

Proposed Affordable Housing Development

**48 New Orleans Crescent,
Maroubra**

TRAFFIC AND PARKING ASSESSMENT REPORT

29 April 2024

Ref 23139

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants 

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1. INTRODUCTION

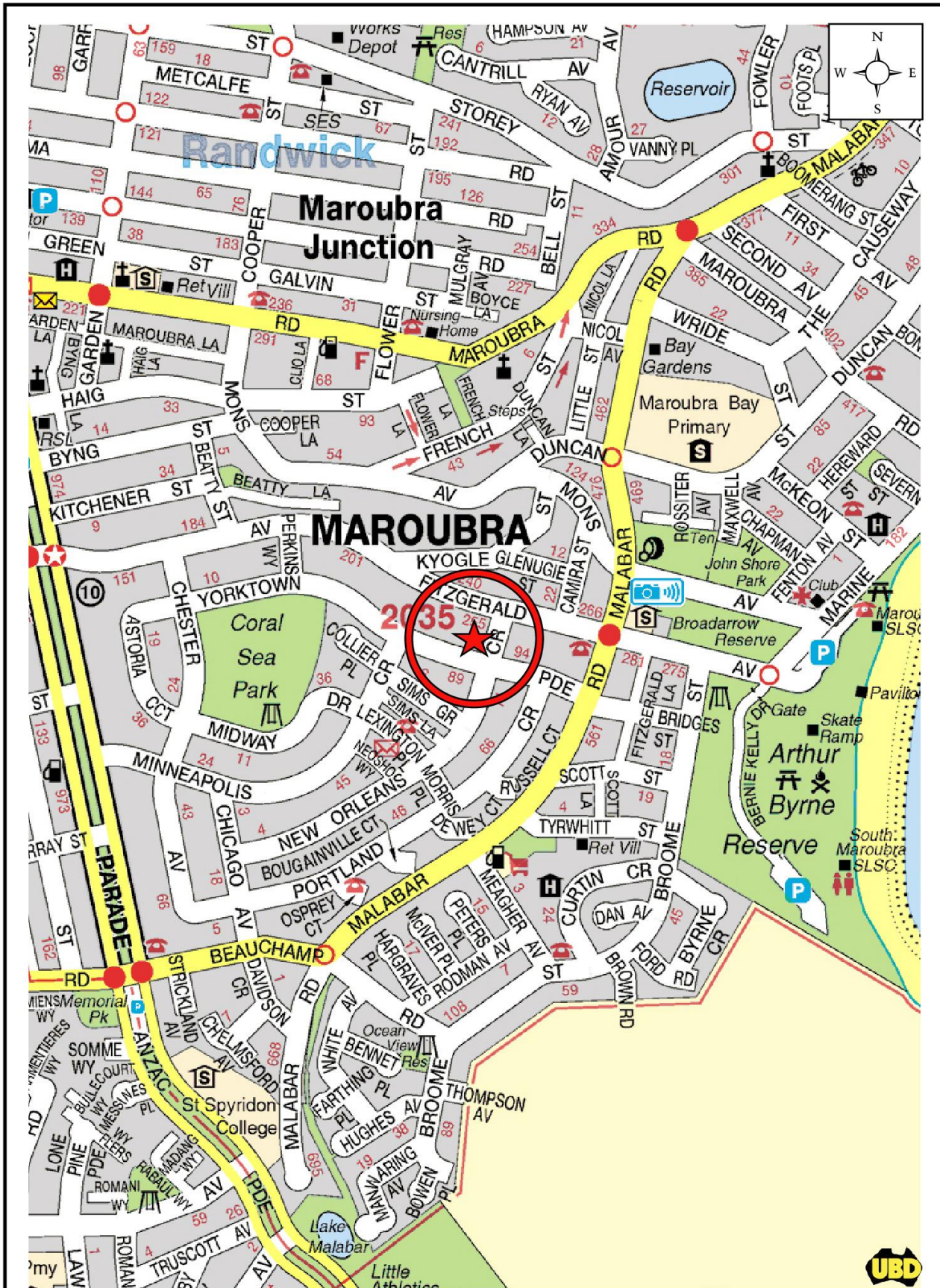
This report has been prepared on behalf of *Homes NSW* to accompany a *Part 5 assessment (under the EPA Act 1979)* for a residential development to be located at 48 New Orleans Crescent, Maroubra (Figures 1 and 2).

The proposed development involves the demolition of the existing residential dwelling on the site to facilitate the construction of 5 *affordable rental* apartments in a new three-storey residential building in accordance with the *SEPP (Housing) 2021* requirements.

Off-street parking is to be provided in a new at-grade car parking area located at the rear of the site, in accordance with the *SEPP (Housing) 2021* requirements. Vehicular access to the car parking area is to be provided via a new entry/exit driveway located towards the southern end of the New Orleans Crescent site frontage.

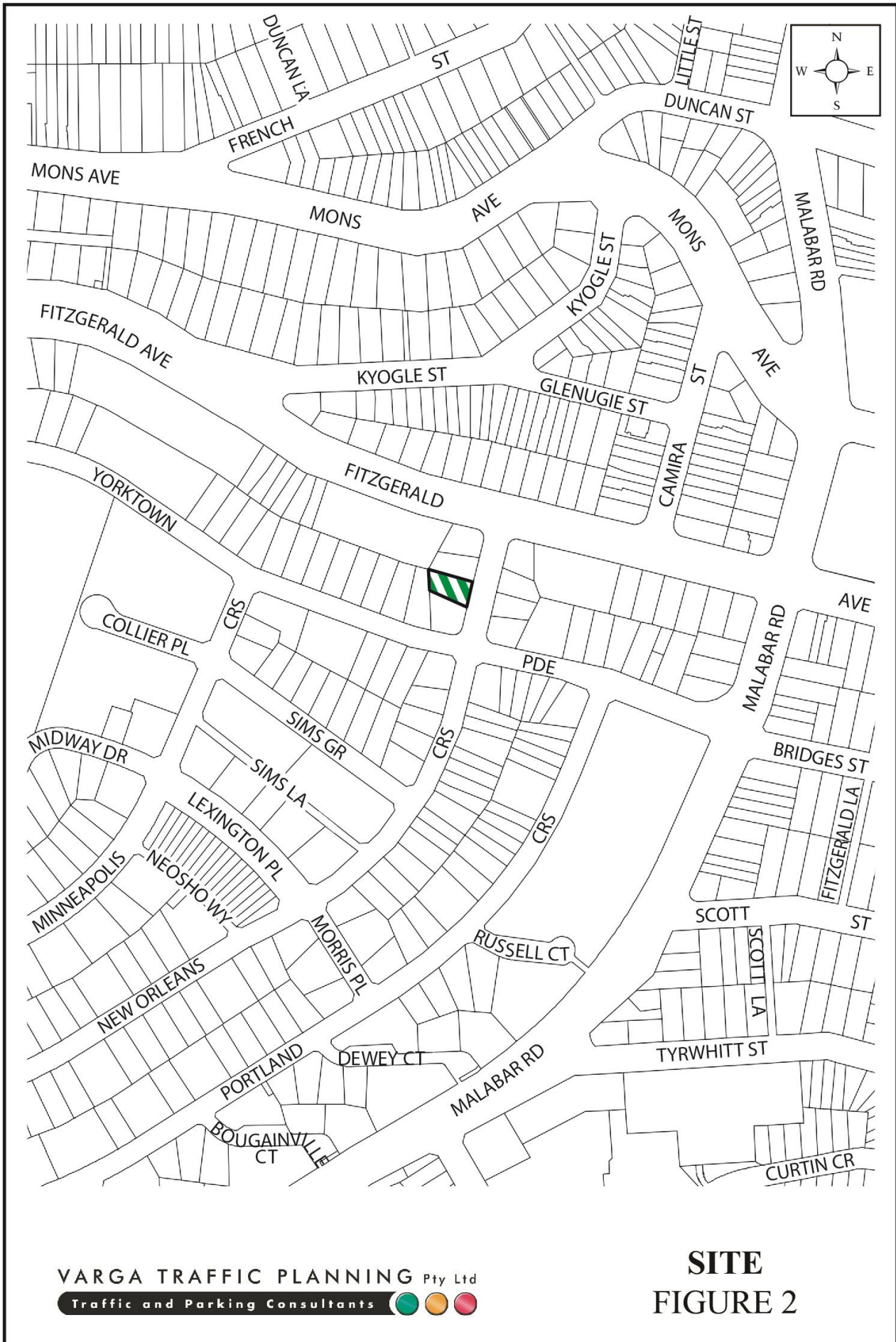
The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- 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.



