

# **43-46 The Esplanade, Ettalong Beach**

## **Planning Proposal**

### **Traffic and Parking Impact Assessment**

Ref: 19201

Date: June 2022

Issue: E

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# 1.0 Introduction

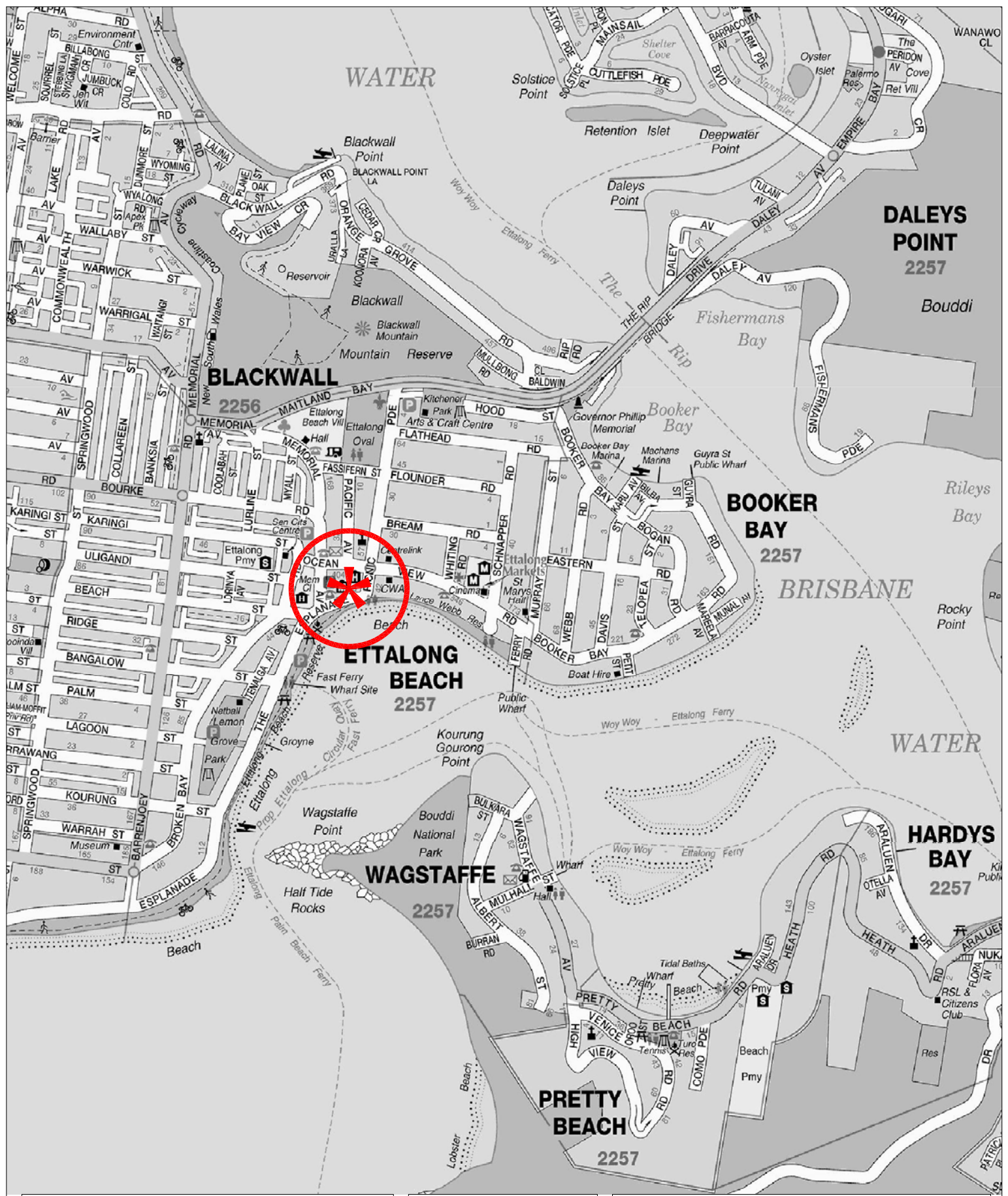
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This report has been prepared to accompany a Planning Proposal to Central Coast Council to increase building height and floor space ratio to permit a mixed-use development on a site at 43-46 The Esplanade, Ettalong Beach (Figure 1).

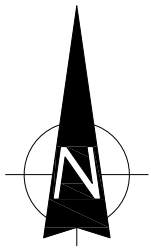
The purpose of this report is to:

- ❖ describe the site, its context and the planning proposal
- ❖ describe the road network serving the site and the prevailing traffic conditions
- ❖ assess the potential traffic implications arising from the intensified uses
- ❖ assess the suitability of the envisaged parking provision
- ❖ assess, on a high level, the suitability of the envisaged access roads and provision for servicing





LEGEND



LOCATION

FIG 1



## 2.0 Planning Proposal

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### 2.1 Site, Context and Existing Use

The subject site (Figure 2), being a consolidation of Lots 117-122 in DP 10650 and Lot 100 in DP1234105, is located at 43-46 The Esplanade, Ettalong Beach. It occupies an area of some 3,164m<sup>2</sup> and has frontages to The Esplanade (south), Picnic Parade (east) and an unnamed rear access lane (north) between Memorial Avenue and Picnic Parade. Details of the site are indicated on the survey plan which is reproduced overleaf.

An older style two storey holiday rental home and a motel/restaurant occupy the site at present. Vehicle access for the holiday rental home is provided at Picnic Parade while the motel/restaurant is accessed via The Esplanade.

The site is situated within the small Ettalong Beach commercial and retail centre and fronts to the Ettalong Beach. Other surrounding land uses include:

- ❖ the Ettalong Diggers and Mantra Resort just to the west of Memorial Avenue
- ❖ the recently completed “Atlantis’ complex of 54 residential apartments plus ground level retail floor space of some 800 m<sup>2</sup> on the adjoining site
- ❖ the Ettalong Beach Hotel which adjoins to the north
- ❖ the various retail and commercial uses along Memorial Avenue, Picnic Parade and Ocean View Road

### 2.2 Envisaged Development Scheme

A Planning Proposal is to be lodged with Central Coast Council to increase the permissible building height from 11.5m to 17m on the site and increase the maximum floor space ratio from 1:1 to 1.7:1 to enable improved lot consolidation and development outcome. Under these increased development parameters, it is envisaged that the development could achieve up to 5 storeys in height involving

approximately 40 shop top units and retail floor space of some 480m<sup>2</sup> GFA.

Vehicle access would be provided at the rear access lane and involve a single level basement of 52 car spaces while a loading bay will be provided at-grade with a separate access at the rear lane.

Details of the envisaged development scheme which are prepared by ADG Architects are reproduced in part in Appendix A.





