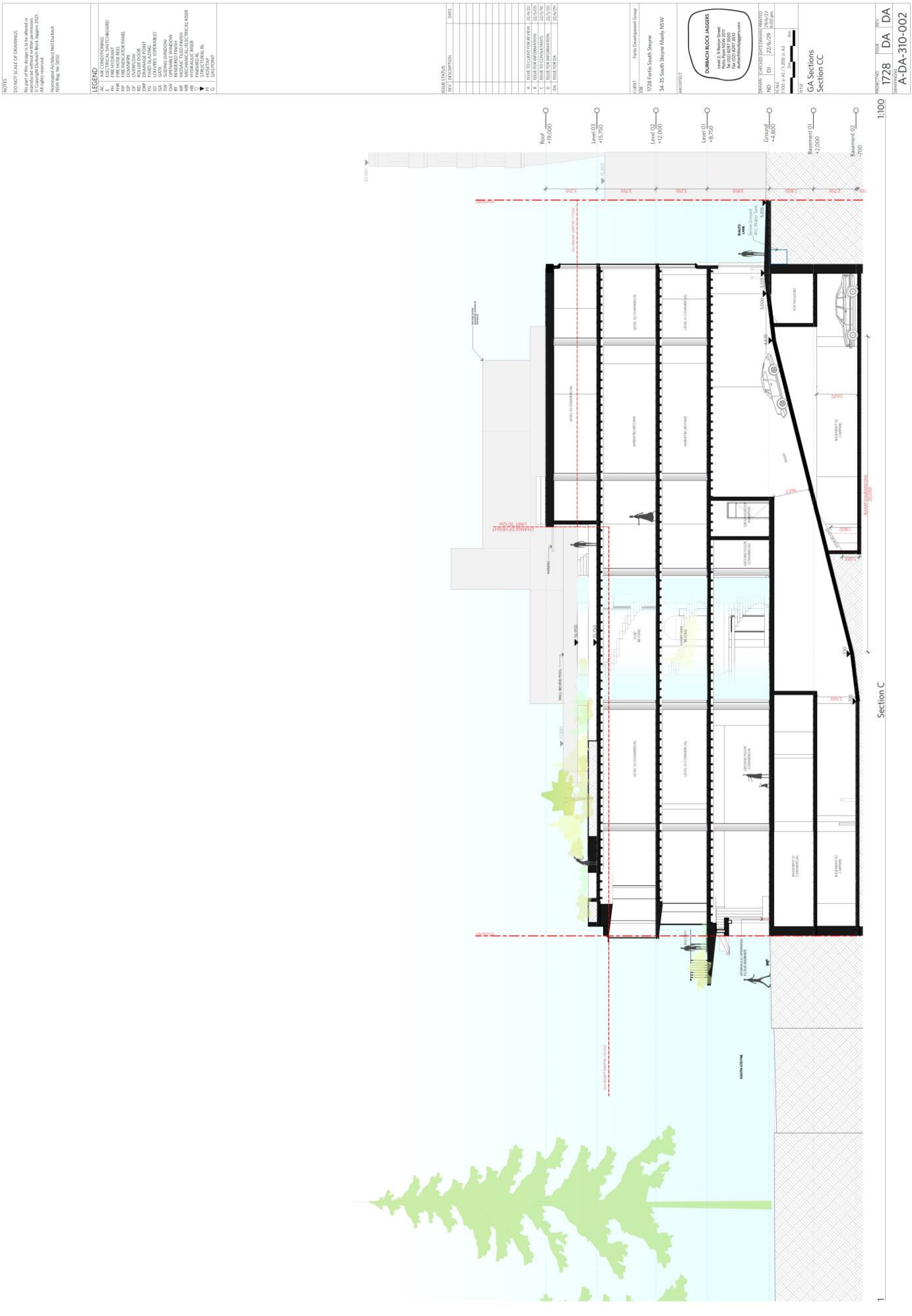
Plans of the proposed development have been prepared by *Durbach Block Jaggers* and are reproduced in the following pages.


BASEMENT LEVEL 02
576.65 m²
Basement 02
1:100
GA Plans
Basement 2 Plan
A-DA-110-000



B1 LEVEL COMMERCIAL GFA
A:152.04 m²
EOT LOBBY
A:39.05 m²
EOT FACILITIES
A:82.32 m²
STAIR 1
STAIR 2
RAMP DOWN TO BASEMENT LEVEL 02
MAIN SWITCH ROOM
COMMS ROOM
POTABLE WATER PUMP
RETAIL BIN STORE
Basement 01
1:100
GA Plans
Basement 1 Plan
1728
A-DA-110-001


SOUTH STEYNE
RIALTO LANE
GROUND LEVEL RETAIL (F&B) GFA
A:370.54 m²
F&B Service area Total: 199.4m²
THROUGH SITE LINK 83.24 m²
OFFICE LOBBY
EOT LOBBY
STAIR 1
STAIR 2
RAMP 25%
F&B B.O.H. Total: 143.68m²
F&B B.O.H 120.05 m²
F&B B.O.H 23.68 m²
Paved Area
AWNING OVER
NEIGHBOURING AWNING OVER
WASTE WISE MINI EXIT
WASTE WISE MINI ENTRY
LOT 5 DP 39426 3 Storey Building No. 36 - 38
B DP 439389 2 Storey Building No. 98 - 100
LOT 2 DP 603504 1 Storey Building No. 96
LOT 1 DP 603504 1 Storey Building No. 94
LOT 1 DP 72580 1 Storey Building No. 92
LOT 1 DP 1255547
LOT 1 DP 1030165 4 Storey Building No. 33
LOT 34 DP 1017433 Multi Storey Building No. 11-15
Ground
1:100


Fortis Development Group
1728 Fortis South Steyne
34-35 South Steyne Manly NSW
DURBACH BLOCK JAGGERS
GA Sections
Section CC
1728
DA
A-DA-310-002
1:100
Roof +19,000
Level 03 +15,750
Level 02 +12,000
Level 01 +8,750
Ground +4,800
Basement 01 +2,000
Basement 02 -700
Section C

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.

Pittwater Road is classified by the RMS as a *State Road* and provides the key north-south road link in the area, connecting Mona Vale and Manly. It typically carries two traffic lanes in each direction in the vicinity of the site, with parking generally permitted in the kerbside lane.

North Steyne is classified by the RMS as a *Regional Road* and provides another north-south road link in the area, connecting Collingwood Street and continues as South Steyne past The Corso. It typically carries one traffic lane in each direction. Kerbside / indented angle parking is permitted at selected locations.

South Steyne is a local, unclassified road which is primarily used to provide pedestrian access to frontage properties. Kerbside / indented angle parking is permitted at selected locations.

