

*June 21st 5pm (Winter sunset at 4:53pm)*

# 2.0 SOLAR ACCESS

## DAYLIGHT

## COMPARISON

## SUMMARY

**Solar Access**  
1. Provide amended plans/ additional information quantifying the solar access to the park and laneways on the winter solstice (21 June), comparing the approved and proposed scheme in terms of area and duration of solar access.

The following table summarises the sun access throughout the year to the key public areas for the project.  
Refer to Appendix for Summer & Equinox sun access diagrams.

As shown in appendices where we have tested summer solstice & Equinox, the daylight access (between 9am-5pm) to park, laneways and plaza throughout the year has increased in the proposed scheme by a total of 7412sqm.

ZONE	APPROVED SCHEME SIZE	PROPOSED SCHEME SIZE	COMPARISON	COMMENT
PLAZA	2,300 m <sup>2</sup>	2,975 m <sup>2</sup>	+	
PARK	1,480 m <sup>2</sup>	1,930 m <sup>2</sup>	+	
WATERLOO	4,940 m <sup>2</sup>	5,256 m <sup>2</sup>	+	
SUPPLEMENTARY PUBLIC DOMAIN (FOOTPATHS, ACCESS, VERGE)	3,201 m <sup>2</sup>	759 m <sup>2</sup>	○	DUE TO INCREASED GROUND FLOOR RETAIL/ CHILD CARE
TOTAL PUBLIC DOMAIN	11,921 m <sup>2</sup>	10,920 m <sup>2</sup>	○	
TOTAL RETAIL AREA	1,858 m <sup>2</sup>	3,819 m <sup>2</sup>	++	
TOTAL GFA	83,368 m <sup>2</sup>	83,368 m <sup>2</sup>	+	
SITE LINKS				
- STATION TO COOLINGA ST	218M	200.5M	+	
- STATION TO GIFFNOCK AVE	265M	182.5M	+	

PARK SOLAR ACCESS 9AM-5PM				
- TOTAL HOURS WINTER SOLSTICE	1,631 m <sup>2</sup>	1,824 m <sup>2</sup>	+	
- TOTAL HOURS SUMMER SOLSTICE	9,724 m <sup>2</sup>	9,865 m <sup>2</sup>	+	
- TOTAL HOURS EQUINOX	5,340 m <sup>2</sup>	6,426 m <sup>2</sup>	++	
SUB-TOTAL	16,695 m <sup>2</sup>	18,115 m <sup>2</sup>	++	

LANEWAY SOLAR ACCESS 9AM-5PM				
- TOTAL HOURS WINTER SOLSTICE	2,305 m <sup>2</sup>	1,063 m <sup>2</sup>	○	
- TOTAL HOURS SUMMER SOLSTICE	3,331 m <sup>2</sup>	1,184 m <sup>2</sup>	○	
- TOTAL HOURS EQUINOX	2,458 m <sup>2</sup>	1,115 m <sup>2</sup>	○	
SUB-TOTAL	8,094 m <sup>2</sup>	3,362 m <sup>2</sup>	○	

PLAZA SOLAR ACCESS 9AM-5PM				
- TOTAL HOURS WINTER SOLSTICE	14,902 m <sup>2</sup>	18,658 m <sup>2</sup>	++	
- TOTAL HOURS SUMMER SOLSTICE	12,345 m <sup>2</sup>	15,727 m <sup>2</sup>	++	
- TOTAL HOURS EQUINOX	13,260 m <sup>2</sup>	16,846 m <sup>2</sup>	++	
SUB-TOTAL	40,507 m <sup>2</sup>	51,231 m <sup>2</sup>	++	

TOTAL SOLAR ACCESS 9AM - 5PM	65, 296 m <sup>2</sup>	72,708 m <sup>2</sup>	++	
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# 3.0 BUILDING A ROOFTOP PLANT

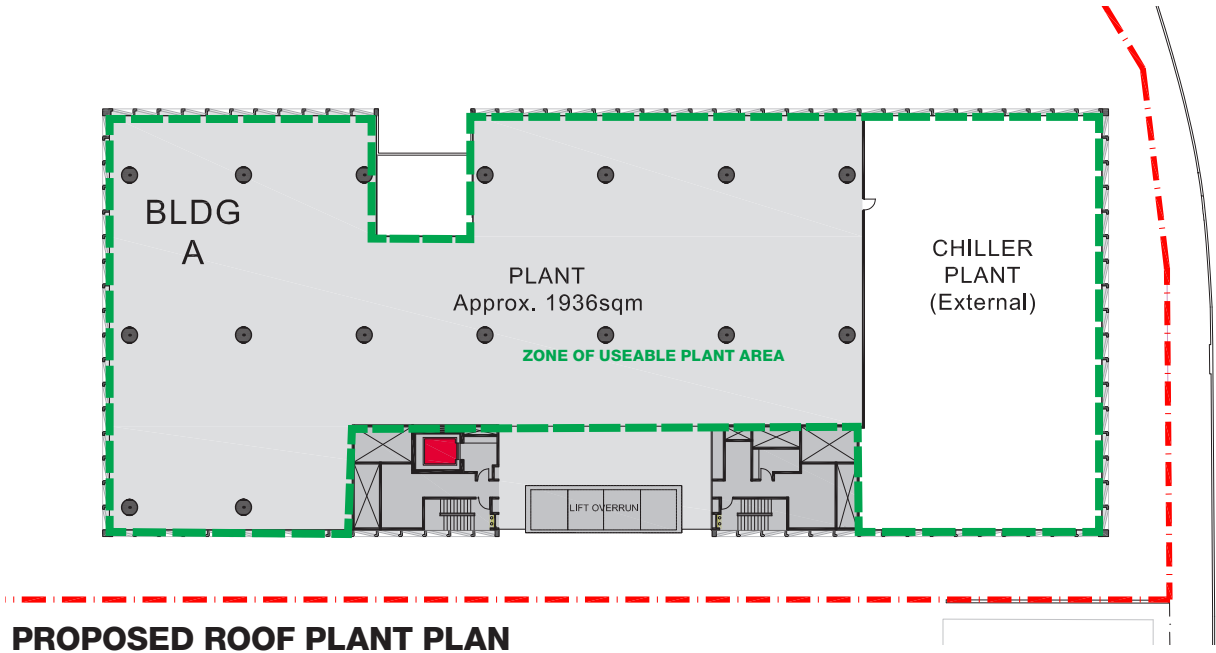
**Building A**  
1. Review the extent of rooftop plant of Building A, including options to incorporate setbacks to the northwest, northeast & southeast.