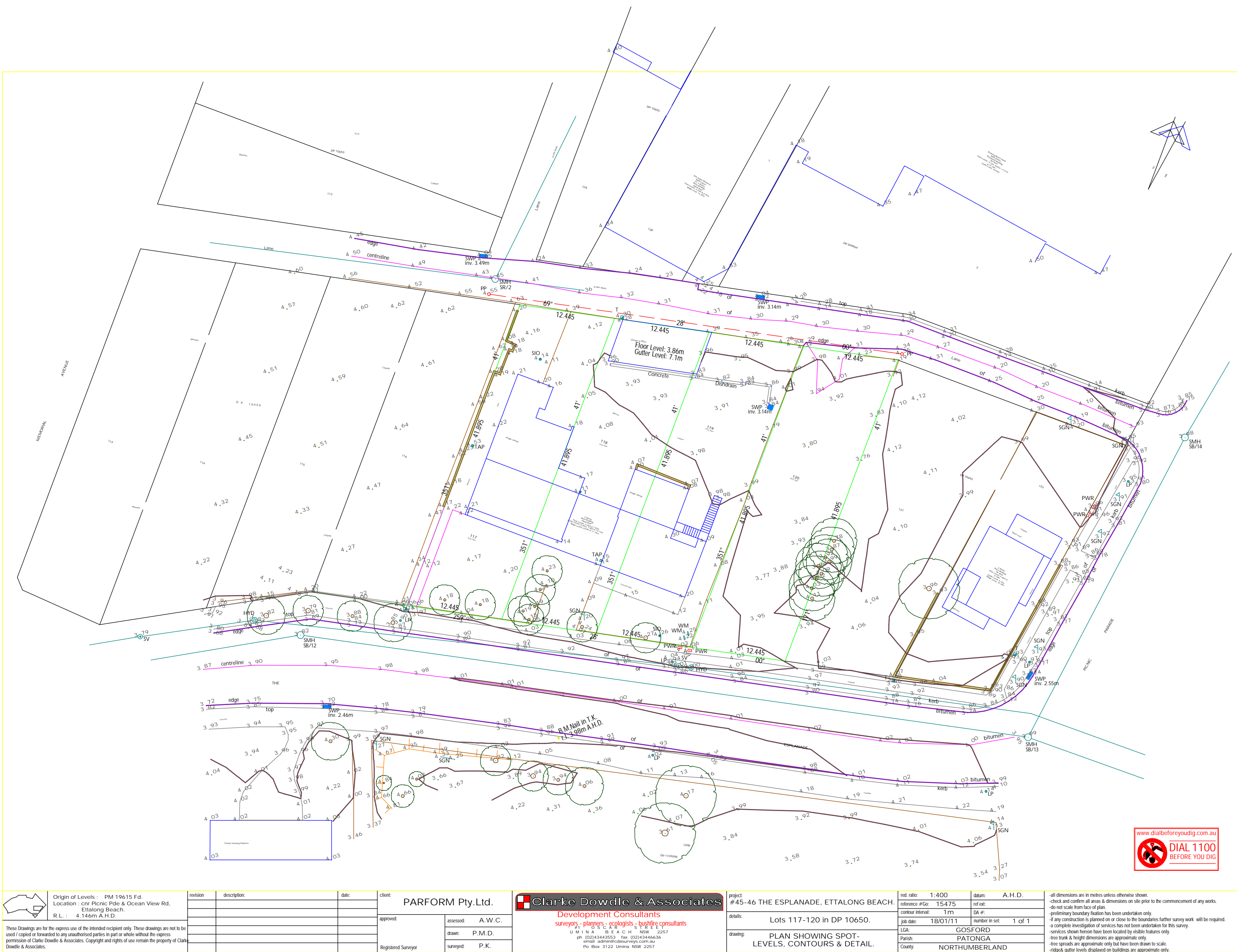
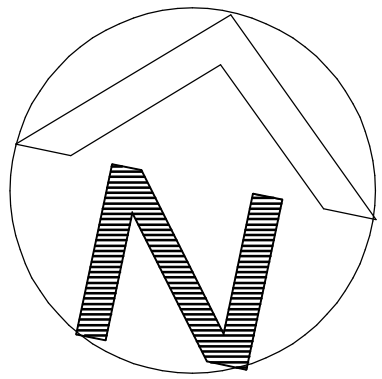
**LEGEND**



**SITE**

**FIG 2**





 Origin of Levels: P.M. 19615 F.I. Location: 101 Picnic Park & Ocean View Rd, Brimley NSW R.L.: 4.146m A.H.D.	revision description date	client <b>PARFORM Pty Ltd.</b>	 <b>Clark Dowdle &amp; Associates</b> Development Consultants surveyors, planners, geologists, building consultants U.S. 10/10/11 10/1
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## HOWARD LESLIE & ASSOCIATES

residential and commercial building design

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BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES INC.

Issue:	Date:	Revision:
	24.02.11	Preliminary issue to consultants
Drawing Title:		
Drawn:	Checked:	Date Drawn:
DR	DR	Feb 2011
File No:	Drawing No:	Rev:
11437		
Sheet 1 of 17		

Proposed Mixed Re-Development

No. 45-46 The Esplanade  
Et talong Beach NSW 2257

Lots 117-120, DP 10650

Parform Pty. Ltd.

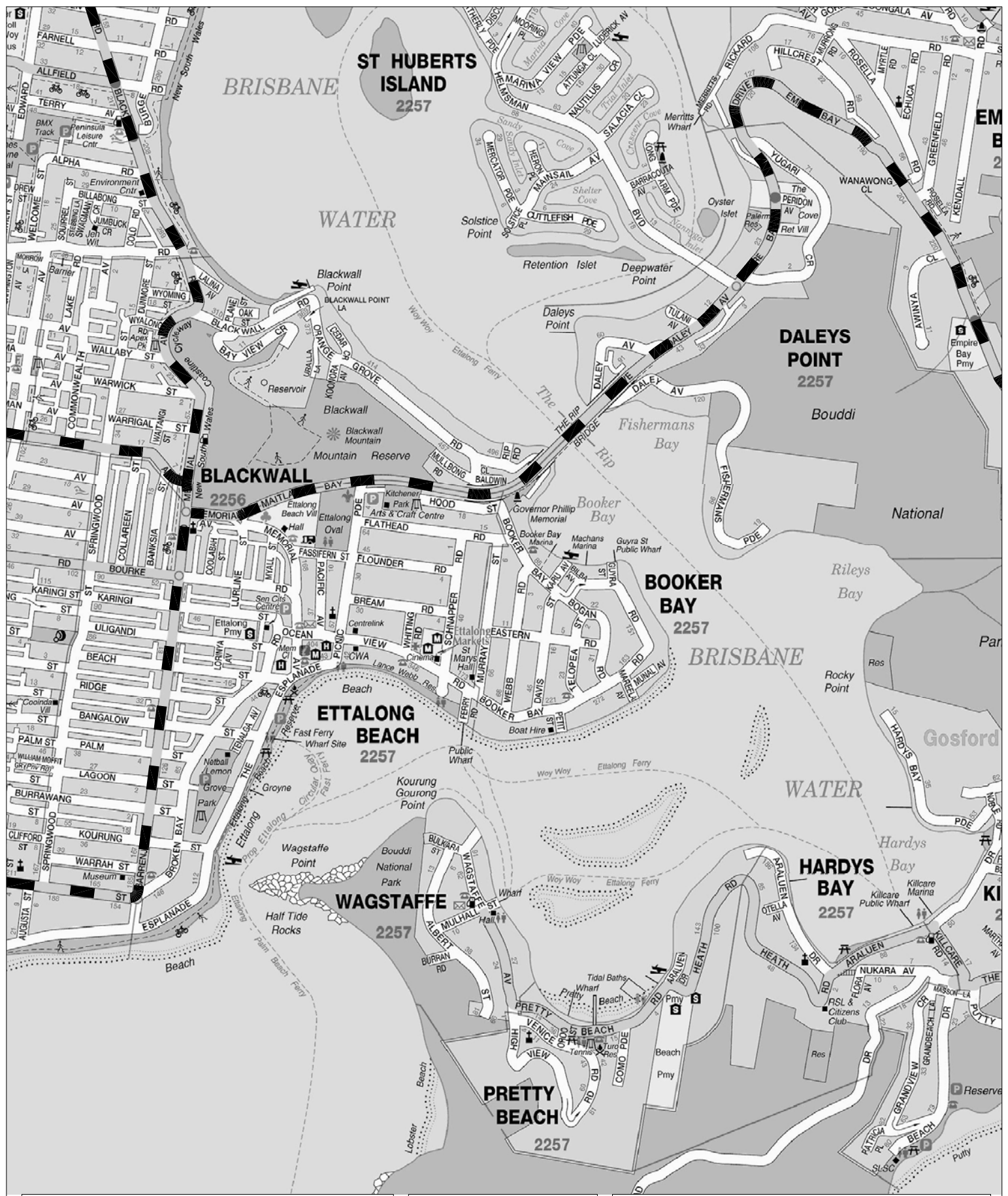
## 3.0 Road Network and Traffic Conditions

