

PLANNING PROPOSAL - ARCHITECTURAL DESIGN REPORT  
EPPING TOWN CENTRE

APRIL 2024



ARCADIA

edge  
design.studio

GYDE  
Consulting

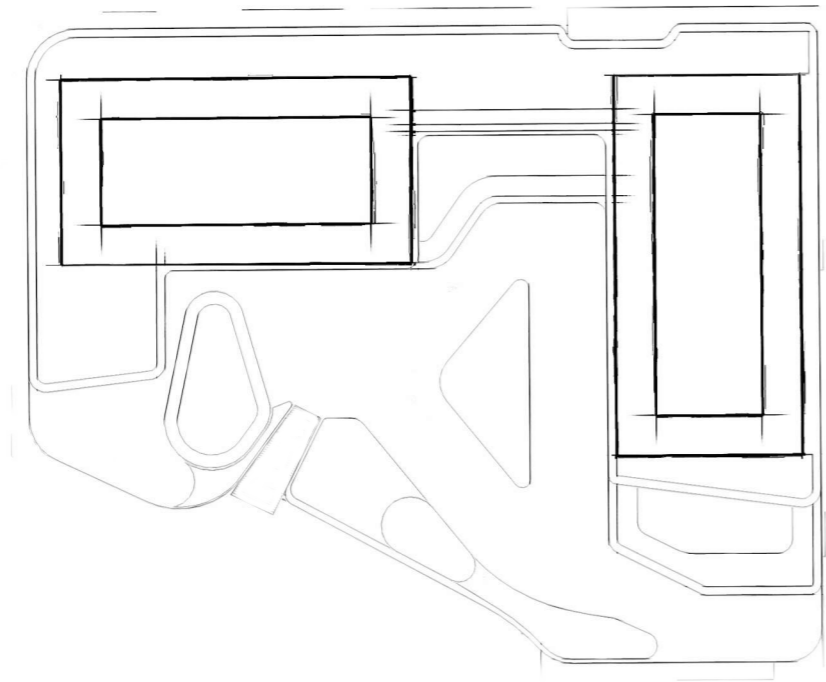


## TABLE OF CONTENT

1	Introduction
2	The Site
3	Flood Plain
4	Building Envelope
5	Landscape - Public Domain
6	Building program
7	Open Space Diagrams
8	Shadow Studies
9	Solar Access + Ventilation
10	Sustainability
11	Massing Studies
12	Architectural

1

Introduction



## The Site

The site is prominently located on the northern edge, within the core zone of the Epping Town Centre Urban Activation Precinct. It's primary frontage faces east towards Rawson Street which is envisaged to become a thriving high street supporting a variety of activities including retail, food and beverage and retail.

The site also benefits from a north facing frontage to Carlingford Road, which is a main arterial road leading to Sydney's CBD via the M2.

Epping Rail Station lies only 100m from the southeast corner of the site .

Immediately adjacent to the west of the site sits Boronia Park, a 4.9 hectare park nestled within the surrounding residential development and edging Council's Rawson Street carpark.

2

The Site



3

Flood Plain



FLOOD STUDY - PLAN

A detailed flood study identified that the north west corner of the site is affected by flooding due to the stormwater channel passing under the site in this location.

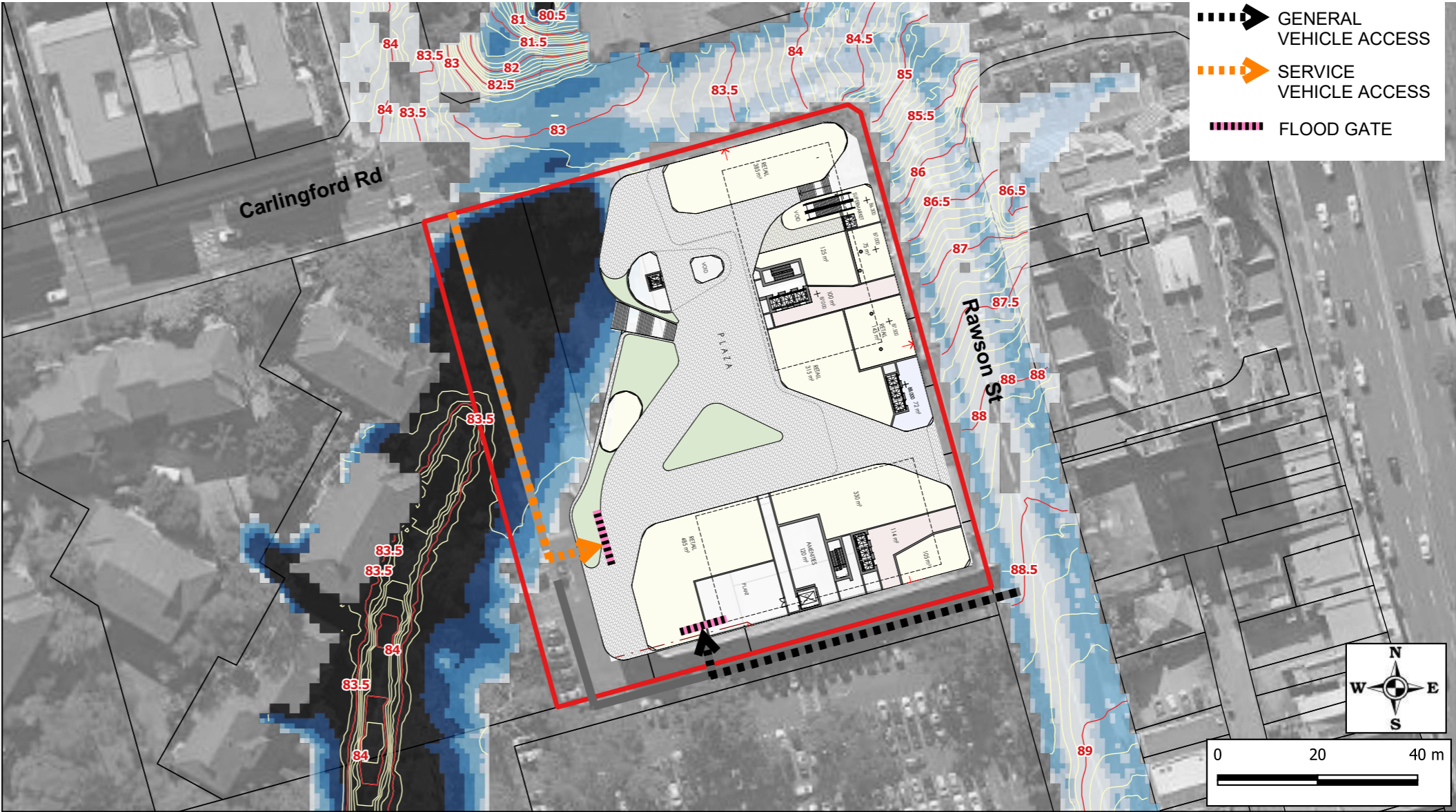
As a result the project has been designed with a reduction in the built footprint across the site with no built form within the flood impacted area of the site.

The general public vehicle access point to the site, from Rawson St via the proposed Council DCP service lane, has been located outside of the 1:100 year flood effected area.

Service vehicle access is proposed from Carlingford Rd via the proposed western Council DCP service lane,

All vehicle entries are proposed to be fitted with flood gates to manage the potential PMF events.

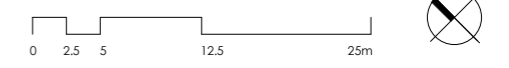
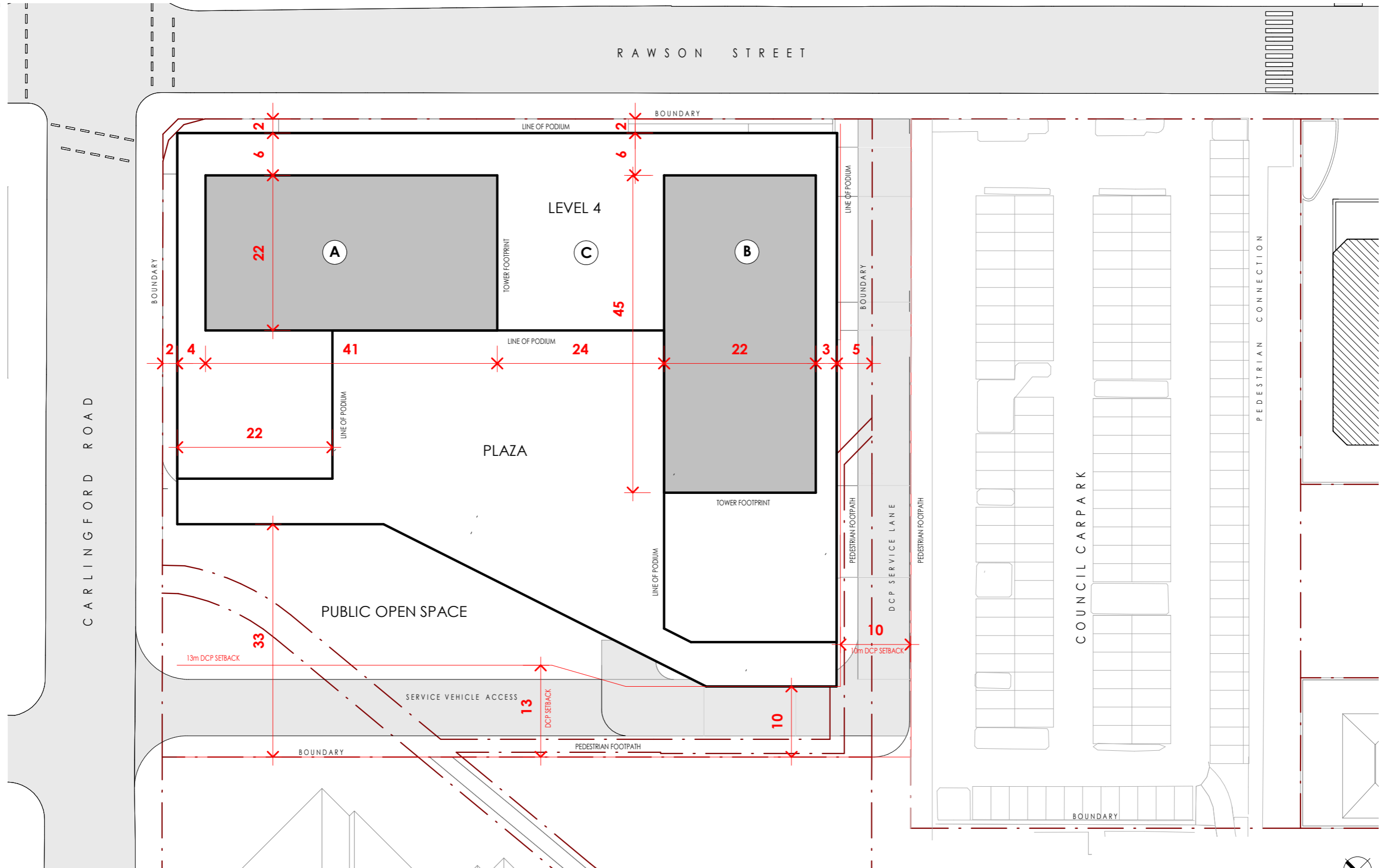
As part of future detailed design, early warning and vehicle control measures will be implemented along the Council DCP Service lane to control vehicle movements in the event of localised site flooding.



<p>Flood Depths (m)</p> <ul style="list-style-type: none"> <li>0.00 - 0.05</li> <li>0.05 - 0.10</li> <li>0.10 - 0.30</li> <li>0.30 - 0.50</li> <li>0.50 - 1.00</li> <li>&gt; 1.00</li> </ul> <p>Subject Site</p>	<p>Cadastral Boundaries</p> <p>Major Flood Level Contours (Spacing = 0.5 m)</p> <p>Minor Flood Level Contours (Spacing = 0.1 m)</p>	<p>TITLE: <b>1% AEP 100% Blockage - Peak Flood Depths &amp; Levels</b></p> <p>PROJECT <b>Epping Town Centre</b></p> <p>PROJECT No. <b>210046</b></p> <p>DATE: <b>07-2021</b>    SCALE: 1:1000    FIGURE No. <b>02</b></p>	
--	---	---	--

