

# **Attachment A3-2**

**Urban Design Report**

## 4.4 Ground Plane Activation

### Retail Strategy

The key space of the retail laneway features double-sided retail with a north-facing lawn area for outdoor recreation.

The retail laneway also contains fine-grain retail and outdoor furniture settings to create a vibrant local retail experience. The retail will be a diverse selection of convenience and food & beverage tenants to service the neighbourhood.



## 4.4 Ground Plane Activation

A commercial lobby is accessible from the corner of Bourke and McEvoy Streets forecourt with an additional through link connects McEvoy to the retail lane and provides additional retail frontage.



## 4.5 Laneway Retail

### Precedents and Reference

Generous public spaces for the residents and the local community.



#### Pictured

1. Boheme Retail, Bondi
2. Macquarie Park Exchange, Sydney
3. Victoria Cross, North Sydney
4. Newmarket, Randwick, Sydney
5. Surry Hills Shopping Village, Sydney

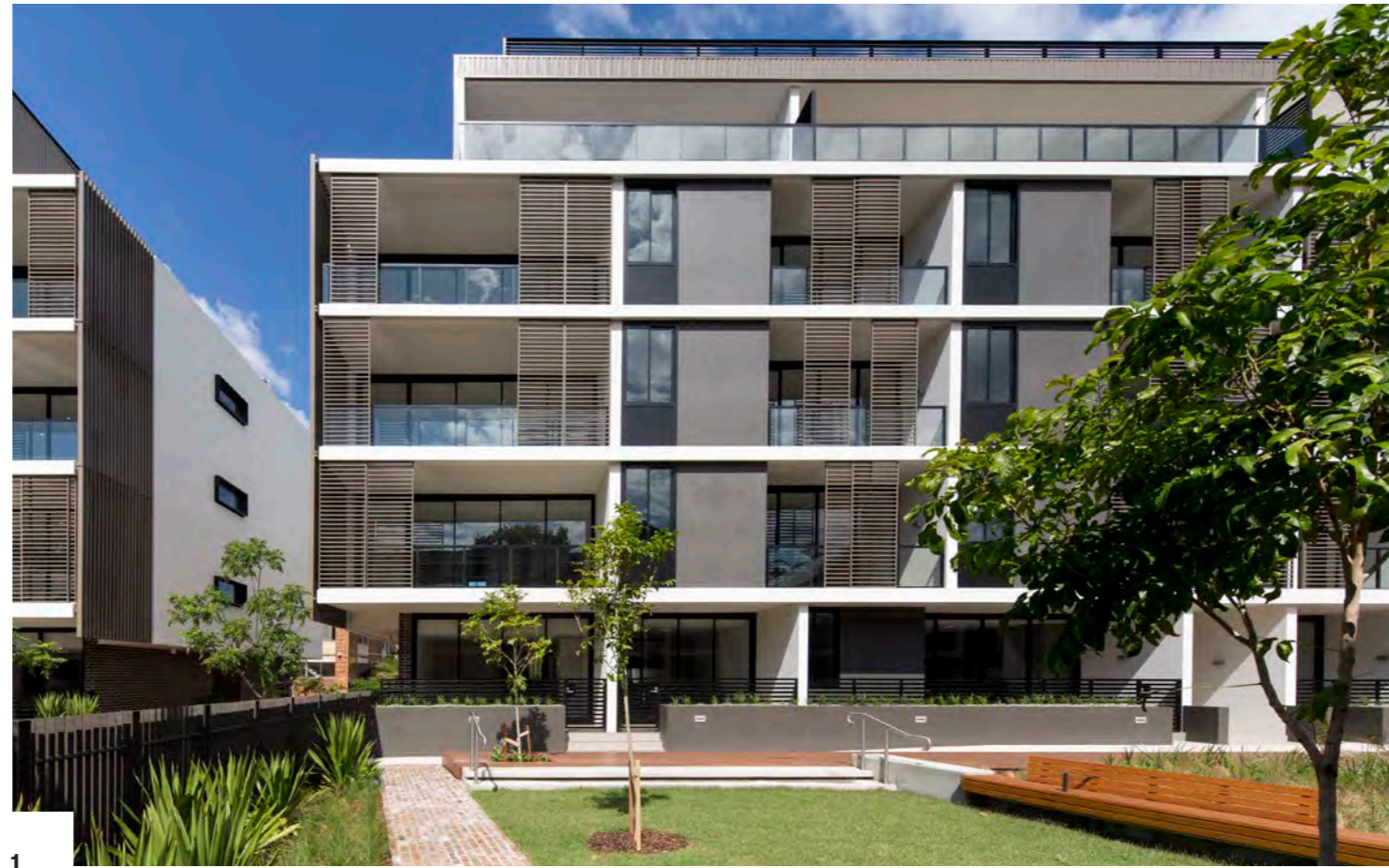
## 4.6 Landscape Design Precedents and Reference

The following images describe the courtyard scale and design envisioned for the proposal.

### Landscape Design

The landscaped courtyard is to offer the following benefits:

- soften the impact of the buildings through use of landscape backdrop
- create a pleasing outlook from apartments facing inward
- ensure adequate privacy is achieved between landscaped spaces and adjacent apartments
- provide a range of suitable active and passive recreation spaces for occupants
- considered shading for use throughout the year
- suitable planting selection native to the site's ecology with low maintenance and less reliance on irrigation



1



2



3

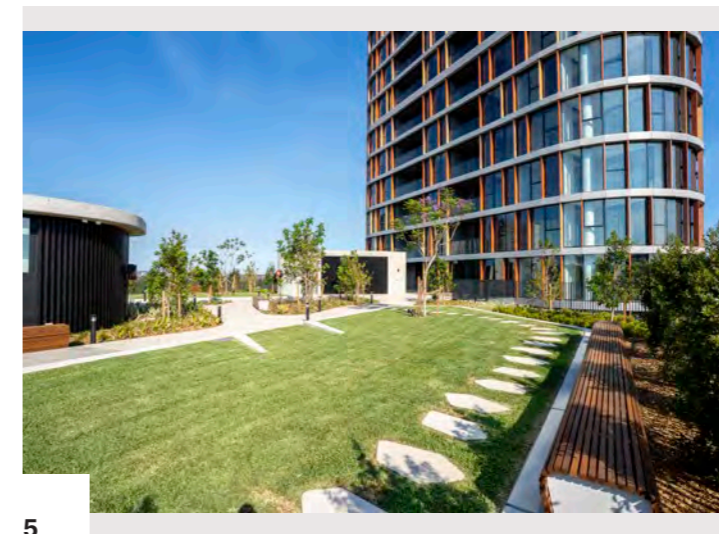
Refer to landscape report for a description.

### Pictured

1. The Gantry, Camperdown .
2. Leichhardt Green, Leichhardt.
3. Kingston Foreshore, Kingston ACT.
4. Harbour Front, Balmain.
5. Boomerang Tower, Sydney Olympic Park.



4



5



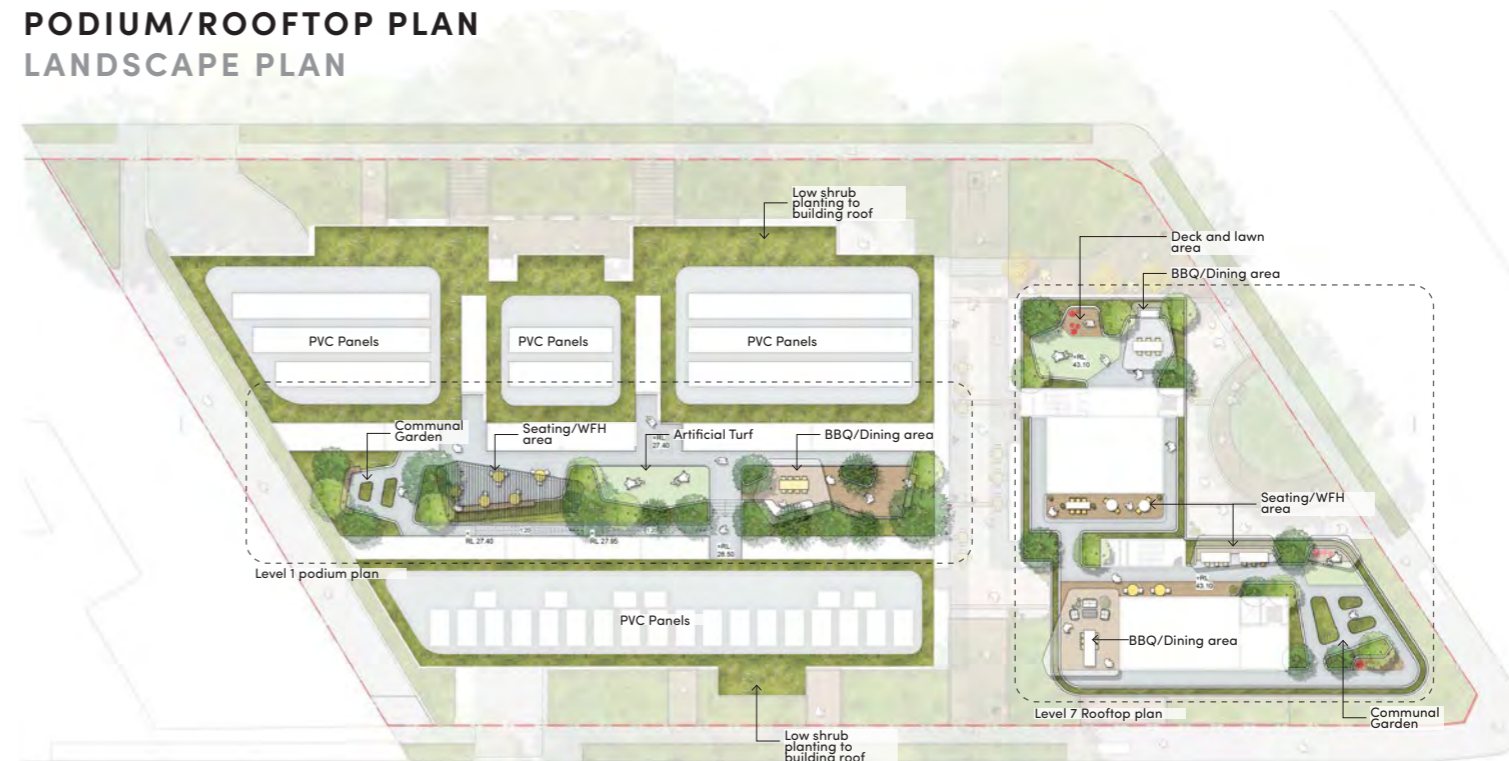
# 4.8 Landscape Design Communal Open Space

## Ground Plane Landscape Design

The ground plane landscape design caters for a broad demographic, the offering is equally attractive for workers during business hours and families for social gatherings. The design embraces best practice landscape sustainability through the retention of a majority of the generous street trees to create an inviting, sustainable place to live, work, and visit.

