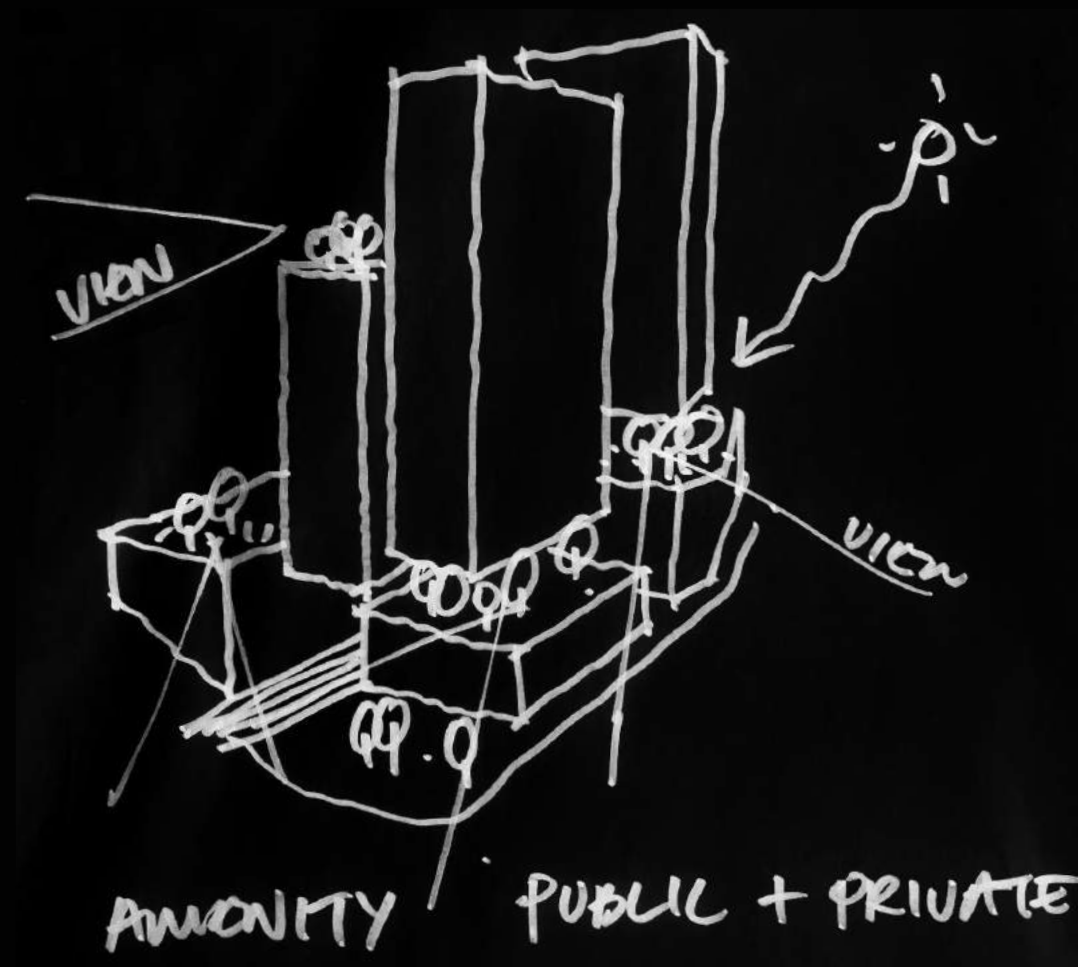


**PLANNING PROPOSAL**  
03-Oct-17









INTRODUCTION

This report has been prepared by Fender Katsalidis on behalf of Sasco Developments, the applicant. The proposal details the opportunities for a mixed use project on Railway Road, Meadowbank. The projects vision is supported by a considered urban design rationale and a high quality public offering.

The project is situated on land bounded by Railway Road, Underdale Lane, Faraday Lane and Constitution Road. It is located adjacent to Meadowbank train station, Meadowbank TAFE campus and within 500m of Meadowbank Ferry. The location is near the geographical centre of Sydney in a desirable area offering foreshore amenity along Parramatta River and a variety of public transport connections to the broader city.

The proposal seeks an increase in FSR (2.7:1 to 5.2:1) and height (21m to 81m) to support a mixed use project consisting of.

- 2,287 m<sup>2</sup> local supermarket,
- 15 specialty retail tenancies
- 3,867m<sup>2</sup> commercial space
- Child care
- 358 Apartments
- 536 m<sup>2</sup> Northern Public Plaza
- Supporting Residential Amenity

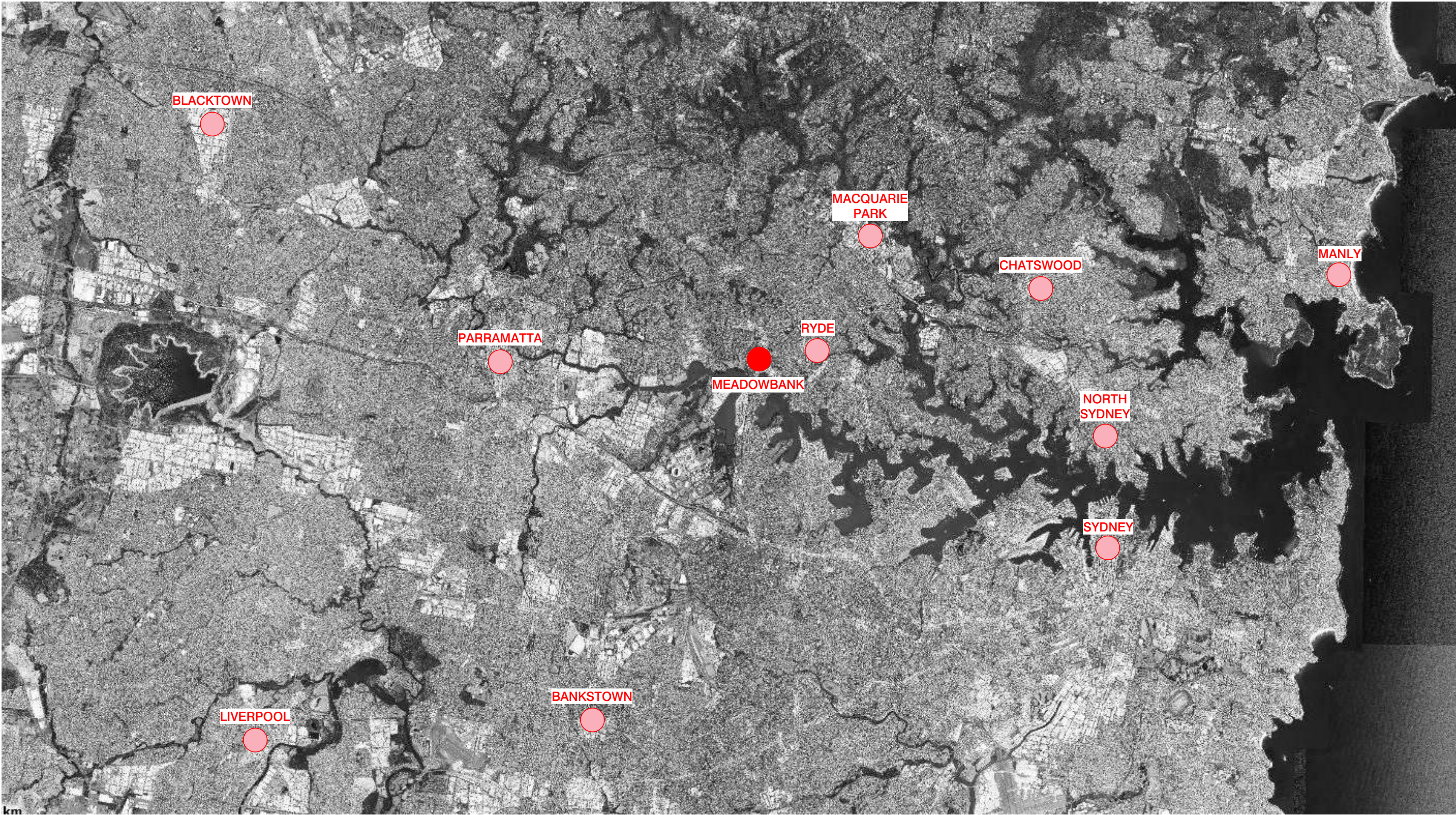
This document details the existing site conditions and local context and outlines the urban design principles that's guided the response. This is illustrated with diagrams, plans, sections, elevations and 3D visualisations.

PROJECT TEAM

Client:	Sasco Developments
Urban Design:	Fender Katsalidis
Planning:	Urbis
Economics:	Urbis
Traffic:	TTPP
Social Impact:	Cred Consulting
CGI's:	Atelier Interactive

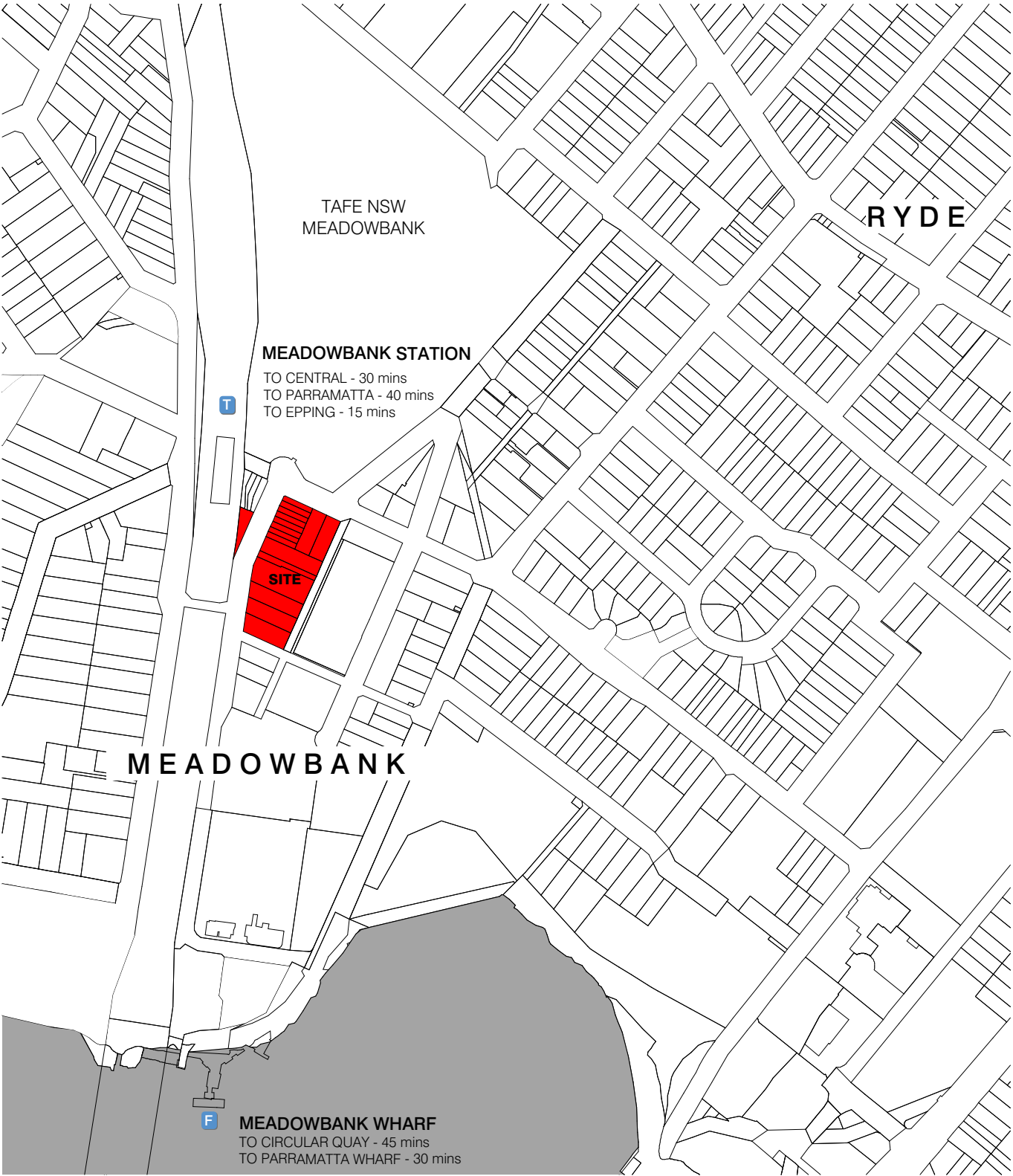


REGIONAL CONTEXT





SITE LOCATION



LOCATION PLAN



AERIAL PHOTO



AERIAL PHOTO



## RAILWAY ROAD AND UNDERDALE LANE

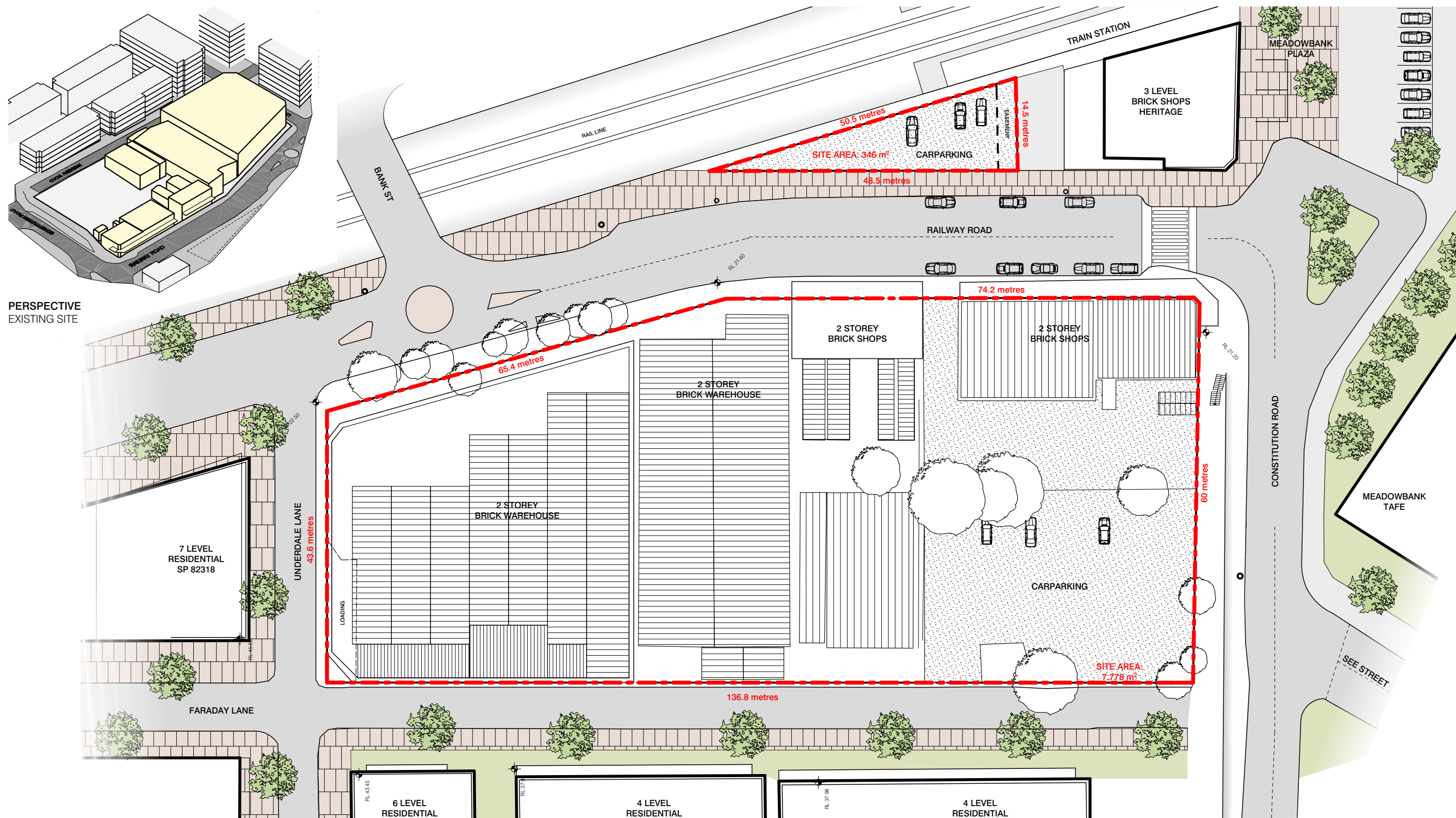


The proposed site consists of one large 7,778m<sup>2</sup> street block bounded by Railway Road, Constitution Road, Underdale Lane and Faraday Lane.

An additional 346 m<sup>2</sup> triangular wedge located off Railway Road is also considered in this proposal.



# EXISTING SITE PLAN





**SITE PHOTO**  
**HERITAGE SHOPS**





SITE PHOTO  
STATION ARRIVAL





**SITE PHOTO**  
**RAILWAY ROAD**





**SITE PHOTO**  
**RAILWAY ROAD RETAIL STRIP**





**SITE PHOTO**  
**RAILWAY ROAD ROUNDABOUT**





**SITE PHOTO  
UNDERDALE CORNER**





**SITE PHOTO**  
**UNDERDALE LANE**





**SITE PHOTO  
FARADAY LANE**



**SITE PHOTO**  
**NORTHERN BOUNDARY**





**SITE PHOTO  
CONSTITUTION ROAD**



## URBAN ANALYSIS MEADOWBANK TAFE

Flanked by the railway line, light industrial and quiet residential streets, Meadowbank TAFE is one of the largest campuses in Sydney. There are over 12,000 students and staff, working and learning just to the north of the site.

Meadowbank train station and the proposed site are the primary interface between this large institution and the broader community.



AERIAL PHOTO - MEADOWBANK TAFE



SITE PHOTO - MEADOWBANK TAFE FROM CONSTITUTION ROAD



## URBAN ANALYSIS MEADOWBANK TRAIN STATION

Meadowbank has a modern and fully accessible train station. It offers convenient journey times to some of Sydney's major hubs.

To Central	30 mins
To Parramatta	40 mins
To Epping	15 mins
To Macquarie Park	20 mins
To North Sydney	40 mins



SITE PHOTO - TRAIN STATION PLAZA



AERIAL PHOTO - MEADOWBANK TRAIN STATION



SITE PHOTO - MEADOWBANK TRAIN STATION



**URBAN ANALYSIS**  
**LOCAL AMENITY**

Meadowbank offers easy access to the Parramatta foreshore. Meadowbank Park is a major sports field complex. Along the foreshore edge is the Parramatta Valley Cycleway offering a recreational cycling and jogging track.

Within Shepherds Bay is a local supermarket submerged between multi storey apartment buildings. Whilst adding convenience, it offers very little to the civic and community atmosphere of the suburb.



SITE PHOTO - EXISTING SUBTERRANEAN SUPERMARKET



AERIAL PHOTO - MEADOWBANK SPORTING FIELDS AND SUPERMARKET LOCATION



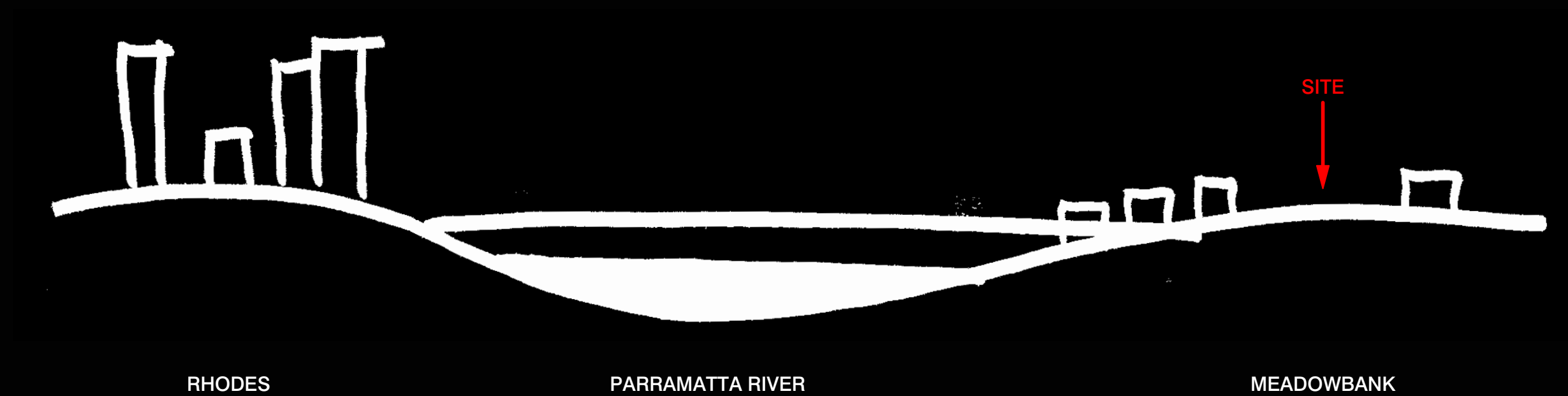
SITE PHOTO - MEADOWBANK SPORTING FIELDS



## URBAN ANALYSIS TOPOGRAPHICAL POSITION

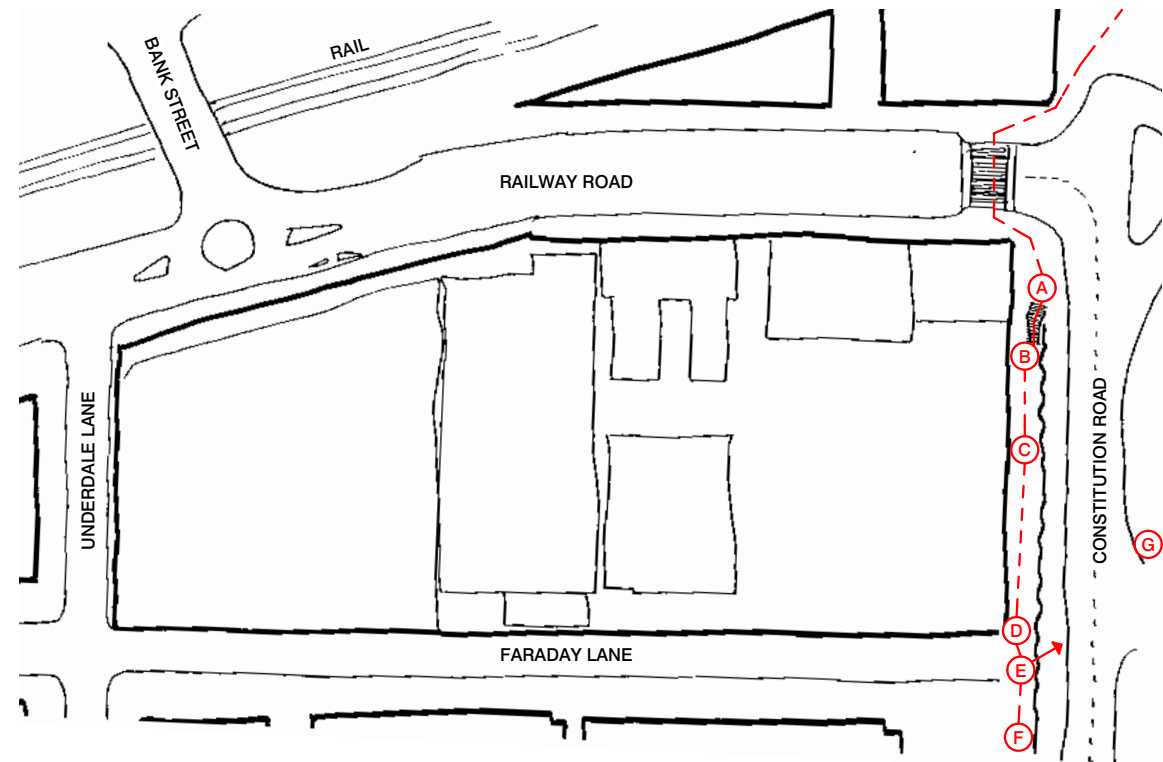
Meadowbank sits on the opposite headland to Rhodes. Whilst Rhodes is dominated by high rise residential towers, Meadowbank follows a mid rise model.

The site itself is located on the topographical high point of the suburb.





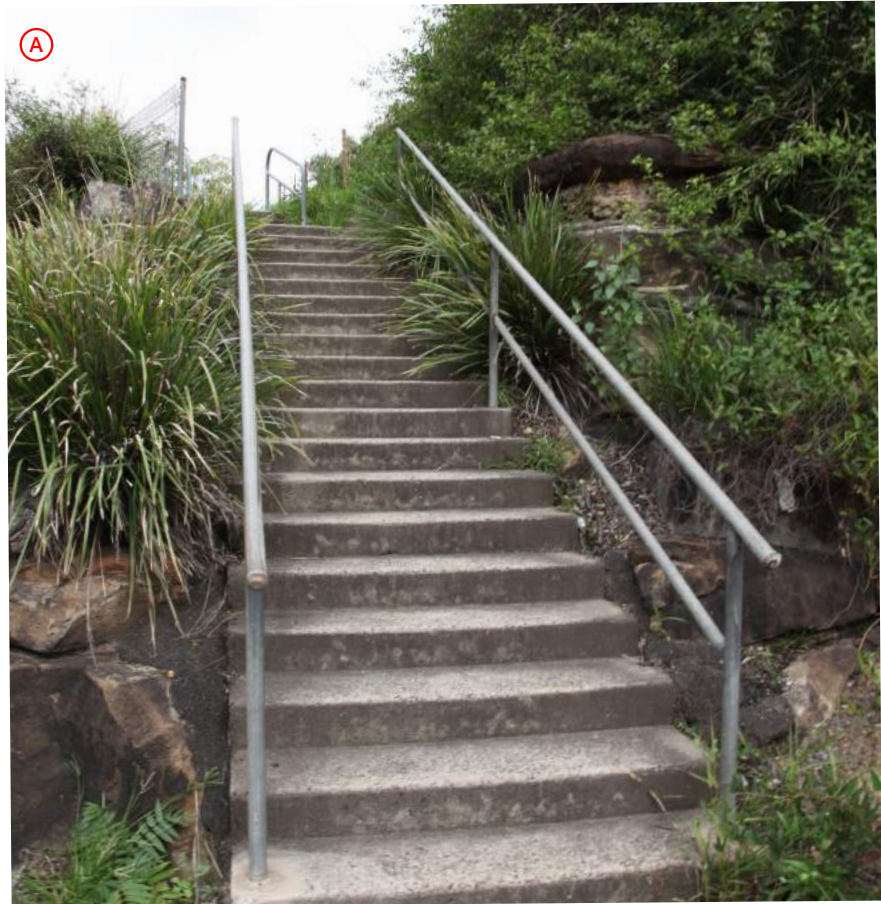
URBAN ANALYSIS  
SITE FEATURES



TO TRAIN STATION

EXISTING SITE LINK

The site has a large sandstone berm along its northern street boundary. There is a stair and path that navigates the level difference over the site connecting Railway Road to the top of Faraday Lane. The sandstone edge is the frontage responding to the TAFE.





URBAN ANALYSIS  
SITE FEATURES





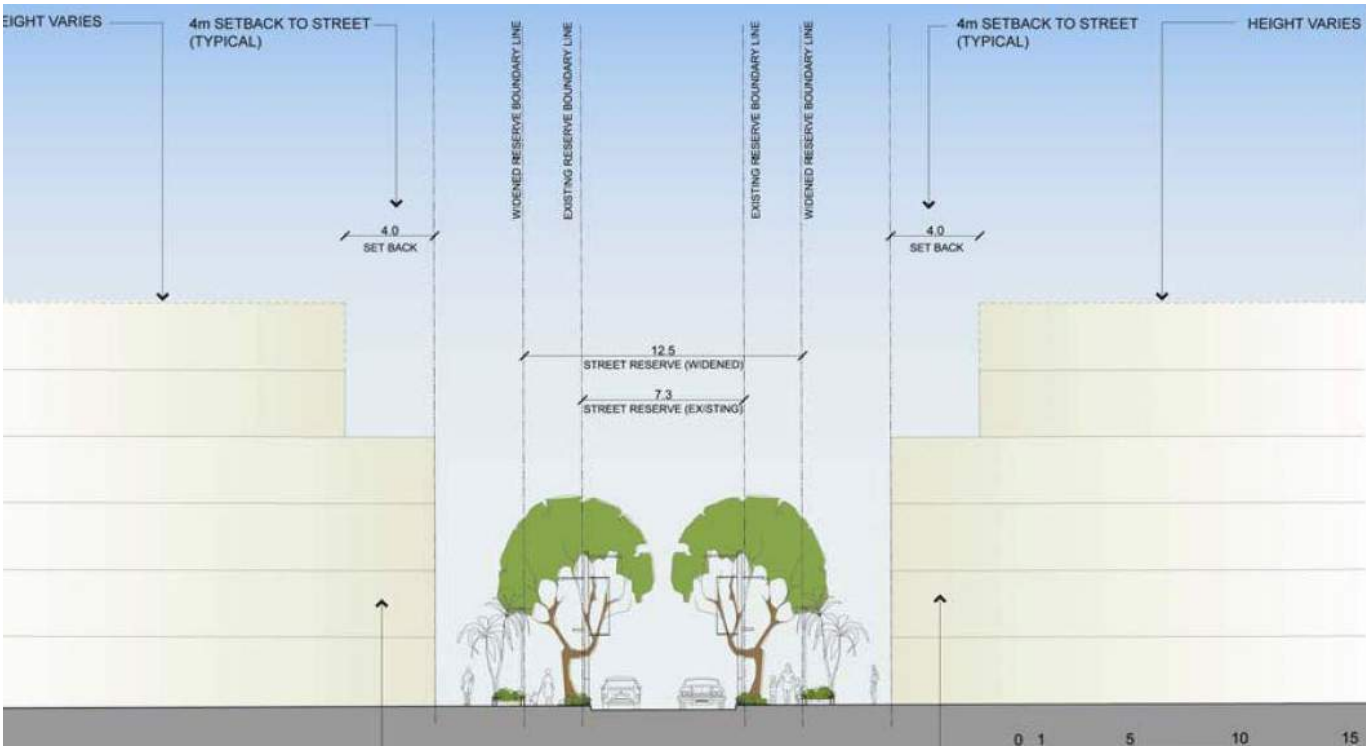
URBAN ANALYSIS  
STREET WALLS



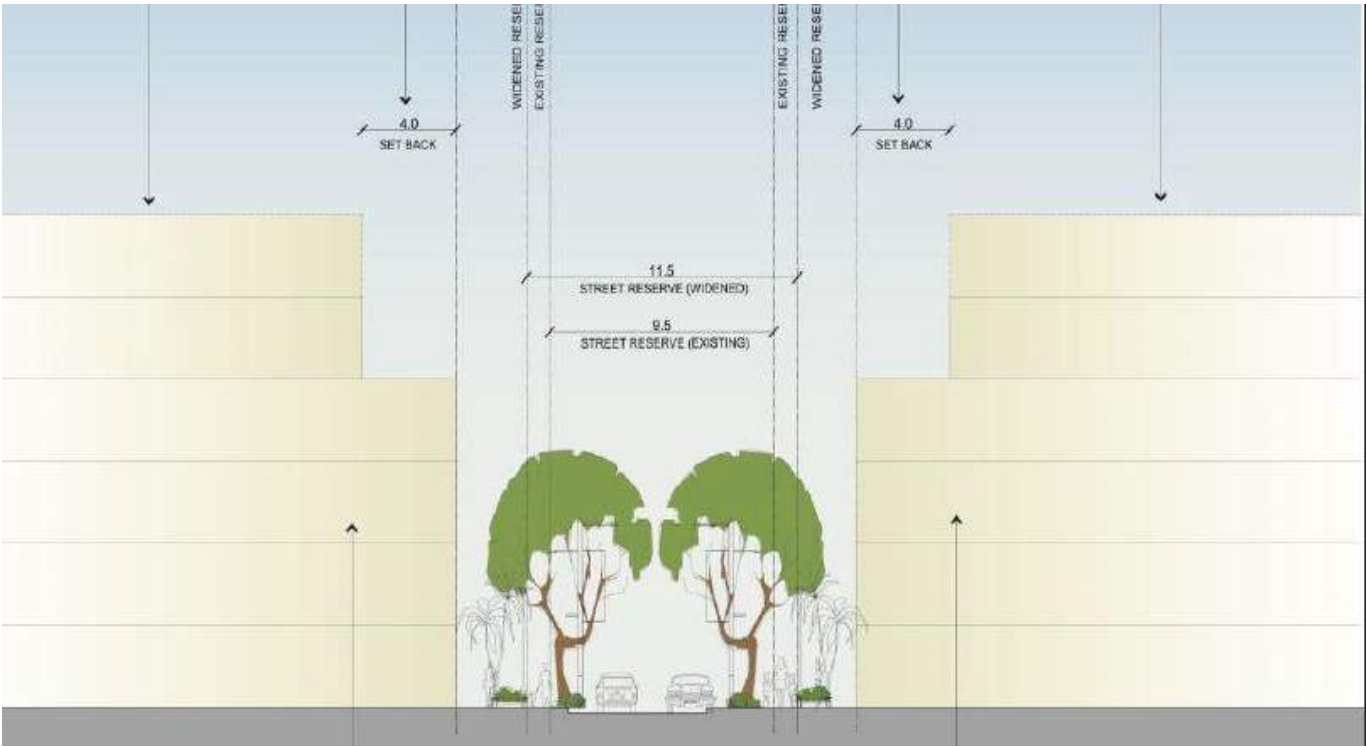
SITE PHOTO - FARADAY LANE



SITE PHOTO - UNDERDALE LANE



EXTRACT - SHEPHERDS BAY, MEADOWBANK DCP  
FARADAY LANE



EXTRACT - SHEPHERDS BAY, MEADOWBANK DCP  
UNDERDALE LANE



## URBAN ANALYSIS STREET WALLS



SITE PHOTO - EXISTING PUBLIC SPACE



SITE PHOTO - CORNER RAILWAY AND CONSTITUTION ROAD



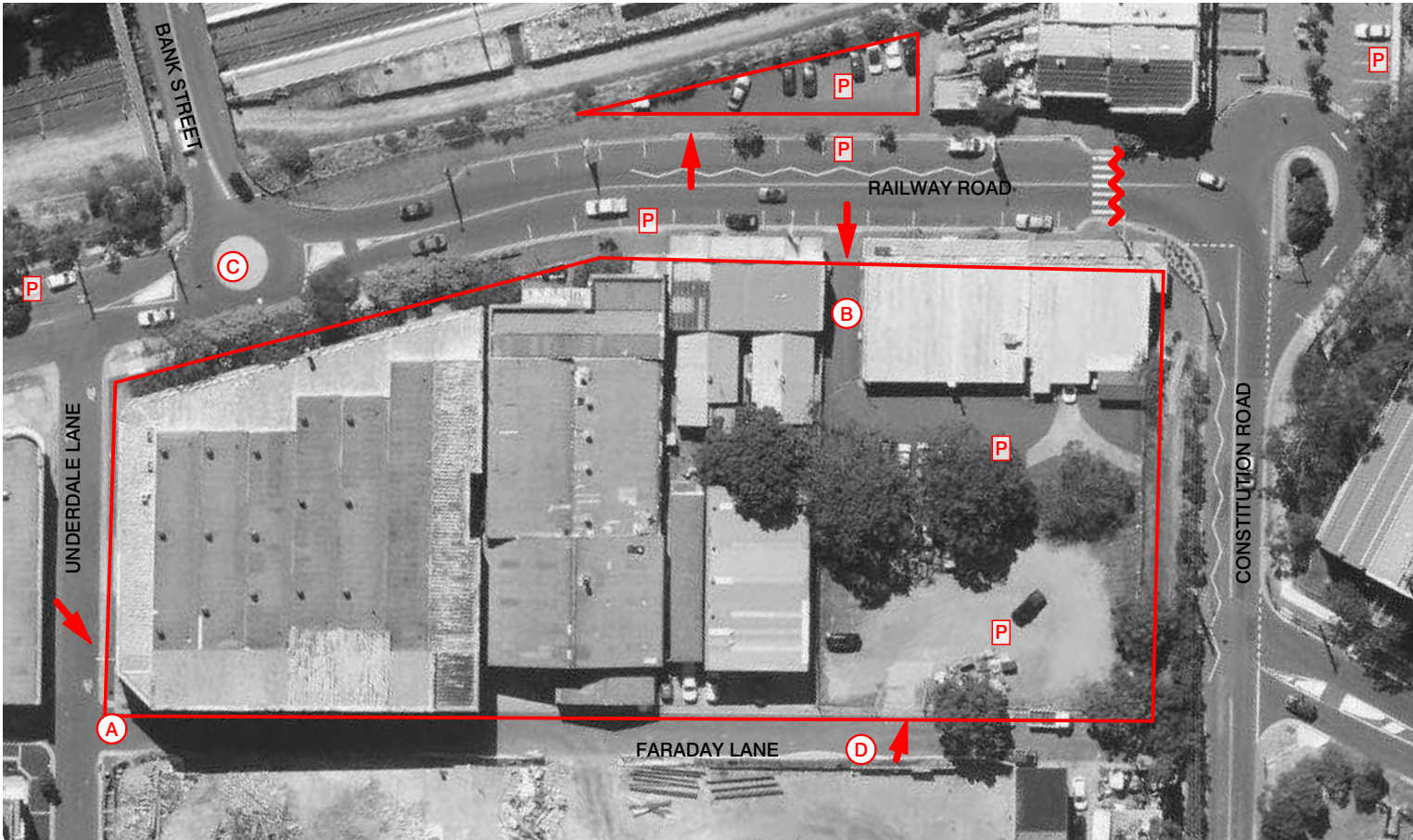
AERIAL PHOTO - POTENTIAL HUB



SITE PHOTO - CONSTITUTION ROAD



URBAN ANALYSIS  
EXISTING TRAFFIC



- P** PARKING
- ⚡** CROSSING
- ➔** ENTRY

The site has two main driveways accessing onsite parking off Railway Road and Faraday Lane. A loading bay is located on the corner of Faraday and Underdale Lanes. An additional driveway entry is located on Railway Road accessing the triangular wedge site.

AERIAL PHOTO



EXISTING LOADING DOCK



RAILWAY ROAD CARPARK ENTRY



RAILWAY ROAD ROUNDABOUT



FARADAY LANE CARPARK ENTRY

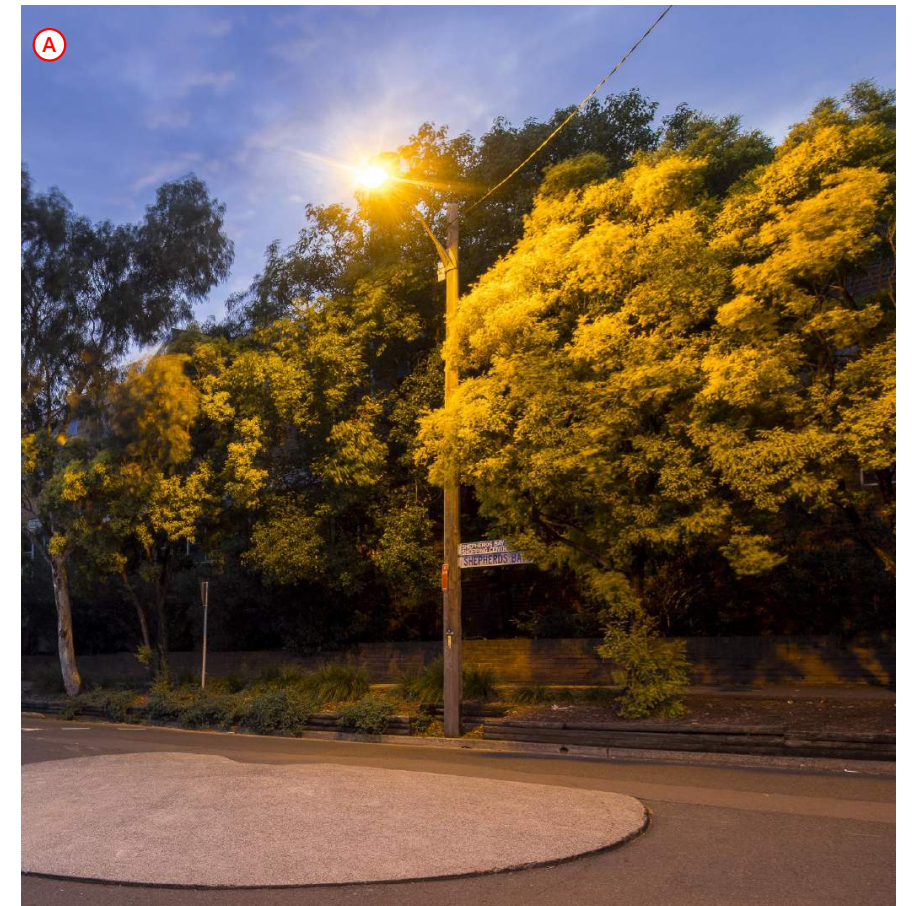


URBAN ANALYSIS  
POTENTIAL ENTRY POINTS



- (A) Access into the site from the roundabout, utilising it to distribute traffic.
- (B) Potential access off Underdale Lane. Consideration of adjacent corners required.
- (C) Access into the site off Faraday Lane. Elevated entry position and introduction of additional traffic onto a quiet residential street.
- (D) Access into the site off Constitution Road through the earth berm, utilising the level difference between Faraday Lane & Constitution Road.