# 4 Building Envelope

URBAN - PROPOSED ENVELOPES



# 5

## Landscape and Public Domain

# MASTERPLAN - PUBLIC DOMAIN

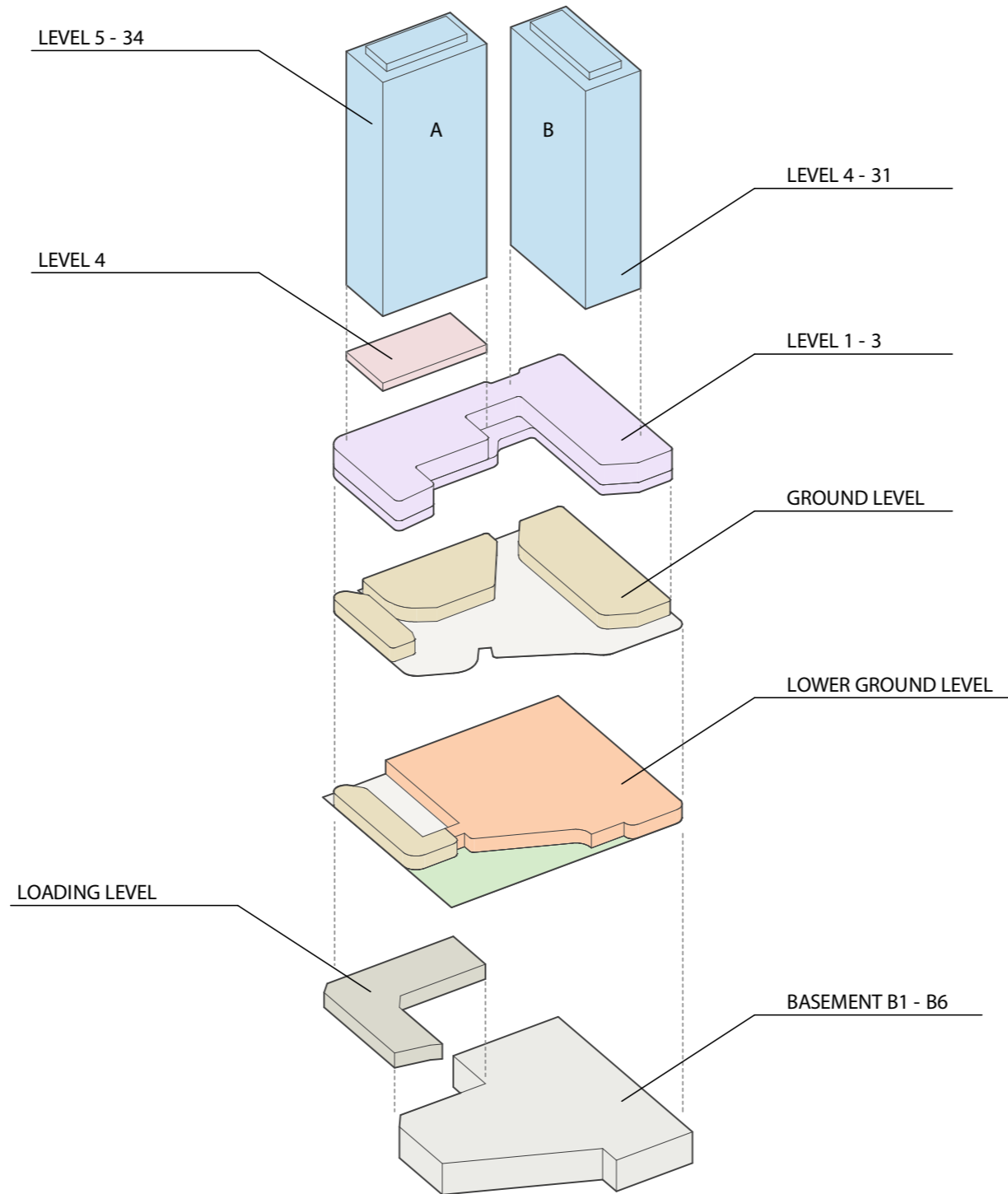


REFER TO ARCADIA LANDSCAPE REPORT

# 6

## Building Program

# BUILDING PROGRAM



**SITE**  
 SITE : 9089m<sup>2</sup>  
 MAX RESI. GFA : 40900m<sup>2</sup>

**KEY DIAGRAM**

- BASEMENT
- LOADING AREA
- SUPERMARKET
- RETAIL
- COMMERCIAL
- COMMUNAL
- RESIDENTIAL
- PUBLIC OPEN SPACE

RESIDENTIAL	
A - 30 STOREYS L5 - L34	19920m <sup>2</sup>
- COS L4	532m <sup>2</sup>
B - 28 STOREYS L4 - L31	20300m <sup>2</sup>
RES LOBBIES G:	214m <sup>2</sup>
<b>TOTAL RESIDENTIAL AREA</b>	
TOTAL GFA:	40966m <sup>2</sup>
RESIDENTIAL FSR:	4.5:1

COMMERCIAL - GROUND - LEVEL 3	
RETAIL:	1965m <sup>2</sup>
COMMERCIAL L1 - L3:	7430m <sup>2</sup>
COMMERCIAL LOBBY:	72m <sup>2</sup>
AMENITIES:	120m <sup>2</sup>
<b>TOTAL:</b>	
TOTAL:	9587m <sup>2</sup>
COMM FSR:	1.05:1

COMMERCIAL - LOWER GROUND	
RETAIL:	493m <sup>2</sup>
M ALL:	497m <sup>2</sup>
SUPERMARKET :	3100m <sup>2</sup>
<b>TOTAL:</b>	
TOTAL:	4090m <sup>2</sup>
FSR:	0.45:1

TOTAL COMMERCIAL AREA	
AREA:	13677m <sup>2</sup>
FSR:	1.5:1

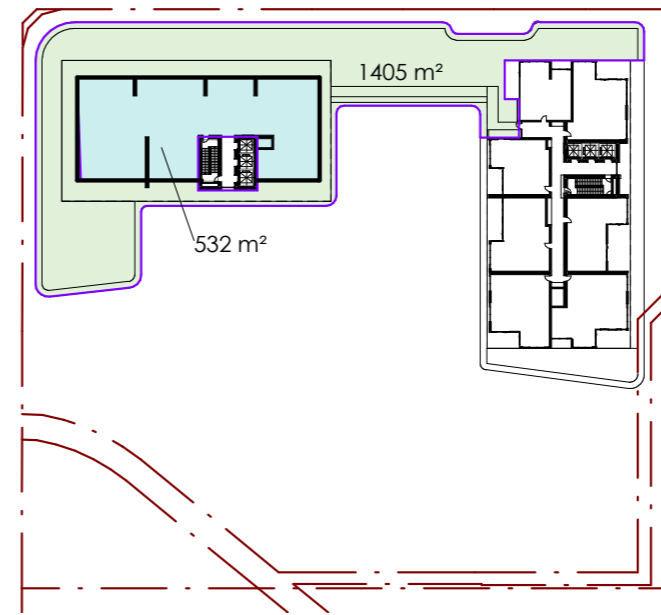
# 7

## Open Space Diagrams

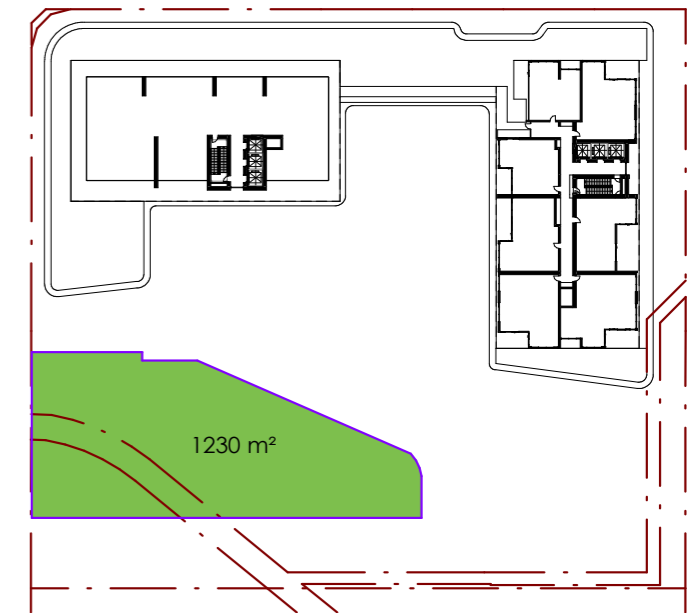


## OPEN SPACE DIAGRAM

SITE AREA 9089m <sup>2</sup>		REQUIRED - ADG	PROVIDED
COMMUNAL OPEN SPACE	25%	15.5% - 1405m <sup>2</sup>	
COS / PUBLIC OPEN SPACE		13.5% - 1230m <sup>2</sup>	
COMMUNAL ROOM		6% - 532m <sup>2</sup>	
PUBLIC OPEN SPACE	N/A	50% - 4600m <sup>2</sup>	
DEEP SOIL (MIN 6m WIDE)	7%	13.5% - 1230m <sup>2</sup>	

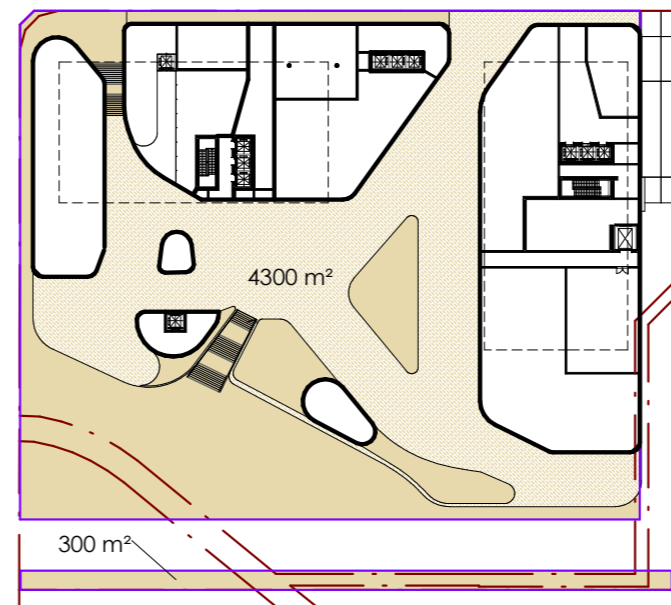


Level 4 - COS

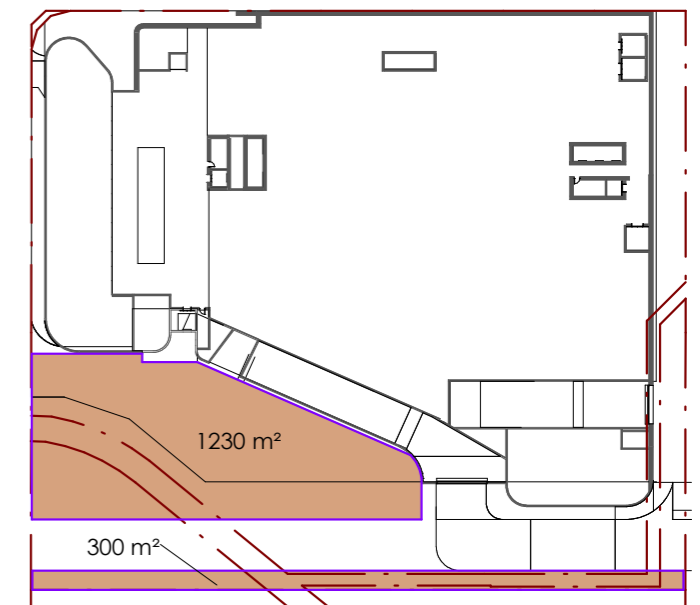


Lower Ground Level - Public Open Space

- Communal Open Space (COS)
- Communal / Public Open Space
- Communal Rooms
- Publicly Accessible Open Space (POS)
- Deep Soil Zones



