

**PROPOSED
RESIDENTIAL DEVELOPMENT
2 – 10 STANLEY STREET, KOGARAH
*Assessment of Traffic and
Parking Implications***

October 2017
(Rev B)

Reference 17169

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Transportation, Traffic and Design Consultants
Suite 502, Level 5
282 Victoria Avenue
CHATSWOOD 2067
Telephone (02) 9411 5660
Facsimile (02) 9904 6622
Email: info@ttpa.com.au

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	PROPOSED DEVELOPMENT SCHEME.....	2
2.1	Site, Context And Existing Use.....	2
2.2	Proposed Development.....	2
3.	ROAD NETWORK AND TRAFFIC CONDITIONS	3
3.1	Road Network.....	3
3.2	Traffic Controls	3
3.3	Traffic Conditions	4
3.4	Transport Services	5
4.	PARKING	6
5.	TRAFFIC	7
6.	ACCESS, INTERNAL CIRCULATION AND SERVICING	8
7.	CONCLUSION	9

APPENDIX A DEVELOPMENT PLANS

LIST OF ILLUSTRATIONS

FIGURE 1	LOCATION
FIGURE 2	SITE
FIGURE 3	ROAD NETWORK
FIGURE 4	TRAFFIC CONTROLS

1. INTRODUCTION

This report has been prepared to accompany a Development Application to Kogarah Council for a proposed residential apartment development on the consolidated site of 2 – 10 Stanley Street, Kogarah (Figure 1).

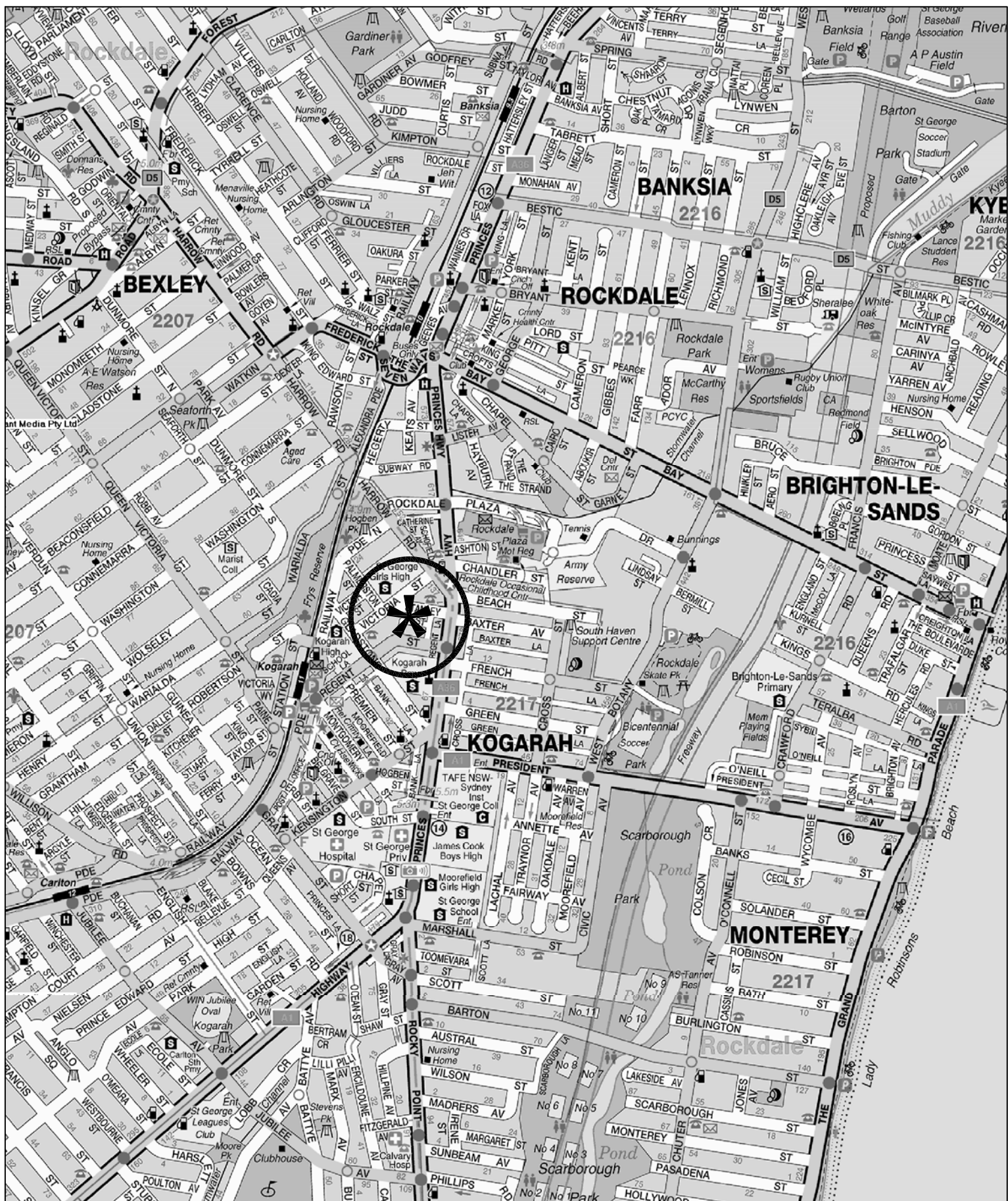
Many commercial centres throughout the Sydney Metropolitan area, particularly those with convenient access to public transport, are experiencing ongoing upgrading and redevelopment as part of the urban consolidation process. Older style buildings and redundant uses are generally being replaced by multi-level apartment buildings with some containing ground level retail floorspace.