The plant level has been designed to accommodate required spatial area for mechanical plant and other base building servicing requirements. Reducing the extent of plant through introduction of setbacks will no longer meet the size requirements.

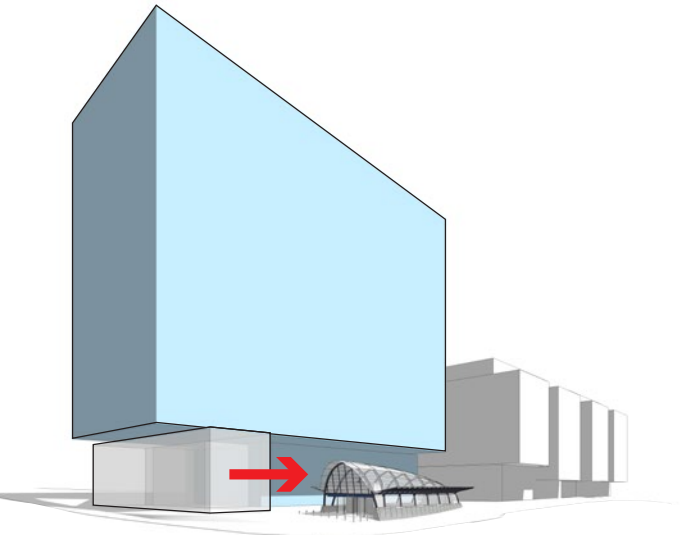
The building massing concept has been studied and the optimum architectural massing outcome comprises a series of stacked volumes that emphasise & articulate the building through landscaped external terraces & expressed vertical connectivity through the building.

The plant facade design is to be fully-integrated into the building's architecture and will become the upper level of the topmost volume. This proposal uniquely disguises unsightly plantroom level when viewed from afar, whilst still achieving the required functionality of the building's servicing requirements.

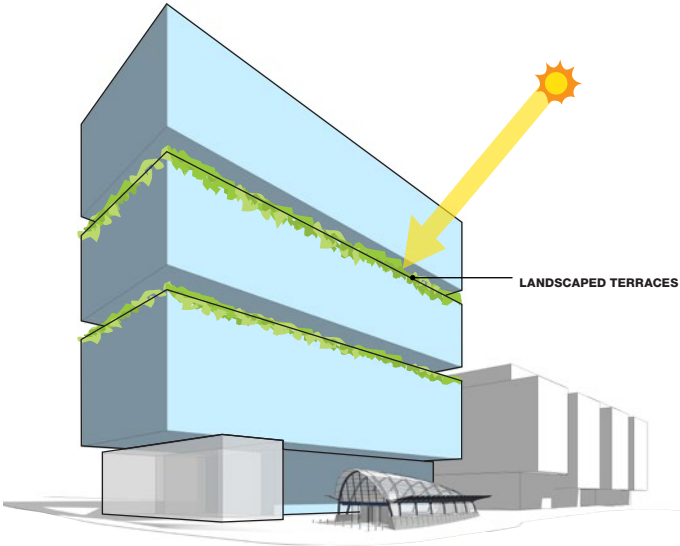
As described in the following shadow diagram impacts from this alteration to the envelope are minimal and do not present any additional loss of amenity to adjacent property.