Ground & Lower Ground Level - POS

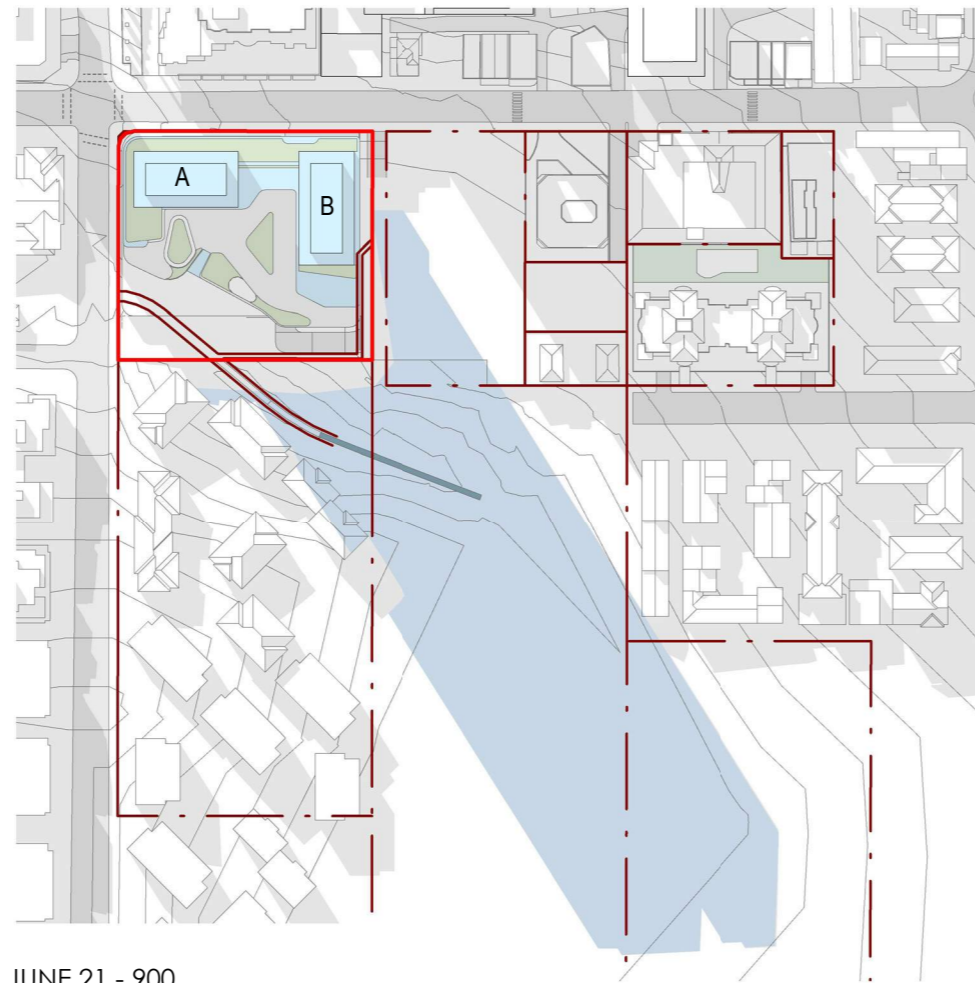


Basement Level - Deep Soil

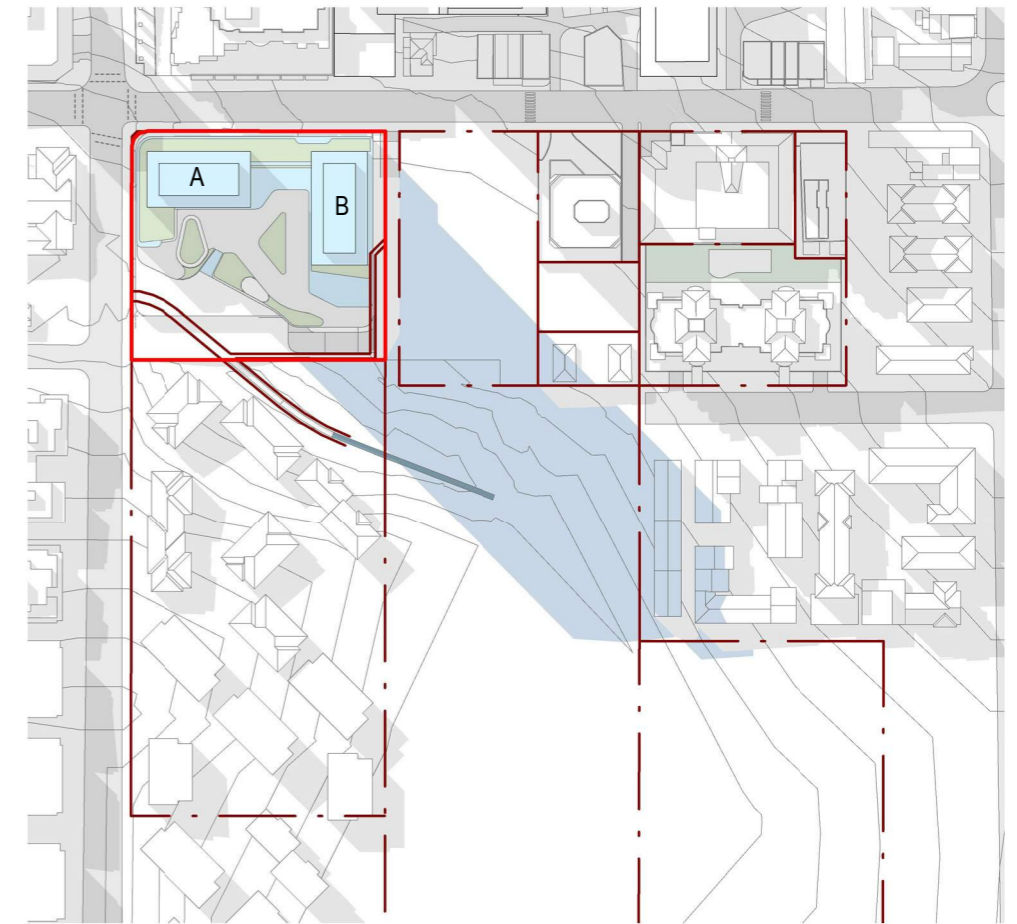
# 8

## Shadow Studies

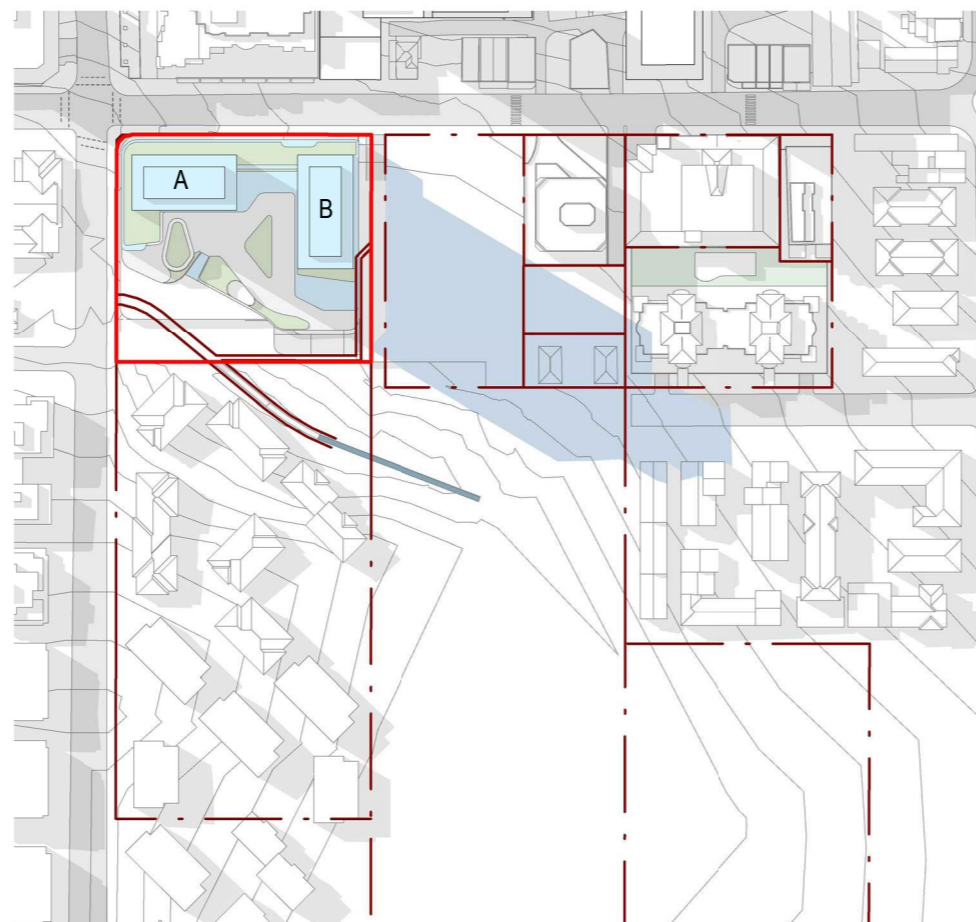
SHADOW STUDIES  
21 June - Mid-Winter



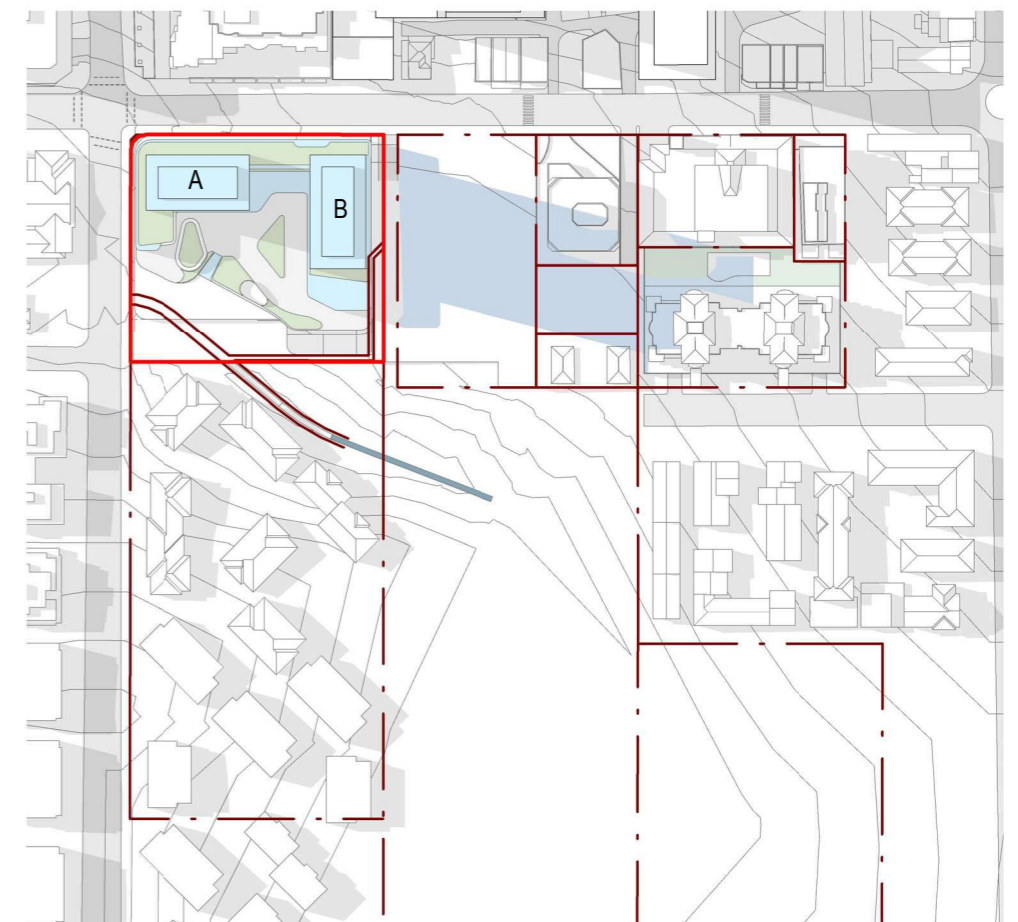
JUNE 21 - 900



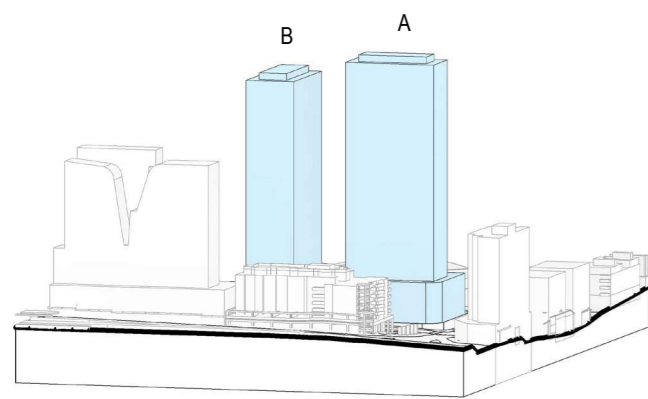
JUNE 21 - 1000



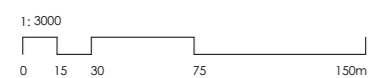
JUNE 21 - 1100



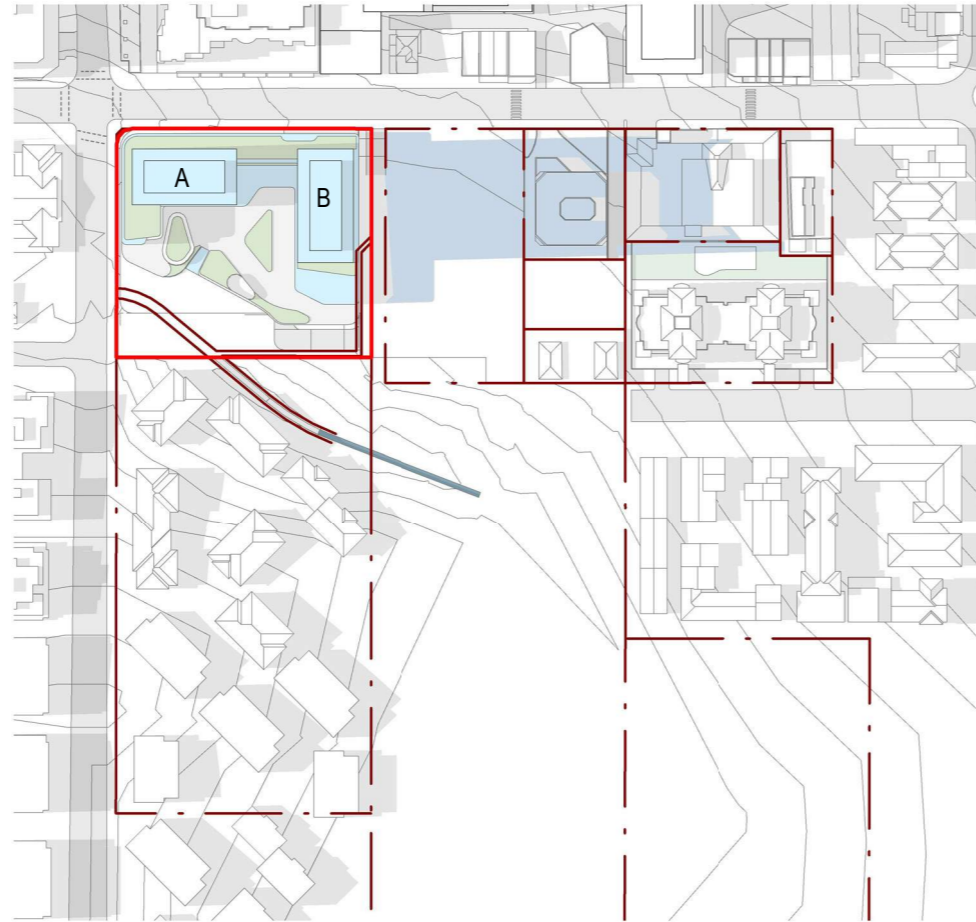
JUNE 21 - 1200



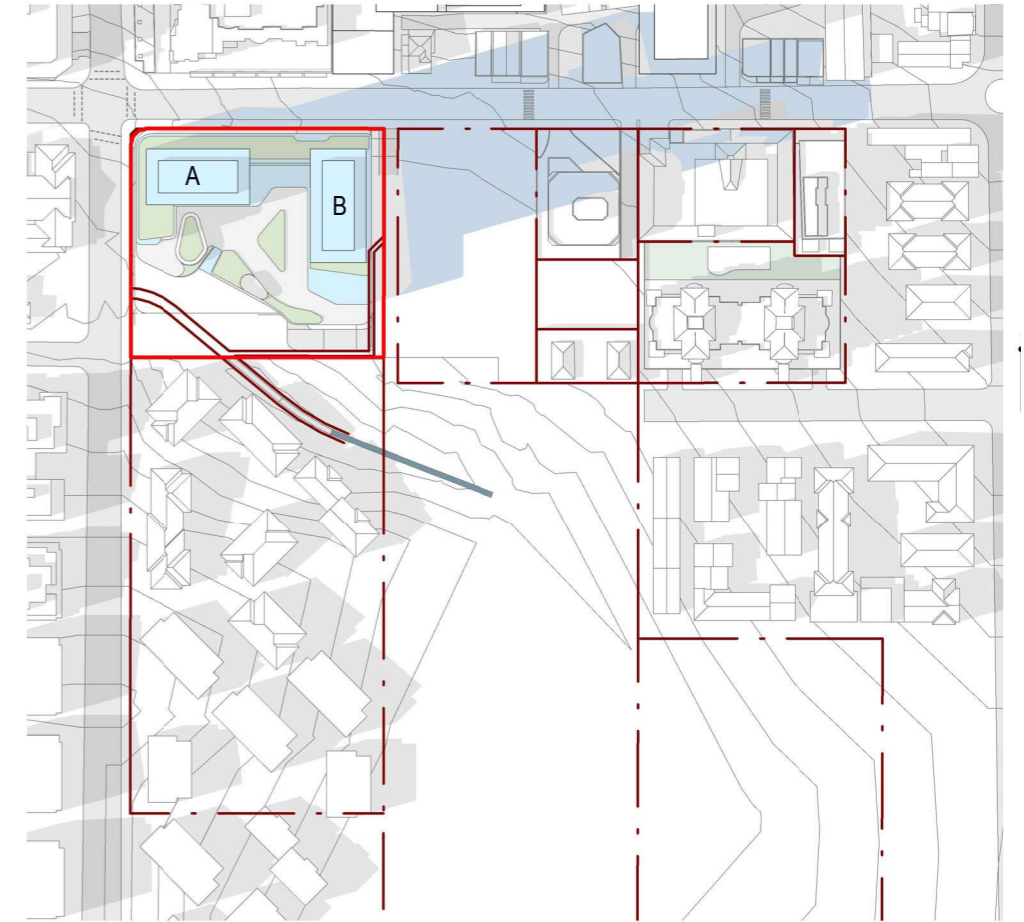
- SITE BOUNDARY
- ADDITIONAL SHADOWS



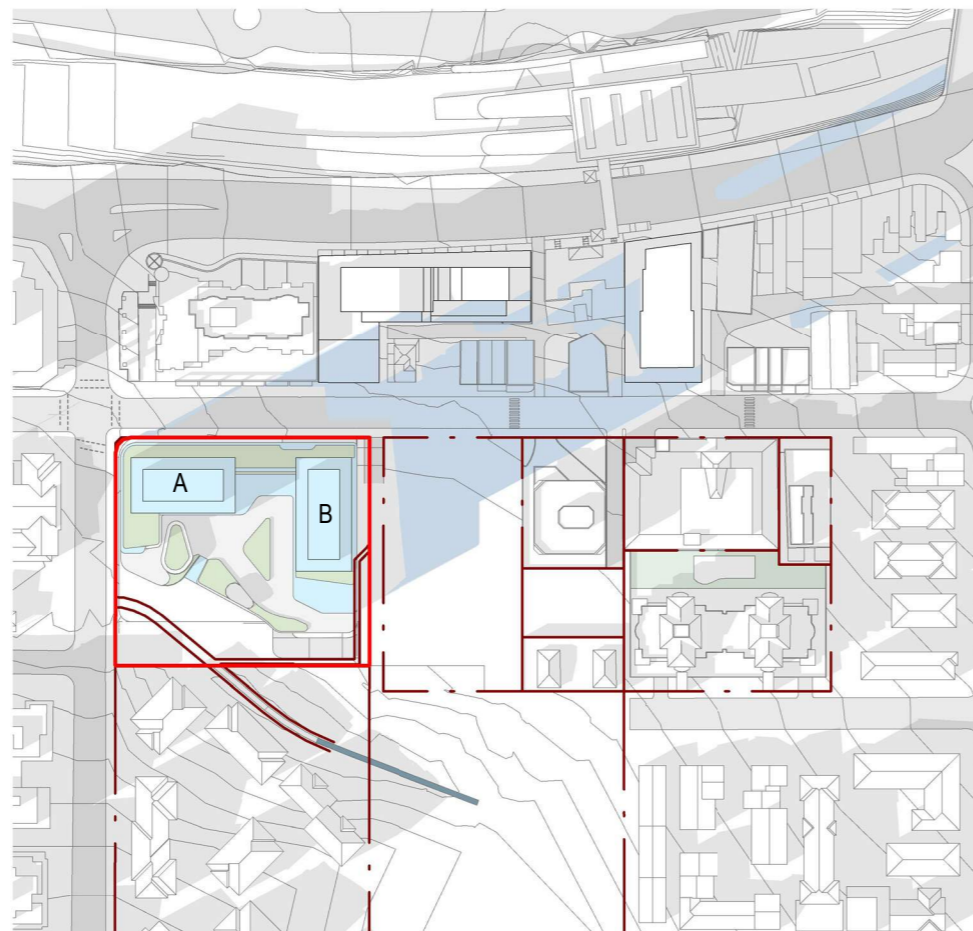
SHADOW STUDIES  
21 June - Mid-Winter



JUNE 21 - 1300

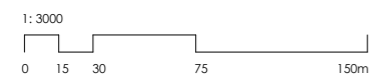


JUNE 21 - 1400



JUNE 21 - 1500

- SITE BOUNDARY
- ADDITIONAL SHADOWS



9

Solar Access + Ventilation