The site for the proposed development at Kogarah has convenient access to the arterial road system, as well as the town centre and public transport facilities, and the proposed scheme comprises:

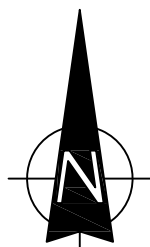
- * 87 Residential Apartments
- * Basement parking

The purpose of this report is to:

- * describe the site, its context and the proposed development scheme
- * describe the existing road network and traffic conditions in the area
- * assess the adequacy of the proposed parking provision
- * assess the potential traffic implications
- * assess the proposed vehicle access, internal circulation and servicing arrangements



LEGEND



LOCATION

FIG 1

2. PROPOSED DEVELOPMENT SCHEME

2.1 SITE, CONTEXT AND EXISTING USE

The development site (Figure 2) is a consolidation of 5 lots occupying a total area of some 1,634m² with frontages to Stanley Street and Regent Lane. The site is located in the northern edge of the Kogarah Centre and the surrounding uses include:

- * the St George High School complexes just to the north
- * the mixture of retail and commercial buildings along Railway Parade
- * the town centre and railway station some 200 metres to the west
- * the large St George Hospital complex to the south-west.

The site currently contains 5 dwellings with 4 having vehicle access on the laneway and 1 with access on Stanley Street.

2.2 PROPOSED DEVELOPMENT

It is proposed to demolish the existing buildings and excavate the site to construct a new 10-level building with basement car parking. The new building will comprise:

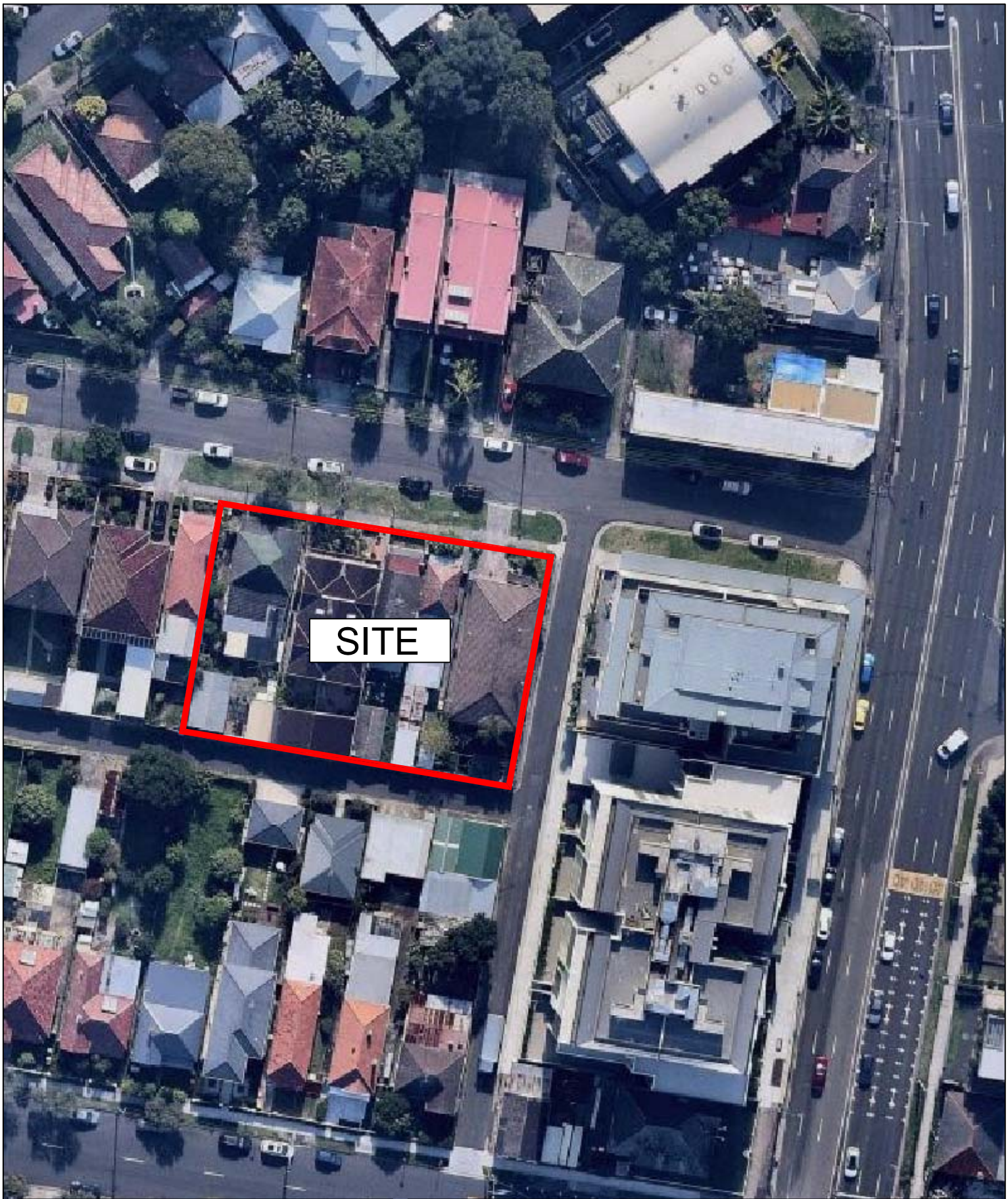
28 x One Bed apartments

59 x Two Bed apartments

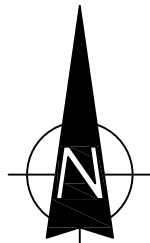
Total: 87 apartments

A total of 100 parking spaces will be provided in 4 basement levels with access on the Regent Lane frontage.