AERIAL PHOTO



EXISTING ROUNDABOUT



UNDERDALE LANE



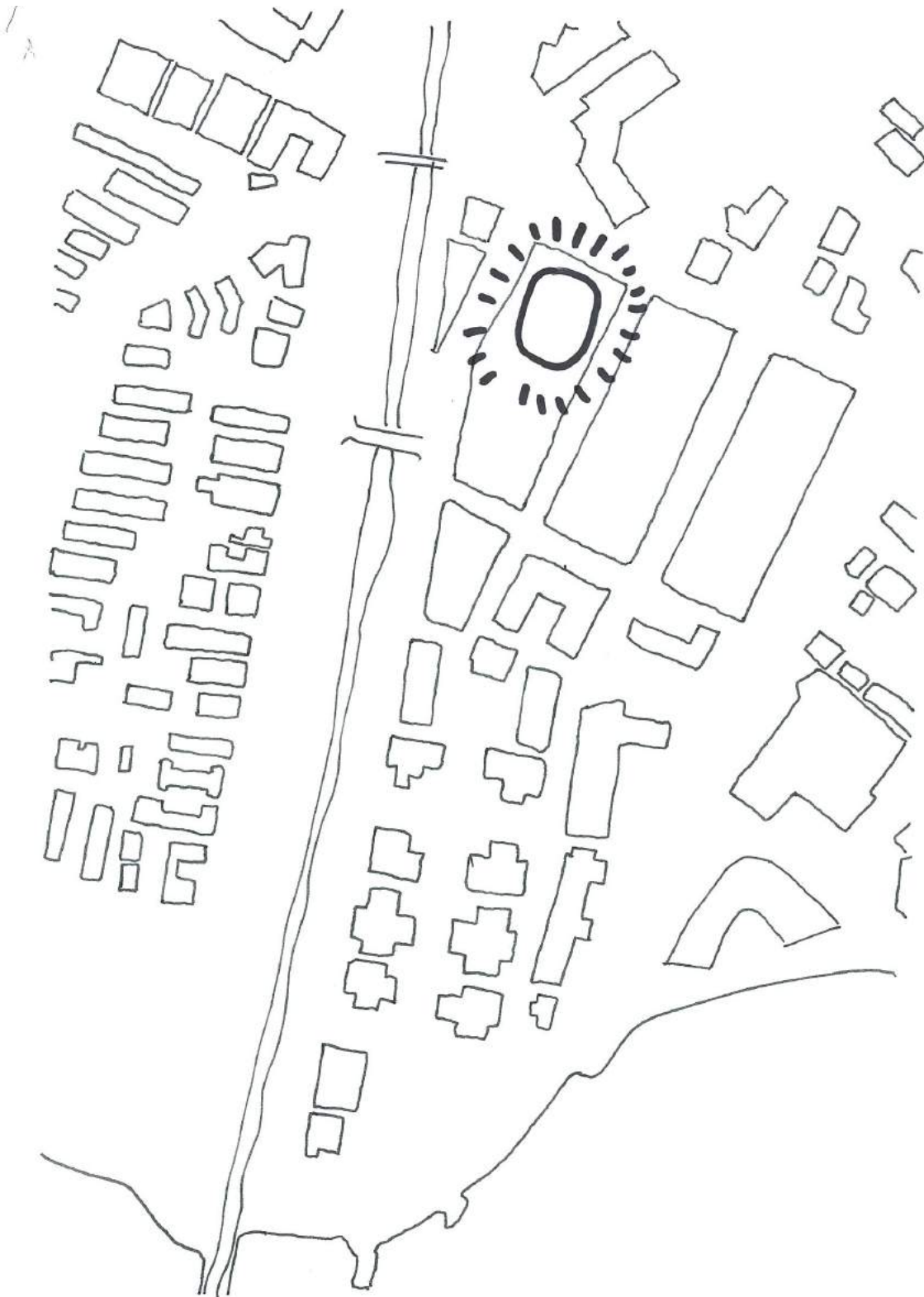
FARADAY LANE



CONSTITUTION ROAD

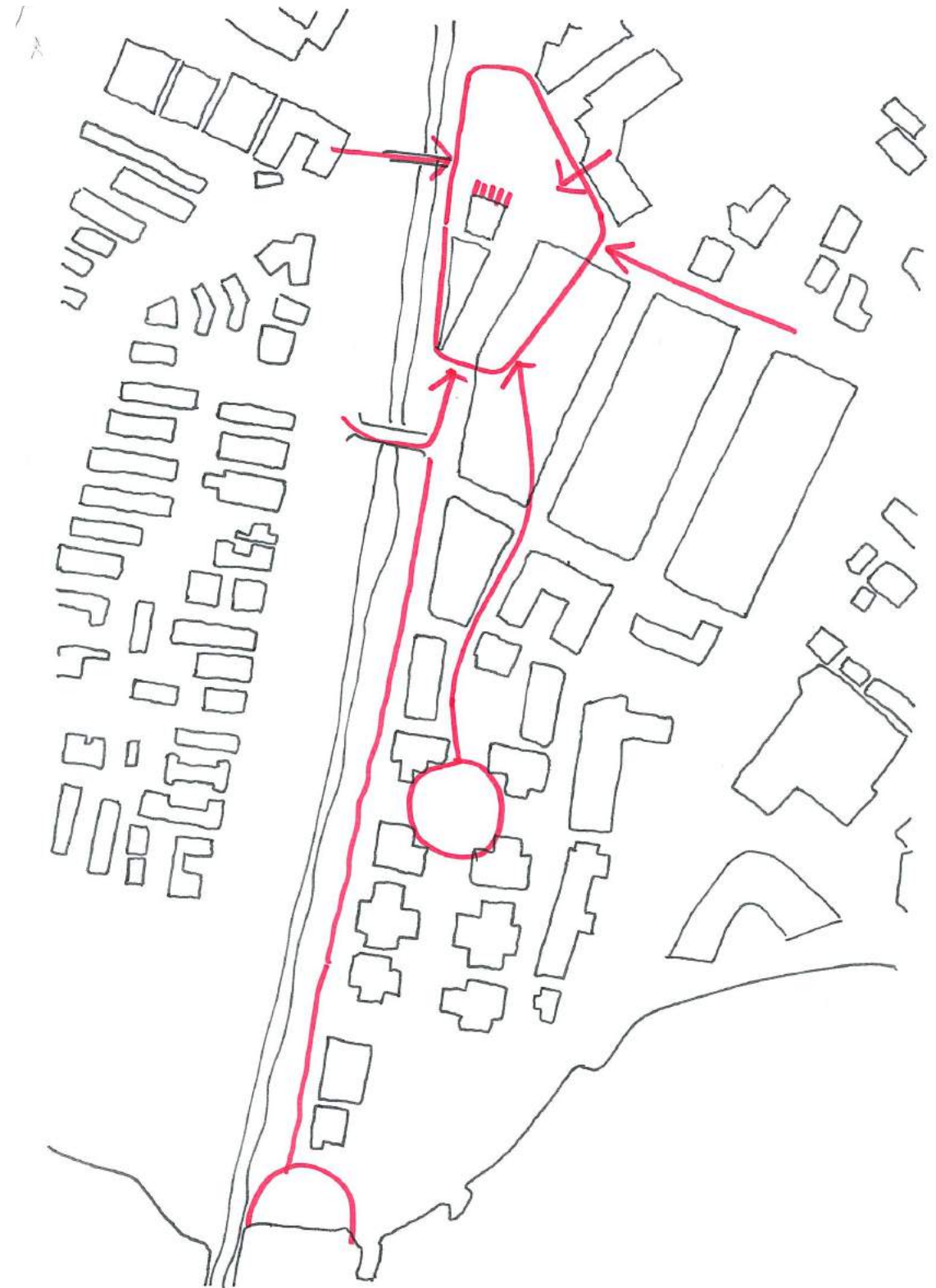


## CONCEPTUAL ANALYSIS A PUBLIC SITE



### LOCAL AND REGIONAL MARKER

Express the importance of a transport node whilst celebrating the topographical high point



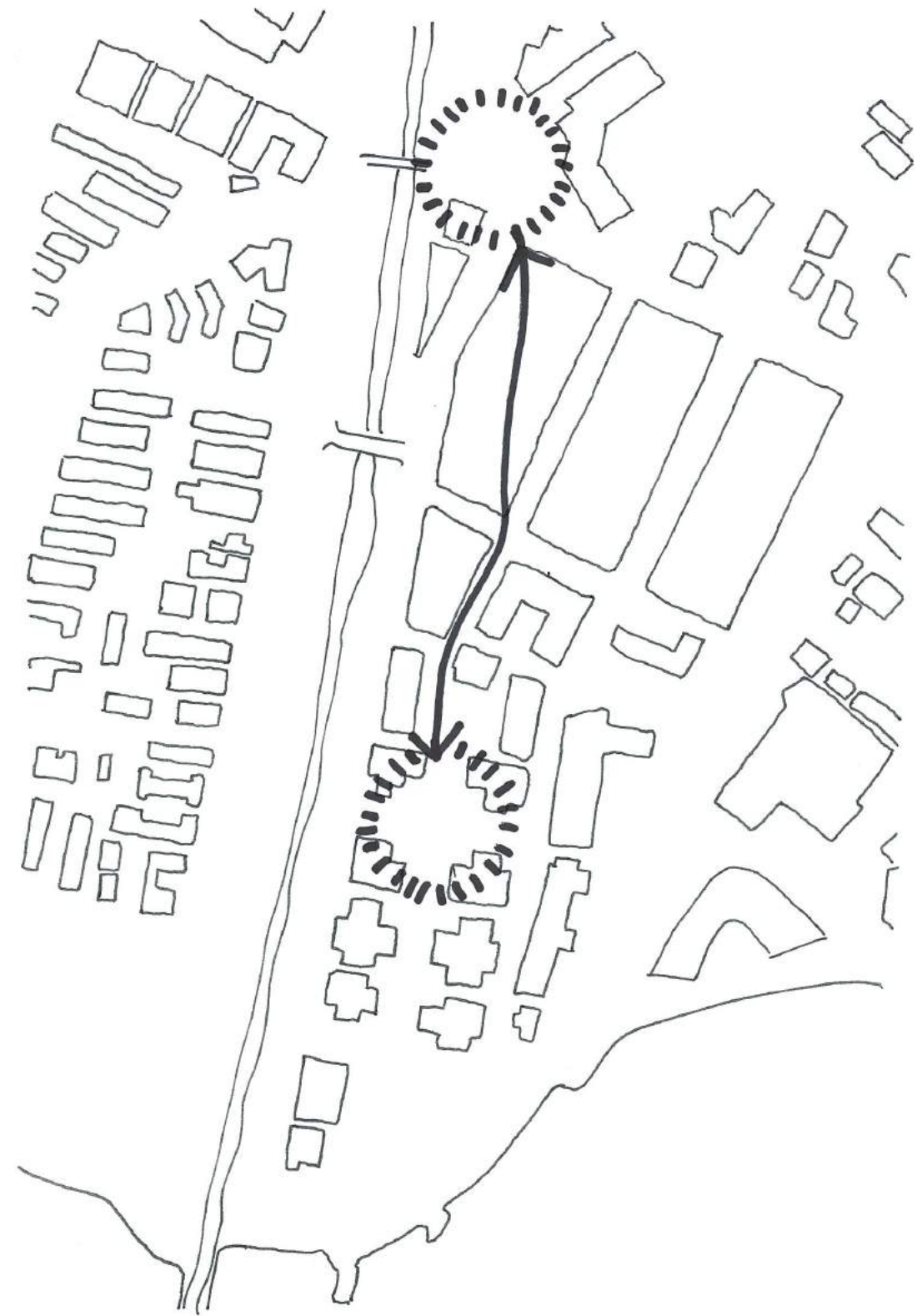
### NEW PUBLIC SPACE OPPORTUNITIES

Creation of positive public space such as a north facing public square linking the heritage buildings, TAFE and train station



**CONCEPTUAL ANALYSIS  
CONCENTRATION POINTS****CONNECTING TRANSPORT NODES**

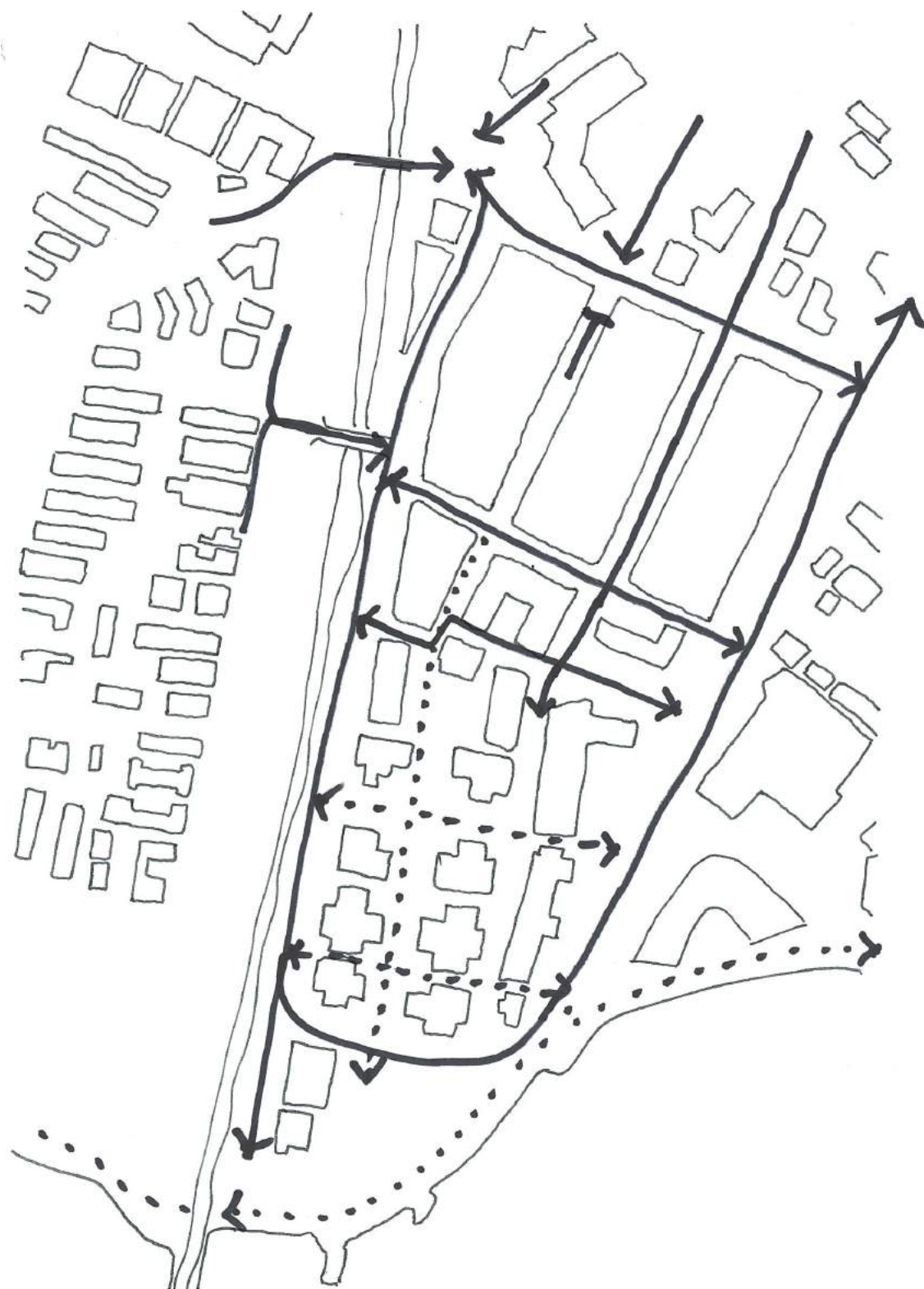
Completing the urban street edge that links the two existing transport nodes

**THROUGH SITE LINK OPPORTUNITIES**

Potential through site link from the train station to the Shepherds Bay precinct.



## CONCEPTUAL ANALYSIS CONNECTIVITY



### EXISTING PERMEABILITY

An existing network of urban links, without hierarchy, within the clusters of buildings.

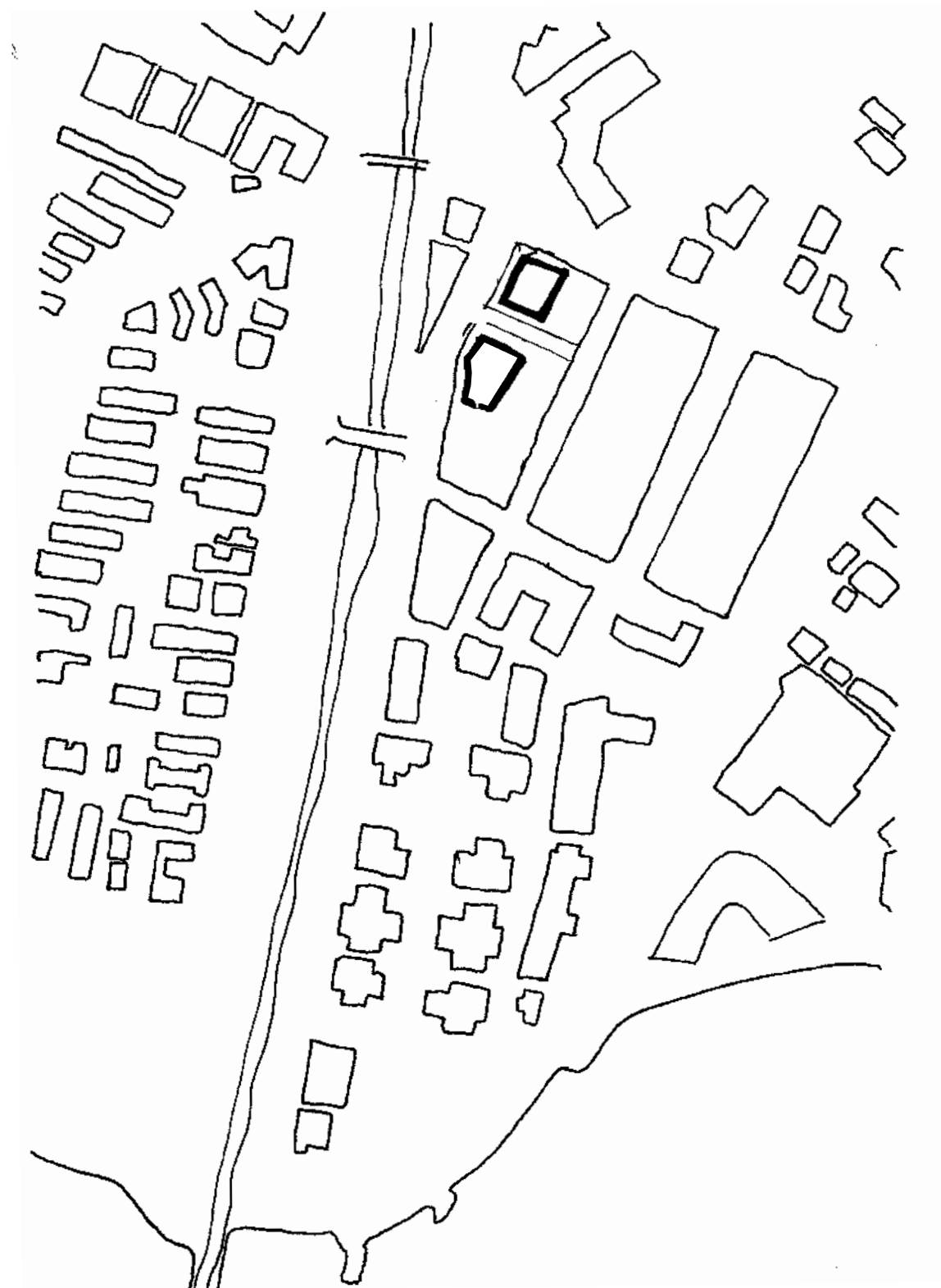


### ALTERNATIVE URBAN LINKAGE

Emphasis on the transport spine as the urban link. Out of the private built up space and into the open street edge activated by retail.

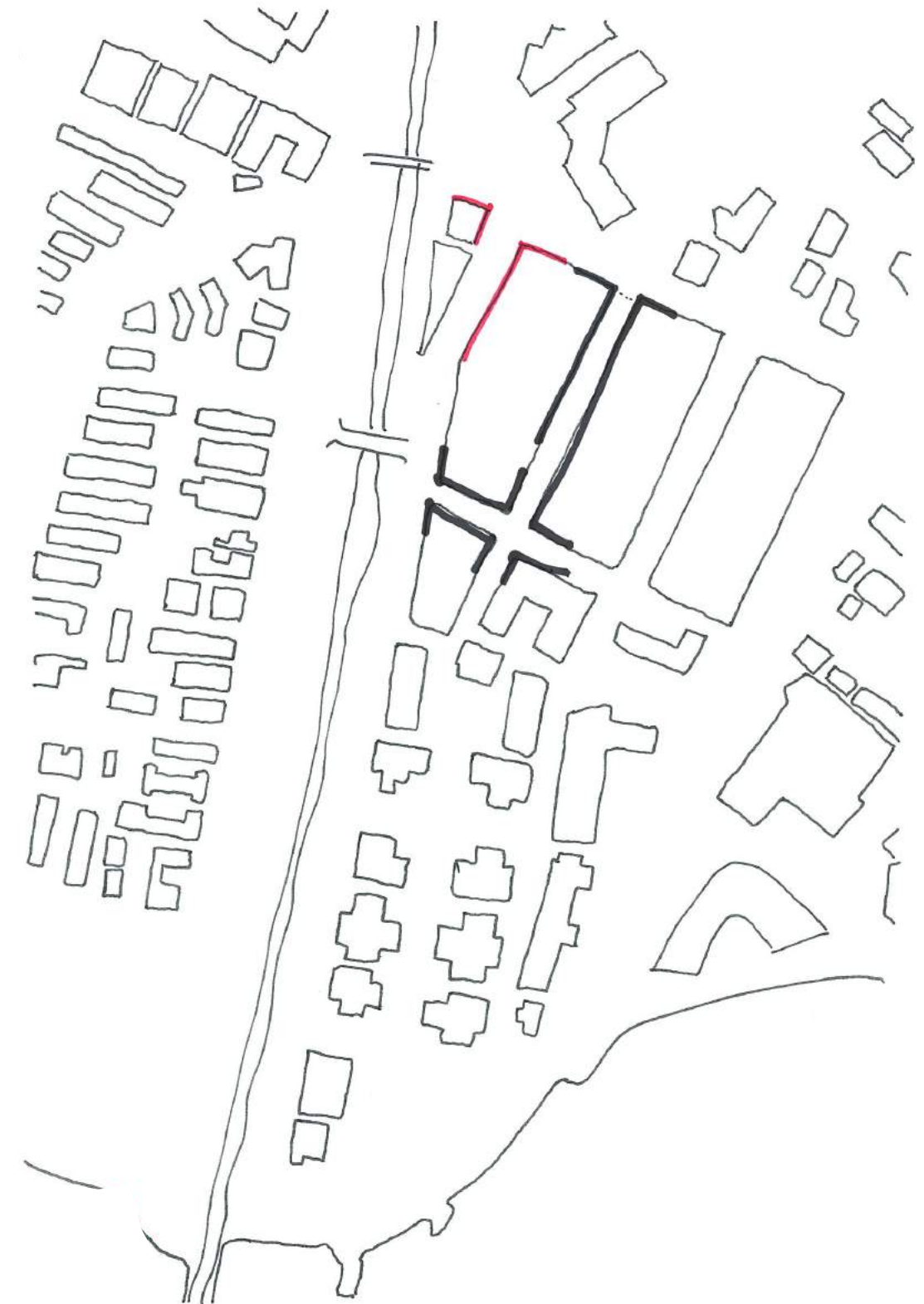


## CONCEPTUAL ANALYSIS URBAN SCALE



### POTENTIAL TOWER ENVELOPES

Setback tower envelopes, located to avoid impacting upon local solar amenity, whilst acting as a local marker

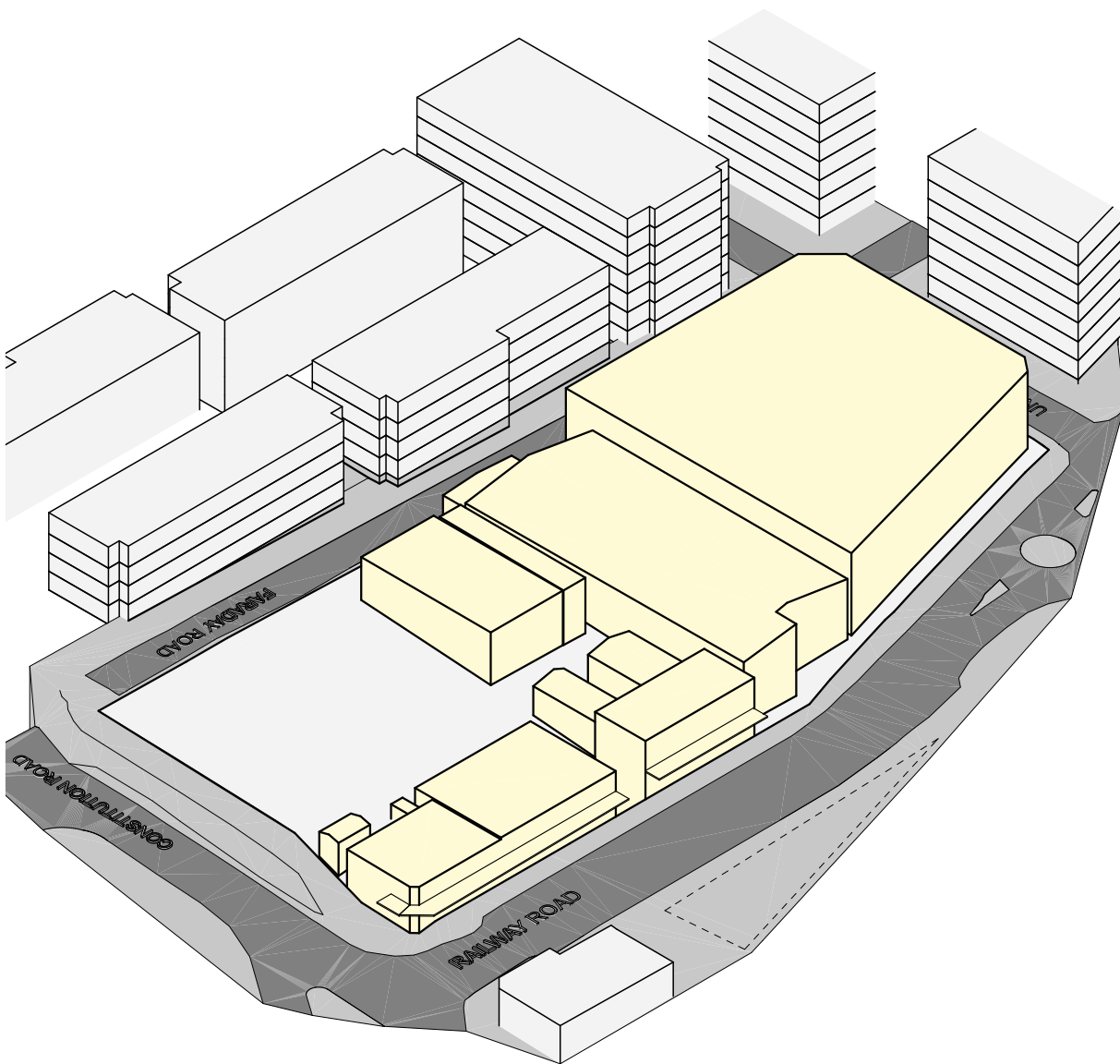


### RESPOND TO EXISTING STREET WALLS

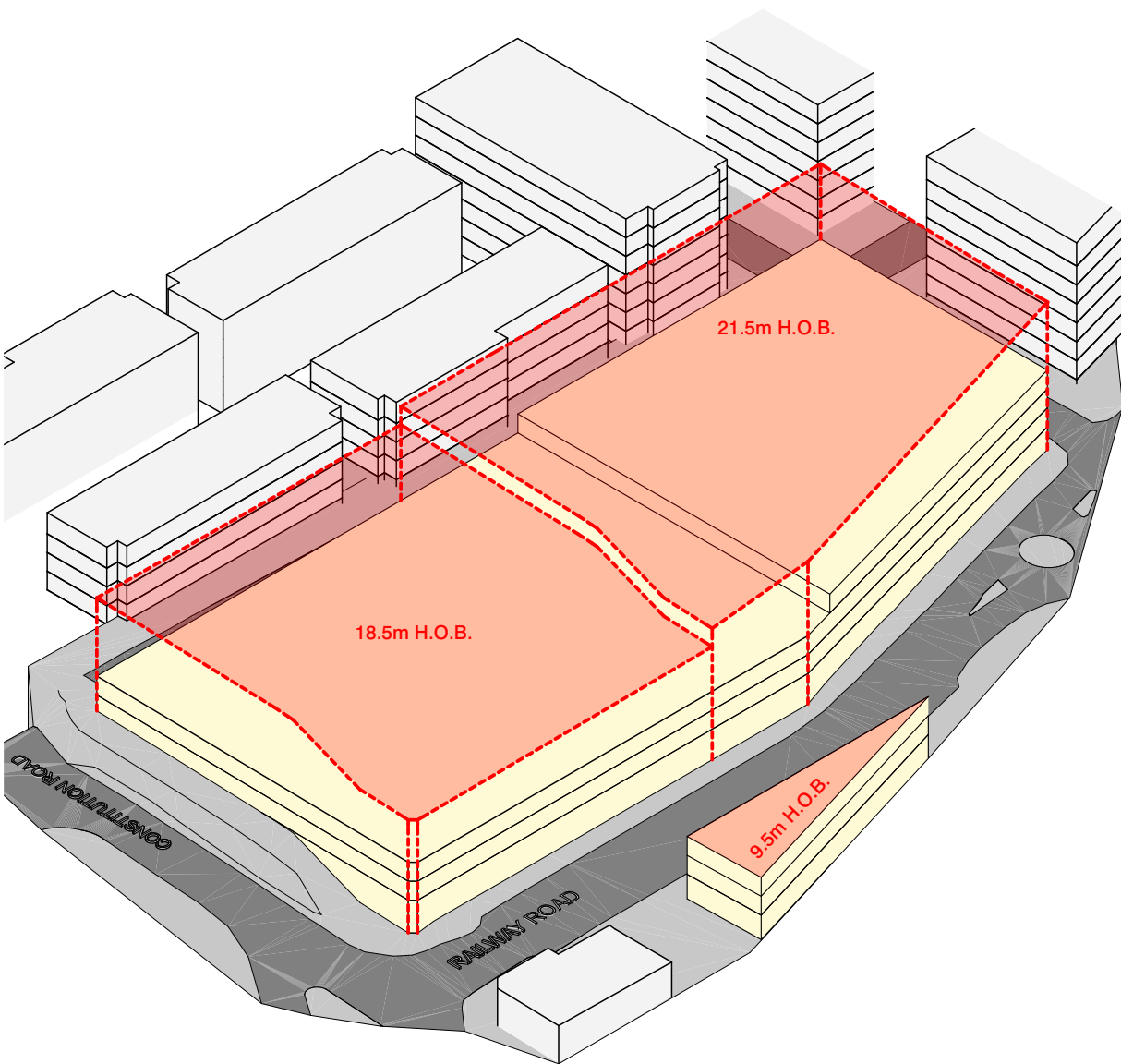
Completing the residential streetscape whilst also creating a highly activated retail and commercial edge in an area of public activity.



EXISTING CONTROLS



**EXISTING SITE**  
Site as is.

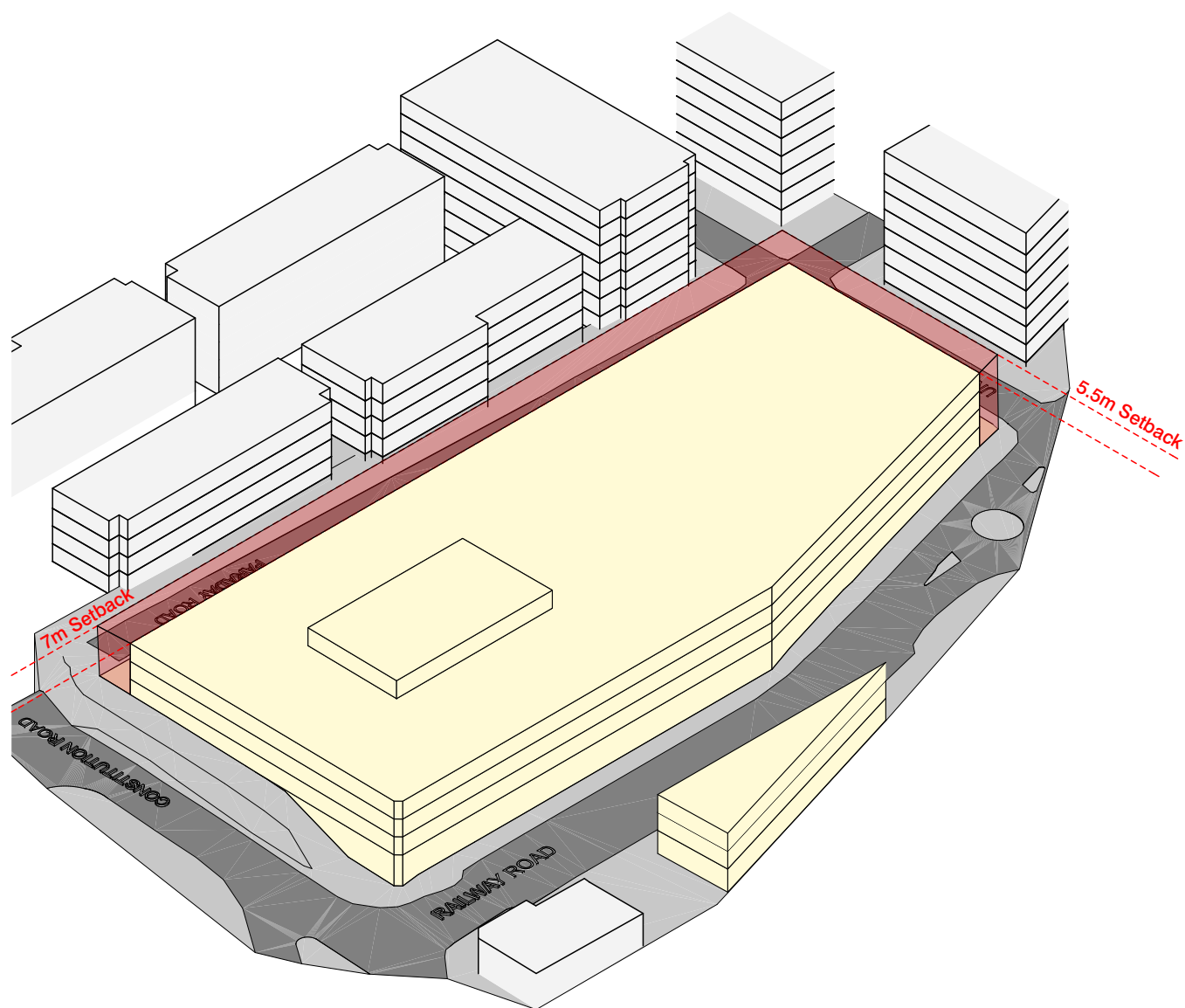


**TO CURRENT LEP**  
Site FSR - 2.7:1  
Site Area - 7,778 m<sup>2</sup>  
Total Allowable GFA - 21,000 m<sup>2</sup>  
Maximum Height - 21.5m or 18.5m

Site FSR - Not Determined  
Site Area - 346 m<sup>2</sup>  
Maximum Height - 9.5m

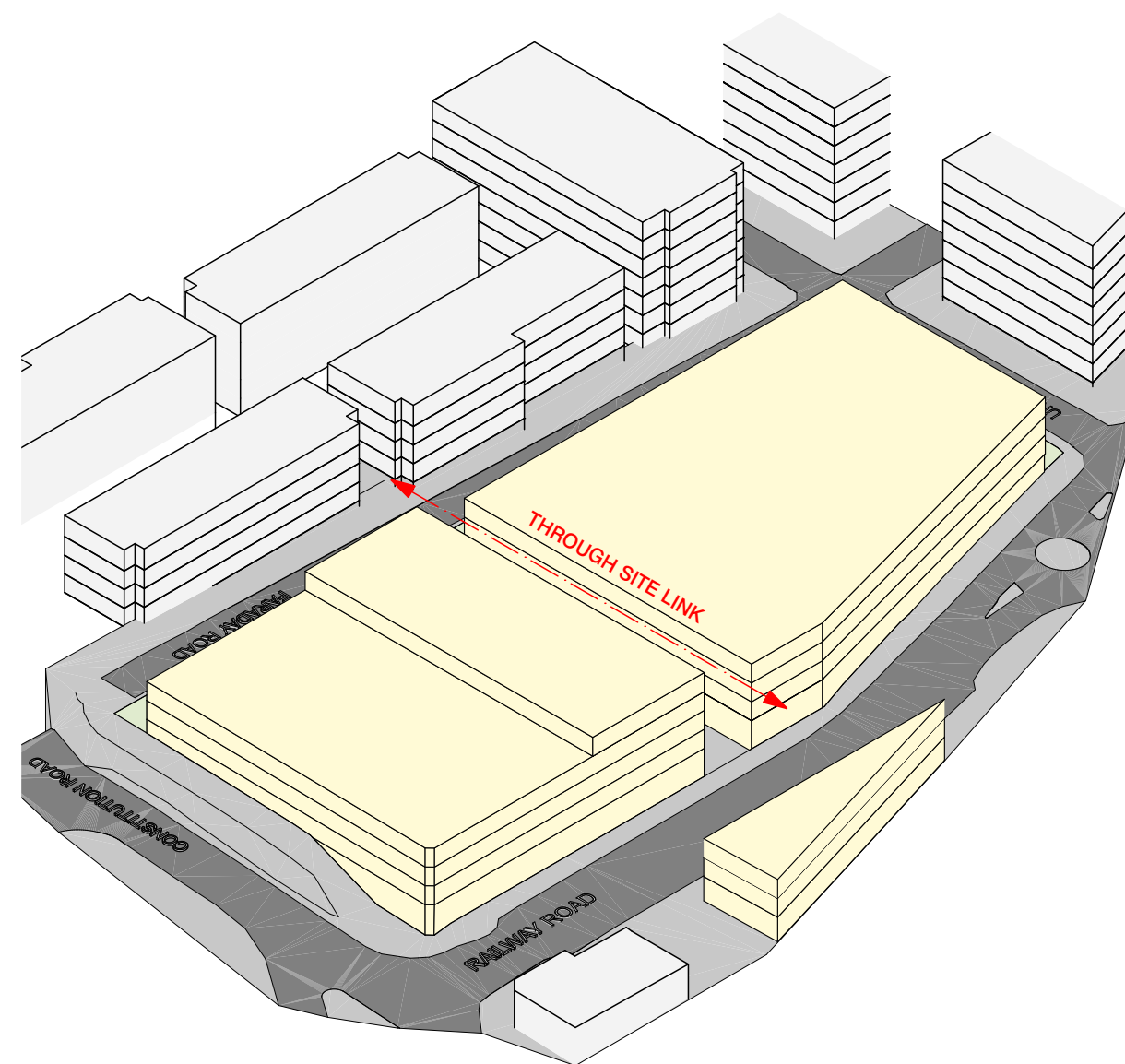


## EXISTING CONTROLS



### DCP SETBACKS

Faraday Lane - 7m from kerb edge  
 Underdale Lane - 5.5m from kerb edge  
 Railway Road - 0m from boundary  
 Constitution Road - 0m from boundary

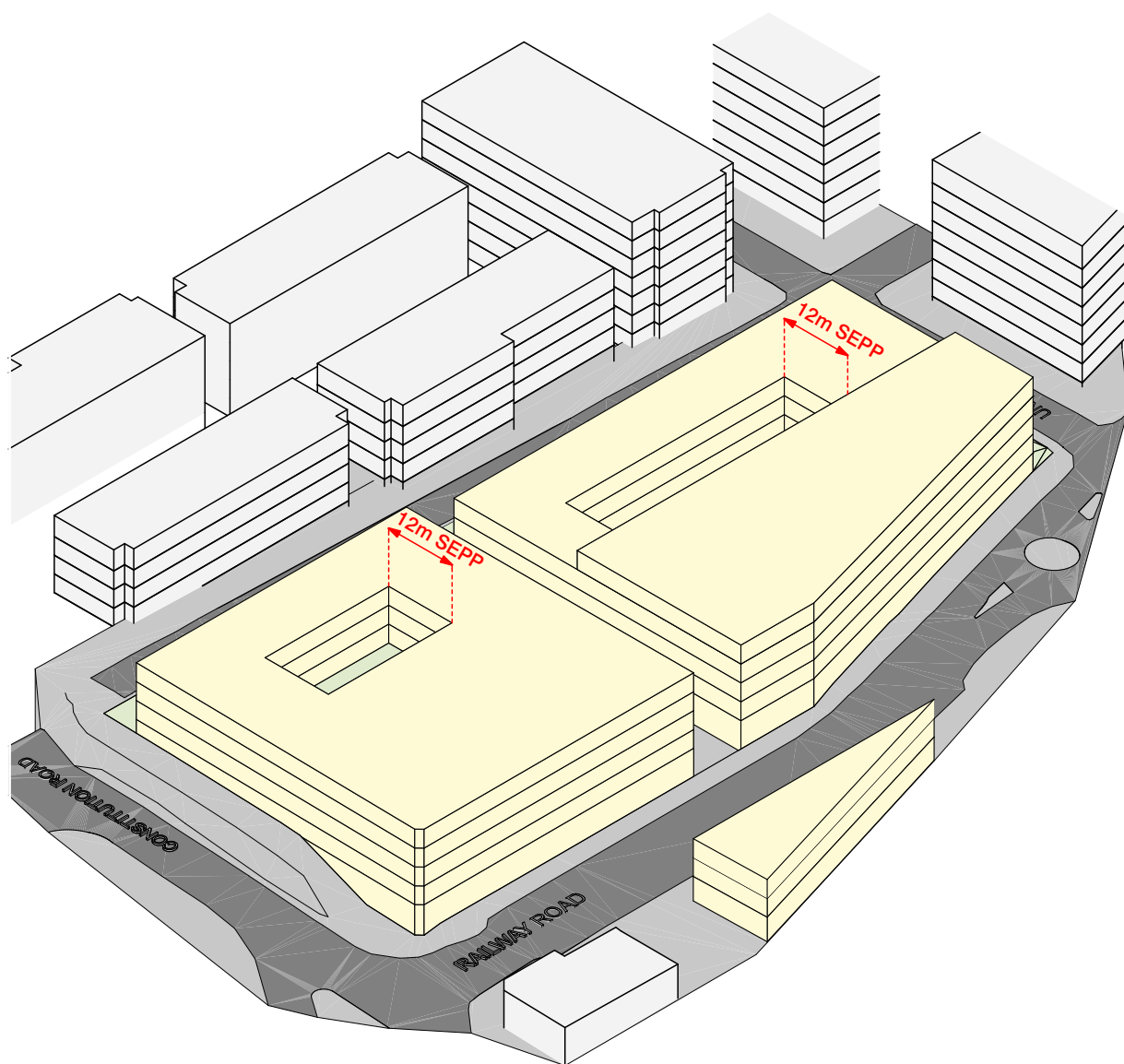


### THROUGH SITE LINK

A through site link is introduced to create permeability through the site and add additional frontage.

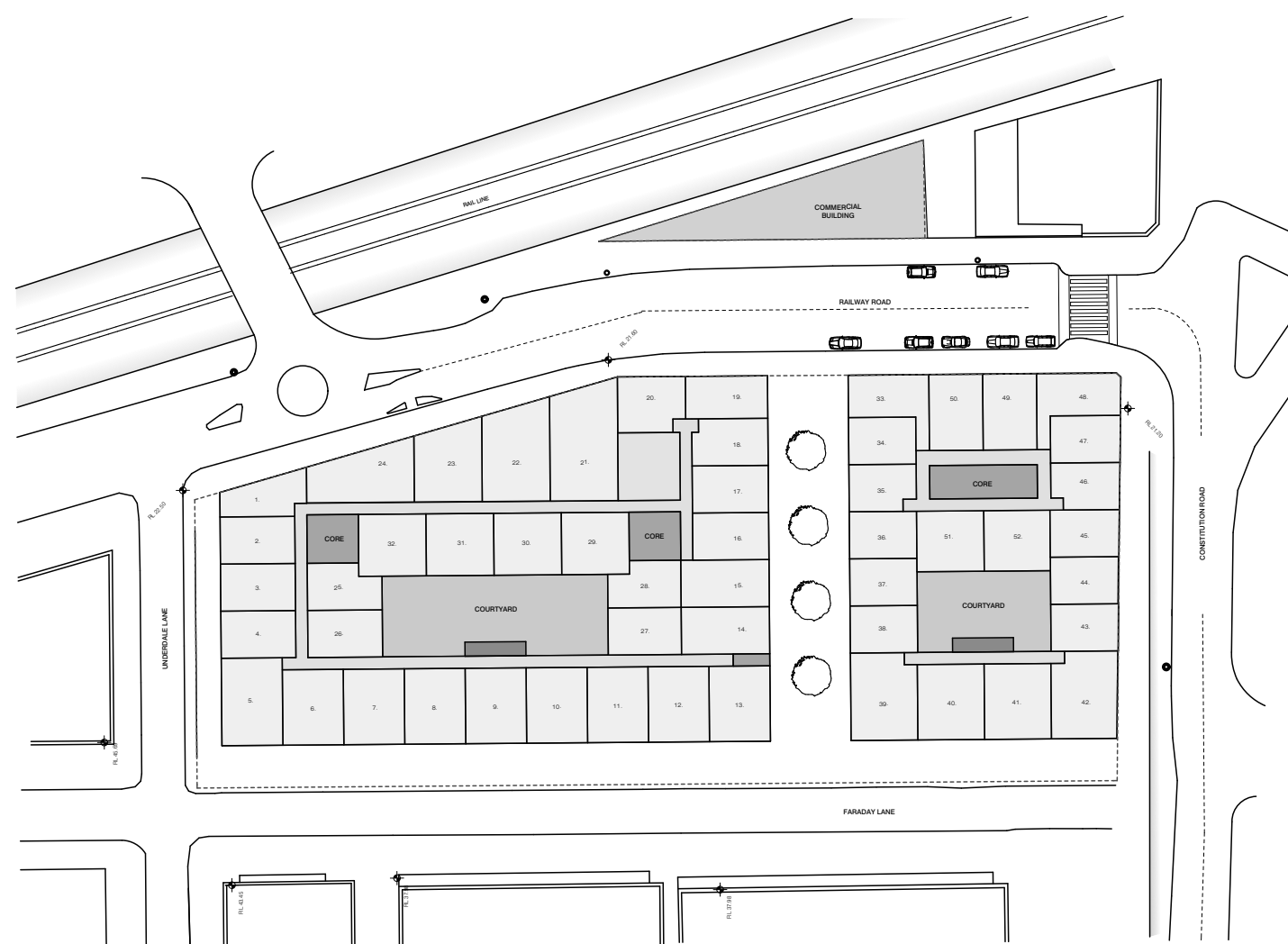


## EXISTING CONTROLS



### LEP / DCP / SEPP 65 COMPLIANT

Two courtyard spaces have been extracted from the volume to create aspect within the depth of the mass. The resulting envelope would comply with SEPP 65 setback requirements



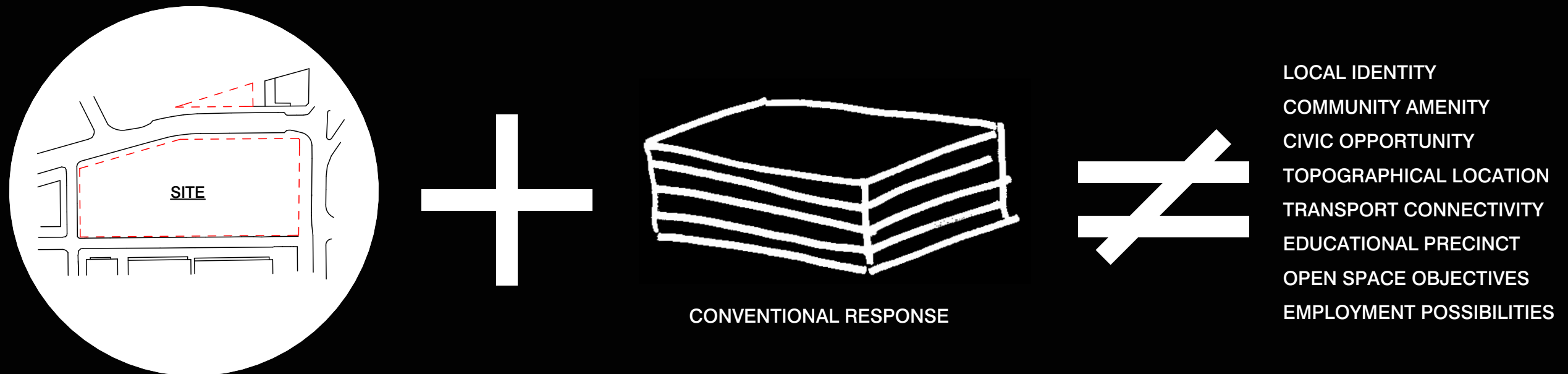
### INDICATIVE PLANNING

The plan above indicates that a typical level would yield approximately 50 - 60 apartments per level. A potential compliant design could schedule the following:

Ground Floor Retail - 2,000 sqm  
Apartments - 190 to 220  
Car Spaces - 290 approx.



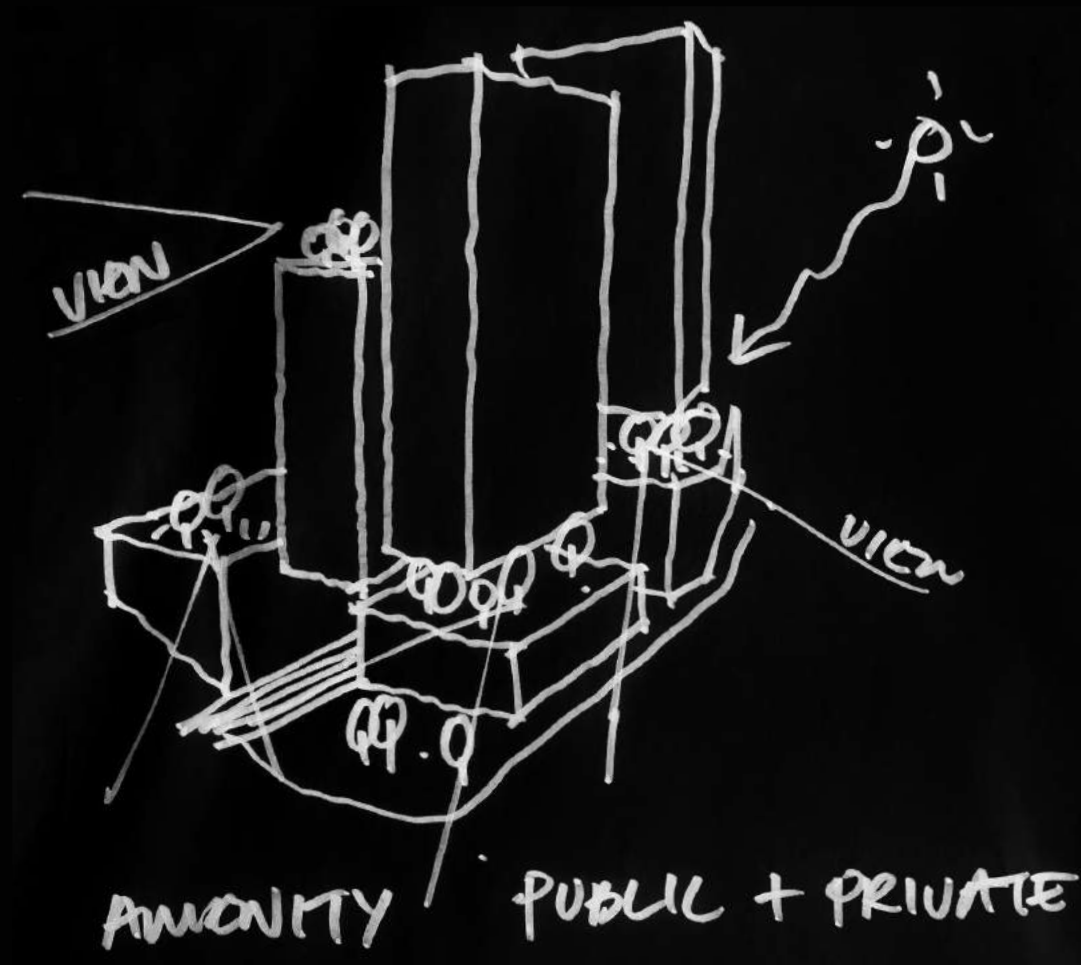
RE-IMAGINING THE SITE



THIS IS A SITE WHERE A CONVENTIONAL RESPONSE WOULD FAIL TO EMBRACE THE LOCATIONS POTENTIAL .....

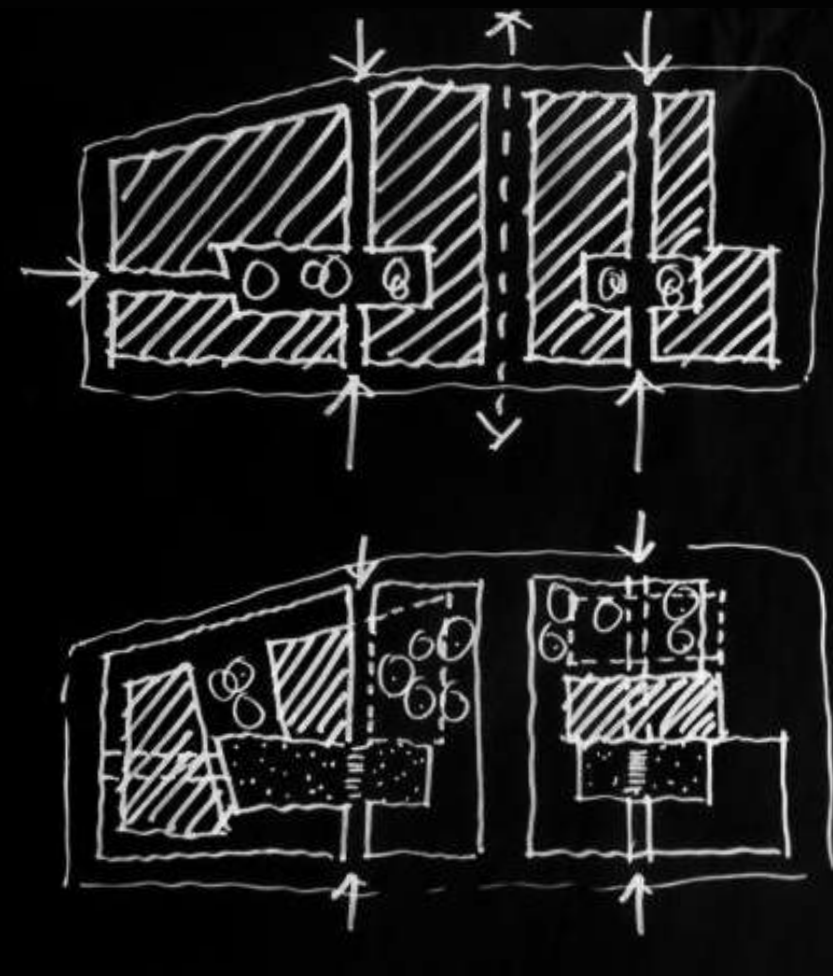


## URBAN RESPONSE



### A GIVING RESPONSE

Carving away building mass and layering generous public and private open space throughout the levels of the proposed form.