## SOLAR MAPPING

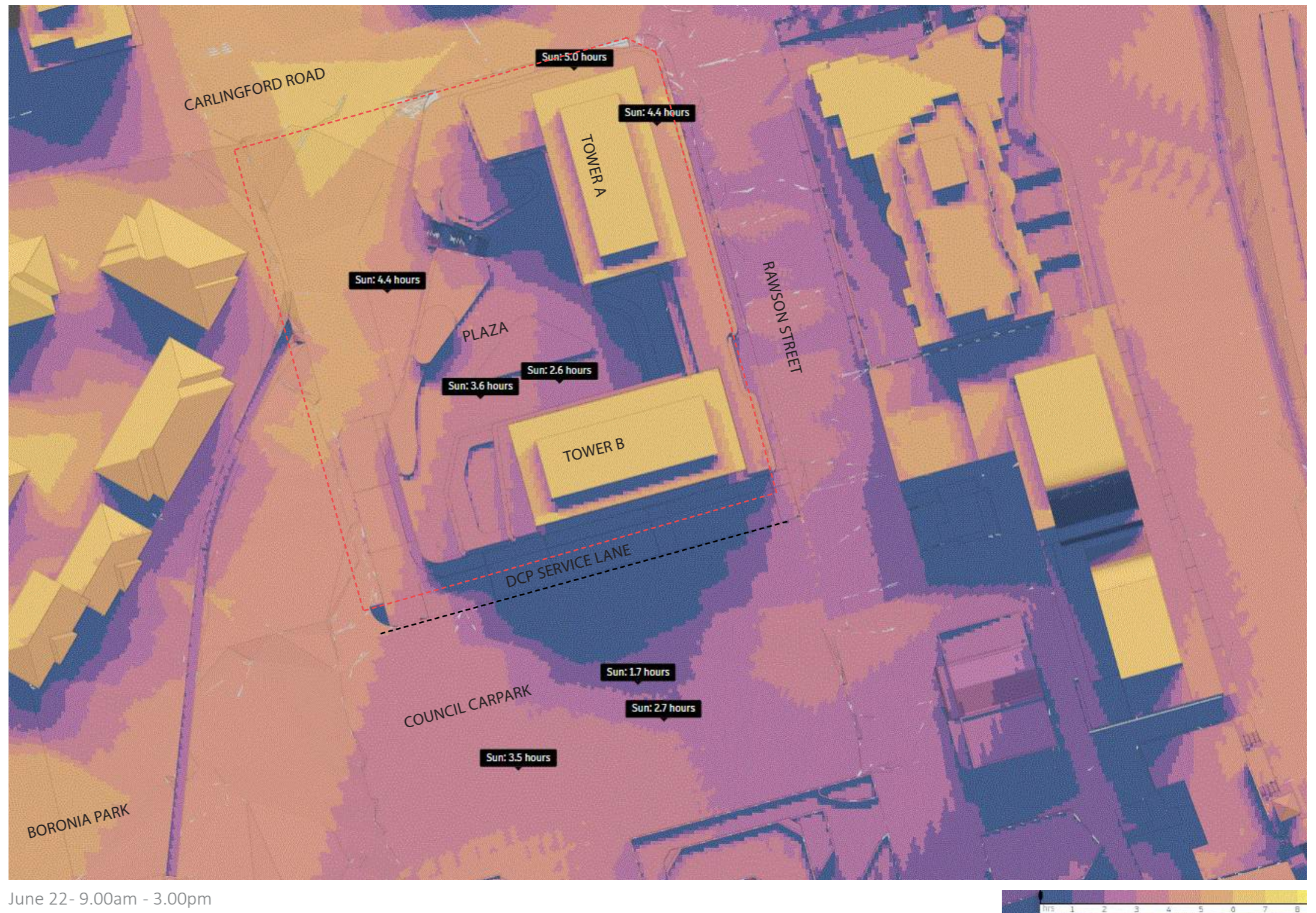
The placement and orientation of the two tower footprints, optimise the opportunities for solar access to the surrounding ground plane areas external to the site.

Each of the proposed tower footprints and their orientations provide opportunities for good levels of solar access to the upper level podium landscaped areas and to each individual tower form.

The principle Communal Open Space areas, located on the podium level are capable of achieving ADG compliance.

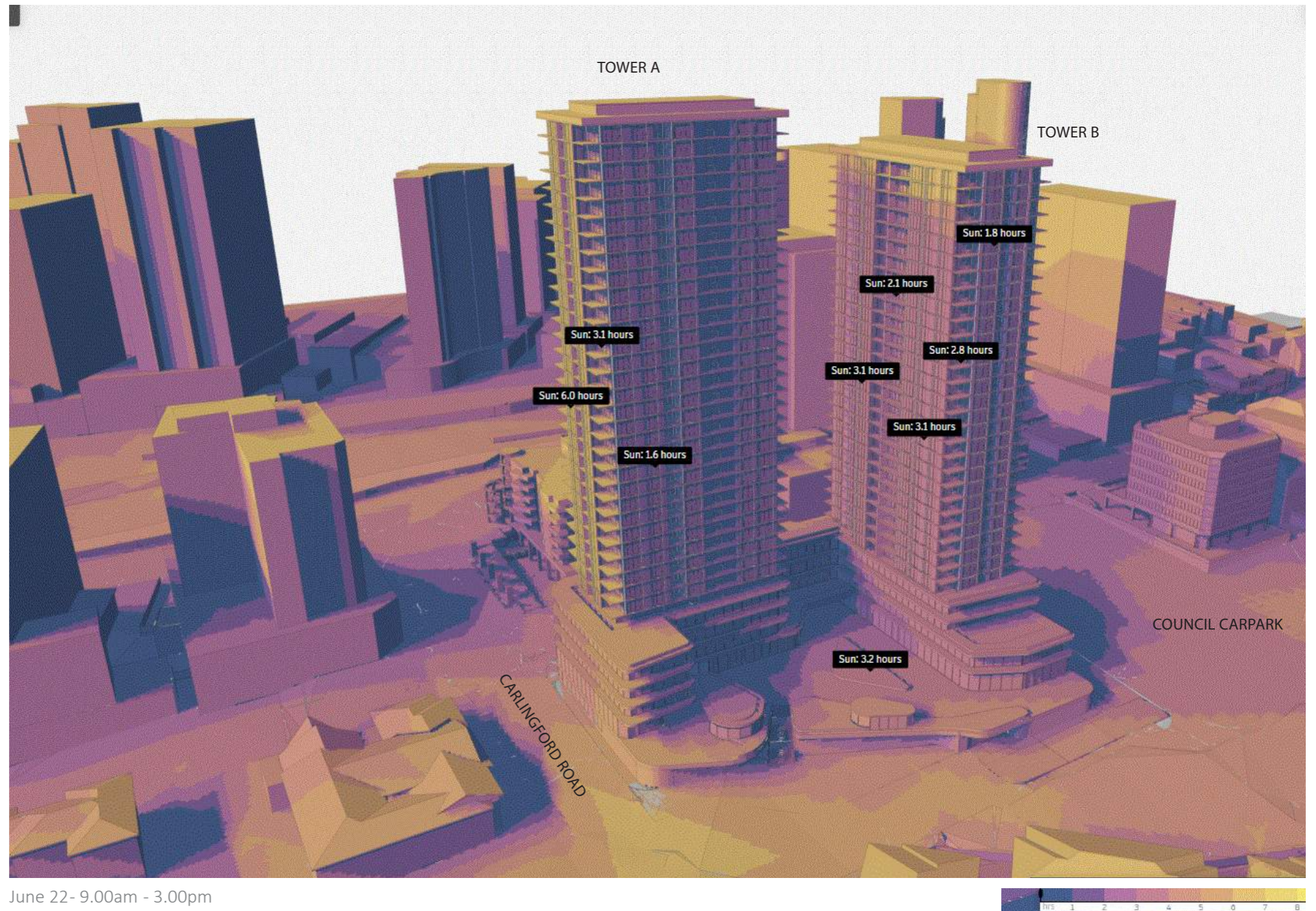
High levels of solar access are achieved to the publicly accessible open space on the western corner of the site.

Shading to the south of the site is predominantly located over or just beyond the proposed DCP service laneway, with good levels of solar access to remaining areas.