Details of the proposed development are provided on the architectural drawings prepared by Level 33 which accompany the Development Application and are reproduced in part in Appendix A.



LEGEND



SITE

FIG 2

STANLEY STREET

T.N. M.M.

ALL BEARINGS ARE ON TRUE NORTH
TAKEN FROM DP 1186941 DATED 2013

RECENT LANE

RECENT LANE

SP 83834

SP 89161



SUITE 7/14 FRENCH AVENUE AVENUE, BANKSTOWN
PH: 02 9708 0177 FAX: 02 9708 0255 E: info@sydney-surveyors.com.au

NOTE: NO BOUNDARY SURVEY HAS BEEN CARRIED OUT
IMPROVEMENTS ON OR NEAR THE BOUNDARIES ARE SHOWN DIAGRAMMATICALLY ONLY
THE EXACT LOCATION OF UNDERGROUND SERVICES ARE UNKNOWN

- | | | | | |
|--------------|---------------|---------------|-----------------|-----------------|
| ▲ BENCH MARK | ⬮ TELSTRA PIT | ⬮ WATER METER | ⊗ SEWER MANHOLE | ⬮ STOP VALVE |
| ⬮ TREES | ⬮ HYDRANT | ⬮ GAS METER | ⊗ POWER POLE | ⬮ DRAIN / GRATE |

SHEET 01 OF 01

REGISTERED SURVEYOR

REF: 141820

SCALE: 1:100 @A1

GRID:

DATUM: AHD

DATE: 29/09/2017

PLAN SHOWING DETAIL AND LEVELS AT
2-10 STANLEY STREET, KOGARAH
LOTS 47-54, SEC. B IN D.P. 1397

3. ROAD NETWORK AND TRAFFIC CONDITIONS

3.1 ROAD NETWORK

The road network serving the site (Figure 3) comprise:

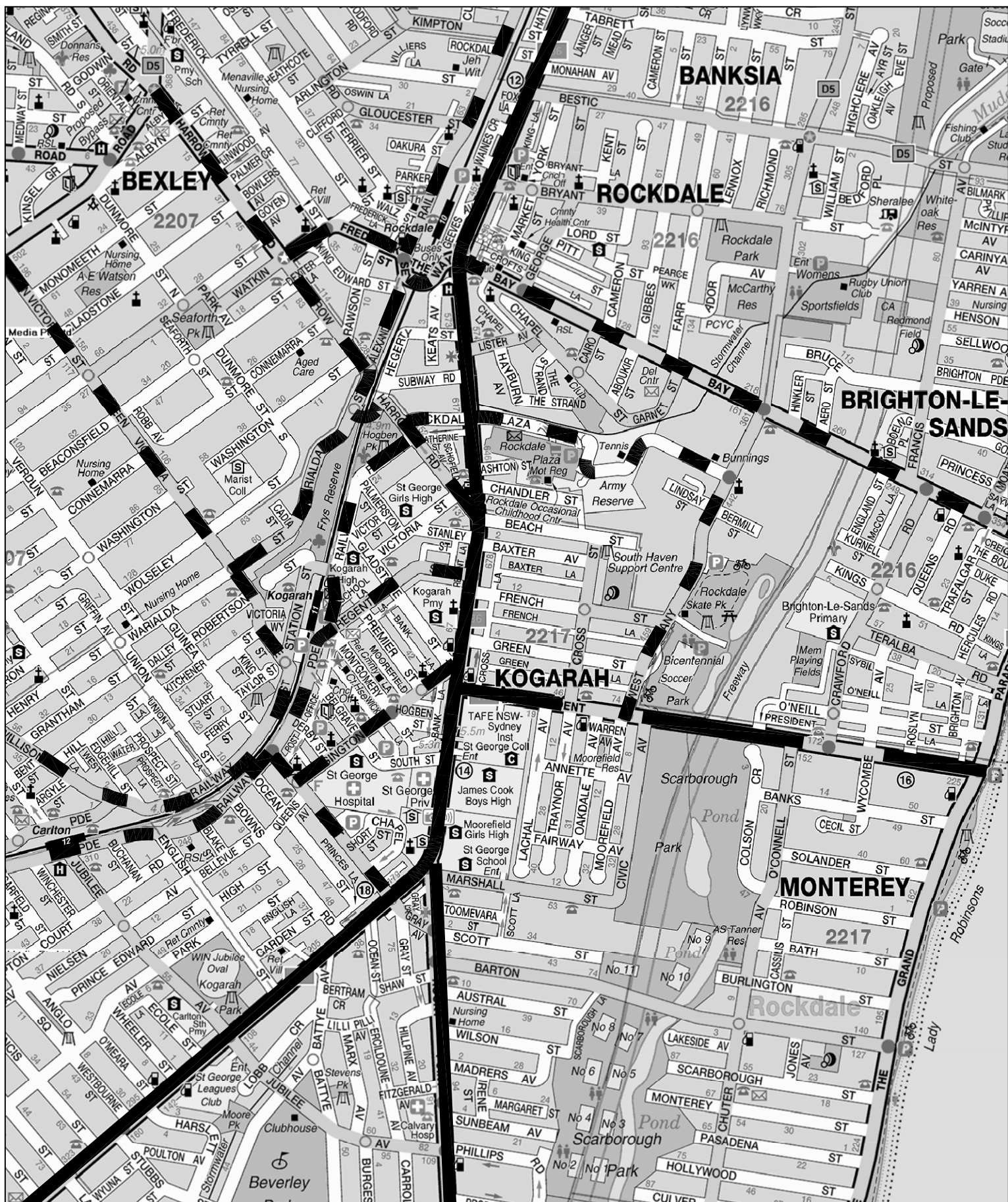
- * *Princes Highway* – a State Highway and principal north-south arterial route to/from the City
- * *President Avenue* – a State Road and sub-arterial route linking between Princes Highway and Grand Parade
- * *Rocky Point Road* – a State Road and sub-arterial route linking between Princes Highway and Captain Cook Bridge
- * *Railway Parade, Gray Street, Gray Avenue and Regent Street* – collector roads through Kogarah connecting to the arterial routes
- * *Victoria Street and Stanley Street* – local access roads