### PERMEABLE FORM

An "alive" mass with people, nature and activity flowing out of the site, engaging with its context.

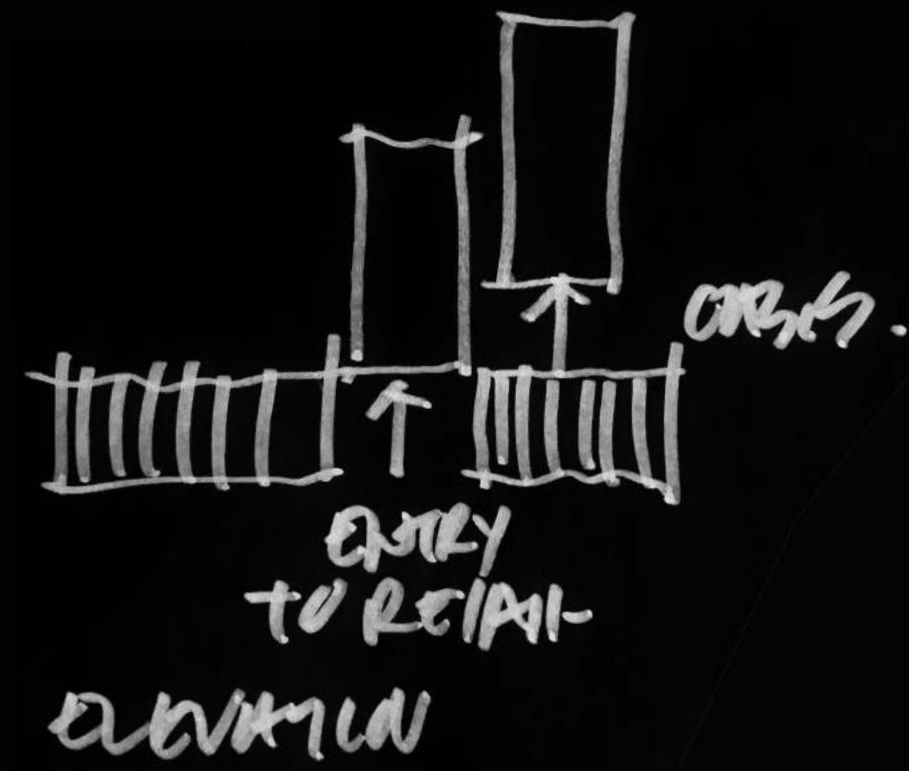


### EQUAL EXPERIENCE

Entrances and visual connections through the built form to landscaped pockets within.

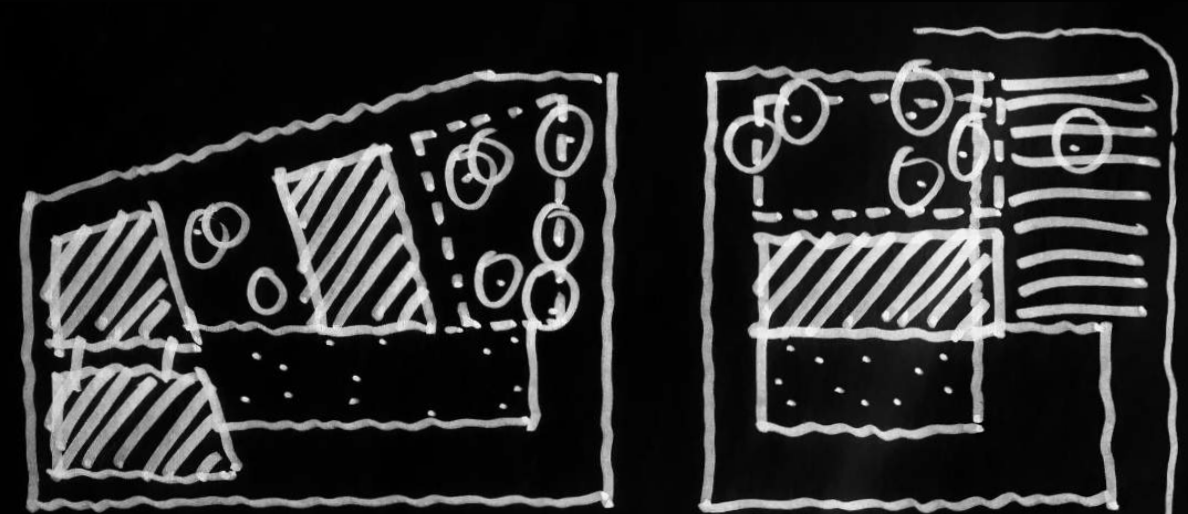


## URBAN RESPONSE



### SLIPPING THE FORMS

Dividing the mass into two and slipping the forms. This defines entries and creates open space. It also reduces the bulk and scale.

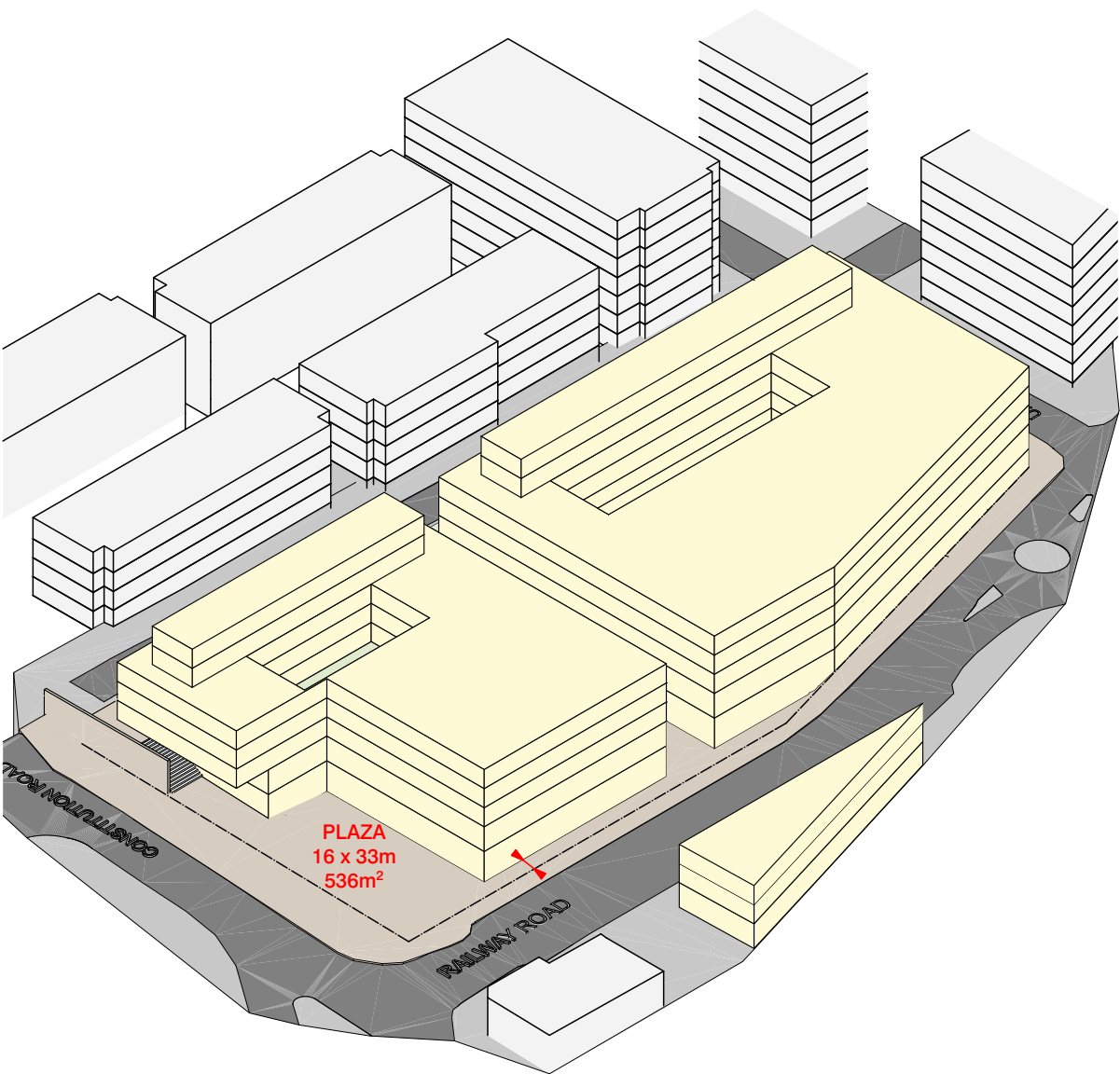


### RAISING THE MEADOWS

Creating tiers within the mass for landscaping and open residential recreation space.

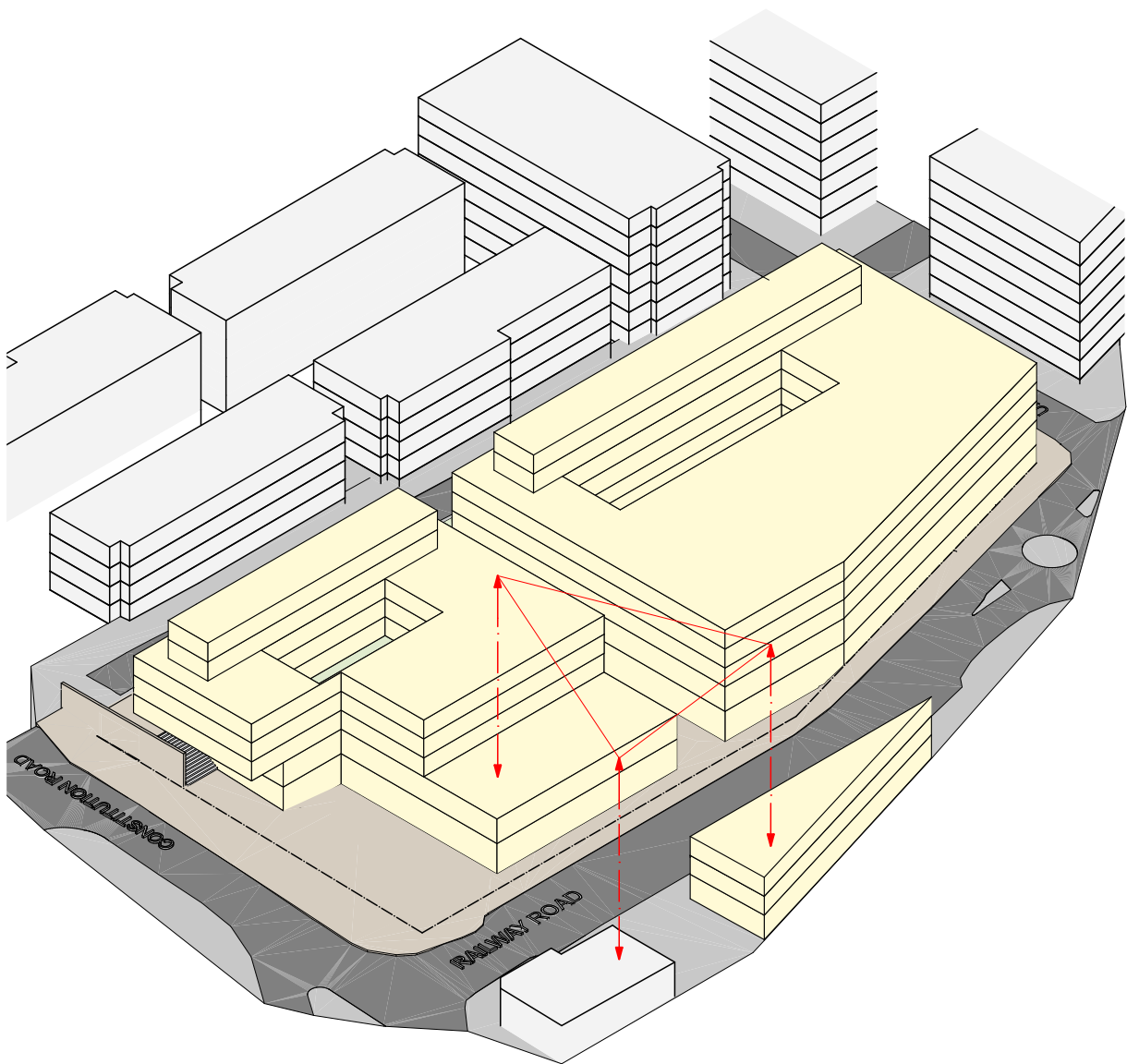


# CONCEPTUAL DIAGRAMS



## PUBLIC SPACE

A north facing public plaza is introduced. It is proposed the earth berm is removed, opening up this space to the TAFE and adjacent rail plaza.

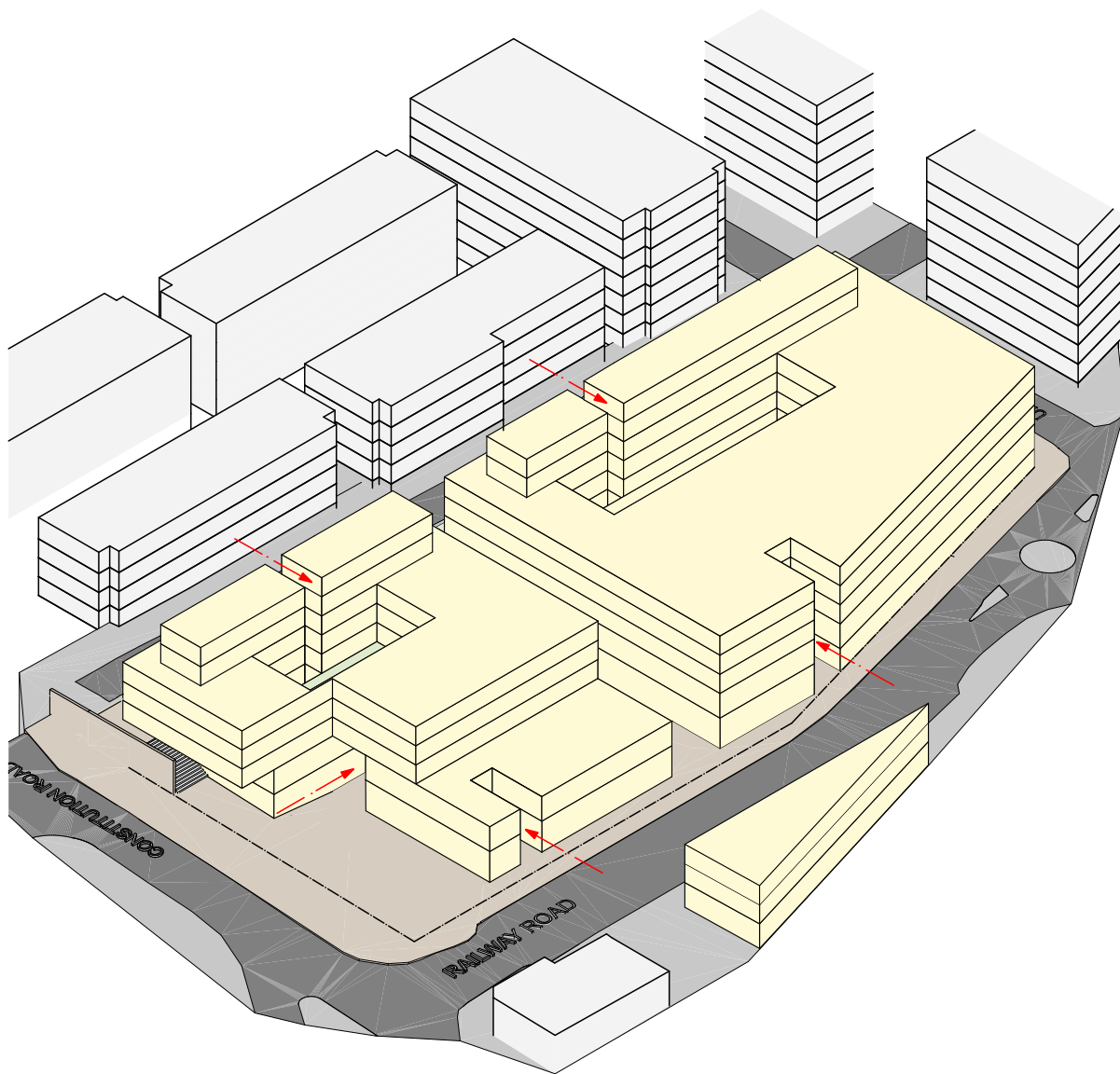


## CONTEXTUAL RESPONSE

Adapting the built form in response to the heritage neighbours scale.

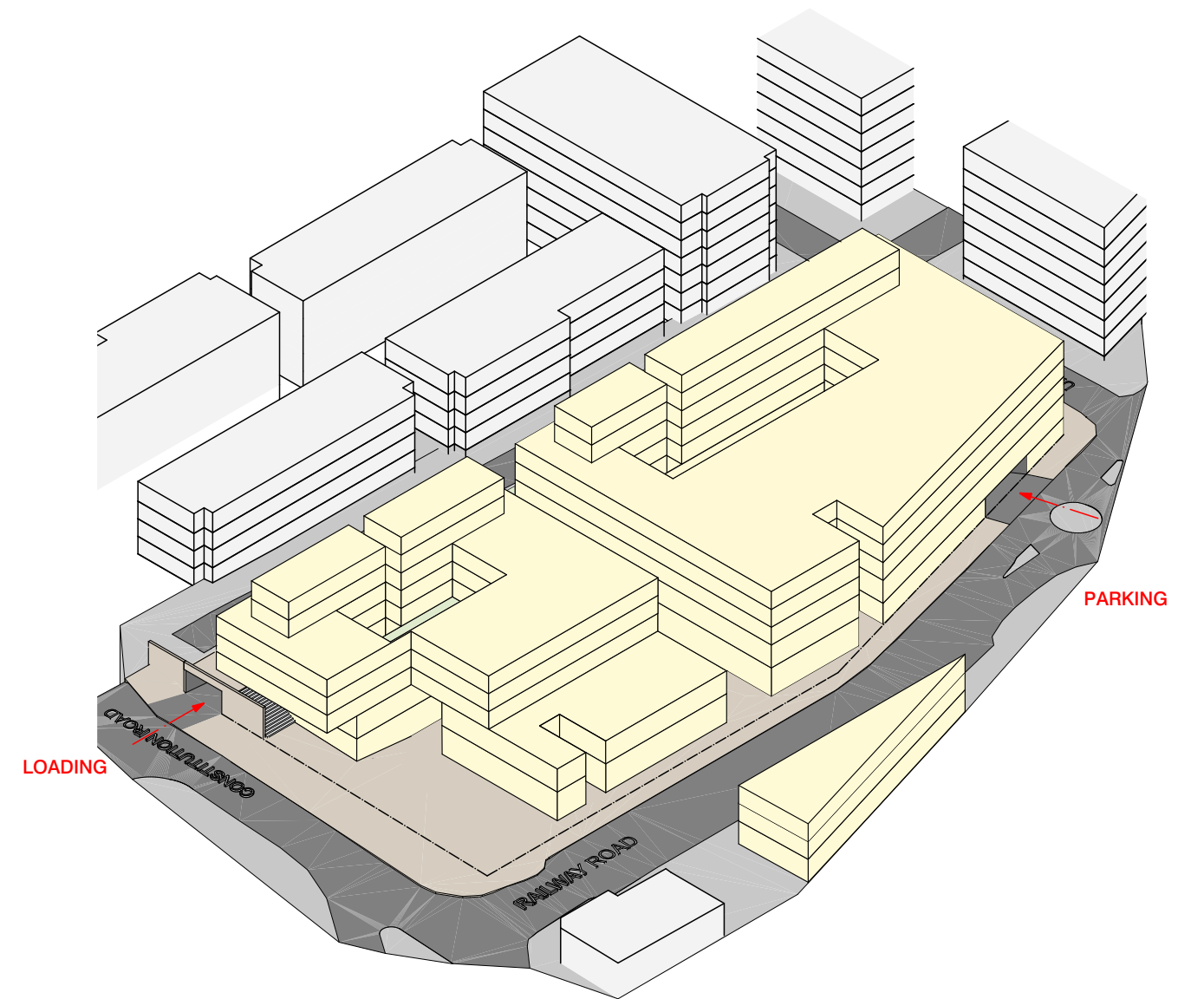


## CONCEPTUAL DIAGRAMS



### PERMEABILITY

Articulating the built form, breaking up the mass with a series of entrances and visual connections between volumes.

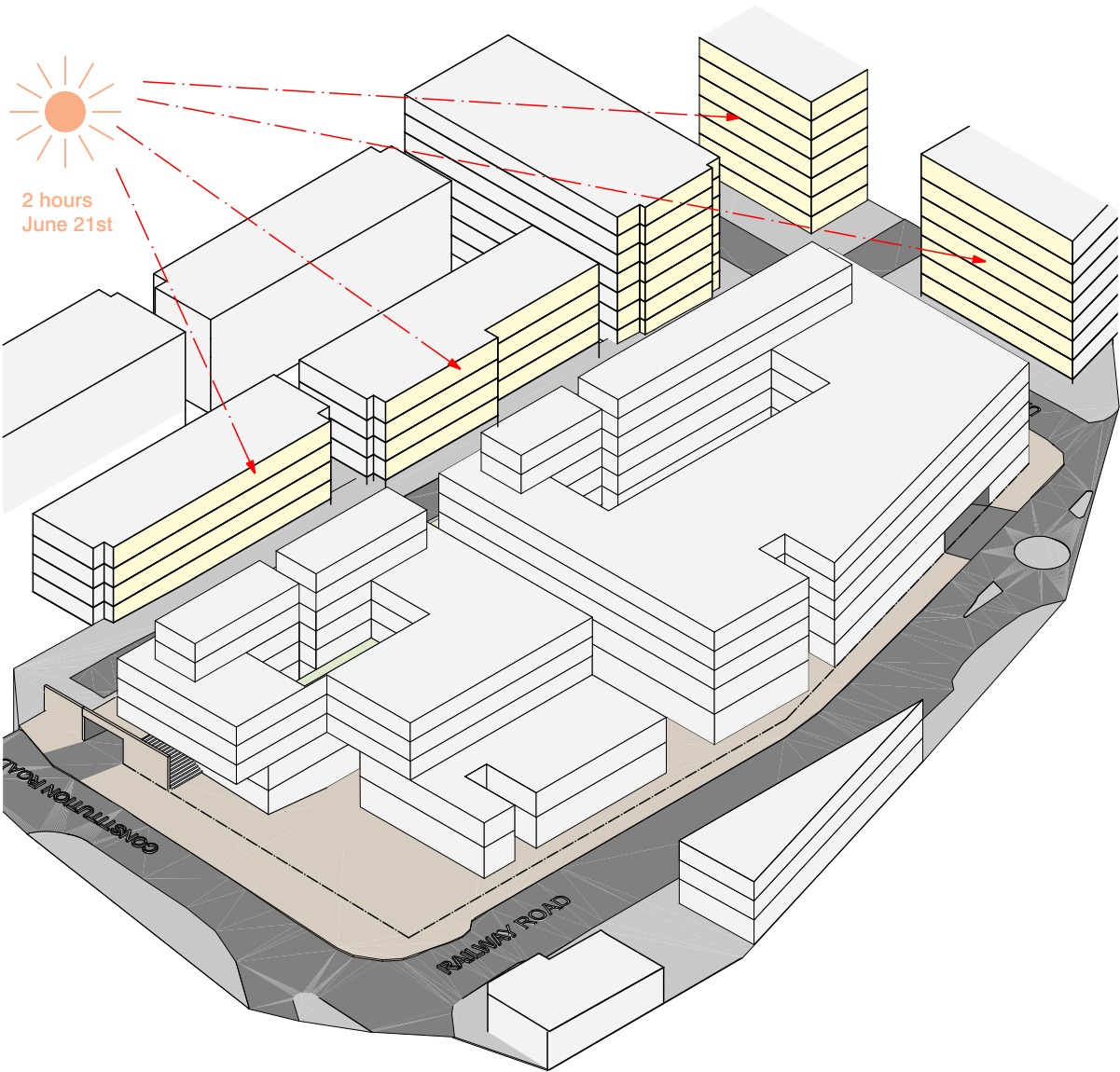


### TRAFFIC AND LOADING

Providing adequate parking and loading access to the ground plane and the basement levels below.

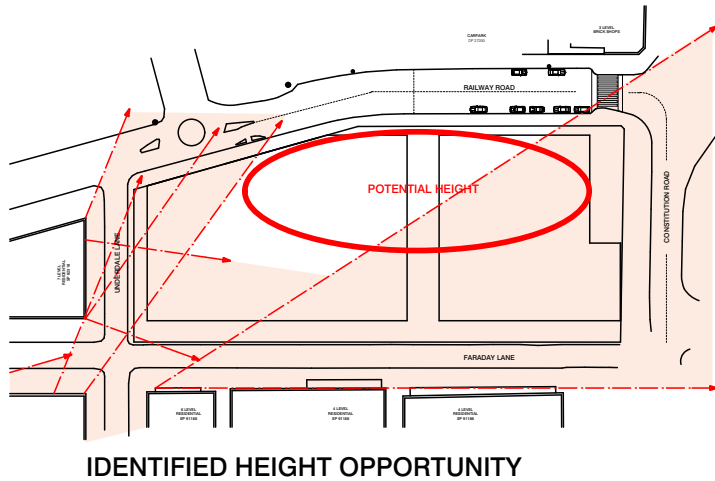
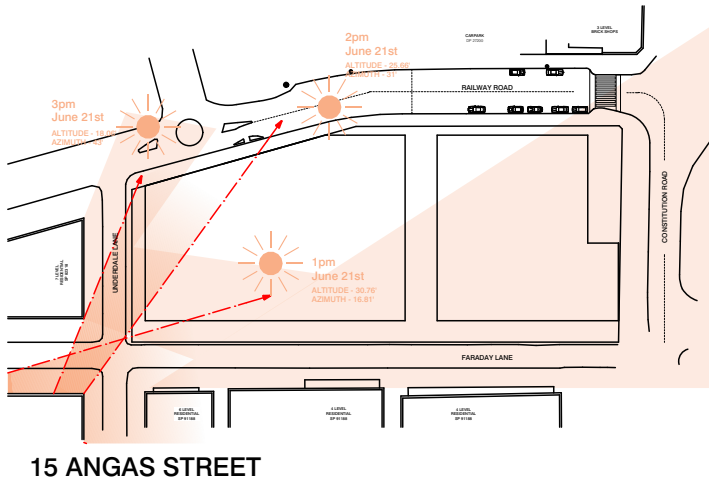
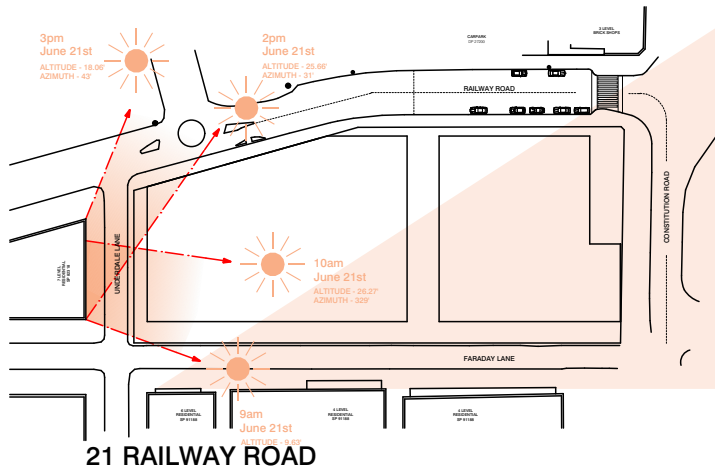
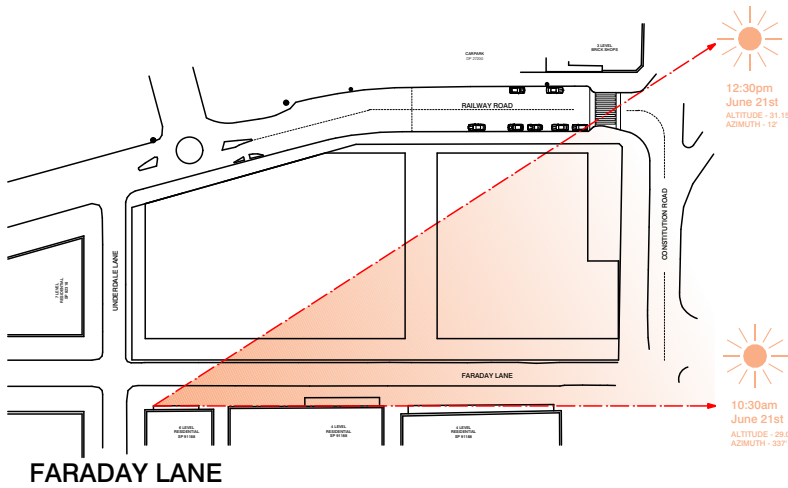


# CONCEPTUAL DIAGRAMS



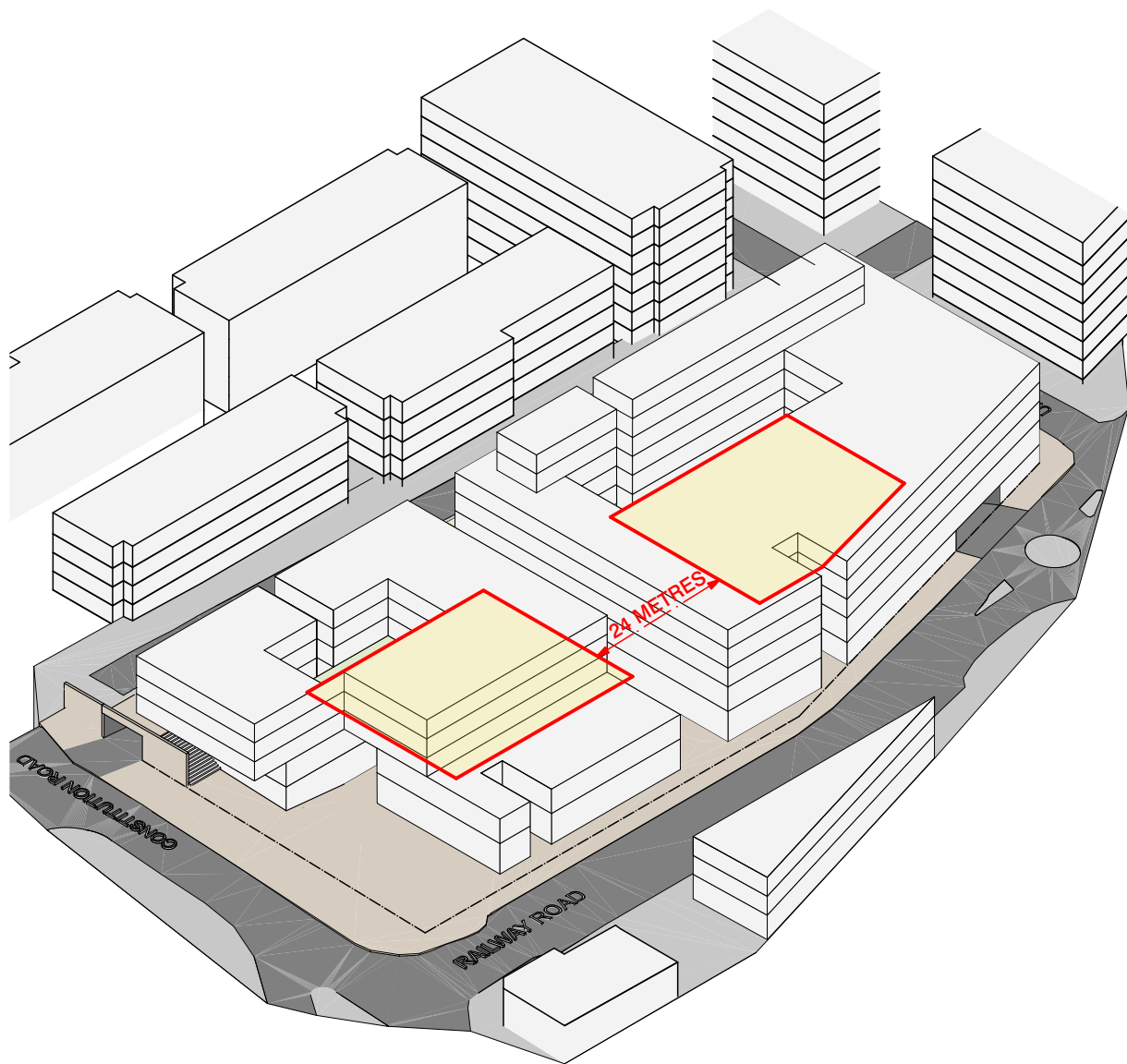
## SOLAR ACCESS

Preserving a minimum of 2 hour solar access to the neighbouring buildings on winter solstice.



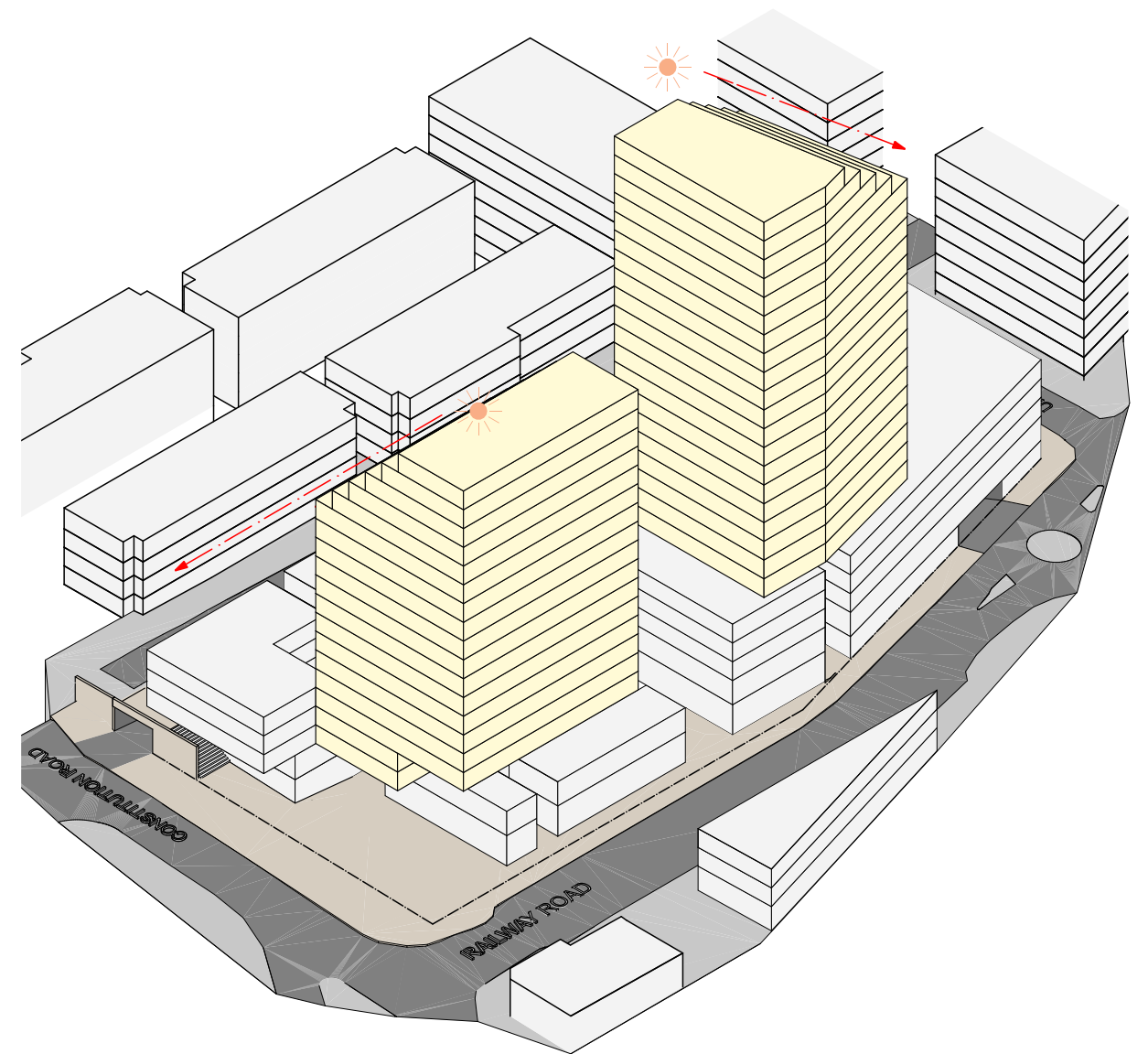


## CONCEPTUAL DIAGRAMS



### IDENTIFIED TOWER FOOTPRINTS

Area selected through solar analysis, located in the North Western corner of the site. A 24m separation between the footprints is in place to satisfy SEPP 65 building separations.

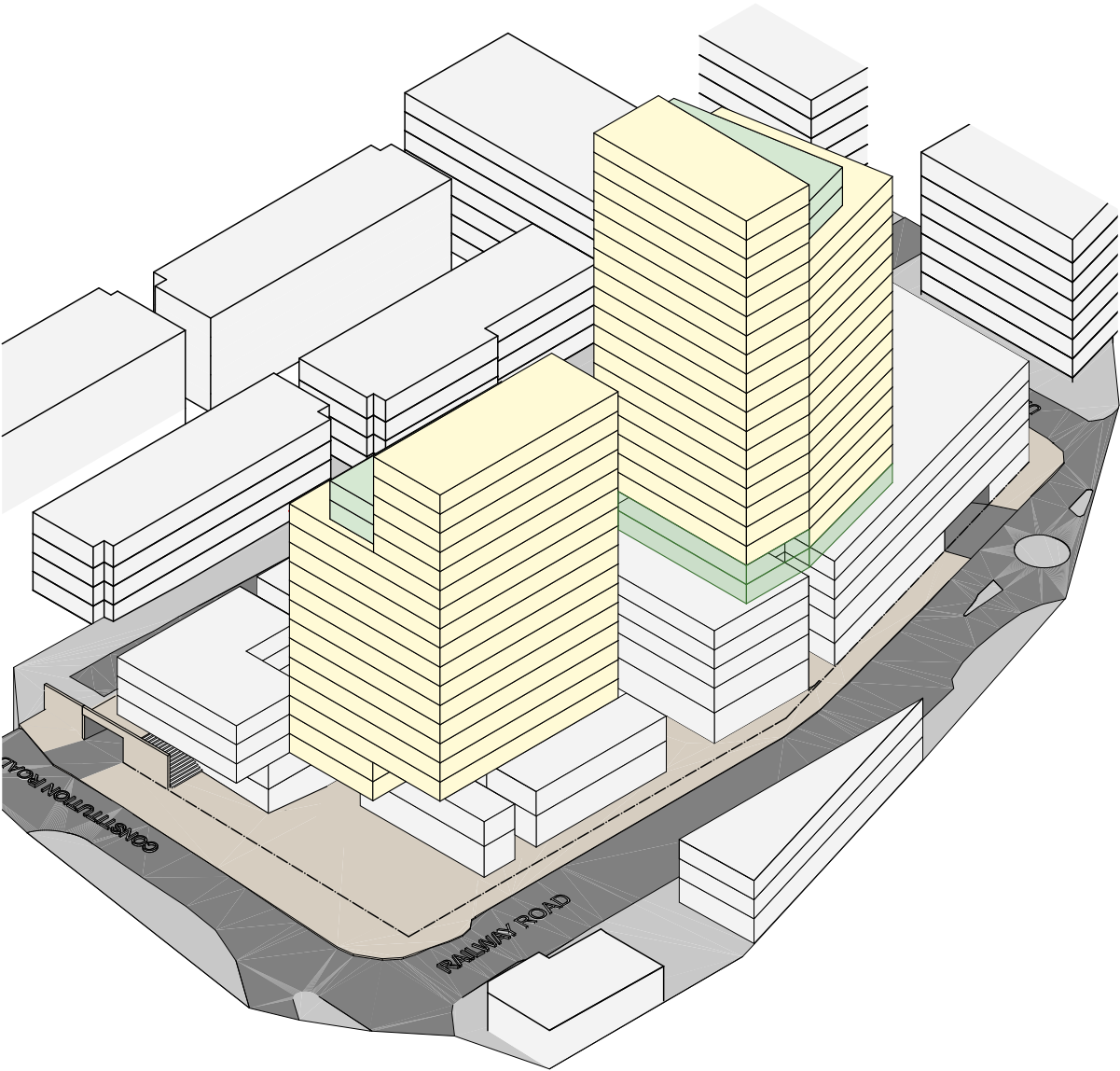


### TOWER EXTRUSIONS

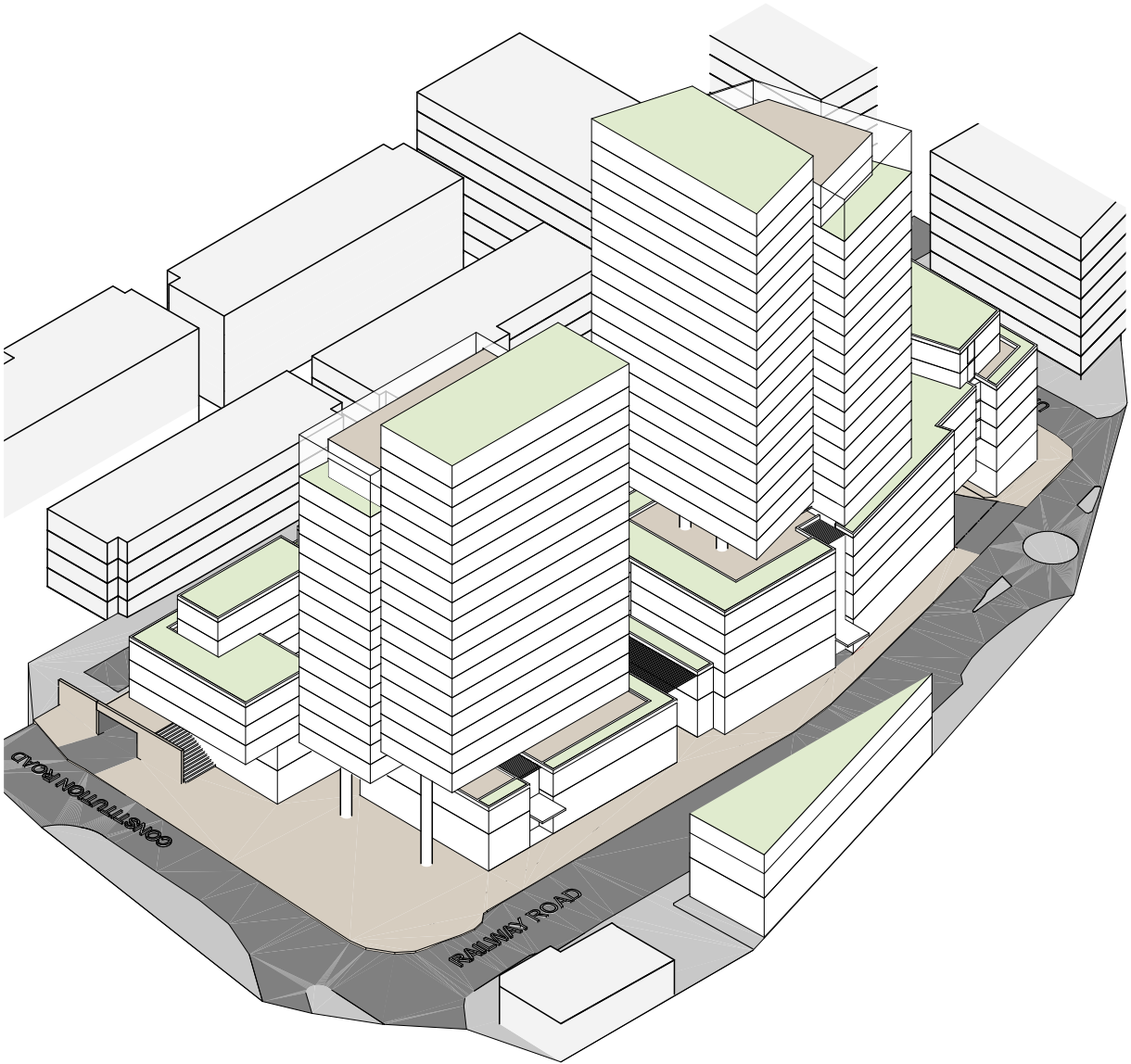
The tower footprints are vertically extruded. The form is stepped to preserve the daylight amenity of neighbouring properties.



CONCEPTUAL DIAGRAMS



**RESIDENTIAL RECREATION**  
Extracting from the volumes to provide opportunity for residential recreation space.



**VOLUME ARTICULATION**  
Articulating the volume to sculpt the form to reduce the bulk and scale of the mass. Landscaping to roofscapes, creating tiered "Meadows".







LOCAL MARKER  
VIEW STUDY

Meadowbank lacks a distinctive marker that denotes the centre of its civic hub. The proposed towers create a point of reference within the context to orientate locals to the central node of the suburb.



CNR VICTORIA AND BELMORE ROADS  
33°48'55 S 151°6'3 E ALTITUDE - 50m



RHODES BOAT RAMP  
33°49'22 S 151°5'21 E ALTITUDE - 5m



CONCORD ROAD  
33°49'27 S 151°5'36 E ALTITUDE - 11m

DISCLAIMER:  
OVERLAYED IMAGES TO ASSIST WITH VISUALISATION PURPOSES ONLY. WHILST ALL EFFORT HAS BEEN MADE TO ACCURATELY ILLUSTRATE THE PROPOSED ENVELOPE, FENDER KATSALIDIS CANNOT WARRANT POTENTIAL DISCREPANCIES WITHIN THE IMAGES.