SOLAR MAPPING

AERIAL VIEW FROM THE WEST



June 22- 9.00am - 3.00pm

SOLAR MAPPING

AERIAL VIEW FROM THE NORTH



June 22 - 9.00am - 3.00pm



SOLAR ACCESS SUMMARY  
AND VENTILATION STUDIES

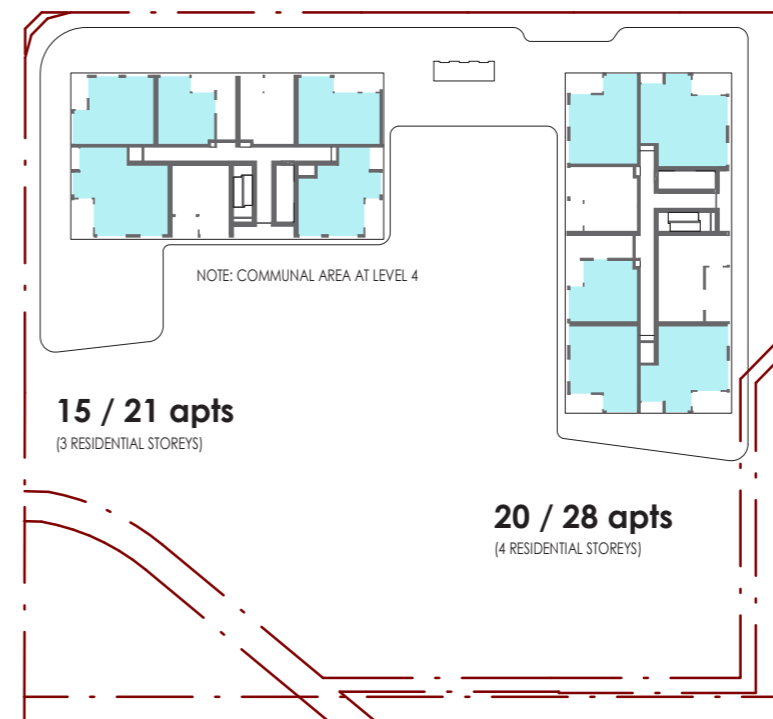


TYPICAL LEVEL - SOLAR ACCESS

9.00am - 3.00pm

290 APARTMENTS (290/406) - **71%** - RECEIVE MIN 2HRS SOLAR ACCESS TO HABITABLE AREAS BETWEEN THE HOURS OF 9.00AM AND 3.00PM

\*APPROX 28 APARTMENTS (28/406) - **7%** - RECEIVE NO SOLAR ACCESS TO THE APARTMENT BETWEEN 9.00AM AND 3.00PM



TYPICAL LEVEL - VENTILATION

Natural Ventilation

35 APARTMENTS (35/49) - **71%** - ARE NATURALLY CROSS VENTILATED 9 STOREYS ABOVE GROUND.

UNDER THE ADG APARTMENTS ABOVE THIS HEIGHT ARE CONSIDERED NATURALLY VENTILATED

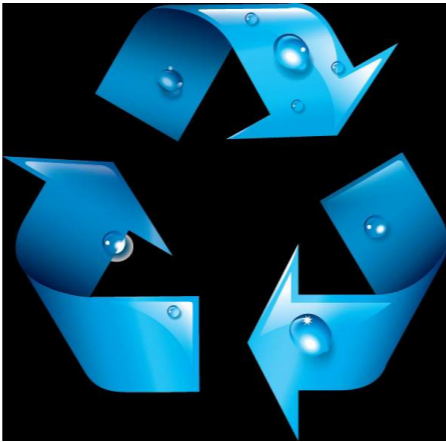


# 10 Sustainability

SUSTAINABILITY

ESD INITIATIVES TO BE EXPLORED FOR THE DEVELOPMENT APPLICATION

- Intergrate passive design systems- solar control and wind mitigation
- Water harvesting and reuse
- Minimise reliance on natural gas
- PV panels
- Electrical car charging facilities
- Extensive Landscape to reduce the 'Heat Island' effect
- Promote beneficial micro climate
- End of Trip facilities and bicycles parking
- Inclusion of low VOC and recycled materials
- Live- Work arrangements



# 11

## Massing Studies

Perspective View From Rawson Street - Looking West



Perspective View From Carligford Road - Looking South



Perspective View From Carligford Road - Looking East



Perspective View From Ray Street - Looking South





Perspective View From Boronia Park - Looking North



12

Architectural

BASEMENT 3 PLAN (B4 & B6 SIMILAR)



INDICATIVE CAR PARKING

MAXIMUM DCP CARPARKING RATES

RESIDENTIAL

	REQUIRED	PROVIDED
1BED (98 APT x 0.4)	39.2	39
2BED (251 APT x 0.7)	175.7	176
3BED (57 APT x 1.2)	68.4	69
VISITOR (406 APT / 7)	58	58
<b>TOTAL</b>	<b>341.3</b>	<b>342</b>
RES BICYCLE (406 APT / 2)	203	203

COMMERCIAL\*

	REQUIRED	PROVIDED
RETAIL (1965m <sup>2</sup> / 30)	65.5	(1965m <sup>2</sup> / 50) 40
COMMERCIAL (7430m <sup>2</sup> / 50)	148.6	(7430m <sup>2</sup> / 100) 74
SUPERMARKET (3100m <sup>2</sup> / 30)	103.3	103
MINI MAJOR (493m <sup>2</sup> / 30)	16.4	17
<b>TOTAL</b>	<b>333.8</b>	<b>234</b>
* EXCLUDES BOH, MALL, LOBBY AREAS		
MOTORCYCLE (234 / 25)	9.3	9
COMM BICYCLE (7430m <sup>2</sup> / 200)	37.1	37

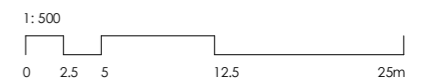
MAXIMUM DCP CARPARKING RATES - (PART 4.1)

RESIDENTIAL

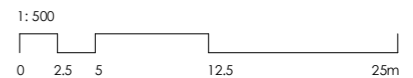
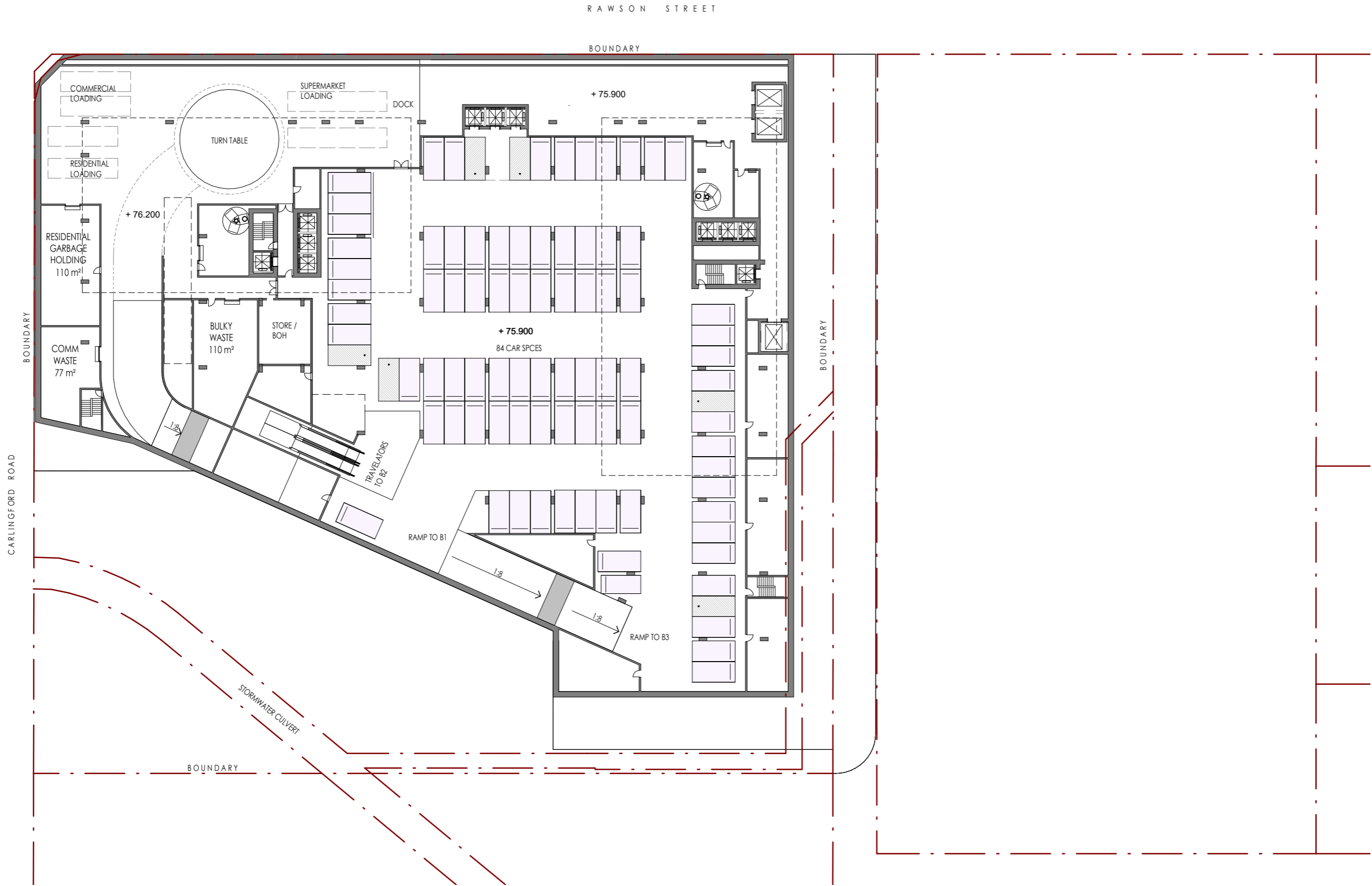
- 1 BED - 0.4 SPACES
- 2 BED - 0.7 SPACES
- 3 BED - 1.2 SPACES
- VISITOR - 1 SPACE PER 7 APTS (MIN)
- MINIMUM 1 CAR SHARE SPACE
- RESIDENTIAL BICYCLE PARKING - 1 SPACE PER 2 APTS (PART 3.6)

COMMERCIAL

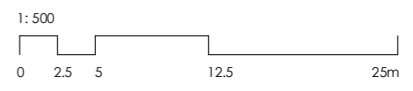
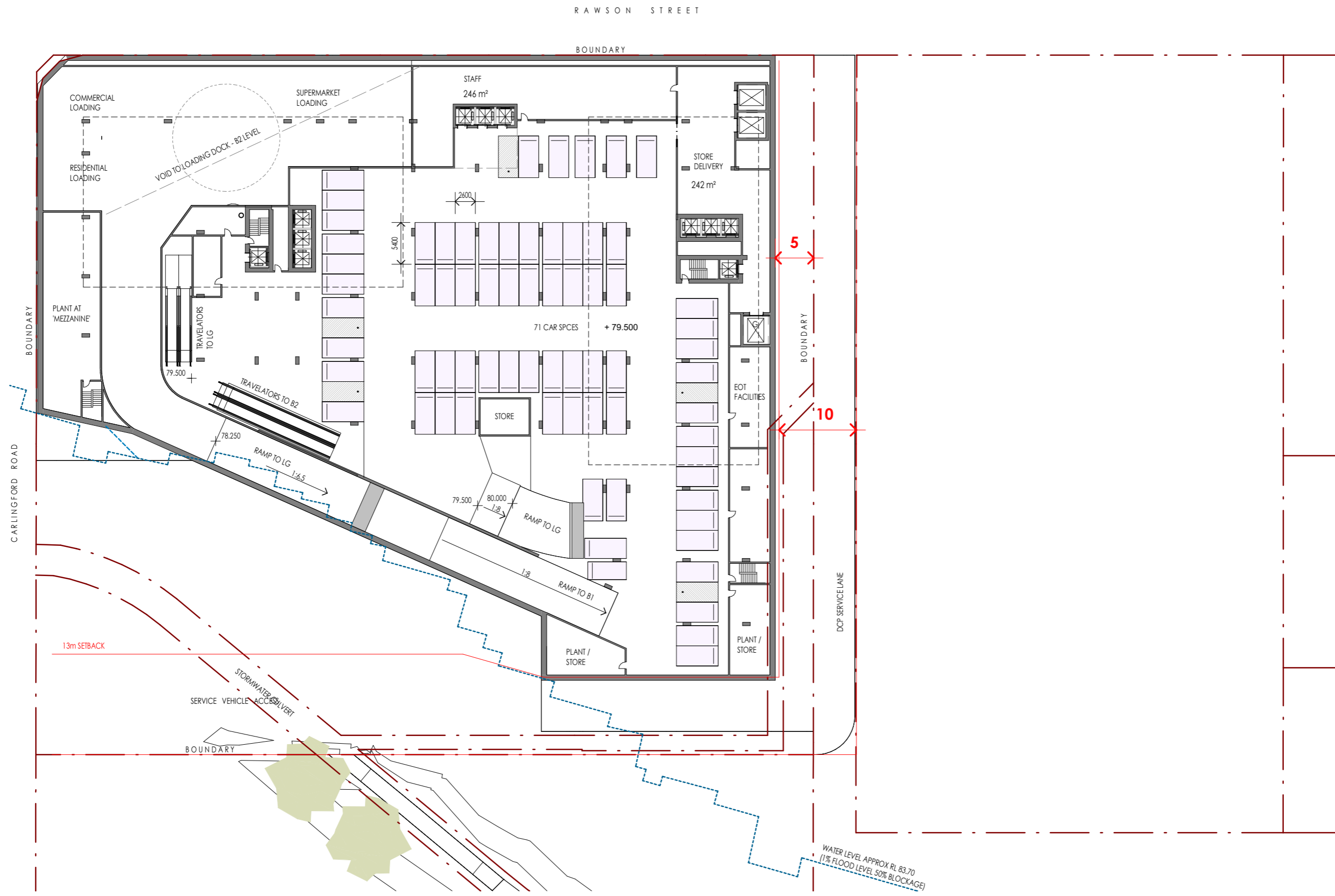
- COMMERCIAL - 1 SPACE PER 50SQM
- RETAIL - 1 SPACE PER 30SQM
- ACCESSIBLE - MIN 1% OF ALL COMMERCIAL SPACES
- MOTORCYCLE - 1 SPACE PER 25 CAR SPACES
- COMMERCIAL BICYCLE PARKING - 1 SPACE PER 200SQM