Victoria Street and Stanley Street in the vicinity of the site are relatively straight with 12.8 metre wide roadways while Stanley Lane is narrow service lane.




3.2 TRAFFIC CONTROLS

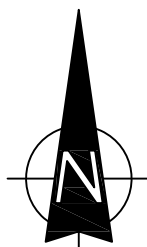
The existing traffic controls which have been applied to the road system in the vicinity of the site are shown on Figure 4. The principal features of these controls are:

- * the traffic control signals along the Princes Highway including the Regent Street, Rockdale Plaza and President Avenue intersections
- * the traffic signals at the Railway Parade / Regent Street intersection
- * the roundabout at the Regent Street/Gladestone Street intersection



LEGEND

-  ARTERIAL
-  SUB-ARTERIAL
-  COLLECTOR



ROAD NETWORK

FIG 3

- * the central median island along the Highway across the Stanley Street intersection
- * the 60 kmph speed restriction along the Highway and 50 kmph along the local and collector road system with section of 40 kmph SCHOOL ZONE restrictions near the schools
- * the NO PARKING/NO STOPPING restrictions in Regent Lane

3.3 TRAFFIC CONDITIONS

An indication of the existing traffic conditions in the vicinity of the site is provided by data published by RMS¹ and traffic surveys undertaken for this study. This data is expressed in terms of Annual Average Daily Traffic (AADT) and details of the most recent data are provided in the following:

Location	AADT
Princes Highway @ Regent Street	45,000
Regent Street @ Princes Highway	6,000

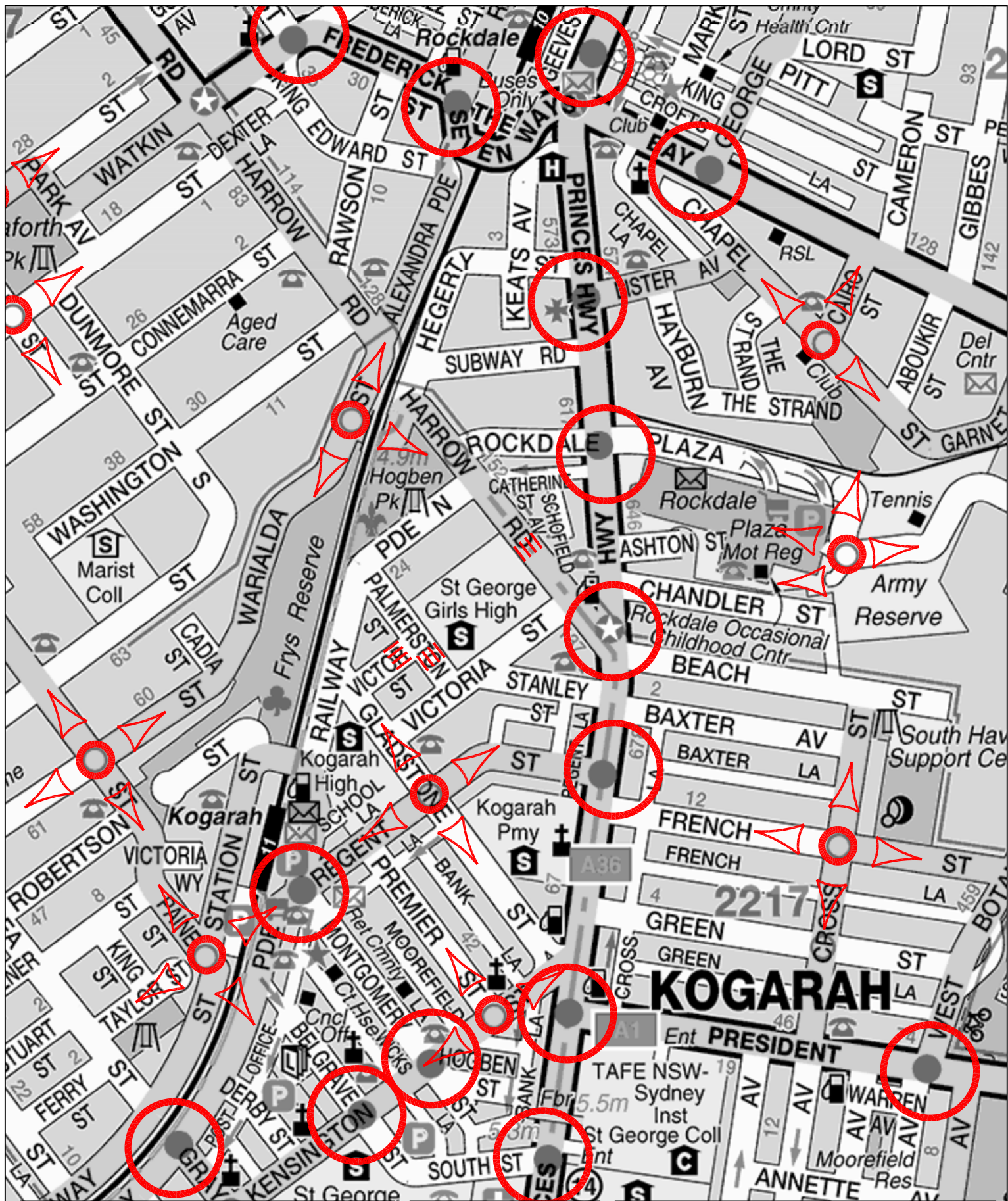
Traffic surveys have been undertaken on Stanley Street during the weekday morning and afternoon peak periods which indicate two-way flows of some 1-200 vph while the flows along Regent Lane are negligible.