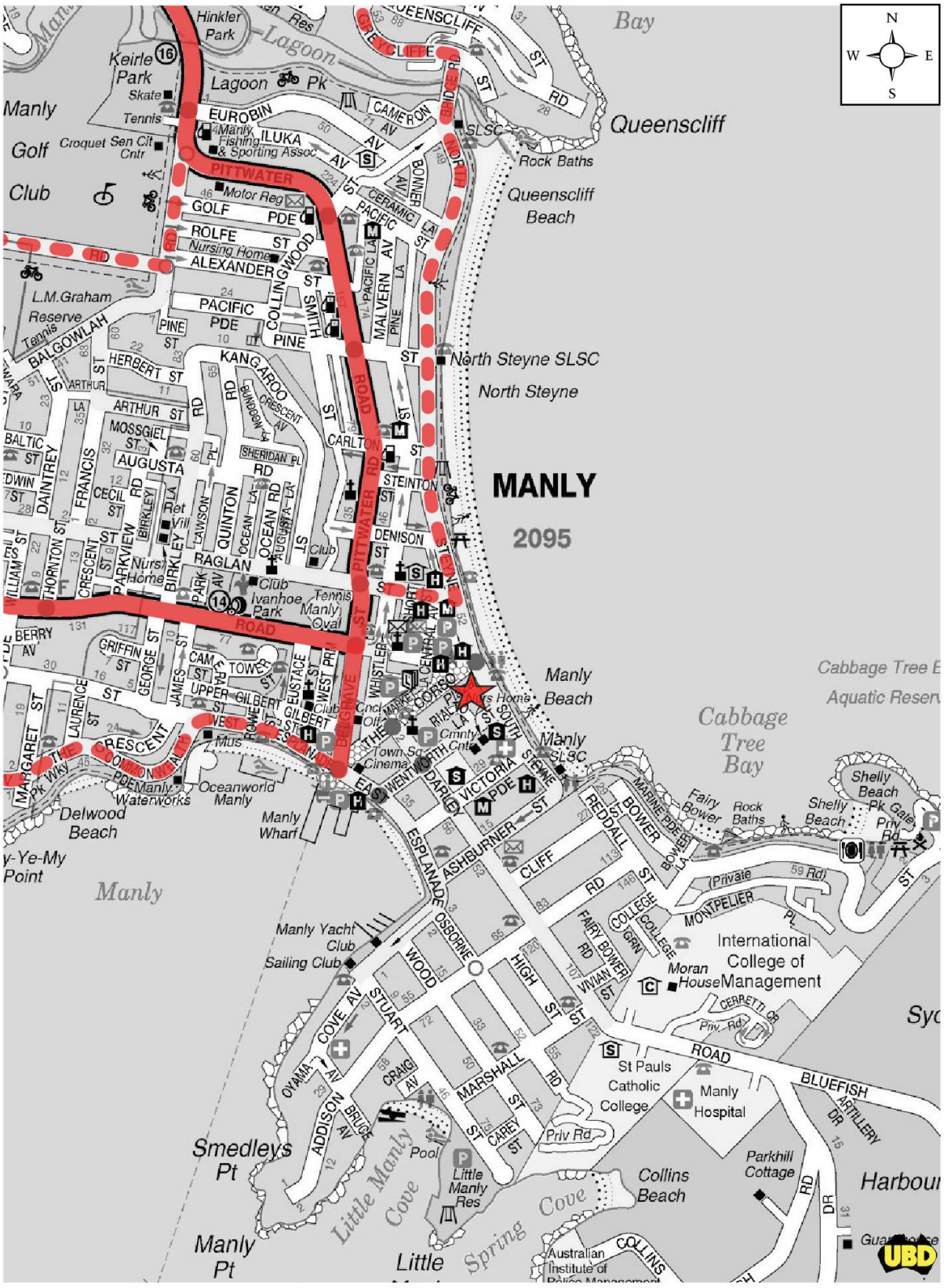
Rialto Lane is a rear service lane that is primarily used to provide vehicular access to properties fronting South Steyne, as well as properties fronting The Corso. Kerbside parking is generally prohibited in the laneway.

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 30 km/h SPEED LIMIT which applies to North Steyne, Raglan Street and all other local roads in the immediate vicinity of the site

- SIGNALISED PEDESTRIAN CROSSINGS in North Steyne and Darley Road at either ends of The Corso



Key: State Road

Regional Road

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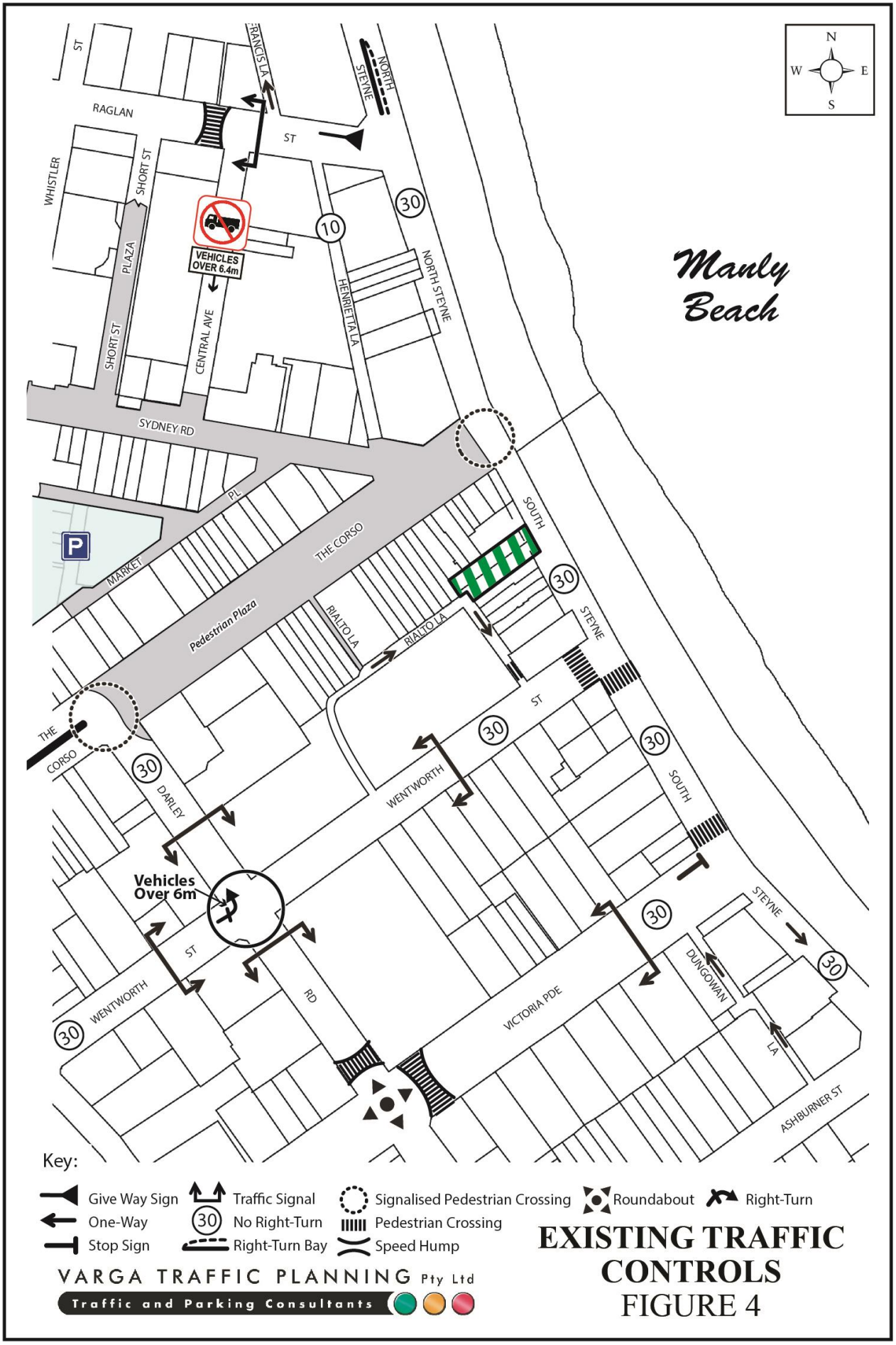
ROAD HIERARCHY
FIGURE 3