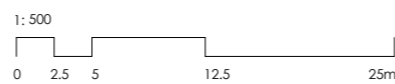
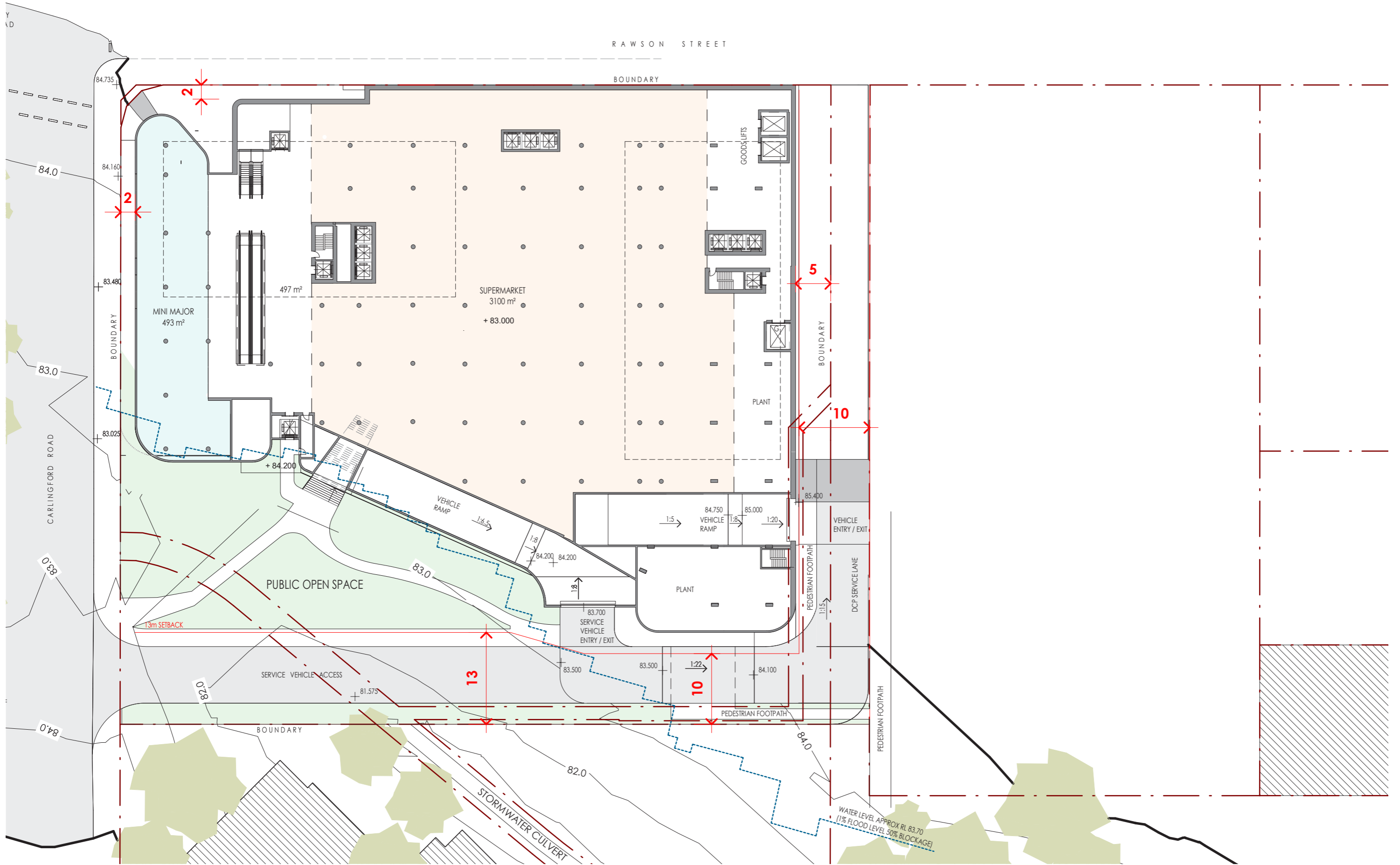
BASEMENT 2 PLAN



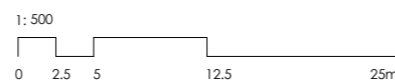
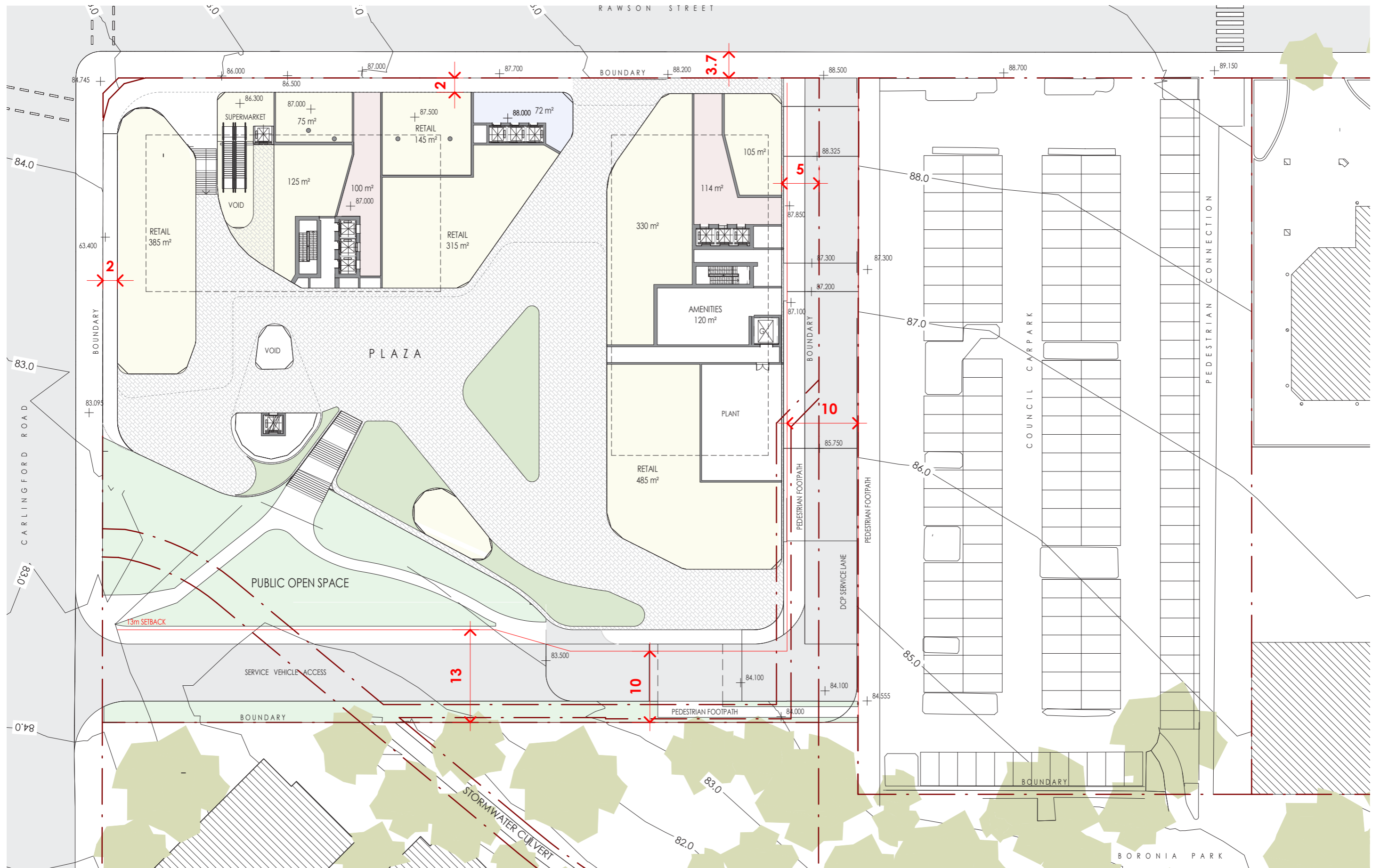
BASEMENT 1 PLAN



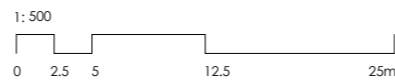
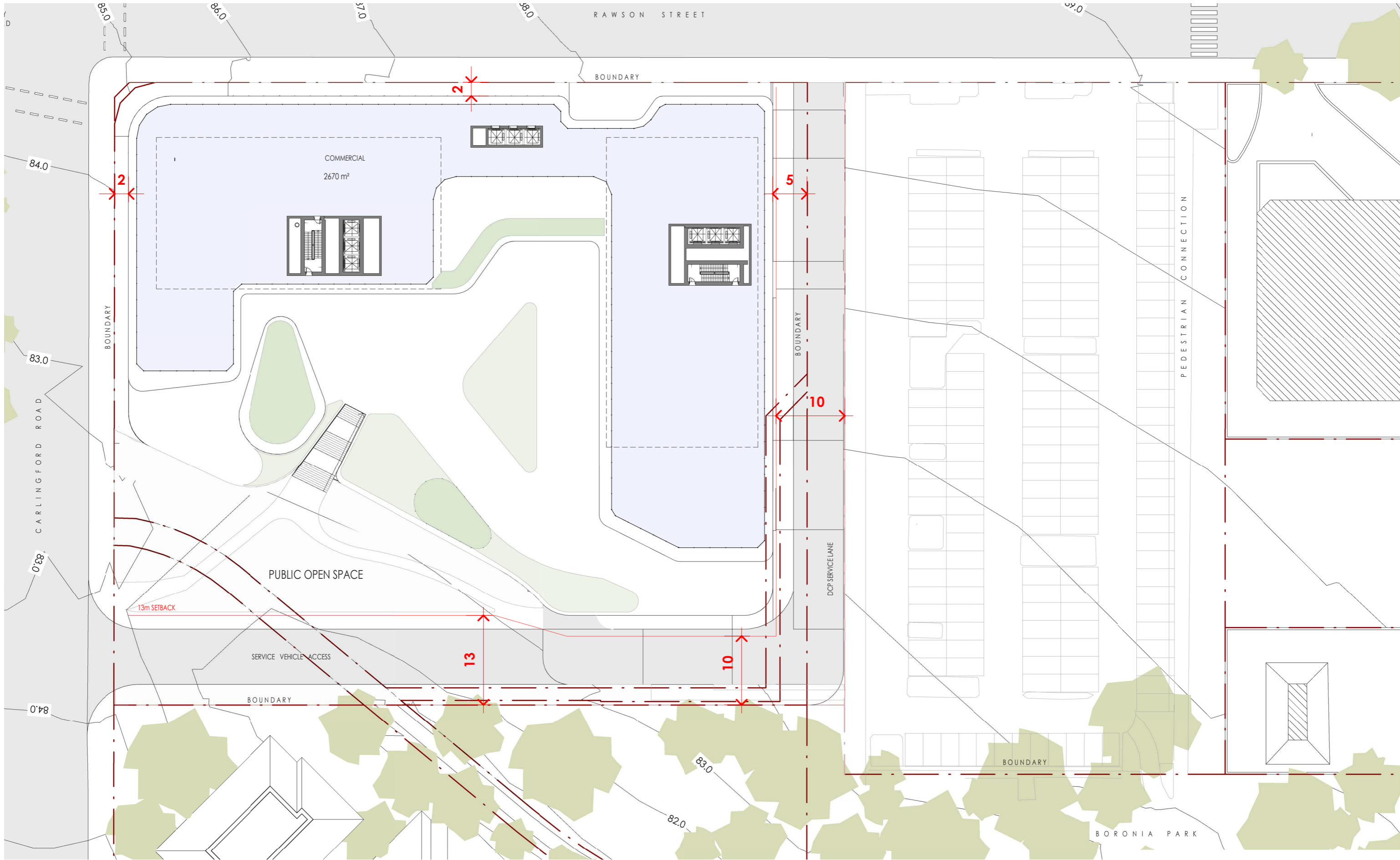
LOWER GROUND PLAN



GROUND PLAN

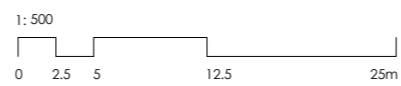
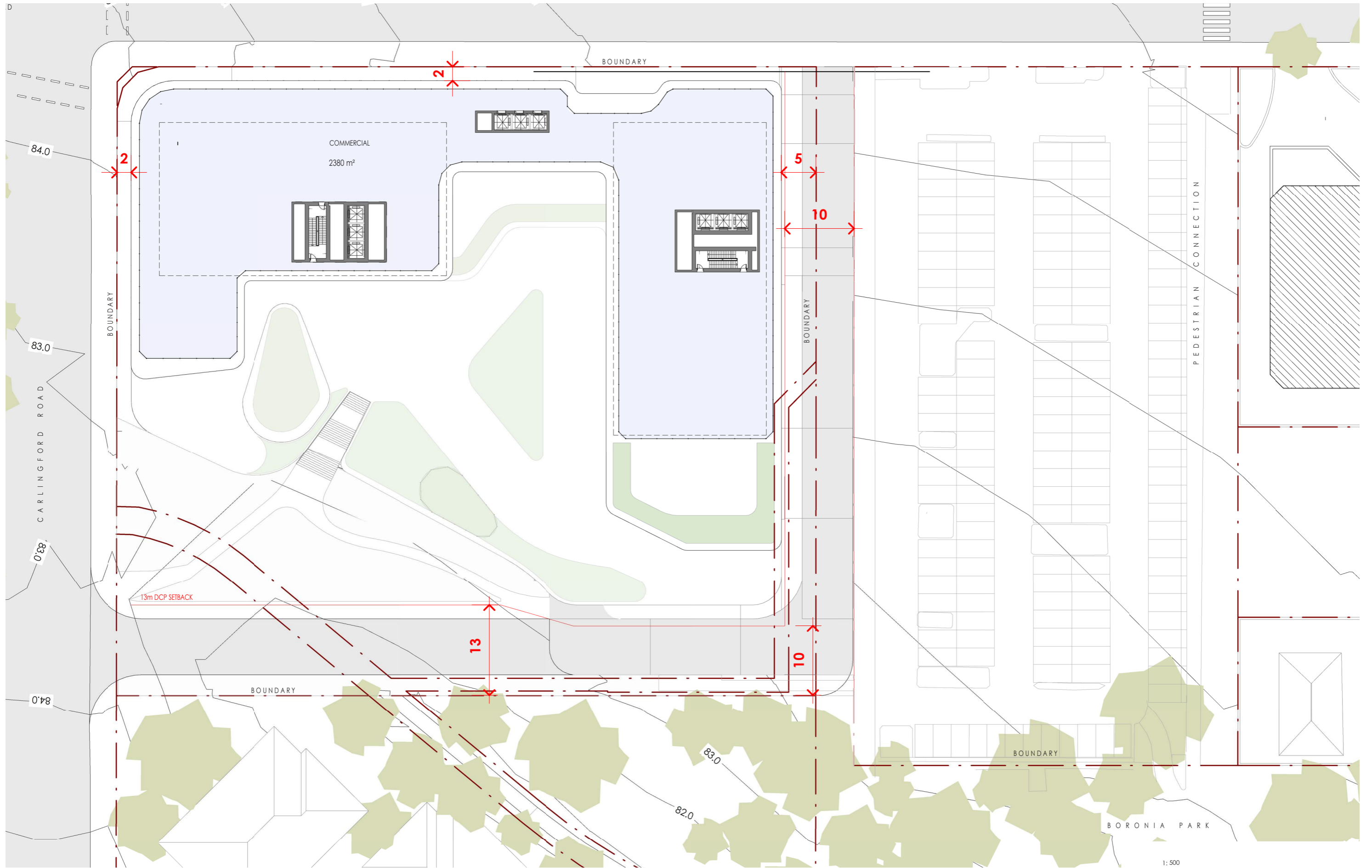