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### 3.1 Road Network

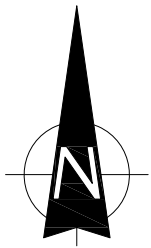
The existing road network serving the site (Figure 3) comprises:

- ❖ *F3 Freeway/M1 Pacific Motorway* – a State Road and arterial route providing the principal road link with Newcastle to the north and Sydney to the south
- ❖ *Central Coast Highway* – a State Road and arterial route connecting the central coast suburbs to the M1 Motorway
- ❖ *Brisbane Water Road, Woy Woy Road* – Regional Roads and major collector route providing interconnection between the M1 Motorway (via Central Coast Highway) and the inner townships
- ❖ *Blackwall Road* – a north-south collector route connecting between Woy Woy town centre and Blackwall and Memorial Avenue
- ❖ *Memorial Avenue/Barrenjoey Road* – a north-south collector route connecting between Blackwall Road and the local township
- ❖ *Ocean Beach Road* – a north-south collector road connecting Woy Woy to Umina Beach
- ❖ *Maitland Bay Drive* – an east-west collector road connecting between Ettalong Beach and Ettalong across the Brisbane Water river (Rip Bridge)
- ❖ *Ocean View Road, Booker Bay Road, Picnic Parade* – local collector road system serving Ettalong Beach



# LEGEND

-  ARTERIAL
-  SUB-ARTERIAL
-  COLLECTOR



# ROAD NETWORK

FIG 3



## 3.2 Traffic Controls

The existing traffic and parking controls in the vicinity of the site (Figure 4) comprise:

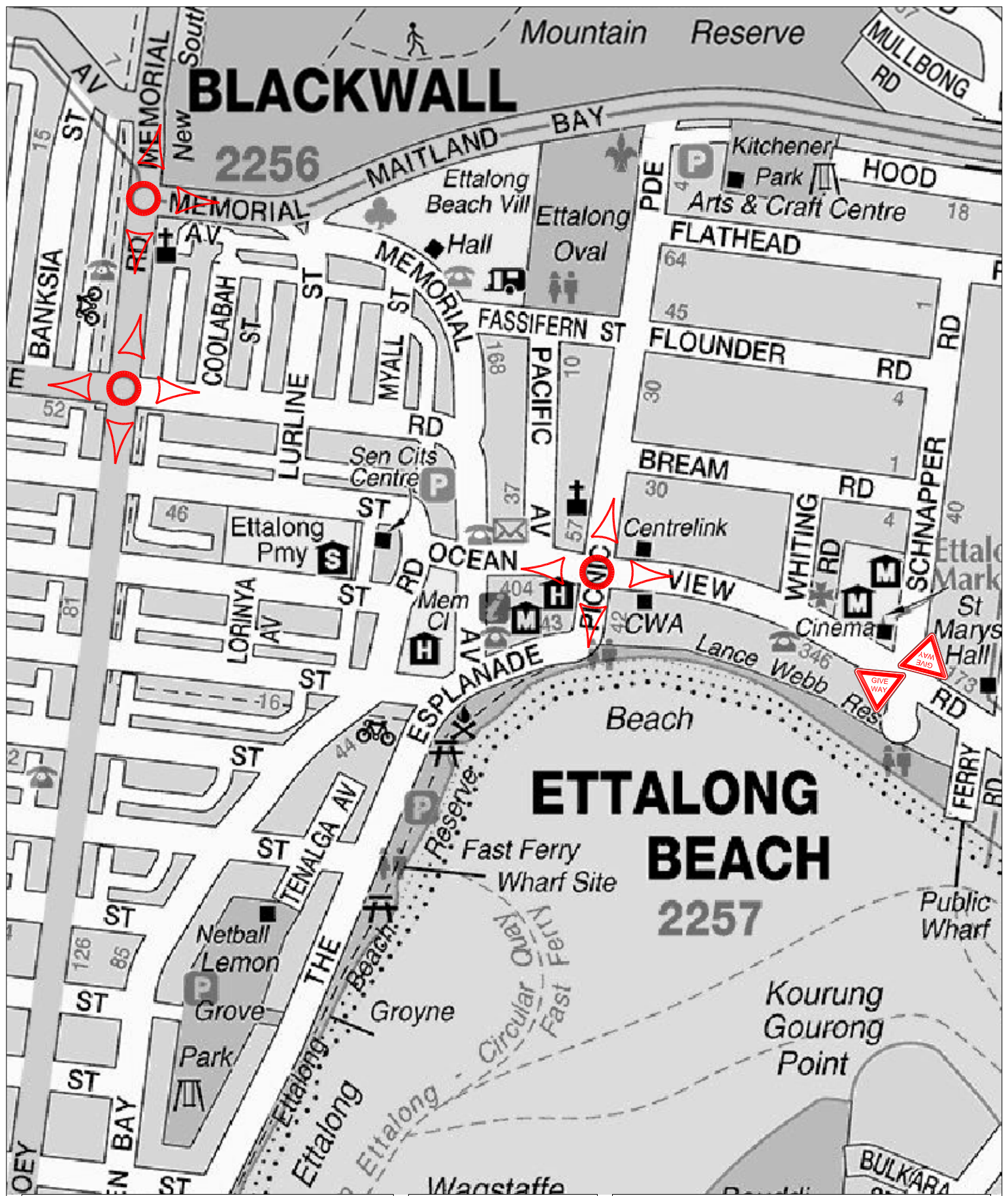
- ❖ the roundabout at the intersection of Ocean View Road and Picnic Parade
- ❖ the Seagull treatment at the intersection of Picnic Parade and Maitland Bay Drive which is currently the subject of RMS' investigation<sup>1</sup> for upgrade to a roundabout (details overleaf)
- ❖ the Give-Way priority control at the intersection of The Esplanade and Memorial Avenue
- ❖ the One-Way east restriction along the rear laneway frontage on the northern side of the site
- ❖ the numerous marked pedestrian crossings on Ocean View Road, Memorial Avenue and The Esplanade
- ❖ the 1P parking restriction along Picnic Parade and unrestricted angled parking on The Esplanade

## 3.3 Traffic Conditions

An indication of the of vehicle activity on the local road system is provided by surveys undertaken at the nearby Picnic Parade / Ocean View Road intersection. A Traffic Study prepared by Cardno for the RMS in 2019 provides an indication of the Maitland Bay Drive / Picnic Parade intersection's performance under prevailing traffic demand.