There is no traffic congestion along Stanley Street or Victoria Street while the operation of the road system in the area is largely influenced by the circumstances at the nearby major intersections including Princes Highway / President Avenue.




¹ Traffic Volume Data for Sydney Region
Roads and Maritime Services

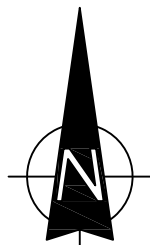
3.4 TRANSPORT SERVICES

Public transport plays an important role in meeting the travel needs of residents, shoppers, employees and visitors of the area. The development site is located some 350 metres from Kogarah Railway Station and Town Centre. There are a number of bus services operating in the area which facilitate connection to/from the railway station and provide extensive linkages to Metropolitan Transport Network.



LEGEND

-  TRAFFIC SIGNAL CONTROL
-  ROUNDABOUT
-  RESTRICTED TURNING MOVEMENT



TRAFFIC CONTROLS

FIG 4

4. PARKING

The ADG specifies the following (RMS) minimum parking provision in relation to the proposed development.

One Bed	0.4 space
Two Bed	0.7 space
Three Bed	1.0 space
Visitors	1 space per 7 apartments

Application of this criteria to the proposed development would indicate the following:

28 x One Bed	11.2 spaces (12)
59 x Two Bed	41.3 spaces (42)
Visitors (87)	12.4 spaces (13)
Total:	67 spaces

It is proposed to provide a total of 100 spaces for residents and visitors including 10 accessible spaces and 1 wash bay in satisfaction of the ADG criteria and this proposed provision will ensure that there will be no overflow on-street parking. The DCP specifies a provision of bicycle parking of 1 space per 3 apartments for residents and 1 space per 10 apartments for visitors indicating a requirement of 38 spaces, however it is proposed to provide 40 bicycle spaces.

5. TRAFFIC

An indication of the peak traffic generation of the proposed development is provided by the RMS Guidelines (TDT 2014-4b) which specifies for high density residential apartments near railway stations.

vtpg per Apartment	
AM	PM
0.19	0.15

Application of this criteria to the proposed 87 apartments would indicate the following peak traffic generation.

AM	PM
17 vtpg	13 vtpg

This generation would be discounted by that of the existing 5 dwellings of say 3 @ 0.85 vtpg (large) and 2 x 0.65 vtpg (small) which equates to 4 vtpg. Thus, the additional traffic generation during the AM and PM peak periods will only be some 9 to 13 vtpg and this outcome will:

- largely imperceptible on the road system
- consistent with the planning and zoning for development in the area

It is apparent that there will be no unsatisfactory traffic implications as a result of the development.

6. ACCESS, INTERNAL CIRCULATION AND SERVICING

ACCESS

Vehicle access will be provided on the Regent Lane frontage (north/south section) with a 6.0m wide driveway on a straight and level section of the laneway. The driveway design will comply with the requirements of AS2890.1 and there will be good sight distances available.

A driveway will also be provided on the Stanley Lane frontage for access to the loading bay.

INTERNAL CIRCULATION

The design of the access ramps and parking areas will comply with the requirements of AS2890.1 and 6 and there will be generous provision for cars to manoeuvre.

SERVICING

Refuse will be collected by an SRV contract vehicle standing in the loading area off Stanley Lane where there is at least 3.5m headroom. Other small service and delivery vehicles etc will also be able to stand in the SRV bay on Basement Level 1 while small service vehicles (i.e. service personnel) will be able to park in the visitor spaces while any occasional requirement for a large service will be satisfied by the available kerbside parking in the area.