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LOCATION
FIGURE 1



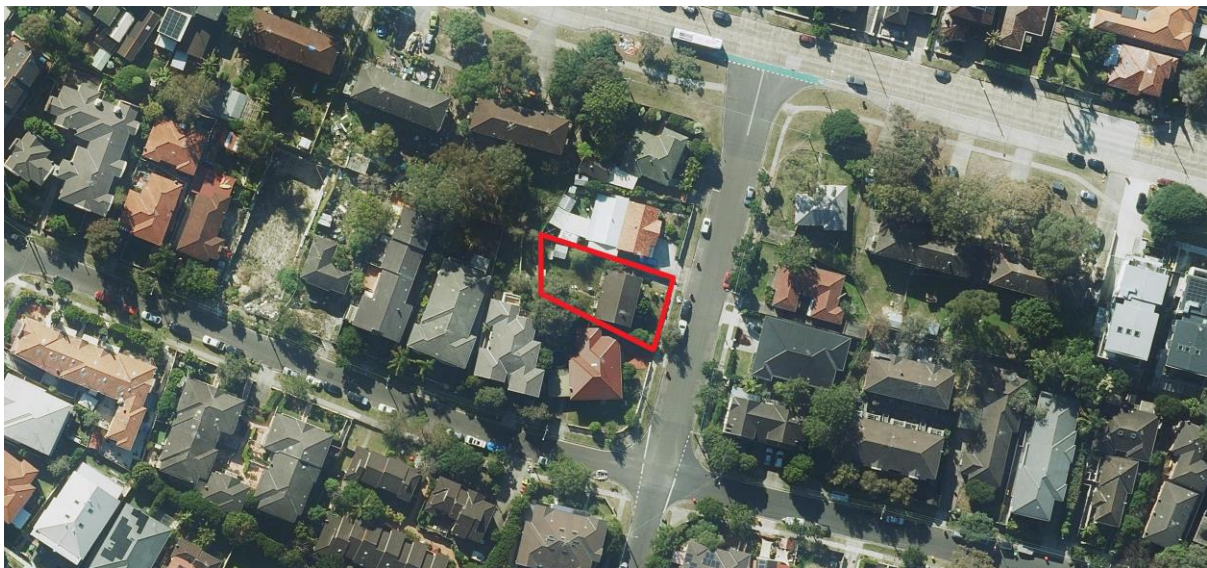
2. PROPOSED DEVELOPMENT

Site

The subject site is located on the western side of New Orleans Crescent, some 60m south of the New Orleans Crescent and Fitzgerald Avenue intersection. The site has a street frontage approximately 18m in length to New Orleans Crescent, and occupies an area of approximately 505m².

The subject site is currently occupied by a single residential dwelling with a vehicular access driveway off New Orleans Crescent.

A recent aerial image of the site and its surroundings is reproduced below.



Source: Metro Map

Proposed Development

The proposed development involves the demolition of the existing residential dwelling on the site to facilitate the construction of a new three-storey *affordable rental housing* building.

A total of 5 residential apartments are proposed as follows:

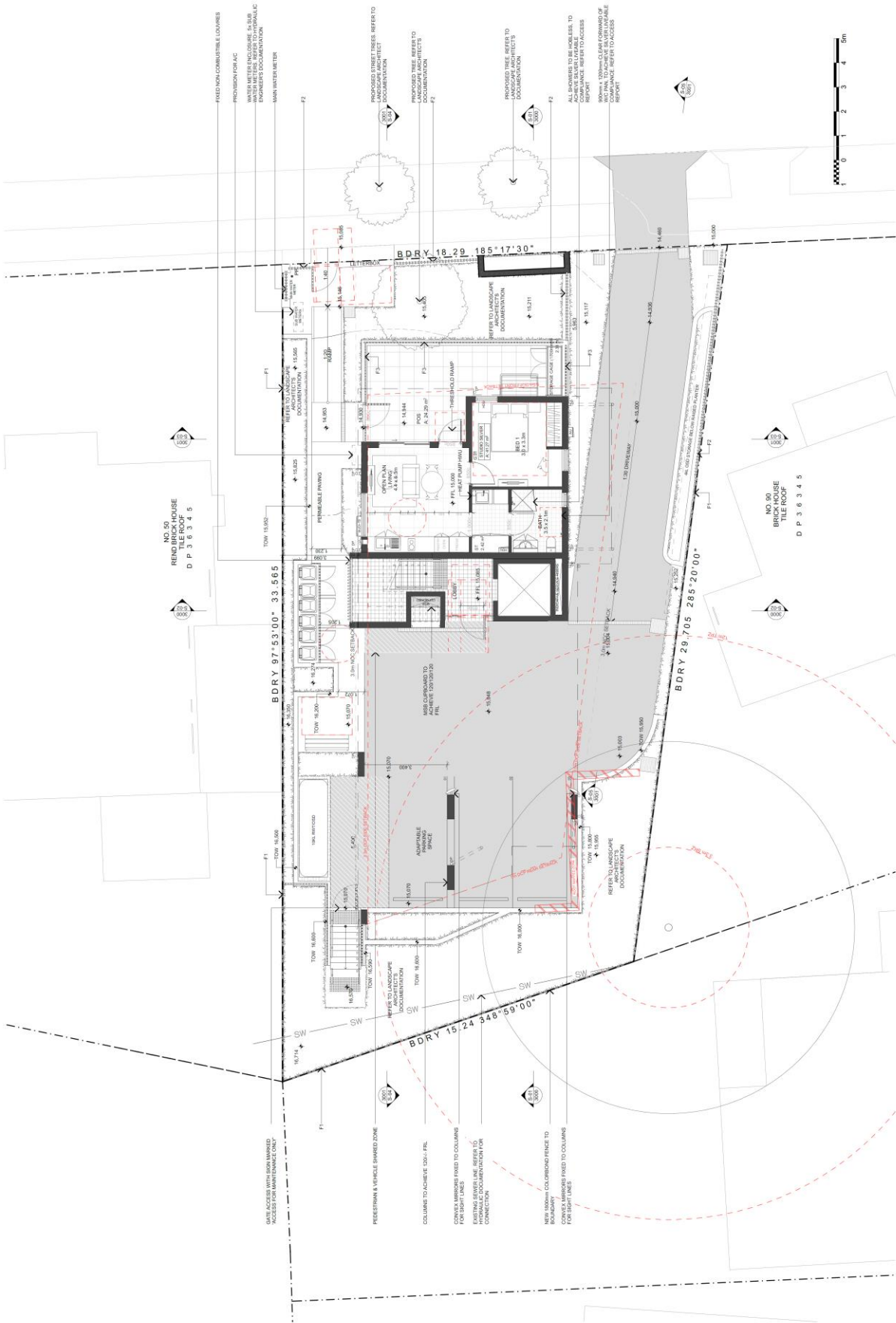
1 bedroom apartments:	3
2 bedroom apartments:	2
TOTAL APARTMENTS:	5