## LOCAL MARKER VIEW STUDY



KEY PLAN



MEADOWBANK - PARK NO 7  
33°49'4 S 151°4'49 E ALTITUDE - 5m



154 BLAXLAND ROAD  
33°48'43 S 151°6'14 E ALTITUDE - 93m



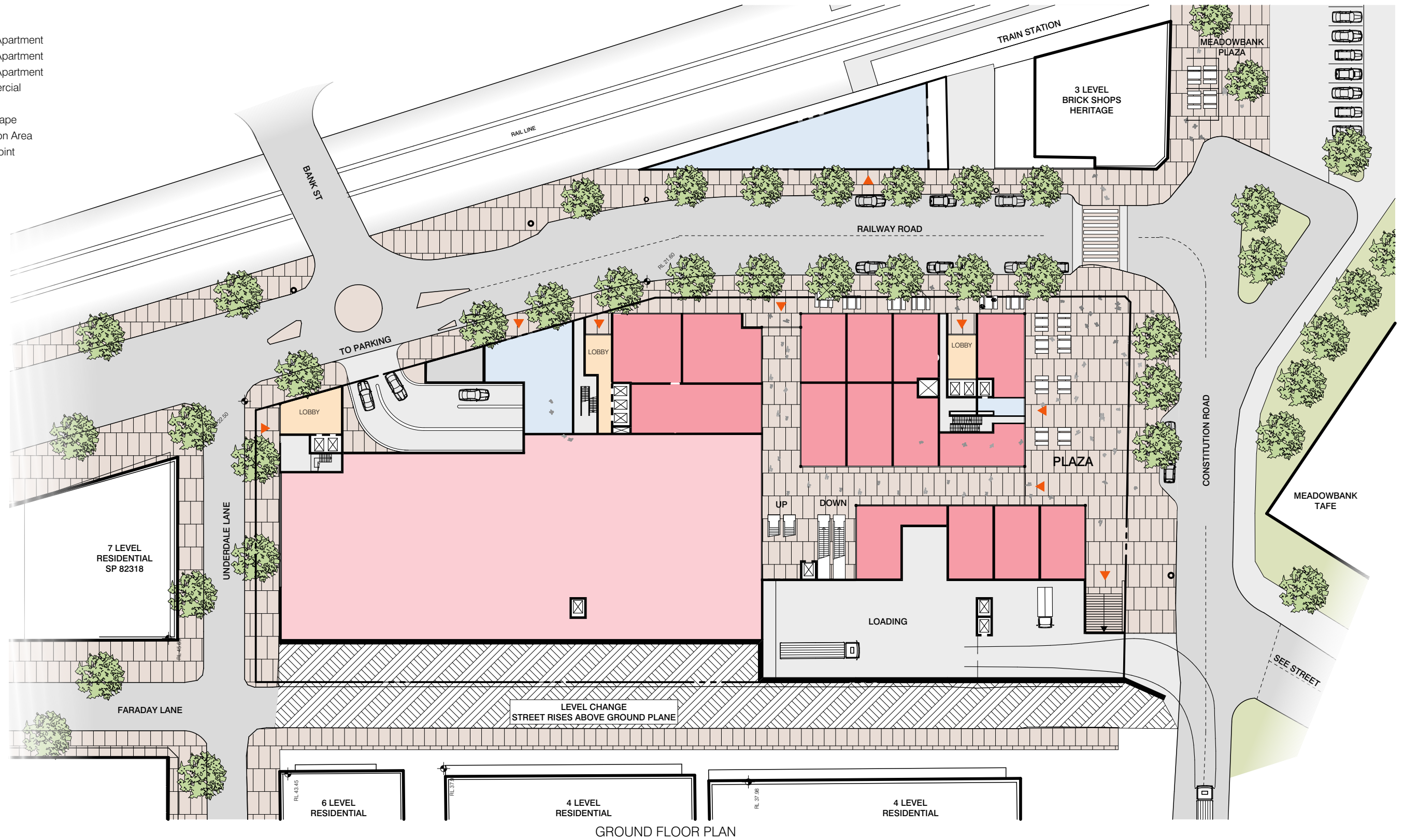
12 LINTON AVENUE  
33°48'31 S 151°5'50 E ALTITUDE - 29m



## KEY PLAN

### LEGEND

-  1 Bed Apartment
-  2 Bed Apartment
-  3 Bed Apartment
-  Commercial
-  Retail
-  Landscape
-  Common Area
-  Entry Point





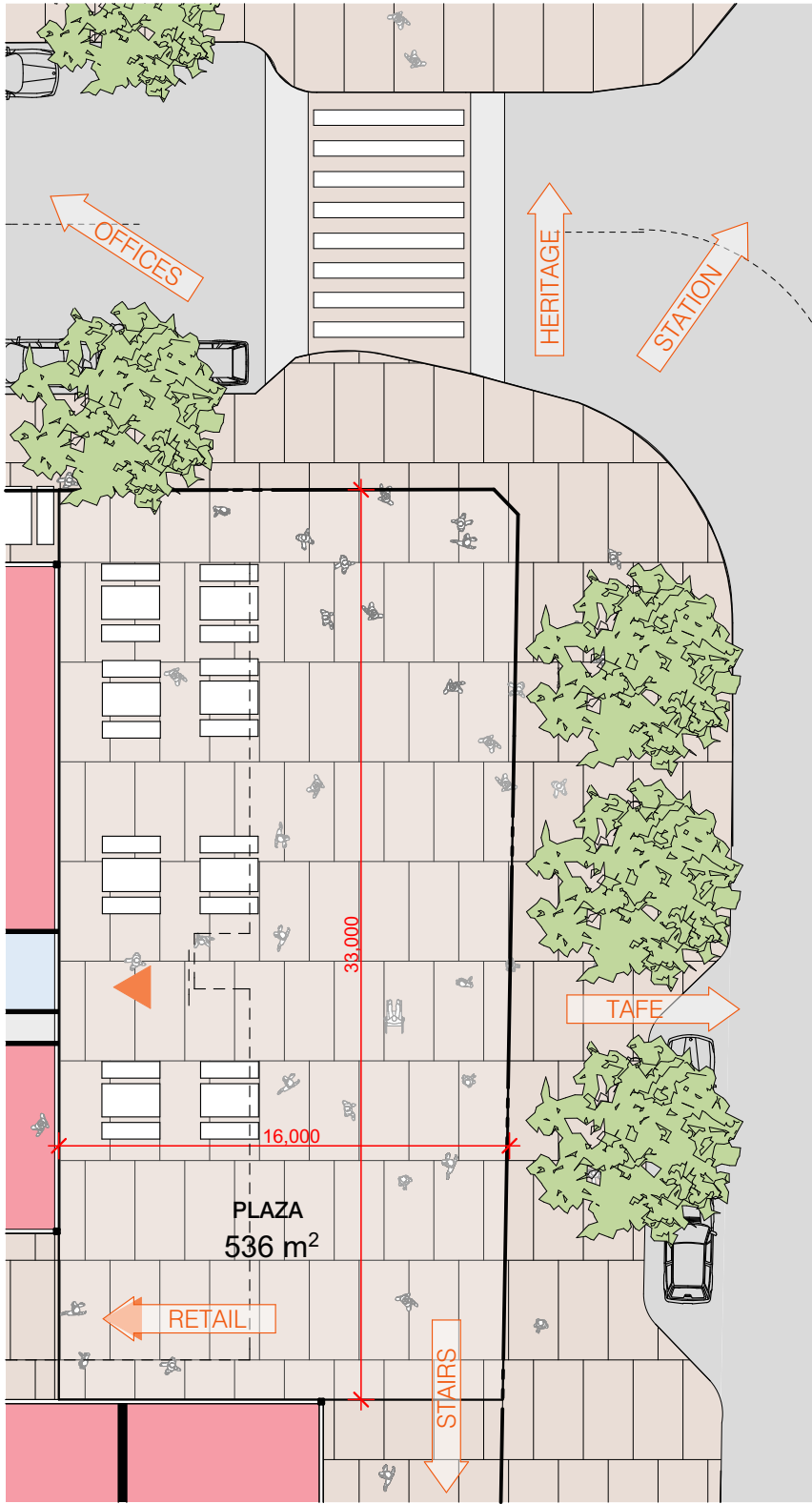
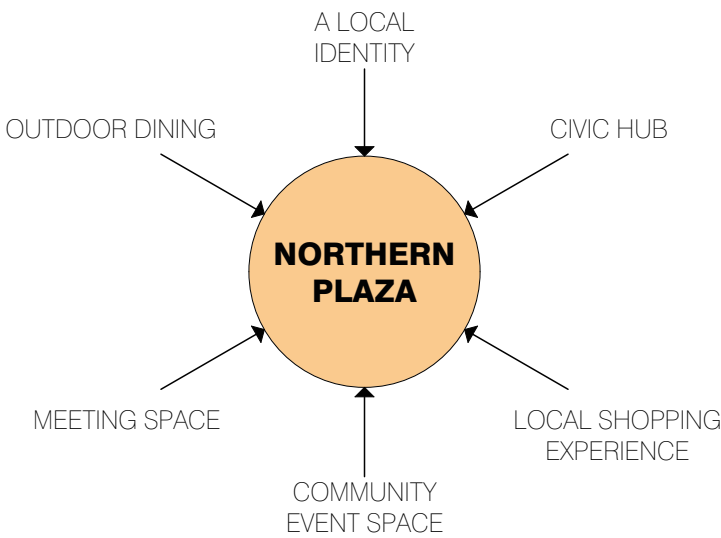
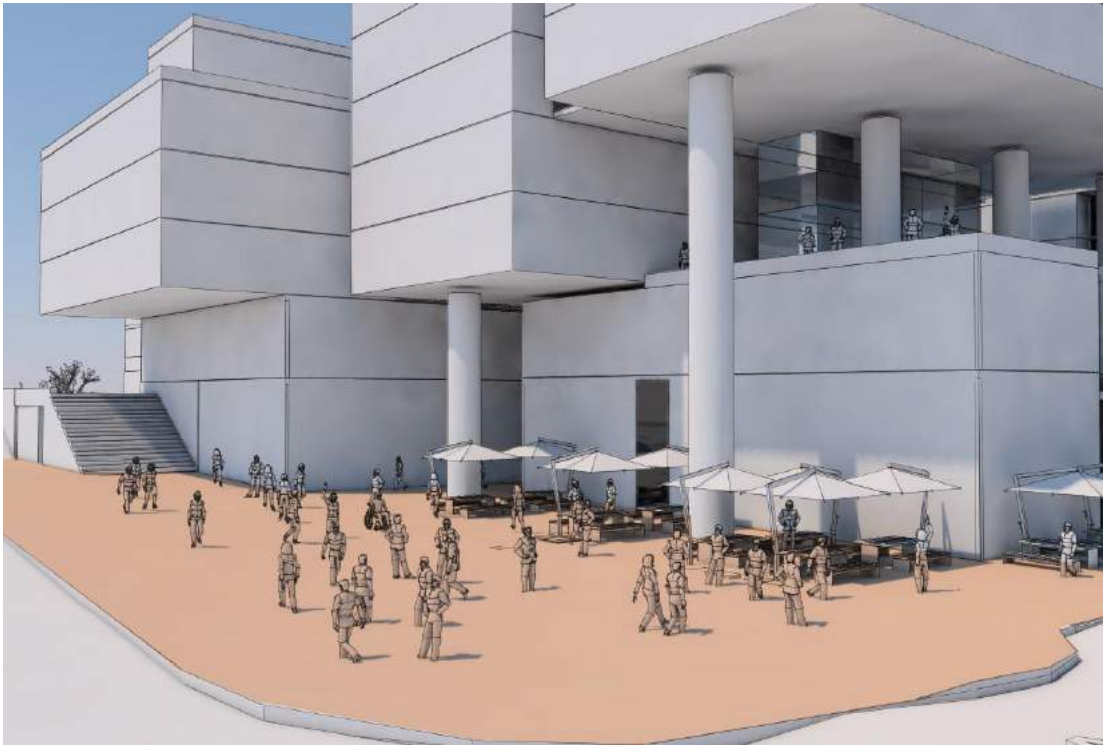




NORTHERN PLAZA

Opening up the corner of the site creates a generous north facing public space. This responds to the existing station entry on the opposite corner, the heritage buildings adjacent, and the TAFE across the road. It is envisaged this prominent location would form a civic place for the gathering of the local community.

Lined with an active retail edge, shopping precinct entrance and an expansive stair for access to Faraday Lane, this plaza will encourage a place for public activity and add vitality to an existing context lacking in civic space.



PLAZA PLAN

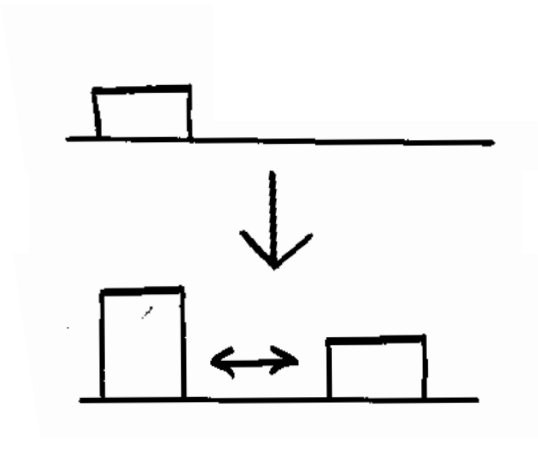
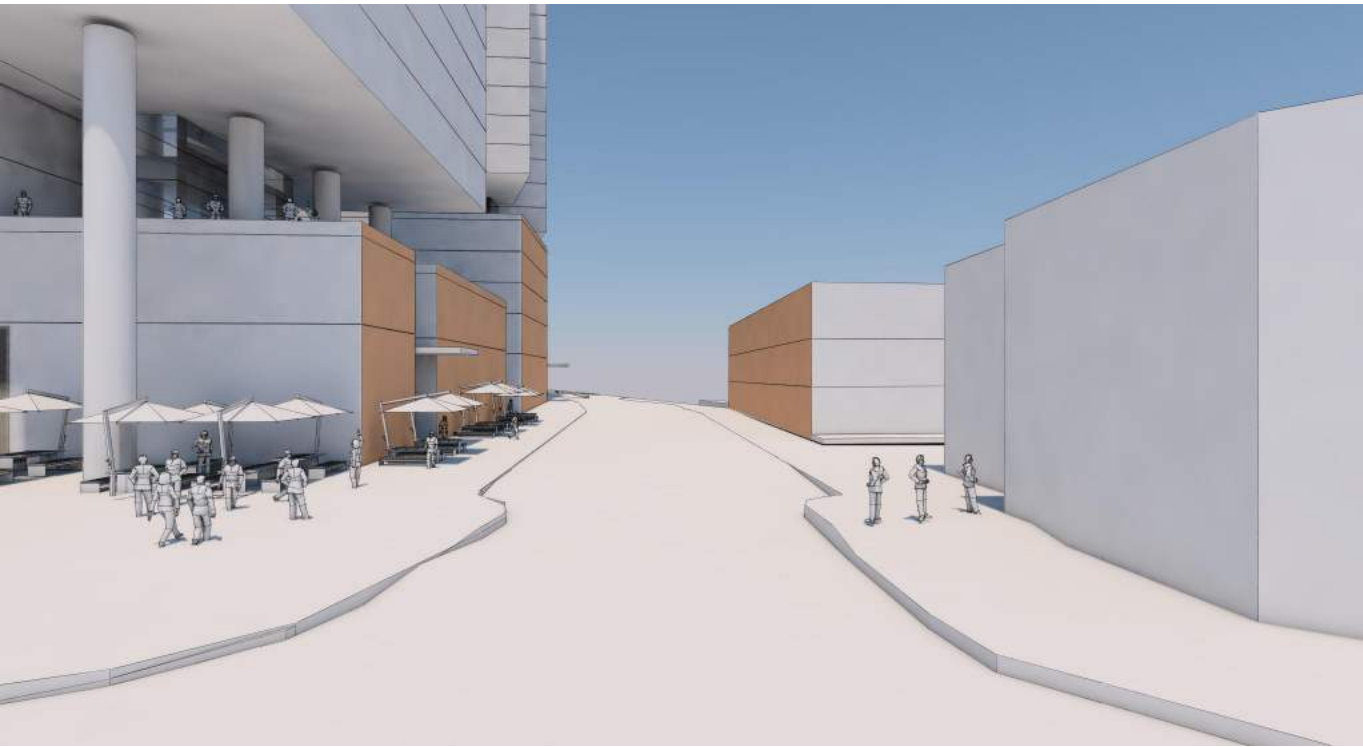
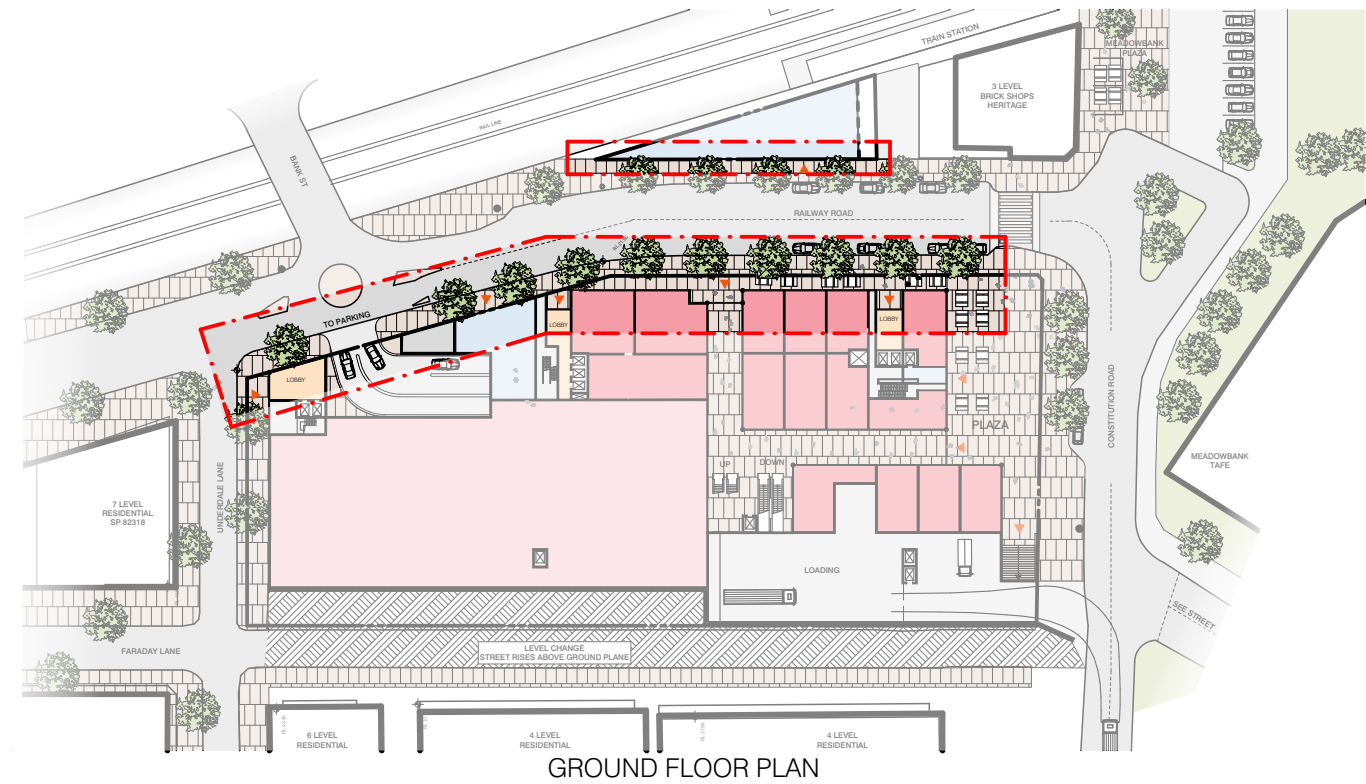
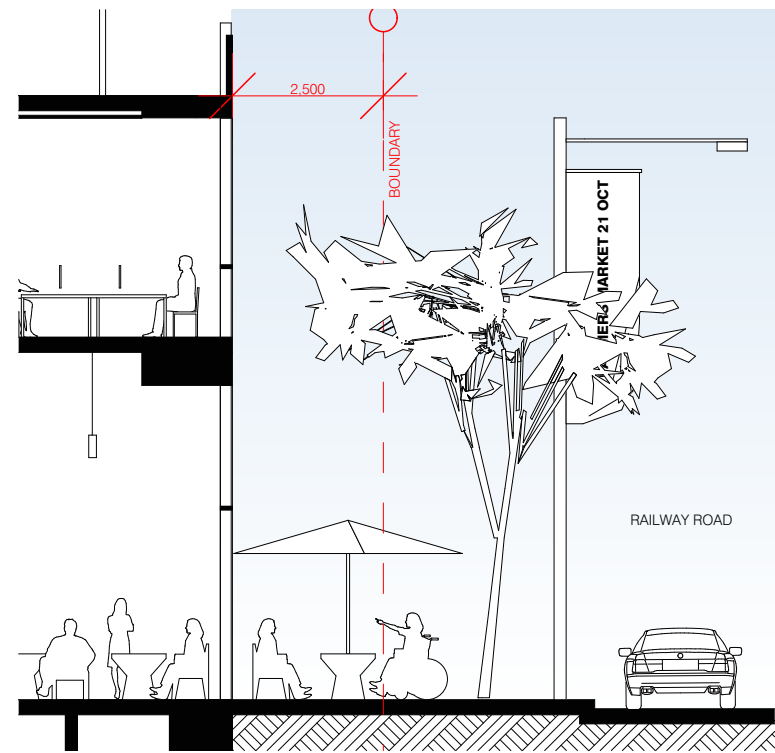




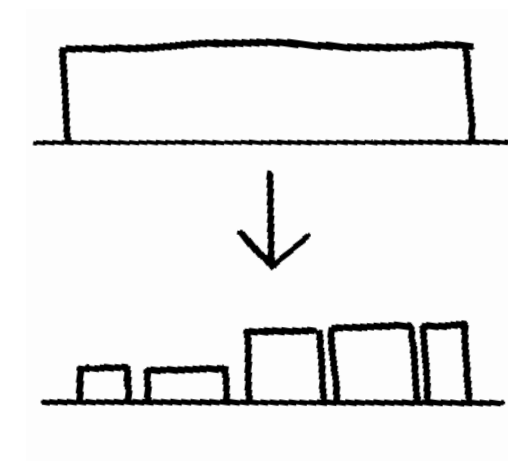


## RAILWAY ROAD EDGE

Widening the footpath along Railway Road an additional 2.5 metres encourages street dining and assists in opening up retail tenancies into the public space. Furthermore, by offsetting the building line a row of street trees can then be planted along the eastern edge of Railway Road.



The current Railway Road street wall is single sided. By developing the car park on the opposite side of the road it will begin to form an urban street wall to both sides adding to the areas activation.



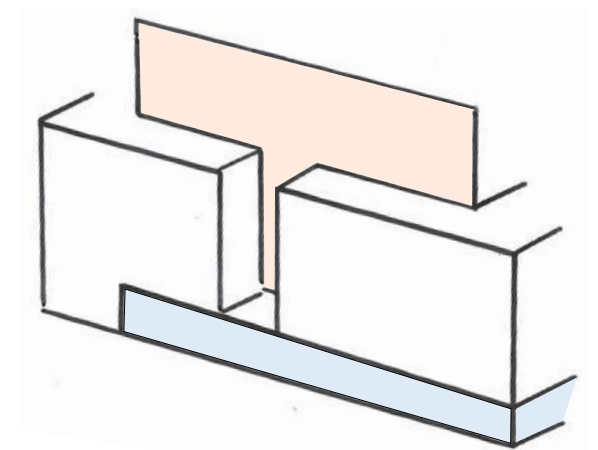
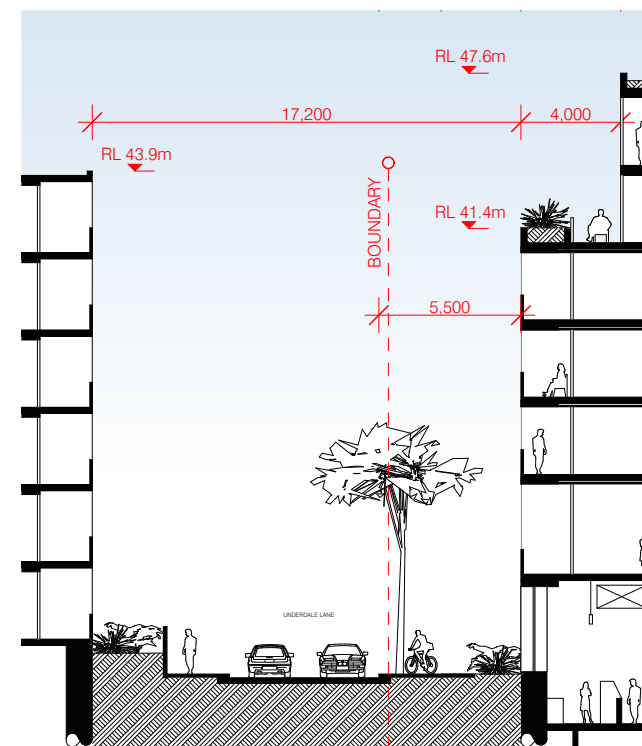
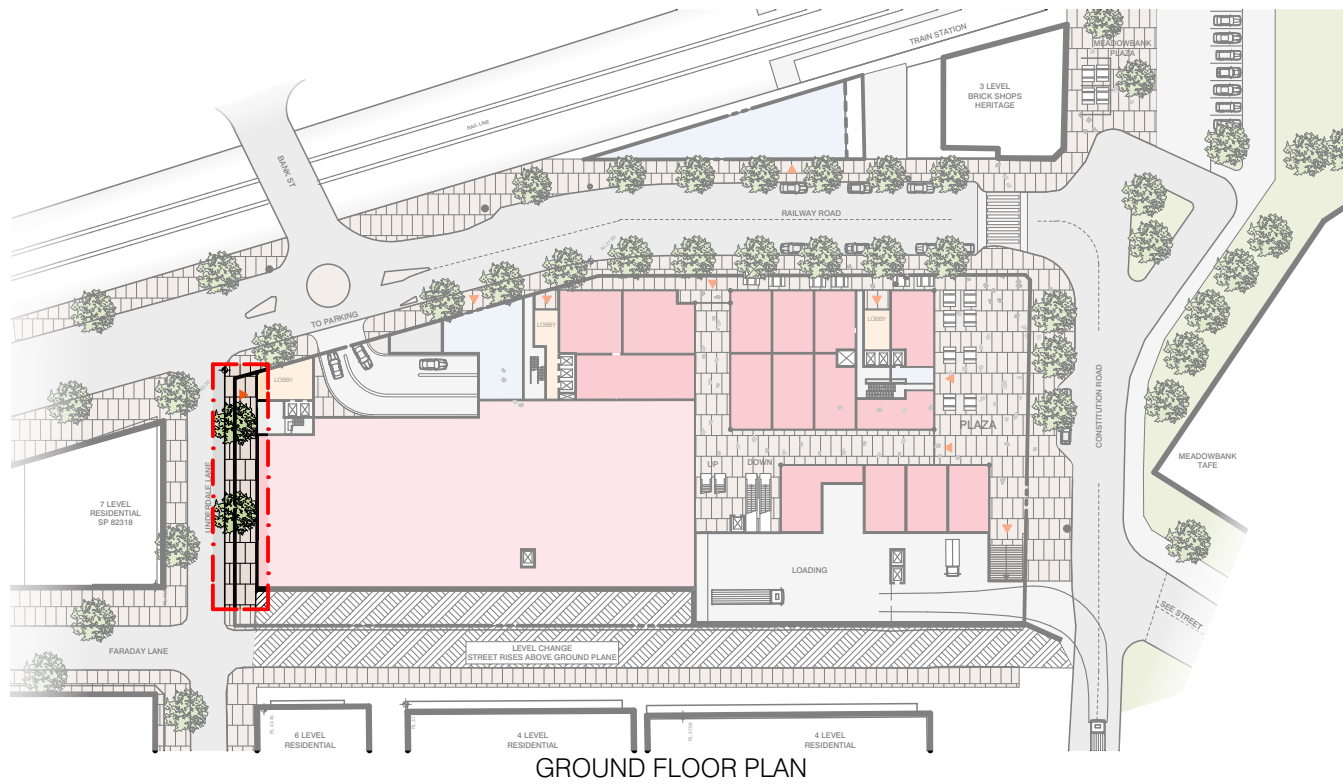
Railway Road presents a long and potentially overwhelming frontage. The massing of the volumes has broken it down into smaller segments with varying heights to articulate the edge.



## UNDERDALE LANE EDGE

The Underdale Lane mass mirrors the scale of the recent development to the south of the site. The proposed facade has an additional 4m setback starting on level 5. The ground level includes large shopfront glazing along its lower edge where pedestrians can view down into the local supermarket below.

An indentation to the facade breaks down the overall facade length, integrating the top levels down into the podium level form.



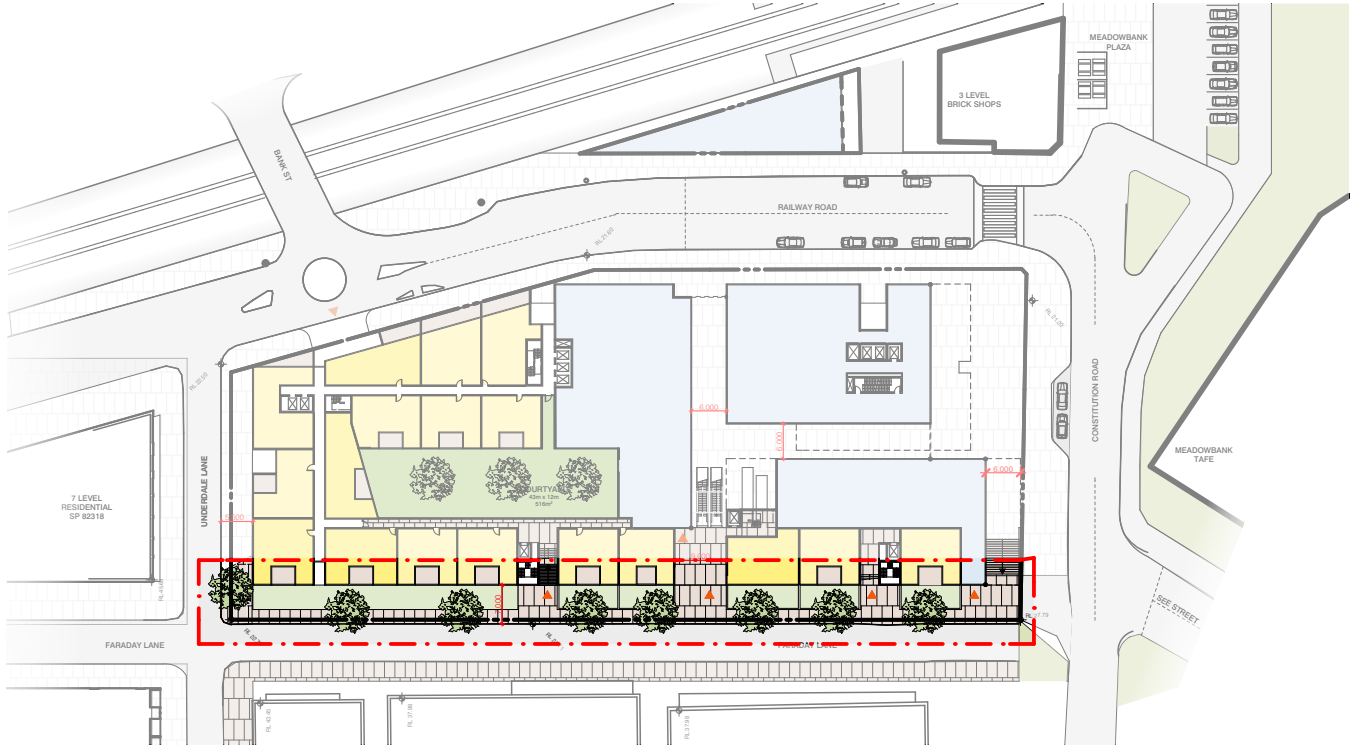
Facade Indentation linking upper levels down



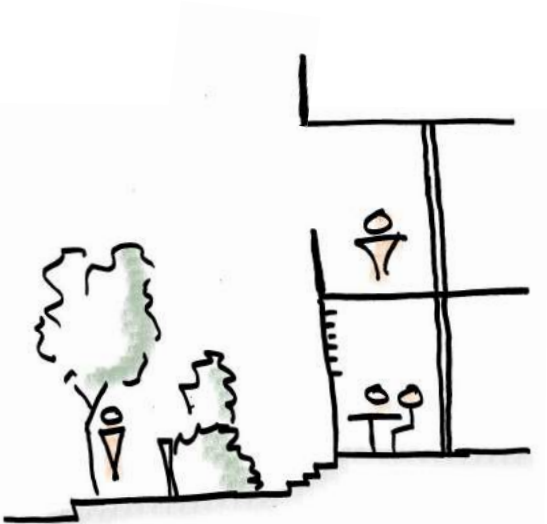
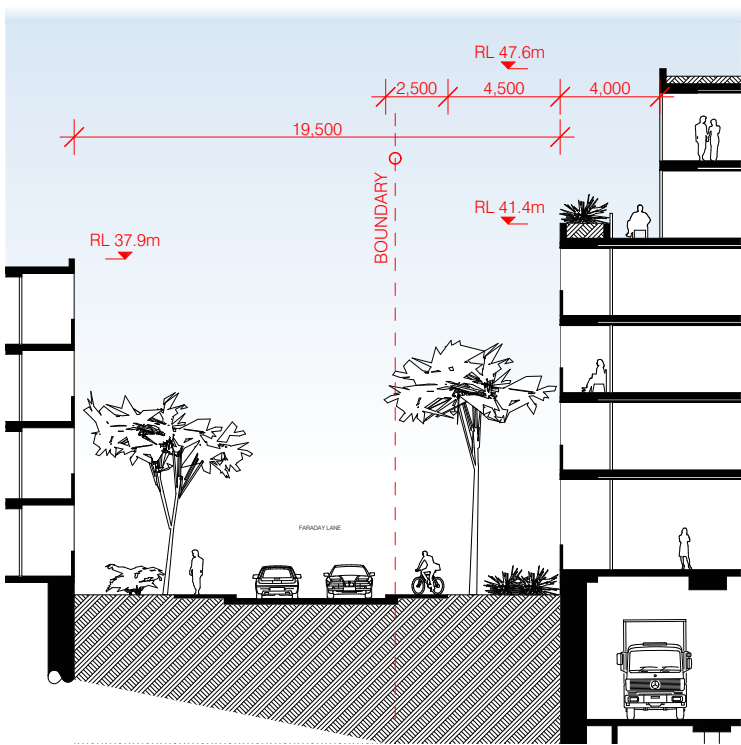
FARADAY LANE

The edge condition of our neighbours to the east perfectly articulates a quiet residential street. The proposed design aims to mimic the neighbours approach, completing the street edge.

The design offers no traffic entry points on this street taking vehicles off Faraday Lane. Clusters of apartments are broken down with breaks in the building forming a through site link and residential entrances.



LEVEL 1 PLAN



The quiet street edge.



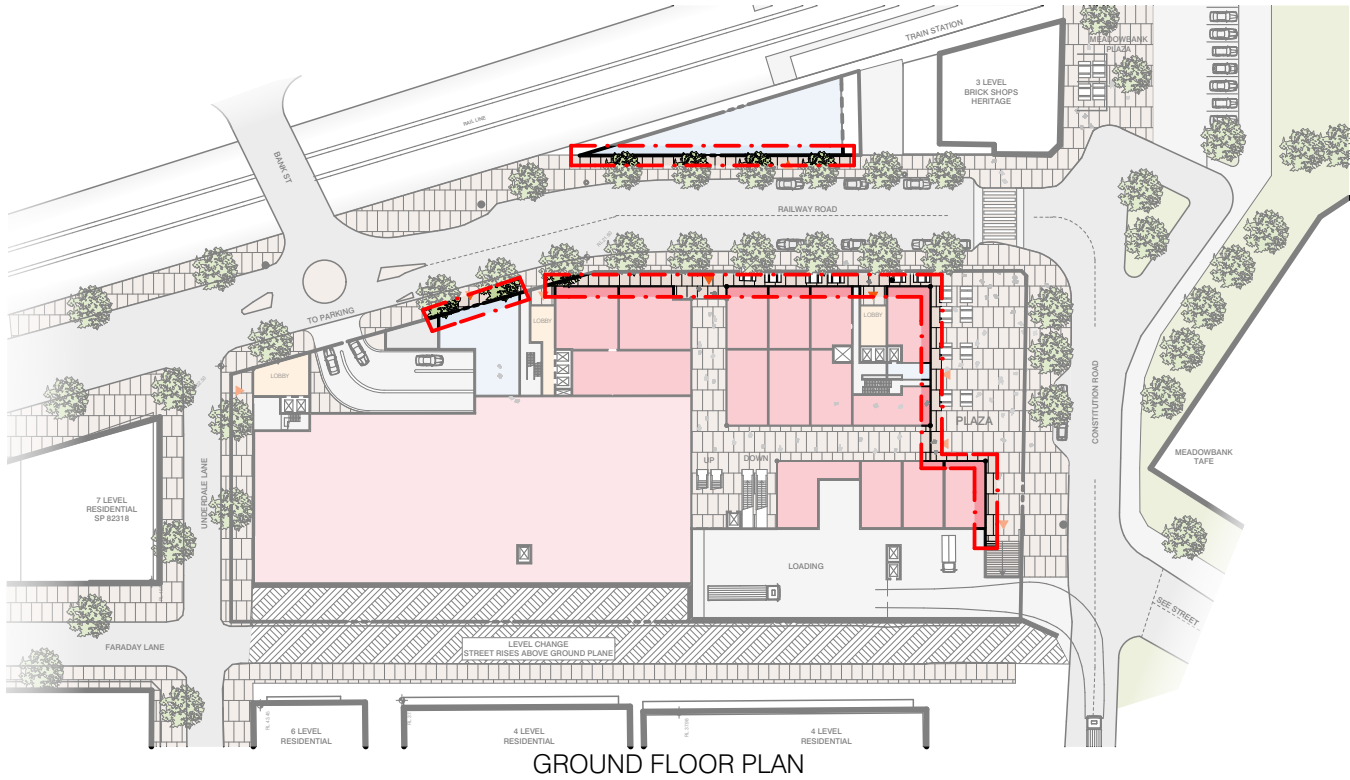




ACTIVE EDGE

The proposed street edge treatment includes 148 linear metres of active retail and commercial frontages along Railway Road and Constitution Road. The retail outlets feed out onto the northern public space, benefited by the overhanging building edge above for solar and weather protection.

The western edge faces out onto the proposed tree lining along Railway Road. Tenancies are celebrated with 6m floor to floor heights.





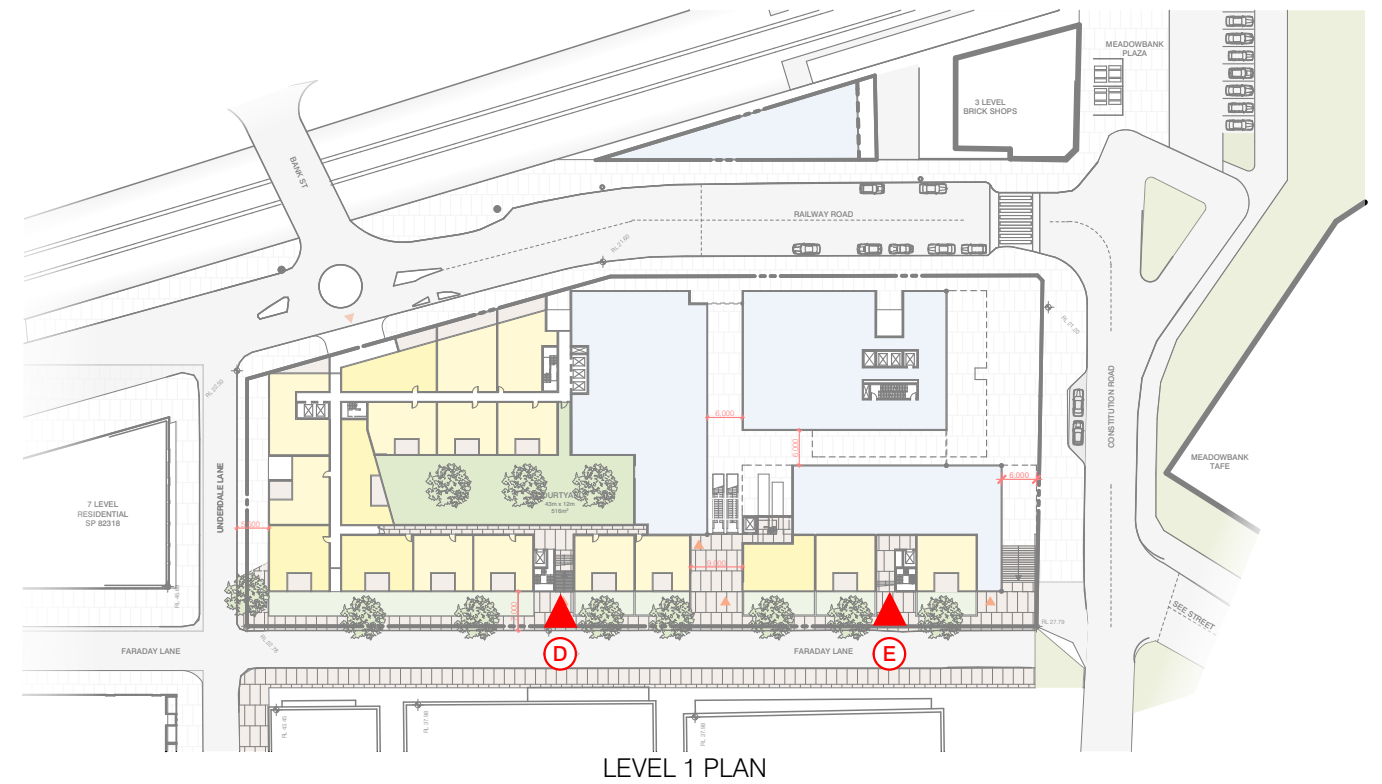
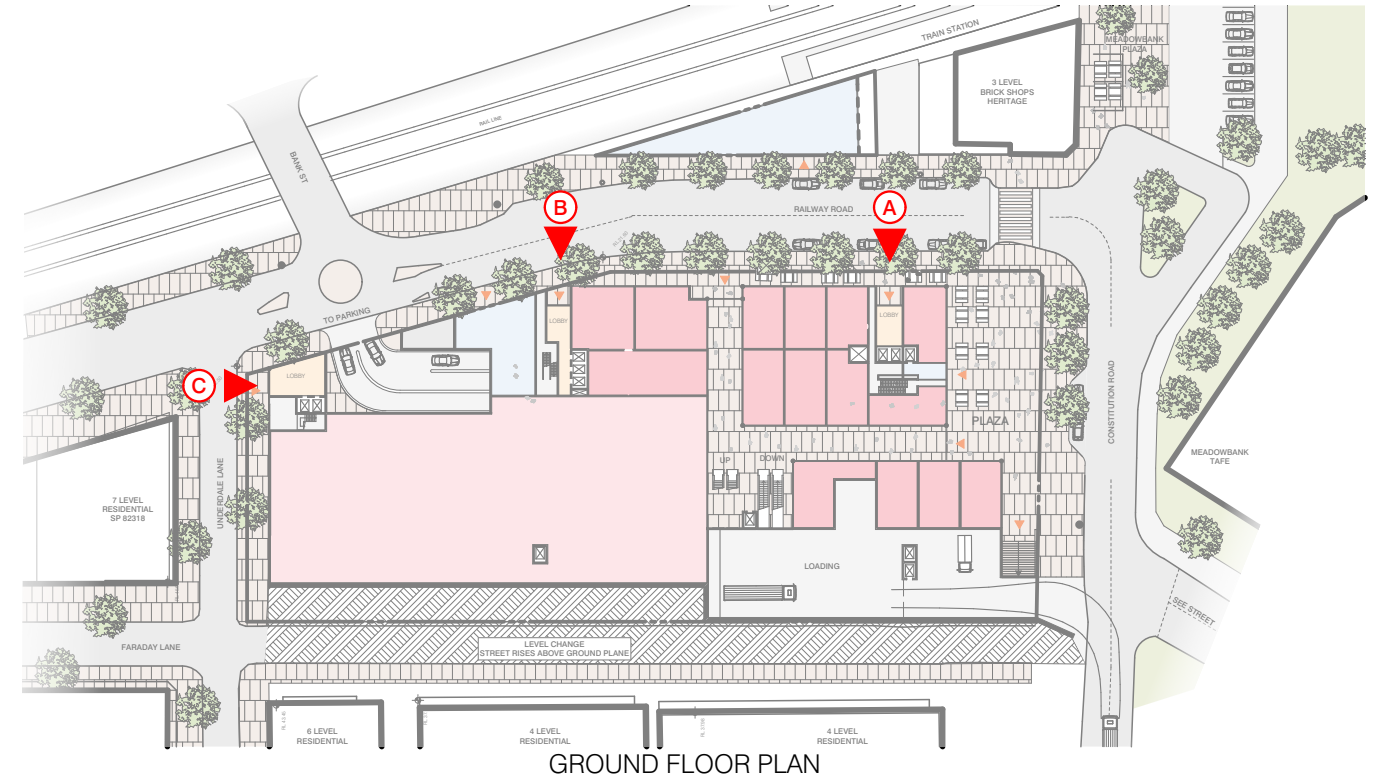
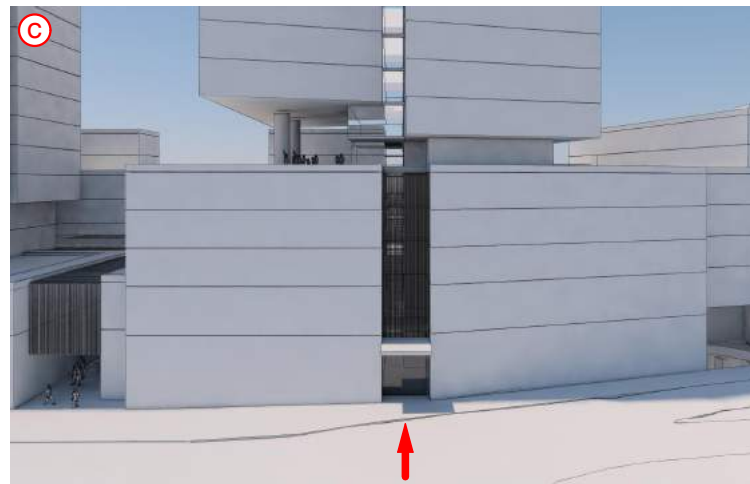




## RESIDENTIAL ENTRIES

Residential entries form breaks within the volume. These breaks are full height, connecting the lobbies to the sky above. Landscape is either integrated overhead of these volumes or through these spaces in the courtyards beyond.

The tower elements are articulated in locations that correspond to their entry points below.



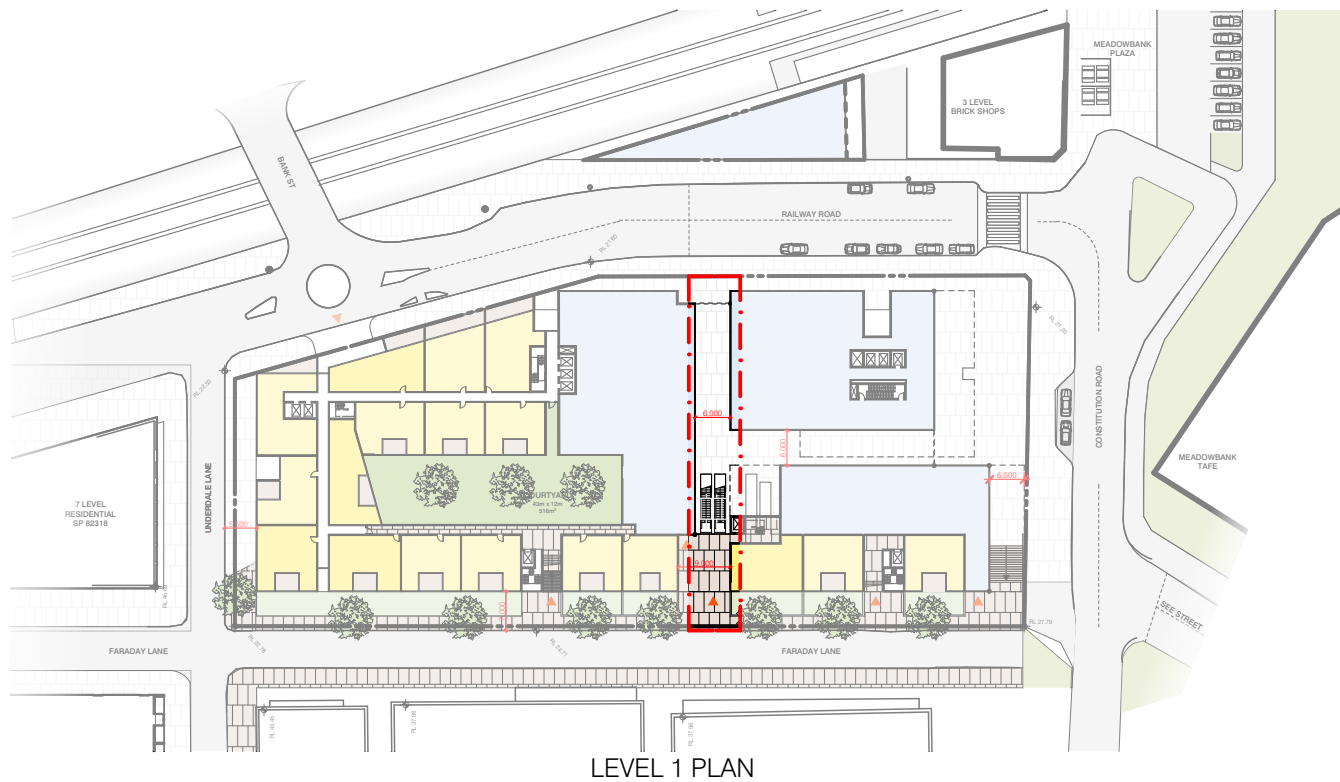
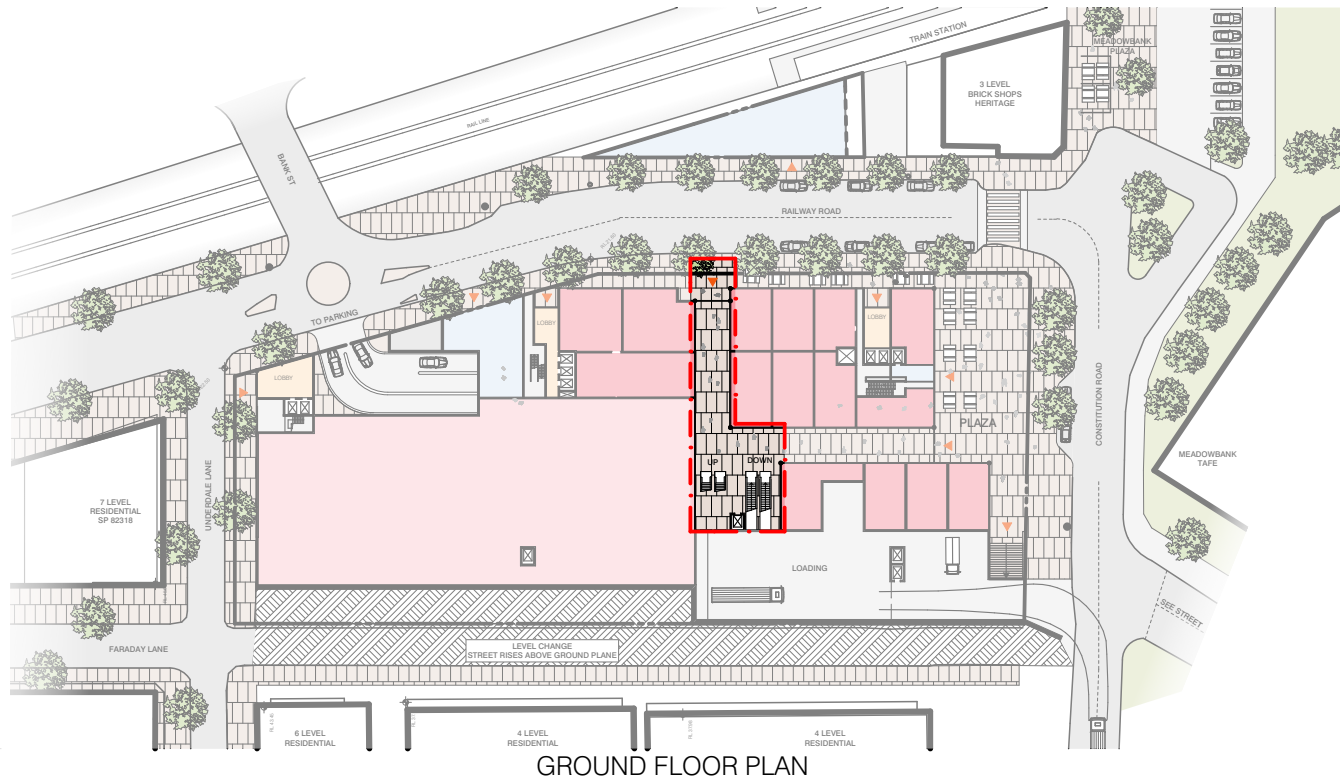


## THROUGH SITE LINK

Dividing the volume is a through site link. The link is used to negotiate the level difference between Railway Road and Faraday Lane with a set of escalators and a lift.