Details of the relevant traffic surveys are reproduced in Appendix B and summarised in Figure 5 - Existing Peak Traffic Flows.

<sup>1</sup> Maitland Bay Drive/Picnic Parade, Ettalong Beach – Intersection Upgrade, Cardno, 24 October 2019



The peak periods' operating circumstances at the Ocean View Road/Picnic Parade intersection have been assessed using traffic modelling program SIDRA. The results of the traffic modelling assessment for both the intersections are summarised as follows:

	AM Peak		PM Peak	
	LOS	AVD	LOS	AVD
Ocean View Rd/Picnic Pde (roundabout)	A	9.1s	A	9.9s
Maitland Bay Dr/Picnic Pde (seagull)	C	31.3s	B	21.7s

Details of the model output are reproduced in Appendix C while a guide to interpreting the SIDRA model results is reproduced overleaf.

The assessment found the two intersections to operate satisfactorily under prevailing traffic demand and there is no apparent capacity constraint in the local road network.

### 3.4 Transport Services

Transport services to and from the site are provided by the comprehensive bus services which are accessed via the bus stops located on Picnic Parade just to the east of the site and on Ocean View Road some 200m north east of the site. Local bus services offered via routes no. 50, 53, 55, 59, and 64 provide interconnections between the site and the nearby town centres of Kincumber, Woy Woy, Wagstaffe, and Gosford on a 4 services per hour basis. Additionally, the site benefits from convenient access to the local ferry network via Ettalong Ferry Wharf which is situated some 500m to the east. Details of the available transport services are provided on the route maps which are reproduced in Appendix D.



## 4.0 Parking

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Council's DCP (Gosford) specifies the following relevant off-street parking criteria:

Shop Top Housing	1 space per dwelling
Commercial (Shops)	1 spaces per 40m <sup>2</sup>

Based on the concept plans appended to this report, the application of the above criteria would indicate the following requirements:

40 apartments	40 spaces
Commercial (480m <sup>2</sup> )	12 spaces
<b>Total</b>	<b>52 spaces</b>

It is envisaged that 52 spaces would be provided on the ground level to satisfy the DCP criteria. It is also proposed to provide a dedicated loading area on the ground level with appropriate 4.5m headroom to accommodate a heavy rigid waste truck.

## 5.0 Traffic

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An indication of the traffic generation of the envisaged development outcome can be established with reference to the RMS document 'Guide to Traffic Generating Developments'. For high density residential development i.e. a complex comprising 20 or more units in a 5 or more storey building not close to a railway, the Guideline specifies a peak traffic generation rate of 0.5 vtpd per unit. For commercial developments, the Guideline specifies a peak traffic generation rate of 2 vtpd per 100m<sup>2</sup> GFA.

Accordingly, the proposal of 40 residential units and commercial floor space of 480m<sup>2</sup> GFA would indicate the following peak traffic generation in/out distribution outcome:

	<b>AM Peak</b>		<b>PM Peak</b>	
	<b>In</b>	<b>Out</b>	<b>In</b>	<b>Out</b>
Residential	4	16	16	4
Commercial	8	2	2	8
<b>Total</b>	<b>30 vtpd</b>		<b>30 vtpd</b>	

It is understood that the site, when subject to existing LEP controls, could eventuate in a development outcome that involves:

Residential	30 units (two-bedrooms)
Commercial	850m <sup>2</sup> GFA

When the same RMS traffic generation rates are applied to that development outcome, the total peak period traffic generation would equate some 32 vtpd.

By comparison, the proposed development outcome's traffic generation will be comparable (2 trips less) with the permissible outcome on the site. The assessment therefore concludes that the planning proposal will have no adverse traffic impact on the local road network.

## 6.0 Access, Internal Circulation and Servicing

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### 6.1 Access

The envisaged vehicle access arrangement will involve:

- ❖ a 5.5m wide driveway on the laneway frontage
- ❖ an indented 4m wide service vehicle bay on the rear laneway

The access driveway and loading bay will be designed to accord with the geometric, sightline and grade requirements of the AS2890.1 and AS2890.2.

### 6.2 Internal Circulation

Provisions for vehicle internal circulation will have regard for the design requirements in the AS2890.1 design criteria particular in relation to headroom, grade, aisle and carpark geometries. Vehicle circulation and movements in the carparking module will be subject to detailed assessment during the subsequent DA planning stages.

### 6.3 Servicing

Refuse collection will occur at the designated loading bay parallel to the rear laneway. Provision has been made in the loading bay to accommodate a 12.5m long HRV. The service vehicle will enter from the west off Memorial Avenue to access the loading bay and exit to the east onto Picnic Parade on the basis that:

- ❖ the laneway has a one-way east only traffic flow restriction therefore there will be no opposing traffic conflict
- ❖ the service vehicle frequency will be low and largely occur outside of normal peak traffic and commuting periods.



## 7.0 Conclusion

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A Traffic and Transport Assessment has been undertaken to accompany a Planning Proposal on a site with frontage to The Esplanade and Picnic Parade in Ettalong Beach.

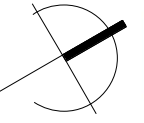
The assessment has established that:

- ❖ the site is benefitted by good accessibility to local transport services and connectivity to local retail centre
- ❖ the existing intersections in the vicinity of the site have been shown to be operating with excellent levels of service and minimal delays
- ❖ the envisaged parking provision for the residential apartment component will be consistent with the DCP criteria
- ❖ the projected traffic generation outcome will only be 2 vtpd less than the permissible development outcome
- ❖ the proposed access, internal circulation and service arrangement will have regard for the relevant AS2890 design requirements.