Off-street parking is proposed for a total of 3 cars in accordance with *SEPP (Housing) 2021* requirements. Vehicular access to the car parking facilities is to be provided via a new entry/exit driveway located towards the southern end of the New Orleans Crescent site frontage.

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

NEW ORLEANS CRESCENT

NOT FOR CONSTRUCTION



GROUND FLOOR PLAN

PROJECT: Residential Flat Building
DRAWN: P5-1100 B-WIP
DATE: 1/10/2024
SCALE: 1:100

PROJECT: Residential Flat Building
DRAWN: P5-1100 B-WIP
DATE: 1/10/2024
SCALE: 1:100



NO. 90
BRICK HOUSE
TILE ROOF
D P 3 6 3 4 5

NO. 90
BRICK HOUSE
TILE ROOF
D P 3 6 3 4 5

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TILE ROOF
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NOTES

1. Contacted dimensions like precedence over scaled drawings
2. Figures to check and verify all levels, drains and dimensions on site
3. All materials and underpinning to be in accordance with current water supply and sewerage regulations
4. All materials and underpinning to be in accordance with current water supply and sewerage regulations, local regulations and SAA rules
5. All materials and underpinning to be in accordance with current water supply and sewerage regulations, local regulations and SAA rules and certification sought before proceeding with any work
6. All drawings are not for construction and are subject to further design development, consultant input, current and legislative requirements
7. Refer to General notes page for general and additional

[illegible]

PROJECT

Residential Flat Building

SITE: 48 New Orleans Crescent MARCOLUDA NSW 2005
CLIENT: HOMES NEW
REF: 86243

[illegible]

3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by Transport for New South Wales (TfNSW) is illustrated on Figure 3.

Anzac Parade to the north of Beauchamp Road is classified by TfNSW as a *State Road* providing the key north-south road link in the area, linking Surry Hills and La Perouse. It typically carries two traffic lanes in each direction with opposing traffic flows separated by a large landscaped central median island. Kerbside parking is permitted at selected locations on either side of the road, subjected to sign-posted restrictions.

Malabar Road is classified by TfNSW as a *Regional Road* providing another key north-south road link in the area, linking South Coogee and Port Botany. It typically carries one traffic lane in each direction in the vicinity of the site. Kerbside parking is generally permitted on both sides of the road in the vicinity of the site.

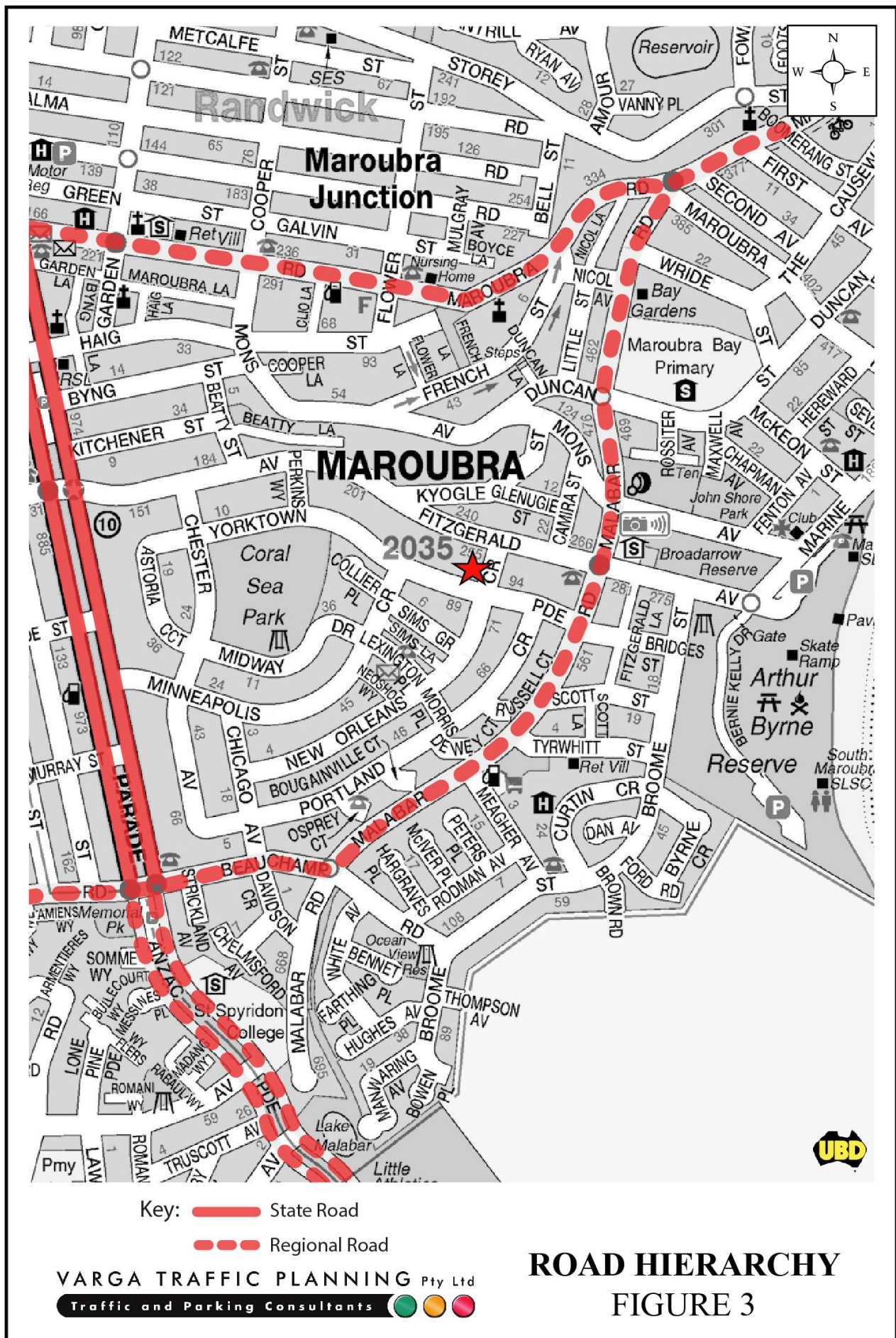
Maroubra Road is classified by TfNSW as a *Regional Road* providing a key east-west road link in the area, linking Maroubra Beach and East Gardens. It typically carries one to two traffic lanes in each direction in the vicinity of the site. Kerbside parking is generally permitted on both sides of the road in the vicinity of the site.