Located at the centre of the link is an internal hub. Here, people can navigate through the internal retail spaces and access the basement levels below.

The roof overhead is fully glazed with battens over, filtering natural light down into the space.



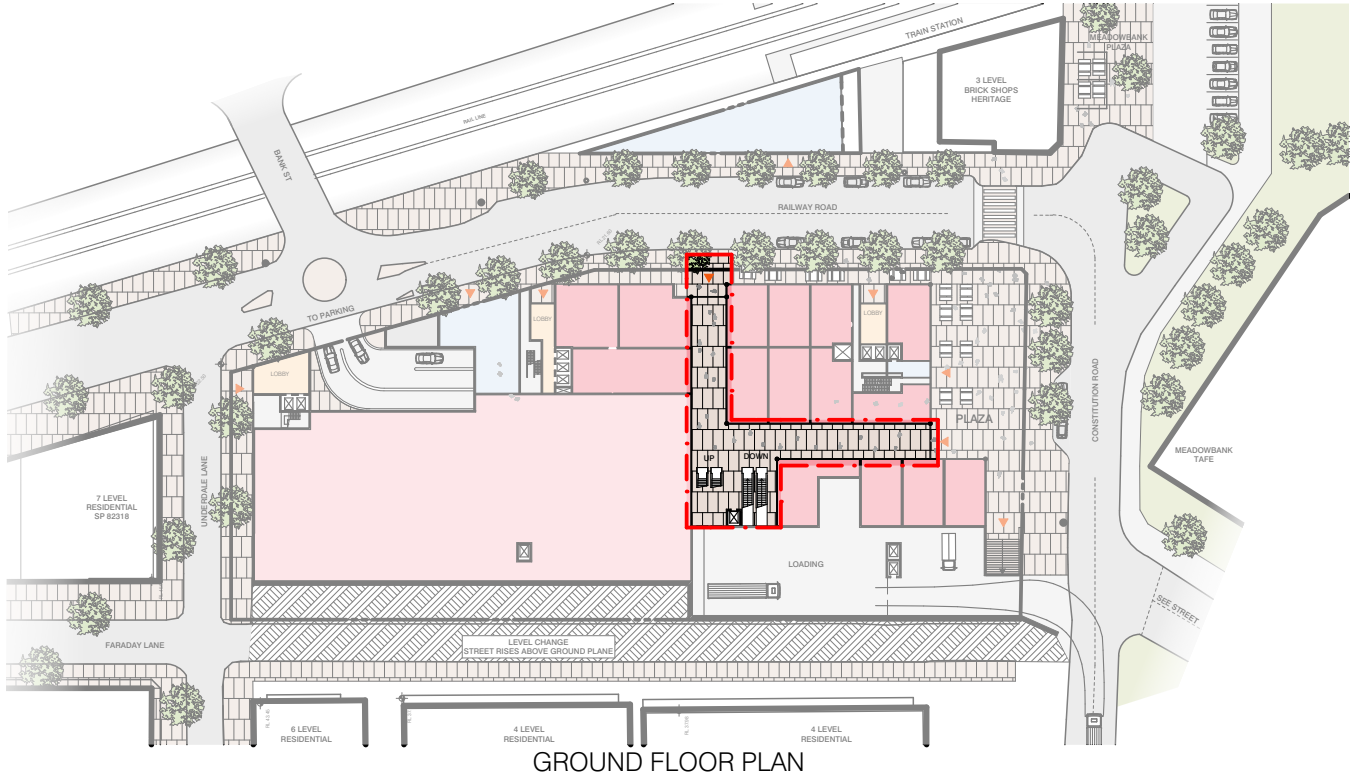


# INTERNAL SHOPPING STREET

Within the ground floor plane is an internal shopping street. Varying between 6 and 7 metres wide, this light filled double height space adds to the retail concentration on the site. Throughout the space people always have a connection to the sky through the glazed atrium roof above.

The shopping street will have glazed operable doors to close off the space when the weather is unfavourable. At the centre of the street is the hub space where people will find a local supermarket and vertical transportation.

Commercial office spaces on Level 1 benefit from looking into this space allowing it to be visually connected to the ground plane.

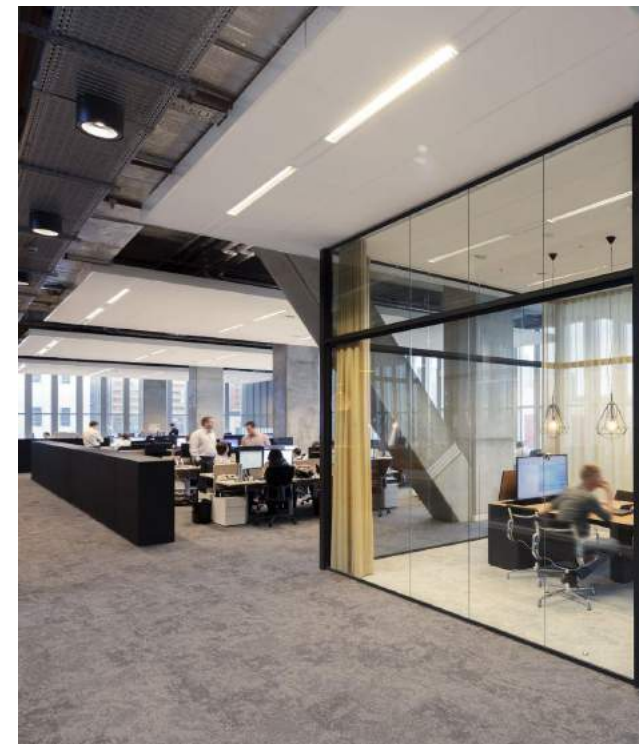
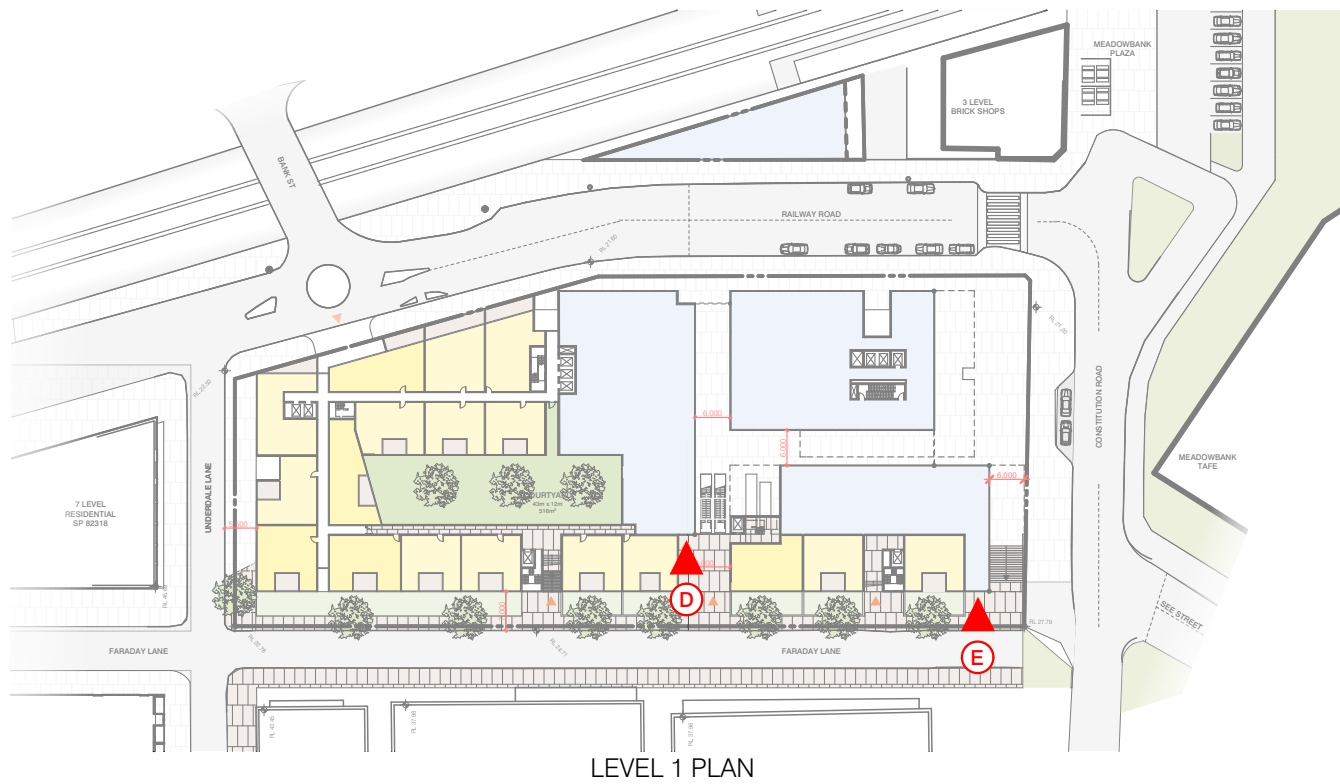
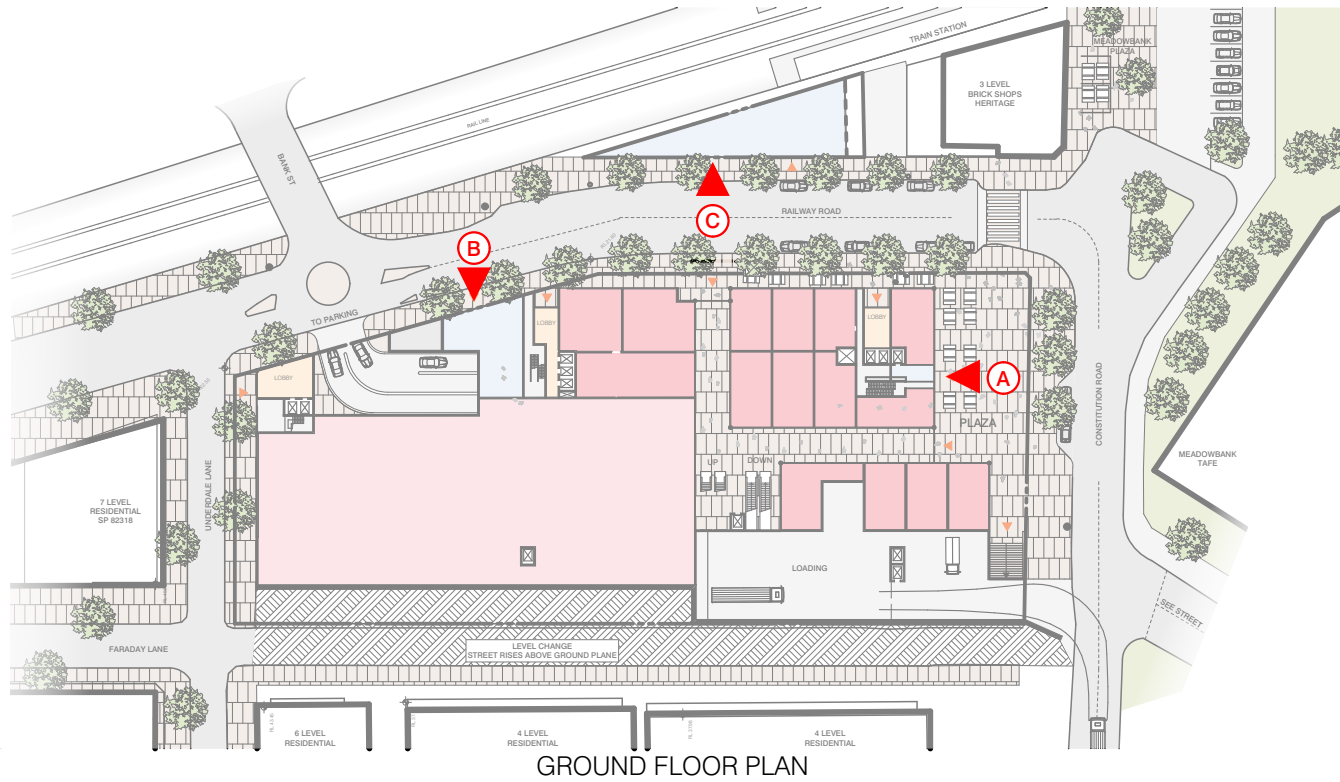




## COMMERCIAL ENTRIES

Complimenting the retail tenancies is a collection of office spaces located on the Ground Floor and Level 01. These spaces provide a variety of floor plate sizes to suit an assortment of office types with the potential for subdivision.

- A** Office space - 212 m<sup>2</sup> - with frontage
- B** Office space - 939 m<sup>2</sup> - 313m<sup>2</sup> per level
- C** Office Space - 734 m<sup>2</sup>
- D** Office Space - 795 m<sup>2</sup>
- E** Gym - 485 m<sup>2</sup>



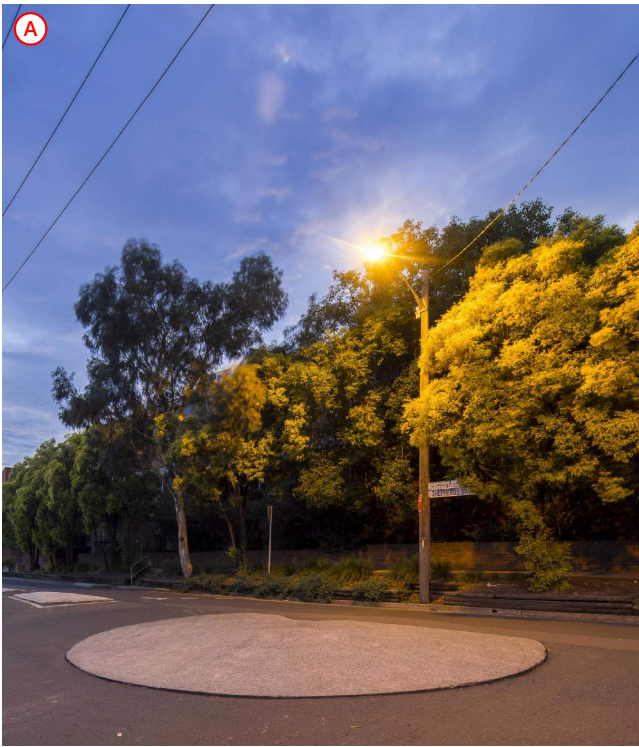
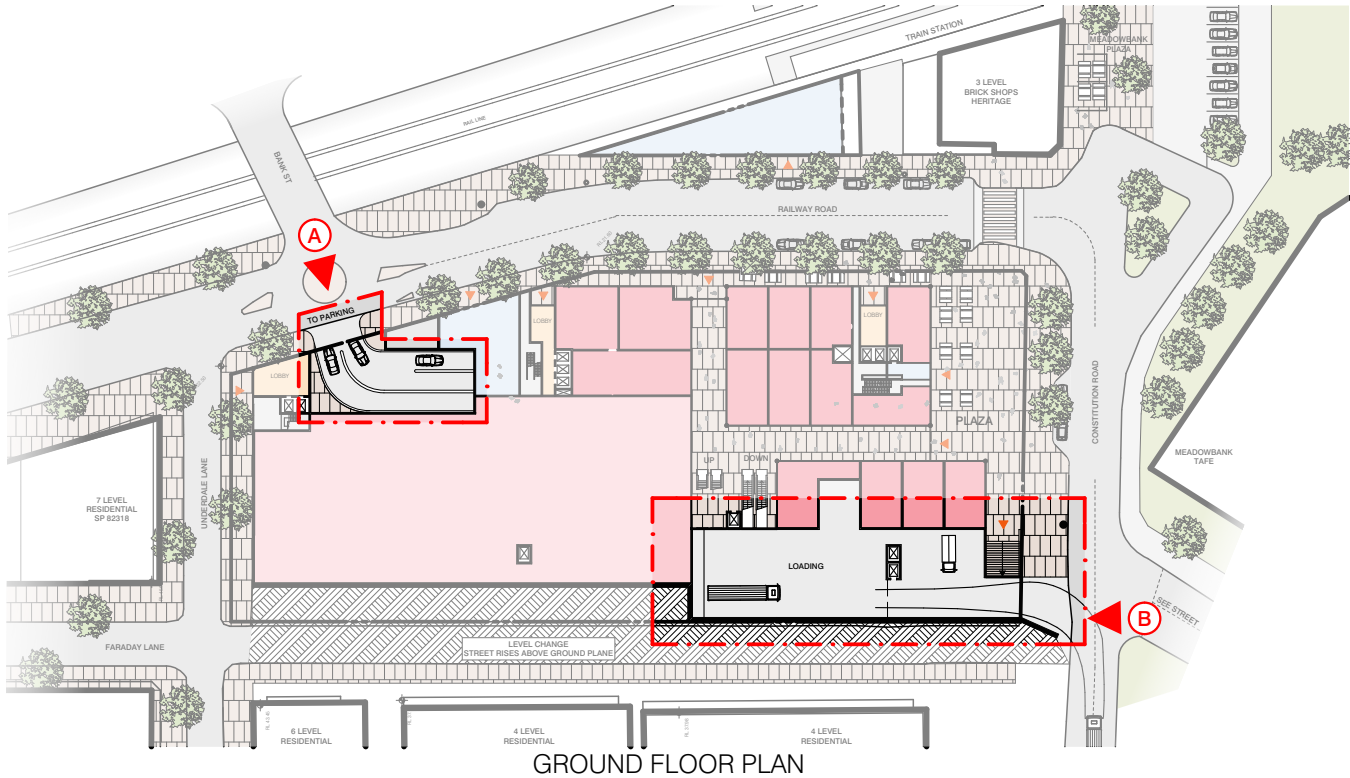


# VEHICLE ENTRIES

Factoring in the narrow frontage of Underdale Lane and the negative effects of drawing traffic onto Faraday Lane, vehicle entry points have been identified on Railway Road and Constitution Road.

Basement parking off the existing roundabout has been designed to have a single entry and exit driveway. Further into the site, the entry is widened to two lanes to separate visitor and resident traffic. This also eases queueing pressures deeper within the basement.

A loading entry off Constitution Road utilises the level differences off the site to define an access point. This creates the opportunity to drive loading vehicles down under the Faraday Lane residential buildings on Level 01.



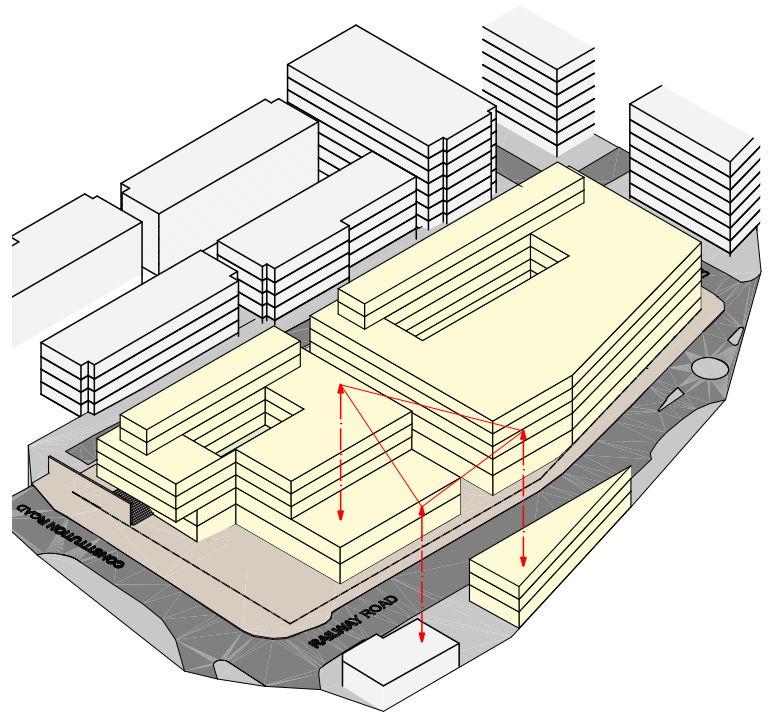


## HERITAGE RESPONSE

The opposite corner contains four attached 2 storey commercial shops designed in a Federation period style. Built between 1916 to 1920, they were owned by Swedish immigrant Wilhelm Emanuel Sundin, whose initials "WES" mark the parapet at the corner.

The scarcity of this period type of building within the local Ryde LGA, makes it an important urban volume to consider when designing adjacent to it.

In acknowledgement, the proposed mass aligns the built form and open void space to match the parapet height.

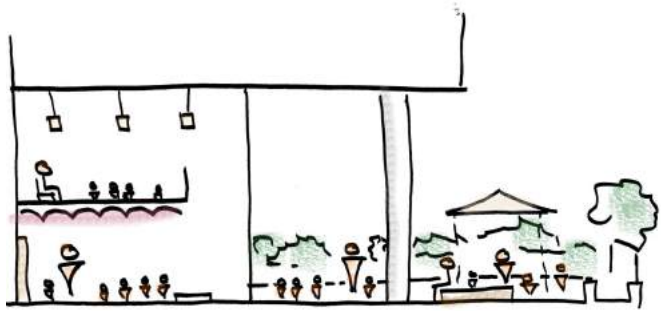




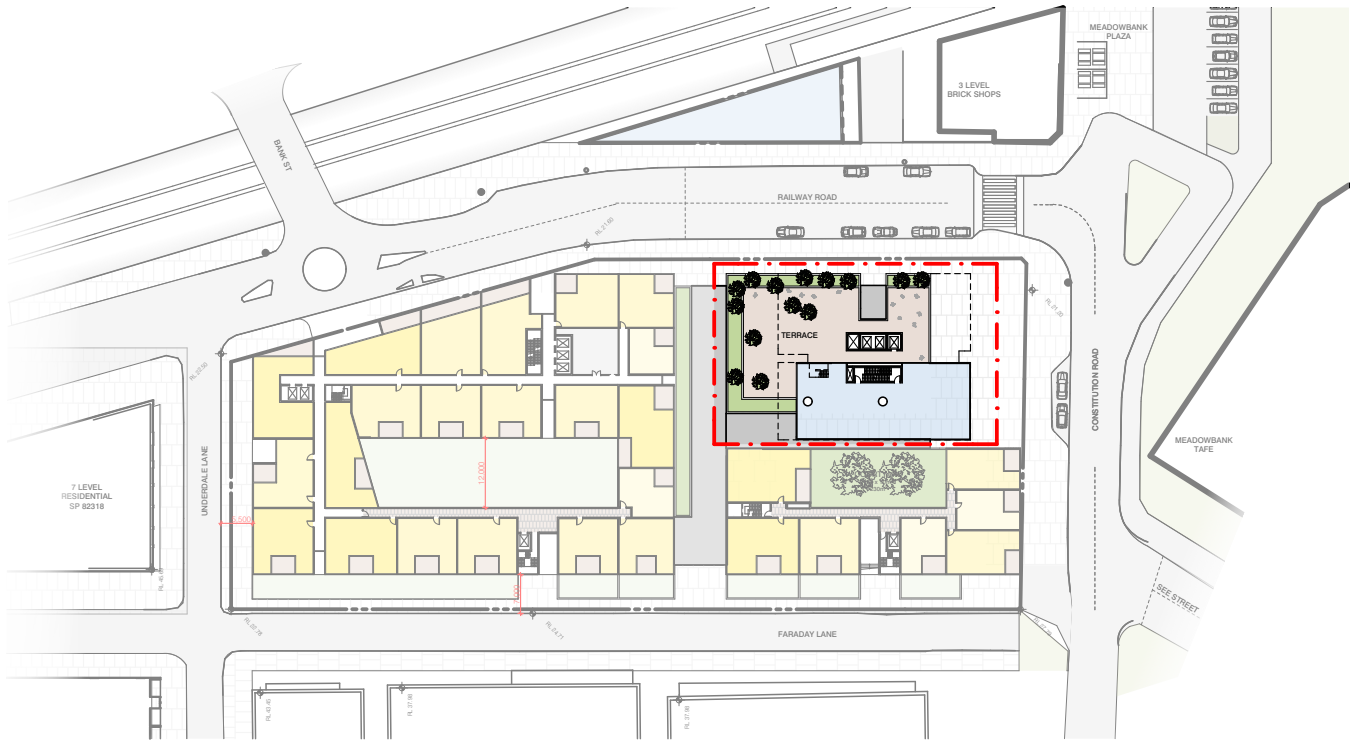
CHILD CARE

Above the podium space of the northern tower, a double height open terrace is carved out. This area provides the outdoor amenity space to support a child care centre. This outdoor area offers both shading and sunlight with a planted perimeter edge to provide privacy.

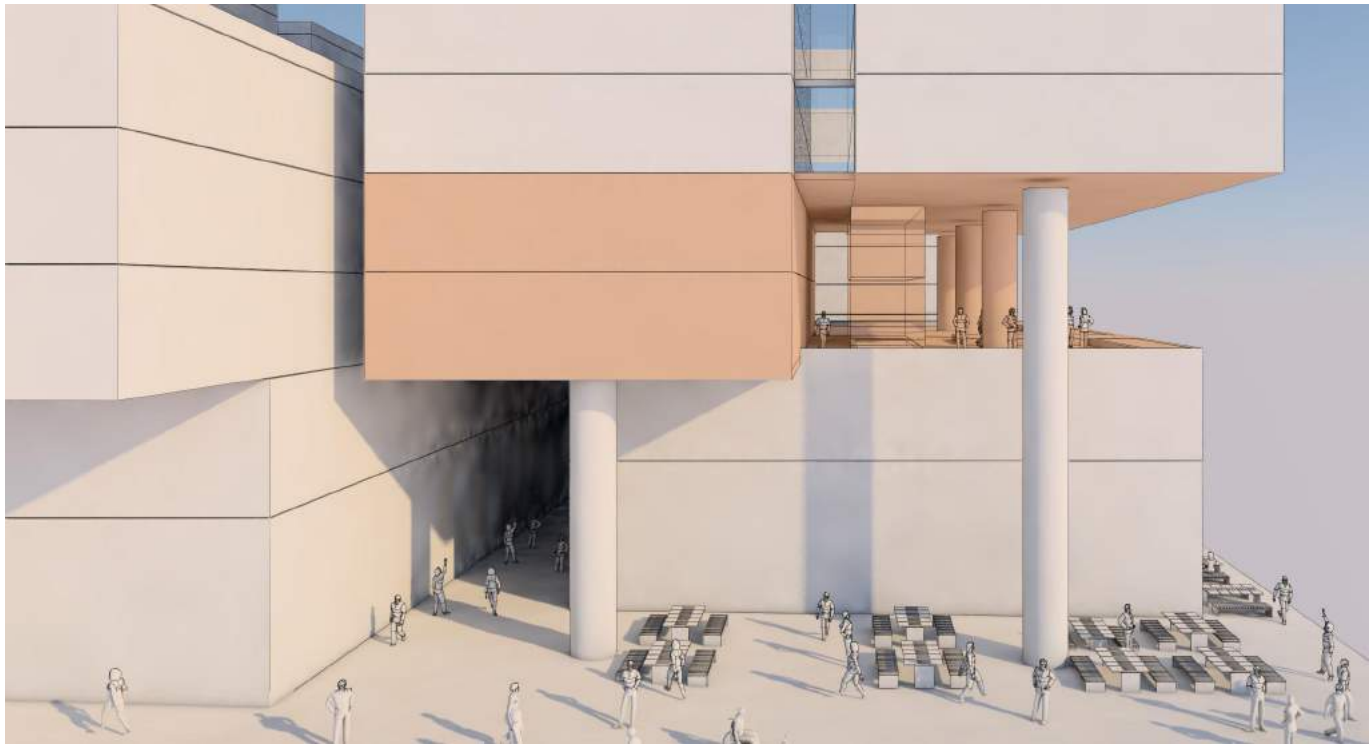
A two level internal space provides indoor facilities and play area. There is 460m<sup>2</sup> outdoor space and 600 m<sup>2</sup> of internal space.



Childs play



LEVEL 2 PLAN





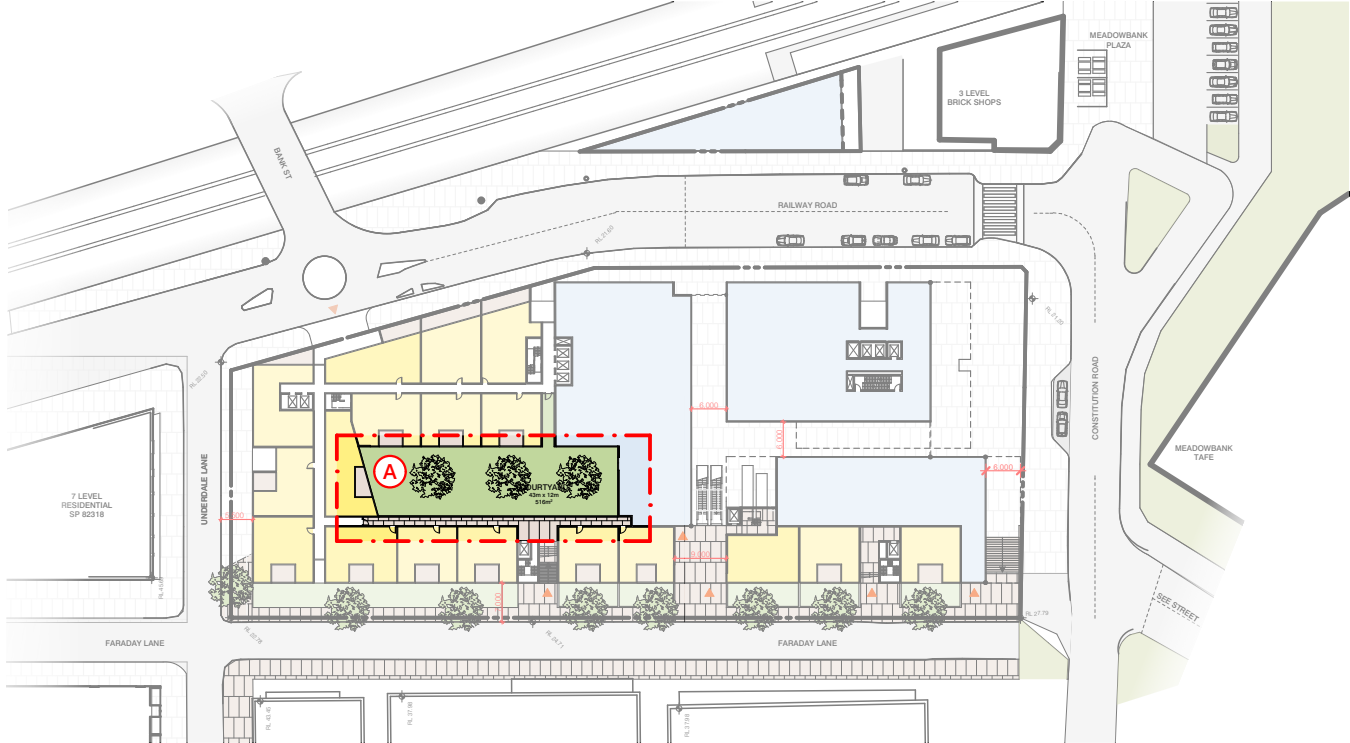




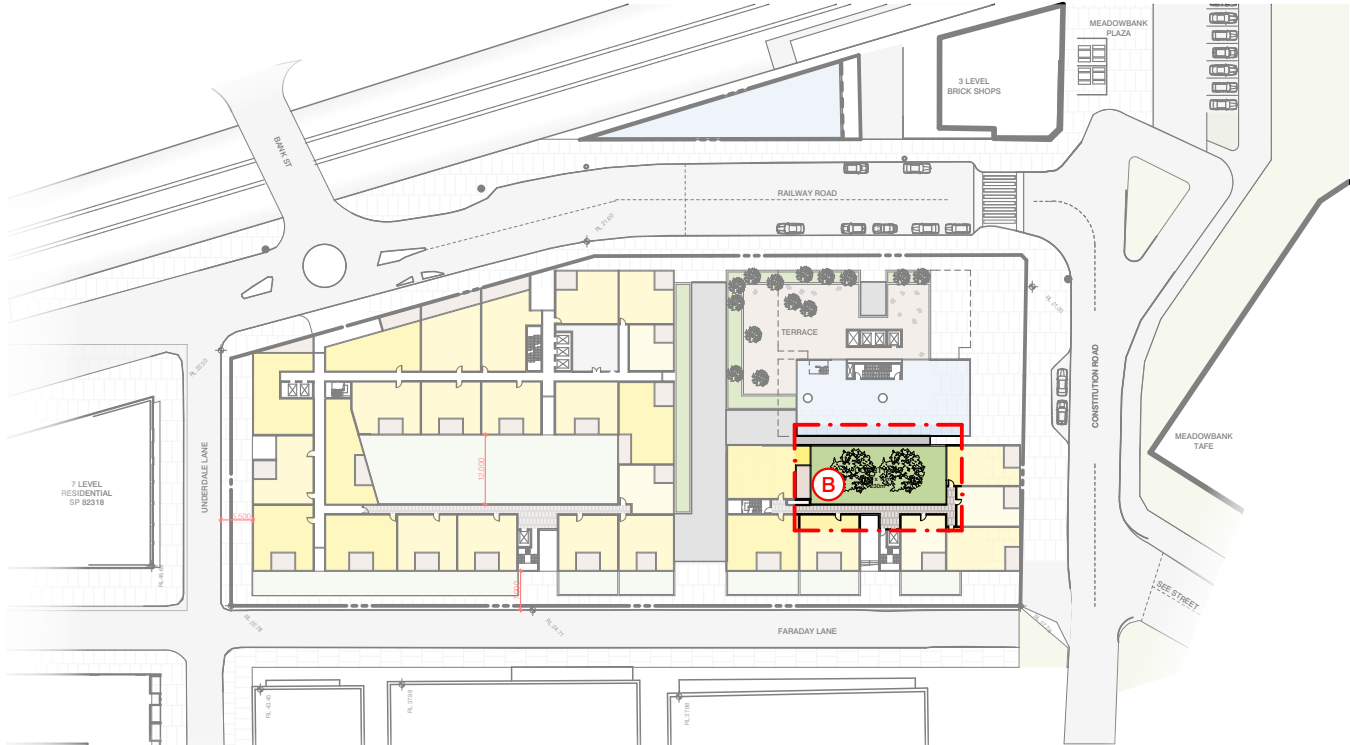
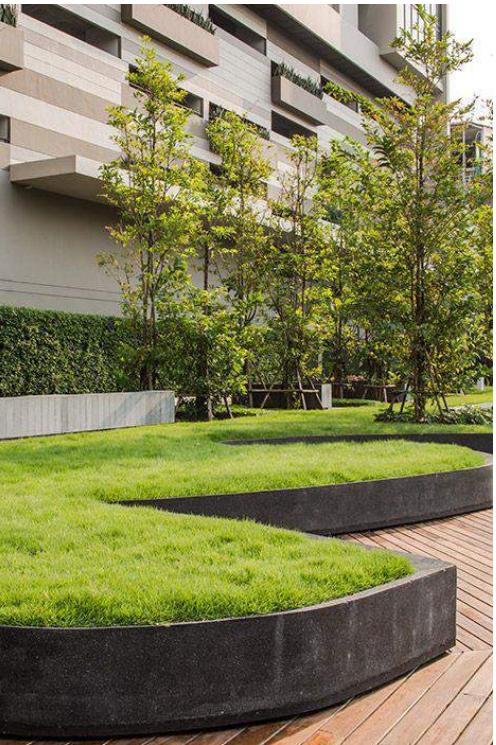
OPEN COURTYARD SPACE

Two open courtyards sit central within the site. These spaces allow for deeper solar penetration into the heart of the mass. The intent for these spaces is to encourage quiet interaction and provide a green space for visual amenity.

- A 43m x 12m - 516m<sup>2</sup>
- B 23m x 12m - 230m<sup>2</sup>



LEVEL 1 PLAN



LEVEL 2 PLAN

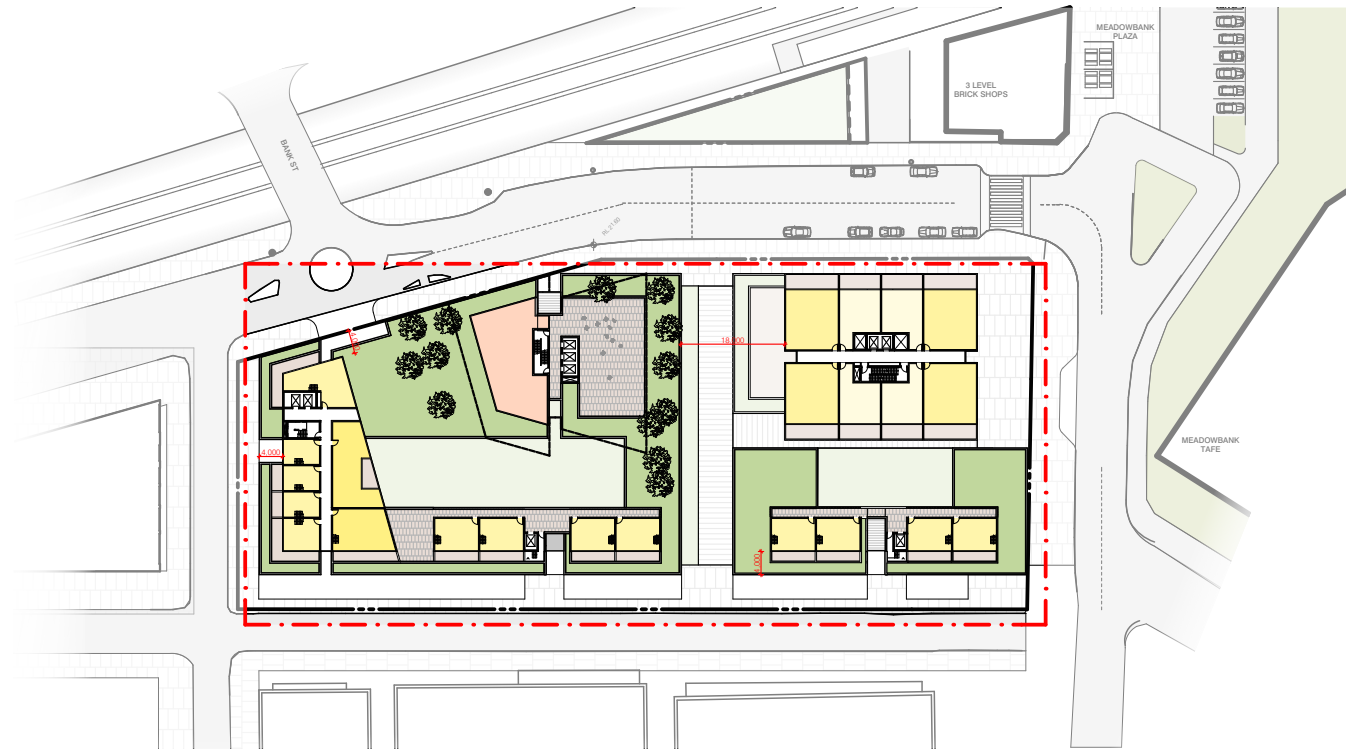


## THE MEADOWS



At the top of the podium is an extensive residential recreation space and common landscaping. The roof terrace offers 299 m<sup>2</sup> outdoor hard surfaces for gatherings and BBQs, in addition there is 412 m<sup>2</sup> of accessible soft landscaping on the roof.

There is also an indoor common recreation room of 189m<sup>2</sup> located off the roof terrace.



LEVEL 5 PLAN





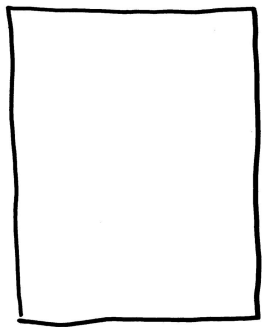
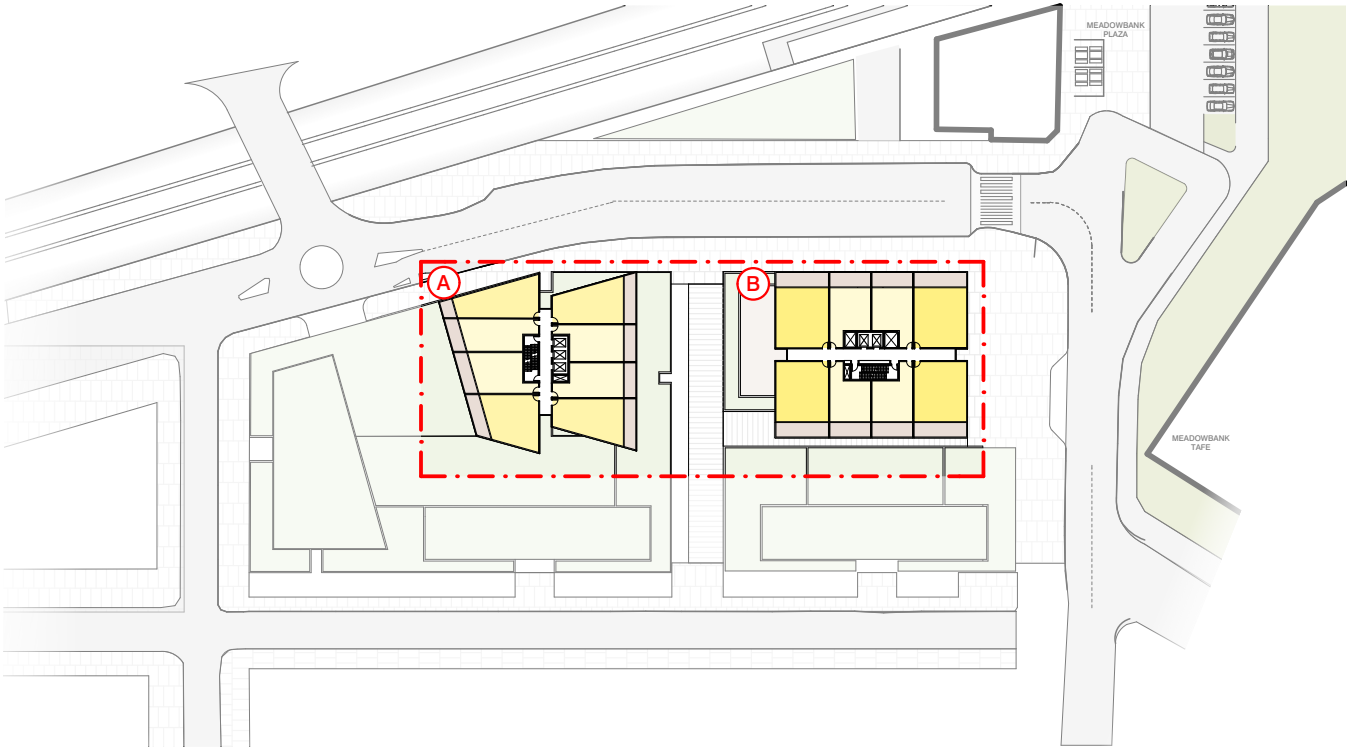
# RESIDENTIAL TOWERS

The two towers are simply arranged with a single central corridor with 8 apartments to a floor. The simple planning creates flexibility in how space is divided for various apartment types. The corridor is naturally ventilated with glazed facade at either side for the wellbeing of the common area.

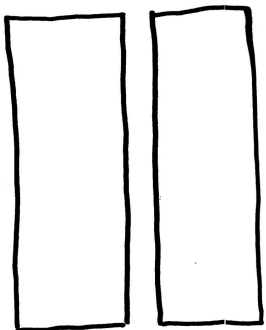
The central circulation spine informs the overall design of the towers. It is recessed in, allowing the volume to be read in two parts as opposed to a single large flat elevation. This division allows the tower forms to naturally slip, creating the landscaped tiers within the built form.

**A** 827 m² Floorplate

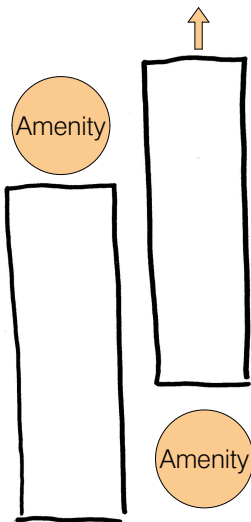
**B** 952 m² Floorplate



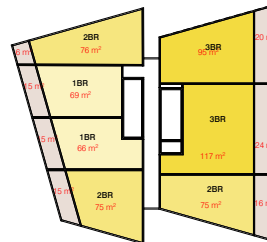
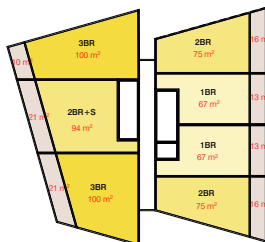
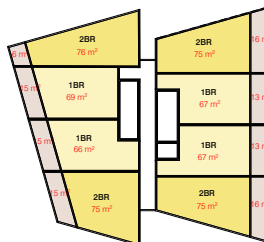
Unarticulated form lacking in definition.



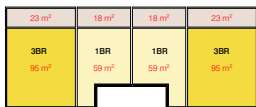
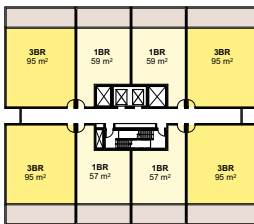
Splitting the form improving its slenderness.