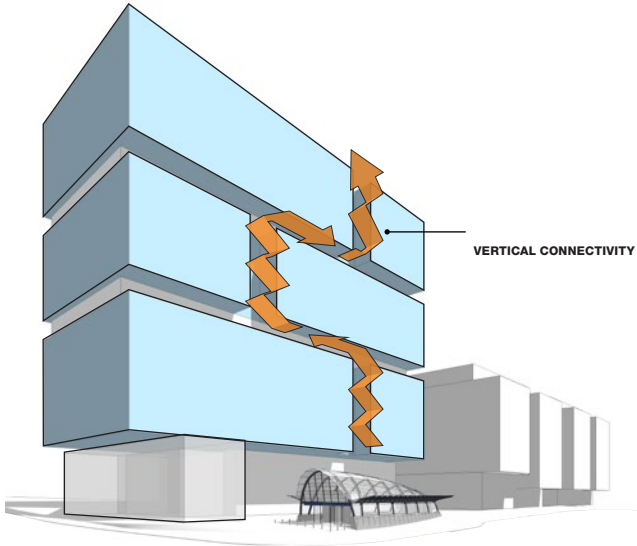
PROPOSED ROOF PLANT PLAN



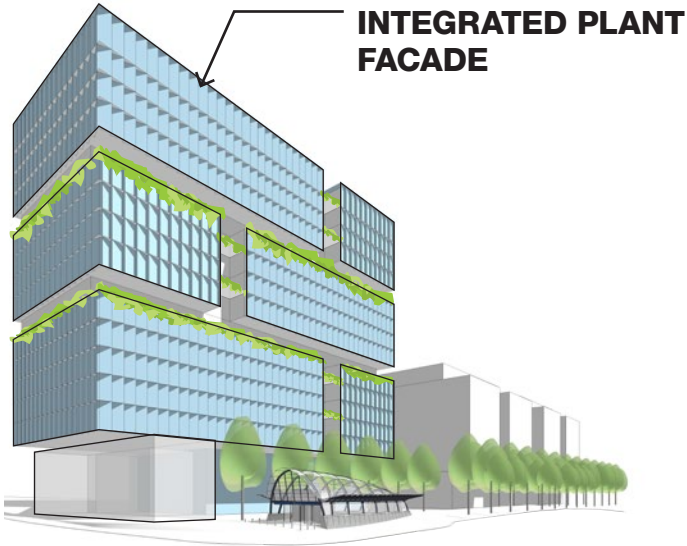
PROPOSED ENVELOPE



ARTICULATED VOLUMES



EXPRESSED VERTICAL  
CONNECTIVITY

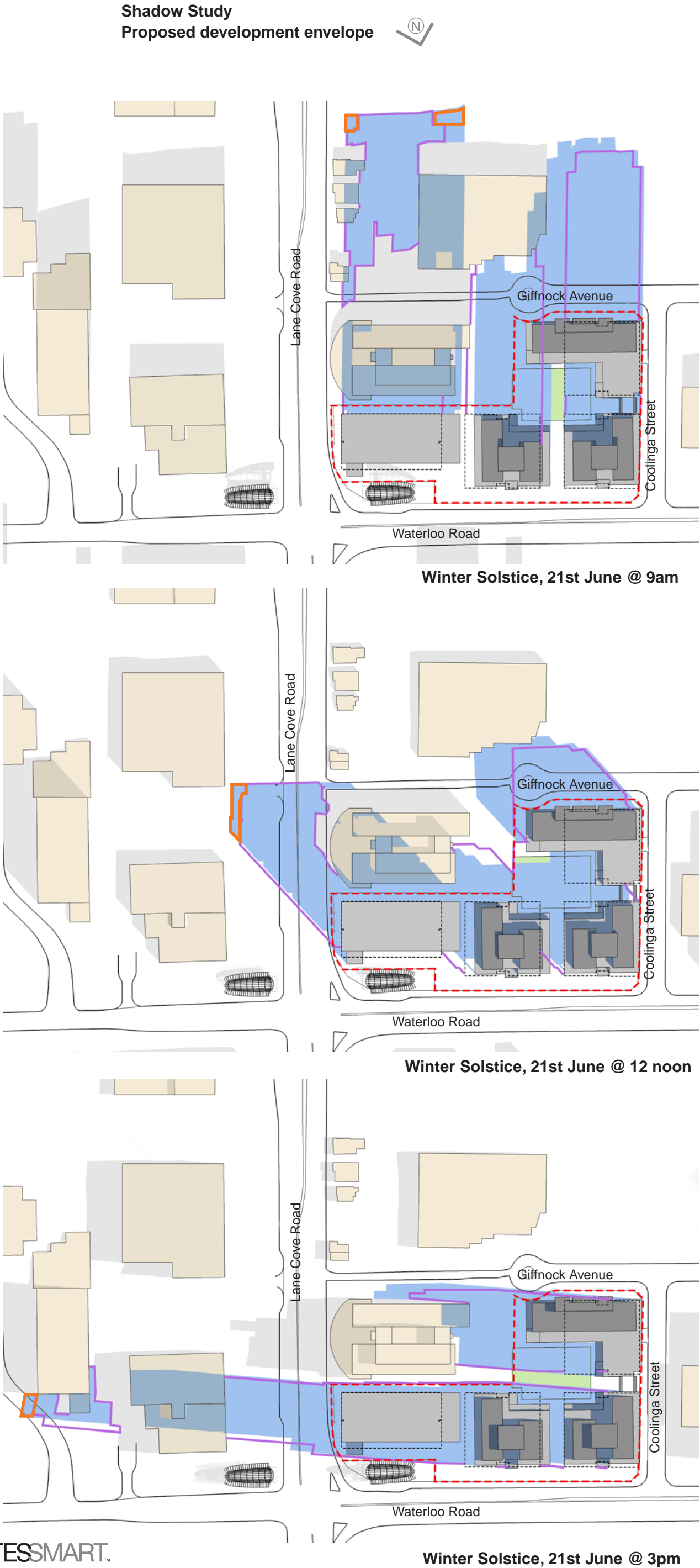


TEXTURED FACADE

# 3.0 BUILDING A ROOFTOP PLANT ADDITIONAL SHADOW

Legend

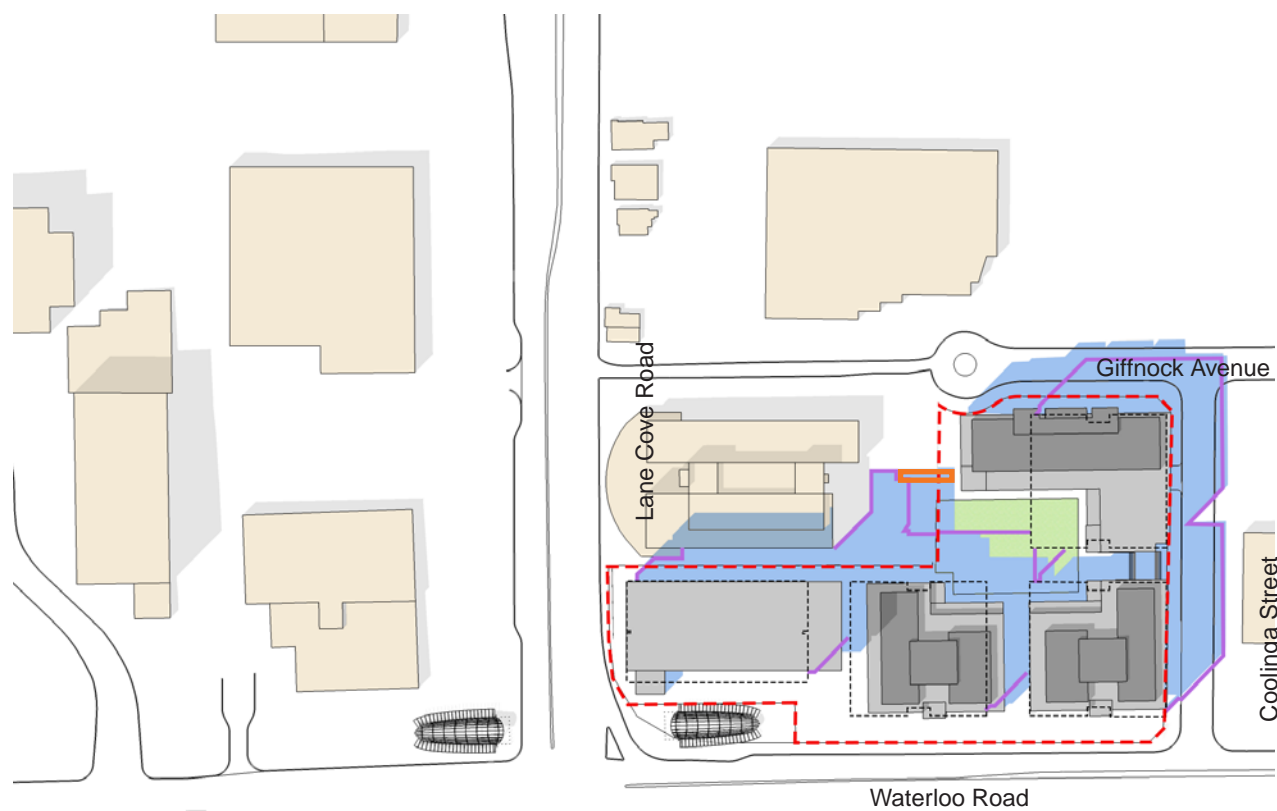
- Development boundary
- Proposed Shadow
- Existing Buildings
- Existing Shadow
- Outline of shadow - Approved masterplan
- Outline of envelope - Approved masterplan
- Area of additional shadow cast by Building A plant