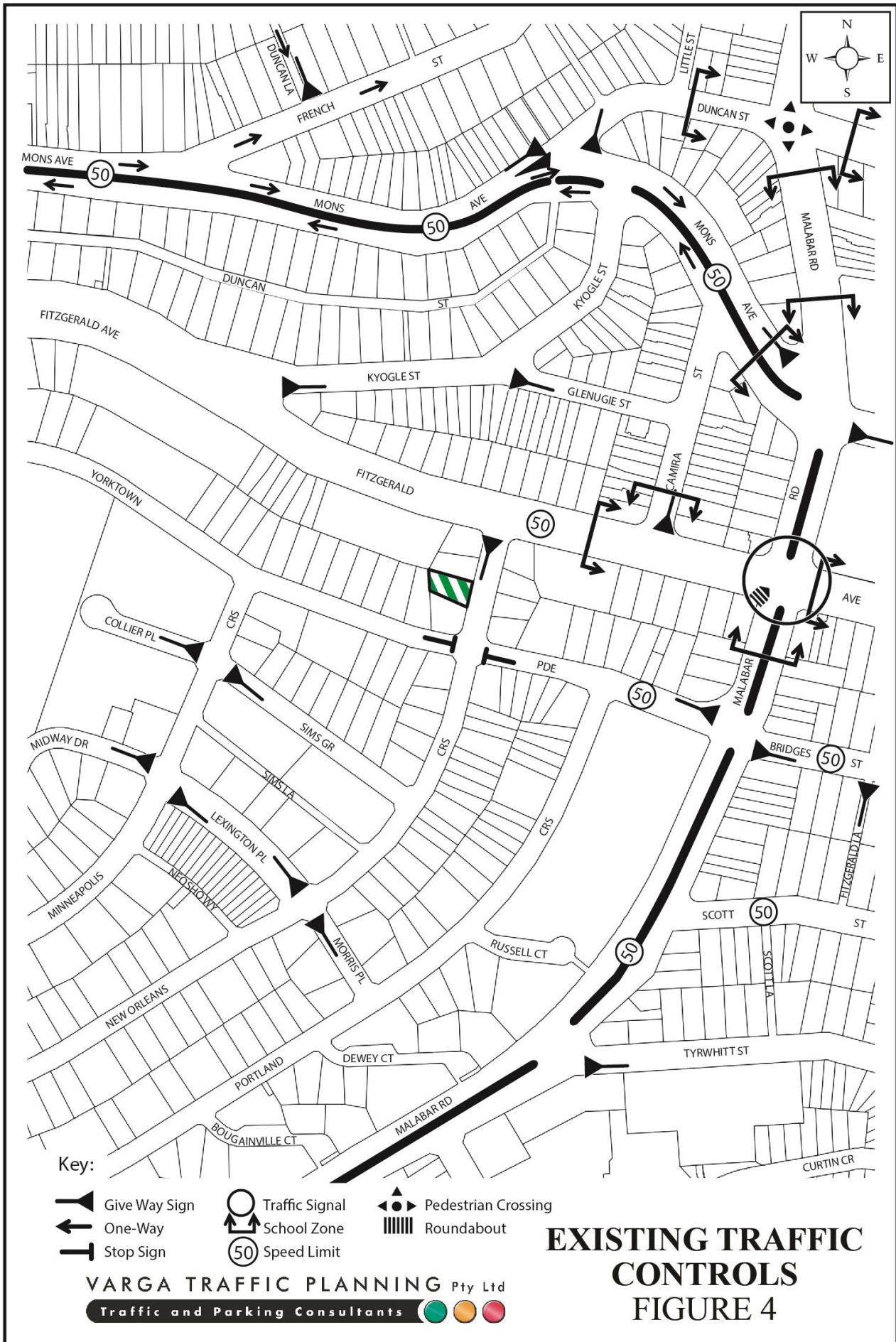
New Orleans Crescent is a local, unclassified road that is primarily used to provide vehicular and pedestrian access to frontage properties. Unrestricted kerbside parking is generally permitted on both sides of the road in the vicinity of the site.

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 New Orleans Crescent and all other local roads in the vicinity of the site