N
W
E
S
Manly Beach
RAGLAN ST
FRANCIS LA
NORTH STEYNE
WHISTLER
SHORT ST
PLAZA
VEHICLES OVER 6.4m
CENTRAL AVE
HENRIETTA LA
NORTH STEYNE
SYDNEY RD
PL
MARKET
THE CORSO
Pedestrian Plaza
RIALTO LA
SOUTH STEYNE
THE CORSO
DARLEY
WENTWORTH ST
Vehicles Over 6m
WENTWORTH ST
RD
VICTORIA PDE
SOUTH STEYNE
DUNGOWAN LA
ASHBURNER ST
30
10
P
Key:
Give Way Sign
One-Way
Stop Sign
Traffic Signal
No Right-Turn
Right-Turn Bay
Signalised Pedestrian Crossing
Pedestrian Crossing
Speed Hump
Roundabout
Right-Turn
VARGA TRAFFIC PLANNING Pty Ltd
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EXISTING TRAFFIC CONTROLS
FIGURE 4

- PEDESTRIAN CROSSINGS in Raglan Street, Darley Road, Wentworth Street, South Steyne, and Victoria Parade

- a 30 km/h SCHOOL ZONE SPEED LIMIT in the vicinity of Manly Village Public School and St Mary's Catholic School

- TRAFFIC SIGNALS in Wentworth Street at its intersection with Darley Road

- a ONE-WAY restriction in Rialto Lane in the immediate vicinity of the site.

Existing Public Transport Services

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

Manly Wharf is located within approximately 600m walking distance from the site, servicing the following:

- the F1 Manly Line and MFF Manly Fast Ferry Line operating between Manly and Circular Quay

- the MWB Manly Watsons Bay Ferry Line operating between Manly and Watsons Bay, and

- the CCWM City to Manly Via Watsons Bay Line operating between Darling Harbour and Manly via Circular Quay, and Watsons Bay.

Ferry services to Sydney CBD operate out of Manly Wharf every 15-30 minutes every day, while services to Watsons Bay operate every 40 minutes only on weekends and public holidays.

The wharf is also located next to a strategic bus corridor with direct access to high frequency and high-capacity buses that links key employment and growth centres as well as the Sydney CBD. This bus corridor is within 600m walking distance from the site and includes the following bus routes:

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PUBLIC TRANSPORT
FIGURE 5

- route 141 – Austlink to Manly via Frenchs Forest & Seaforth
- route 142 – Allambie Heights to Manly
- route 144 – Manly to Chatswood via St Leonards
- route 150X – Manly to Milsons Point (Express Service)
- route 161 – Manly to North Head (Loop Service)
- route 162 – Seaforth to Manly
- route 166 – Frenchs Forest to Manly via Dee Why Beach
- route 167 – Warringah Mall to Manly via South Curl Curl
- route 170X – Manly to City Wynyard (Express Service)
- route 199 – Palm Beach to Manly via Mona Vale & Dee Why

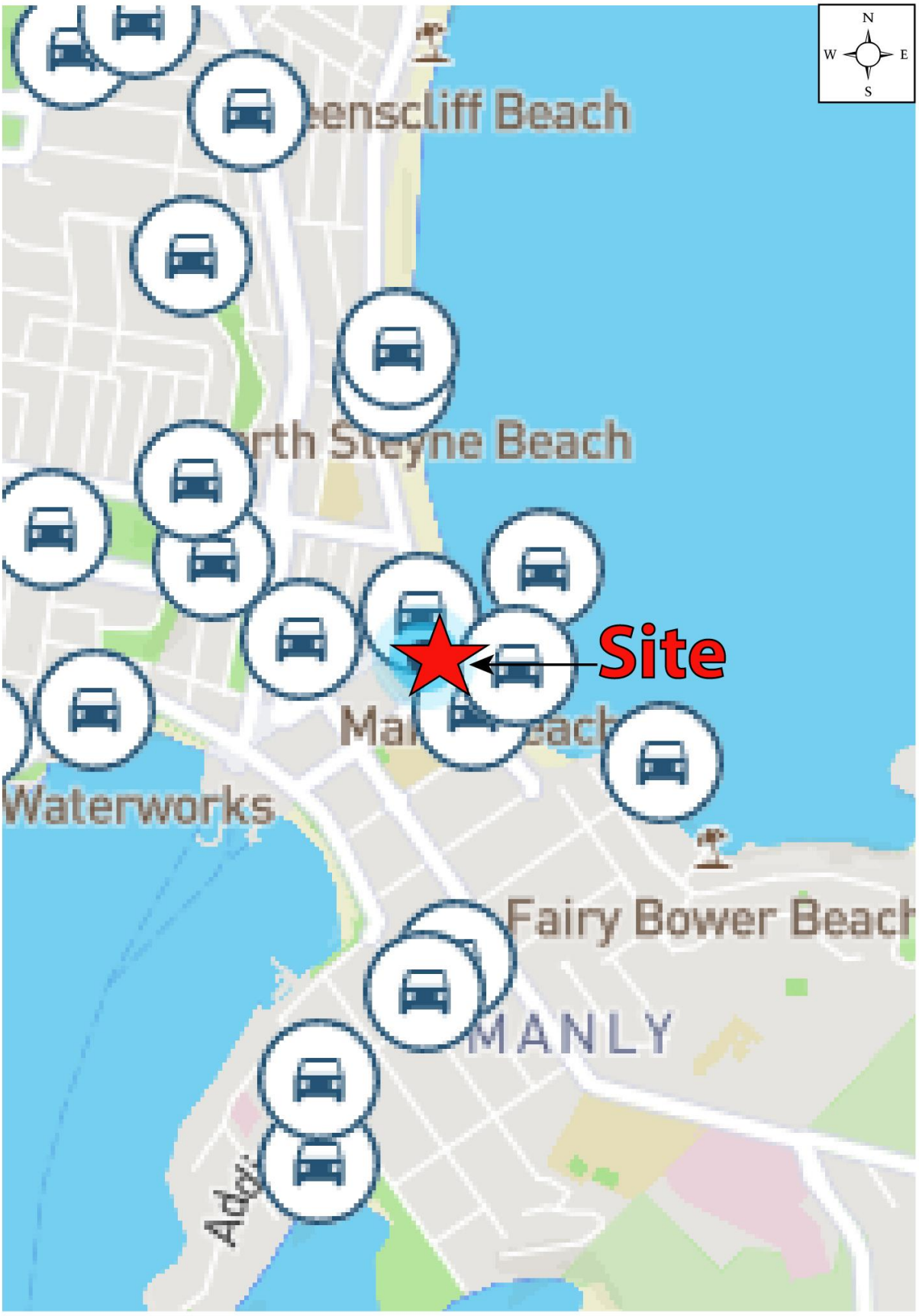
On the above basis, it is clear that the site has excellent connectivity to existing public transport services, and is ideally located to facilitate a positive shift towards sustainable and active modes of transport.