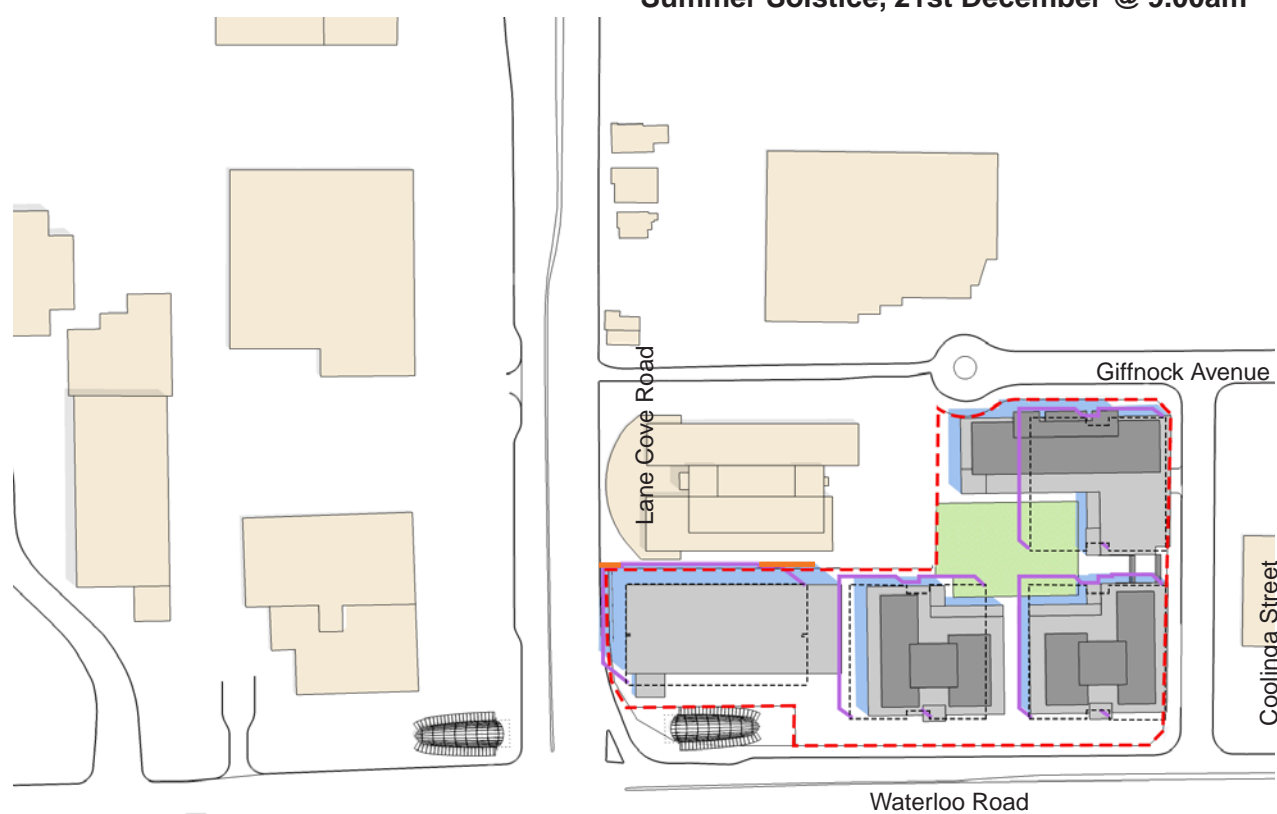


Ⓝ

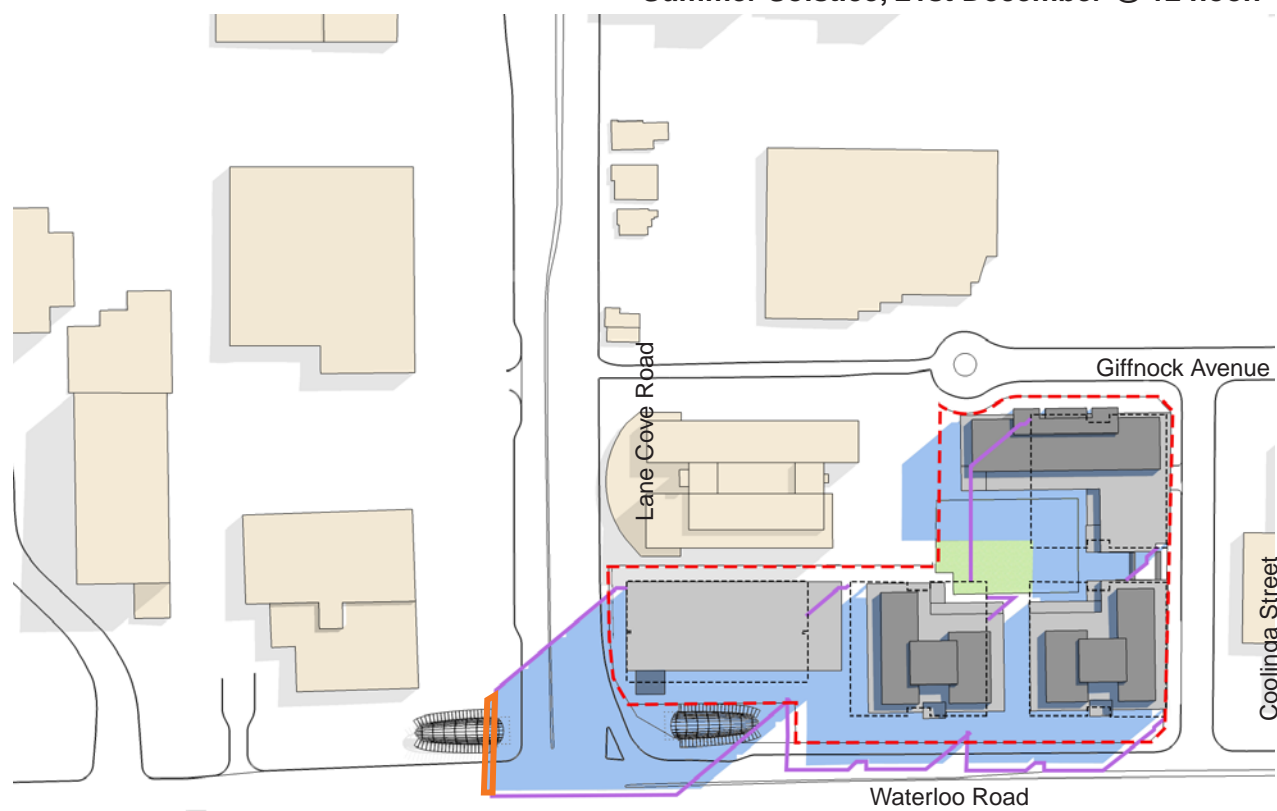
**Area of additional shadow cast by Building A plant**