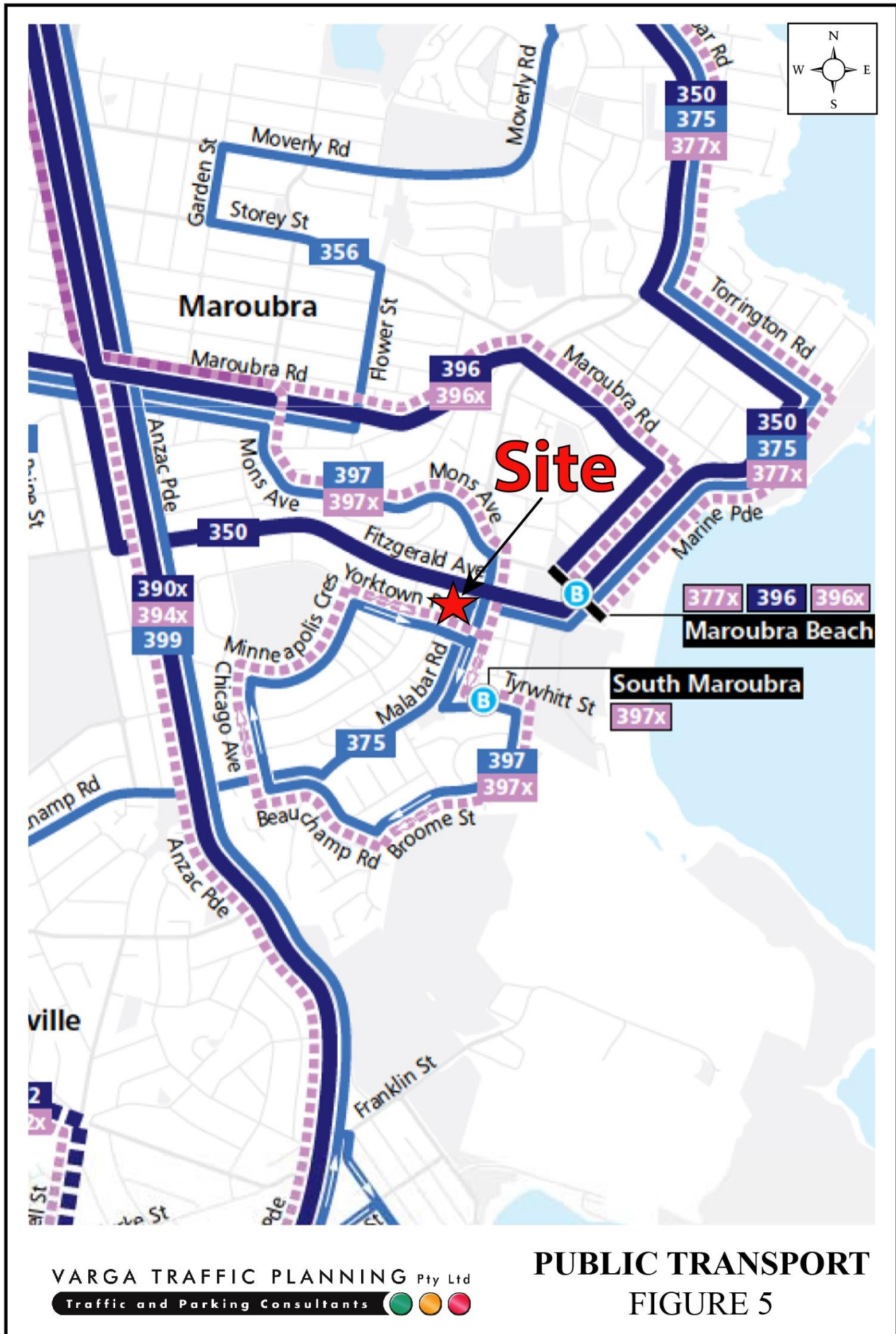
- a 40 km/h SCHOOL ZONE SPEED LIMIT which applies to local roads in the vicinity of St Mary - St Joseph Catholic Primary School
- GIVE WAY SIGNS in New Orleans Crescent where it intersects Fitzgerald Avenue
- STOP SIGNS in Yorktown Parade where it intersects with New Orleans Crescent
- TRAFFIC SIGNALS in Malabar Road where it intersects with Fitzgerald Avenue
- a ROUNDABOUT in Malabar Road where it intersects with Duncan Street
- a CENTRAL MEDIAN ISLAND in Mons Avenue and Malabar Road.

Public Transport Services

The existing public transport services located in proximity of the site are illustrated on Figure 5. There are currently four bus routes which operates along Malabar Road and Fitzgerald Avenue, with the closest bus stops located within 400m walking distance to/from the site.

A summary of those bus services is provided in the table below, revealing that there are approximately 190 services operating in the vicinity of the site on weekdays, and approximately 160 services per day on Saturdays and Sundays/public holidays.

Bus Routes and Frequencies							
Route No.	Route	Weekday		Saturday		Sunday	
		In	Out	In	Out	In	Out
350	Sydney Airport Domestic to Bondi Junction	107	114	101	101	101	101
375	Eastgardens to Randwick (Loop Service)	61	61	50	50	47	47
397	Eastgardens to South Maroubra (Loop Service)	12	12	11	11	11	11
397x	South Maroubra to City Museum (Express Service)	9	10	-	-	-	-
TOTAL		189	197	162	162	159	159



The site is located in an *accessible area* as defined by the *SEPP (Housing) 2021*, as it is located within 400m walking distance of a bus stop used by a regular bus service. The bus stop has at least one bus per hour between 6.00 and 21.00 each day from Monday to Friday (both days inclusive) and between 08.00 and 18.00 on each Saturday and Sunday, in accordance with *SEPP (Housing) 2021* requirements.

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 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the RMS *Technical Direction* (TDT 2013/04a) document.

The RMS *Guidelines* and the updated TDT 2013/04a 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:

Medium Density Residential Flat Dwellings

Smaller units and flats (up to two bedrooms):

Weekday peak hour vehicle trips = 0.4 - 0.5 per dwelling

Larger units and townhouses (three or more bedrooms):

Weekday peak hour vehicle trips = 0.5 - 0.65 per dwelling

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

Definition

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

Application of the above traffic generation rates to the 3 x one bedroom & 2 x two bedroom apartments outlined in the development proposal yields a traffic generation potential of approximately 3 vehicle trips per hour during commuter peak periods.

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.

The updated TDT 2013/04a nominates the following traffic generation rates which are applicable to the existing development:

Low Density Residential Dwellings (Sydney Areas)

0.95-0.99 peak hour vehicle trips per dwelling

Application of the above traffic generation rates to the existing residential dwelling on the site yields a traffic generation potential of approximately 1 vph during both the AM and PM peak hour.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential of the site of approximately 2 vph during both the AM and PM peak hours, 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:	2.5 vph
Less Existing Traffic Generation Potential:	-1.0 vph
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	+1.5 vph

That projected nett increase in traffic activity as a consequence of the development proposal is minimal, consistent with the zoning objectives of the area, 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 6 and comprise:

- NO STOPPING restriction along the northern side of Yorktown Parade to the west of New Orlean Crescent
- BUS ZONES located at regular intervals along both sides of Fitzgerald Avenue
- generally UNRESTRICTED kerbside parking along both sides of New Orleans Crescent and throughout the local area, including along the site frontage.

Off-Street Car Parking Provisions

The off-street parking requirements applicable to the development proposal are specified in *State Environmental Planning Policy (Housing) 2021* in the following terms:

Division 6 Residential development – relevant authorities

42 Development to which division applies

- (1) This division applies to residential development if–
 - (e) for development on land in an accessible area–the development will result in the following number of parking spaces–
 - (i) for each dwelling containing 1 bedroom—at least 0.4 parking spaces,
 - (ii) for each dwelling containing 2 bedrooms—at least 0.5 parking spaces,
 - (iii) for each dwelling containing at least 3 bedrooms—at least 1 parking space, and
 - (f) for development on land that is not in an accessible area– the development will result in the following number of parking spaces–



- (i) for each dwelling containing 1 bedroom—at least 0.5 parking spaces,
- (ii) for each dwelling containing 2 bedrooms—at least 1 parking space,
- (iii) for each dwelling containing at least 3 bedrooms—at least 1.5 parking spaces.

Application of the above *SEPP (Housing) 2021* car parking requirements under Item 42(1)(e) – i.e. in an *accessible* area – to the 5 residential apartments outlined in the development proposal yields an off-street car parking requirement of 3 parking spaces.

The proposed development makes provision for a total of 3 off-street parking spaces, thereby satisfying the *SEPP (Housing) 2021* requirements.

The geometric design layout of the proposed car parking facilities has 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* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6* in respect of parking bay dimensions, ramp gradients and aisle widths.