## Appendix A

### Architectural Plans

## URBAN APPROACH - COMPLYING SCHEME



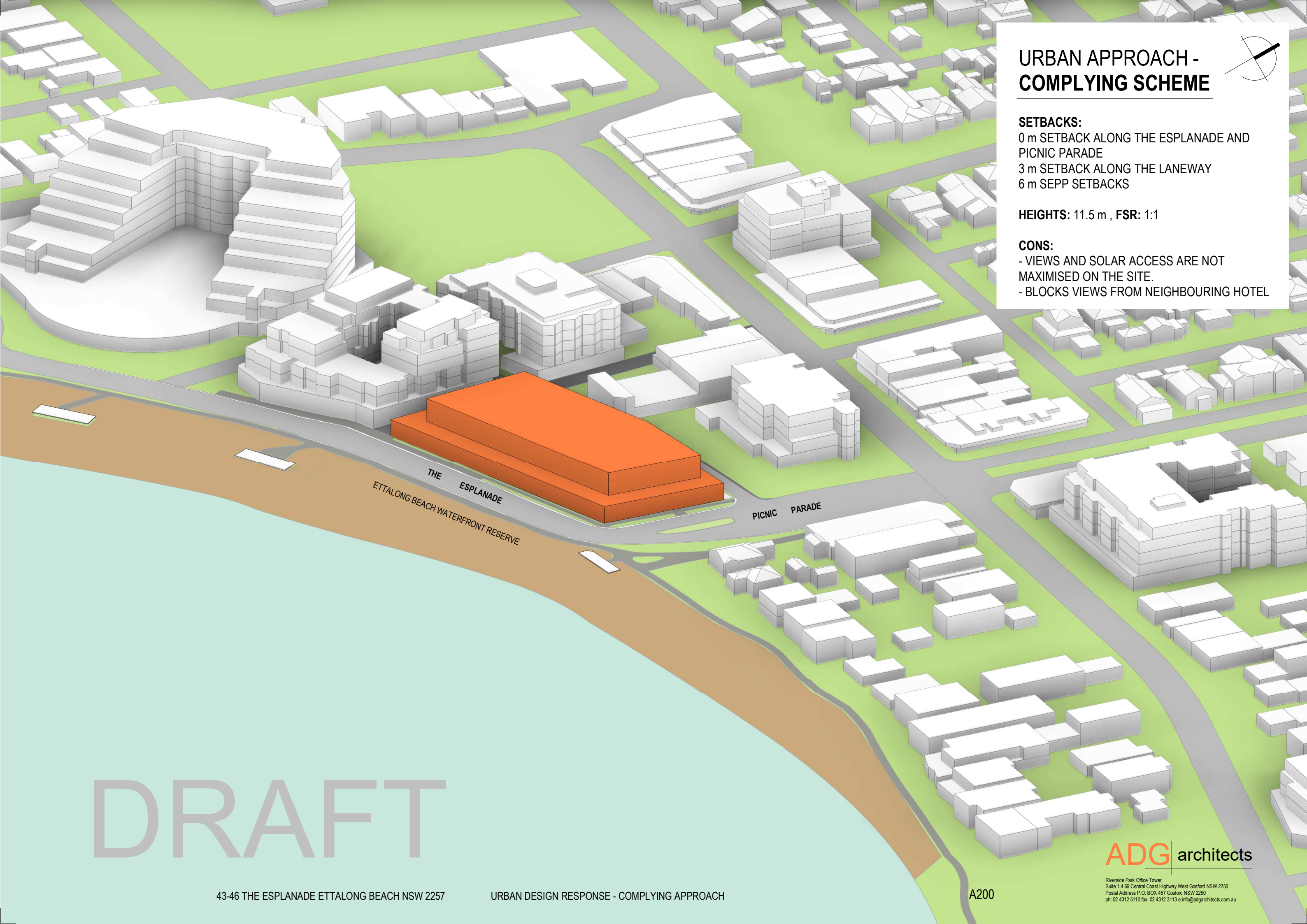
### SETBACKS:

0 m SETBACK ALONG THE ESPLANADE AND  
PICNIC PARADE  
3 m SETBACK ALONG THE LANEWAY  
6 m SEPP SETBACKS

**HEIGHTS:** 11.5 m , FSR: 1:1

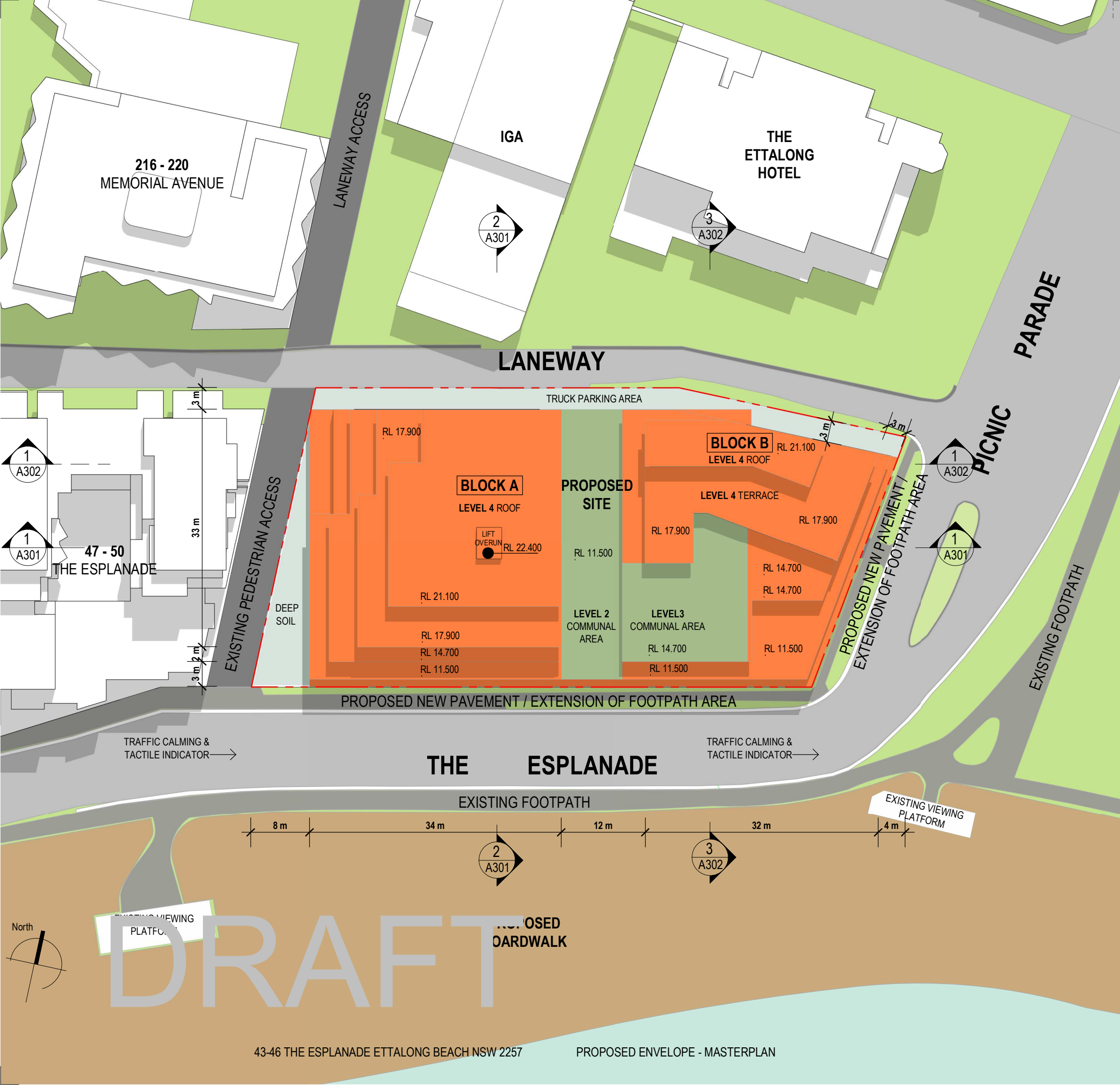
### CONS:

- VIEWS AND SOLAR ACCESS ARE NOT  
MAXIMISED ON THE SITE.
- BLOCKS VIEWS FROM NEIGHBOURING HOTEL



# DRAFT





# PROPOSED:

TOTAL GROSS FLOOR AREA :

TOTAL GFA	
CIRCULATION	618 m²
COMMERCIAL	480 m²
RESIDENTIAL	4049 m²
SERVICES	162 m²
TOTAL	5310 m²

PROPOSED FSR : 40 UNITS  
PROPOSED MAXIMUM HEIGHT 1.7 :1  
: 17.0 m ROOF LEVEL (RL 21.10) AND  
: 18.3 m LIFT OVERUN (RL 22.40)