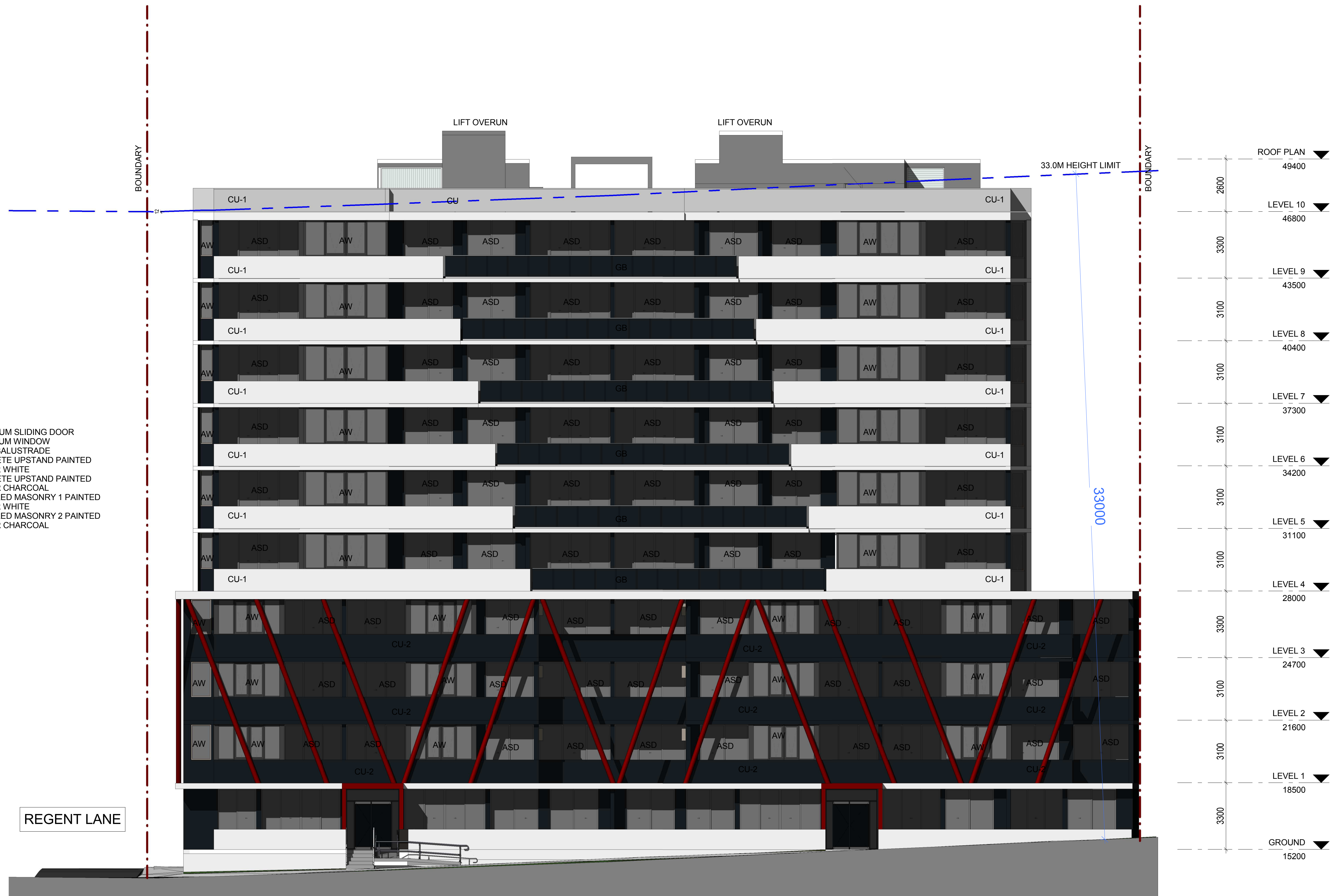
7. CONCLUSION

This assessment concludes that the proposed development:

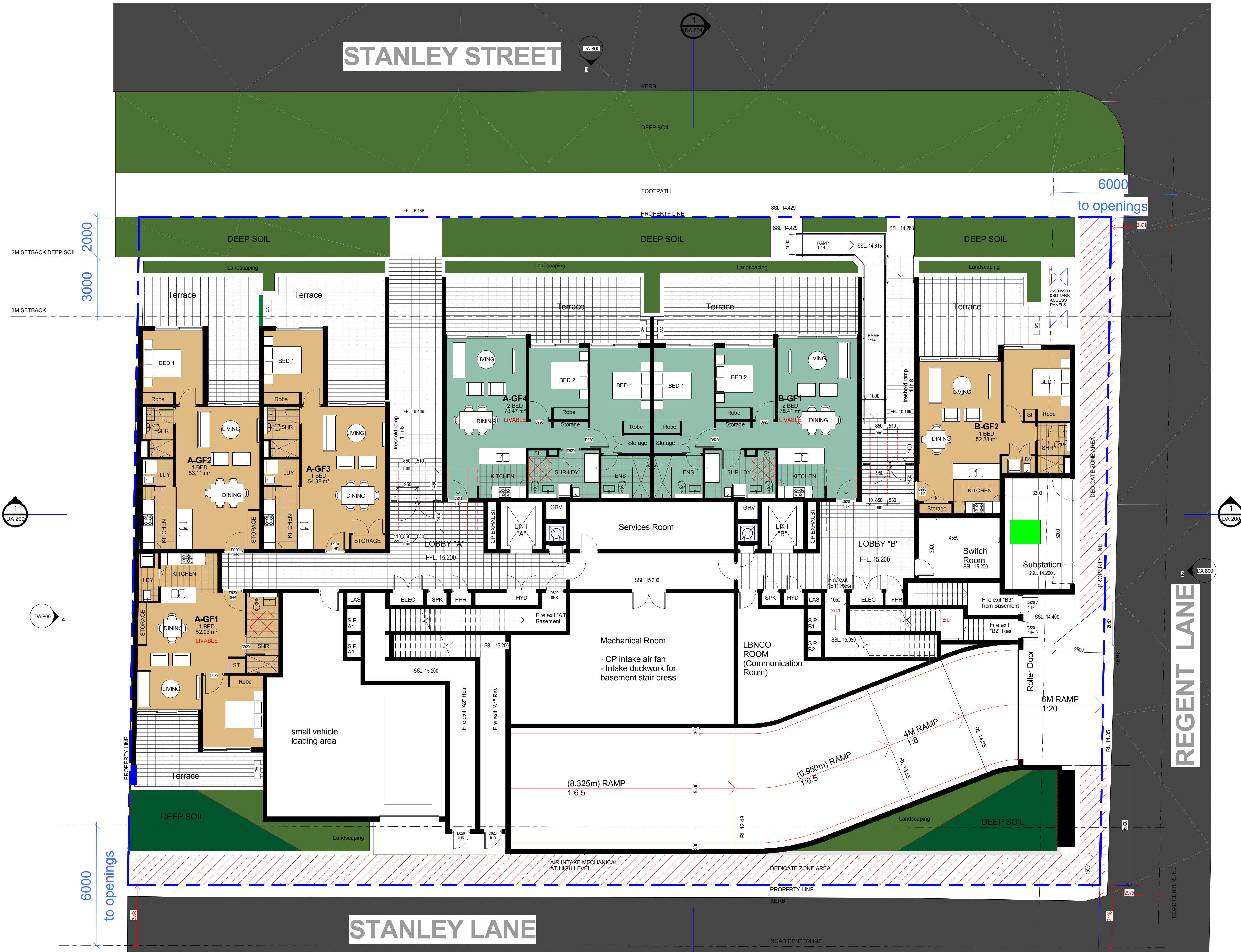
- * will not have any unsatisfactory traffic implications
- * will have an appropriate parking provision
- * will have suitable vehicle access, internal circulation and servicing arrangements
- * will be compatible with the surrounding development and is within close proximity to good public transport services