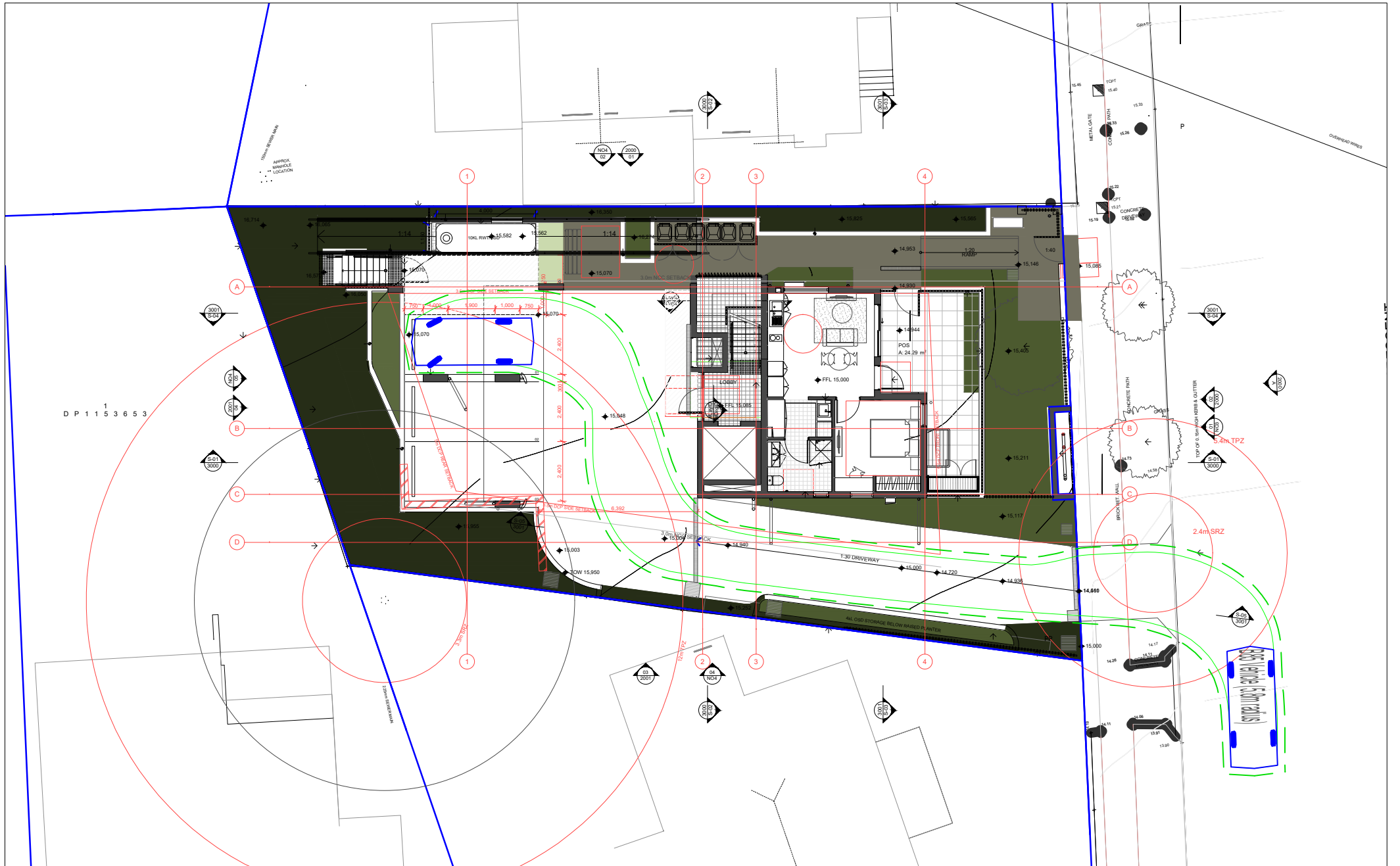
In addition, a series of *swept turning path* diagrams of a B85 design vehicle entering/exiting all parking spaces have been prepared which are reproduced in the following pages, demonstrating that all vehicles will be able to enter and exit the site whilst travelling in a forward direction and maintaining sufficient clearances at all times. Convex mirrors are to be provided in the proposed car parking area for sightlines, so that there will not be any pedestrian and vehicular movement conflict in the shared zone and one-way access driveway.

Further reference is made to *AS2890.1:2004 Clause 3.2.2*, which states that as a guide, *30 or more movements in a peak hour (in and out combined) would usually require the provision for two vehicles to pass on the driveway – i.e. a minimum width of 5.5m.*

As mentioned in the foregoing, the proposed development scheme is expected to generate just 3 peak hour vehicle trips (*less* at other times), which is *significantly less* than the 30 vehicles per hour threshold for two-lane roadways. As such, the likelihood of two cars entering and exiting the site at the same moment in time is *statistically insignificant* and a single lane internal roadway arrangement is therefore considered acceptable.

Conclusion

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



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 www.vargatrafic.com.au
 Sydney, Australia

PROJECT
 RESIDENTIAL DEVELOPMENT



DRAWING TITLE
 B85_Parking (1)