SITE AREA : 3,163.98 m²

DEEP SOIL: 7 % OF SITE AREA

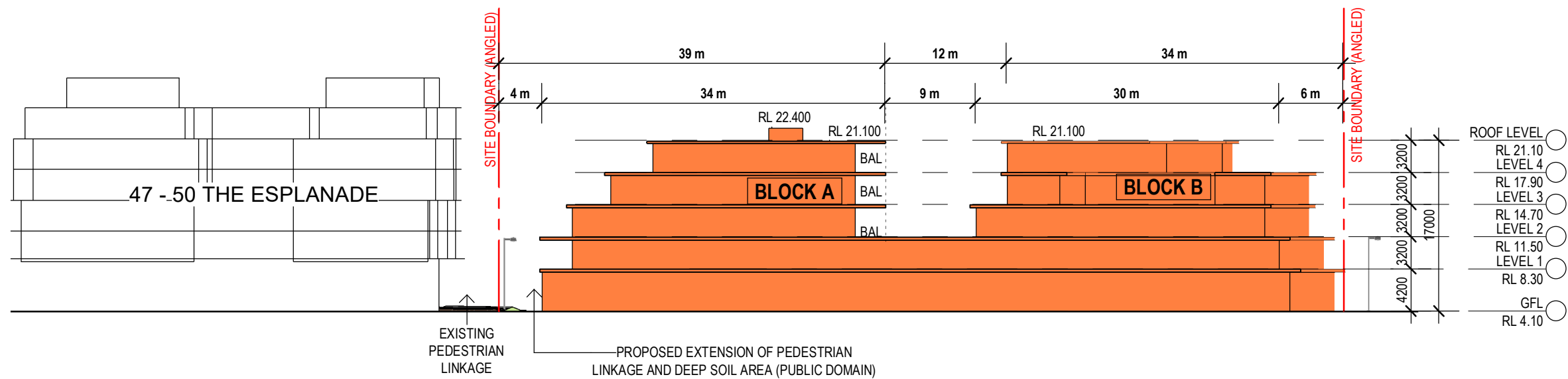
DEEP SOIL	240 m²
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COMMUNAL AREA : 25 % OF SITE AREA

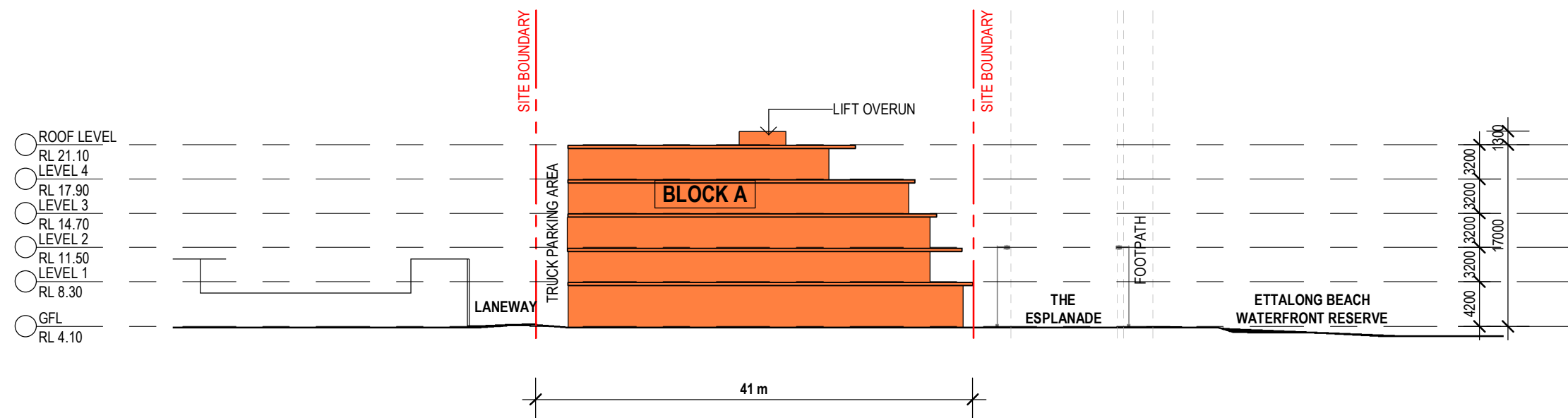
COMMUNAL	790 m²
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# PARKING

REQUIRED:	
SHOPTOP HOUSING 1 CAR SPACE PER DWELLING	= 40 CAR SPACES
COMMERCIAL 1 SPACE PER 40M² GROSS FLOOR AREA	= 12 CAR SPACES
TOTAL REQUIRED :	= 52 CAR SPACES
TOTAL PROPOSED :	= 52 CAR SPACES