Slipping the form adding amenity in the new spaces created



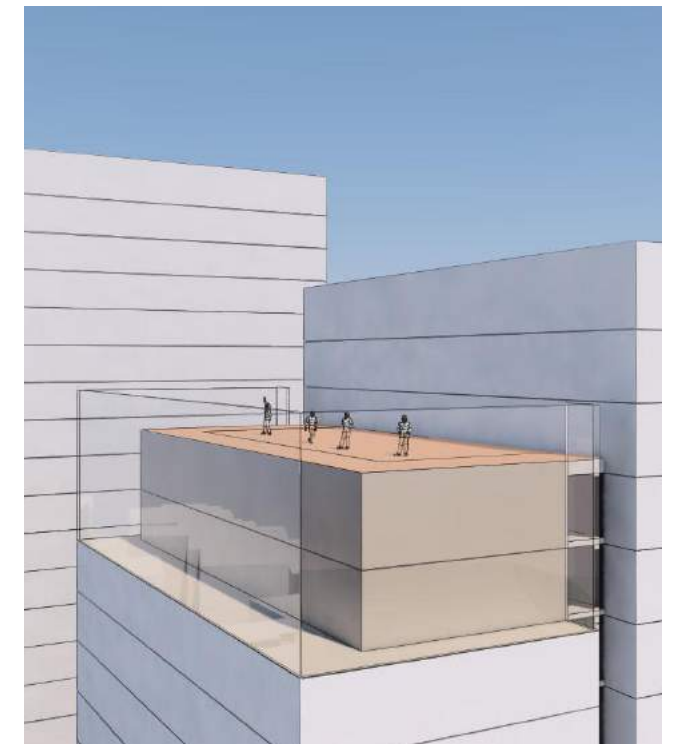
There are multiple ways to segment the residential floor plates in order to shape the mix to suit local requirements





## ROOFTOP AMENITY

Each tower has its own communal roof terrace, creating a place for residents to entertain and share the regional and district views with their friends and family. These spaces would be landscaped with a glazed surround extending up to protect from weather, whilst preserving the solar amenity to the neighbouring buildings.



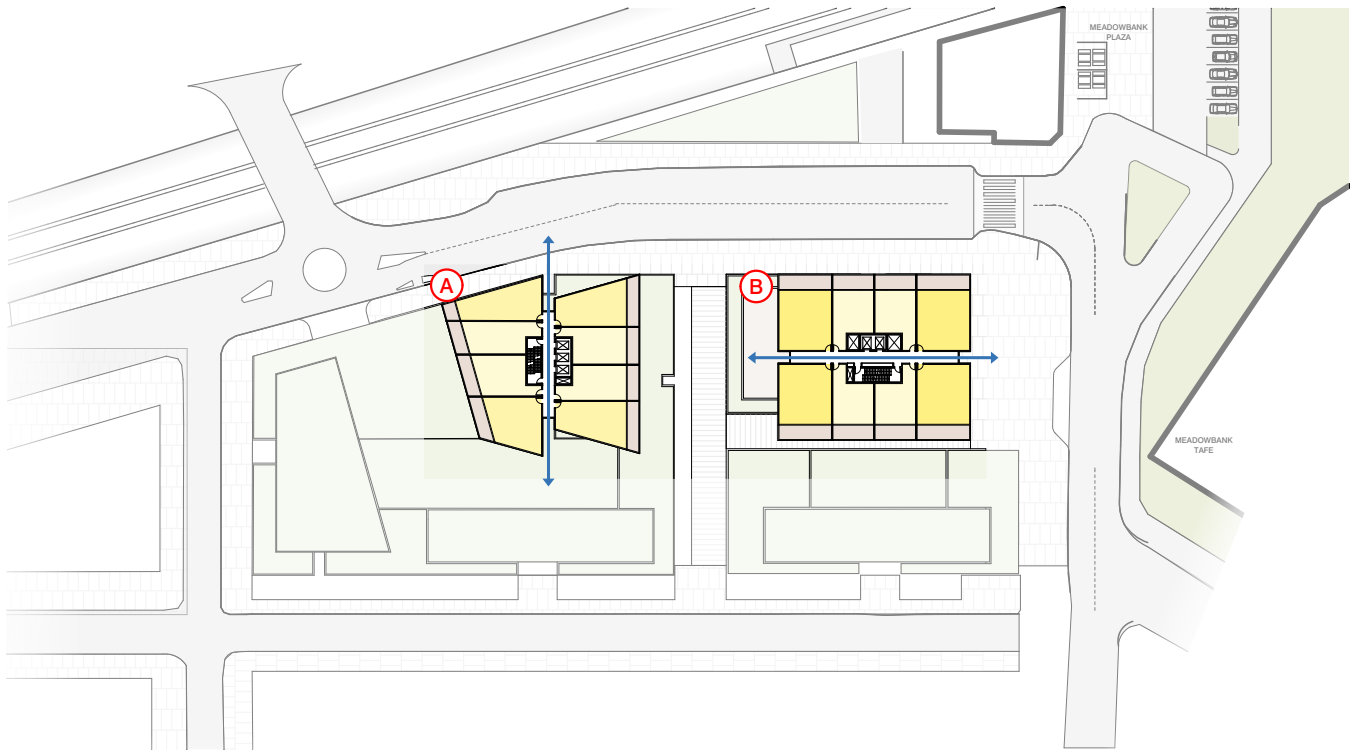
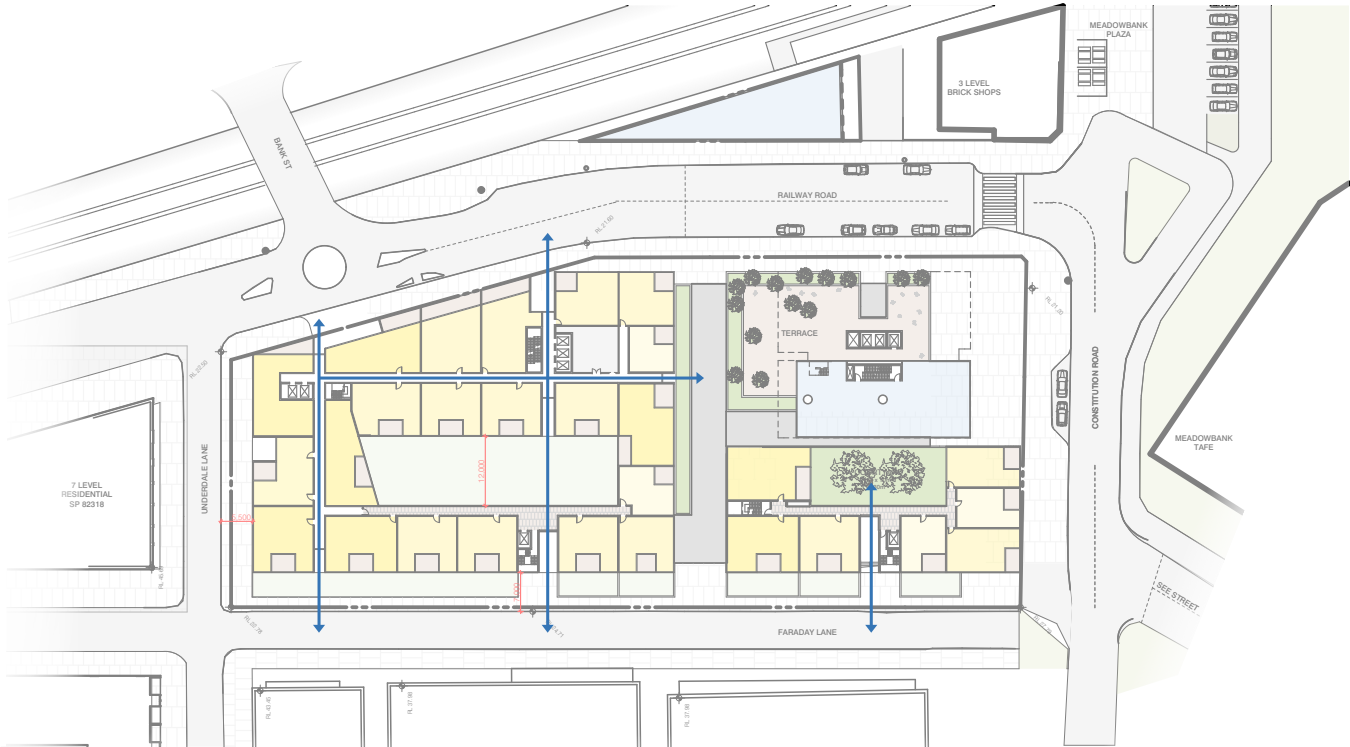
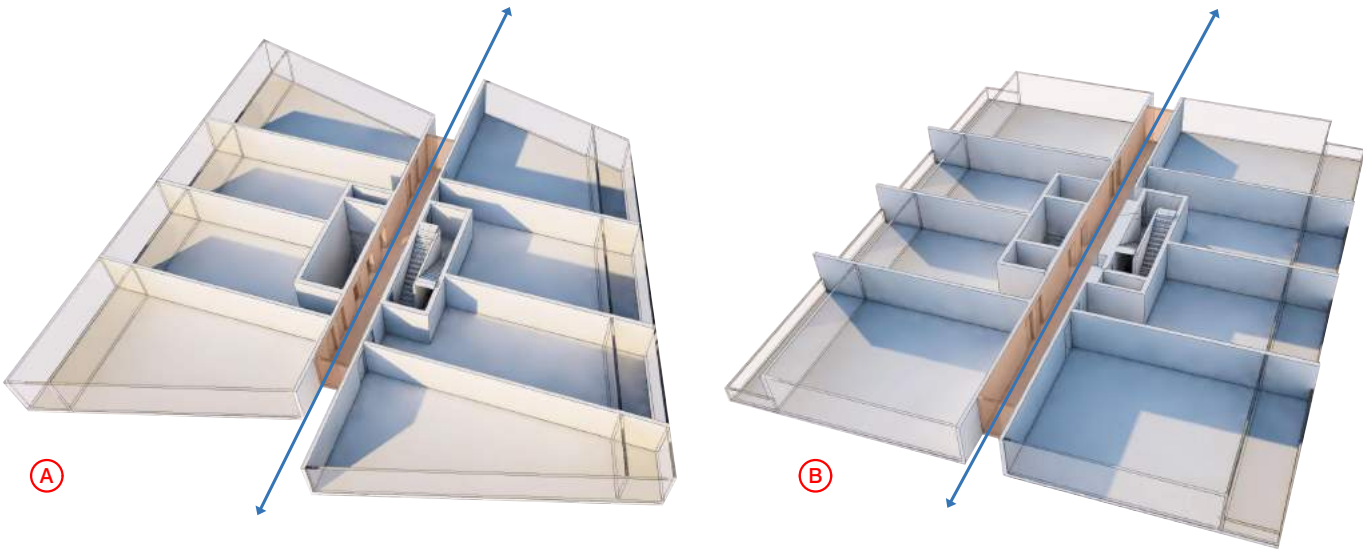


VENTILATION

The design features linear corridors with operable windows at either end to encourage cross air flow. Off the courtyards there are also semi enclosed corridors. The design achieves SEPP 65 compliance for apartment ventilation. A summary is tabled below with further detailed plans in the appendix.

SEPP 65 - Ventilation Summary

	Yes	No
Ground		
Level 1	11	7
Level 2	19	9
Level 3	19	9
Level 4	27	9
Level 5	19	4
Level 6	6	6
Level 7	8	8
Level 8	8	8
Level 9	8	8
Total	125 64.7%	68 35.3%





SOLAR

The design achieves SEPP 65 solar requirement of 70% apartments receiving 2 hrs, with only 10% receiving 0hrs on June 21st. A summary of the performance is below with more detailed information in the appendix.

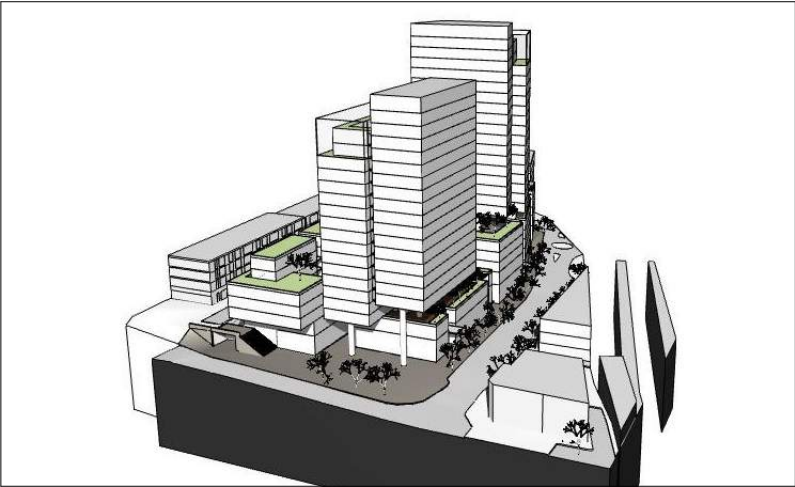
It is worth noting that the eastern face of both towers receive 1 hr 45 mins of sunlight and marginally fall short of the +2hr category.

SEPP 65 - 2hr Solar Summary

	+2hrs	<2hrs	0hrs
Ground			
Level 1	5	10	3
Level 2	12	15	1
Level 3	15	12	1
Level 4	32	3	1
Level 5	20	3	
Level 6	7	3	2
Level 7 to 15	99	27	18
Level 16	11	1	2
Level 17	11	1	2
Level 18	9		2
Level 19	9		2
Level 20	6		2
Level 21	4		
Level 22	5		
Level 23	3		
Total	248 70%	72 20%	36 10%



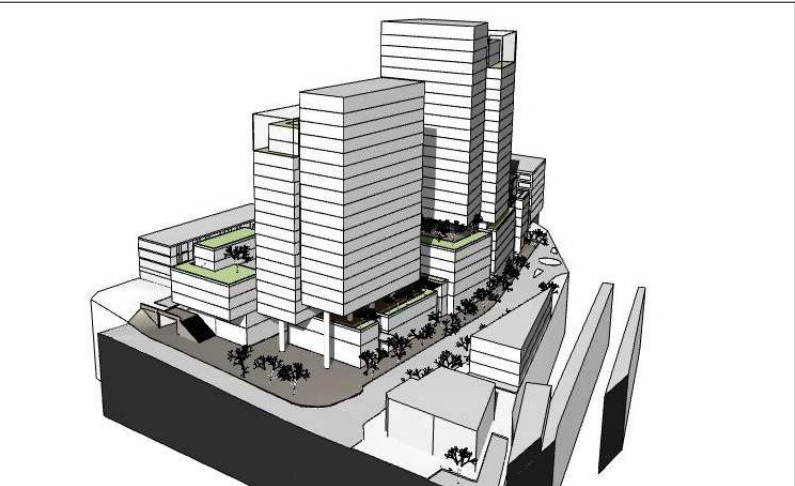
June 21st - 9am  
Azimuth: 47.42 - Altitude: 18.88'



June 21st - 12pm  
Azimuth: 90.79 - Altitude: 31.1'



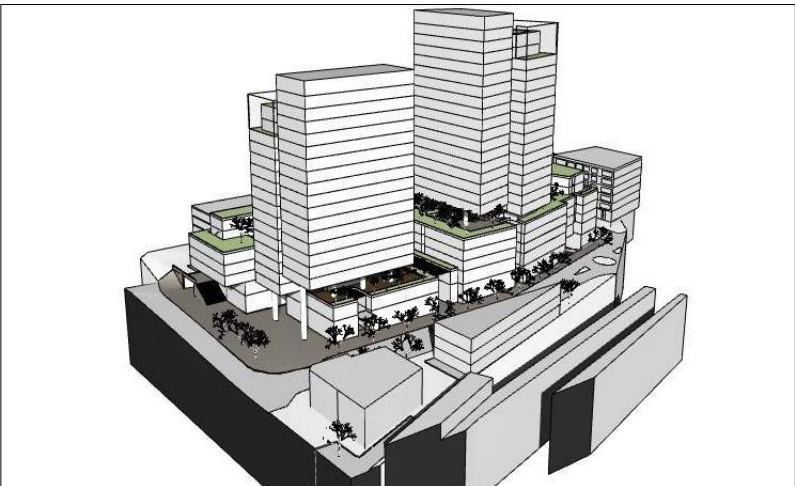
June 21st - 10am  
Azimuth: 59.99 - Altitude: 29.27'



June 21st - 1pm  
Azimuth: 106.8 - Altitude: 30.76'



June 21st - 11am  
Azimuth: 74.68 - Altitude: 31.1'



June 21st - 2pm  
Azimuth: 121.3 - Altitude: 25.66'



June 21st - 3pm  
Azimuth: 133.6 - Altitude: 18.06'



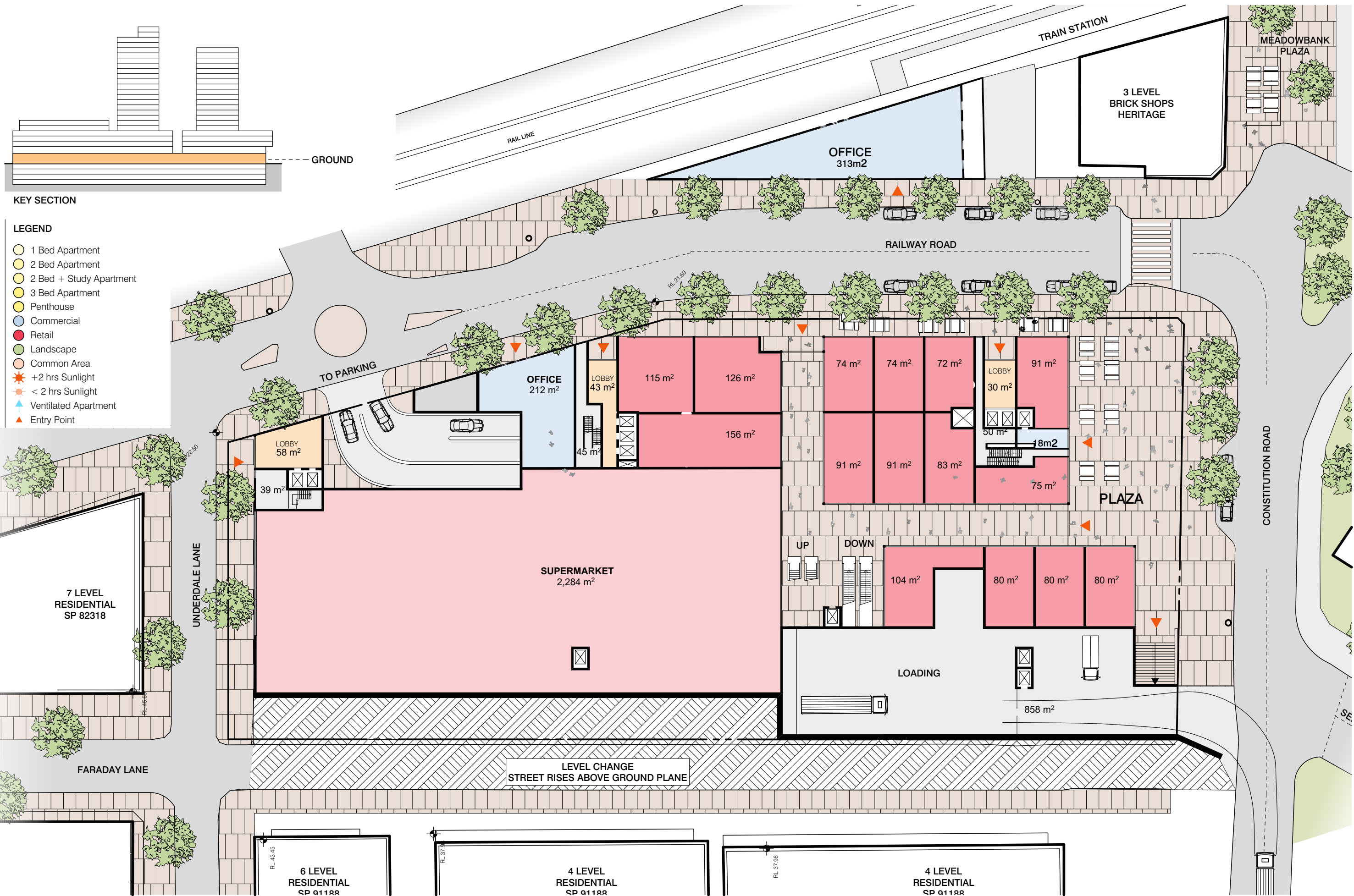




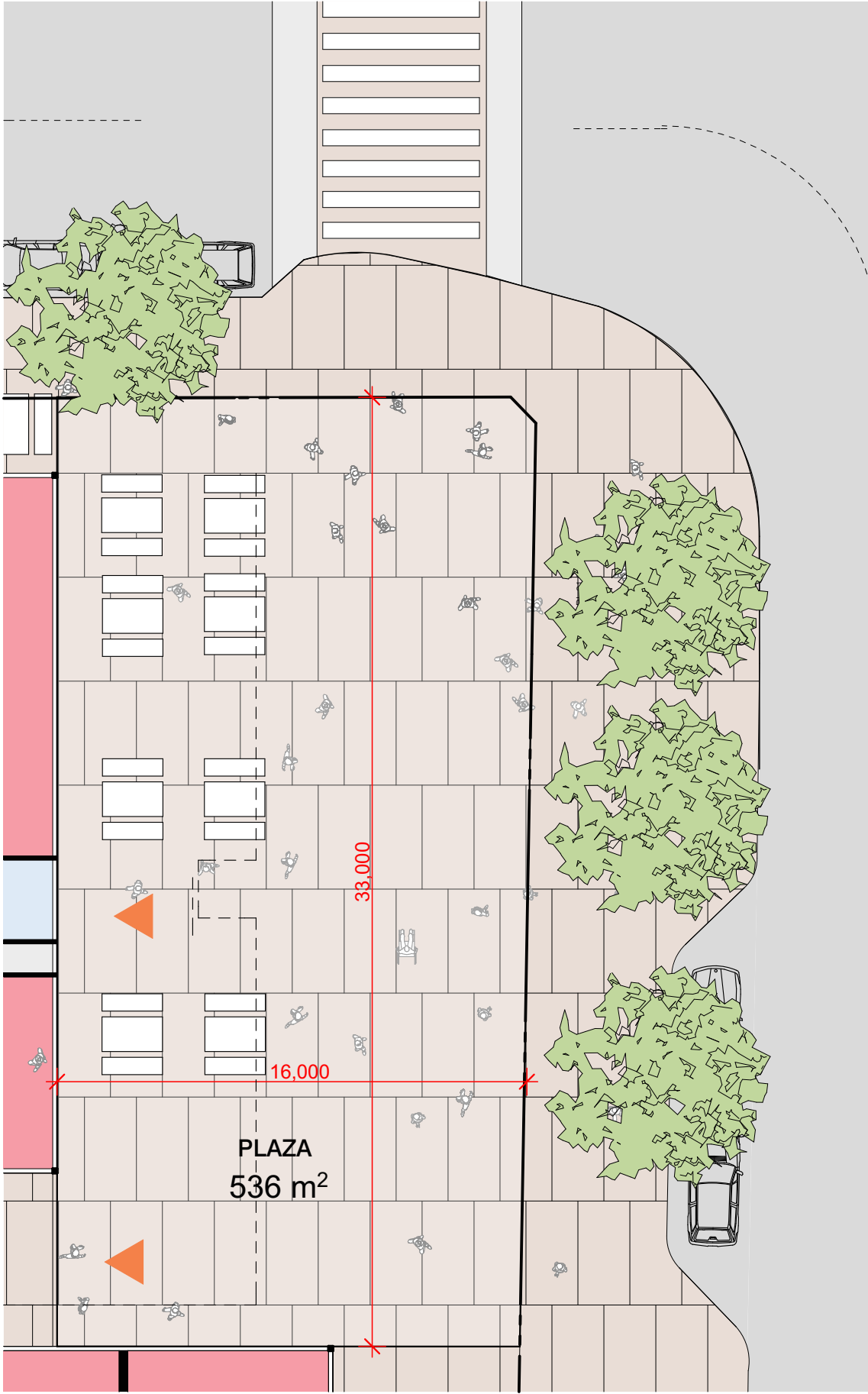
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**APPENDIX**

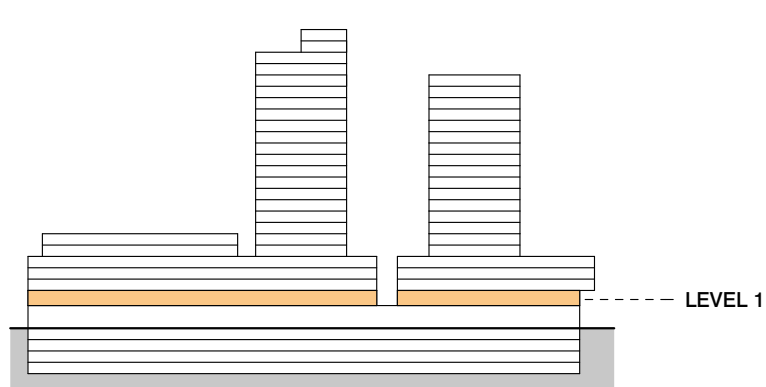






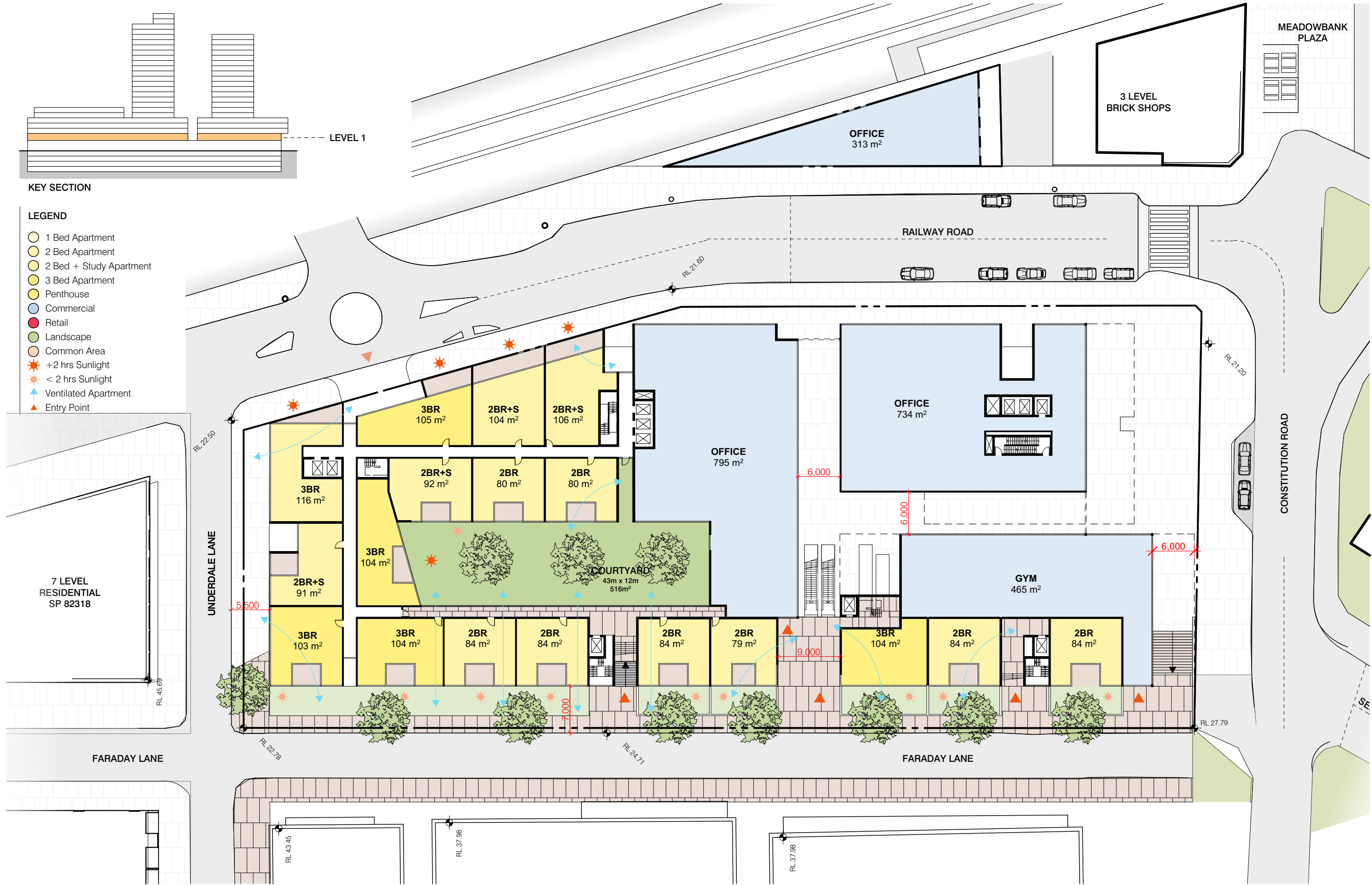






KEY SECTION

- LEGEND
- 1 Bed Apartment
  - 2 Bed Apartment
  - 2 Bed + Study Apartment
  - 3 Bed Apartment
  - Penthouse
  - Commercial
  - Retail
  - Landscape
  - Common Area
  - +2 hrs Sunlight
  - < 2 hrs Sunlight
  - Ventilated Apartment
  - Entry Point



CONTACT  
L3, 414 Kent Street,  
Sydney, NSW, Australia 2000  
P: +61 02 8216 3500  
W: www.fkaustralia.com

PREPARED FOR:  
SASCO DEVELOPMENTS

**FENDER KATSALIDIS**

FENDER KATSALIDIS (AUST) PTY LTD ACN: 092 943 032 ABN: 54 092 943 032

PROJECT  
RAILWAY ROAD, MEADOWBANK

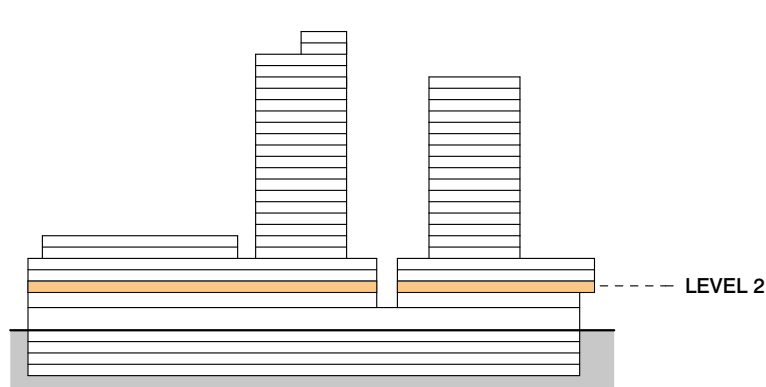
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LEVEL 1 PLAN

SCALE  
1:500 @ A3

DATE  
03-Oct-17

DRAWING NUMBER  
72





KEY SECTION

LEGEND

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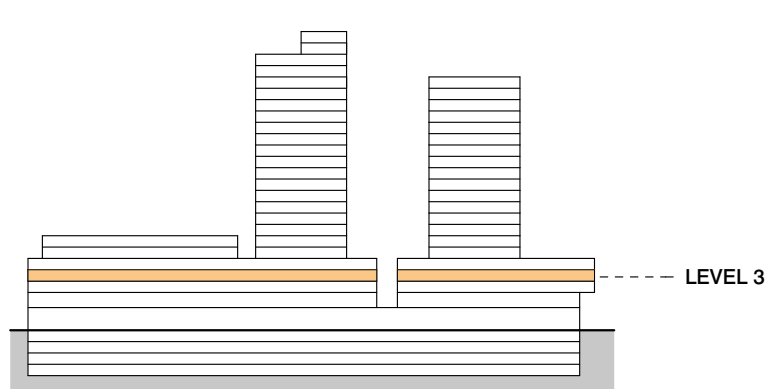
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DATE  
03-Oct-17

DRAWING NUMBER  
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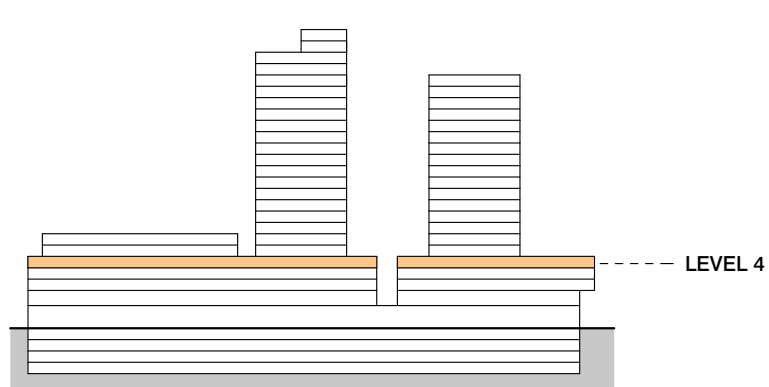
KEY SECTION

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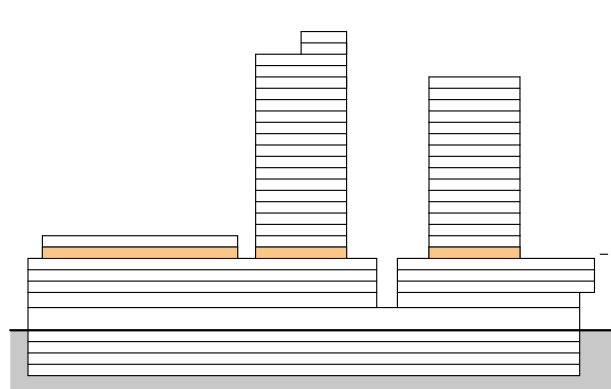
KEY SECTION

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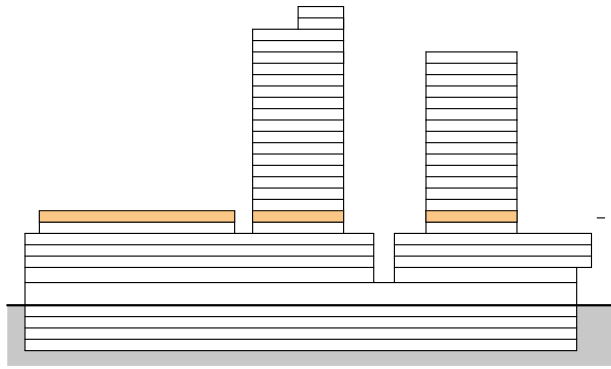
KEY SECTION

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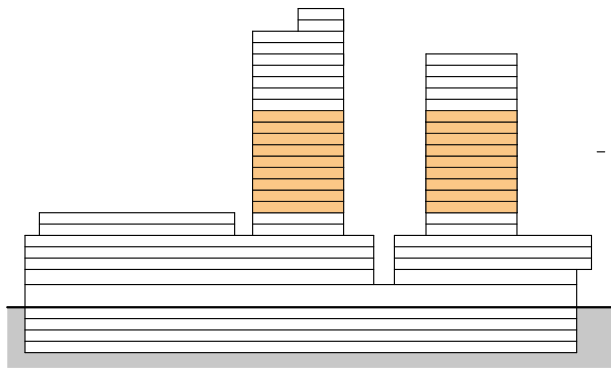
KEY SECTION

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- Landscape
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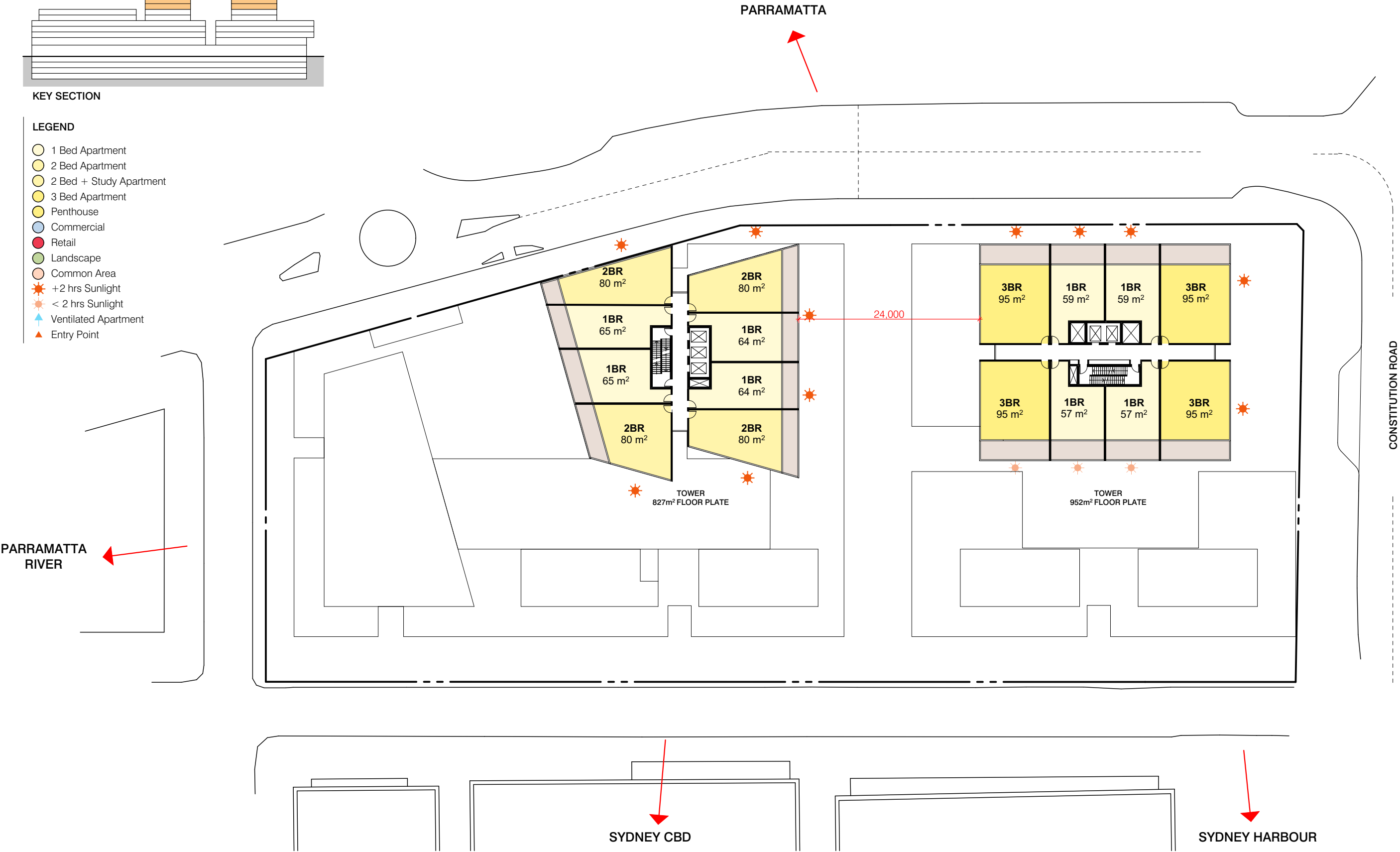




KEY SECTION

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L3, 414 Kent Street,  
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P: +61 02 8216 3500  
W: www.fkaustralia.com

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PROJECT  
RAILWAY ROAD, MEADOWBANK

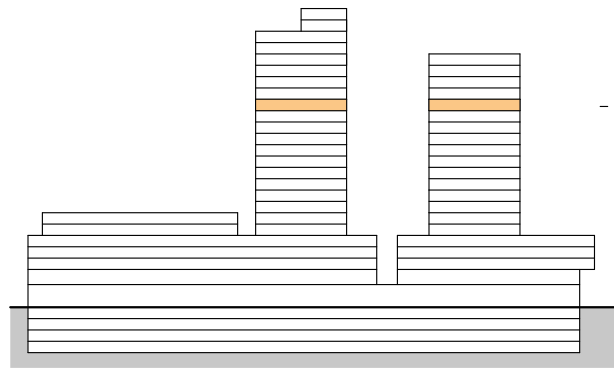
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LEVEL 7-15 TYPICAL PLAN

SCALE  
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DATE  
03-Oct-17

DRAWING NUMBER  
**78**





KEY SECTION

LEGEND

- 1 Bed Apartment
- 2 Bed Apartment
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- 3 Bed Apartment
- Penthouse
- Commercial
- Retail
- Landscape
- Common Area
- +2 hrs Sunlight
- < 2 hrs Sunlight
- Ventilated Apartment
- Entry Point

----- LEVEL 16

PARRAMATTA

PARRAMATTA RIVER

CONSTITUTION ROAD

SYDNEY CBD

SYDNEY HARBOUR

CONTACT  
L3, 414 Kent Street,  
Sydney, NSW, Australia 2000  
P: +61 02 8216 3500  
W: www.fkaustralia.com

PREPARED FOR:  
SASCO DEVELOPMENTS

**FENDER KATSALIDIS**  
FENDER KATSALIDIS (AUST) PTY LTD ACN: 092 943 032 ABN: 54 092 943 032

PROJECT  
RAILWAY ROAD, MEADOWBANK

DRAWING TITLE  
LEVEL 16 PLAN

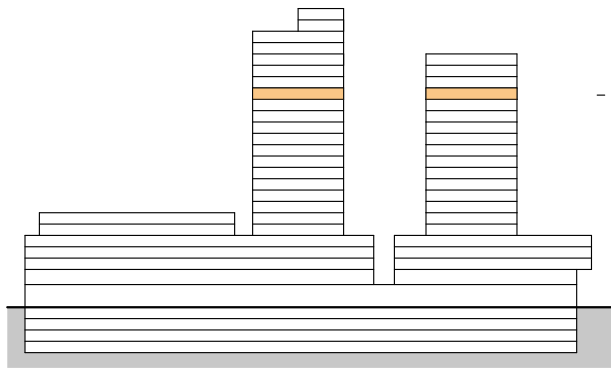


SCALE  
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DATE  
03-Oct-17

DRAWING NUMBER  
**79**





KEY SECTION

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PARRAMATTA RIVER

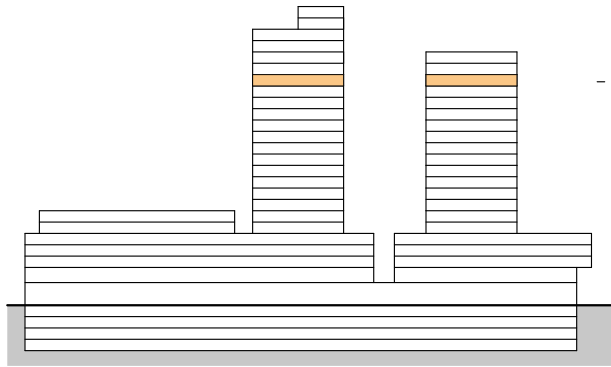
PARRAMATTA

CONSTITUTION ROAD

SYDNEY CBD

SYDNEY HARBOUR





KEY SECTION

LEGEND

- 1 Bed Apartment
- 2 Bed Apartment
- 2 Bed + Study Apartment
- 3 Bed Apartment
- Penthouse
- Commercial
- Retail
- Landscape
- Common Area
- +2 hrs Sunlight
- < 2 hrs Sunlight
- Ventilated Apartment
- Entry Point

PARRAMATTA RIVER

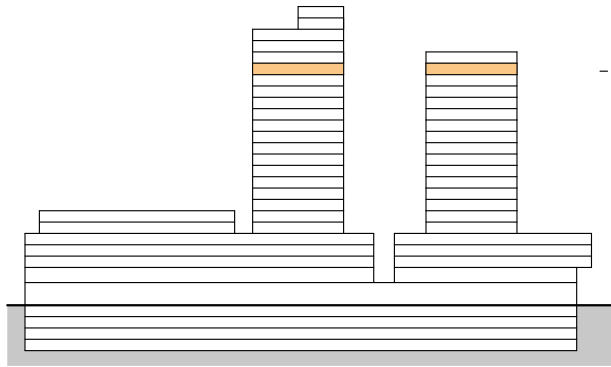
PARRAMATTA

CONSTITUTION ROAD

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SYDNEY HARBOUR





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PARRAMATTA RIVER

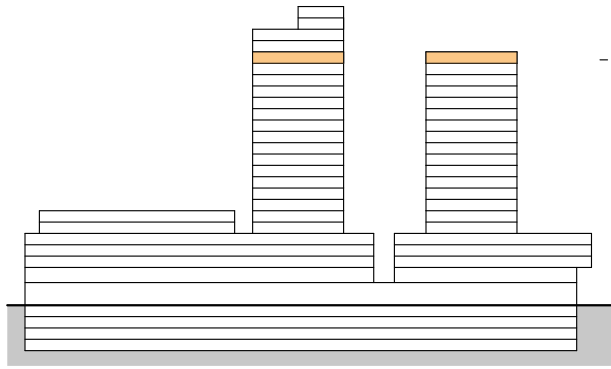
PARRAMATTA

CONSTITUTION ROAD

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- Ventilated Apartment
- Entry Point

PARRAMATTA RIVER

PARRAMATTA

CONSTITUTION ROAD

SYDNEY CBD

SYDNEY HARBOUR

CONTACT  
L3, 414 Kent Street,  
Sydney, NSW, Australia 2000  
P: +61 02 8216 3500  
W: www.fkaustralia.com