ADDRESS
 48 New Orleans Crs,
 Maroubra

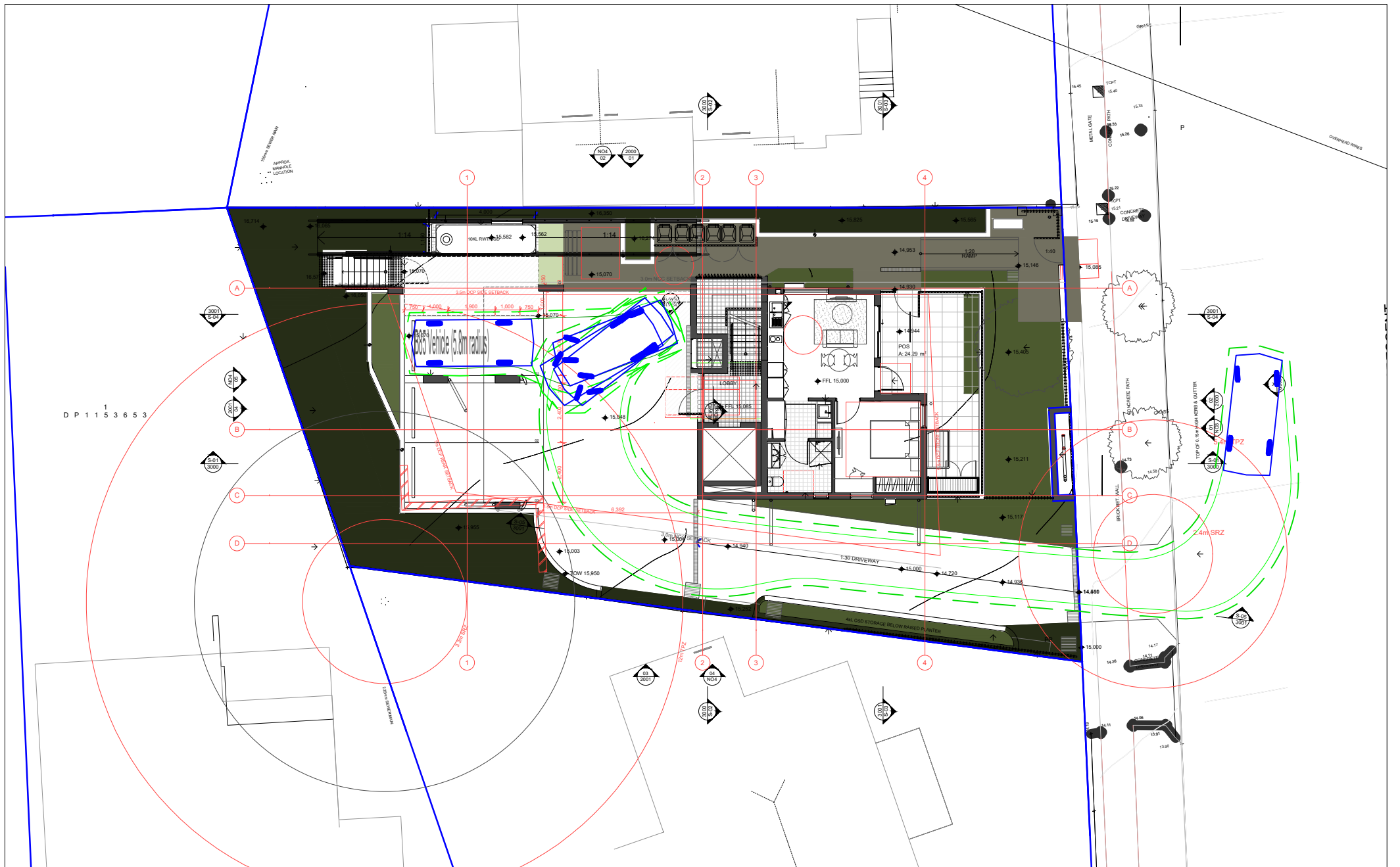
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 Sydney, Australia

PROJECT
 RESIDENTIAL DEVELOPMENT



DRAWING TITLE
 B85_Exit (1)

ADDRESS
 48 New Orleans Crs,
 Maroubra

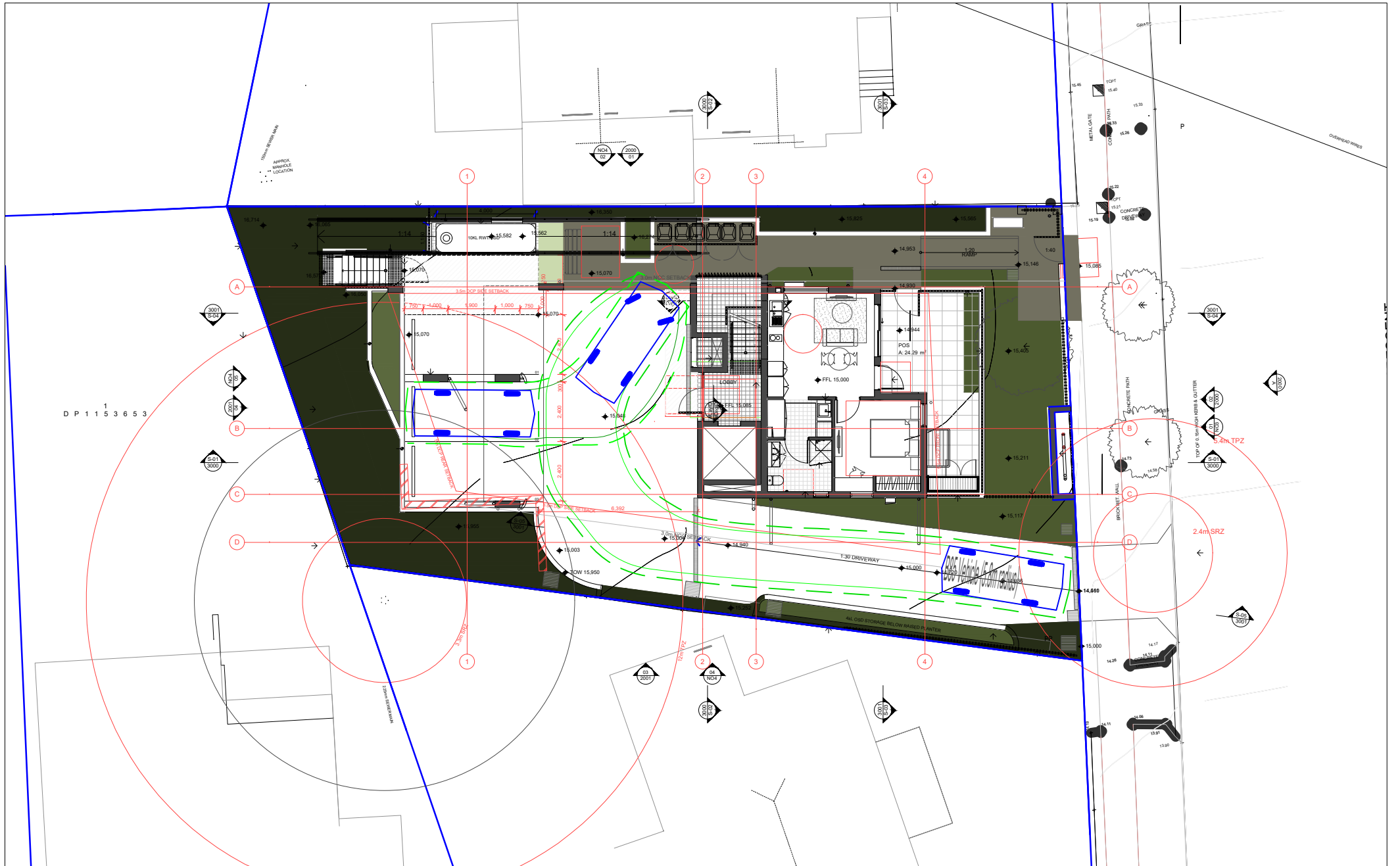
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PROJECT
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DRAWING TITLE
 B85_Parking (2)