## Communal Open Space

The landscape design of the communal open space for the residential amenities is anchored on biophilic design. This design principles underpins the landscape approach, with a focus on maximising visual and physical connections with nature throughout the communal open space and built form.

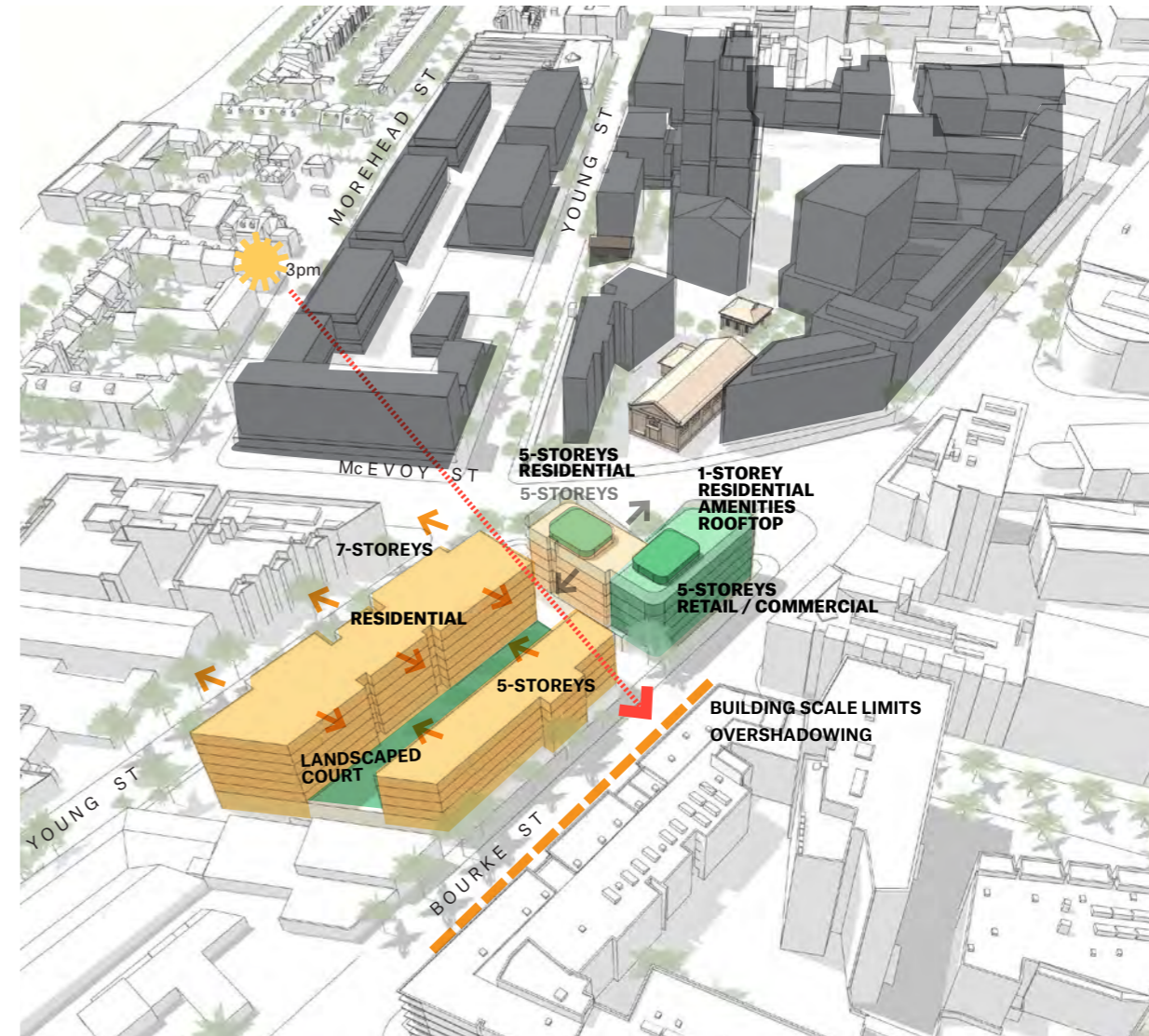
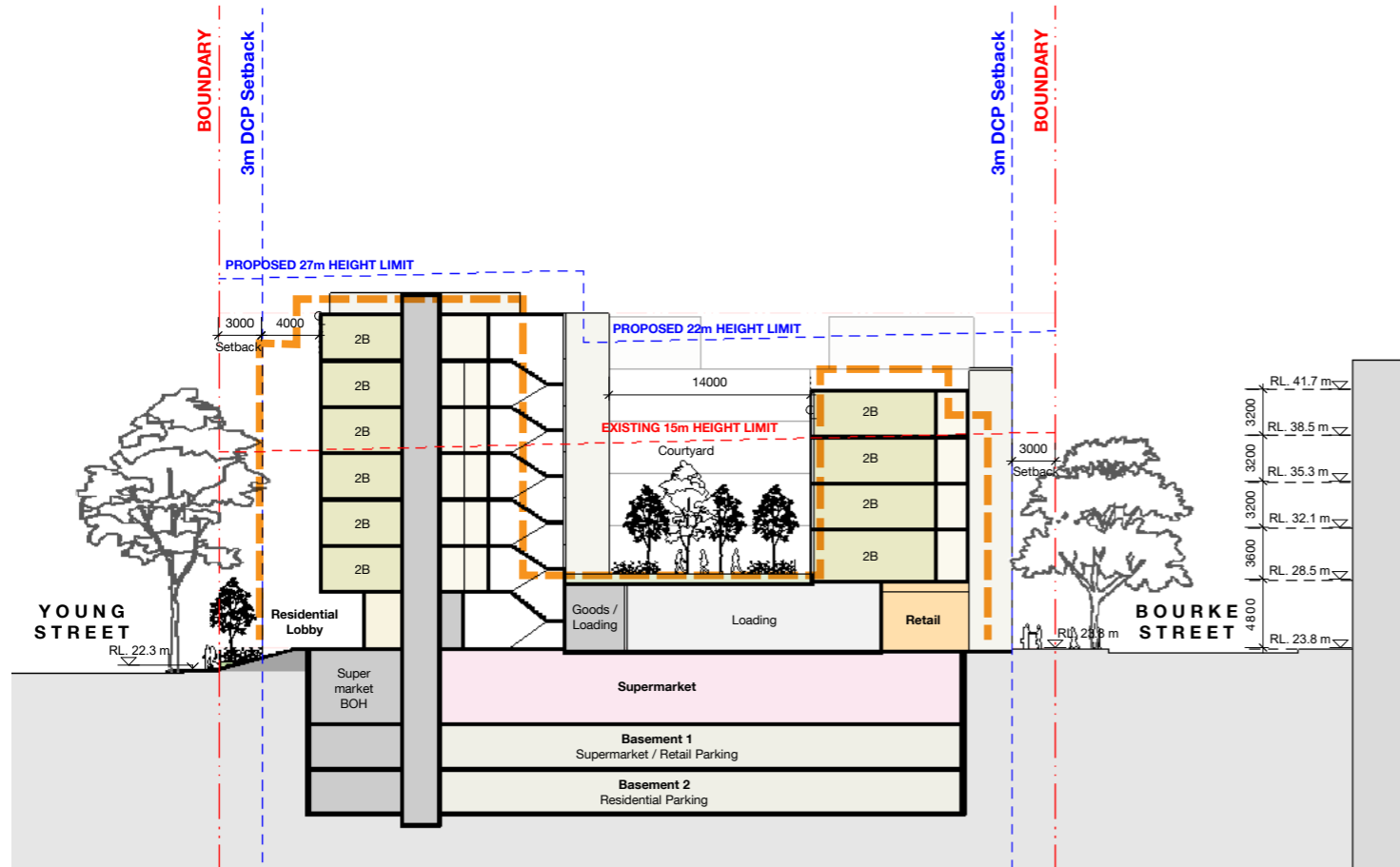


**Pictured**

Landscape Design Strategy by Turf

# 4.9 Urban Form

## Bulk and Scale



### Height Composition

- 5- storey street wall to Bourke Street
- 2- storey townhouse scale to Young Street with 5-storleys of apartment over
- 7-storey street-wall height along Young Street
- Narrower building depth to Bourke Street allows for single frontage apartments oriented away from street noise
- Landscape courtyard between residential buildings
- 5-storey commercial and residential building hybrid building acts as a prominent gateway building & buffers noisier street corner

### Appropriately-scaled Massing

- The height of the Bourke Street building has been sized to ensure minimal impact from overshadowing onto the residential development opposite
- Residential buildings are well articulated
- Maximise number of apartments facing the courtyard
- Double-loaded floorplate to Young Street to take advantage of the mature tree top streetscape and courtyard frontages
- Orient Bourke Street building towards the courtyard away from street noise of Bourke Street



## 4.10 Massing & Height Bulk & Scale

The following images describe the concept massing as viewed from prominent vantage points in the precinct.

### View from Young Street

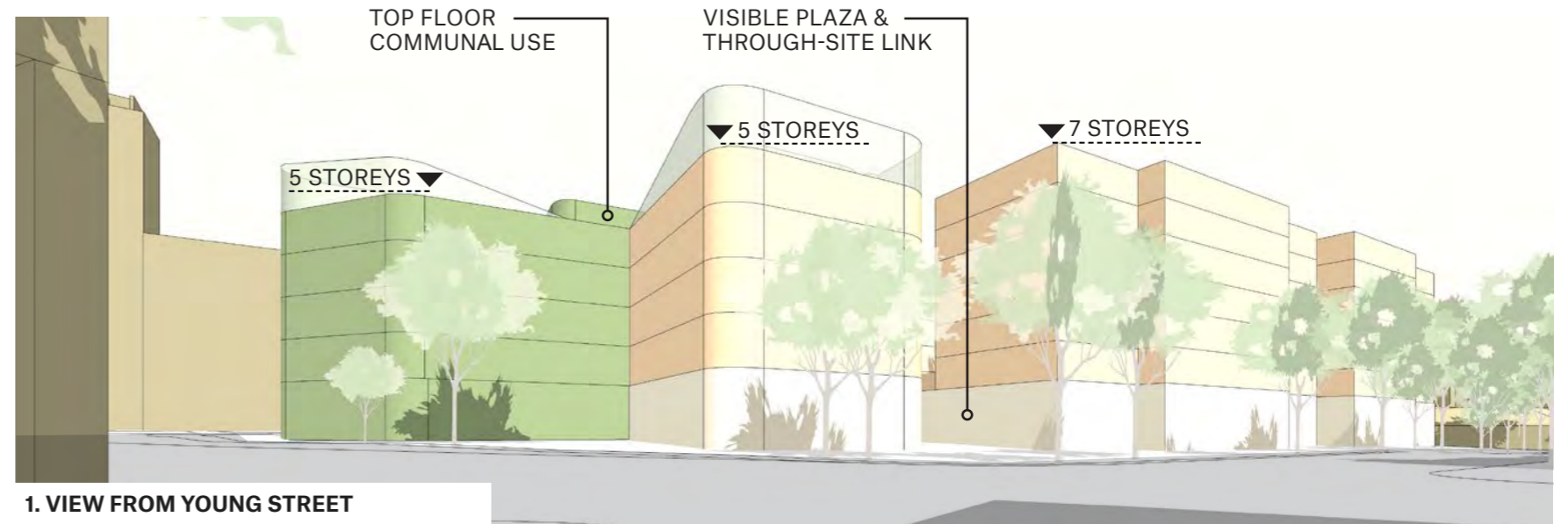
Describes the development massing and height at the site entry as viewed along Young Street from the north. The significant trees on the corner together with the open space with landscape lawn area denote the important north facing gathering place.