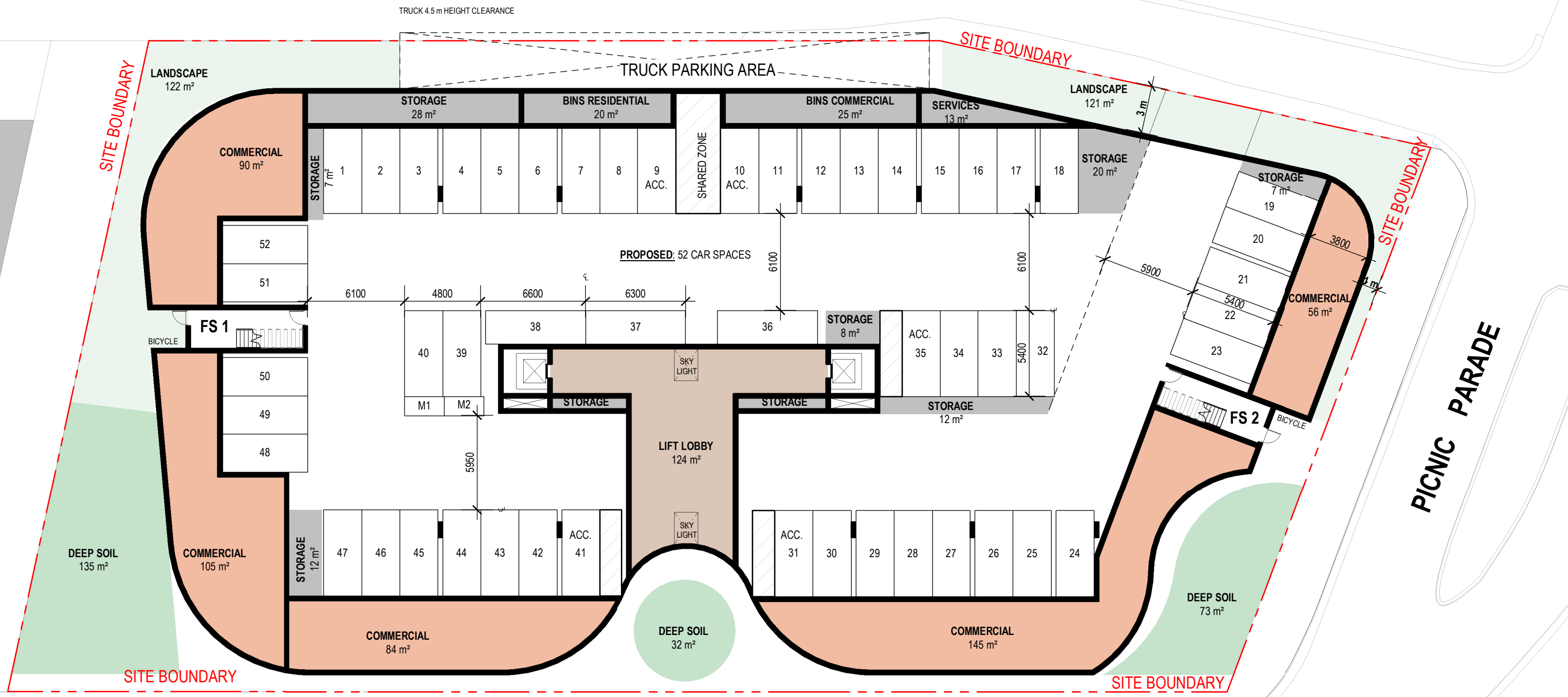


1 PROPOSED ENVELOPE - SECTION 1  
A300 1:500



2 PROPOSED ENVELOPE - SECTION 2  
A300 1:500

DRAFT



DRAFT

THE ESPLANADE



## Appendix B

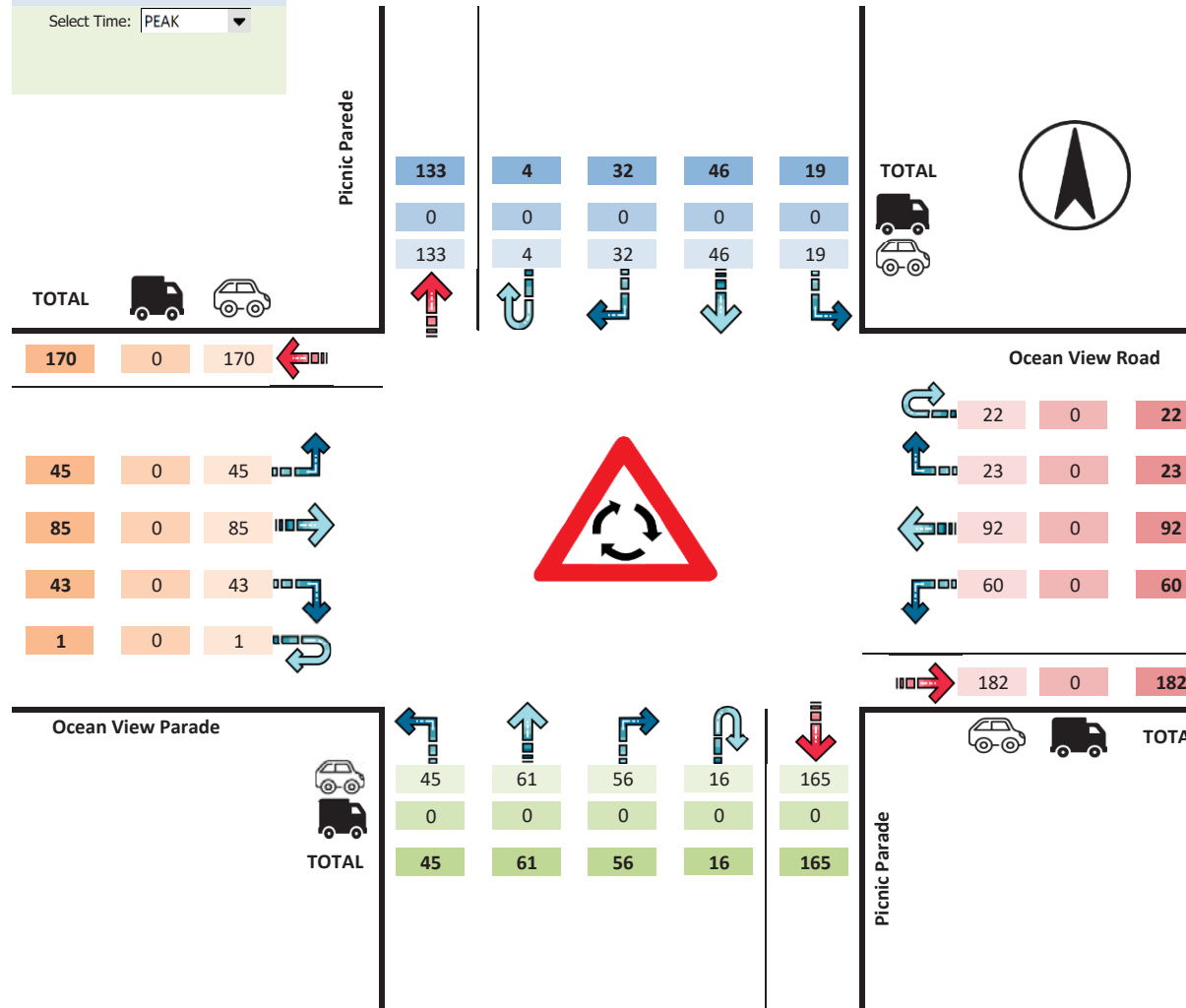
### Traffic Surveys

Location Picnic Parade  
Ocean View Road  
Picnic Parade  
Ocean View Parade  
 Suburb ETTALONG

Duration 0700 - 0900  
1600 - 1800  
-  
 Day/Date Thursday, December 6, 2018  
 Weather -

DATA SELECTION  
 Select Time: PEAK

TIME RANGE  
 PEAK - AM  
 PEAK  
 8:00 - 9:00



**Traffic Information Specialists**

ABN: 42 613 389 923

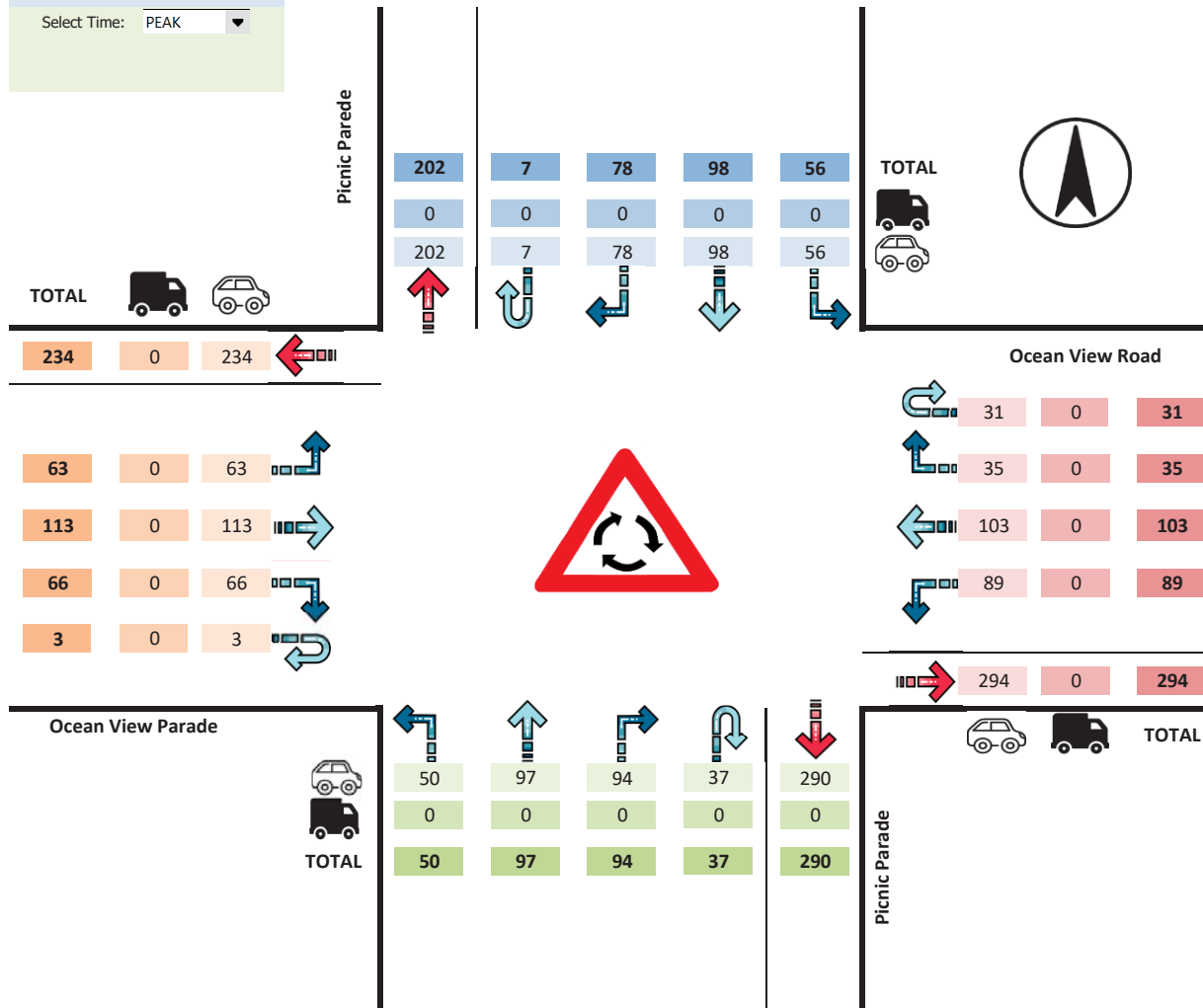
Email [info@trafficinfospecialist.com.au](mailto:info@trafficinfospecialist.com.au)