Car Share

Car sharing is becoming increasingly popular in Sydney, and offers a convenient, affordable and sustainable alternate transport option to owing / using private cars. Car sharing encourages more sustainable travel habits, and helps keep everyone connected. It also makes more efficient use of available parking by allowing a single vehicle to be used by a large number of people. This reduces road congestion and the competition for parking spaces, which ultimately benefits all road users.

Car share involves signing up to a membership plan offered by car share operators. Plan fees vary depending on how frequent the user intends to use the service and affects hiring costs. Car share users are charged by time and distance, at a rate set by each operator. Costs associated with fuel, vehicle maintenance and insurance are usually included in the operator's hire fees which ranges from $6 to $13 per kilometre depending on the type of vehicle. Car share vehicles mostly comprise small hatchbacks but can also include SUVs, vans and luxury vehicles depending on location. Each vehicle has a designated "home" location referred to as a "pod" in a publicly accessible location.

GoGet and Car Next Door are two of the most prominent car share providers in Australia and has a large number of car share vehicles positioned in the vicinity of the site as illustrated in Figure 6A and 6B.



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GoGet
FIGURE 6A

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CAR NEXT DOOR
FIGURE 6B

Existing Cycleways

The cycleways in the vicinity of the site are illustrated in Figure 7 showing that South Steyne, and Sydney Road form *existing* designated on-road bike routes, and Wentworth Street and Darley Road form *proposed* designated on-road bike routes, all of which connect to the wider cycling network.

Projected Traffic Generation

The traffic implications of a development proposal primarily concern the effects of the *additional* traffic flows generated as a result of the development and its impact on the operational performance of the adjacent road network during the morning and afternoon commuter peak periods.

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 – Land Use Traffic Generation (October 2002)* and the updated traffic generation rates in the recently published RMS *Technical Direction* (*TDT 2013/04a*) document.

The RMS *Technical Direction* document specifies that it replaces those sections of the RMS *Guidelines* indicated, and must be followed when RMS is undertaken trip generation and / or parking demand assessments.

The RMS *Guidelines* and *Technical Direction* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the development proposal:

Restaurants

PM Peak Hour: 5 peak hour vehicle trips per 100m^2 GFA

Commercial

PM Peak Hour: 1.2 peak hour vehicle trips per 100m^2 GFA

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BICYCLE MAP
FIGURE 7

Application of the above traffic generation rates to the various components of the development proposal yields a traffic generation potential of approximately 35 vehicle trips per hour (vph) during the PM peak hour, as set out below:

Projected Future Traffic Generation Potential

	PM
Restaurant (370.54m^2 GFA):	18.5 vph
Commercial (1,386.5m^2 GFA):	16.6 vph
TOTAL TRAFFIC GENERATION POTENTIAL:	**35.1 vph**

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 expected to occur as a consequence of the development proposal.

Application of the above traffic generation rates to the existing uses of the building on the site yields a traffic generation potential of approximately 17 vph during the PM peak hour.

Existing Traffic Generation Potential

	PM
Commercial Premises (1,400m^2):	16.8 vph
TOTAL TRAFFIC GENERATION POTENTIAL:	**16.8 vph**

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential of the site of approximately 18 vph during the PM peak hour as set out below:

Projected Nett Change in Peak Hour Traffic Generation Potential of the Site as a Consequence of the Development Proposal

	PM
Projected Future Traffic Generation Potential:	35.1 vph
Less Existing Traffic Generation Potential:	-16.8 vph
NETT CHANGE TRAFFIC GENERATION POTENTIAL:	**18.3 vph**

It is noted however, that car parking on the site is *constrained*, and will remain *constrained* under the proposed development as detailed in Chapter 4 of this report. Thus, the traffic generation potential of both the existing and the proposed uses of the site is likely to be *somewhat less* than is set out in the tables above.

In any event, the traffic generation potential of the site as a consequence of the development proposal is *minimal*, and 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 8 and comprise:

- NO STOPPING restrictions on both sides of South Steyne in the vicinity of the site
- RESTRICTED PARKING on both sides of South Steyne towards the south of its intersection with Wentworth Street
- NO STOPPING / NO PARKING restrictions along most of Rialto Lane
- LOADING ZONES along some sections of Rialto Lane in the vicinity of the site
- RESTRICTED PARKING on both sides of Wentworth Street.