### View from Bourke Street

Describes the proposal as viewed along Bourke Street looking to the south. The proposal presents a consistent streetwall height along Bourke Street with taller building of Young Street beyond. The prominent corner building denotes a marker building or urban gateway to the site. The landscape plaza area is visible drawing pedestrians towards the retail and outdoor space.

### View from Archibald Street

Describes the relationship and visual alignment between Archibald Street and the proposed through-site link of the retail laneway. The proposed massing allows for a rooftop setback or expression to the residential and commercial building.



## 4.11 Residential Design Typical Floor Plan

The following drawing shows the typical levels of the three buildings to the site.

The two residential buildings are separated by a landscaped courtyard with minimum width of 14m.

### Bourke Street

The Bourke Street building contains a single-frontage apartments overlooking the courtyard to reduce exposure to traffic noise. Three of these apartments include a ventilation shaft for cross-ventilation. Access is via a lift and corridor that also absorbs the traffic noise.

### Young Street

The Young Street residential building contains double-sided apartments with 2 x through-apartments for improved cross ventilation with minimum single frontage apartments per level will face the courtyard. The apartment layout for the Young Street building is serviced by a twin core and 2 x lifts and stair with ample access to natural light and ventilation.

### McEvoy Street

The mixed-use building follows the geometry of the street alignment and the retail lane-way below. A small services central core ensures an open and flexible floor-plate for future tenancy subdivision. The residential component of the building is designed to be buffered by the matured street trees and courtyard on McEvoy Street. This ensures the apartment units have quality amenities and provide a diverse residential offering for the development.



## 4.12 Residential Design Elevation

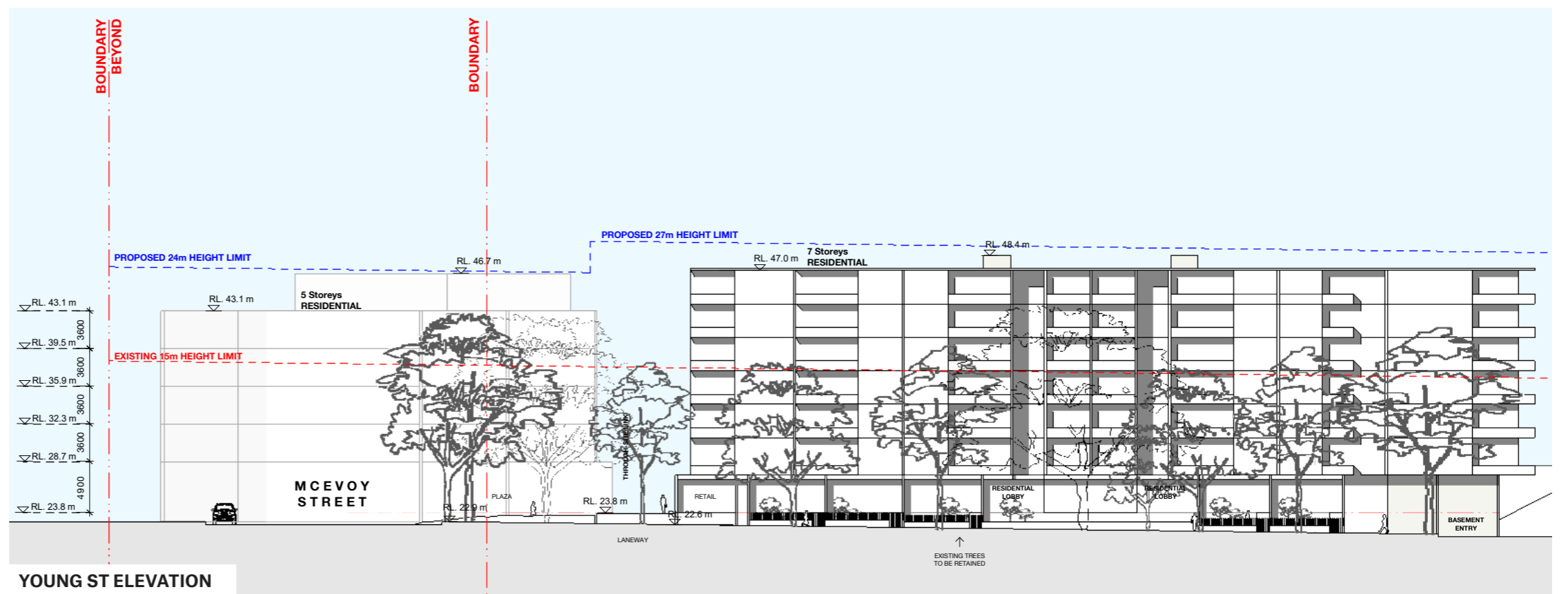
The place we create should feel like part of the neighbourhood. It draws from the characteristics that define and distinguish Waterloo from other places. In doing so, it gives us the best chance of creating a new place that is equally welcomed by existing and emerging communities of Waterloo.

### Bourke Street - Civic Generosity

The three buildings together form a rich residential development with interesting fine grain retail moments created by the new proposed through-site link. This will continue the urban visual through corridor established by Archibald Avenue.

### Young Street - Quality Amenities

The place we create should be a great place to live. The dwellings, buildings, communal and public places, should all provide excellent amenity. We've designed them to feel good and work well. The matured street trees not only defines the Young Street place and character, it offers extensive tree top views to all external facing units.



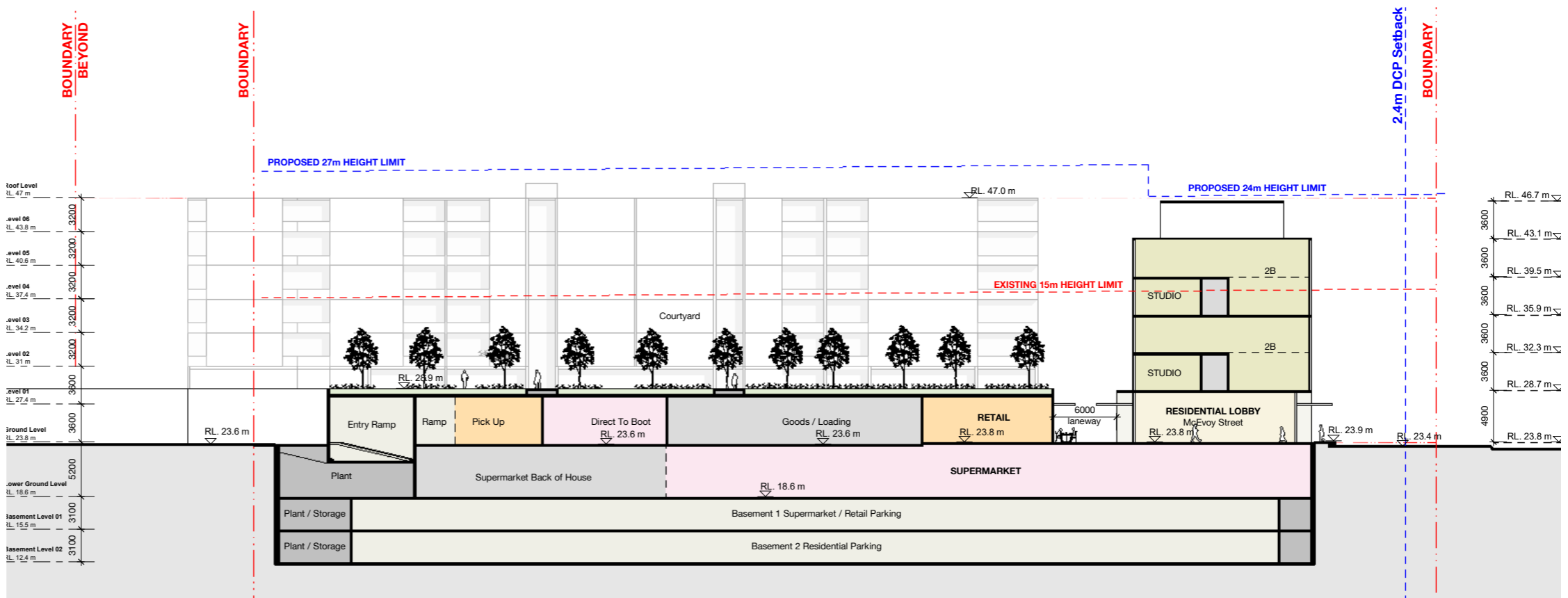
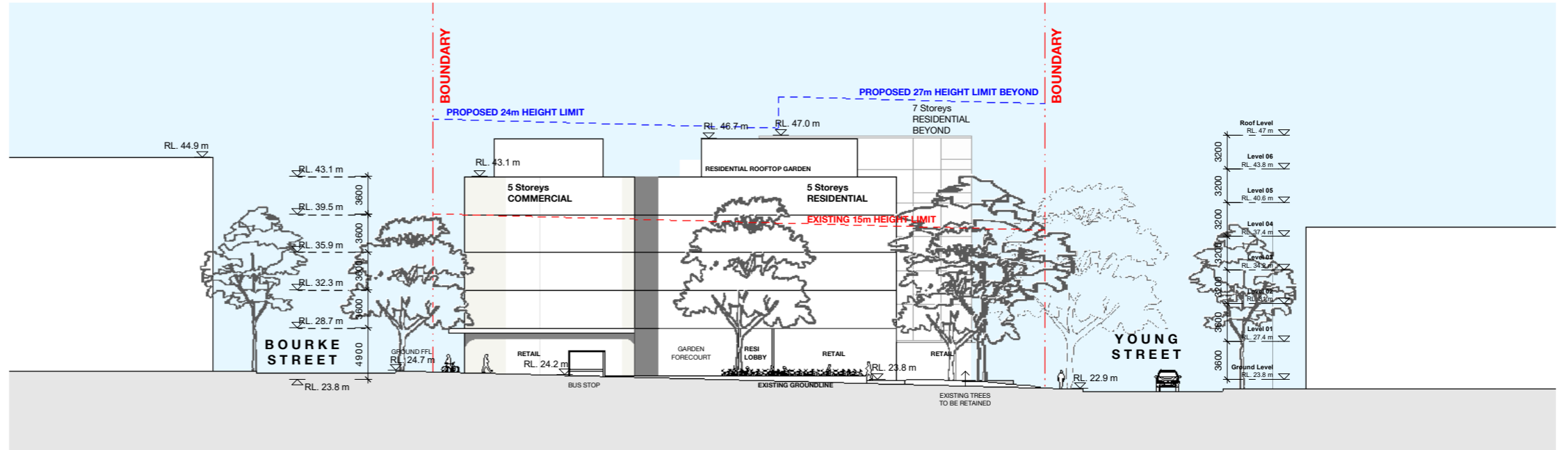
## 4.13 Street Elevation Young Street



# 4.14 Street Elevation McEvoy Street

Design resilient and diverse places for enduring communities. Housing diversity is provided through three very distinct buildings of different sizes, dwelling types, and characteristics, including multi-level apartment units.