**Summer Solstice, 21st December @ 9.00am**



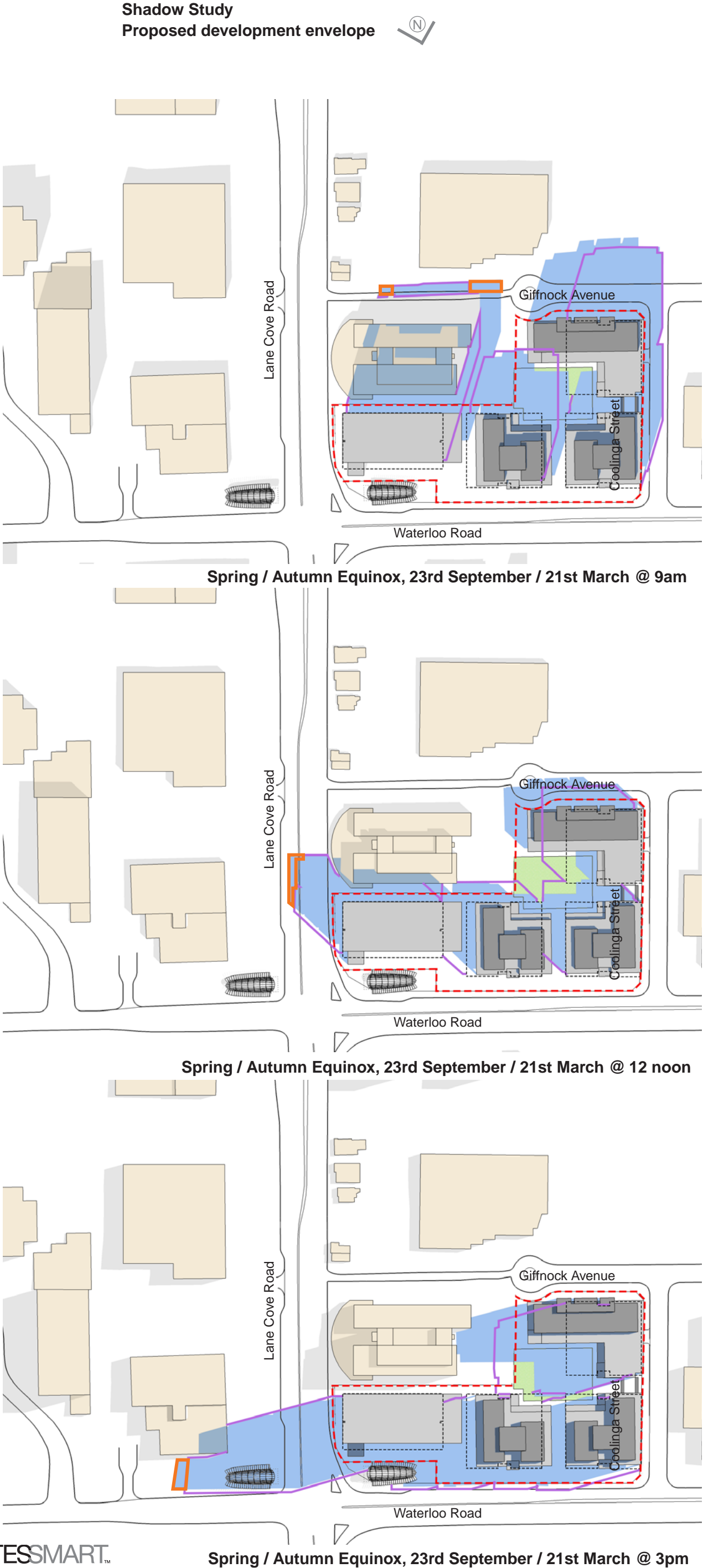
**Summer Solstice, 21st December @ 12 noon**



**Summer Solstice, 21st December @ 3pm**

Legend

- Development boundary
- Proposed Shadow
- Existing Buildings
- Existing Shadow
- Outline of shadow - Approved masterplan
- Outline of envelope - Approved masterplan
- Area of additional shadow cast by Building A plant