PREPARED FOR:  
SASCO DEVELOPMENTS

**FENDER KATSALIDIS**  
FENDER KATSALIDIS (AUST) PTY LTD ACN: 092 943 032 ABN: 54 092 943 032

PROJECT  
RAILWAY ROAD, MEADOWBANK

DRAWING TITLE  
LEVEL 20 PLAN

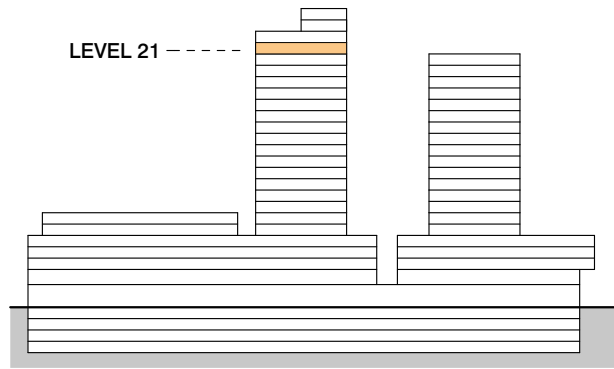


SCALE  
1:500 @ A3

DATE  
03-Oct-17

DRAWING NUMBER  
**83**

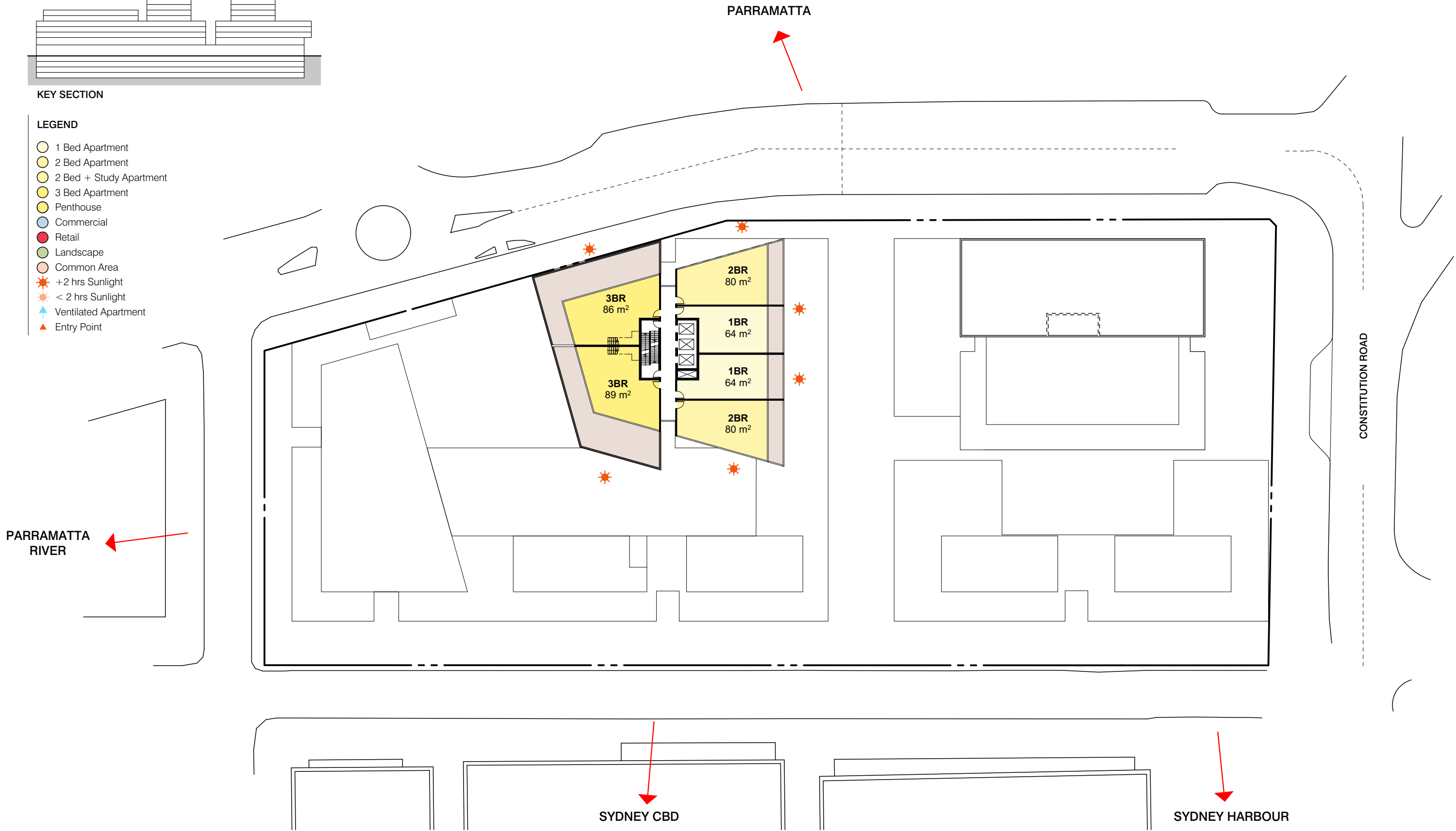




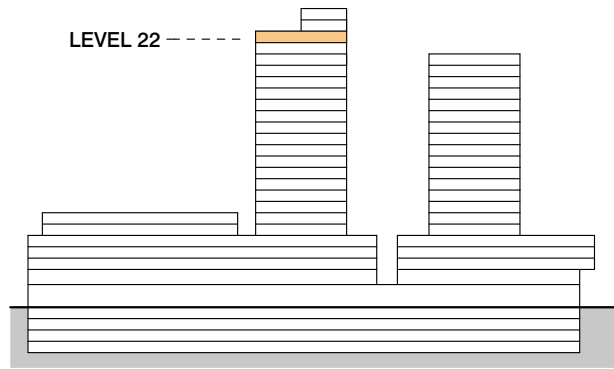
KEY SECTION

LEGEND

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- Retail
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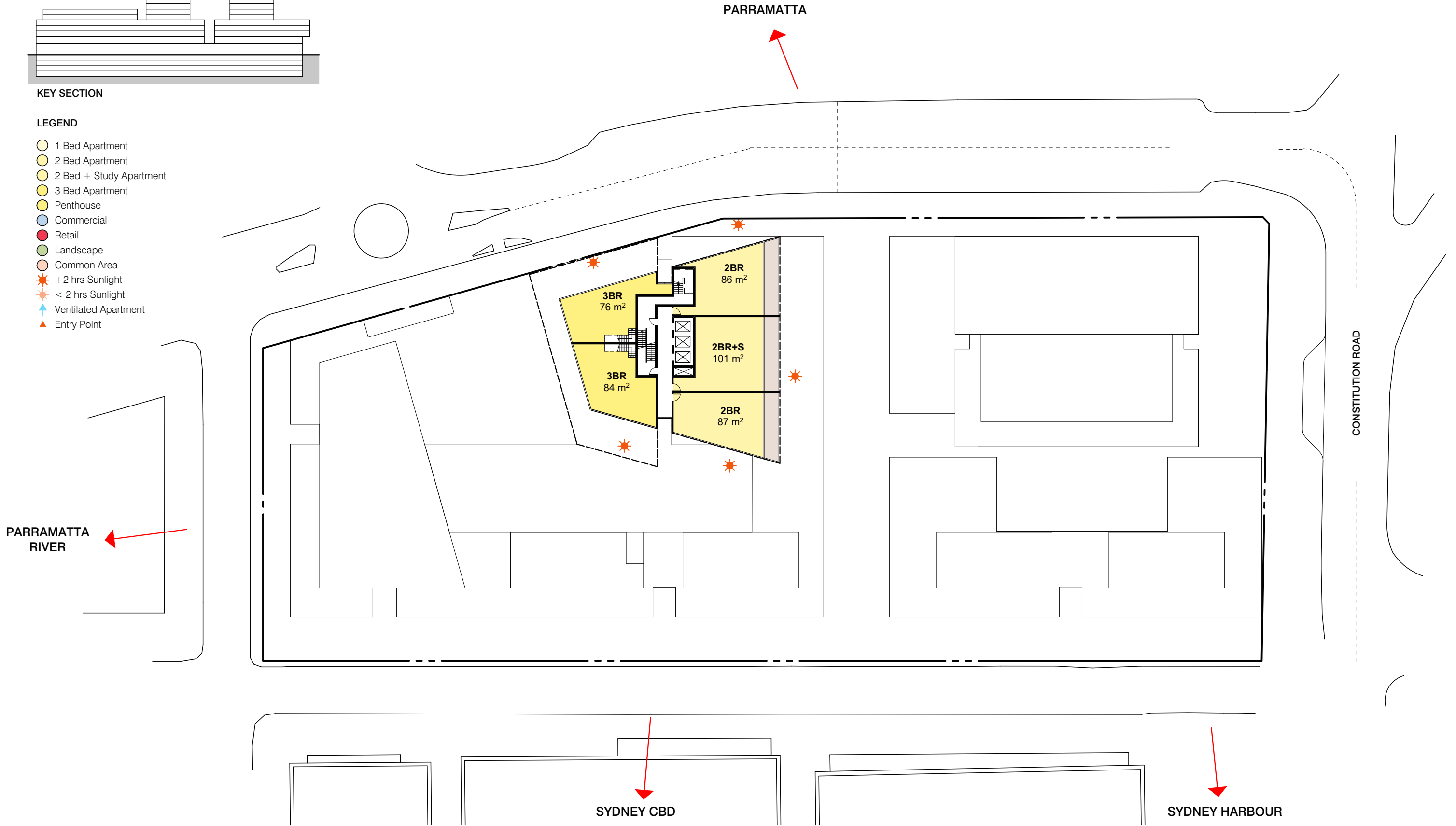




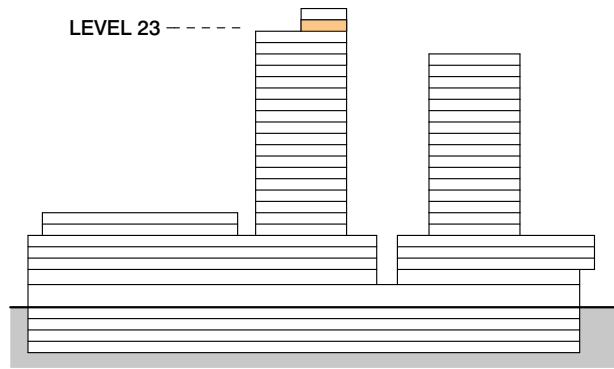
KEY SECTION

LEGEND

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- Entry Point



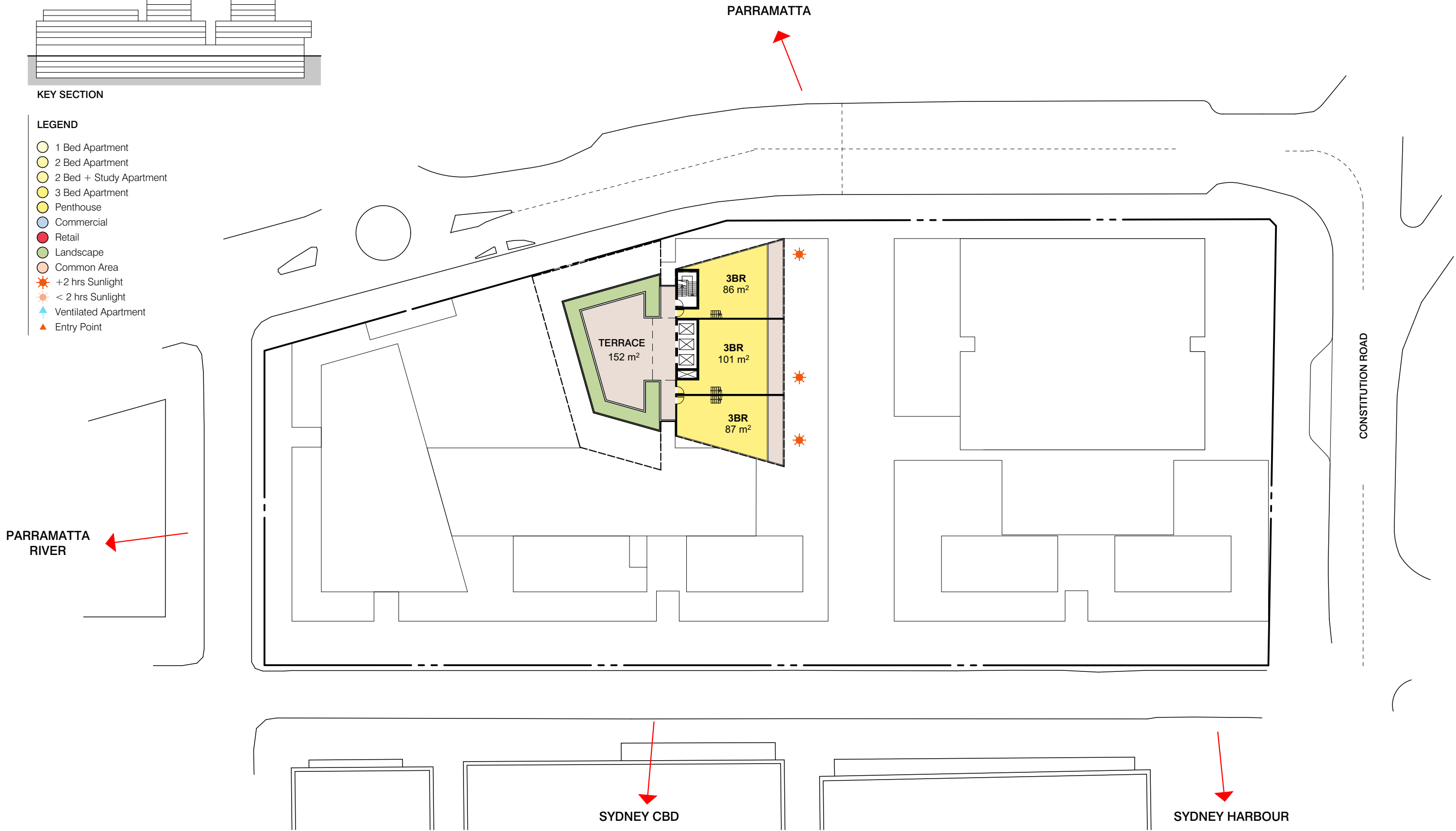




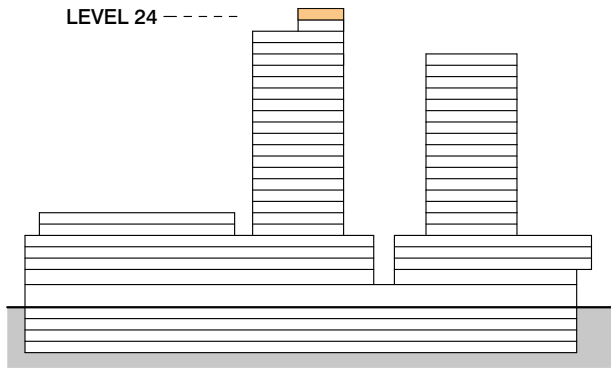
KEY SECTION

LEGEND

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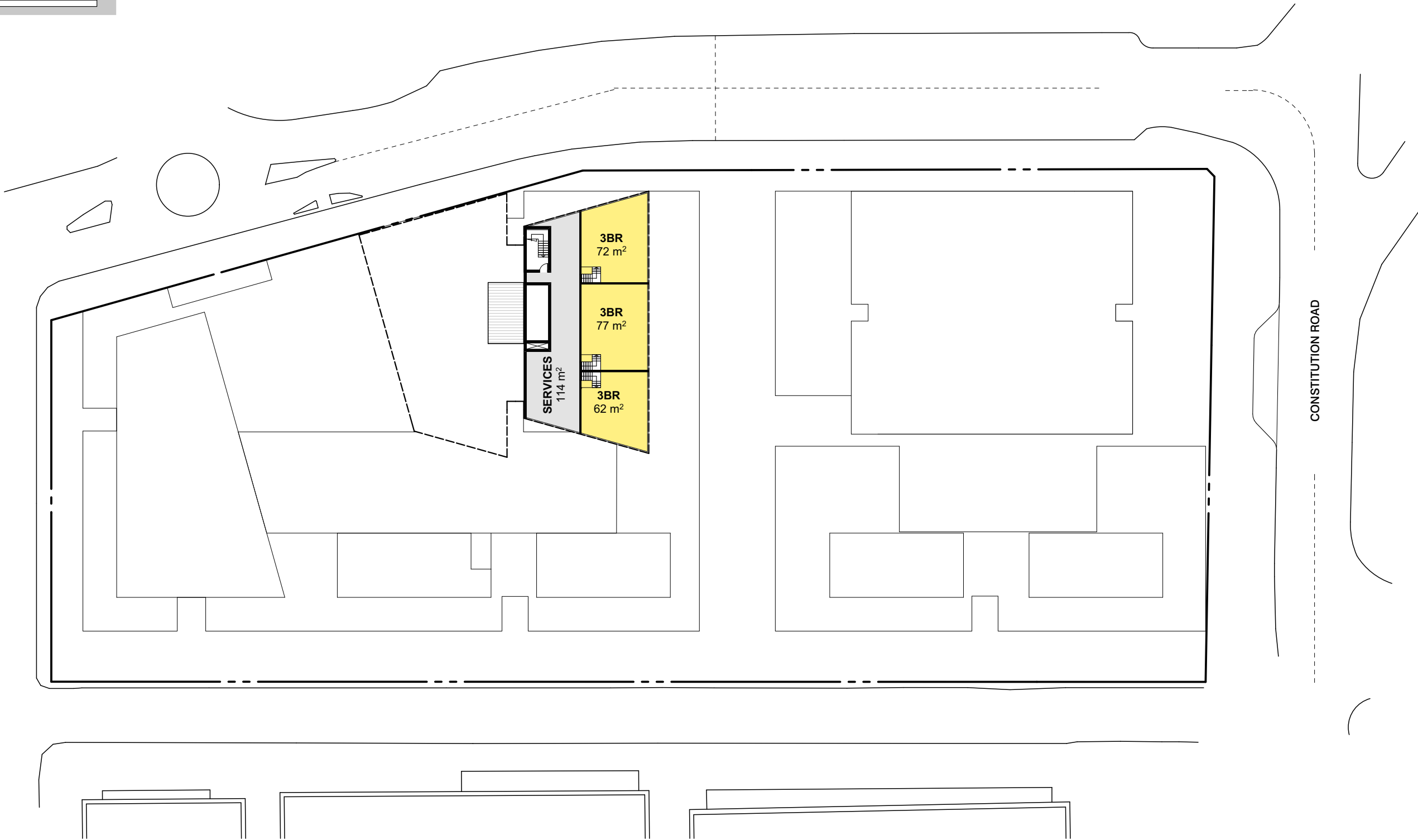




KEY SECTION

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PROJECT  
RAILWAY ROAD, MEADOWBANK

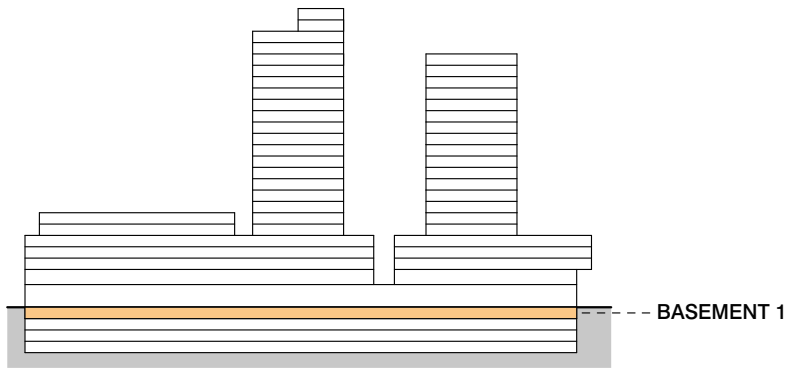
DRAWING TITLE  
LEVEL 24 PLAN

SCALE  
1:500 @ A3

DATE  
03-Oct-17

DRAWING NUMBER  
**87**

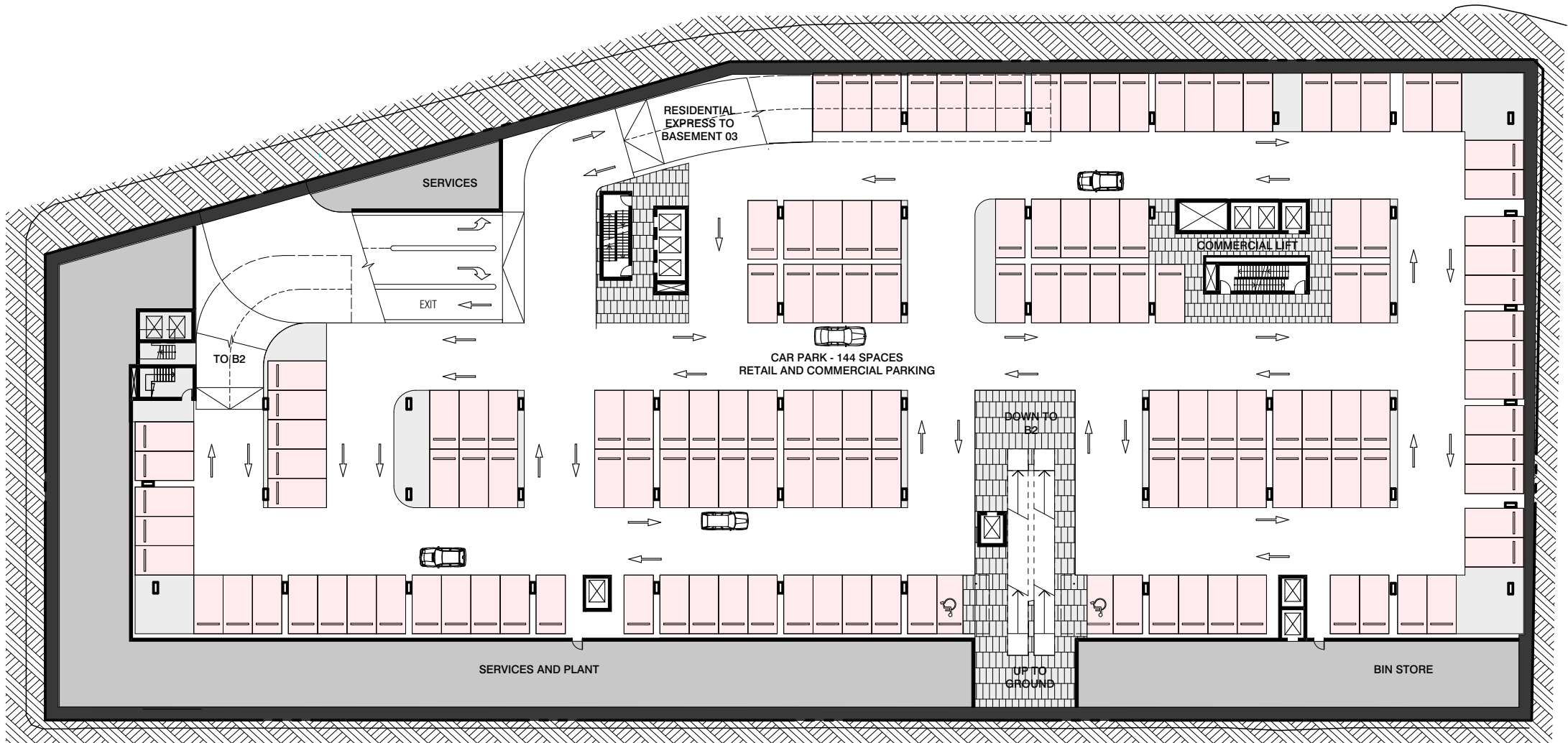




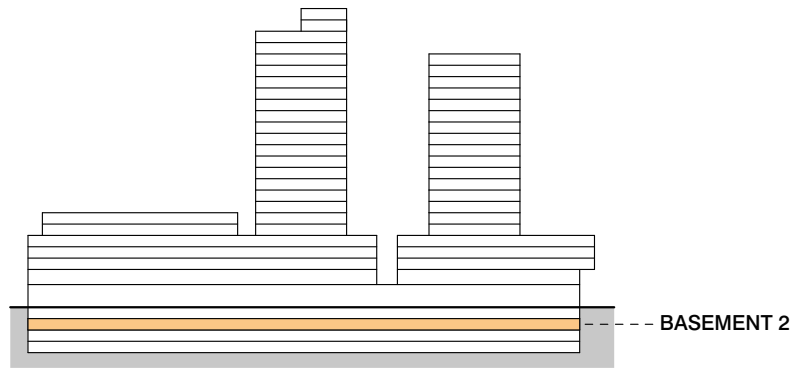
KEY SECTION

LEGEND

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- 2 Bed + Study Apartment
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- Retail
- Landscape
- Common Area
- +2 hrs Sunlight
- < 2 hrs Sunlight
- Ventilated Apartment
- Entry Point



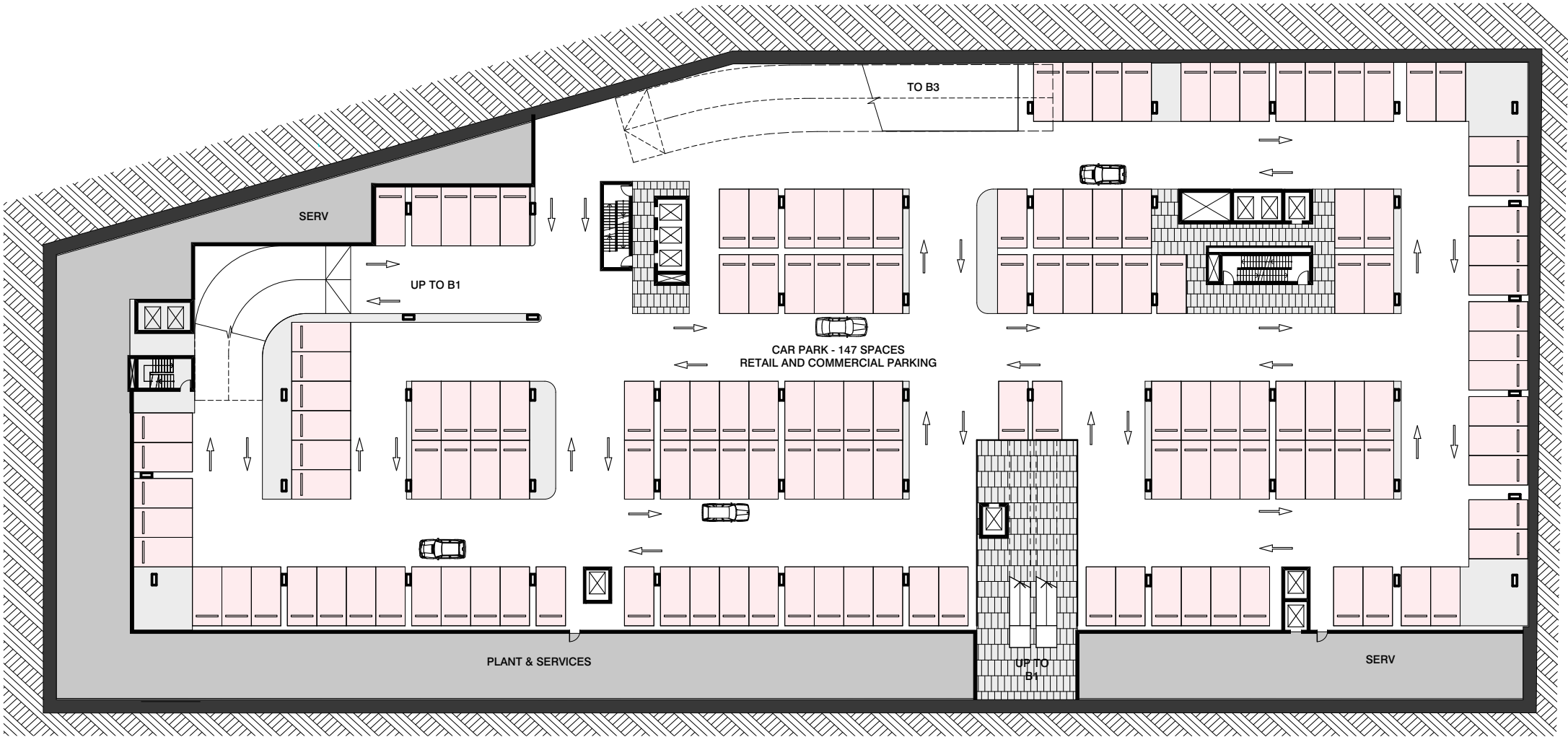




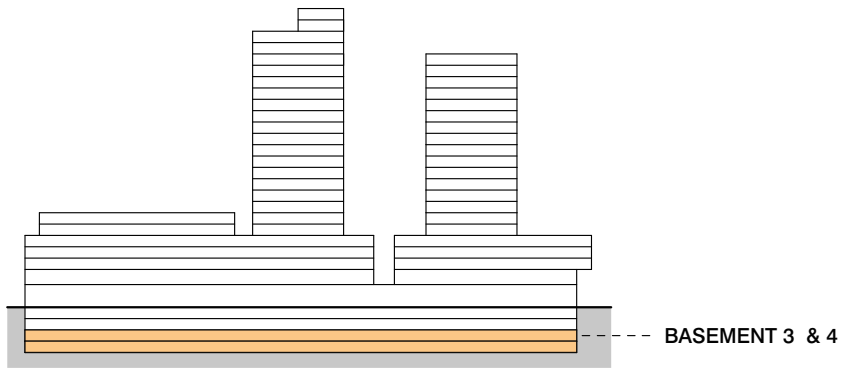
KEY SECTION

LEGEND

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- Retail
- Landscape
- Common Area
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- Entry Point



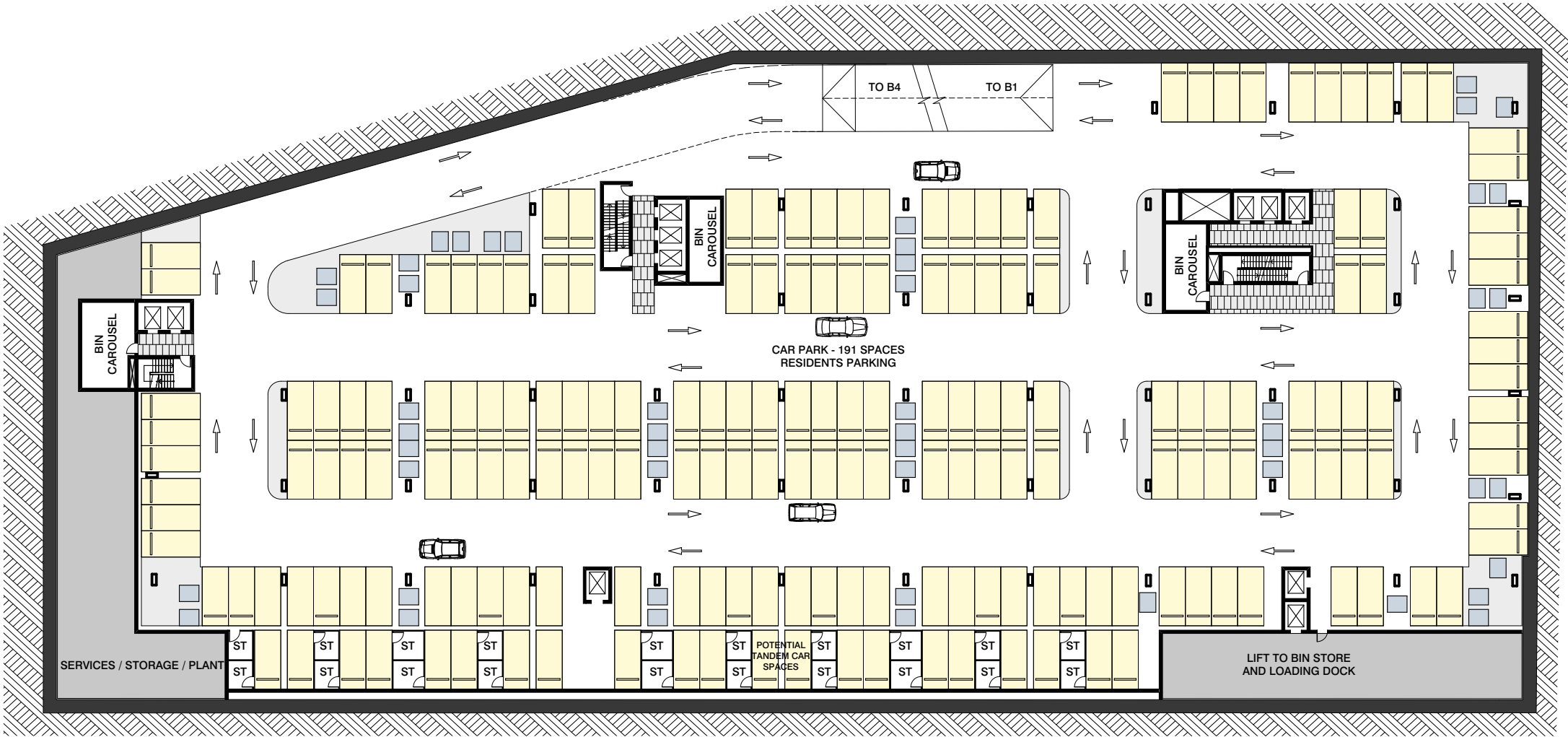




KEY SECTION

LEGEND

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- Ventilated Apartment
- Entry Point
- Storage





AREA SUMMARY

GFA SUMMARY

GFA	40,496 m²
SITE AREA	7,773 m²
FSR	5.2:1

NOTE:  
CALCULATION EXCLUDES TRIANGULAR WEDGE SITE.

NSA / NLA AREA SUMMARY

COMMERCIAL	2,928 m2
RETAIL	3,681 m2
RESIDENTIAL	29,436 m2

NOTE:  
CALCULATION EXCLUDES TRIANGULAR WEDGE SITE.

APARTMENT MIX SUMMARY

APARTMENT TYPE	QUANTITY	AVERAGE SIZE	Excludes
1 Bedroom	100	61m2	27%
2 Bedroom	163	81m2	46%
2 Bedroom + Study	23	94m2	7%
3 Bedroom	72	107m2	20%
TOTAL	358	APARTMENTS	

NOTE:  
AS DEMONSTATED ON THE TOWER FLOOR PLATE DRAWING  
THE FLOOR PLATES OFFER APARTMENT TYPE VERSATILITY.  
MIX SHOWN IS JUST ONE VARIATION

GFA SUMMARY - TRIANGULAR WEDGE

GFA	939 m²
SITE AREA	346 m²
FSR	2.7:1

NLA AREA SUMMARY - TRIANGULAR WEDGE

COMMERCIAL	939 m2
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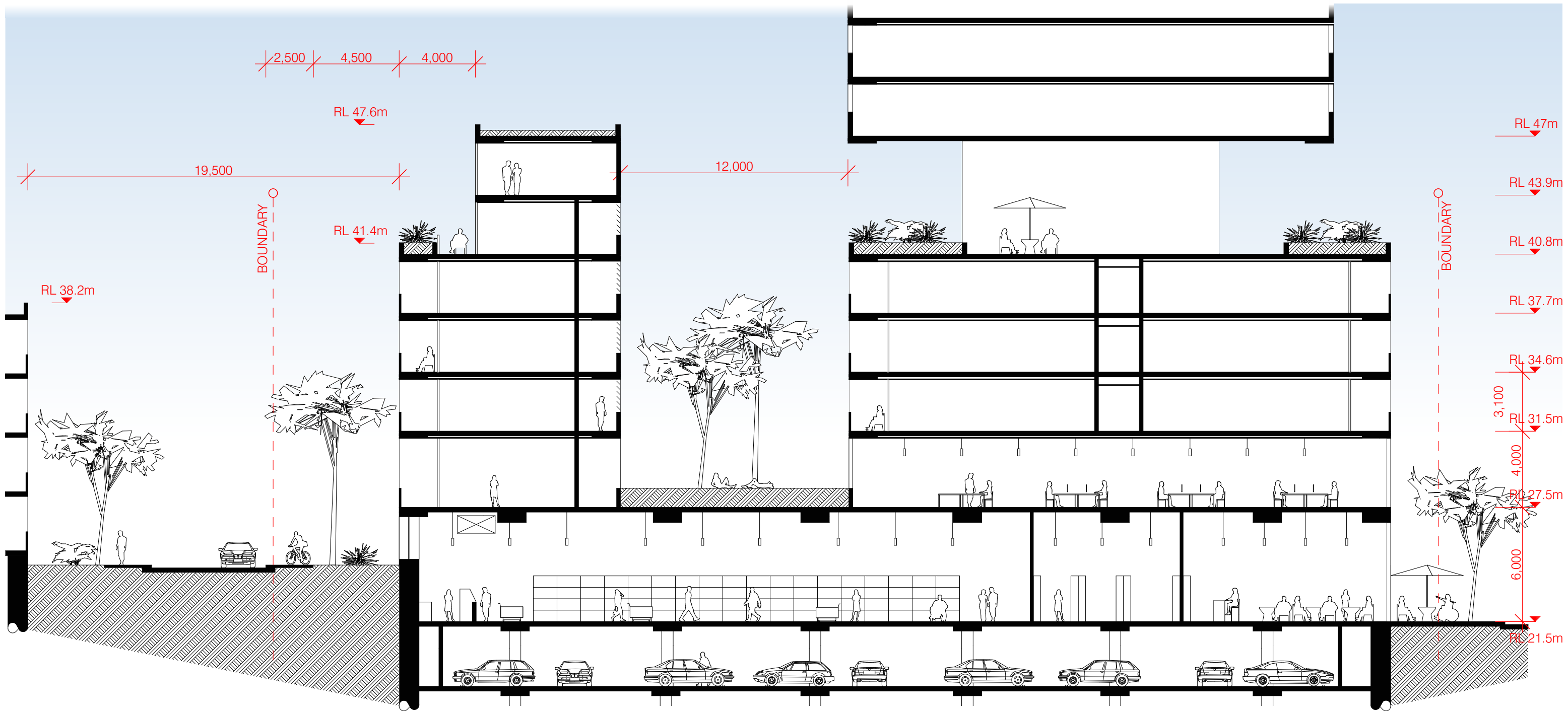
MINIMUM CAR PARKING REQUIREMENTS

TYPE	QUANTITY	RATE	AMOUNT	TOTAL
1 Bedroom	100	0.6 Spaces		60
2 Bedroom	163	0.9 Spaces		147
2 Bedroom + Study	23	0.9 Spaces		21
3 Bedroom	72	1.4 Spaces		101
Visitor		1 Space / 5 Apts		74
TOTAL RESIDENTIAL REQUIRED				403
COMMERCIAL	3,867 m2	1 Space / 40m2		96
RETAIL	3,681 m2	1 Space / 25m2		148
TOTAL RETAIL / COMM. REQUIRED				244
TOTAL CAR SPACES REQUIRED				647









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FENDER KATSALIDIS (AUST) PTY LTD ACN: 092 943 032 ABN: 54 092 943 032