Green infrastructure is integral to the design. Substantial mature trees are retained on site, extensive planting is provided throughout the public domain, and each building integrates planting in open communal areas.



## 4.15 Street Elevation McEvoy Street

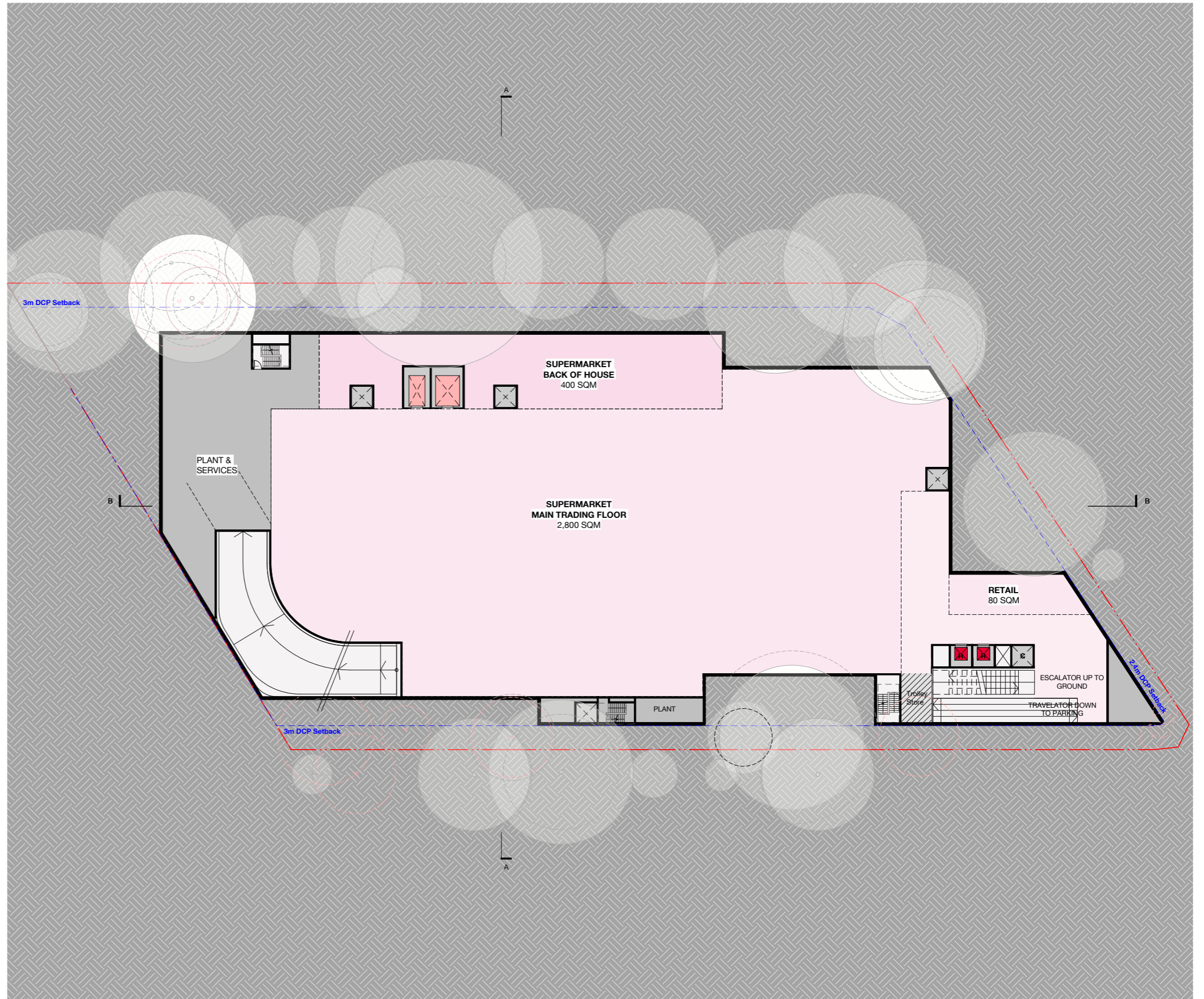


## 4.16 Lower Ground Supermarket

The lower ground level contains a large-format supermarket accessible from the street level through the McEvoy and Bourke Street via escalators.

The subterranean supermarket presents significant benefits to the project and improves the ground level interface by maintaining facade activation.

The below-grade location effectively disguises the large format supermarket from the street allowing smaller-scale retail to address the street and footpaths.



# 4.17 Basement Design Parking & Loading

## Loading Dock

The concept scheme includes an on-site loading dock that can accommodate up to four vehicles at any one time, those being:

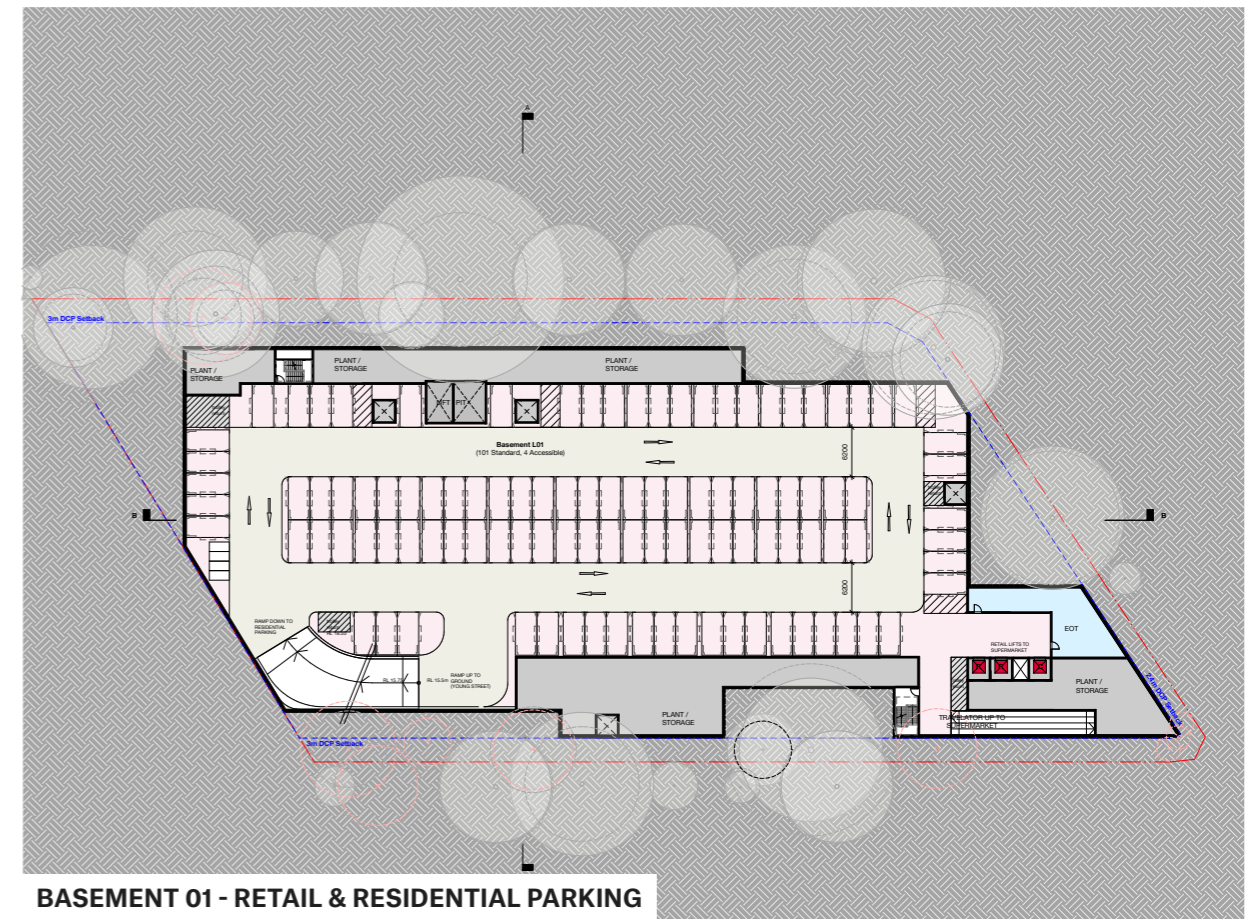
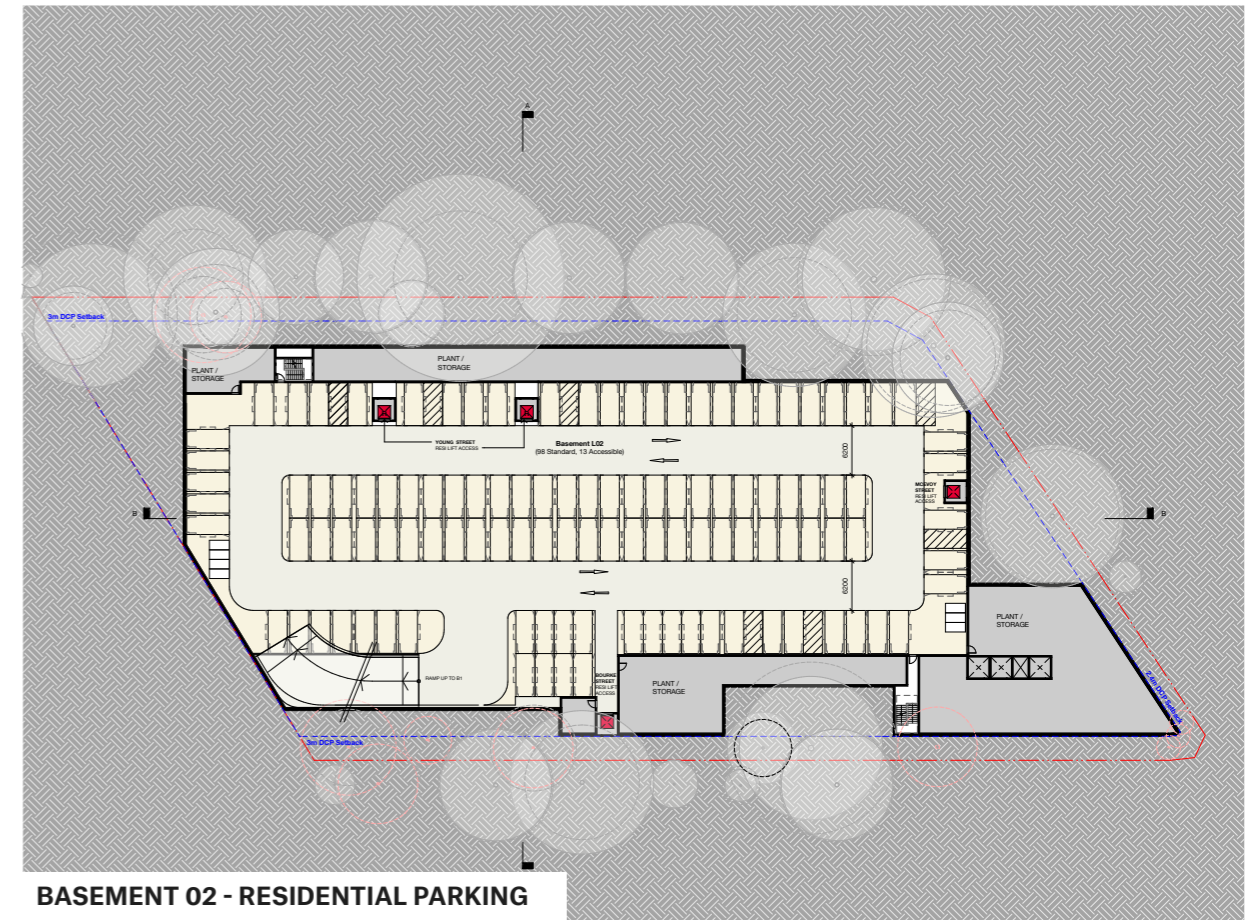
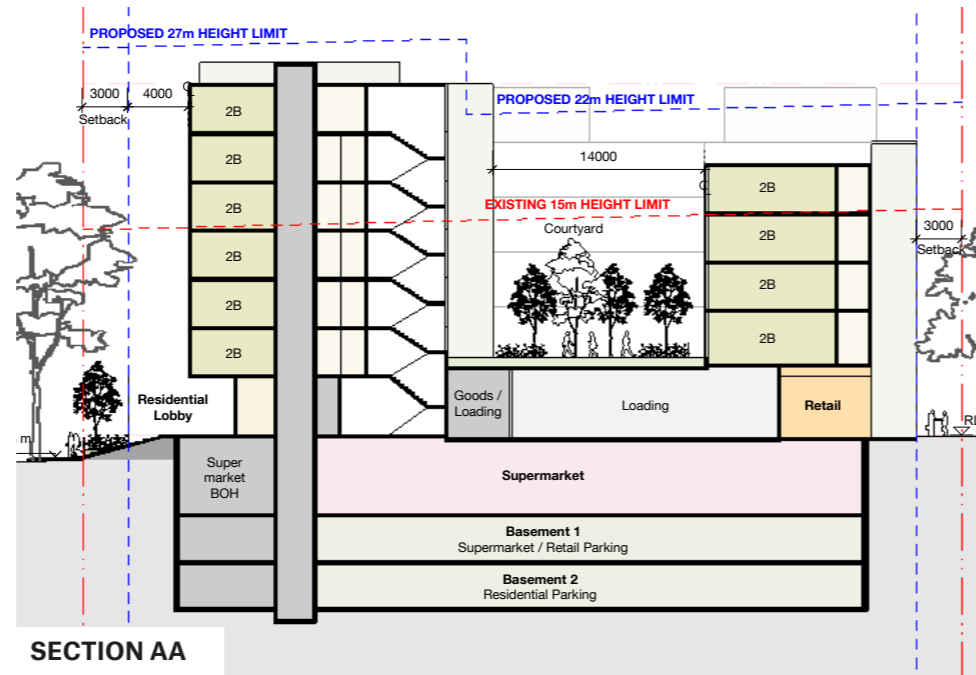
- Two Heavy Rigid Vehicles (HRVs), 12.5m
- Two Medium Rigid Vehicles (MRV), 8.8m