Off-Street Car Parking Provisions

The off-street car parking requirements applicable to the development proposal are specified in the *Manly Development Control Plan 2013, Schedule 3, Part A1 - Parking Rates and Requirements for Vehicles* document in the following terms:

> **Commercial Premises (including business, office and retail premises)**
> 1 parking space per 40m^2 of gross floor area
>
> **Restaurants or Cafes and Take Away Food and Drink Premises**
> 1 parking space per 40m^2 of gross floor area

Application of the above car parking rates to the various components of the development proposal yields an off-street car parking requirement of 40 spaces as set out below:

Restaurant Serviced Area (199.4m^2 GFA):	5.0 spaces
Commercial (1,386.5m^2 GFA):	34.6 spaces
Total:	**39.6 spaces**


N
W
E
S
HENRIETTA LA
NORTH STEYNE
SYDNEY RD
THE CORSO
SOUTH STEYNE
RIALTO LA
LOADING ZONE
RIALTO LA
1/2P
ST
2P
SOUTH STEYNE
1P
Motorbikes only
90° Angle Parking
2P
LZ - 6am-9am Mon-Sat
1/2P
1P
LZ
WENTWORTH
1P
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 8

It is noted however, that *Clause 4.2.5.4* of the DCP allows for a reduction in the car parking requirements in the Manly town centre where the constraints of the site preclude the provision of some or all of the required parking spaces, and where the movement of vehicles to/from the site would cause unacceptable conflict with pedestrian movements.

Discussions with Council's traffic engineer have indicated that a reduction of 50% would be considered acceptable, and that the use of car share spaces would be considered equivalent to 5 parking spaces each.

The proposed development makes provision for a total of 12 parking spaces, including 2 car share spaces (which equate to 5 spaces each). The proposed off-street parking therefore equates to a total of 20 parking spaces (i.e., 50% of the "required" parking, as discussed with Council's traffic engineer).

In this instance, it is noted that the proposed basement car parking area provides the maximum number of parking spaces that could be accommodated within the basement floor-plate of the *site*, having regard for the need to provide a car park ramp, fire stairs and a lift in the basement.

Furthermore, it is proposed to allocate the car parking spaces to the employees and staff of the commercial offices and restaurant only. In particular, the proposed development avoids the introduction of traffic activity in Rialto Lane which could have been generated by *customers* accessing the proposed development, such as restaurant patrons.

The proposed parking arrangements would thereby *minimise the level of traffic activity in Rialto Lane* by restricting traffic flows to the *less intensive* employee and staff uses only, without the more intensive levels of traffic activity which would be generated by customer uses of those parking spaces.

Finally, the site has excellent connectivity to existing public transport services, and is ideally located to facilitate a positive shift towards sustainable and active modes of transport as demonstrated in chapter 3 of this report.

The geometric design layout of the proposed new car parking facilities has been generally designed to generally comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1:2004* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6* in respect of parking bay dimensions and aisle widths.

Off-Street Bicycle Parking Provision

The off-street bicycle parking requirements applicable to the development proposal are specified in *Manly Development Control Plan 2013, Schedule 3, Part A2 - Parking Rates and Requirements for Bicycles* document in the following terms:

> **Other developments which generate requirements for vehicular parking**
> Bicycle parking stands are required at a minimum rate of one stand for every three car parking spaces with a minimum provision of one stand for each premises.

Application of the above bicycle parking rates to the car parking provision of 12 spaces outlined in the proposal yields an off-street bicycle parking requirement of 4 spaces.

The proposed development makes provision for 5 bicycle spaces, thereby satisfying Council's bicycle parking requirements.

Loading/Servicing Provisions

The proposed new mixed-use building is expected to be serviced by a variety of light commercial vehicles such as the *Hyundai iLoad* or similar white vans, and small trucks up to and including the 6.4m long *Waste Wise Mini Garbage Truck* which requires an overhead clearance of 2.08m. A letter from the private contractor Waste Wise Environmental confirming that the site can be serviced by their 6.4m long Waste Wise Mini Garbage Truck, is attached in Appendix A.

These servicing and delivery vehicles can be accommodated in a conventional parking space and is proposed to be accommodated in the basement parking area. The loading/servicing bay manoeuvring area has been designed to accommodate the swept turning path requirements of the 6.4m long Waste Wise Mini Garbage Truck, allowing it to enter and exit

the site via Rialto Lane whilst travelling in a forward direction at all times, as per the *swept turning path* diagrams in Appendix B.

Conclusion

In summary, the proposed new parking facilities will comfortably satisfy the needs of the proposed development, noting the reductions in carpark permitted by Council's *DCP* to reduce traffic activity in the Manly town centre. In this instance, parking is *not* proposed to be provided for customers such as restaurant patrons which would traditionally generate higher levels of traffic activity than parking spaces which are restricted to staff only usage.

In addition, the proposed basement carpark layout has been designed in accordance with the dimensional requirements specified in *AS2890.1 – 2004*, and can accommodate the manoeuvring requirements of the largest service vehicle expected to visit the site as specified in the service commitment provided by *Waste Wise Environmental* as detailed in Appendix A.

It is therefore reasonable to conclude that the proposed development will not have any unacceptable parking or servicing implications, and is recommended for approval.

APPENDIX A

WASTE WISE ENVIRONMENTAL LETTER

FC/WWE - 22.007 9th June 2022

To Whom it may concern:

Service Commitment by Waste Wise Environmental for private waste collection

35 – 35 South Steyne Manly NSW : private contractor waste vehicle letter

I refer to your request for private waste services at the subject site.

Based on the information received, I have reviewed the plans and confirm Waste Wise Environmental can service the subject site using a Waste Wise Mini Rear Loader.

Our real loader waste truck is 6.40m long, 2.20m high, with a GVM of 6.500 tonne.

Please note that reference must be made to the independent traffic engineers report to confirm turning circles and swept paths conform with my approval for service.

I have also attached a dimension diagram of the Waste Wise truck referred to within