PROJECT  
RAILWAY ROAD, MEADOWBANK

DRAWING TITLE  
SETBACK SECTION

SCALE  
1:200 @ A3

DATE  
03-Oct-17

DRAWING NUMBER  
**93**

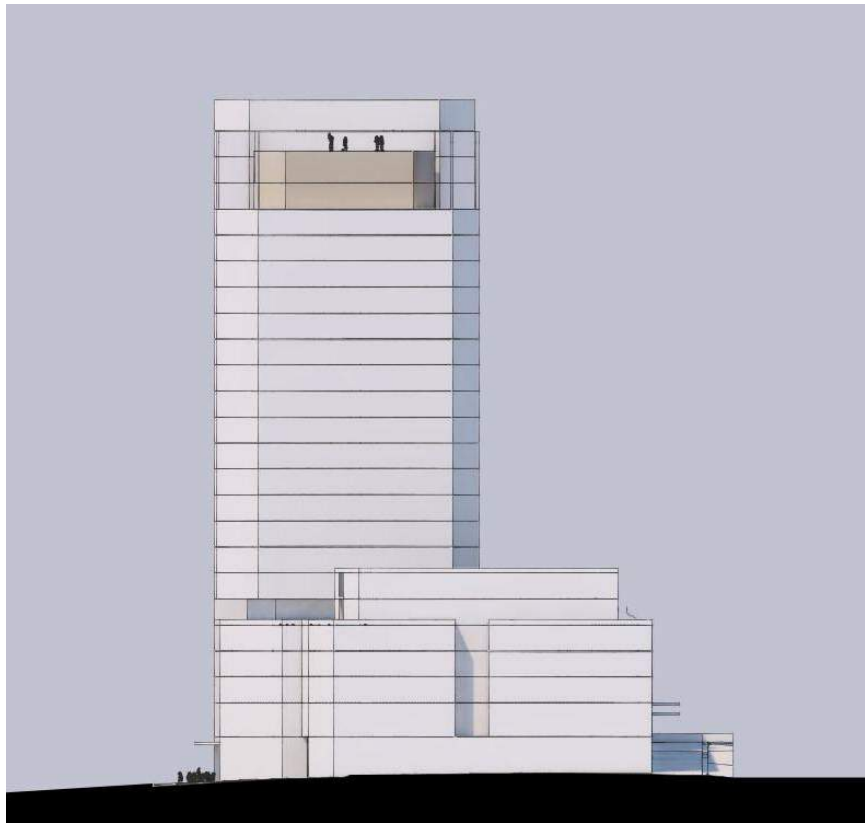




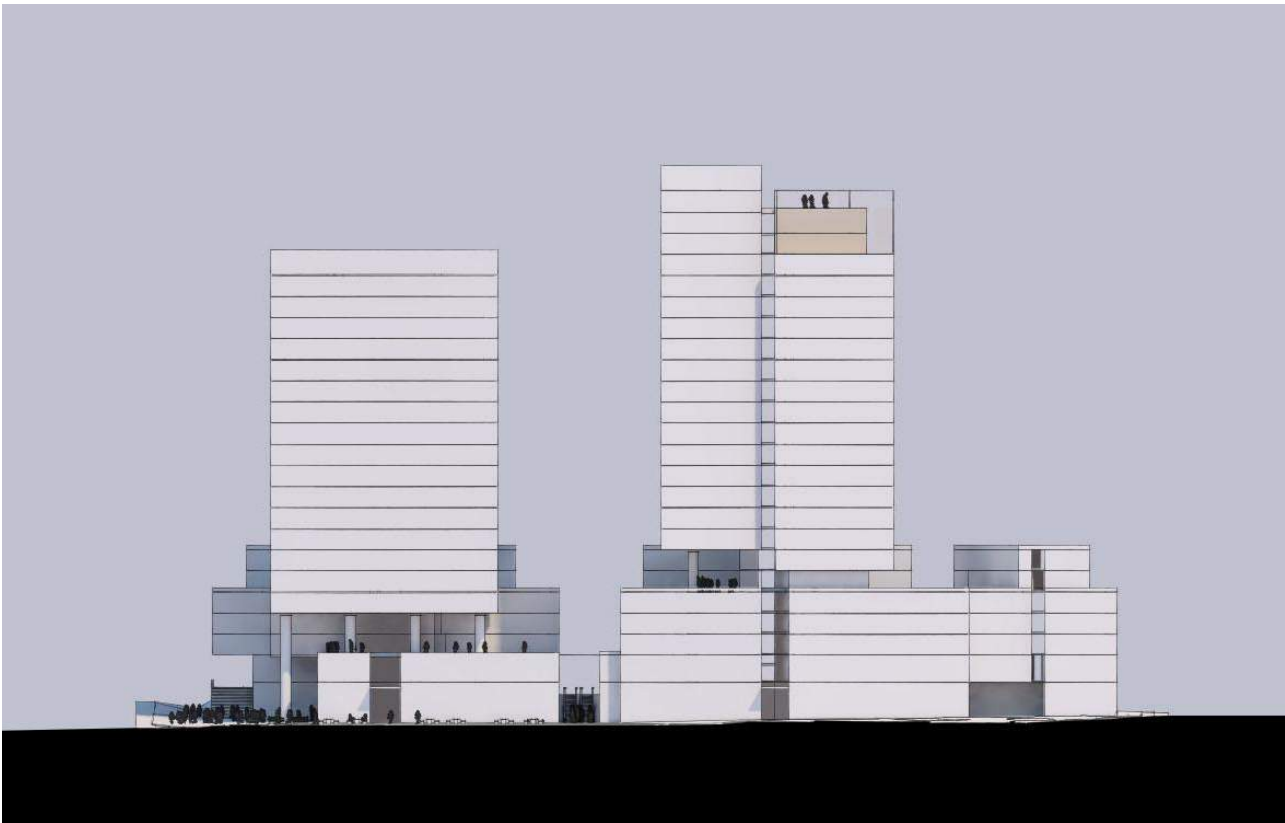
NORTH ELEVATION



EAST ELEVATION

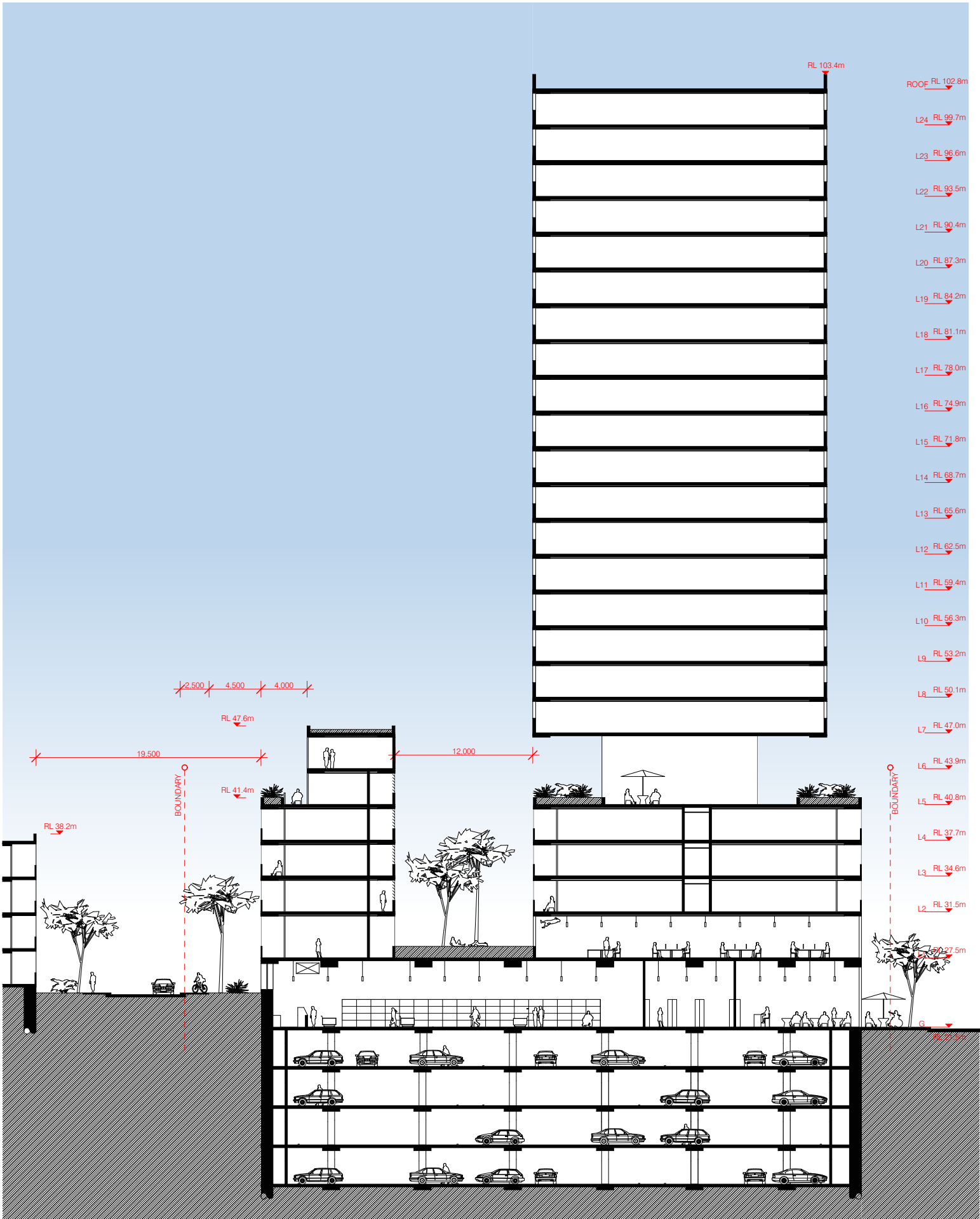


SOUTH ELEVATION

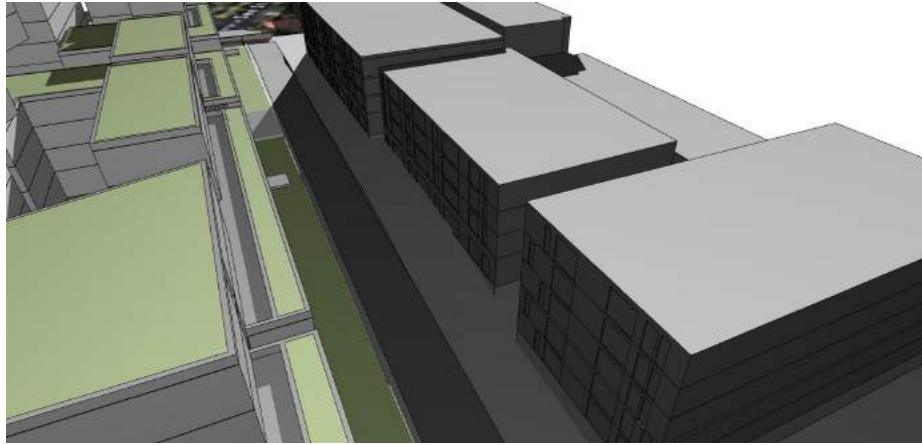


WEST ELEVATION

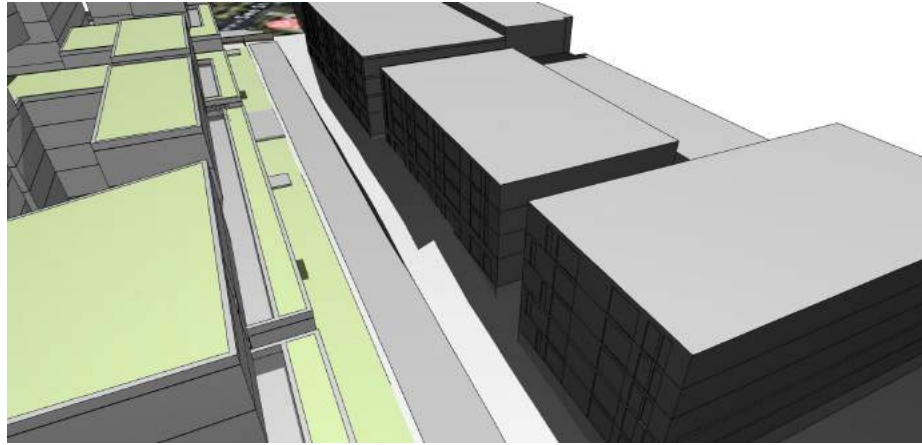




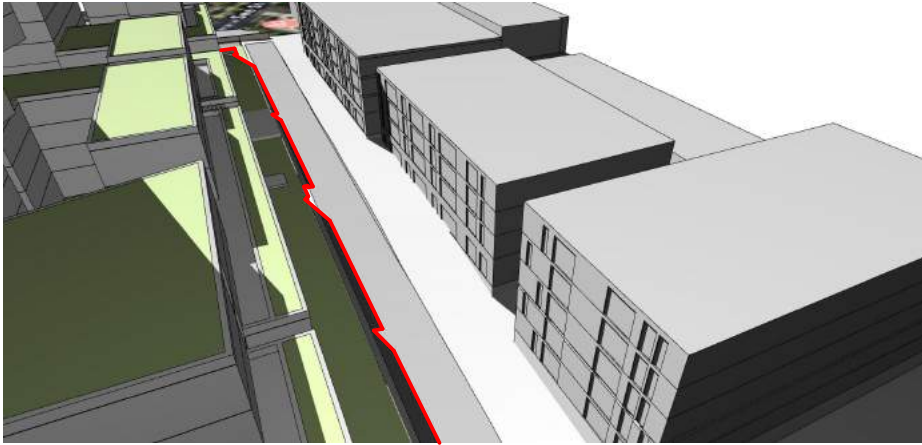




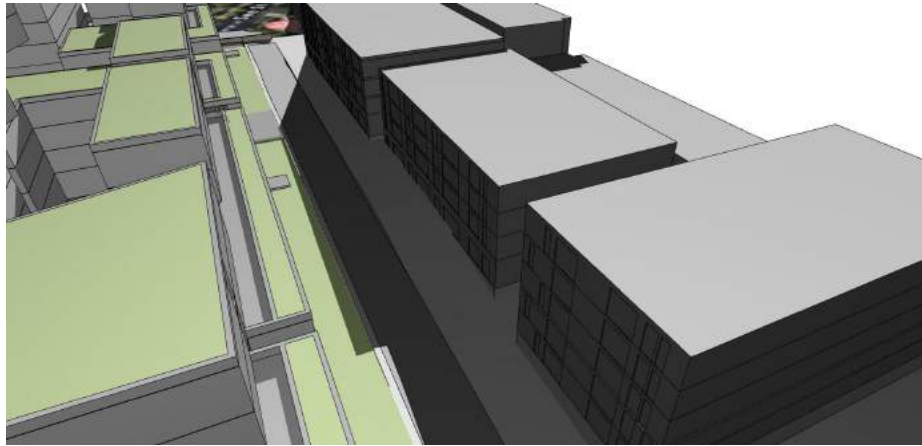
Faraday Lane - 21st June  
8:30am



Faraday Lane - 21st June  
10:00am



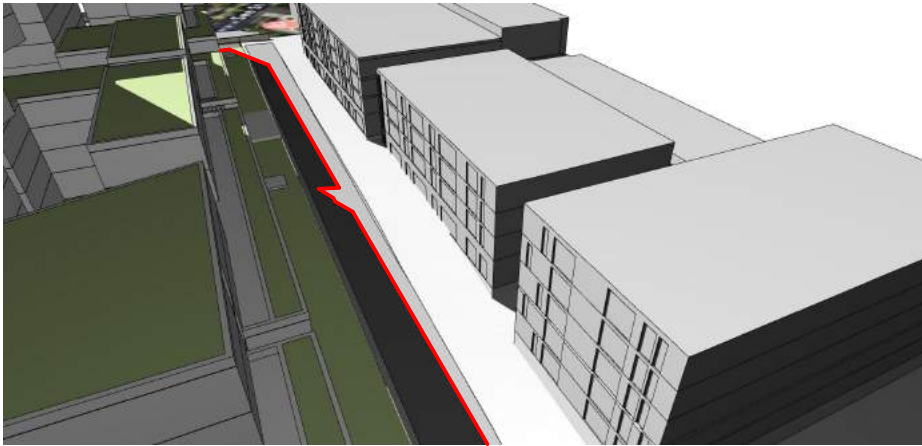
Faraday Lane - 21st June  
11:30am



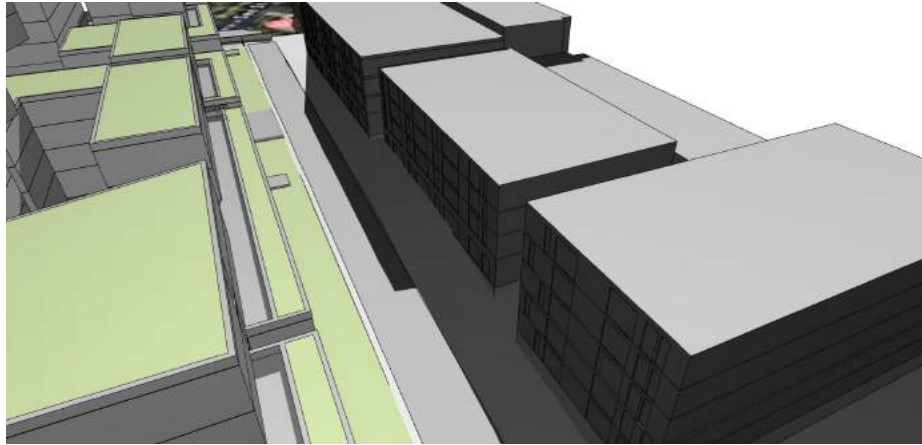
Faraday Lane - 21st June  
9:00am



Faraday Lane - 21st June  
10:30am



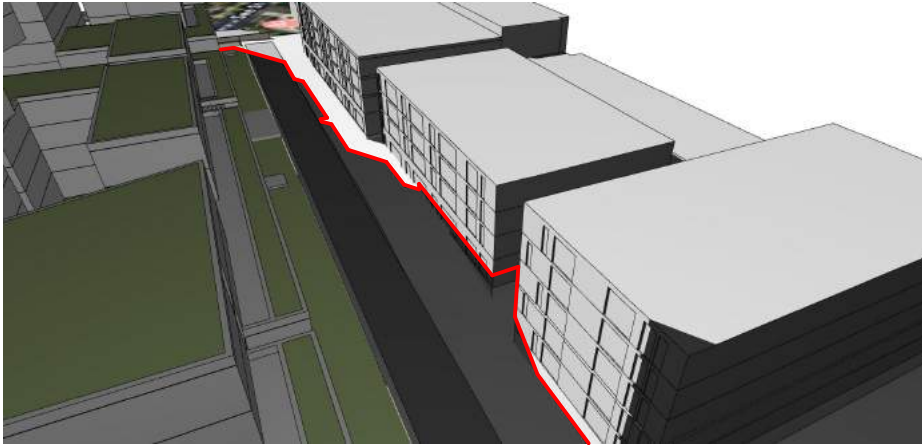
Faraday Lane - 21st June  
12:00pm



Faraday Lane - 21st June  
9:30am



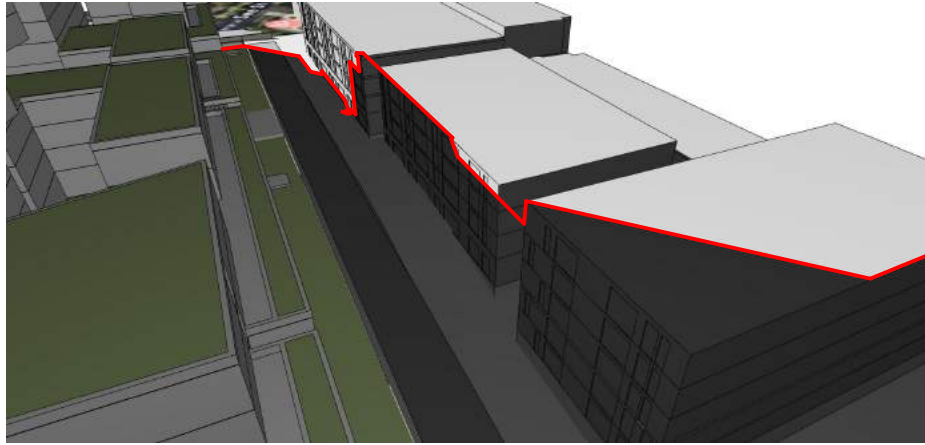
Faraday Lane - 21st June  
11:00am



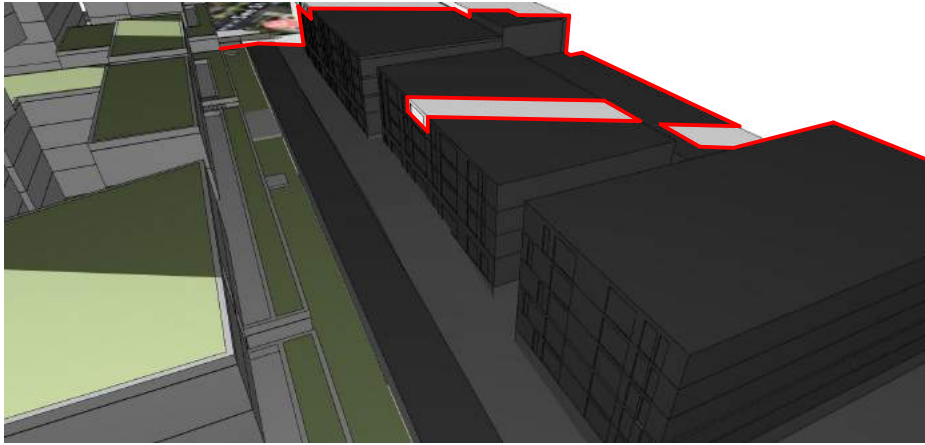
Faraday Lane - 21st June  
12:30pm



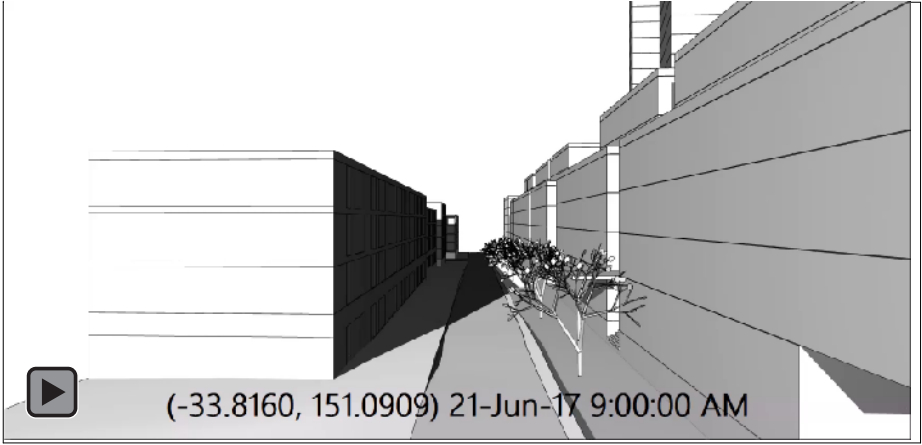




Faraday Lane - 21st June  
1:00pm



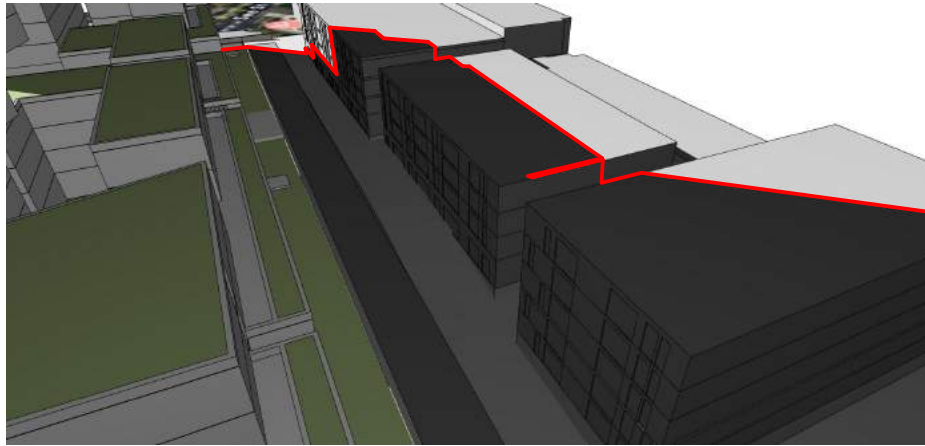
Faraday Lane - 21st June  
2:30pm



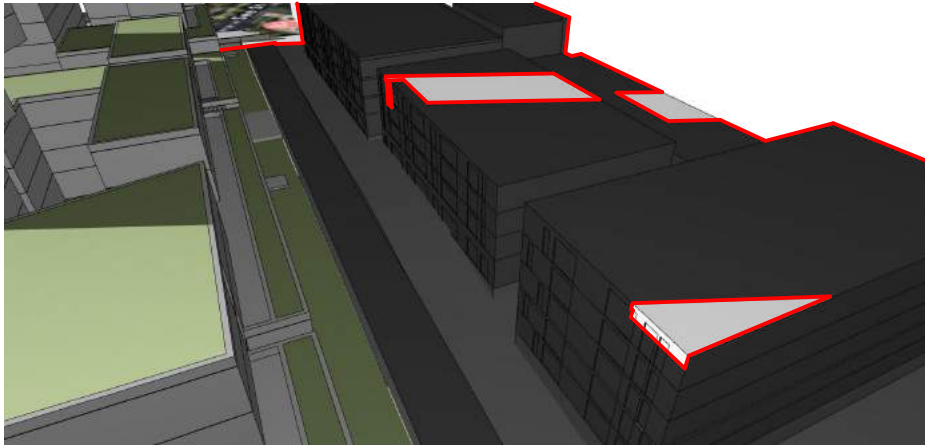
Faraday Lane - 21st June  
9am to 1pm

The proposed design aims to achieve 2hrs solar amenity to the neighbouring properties on Faraday Lane from 10:30am to 12:30pm.

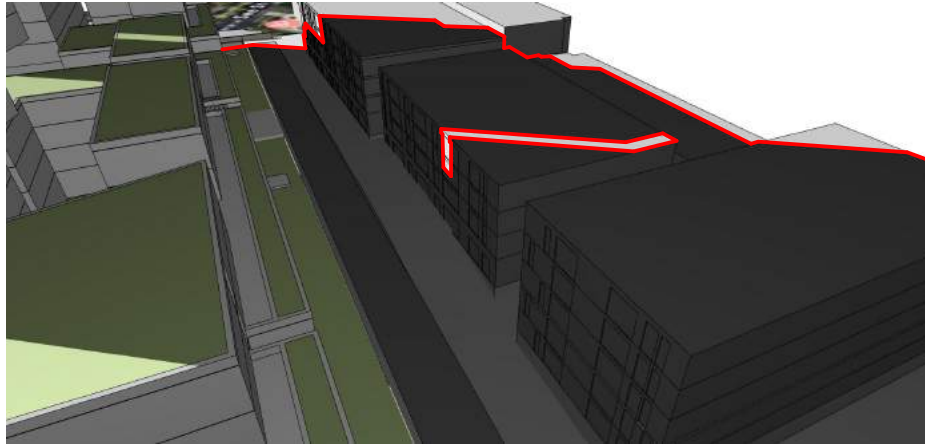
Note: Embedded video. Please ensure latest version of Flash has been downloaded to view.



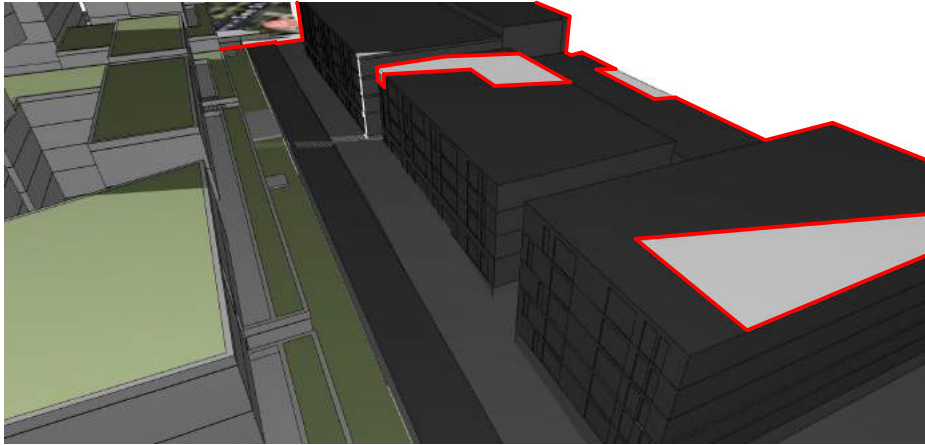
Faraday Lane - 21st June  
1:30pm



Faraday Lane - 21st June  
3:00pm

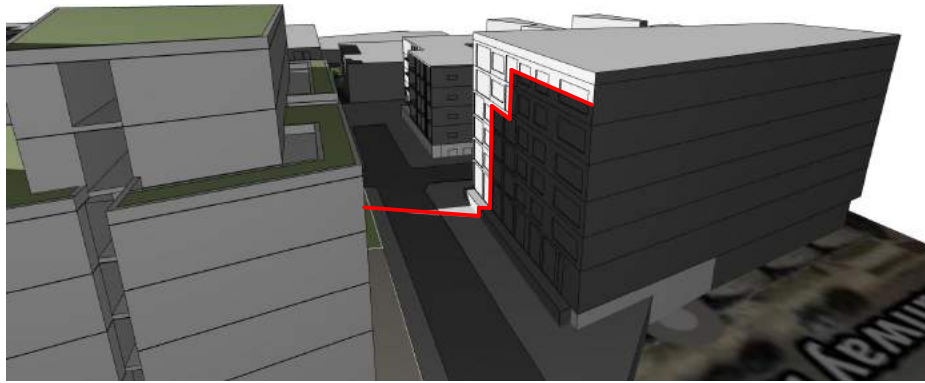


Faraday Lane - 21st June  
2:00pm



Faraday Lane - 21st June  
3:30pm

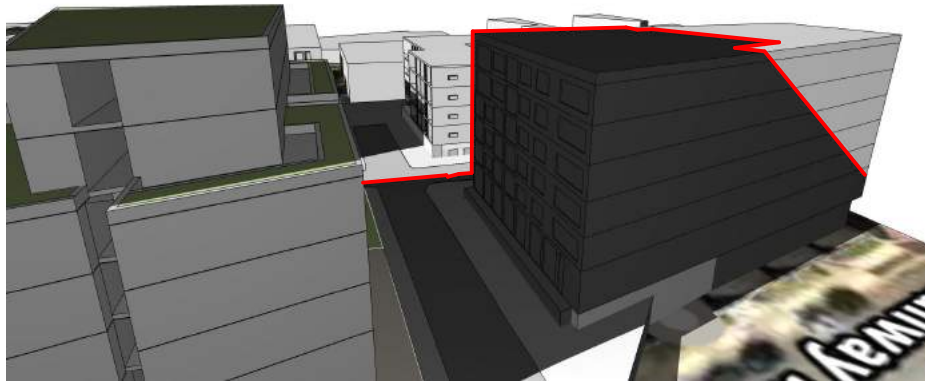




Underdale Lane - 21st June  
8:30am



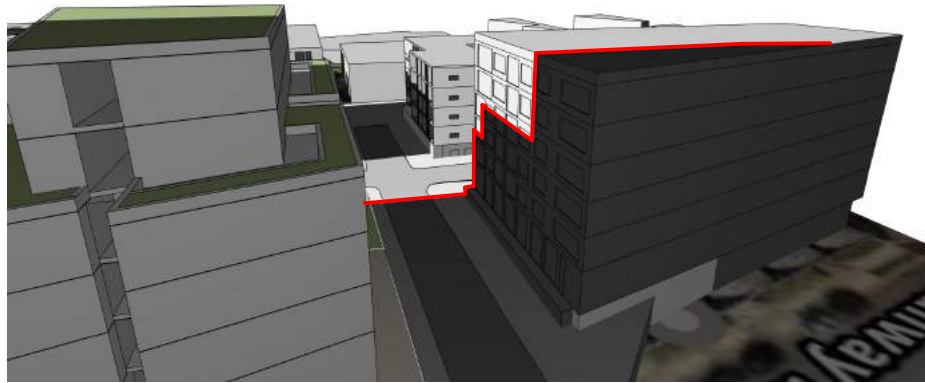
Underdale Lane - 21st June  
10:00am



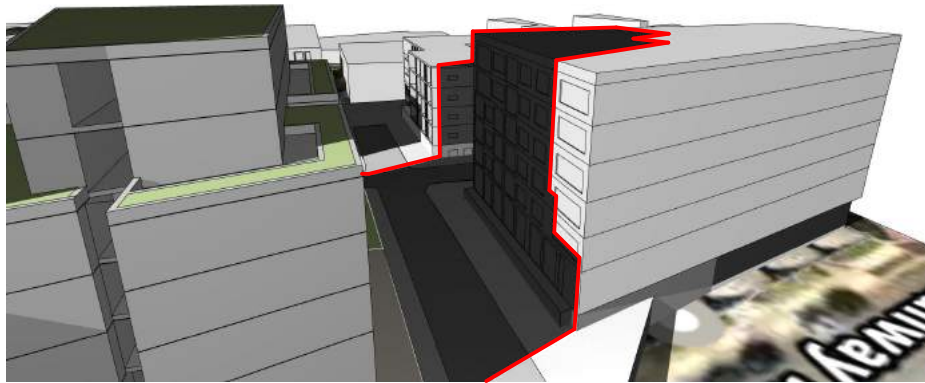
Underdale Lane - 21st June  
11:30am



Underdale Lane - 21st June  
9:00am



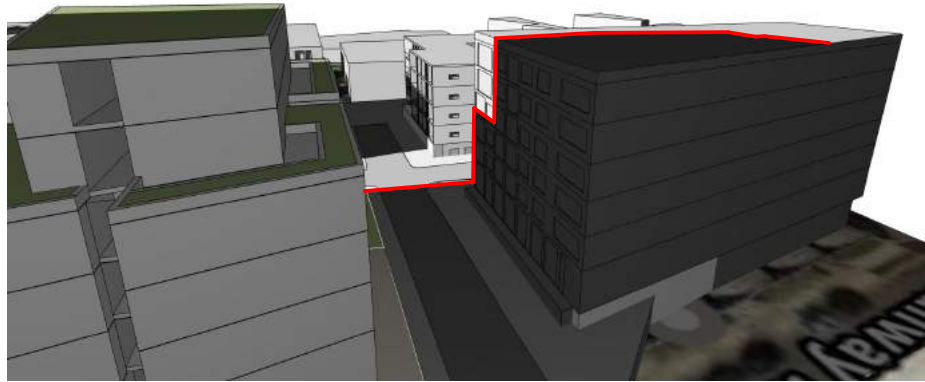
Underdale Lane - 21st June  
10:30am



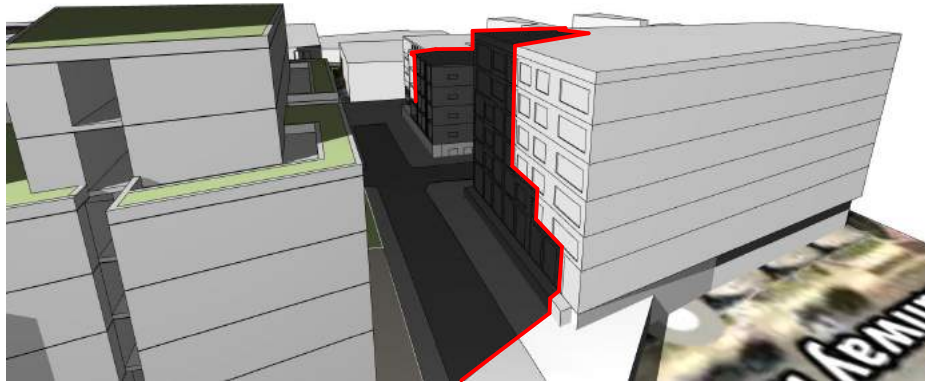
Underdale Lane - 21st June  
12:00pm



Underdale Lane - 21st June  
9:30am



Underdale Lane - 21st June  
11:00am



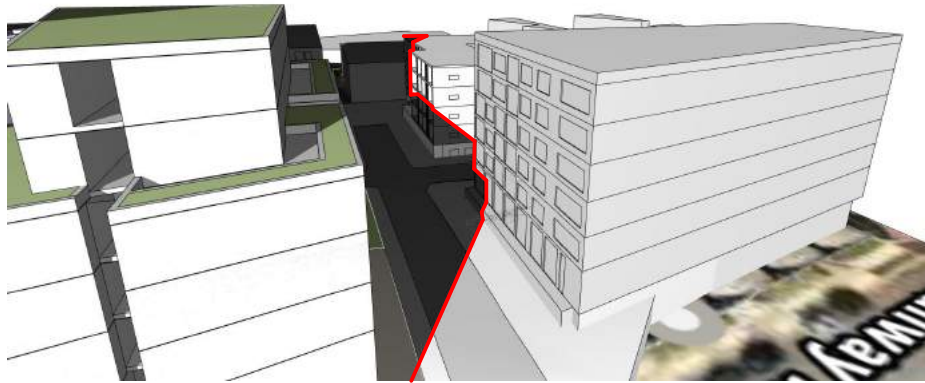
Underdale Lane - 21st June  
12:30pm



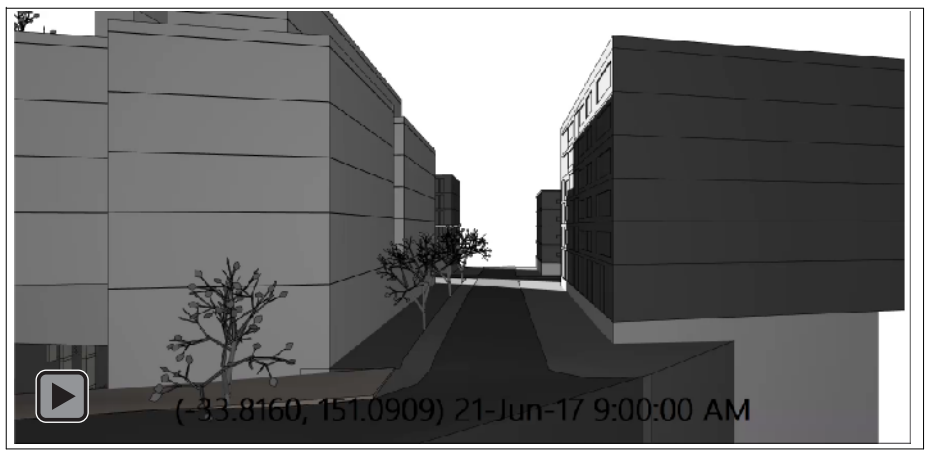




Underdale Lane - 21st June  
1:00pm



Underdale Lane - 21st June  
2:30pm



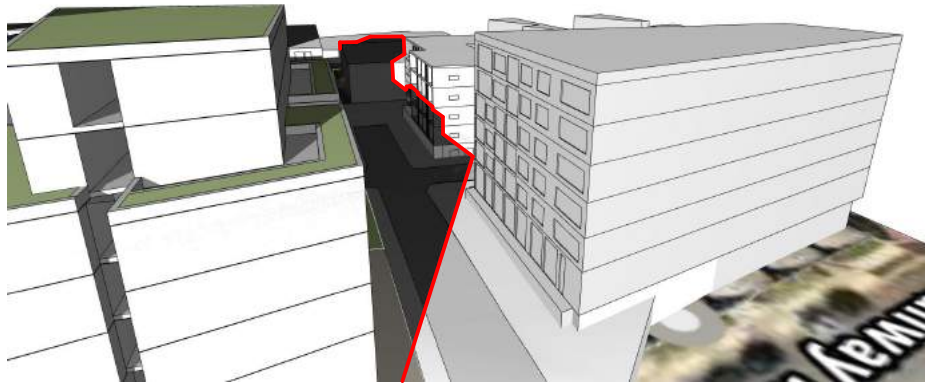
Underdale Lane - 21st June  
9am to 3pm

Underdale Lane buildings receive solar amenity at a variety of times throughout June 21st the collection of which culminates to a 2hr provision.

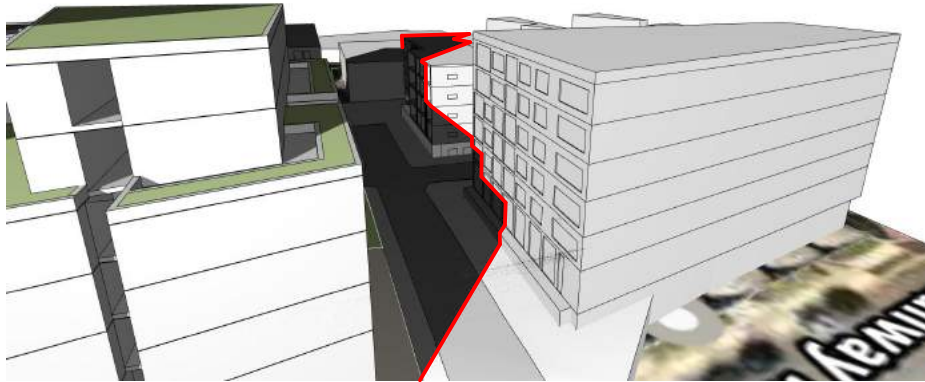
Note: Embedded video. Please ensure latest version of Flash has been downloaded to view.



Underdale Lane - 21st June  
1:30pm



Underdale Lane - 21st June  
3:00pm



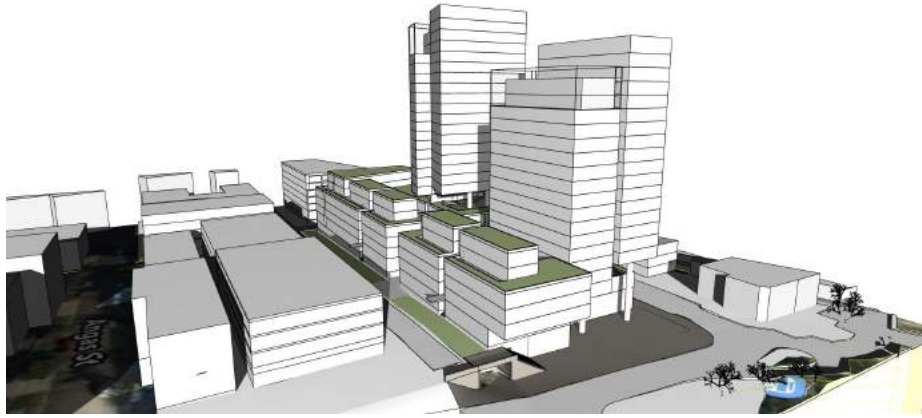
Underdale Lane - 21st June  
2:00pm



Underdale Lane - 21st June  
3:30pm



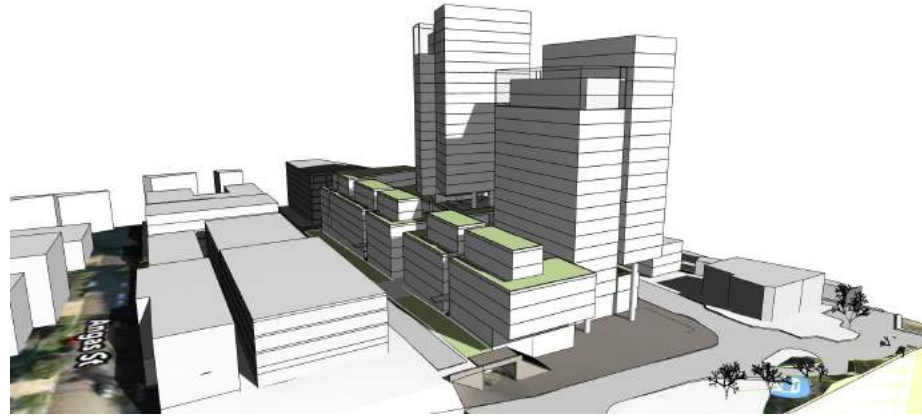




North East Corner- 21st June  
8:30am



North East Corner- 21st June  
10:00am



North East Corner- 21st June  
11:30am



North East Corner- 21st June  
9:00am



North East Corner- 21st June  
10:30am



North East Corner- 21st June  
12:00pm



North East Corner- 21st June  
9:30am



North East Corner- 21st June  
11:00am

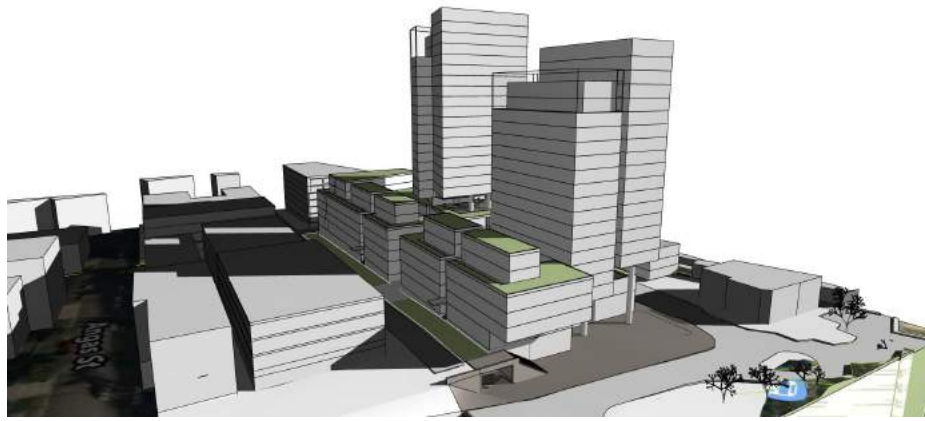


North East Corner- 21st June  
12:30pm

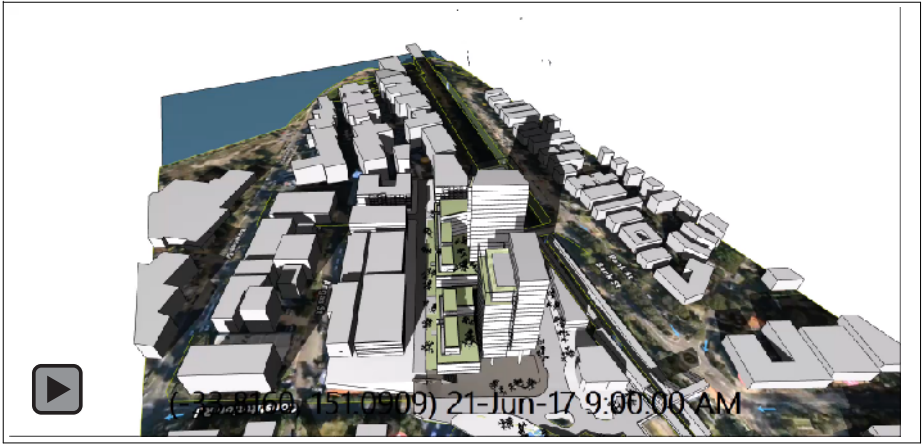




North East Corner- 21st June  
1:00pm



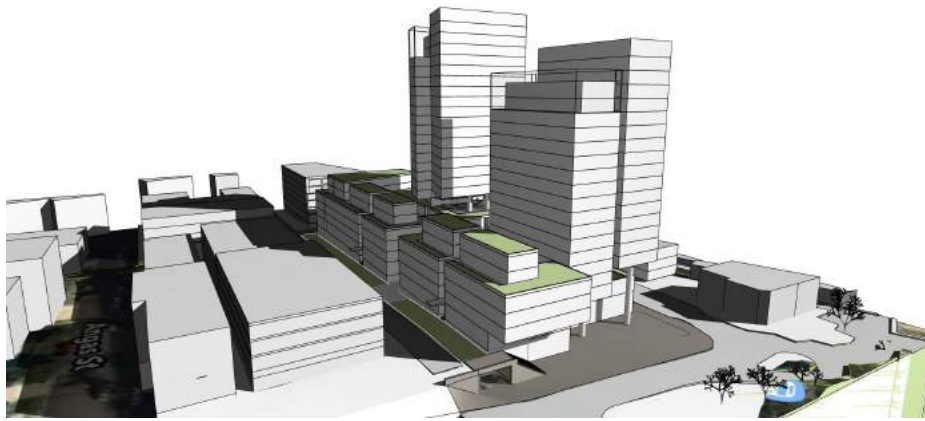
North East Corner- 21st June  
2:30pm



Site Overview - 21st June  
9am to 3pm

The shadow of the towers has been designed to cut off its shadow when it reaches the public space at the end of Faraday Lane. This occurs at 11:30am

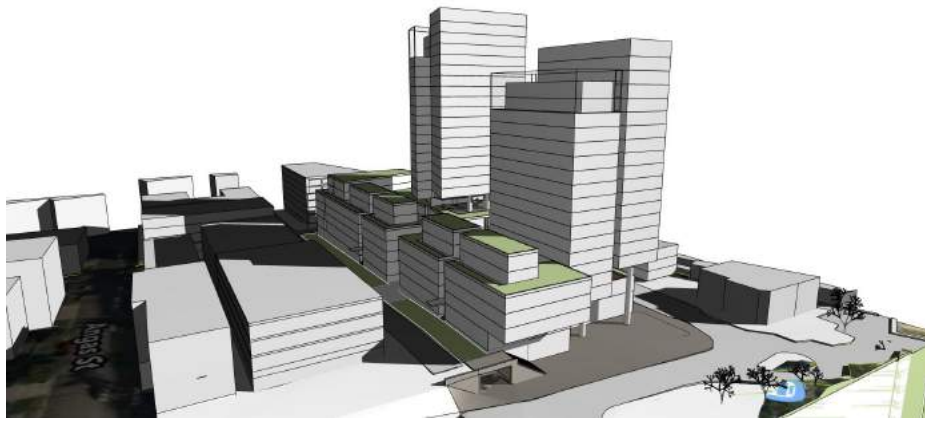
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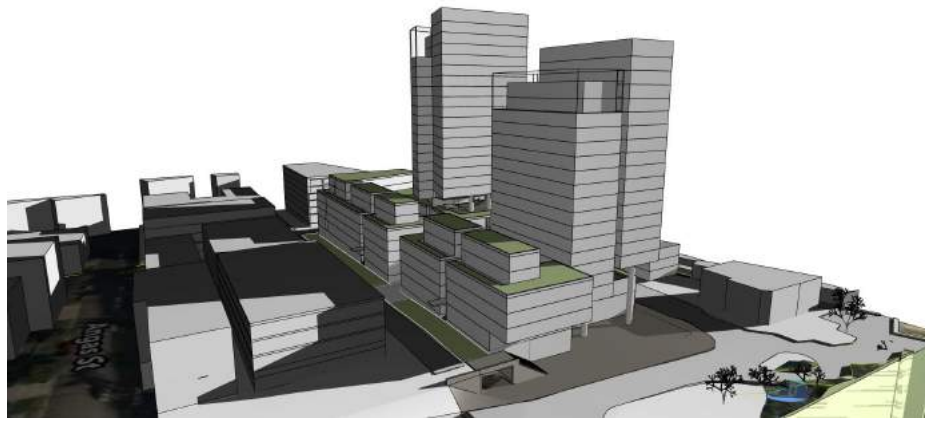
North East Corner- 21st June  
1:30pm



North East Corner- 21st June  
3:00pm



North East Corner- 21st June  
2:00pm



North East Corner- 21st June  
3:30pm





North West Corner- 21st June  
8:30am



North West Corner- 21st June  
10:00am



North West Corner- 21st June  
11:30am



North West Corner- 21st June  
9:00am



North West Corner- 21st June  
10:30am



North West Corner- 21st June  
12:00pm



North West Corner- 21st June  
9:30am



North West Corner- 21st June  
11:00am



North West Corner- 21st June  
12:30pm





North West Corner- 21st June  
1:00pm



North West Corner- 21st June  
2:30pm



North West Corner- 21st June  
1:30pm



North West Corner- 21st June  
3:00pm



North West Corner- 21st June  
2:00pm



North West Corner- 21st June  
3:30pm



Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

The broader context of Meadowbank is a mixture of existing low rise residential houses and a concentrated area of medium density residential development in the Shepards Bay precinct. The area offers a variety of public transport connections to the broader city and large public open space along the river foreshore. The area offers little in public civic space and retail amenity. The pockets of retail and community offerings are scattered amongst the building clusters, offering convenience, but no distinct community destination. Lacking in this vitality, the area suffers from some traffic congestion, as the burgeoning local population seek this amenity from its regional neighbours.

The transition of this area is nearing completion. This site is one of the last large parcels of developable land within the Shepards Bay precinct. Recent development in the area has had varied success, obscuring some of the suburbs nice features, leading to a "commuter suburb" impression.

The proposed development seeks to offer a walkable, exciting, community orientated destination within Meadowbank. The combination of a public plaza, concentrated shopping and dining, employment floorspace, transportation connections, the TAFE population and a high quality design, mix together to create a vibrant local hub.

The proposal aims to be the urban heart of Meadowbank, in a central location, offering the local residents a great public space and a sense of pride and place within their community.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

The scale of the proposed development along its boundary directly responds to the neighbouring properties scale, mimicking the levels opposite.

Along Faraday and Underdale Lanes DCP setbacks are applied providing a widened footpath and street planting zones along the boundary edge. An additional 4 metre setback is applied to levels 5 and 6. In a response to the heritage properties adjacent the built form extracts a double level void out of the volume, providing the outdoor space of the proposed child care centre.

The scale of the towers has been designed to preserve 2 hours of solar exposure to the neighbouring buildings. They have been located in the northern corner of the site to maximise their height and in turn the slenderness of the tower volumes. The bulk of the towers has been reduced further by articulating central recesses in the facade line and slipping the tower forms. Distinction is further created when extracting space out of the tower volume and in the potential facade treatment it receives.

Principle 3: Built form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

The conceptual diagrams earlier in the document breakdown how the built form is generated. A series of techniques have been used to shape the form. These include some of the following features.

*Public plaza space*  
A large north facing public plaza at the corner of the site welcomes visitors to the precinct and provides entry to the retail, child care and commercial space. It is a central feature to the public domain strategy of the project

*Through site link*  
Connecting Railway Road and Faraday Lane is a through site link. It provides an accessible path of travel negotiating the site level differences. It is celebrated by a glazed and battened canopy.

*Internal courtyards*  
Two generous courtyards hollow out the centre of the site providing a landscaped outlook for apartments, quiet meeting space for residents and green space vistas at residential entries

*Corridor vistas.*  
The internal planning features ventilated common circulation corridors with open vistas at the ends. This has influenced the shape of the volume, leading to facade breaks within the built form.

*Street Setbacks*  
Faraday Lane and Underdale Lane have been setback off the street edge 7m and 5.5m respectively. This creates a footpath, street planting and ground floor apartments with courtyards.

Principle 4: Density

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

The proposed development includes 40,496 m<sup>2</sup> of GFA on the main 7,778 m<sup>2</sup> site. An additional 939 m<sup>2</sup> of GFA is proposed on the 346 m<sup>2</sup> triangular wedged site across the road. The resulting FSR is 5.2:1 on the main site and 2.7:1 on the triangular wedge. The total floorspace consists of

Residential - 29,436 m<sup>2</sup>  
Retail - 2,681 m<sup>2</sup>  
Commercial - 3,867 m<sup>2</sup>

Supporting the proposed density on this site is a combination of local features and components within the development.

Access to public transport is available at the Train Station, Bus Stop and Ferry Terminal. The suburbs geographical location within Sydney means it is central between Sydney CBD, Parramatta and Macquarie Park employment centres. Local schools include Meadowbank Public School, St Michaels and the TAFE adjacent.

Residents can easily access open public space including the Parramatta foreshore, Meadowbank playing fields and Parramatta Valley Cycleway.

The proposed development also includes 2,746 m<sup>2</sup> of residential amenity within the building. Notable recreation areas include.

Public Plaza - 536 m<sup>2</sup>  
Internal Courtyards - 746 m<sup>2</sup>  
Podium Terrace and Communal Room - 711 m<sup>2</sup>  
Roof Decks - 382 m<sup>2</sup>

Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

This planning proposal has not been refined to the level required of a development application reducing the level of detail that can be discussed. However some preliminary environmental design principles have been incorporated at this early stage to manage resource requirements of the proposed building.

Natural ventilation and passive solar orientation are key drivers in this design process. 64.7% of apartments are naturally ventilated whilst 70% of apartments achieve 2 hours daylight on June 21st. The solar performance of the design is understated when considering the eastern face of the tower receives 1hr 45mins from 9am to 10:45am negating it's inclusion within the 2hr requirement. The principles of natural ventilation and passive solar design help reduce the energy requirements of the occupants.

Water harvesting is another component considered given the prominence that landscaping takes in this project. Nicknamed "The Meadows" it is envisaged that all roof surfaces are treated as green spaces offering both amenity and outlook. Such large bodies of landscaping requires consideration of species selection and provision of water for them. Future development of this proposal will in no doubt seek to establish on site retention tanks for landscaping use.



Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise usability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

The potential for a high quality landscape design outcome is considerable given the prominence it has in the design. Opportunities included the public plaza space, internal courtyards, thelevel 5 podium, roof decks and individual balcony planters.

Each of these spaces require different considerations ranging from a civic expression at the public plaza, the communal "meadow" on Level 5, to an individual planter box on ones balcony. With further development and the design input of a landscape architect, the landscape outcome has the potential to achieve exemplar status.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

Whilst the indicative apartment layouts are not designed in detail, the indicated breakup begins to illustrate the high degree of amenity provided in it's design.

Celebrated entry slots within the mass provide full height lobbies connected to green spaces either beyond or over. Internal corridors connect to the facade allowing these spaces to be naturally ventilated and offering views to these common spaces.

The set out of apartments has considered the minimum room width requirements outlined in the apartment design guide. Their break up affords sufficient facade lengths are available to design the internal layout of apartments. As the design develops considerations of the liveable housing guidelines and adaptable apartment design would also be included in the overall design.

Principle 8: Safety and security

Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

The ground plane is heavily activated with a variety of shops and residential entrances punctuating the street elevation. This active pedestrian movement and the lighting strategies associated with the retail shops will help create a safe and inviting atmosphere along Railway Road and Underdale Lane.

The internal courtyard spaces are within the bounds of the residential entries and are not accessible by the public. They are passively surveyed from the apartments above. Privacy for these apartments though has been considered by not having apartments viewing back towards them from the opposite side.

The outdoor terrace of the child care space has also been considered to provide privacy for the children. The design incorporates a planter box around the edge to form a landscape screen between the apartments and this sensitive outdoor space. Additional screening and shading design solutions can be incorporated in developing the design further.

A development of this size would also include an on site managers office and security room for storage of CCTV information.

Principle 9: Social dimensions

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

The design offers a variety of housing types to suit the neighbourhoods needs. The overall mix of 1, 2 and 3 bedroom apartments has a degree of flexibility to be adjusted as outlined on page 64 of this document.

A variety of apartments types include

- Apartments with courtyards
- Double level apartments
- Penthouses
- Tower apartments
- Low Rise apartments
- Street or courtyard facing
- Through apartments

This variety influences the affordability and lifestyle options that can be provided within the proposal.

Apartments areas have been determined by using the apartment design guide minimum internal sizes. These variety of sizes offer a mix to of options to cater for the requirements and budgets of the community

Type	Minimum	Maximum
1Bed	50 m <sup>2</sup>	65 m <sup>2</sup>
2 Bed	75 m <sup>2</sup>	85 m <sup>2</sup>
2 Bed + Study	86 m <sup>2</sup>	106 m <sup>2</sup>
3 Bed	95 m <sup>2</sup>	173 m <sup>2</sup>

Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

The proposed aesthetics of the design is still under development and only lightly illustrated in the CGI's embedded within the document. There are however some key design criteria that we would look to develop further.

- The design treatment of Faraday lane would aim to reflect the design of our neighbours. Features such as privacy screens, soft planting and residential fencing would be borrowed and incorporated into the design.
- The design treatment of the towers will utilise a split centrally within the volume. This will help define the two halves allowing differing facade design treatment. The halving also creates a slender appearance of the volume
- Landscaping plays a heavy role in the character of the design. Thoughtful curation of specie selection and detail design of street furniture will help bring out a finer grain of design.
- The internal retail street will be protected by a glazed canopy offering connection to the sky. Battens over will filter the light and reduce solar heat gain into the space.



CONTACT

FENDER KATSALIDIS  
www.fkaustralia.com

SYDNEY  
L3, 414 KENT STREET  
SYDNEY NSW 2000  
P: (02) 8216 3500

MELBOURNE  
2 RIVERSIDE QUAY  
SOUTHBANK, VIC 3006  
(03) 8698 3888

BRISBANE  
32 KEDRON BROOK RD  
WILSTON, QLD 3051  
(07) 3668 0681

LONDON  
L1, 44-46 SCRUTTON ST  
LONDON EC24 4HH  
UNITED KINGDOM  
+44 20 2772 7320