The loading dock is located on the ground floor at the southern end of the site, with a 13.5m diameter turntable provided to facilitate the entry and exit of vehicles from the site in a forwards direction. All retail and residential loading / unloading occurs on-site and not in public streets.

## Car Parking Provision

The project proposes two parking levels to meet the retail, residential and commercial parking requirements, including an end-of-trip provision on Basement 01 and bicycle storage. Motorcycle parking will also be provided across the two levels.

An extensive provision of future-ready EV charging opportunities is a project commitment by Fabcot.





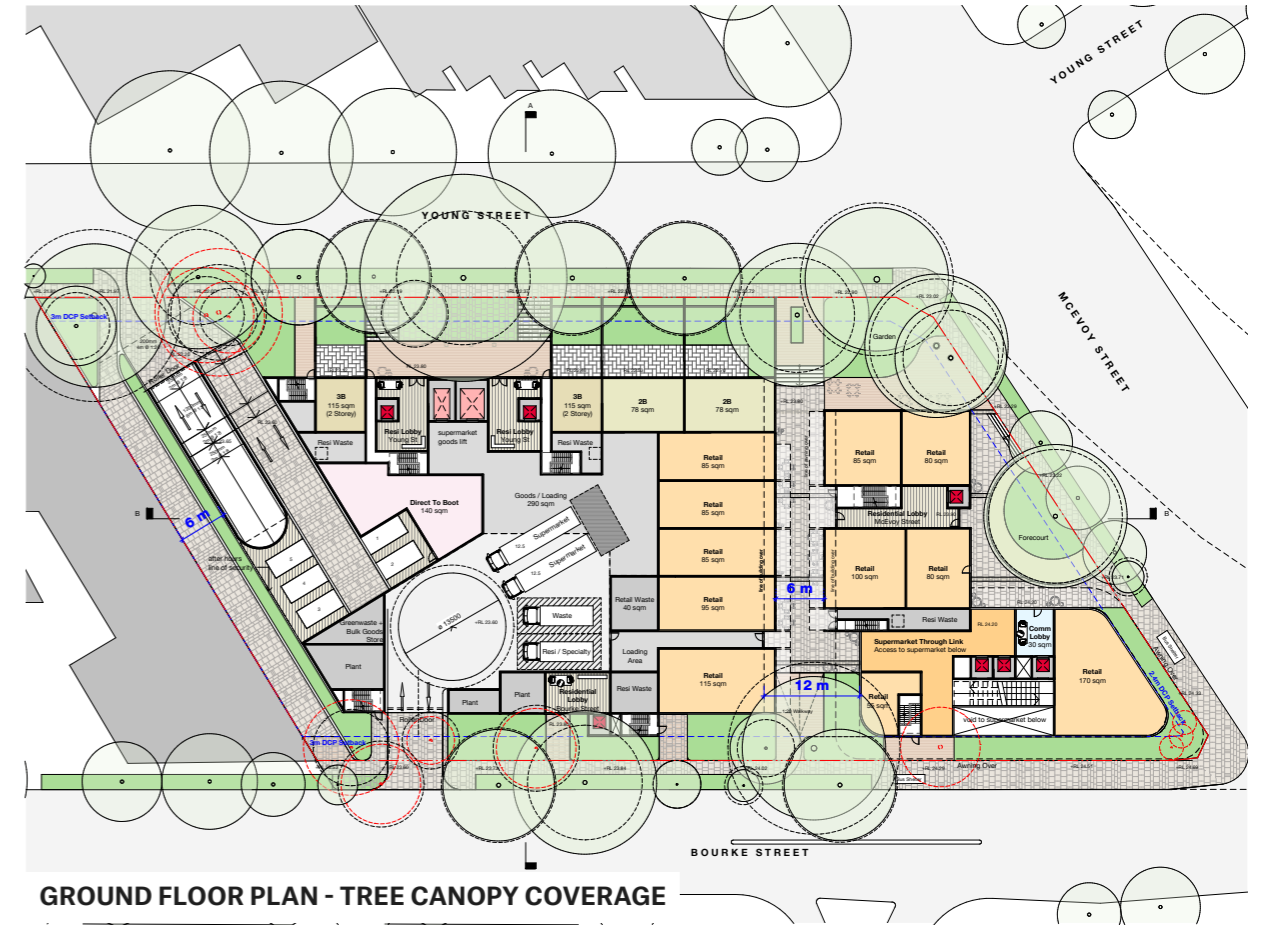
# 4.18 Tree Canopy Site Coverage

The proposal seeks to retain most of the important trees on site, identified as 'AA' and 'A' by the arborist assessment, with the exception of a few removed for site access.

All considerations have been given to allow for sufficient scaffold zone during construction to maximise tree retention across the full site.



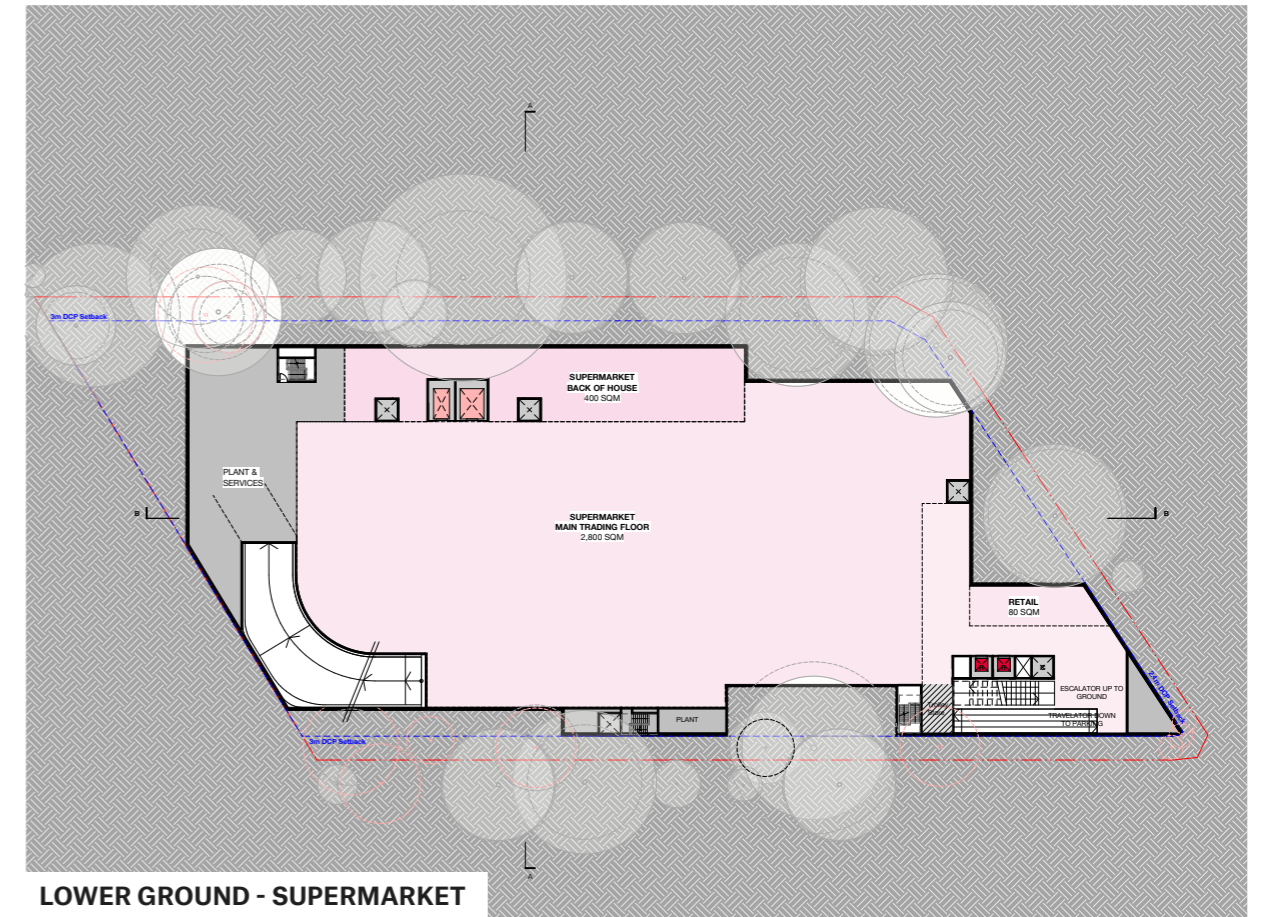
**BOURKE ST - STREET PERSPECTIVE OF STREET TREE**