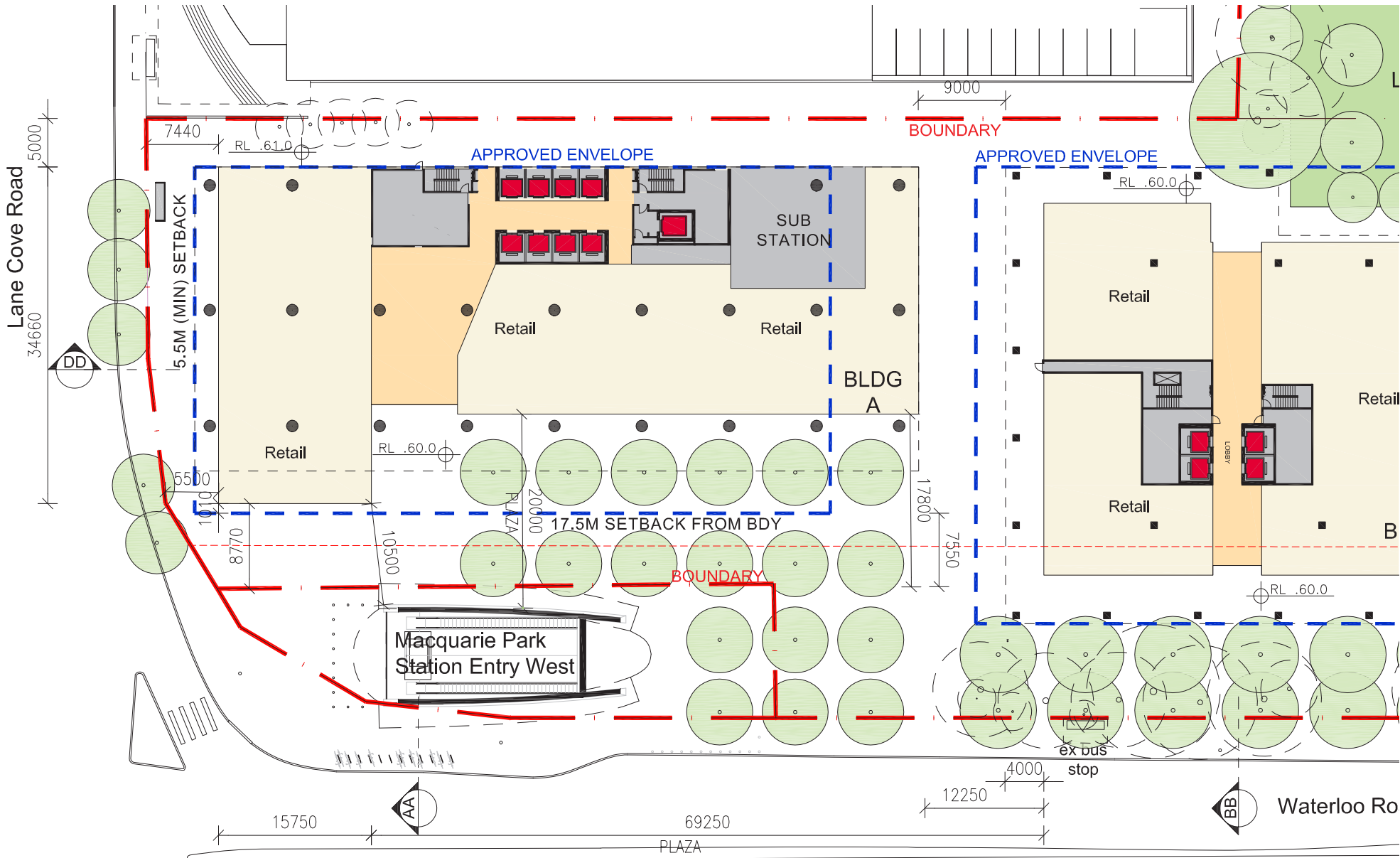




# 3.0 BUILDING A GROUND FLOOR SETBACK FROM STATION ENTRY

**Building A**  
2. Provide dimensions of the setback of the ground floor protrusion from the station entry and site boundary. Provide a view of this aspect of the building to show the area for the pedestrian movement.

Refer to below plan and image.









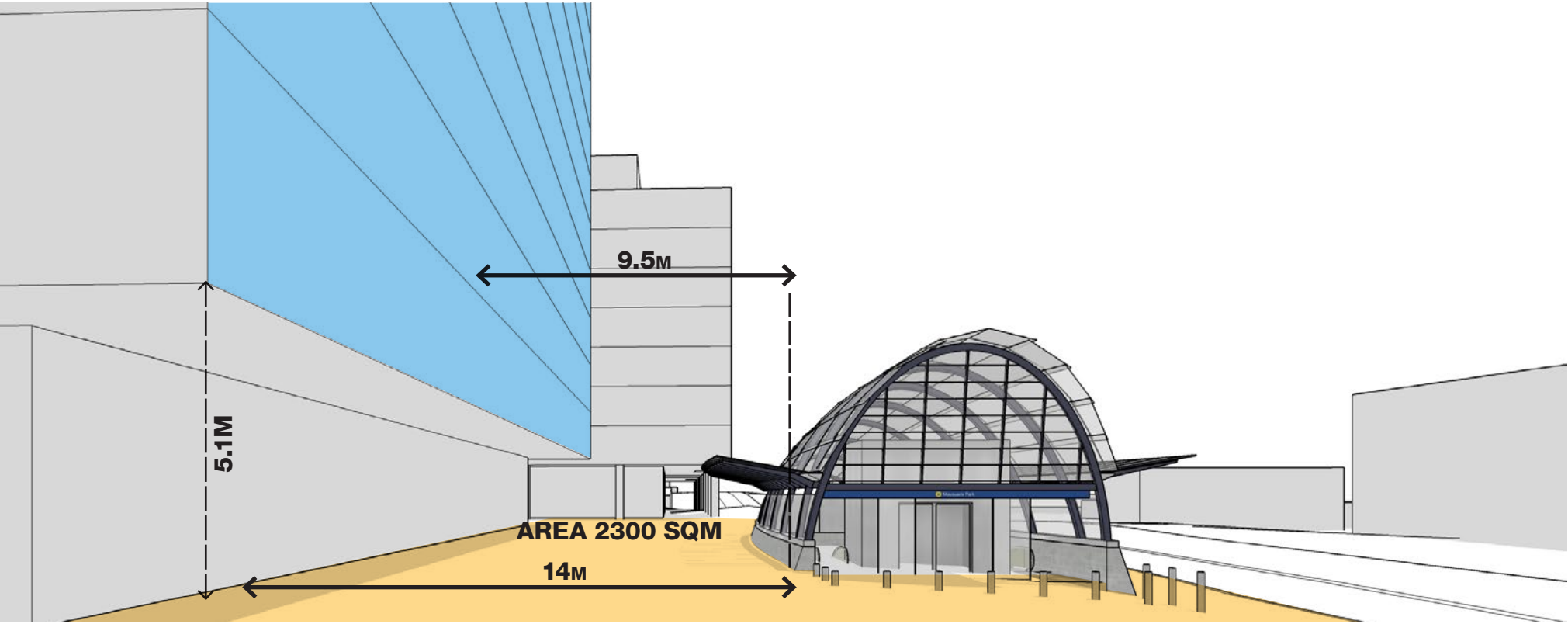
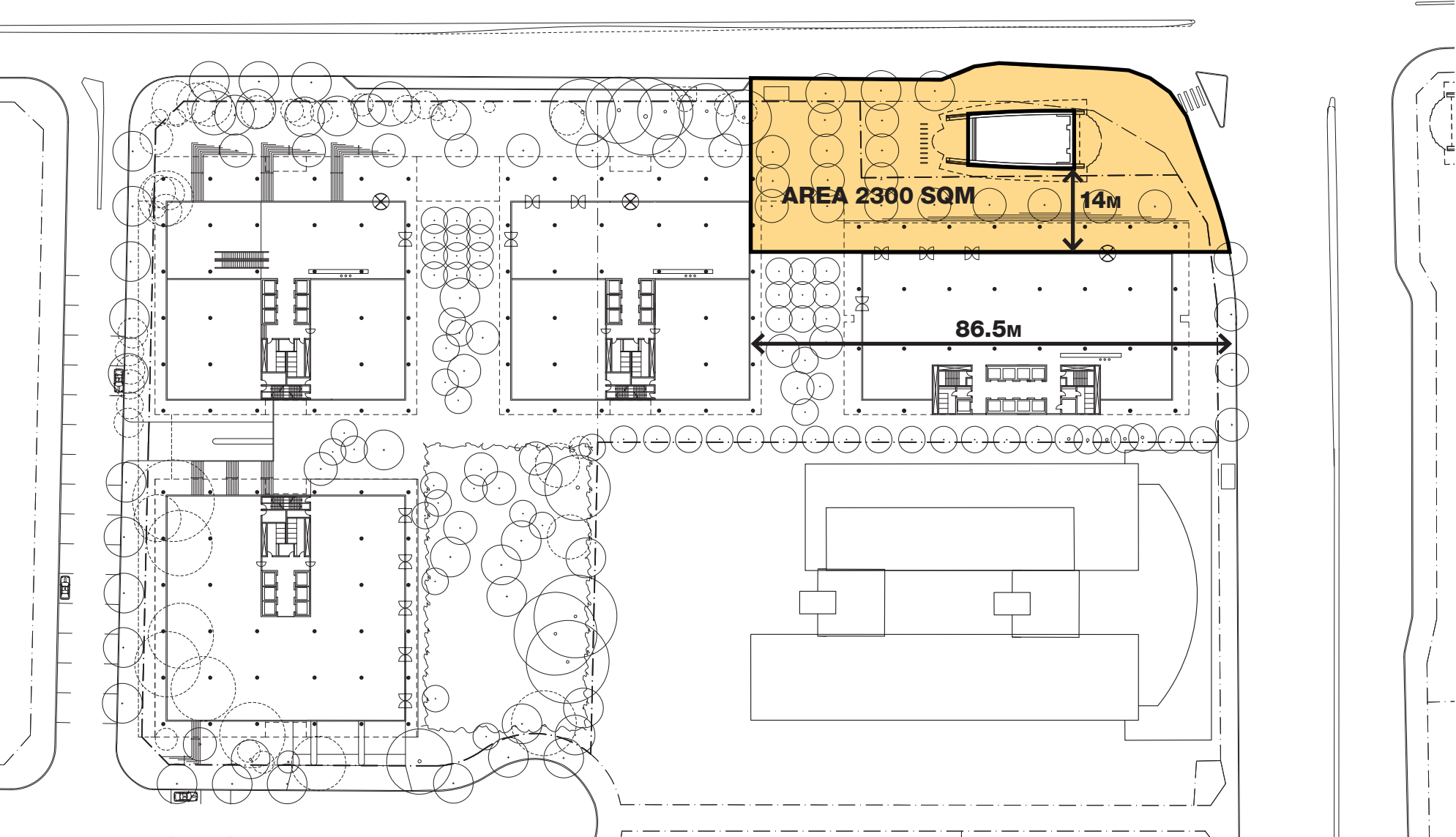