Location Picnic Parade  
Ocean View Road  
Picnic Parade  
Ocean View Parade  
 Suburb ETTALONG

Duration 0700 - 0900  
1600 - 1800  
-  
 Day/Date Thursday, December 6, 2018  
 Weather -

DATA SELECTION  
 Select Time: **PEAK**

TIME RANGE		
PEAK	-	PM
PEAK		
16:00	-	17:00



**Traffic Information Specialists**

ABN: 42 613 389 923

Email [info@trafficinfospecialist.com.au](mailto:info@trafficinfospecialist.com.au)



## Appendix C

### SIDRA Model Results

# MOVEMENT SUMMARY

 **Site: 101 [Ocean View Road and Picnic Parade AM Existing]**

Ocean View Road and Picnic Parade  
Site Category: (None)  
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Picnic Parade												
1	L2	47	0.0	0.148	5.0	LOS A	0.8	5.5	0.34	0.57	0.34	50.4
2	T1	64	0.0	0.148	5.4	LOS A	0.8	5.5	0.34	0.57	0.34	53.4
3	R2	59	0.0	0.148	9.0	LOS A	0.8	5.5	0.34	0.57	0.34	53.2
Approach		171	0.0	0.148	6.5	LOS A	0.8	5.5	0.34	0.57	0.34	52.6
East: Ocean View Road												
4	L2	63	0.0	0.160	5.5	LOS A	0.9	6.0	0.32	0.54	0.32	52.7
5	T1	97	0.0	0.160	5.3	LOS A	0.9	6.0	0.32	0.54	0.32	52.0
6	R2	24	0.0	0.160	8.7	LOS A	0.9	6.0	0.32	0.54	0.32	53.4
Approach		184	0.0	0.160	5.8	LOS A	0.9	6.0	0.32	0.54	0.32	52.5
North: Picnic Parade												
7	L2	20	0.0	0.092	5.2	LOS A	0.5	3.3	0.37	0.57	0.37	52.6
8	T1	48	0.0	0.092	5.6	LOS A	0.5	3.3	0.37	0.57	0.37	53.3
9	R2	34	0.0	0.092	9.1	LOS A	0.5	3.3	0.37	0.57	0.37	51.0
Approach		102	0.0	0.092	6.7	LOS A	0.5	3.3	0.37	0.57	0.37	52.5
West: Ocean View Road												
10	L2	47	0.0	0.162	5.6	LOS A	0.9	6.2	0.35	0.56	0.35	50.1
11	T1	89	0.0	0.162	5.4	LOS A	0.9	6.2	0.35	0.56	0.35	51.5
12	R2	45	0.0	0.162	8.8	LOS A	0.9	6.2	0.35	0.56	0.35	51.0
Approach		182	0.0	0.162	6.3	LOS A	0.9	6.2	0.35	0.56	0.35	51.0
All Vehicles		639	0.0	0.162	6.3	LOS A	0.9	6.2	0.34	0.56	0.34	52.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**SIDRA INTERSECTION 8.0 | Copyright © 2000-2019 Akcelik and Associates Pty Ltd | sidrasolutions.com**

Organisation: TRANSPORT AND TRAFFIC PLANNING ASSOCIATES | Processed: Wednesday, 12 February 2020 10:50:17 AM

Project: T:\WORK19\19201 - 45-46 THE ESPLANADE, ETALONG BEACH\MODEL\Sidra.sip8

# MOVEMENT SUMMARY

## Site: 101 [Ocean View Road and Picnic Parade PM Existing]

Ocean View Road and Picnic Parade  
Site Category: (None)  
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Picnic Parade												
1	L2	54	0.0	0.237	5.6	LOS A	1.4	9.6	0.45	0.62	0.45	49.9
2	T1	102	0.0	0.237	5.9	LOS A	1.4	9.6	0.45	0.62	0.45	53.0
3	R2	99	0.0	0.237	9.5	LOS A	1.4	9.6	0.45	0.62	0.45	52.8
Approach		255	0.0	0.237	7.2	LOS A	1.4	9.6	0.45	0.62	0.45	52.3
East: Ocean View Road												
4	L2	94	0.0	0.236	6.4	LOS A	1.4	9.6	0.48	0.62	0.48	52.1
5	T1	108	0.0	0.236	6.2	LOS A	1.4	9.6	0.48	0.62	0.48	51.2
6	R2	37	0.0	0.236	9.6	LOS A	1.4	9.6	0.48	0.62	0.48	52.8
Approach		239	0.0	0.236	6.8	LOS A	1.4	9.6	0.48	0.62	0.48	51.9
North: Picnic Parade												
7	L2	59	0.0	0.238	5.9	LOS A	1.4	9.7	0.50	0.65	0.50	52.1
8	T1	103	0.0	0.238	6.3	LOS A	1.4	9.7	0.50	0.65	0.50	52.9
9	R2	82	0.0	0.238	9.9	LOS A	1.4	9.7	0.50	0.65	0.50	50.5
Approach		244	0.0	0.238	7.4	LOS A	1.4	9.7	0.50	0.65	0.50	52.0
West: Ocean View Road												
10	L2	66	0.0	0.248	6.3	LOS A	1.5	10.3	0.48	0.62	0.48	49.5
11	T1	119	0.0	0.248	6.1	LOS A	1.5	10.3	0.48	0.62	0.48	50.9
12	R2	69	0.0	0.248	9.5	LOS A	1.5	10.3	0.48	0.62	0.48	50.4
Approach		255	0.0	0.248	7.1	LOS A	1.5	10.3	0.48	0.62	0.48	50.4
All Vehicles		993	0.0	0.248	7.1	LOS A	1.5	10.3	0.48	0.63	0.48	51.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

## Appendix D

### Transport Services