**GROUND FLOOR PLAN - TREE CANOPY COVERAGE**



**YOUNG ST - STREET PERSPECTIVE OF STREET TREE**



**LOWER GROUND - SUPERMARKET**

# 4.19 Tree Impact Review Ground Floor

The subject Trees are preserved under Section 3.5.3 of City of Sydney Development Control Plan 2012 with the exception of trees located on the intersection of McEvoy and Bourke Street which are exempt.

Consideration has been given to maximise tree retention to provide extensive tree canopy coverage for the development. The proposed trees to be removed are two along Bourke Street beside the driveway and four around Bourke Street near the loading dock access, as well as one around the new mixed-use building to the north of Bourke Street.

Refer to Arborist Report for further details on proposed tree retention strategy.



**Pictured**  
Ground Floor Tree Impact Analysis

## 4.20 Tree Impact Review Typical Floor

Lidar surveying has been carried out to enable detail tree impact assessment against the proposed building envelope and proposed scaffolding zone.

Tree impact assessment of the proposed building envelopes (above ground) and the two vehicle access driveways (Young and Bourke Street) on the Tree Protection Zones (TPZ) including the crowns of the existing trees has been carried out.

Refer to Arborist Report for further details on proposed tree retention strategy.



**Pictured**

Typical Floor Tree Impact Analysis



**A.**  
**Appendices**



# A.2 Solar Analysis

## Views from sun

### Key Planning Controls (Apartment Design Guide)

Objective: To optimize the number of apartments receiving sunlight to habitable rooms, primary windows and private open space

### Design criteria:

- Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in the Sydney Metropolitan Area
- A maximum of 15% of apartments in a building receive subject building DA approved adjacent development



JUNE 21ST: 9 AM



JUNE 21ST: 10 AM



JUNE 21ST: 11 AM



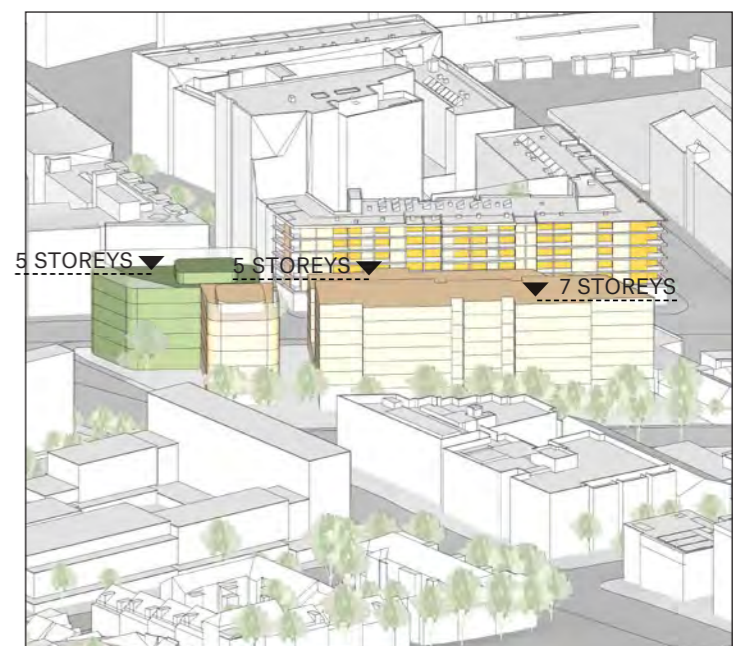
JUNE 21ST: 12 PM



JUNE 21ST: 1 PM



JUNE 21ST: 2 PM



JUNE 21ST: 3 PM

# A.3 ADG Compliance

## Daylight Access

### Solar

Part 4A of the Apartment Design Guide provides three objectives and a range of guidance for solar and daylight access. They deal with optimising sunlight to living rooms and private open space, solar access in circumstances where sunlight is limited and shading and glare control.


Key design criteria set out measurable requirements for achieving this objective in apartment developments, as follows:

- Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in the Sydney Metropolitan Area.
- A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter.

Solar access has been carefully considered for both residential buildings. When assessing the entire site, the project complies with the objectives of the ADG.

**From the total 121 apartments, 85 or 70% achieve 2 hours or more of solar access on the winter solstice.**

### Key

 Apartments receiving 2+ hours of sun to living room and private open space



### Apartments with 2 hours solar access

	Young St	Bourke St	McEvoy St	
Level 6	9	-	-	
Level 5	9	-	-	
Level 4	9	6	5	
Level 3	9	6	2	
Level 2	9	2	5	
Level 1	7	1	2	
Ground	4	-	-	
<b>Total</b>	<b>59 / 79</b>	<b>15 / 24</b>	<b>14 / 18</b>	<b>85 / 121</b>
	71%	63%	78%	<b>70%</b>



# A.4 ADG Compliance

## Cross Ventilation

### Cross Ventilation

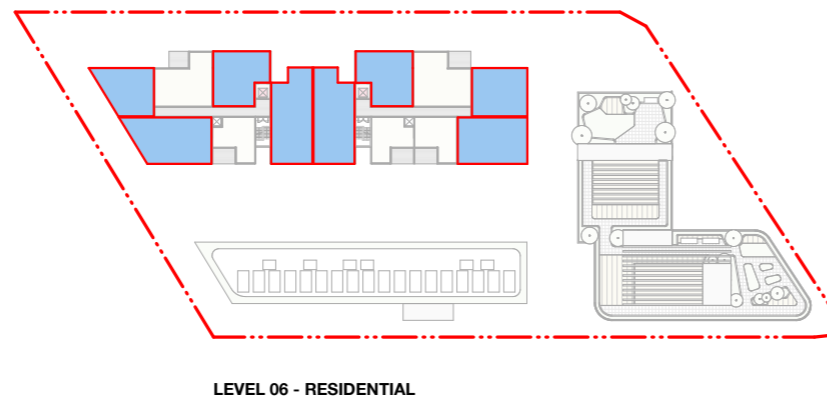
Part 4B of the Apartment Design Guide provides objectives to achieve adequate cross ventilation to apartments.

As per the ADG, Natural cross ventilation is achieved by apartments having more than one aspect with direct exposure to the prevailing winds, or windows located in significantly different pressure regions, rather than relying on purely wind driven air.

At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.

Cross ventilation has been carefully considered when laying out the floorplan for both residential buildings. When assessing the entire site, the project complies with the objectives of the ADG.

From the total 121 apartments, 63 or 65% are cross ventilated.

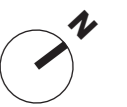


**Key**

Apartments benefiting from cross ventilation

### Apartments with Cross Ventilation

	Young St	Bourke St	McEvoy St	
Level 6	8	-	-	
Level 5	8	-	-	
Level 4	8	2	5	
Level 3	8	2	2	
Level 2	8	2	5	
Level 1	8	2	2	
Ground	1	-	-	
<b>Total</b>	<b>49 / 79</b>	<b>8 / 24</b>	<b>14 / 18</b>	<b>63 / 121</b>
	62%	33%	78%	65%





# A.5 Daylight Access Analysis

## 840 Bourke Street

### Daylight Access Analysis - 840 Bourke Street

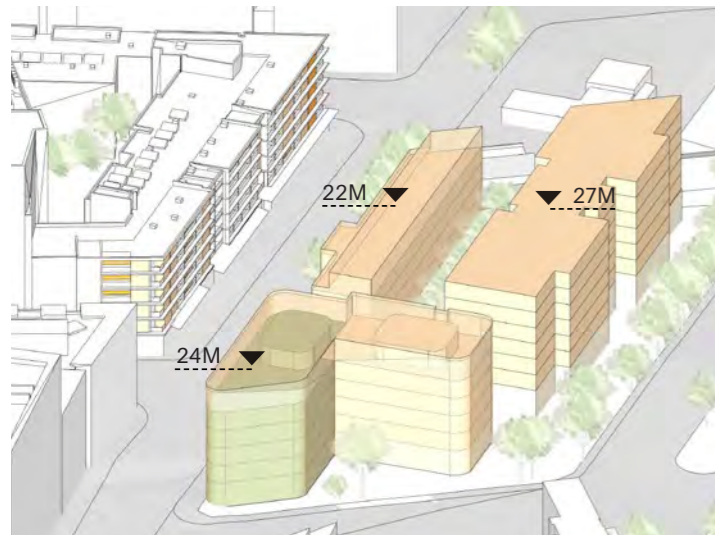
Maintain 2 hours solar access to 840 Bourke Street between 9am - 3pm on the 21 June, Winter Solstice

### 840 Bourke Analysis

Apartments Affected	0	
Total Apartments	359	0%



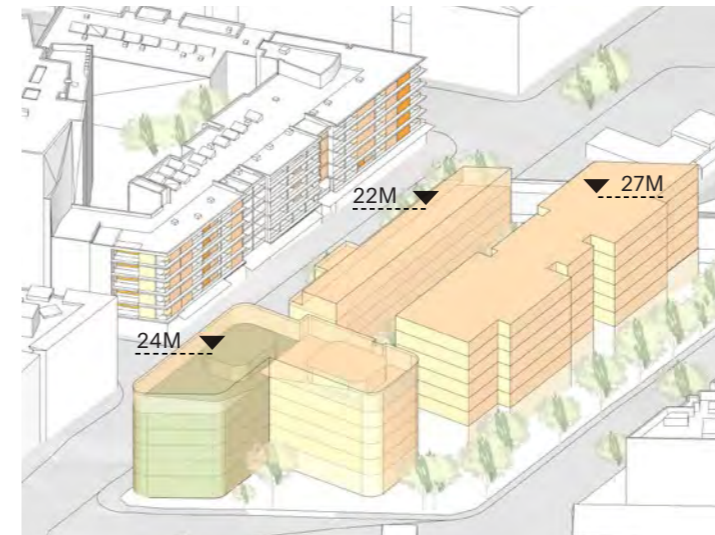
Part Plan: Typical Floor level of 840 Bourke Street