# APPENDICES



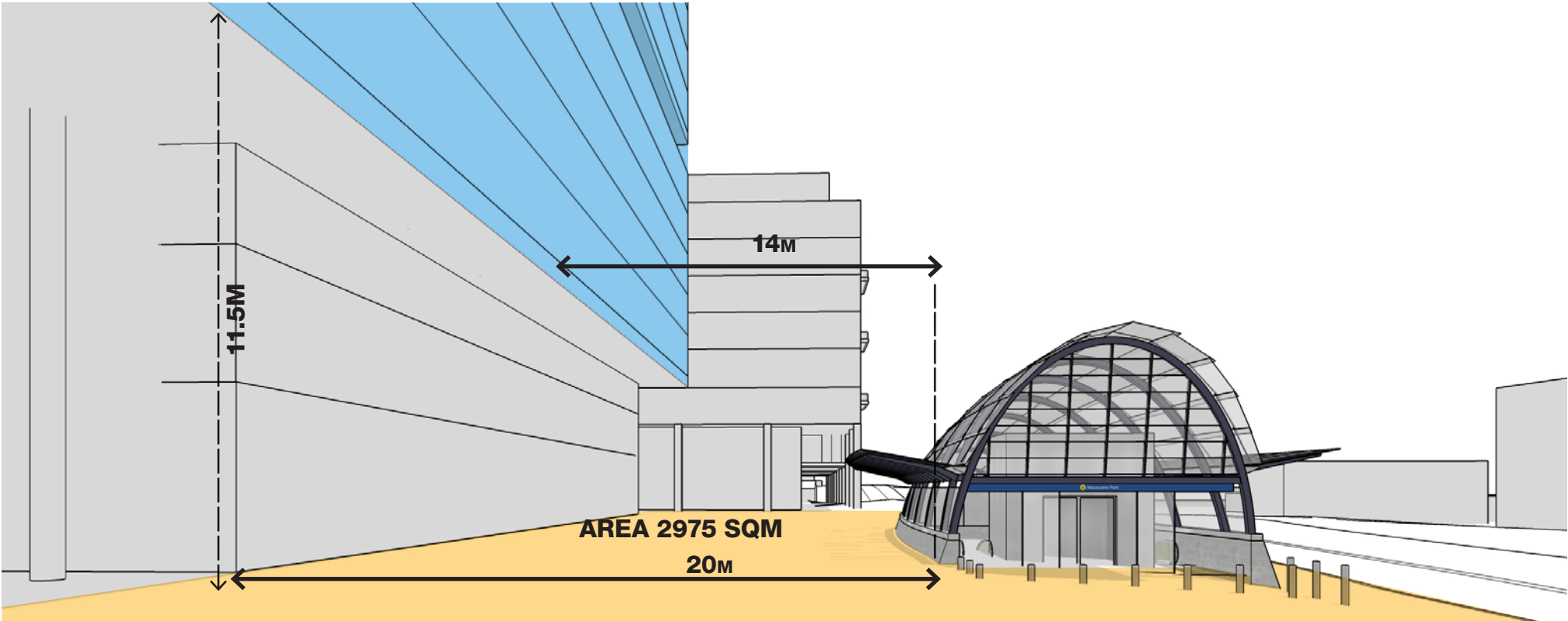
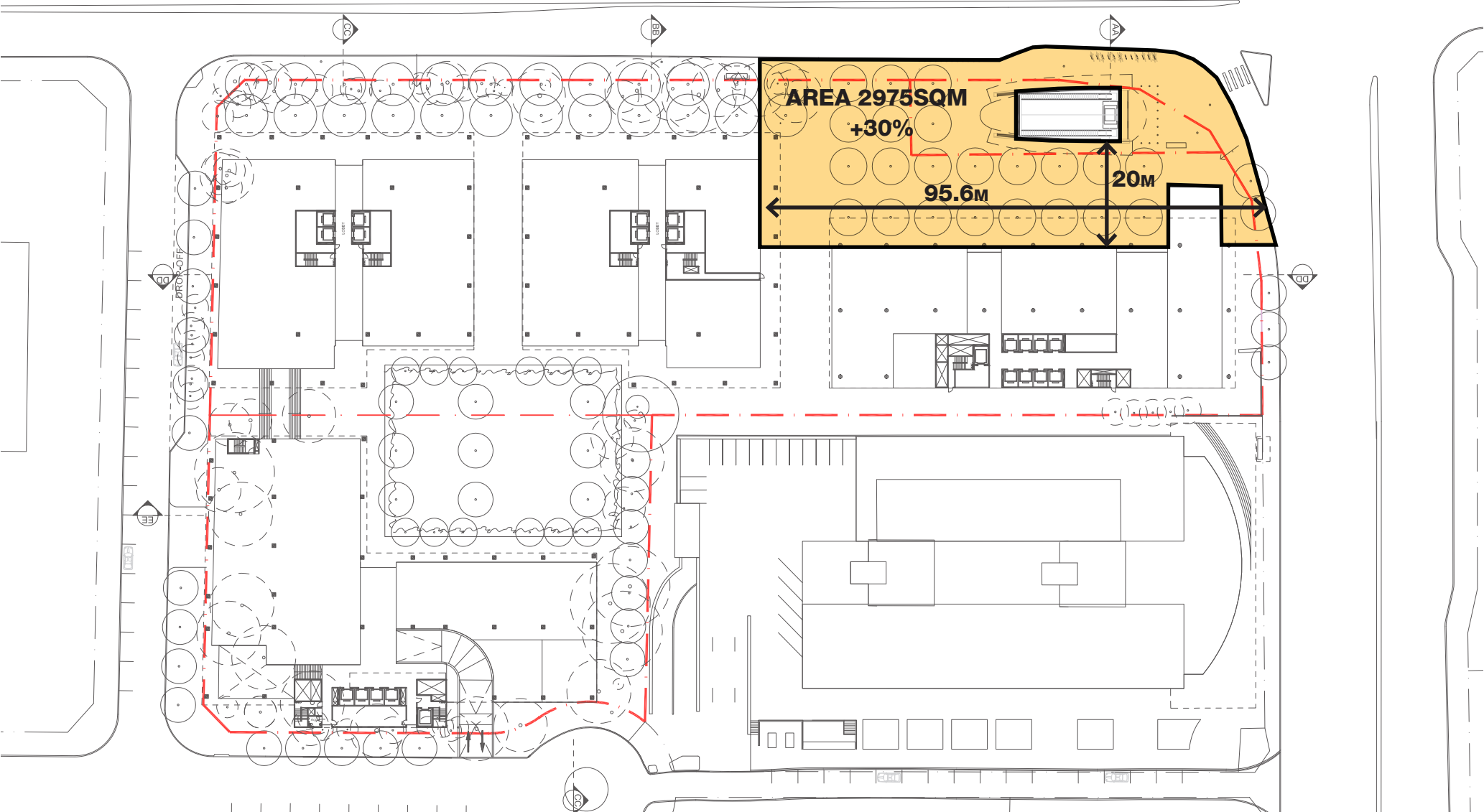
# S75W ADJUSTMENTS SCHEME COMPARISON PLAZA