Thank You

Frank Cardamone

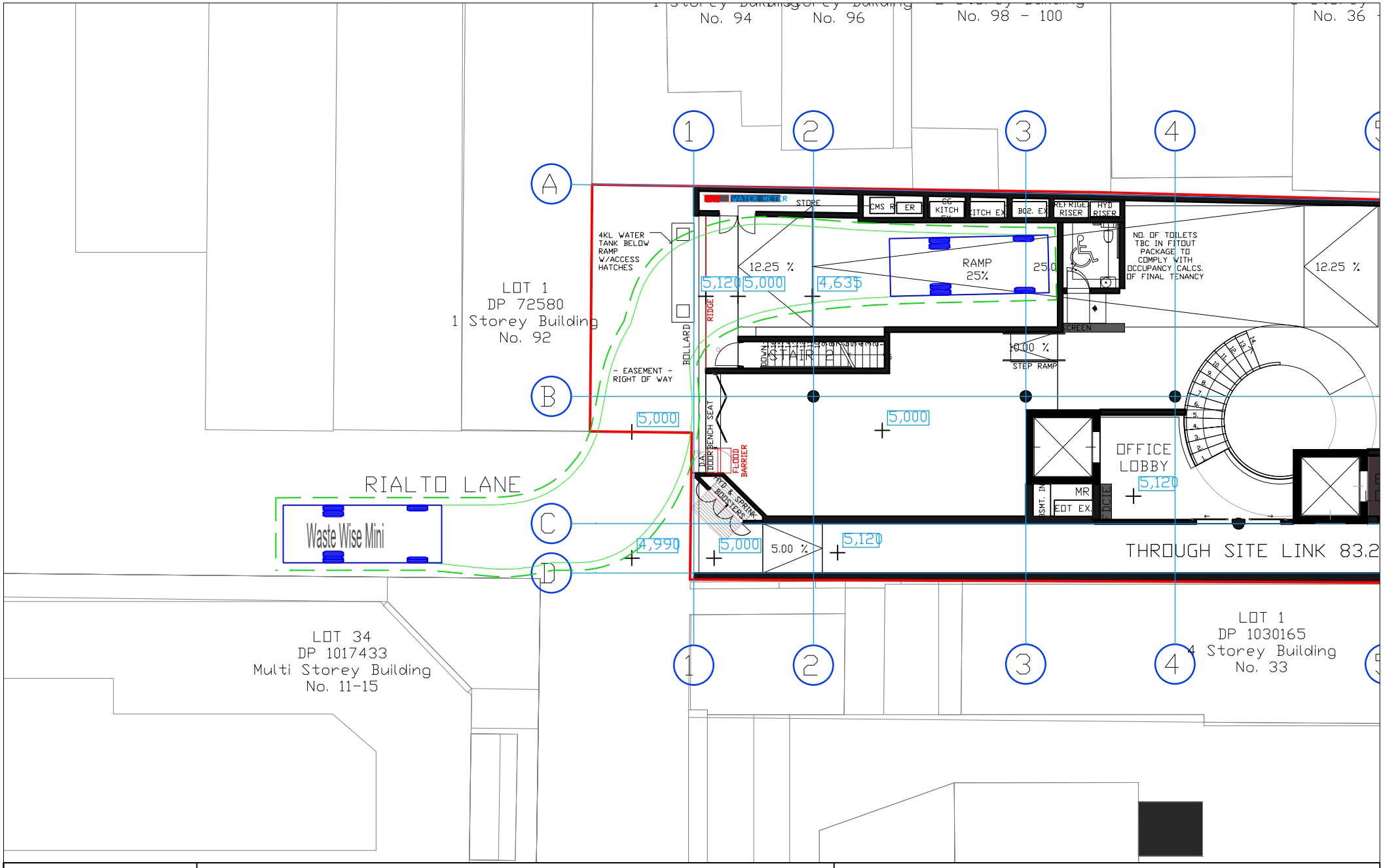
Waste Wise Environmental Pty Ltd

Email: frank@wastewise.com.au

Phone: 0417 511 396 or 1300 550 408

APPENDIX B

SWEPT TURNING PATHS



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Neutral Bay, NSW 2089

Phone +61 2 9904 3224
PO Box 1868
Neutral Bay, NSW 2089
www.vargatraffic.com.au
Sydney, Australia

PROJECT
MIXED-USE DEVELOPMENT

DRAWING TITLE
SRV_GF_Entry

1:200 @ A4

ADDRESS
34 - 35 South Steyne,
Manly

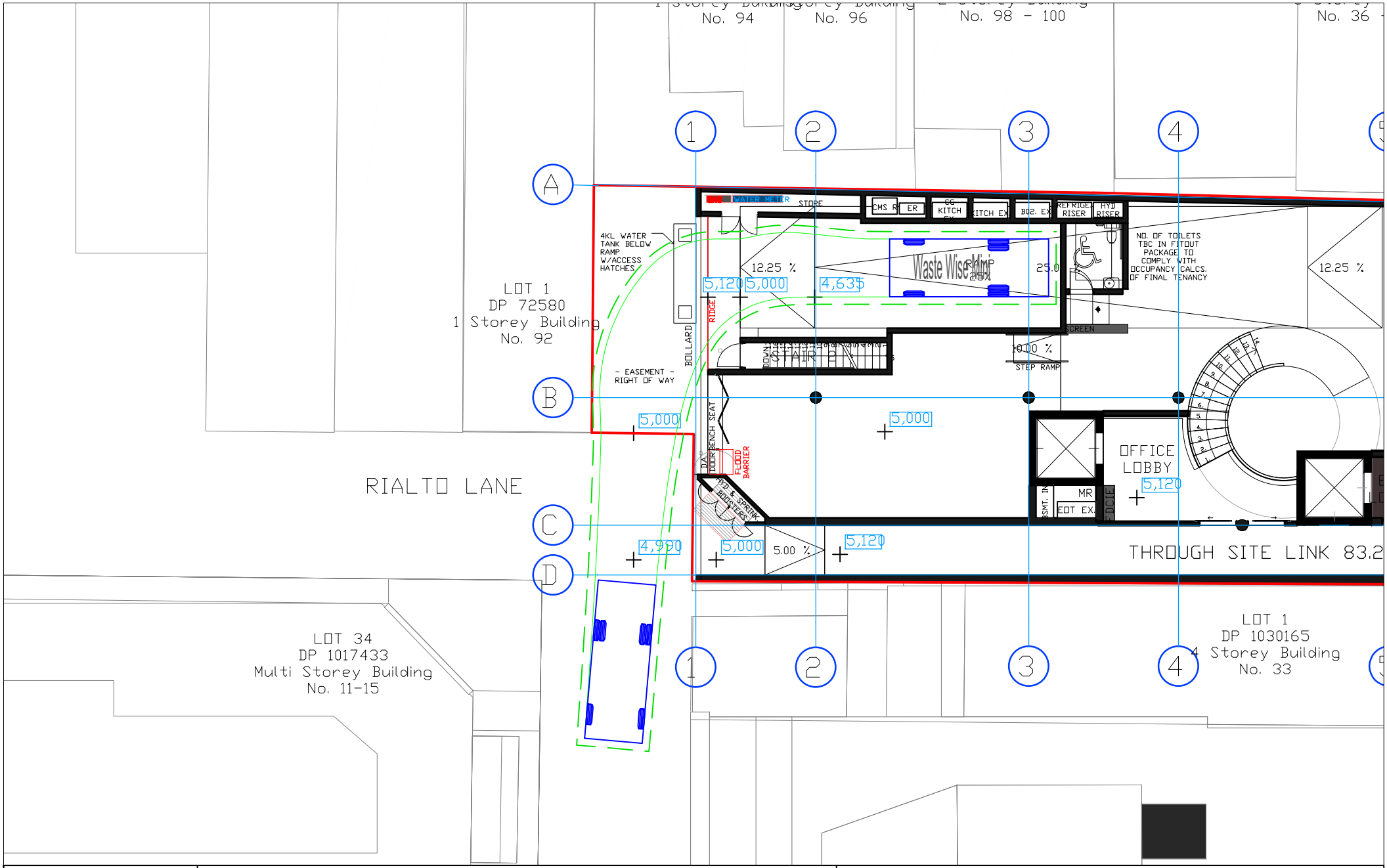
PROJECT NO.
22047

DATE DRAWN
2022-6-23

REVIEWED
RV

PREPARED
MN

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants



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PO Box 1868
Neutral Bay, NSW 2089
www.vargatraffic.com.au
Sydney, Australia