APPENDIX A

DEVELOPMENT PLANS

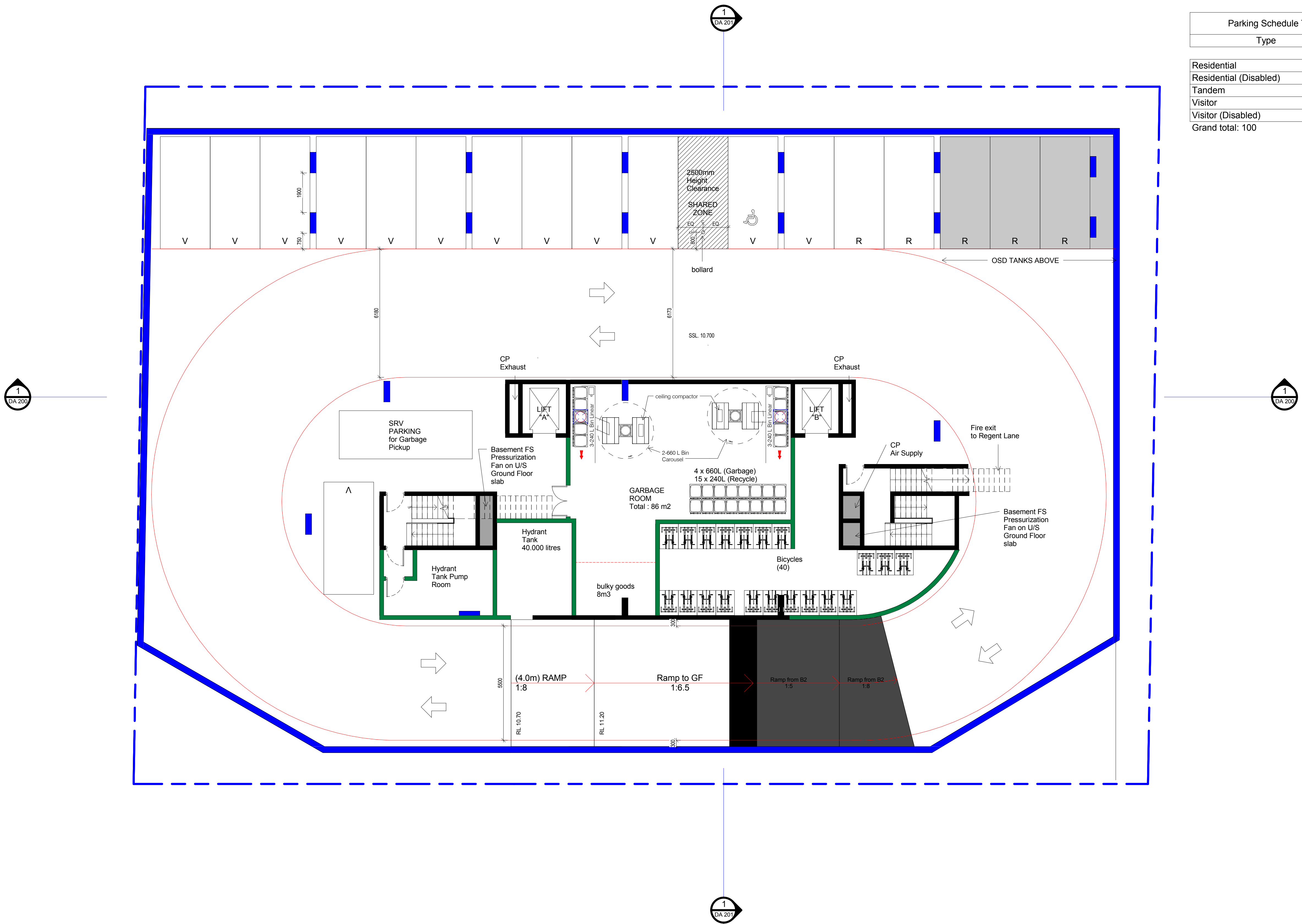




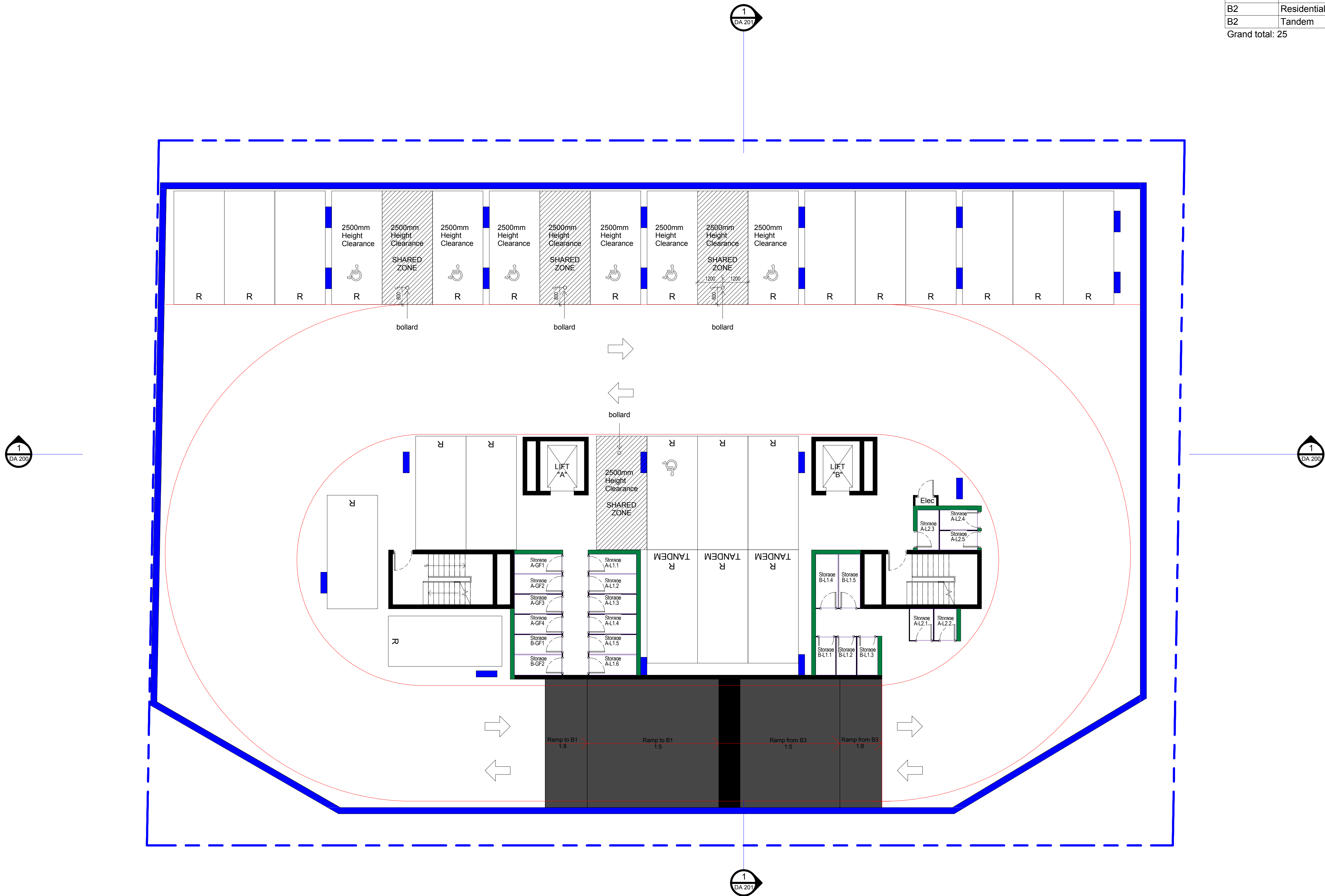


Parking Schedule B1		
Level	Type	Count
B1	Residential	5
B1	Visitor	12
B1	Visitor (Disabled)	1
Grand total: 18		

Parking Schedule TOTAL_Detailed	
Type	Count
Residential	70
Residential (Disabled)	9
Tandem	8
Visitor	12
Visitor (Disabled)	1
Grand total: 100	



Parking Schedule B2		
Level	Type	Count
B2	Residential	15
B2	Residential (Disabled)	7
B2	Tandem	3
Grand total:		25



Parking Schedule B3		
Level	Type	Count
B3	Residential	24
B3	Residential (Disabled)	1
B3	Tandem	3
Grand total: 28		