LEVEL 1 PLAN

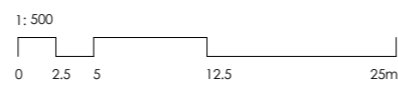
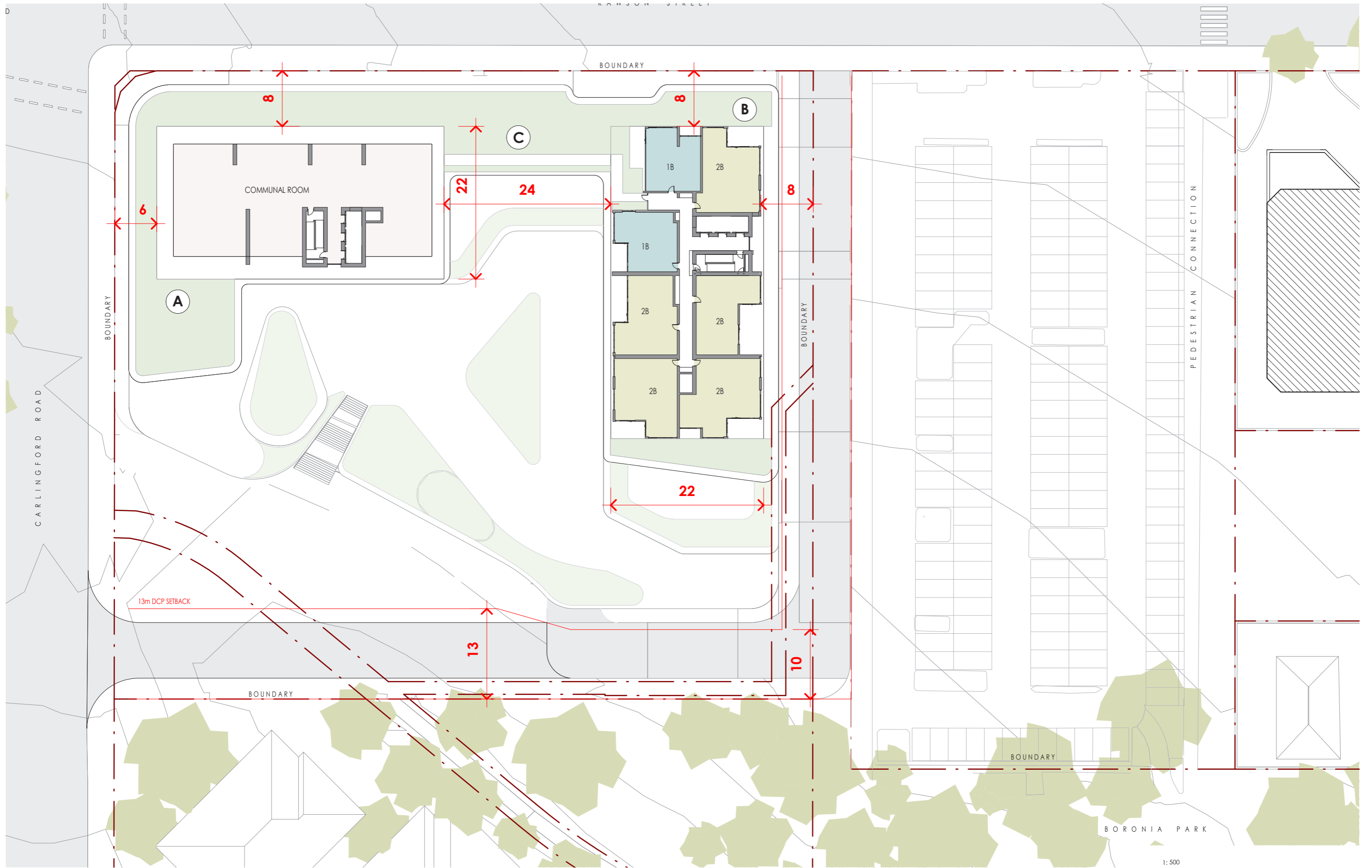




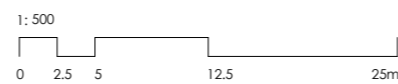
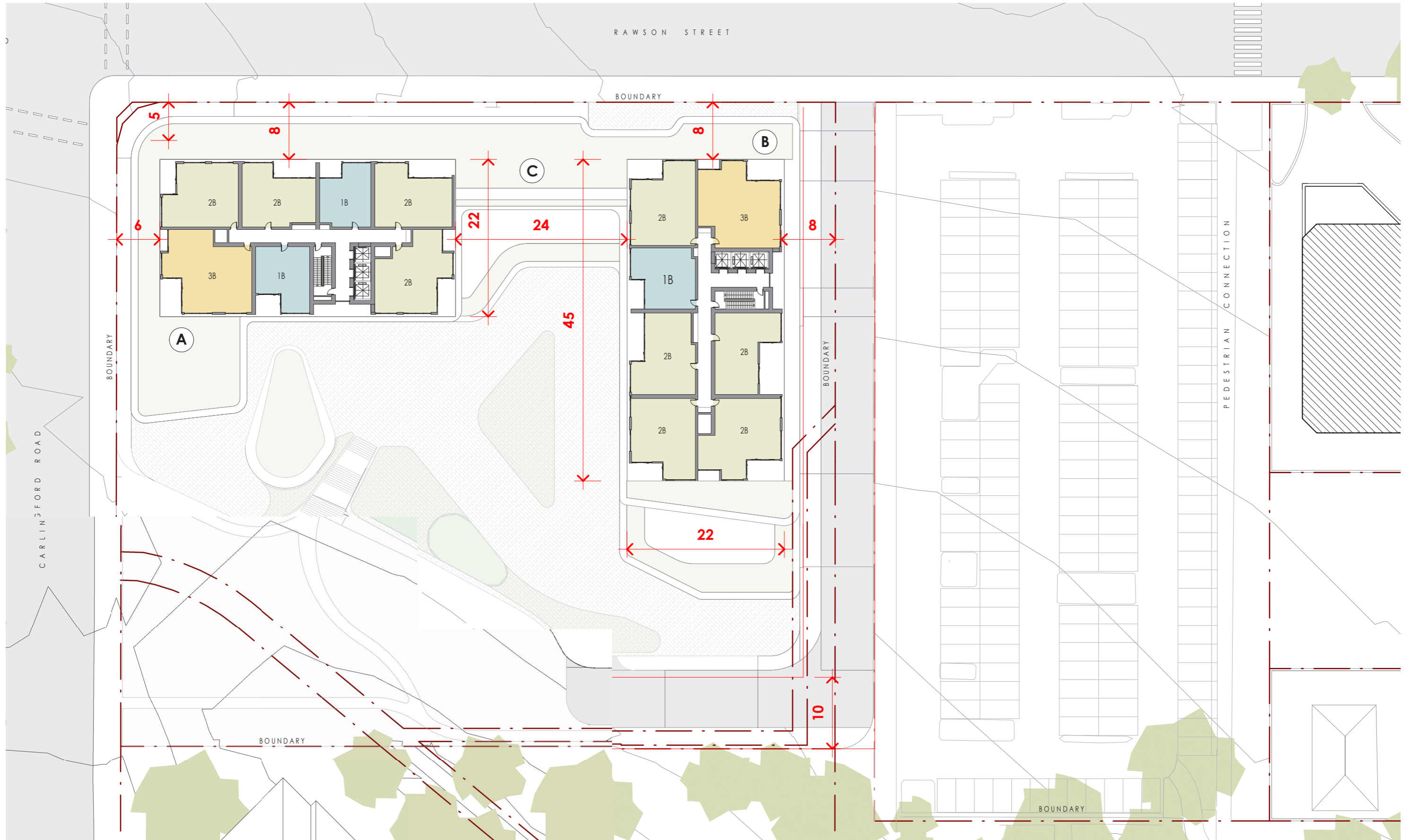
LEVEL 2 - 3 PLAN

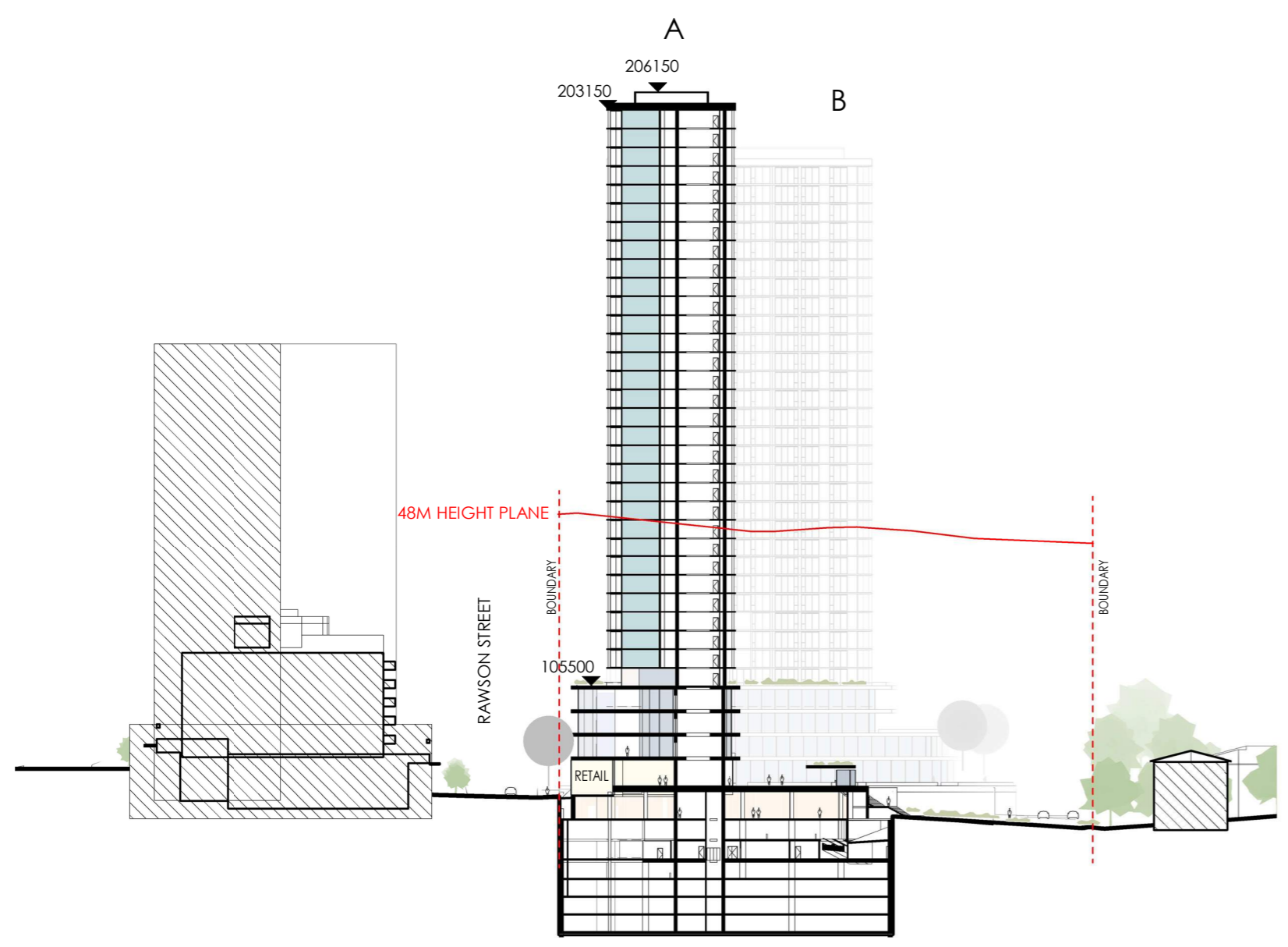
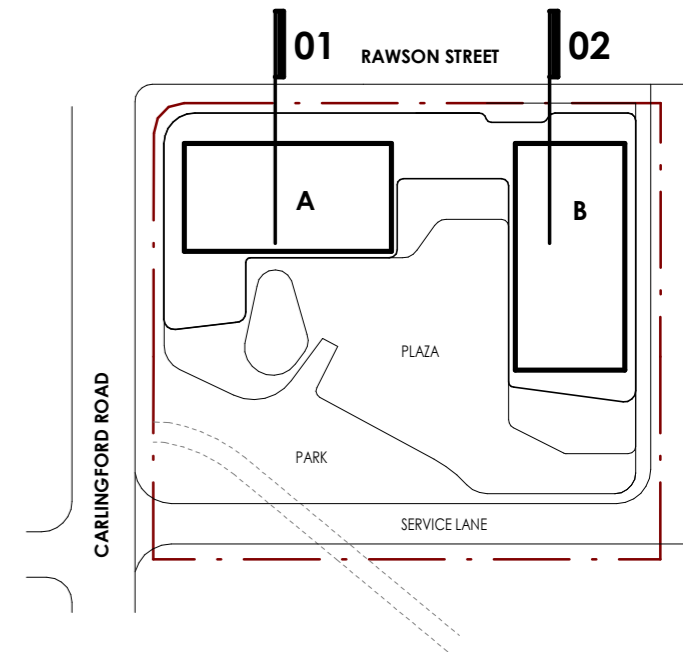