PROJECT
MIXED-USE DEVELOPMENT

DRAWING TITLE
SRV_GF_Exit

1:200 @ A4

ADDRESS
34 - 35 South Steyne,
Manly

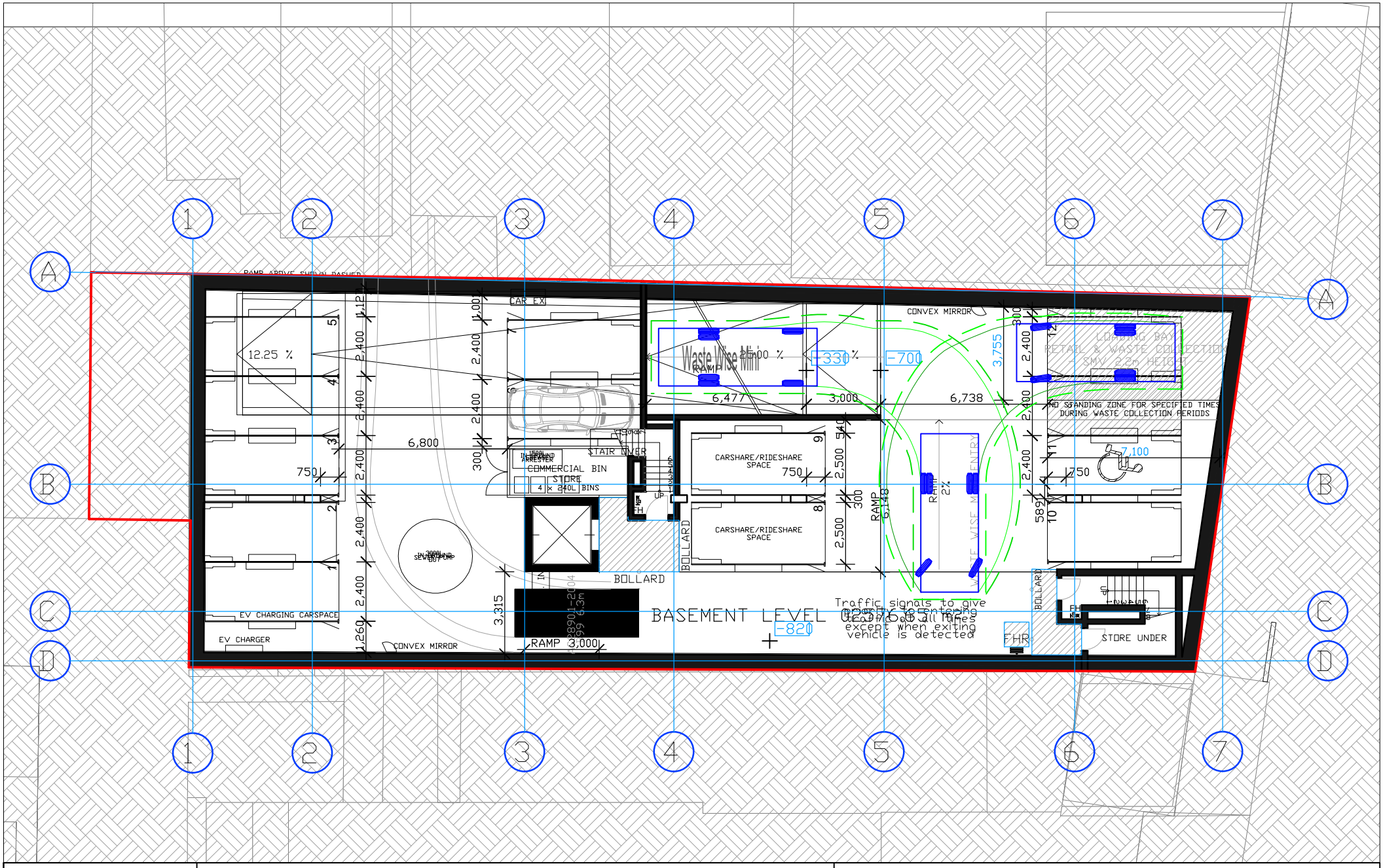
PROJECT NO.
22047

DATE DRAWN
2022-6-23

REVIEWED
RV

PREPARED
MN

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants



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Neutral Bay, NSW 2089

Phone +61 2 9904 3224
PO Box 1868
Neutral Bay, NSW 2089
www.vargatraffic.com.au
Sydney, Australia