10:30 am



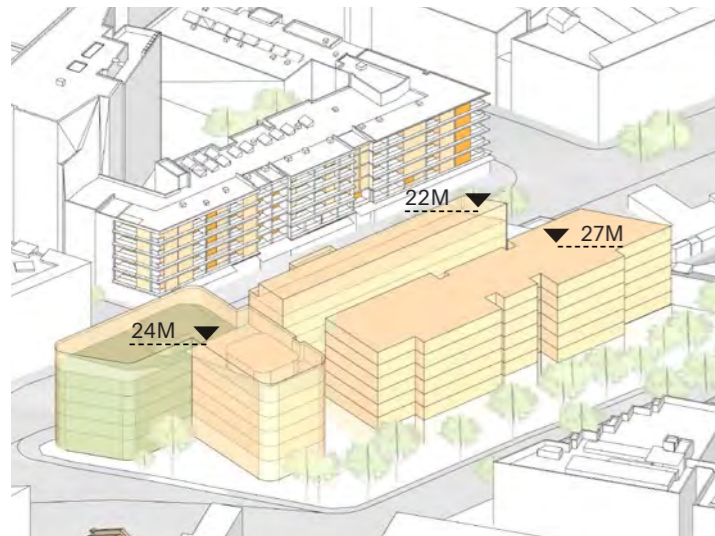
11:00 am



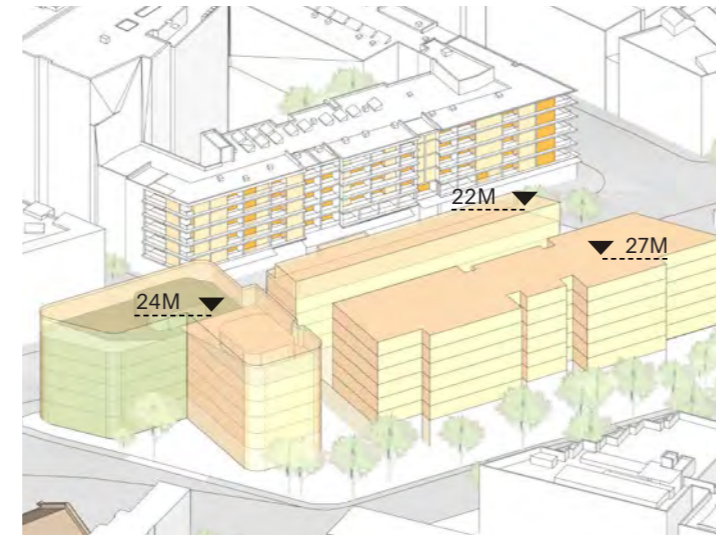
11:30 am



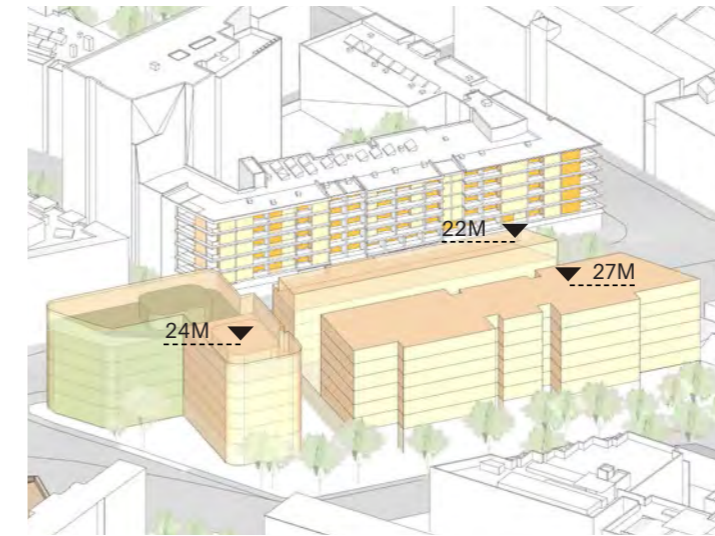
12:00 pm



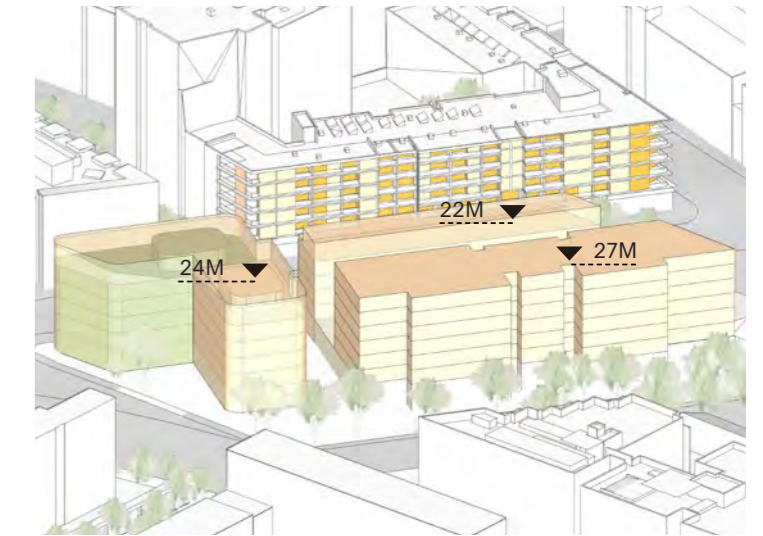
12:30 pm



1:00pm



1:30 pm



2:00pm

**Pictured**

All axes taken as views from the sun Winter Solstice - June 21

# A.6 Site Options Summary



## Option 1 Initial Concept

Young St Building (Resi)	GBA	10,722
	GFA	8,149
	NSA	6,927
Bourke St Building (Resi)	GBA	3,690
	GFA	2,809
	NSA	2,388
Commercial (Non-Resi)	GBA	2,289
	GFA	1,880
	NSA	1,598
Ground (Non-Resi)	GBA	4,014
	GFA	1,827
	NSA	1,193
Total	GBA	20,715
	GFA	14,665
	NSA	12,105
	FSR	2.2

## Option 2 Maximum 6 Storeys

Young St Building (Resi)	GBA	7,790	
	GFA (78% GBA)	6,076	-2,073
	NSA (85% GFA)	5,165	
Bourke St Building (Resi)	GBA	4,500	
	GFA (75% GBA)	3,375	566
	NSA (85% GFA)	2,869	
Commercial (Non-Resi)	GBA	3,186	
	GFA (88% GBA)	2,804	924
	NSA (90% GFA)	2,523	
Ground (Non-Resi)	GBA	4,765	
	GFA (50% GBA)	2,383	556
	NSA (GFA minus Pickup)	2,183	
Total	GBA	20,241	
	GFA	14,637	-28
	NSA	12,739	
	FSR	2.2	

## Option 3 Introduce Building Break

Young St Building (Resi)	GBA	8,189	
	GFA (78% GBA)	6,387	-1,762
	NSA (85% GFA)	5,429	
Bourke St Building (Resi)	GBA	4,200	
	GFA (75% GBA)	3,150	341
	NSA (85% GFA)	2,678	
Commercial (Non-Resi)	GBA	3,186	
	GFA (88% GBA)	2,804	924
	NSA (90% GFA)	2,523	
Ground (Non-Resi)	GBA	4,608	
	GFA (50% GBA)	2,304	477
	NSA (GFA minus Pickup)	2,104	
Total	GBA	20,183	
	GFA	14,645	-20
	NSA	12,734	
	FSR	2.2	

## Option 4 Stepped Young Street

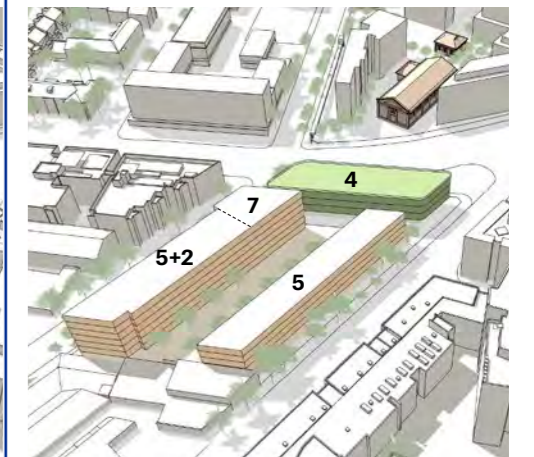
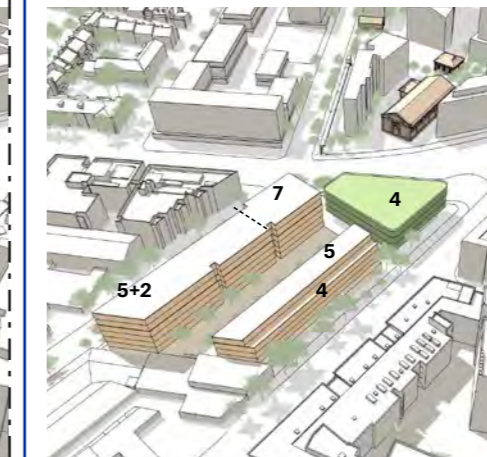
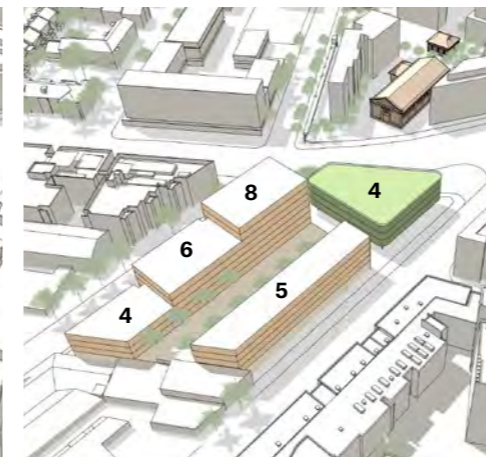
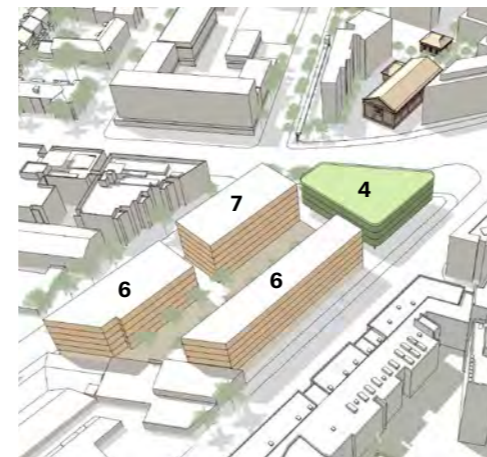
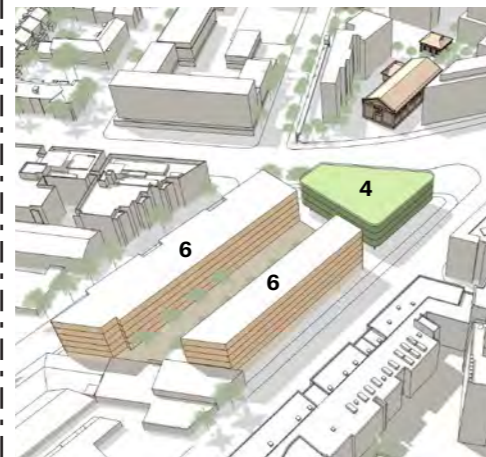
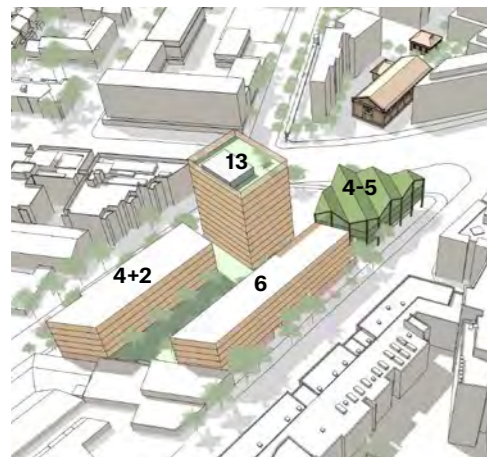
Young St Building (Resi)	GBA	9,078	
	GFA (78% GBA)	7,081	-1,068
	NSA (85% GFA)	6,019	
Bourke St Building (Resi)	GBA	3,252	
	GFA (75% GBA)	2,439	-370
	NSA (85% GFA)	2,073	
Commercial (Non-Resi)	GBA	3,186	
	GFA (88% GBA)	2,804	924
	NSA (90% GFA)	2,523	
Ground (Non-Resi)	GBA	4,608	
	GFA (50% GBA)	2,304	477
	NSA (GFA minus Pickup)	2,104	
Total	GBA	20,124	
	GFA	14,628	-37
	NSA	12,719	
	FSR	2.2	