LEVEL 4 PLAN

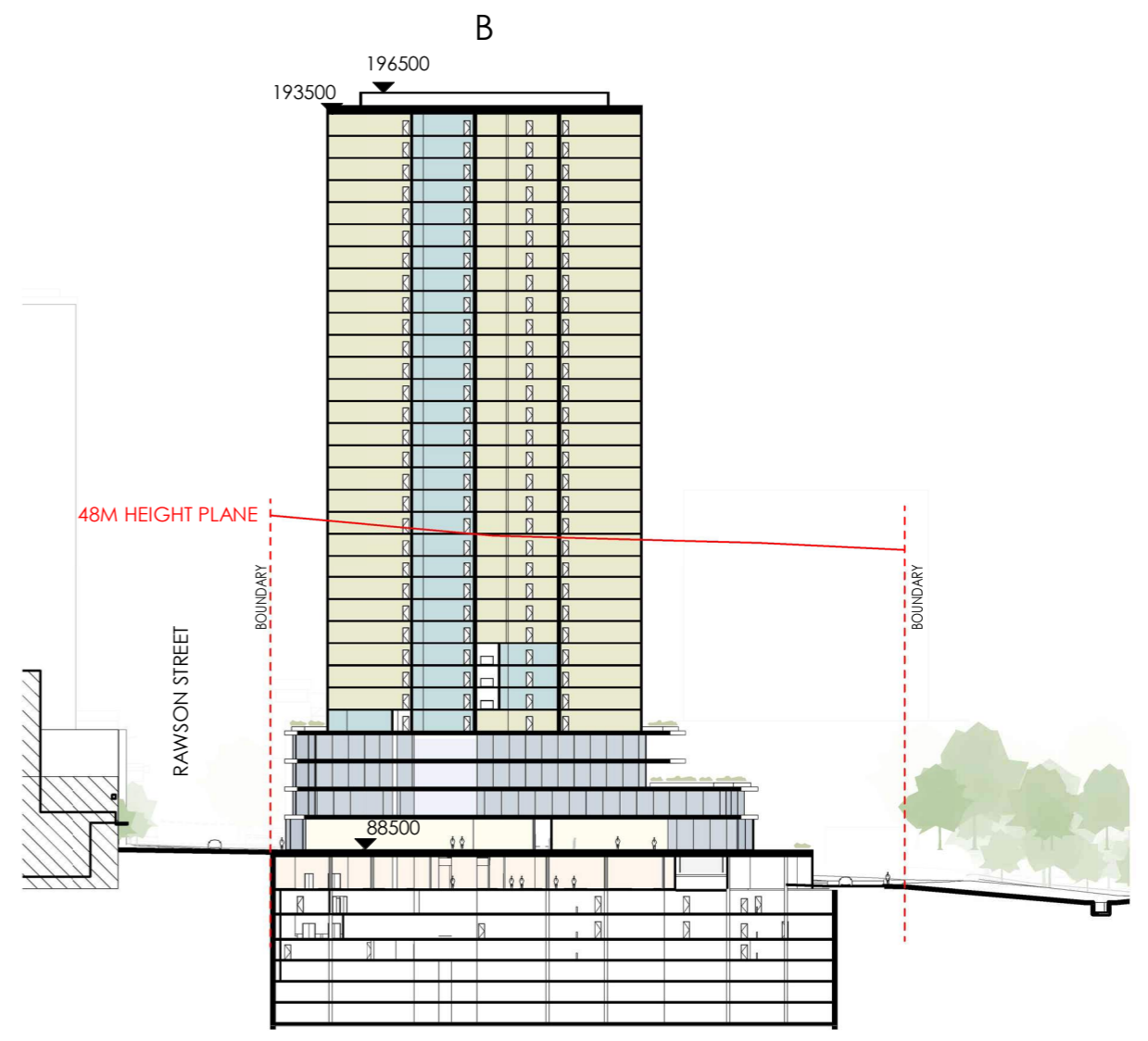


TYPICAL FLOOR PLANS

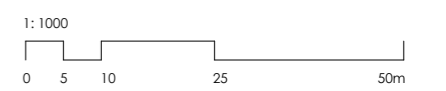


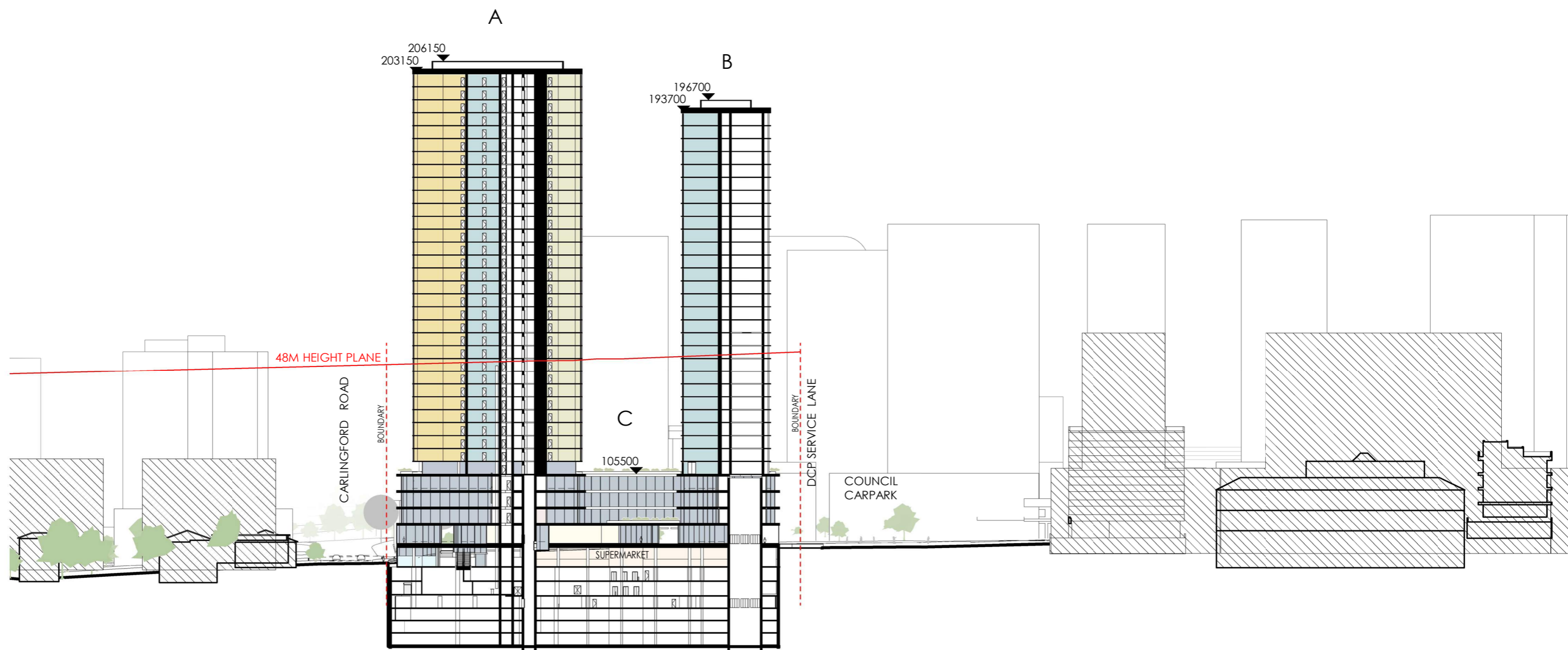
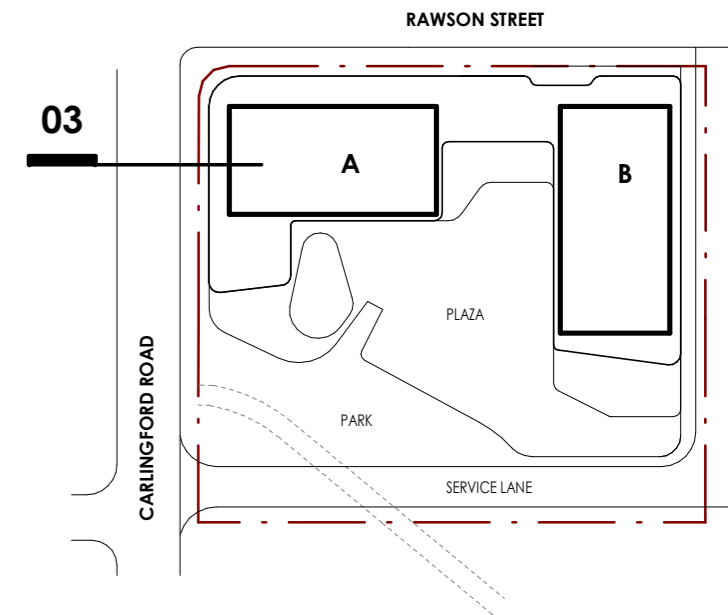


SECTION - NORTH SOUTH - 01

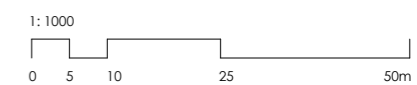


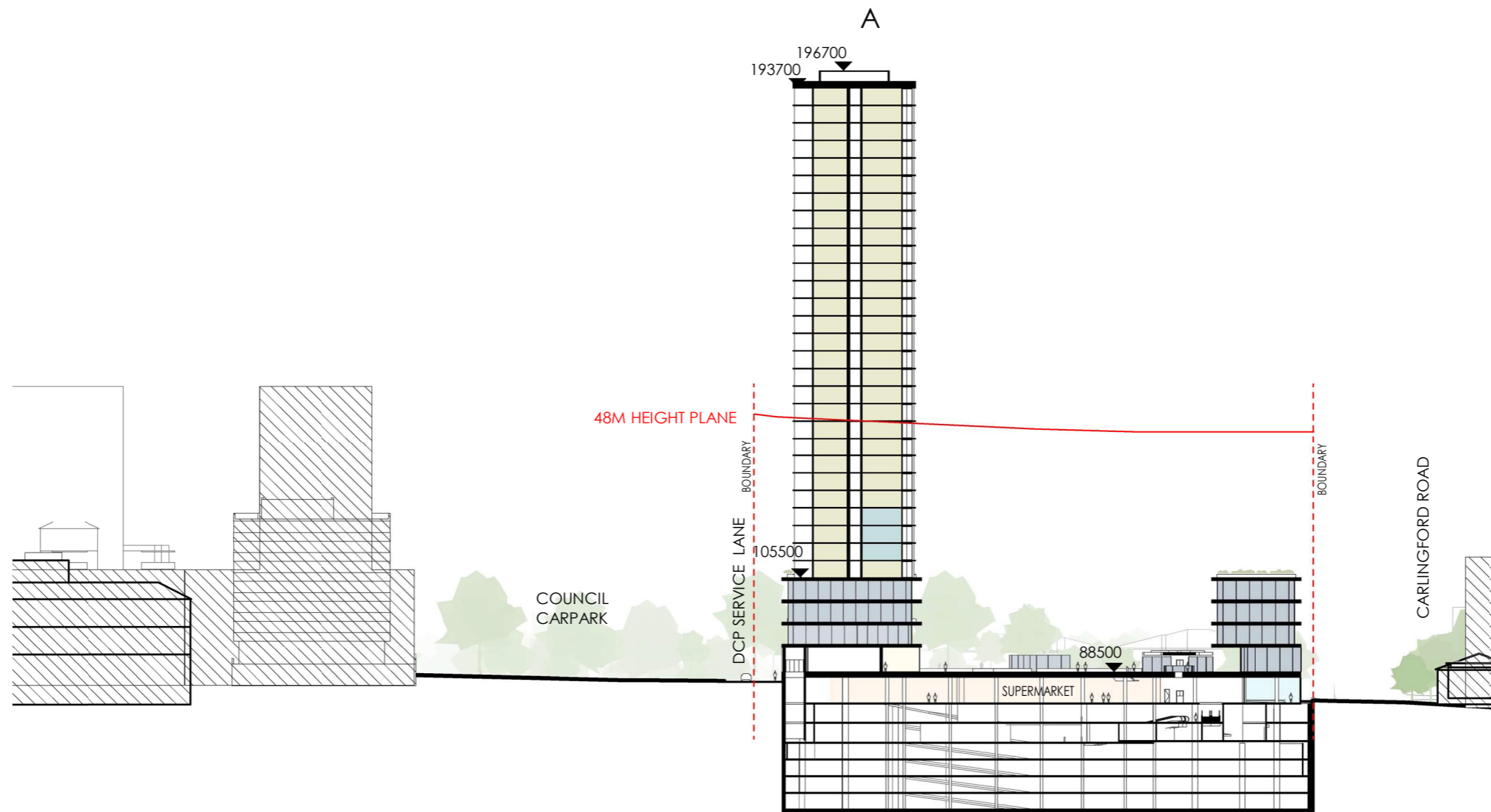
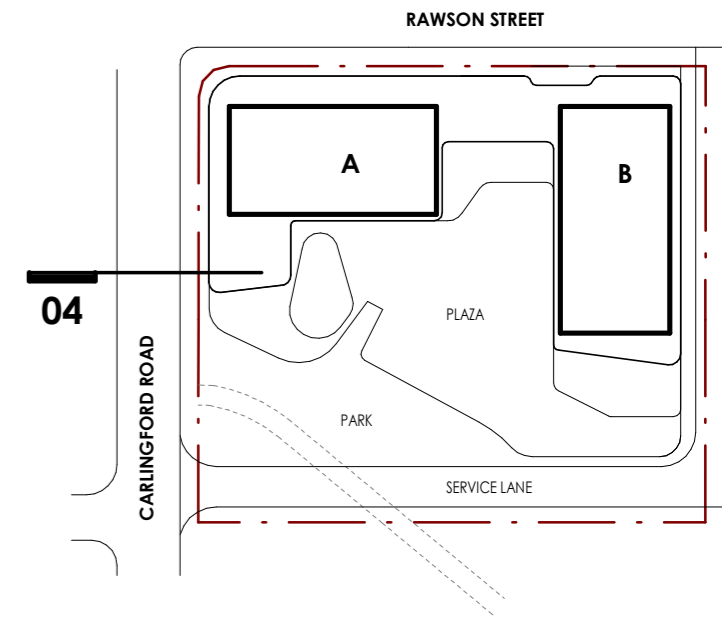
SECTION - NORTH SOUTH - 02





SECTION - EAST WEST - 03





SECTION - NORTH SOUTH - 04