PROJECT
MIXED-USE DEVELOPMENT

DRAWING TITLE
SRV_Basement02_Parking_A

1:200 @ A4

ADDRESS
34 - 35 South Steyne,
Manly

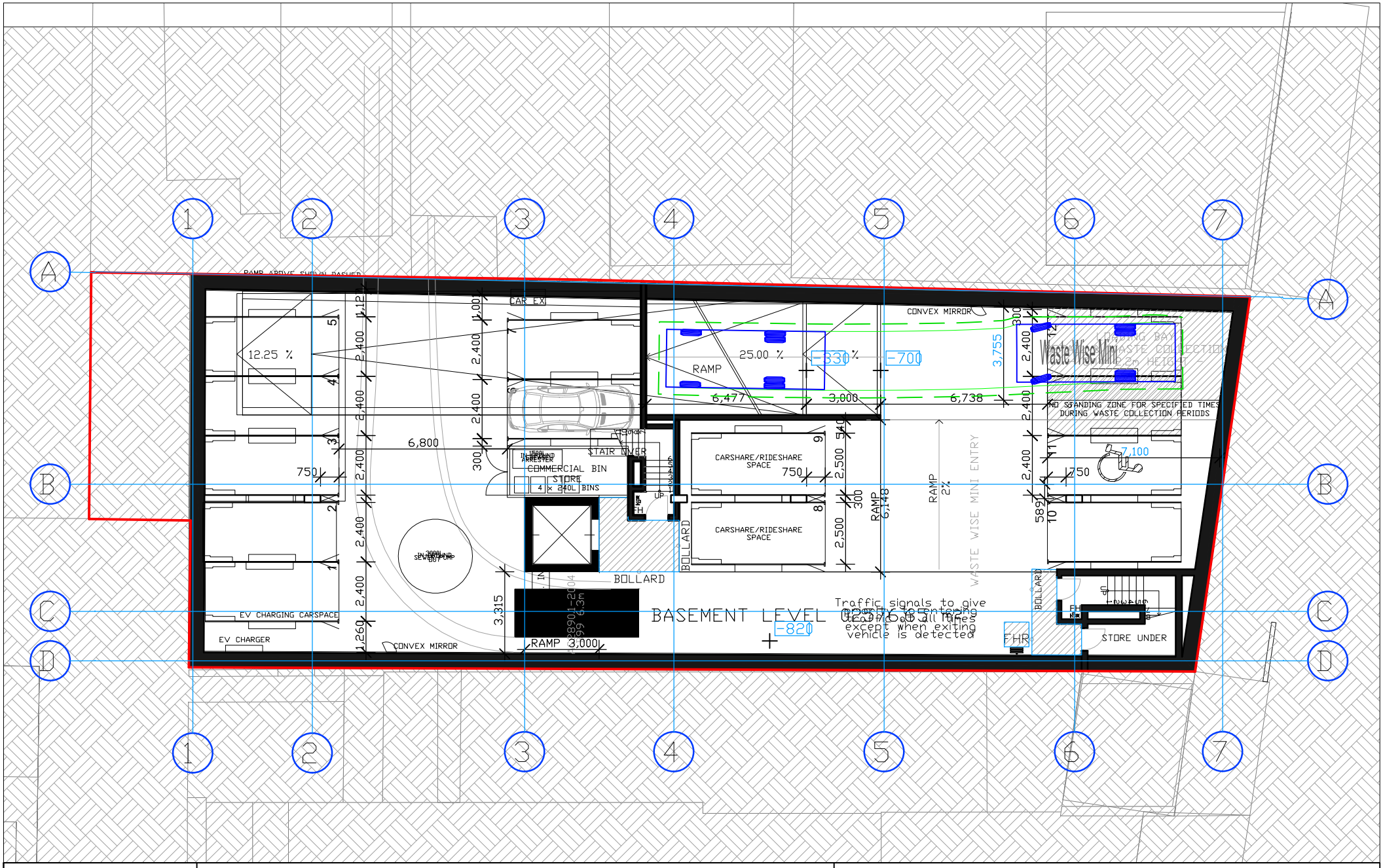
PROJECT NO.
22047

DATE DRAWN
2022-6-23

REVIEWED
RV

PREPARED
MN

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants



VARGA TRAFFIC PLANNING Pty Ltd
ABN 88 071 762 537
Suite 6, Level 1
20 Young Street
Neutral Bay, NSW 2089

Phone +61 2 9904 3224
PO Box 1868
Neutral Bay, NSW 2089
www.vargatraffic.com.au
Sydney, Australia

PROJECT
MIXED-USE DEVELOPMENT

DRAWING TITLE
WasteMini_Basement02_Exit

1:200 @ A4

ADDRESS
34 - 35 South Steyne,
Manly

PROJECT NO.
22047

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RV

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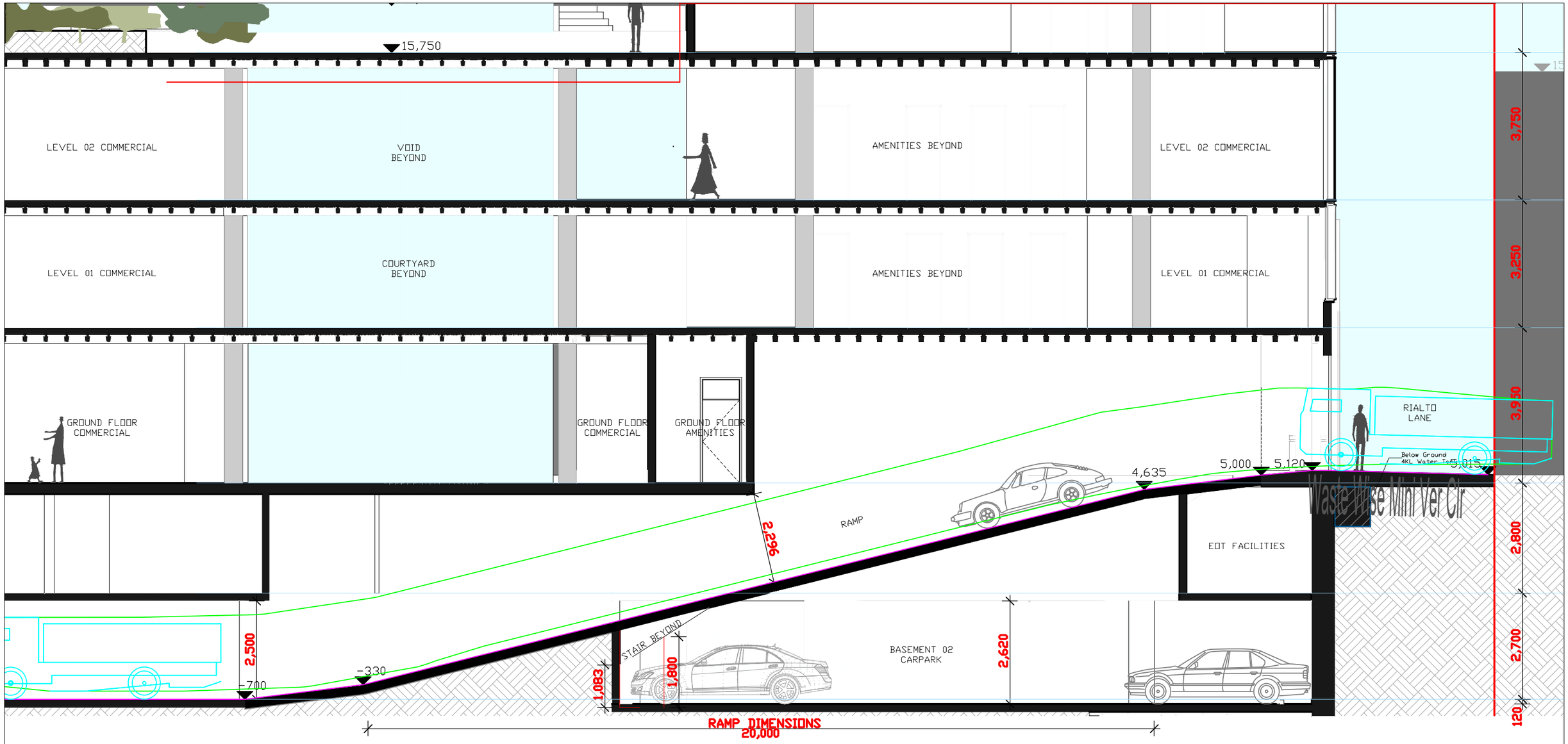

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PROJECT
MIXED-USE DEVELOPMENT

DRAWING TITLE
Ramp_SRV_Clearance

1:100 @ A3

ADDRESS
34 - 35 South Steyne,
Manly

PROJECT NO.
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