## Option 5 Reduce height to Bourke Street

Young St Building (Resi)	GBA	9,130	
	GFA (78% GBA)	7,121	-1,028
	NSA (85% GFA)	6,053	
Bourke St Building (Resi)	GBA	3,252	
	GFA (75% GBA)	2,439	-370
	NSA (85% GFA)	2,073	
Commercial (Non-Resi)	GBA	3,186	
	GFA (88% GBA)	2,804	924
	NSA (90% GFA)	2,523	
Ground (Non-Resi)	GBA	4,608	
	GFA (50% GBA)	2,304	477
	NSA (GFA minus Pickup)	2,104	
Total	GBA	20,176	
	GFA	14,668	3
	NSA	12,754	
	FSR	2.2	

## Option 6 Linear Pavillion

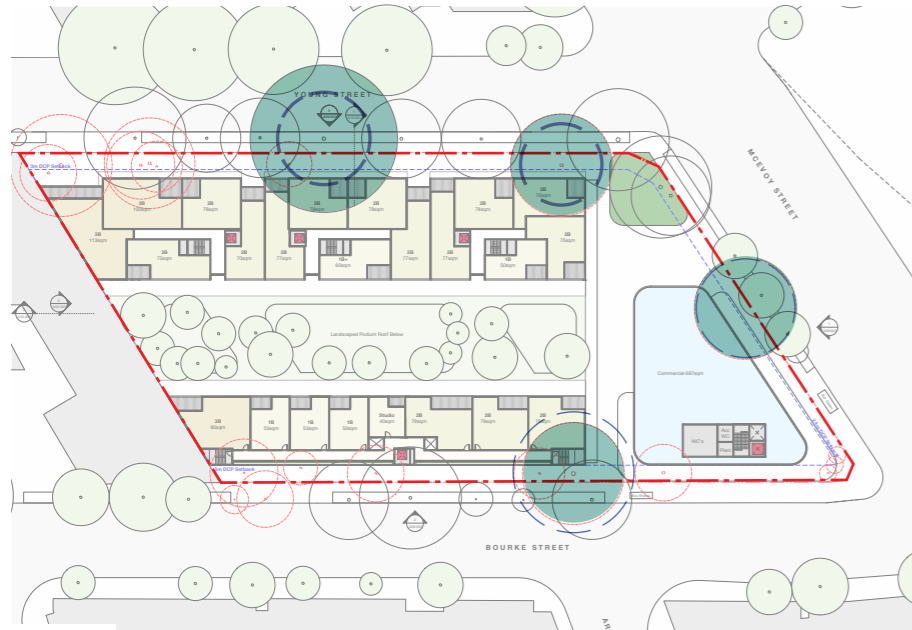
Young St Building (Resi)	GBA	7,978	
	GFA (78% GBA)	6,223	-1,926
	NSA (85% GFA)	5,289	
Bourke St Building (Resi)	GBA	4,012	
	GFA (75% GBA)	3,009	200
	NSA (85% GFA)	2,558	
Commercial (Non-Resi)	GBA	3,132	
	GFA (88% GBA)	2,756	876
	NSA (90% GFA)	2,481	
Ground (Non-Resi)	GBA	4,634	
	GFA (50% GBA)	2,317	490
	NSA (GFA minus Pickup)	2,117	
Total	GBA	19,756	
	GFA	14,305	-360
	NSA	12,445	
	FSR	2.2	



**Preferred Option following community consultation**

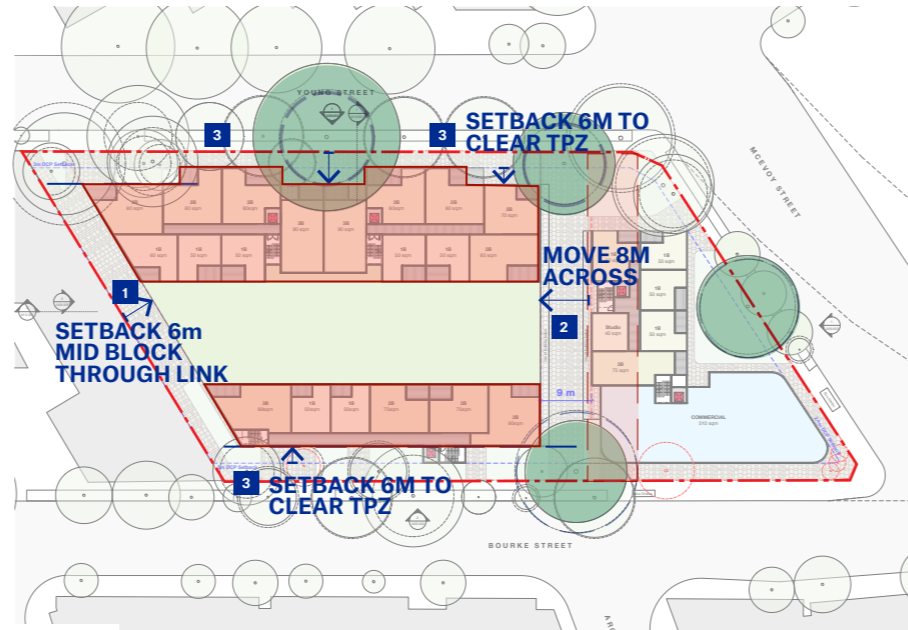
# A.6 Site Options Summary

## Following Tree Retention Strategy



### 1 Concept Post Community Consultation

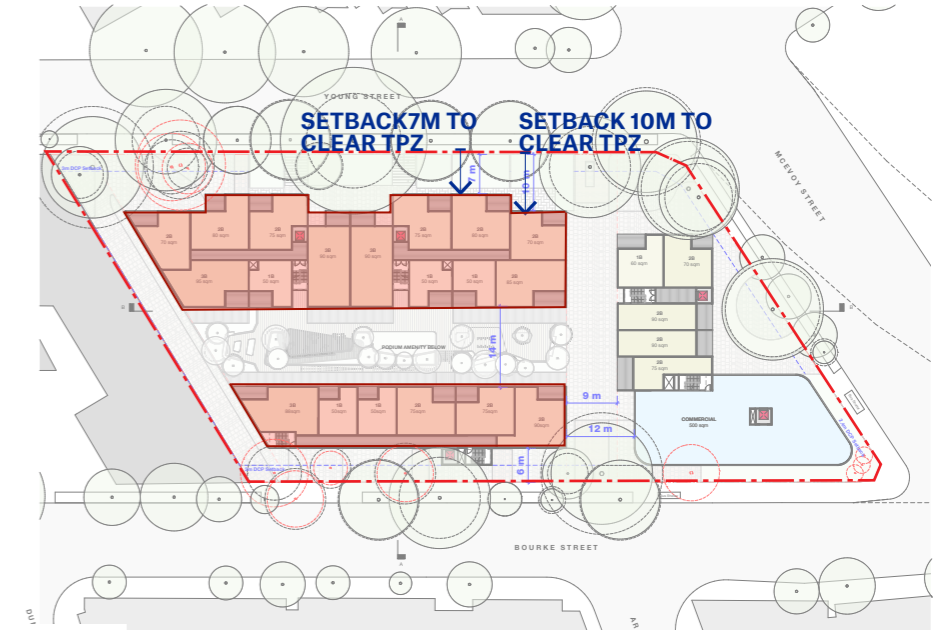
The concept scheme proposed two residential blocks, one on Young Street and one on Bourke Street, with a communal residential facilities on the podium. A community/ commercial building anchoring the corner of McEvoy and Bourke. A through-site link on ground level created a lane-way retail connected to the a public plaza.



### 2 Schematic updated with Major Tree Retention

The updated urban strategy prioritised maximum tree retention on site and used them as anchors for the development. A mid-block through link was introduced to respond to DCP master plan requirements, Young and Bourke Street residential blocks reduced in bulk and scale and further set back to ensure tree retention.

The new retail lane-way through link shifted south by 8m and remain on axis with Archibald Road. The community building now converted to a mixed-use residential and commercial building.



### 3 Schematic refined post LIDAR survey

Lidar surveying has been carried out to enable detail tree impact assessment against the building envelope and proposed scaffolding zone.

Young Street Residential block was further setback to ensure maximum protection for the street trees.

Tree removal is sensitively considered for site access. The proposed trees to be removed are two along Bourke Street beside the driveway and four around Bourke Street near the loading dock access, as well as one around the new mixed-use building to the north of Bourke Street.