ADDRESS
 48 New Orleans Crs,
 Maroubra

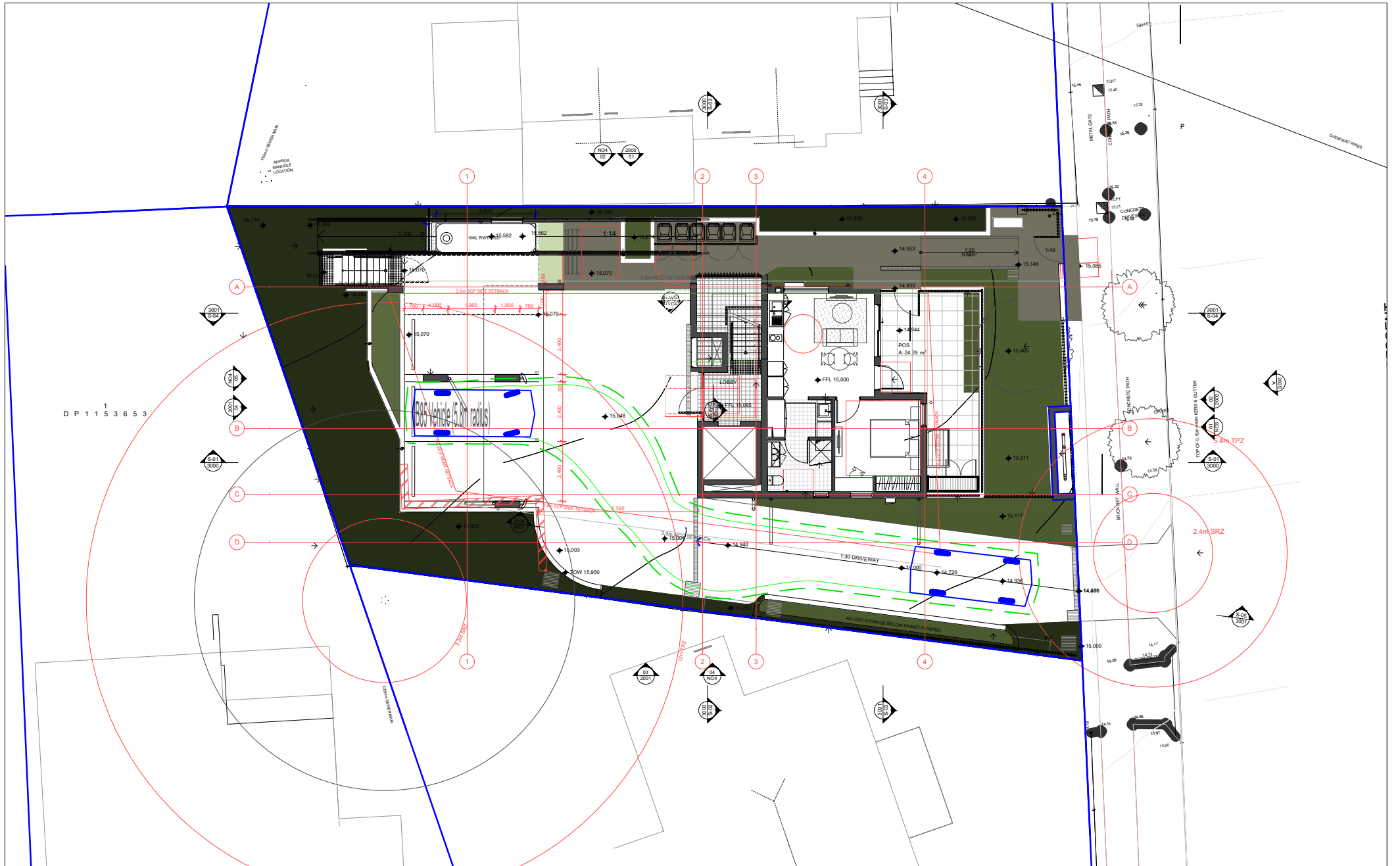
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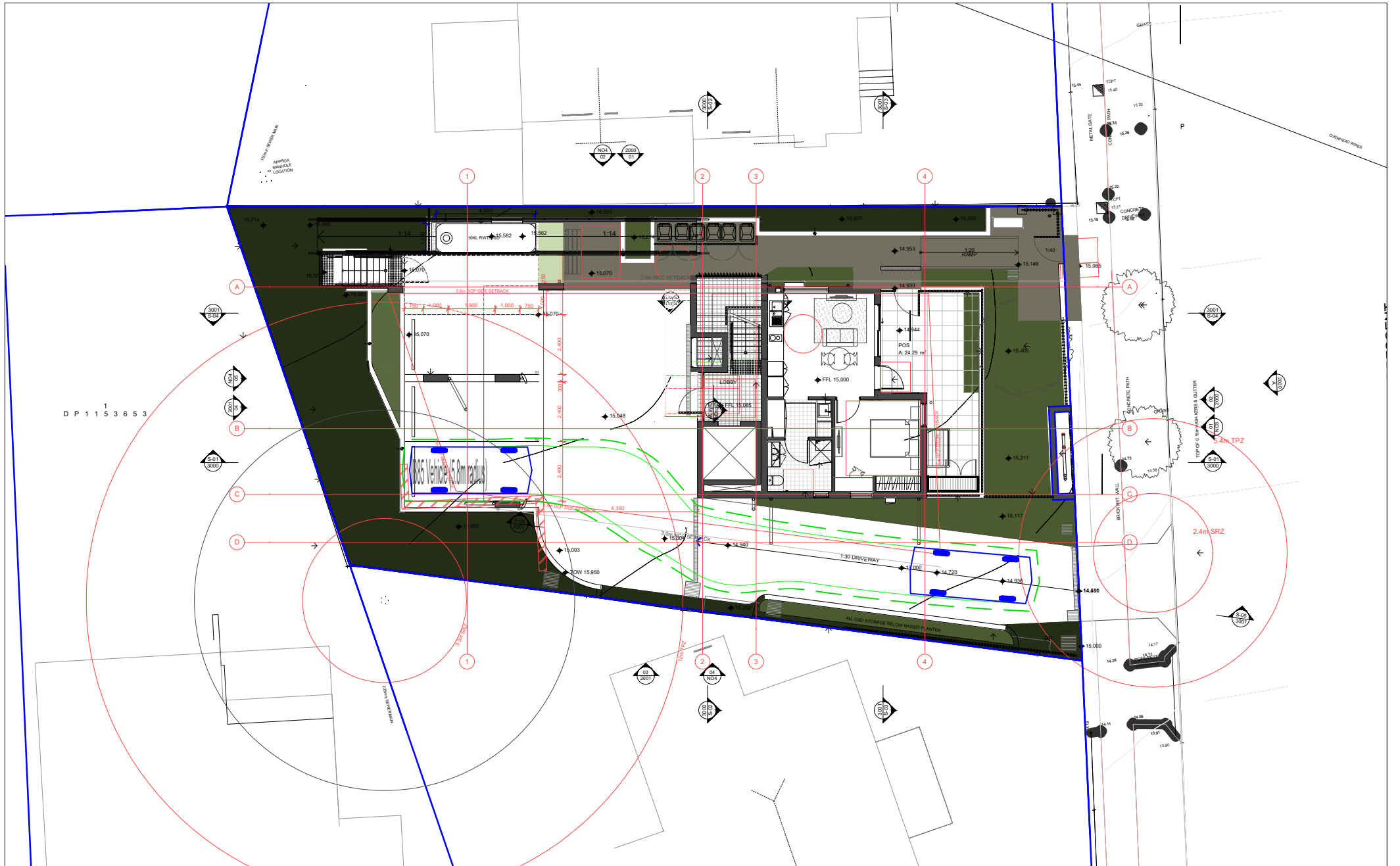
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