The following diagrams describe the amendments and improvements to the Station Plaza in the Section 75W submission.  
The plaza has increased by 40% to be 3,221sqm (an increase of 920sqm)



APPROVED\_PLAZA

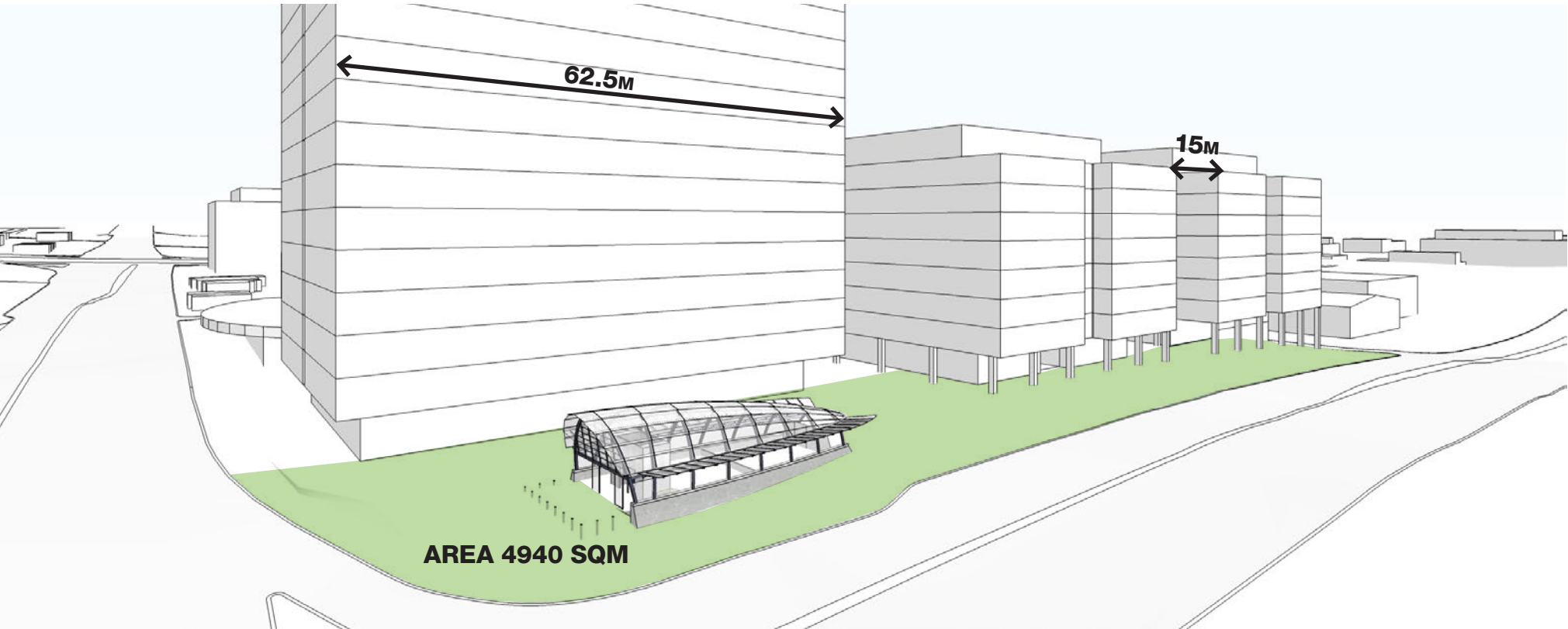
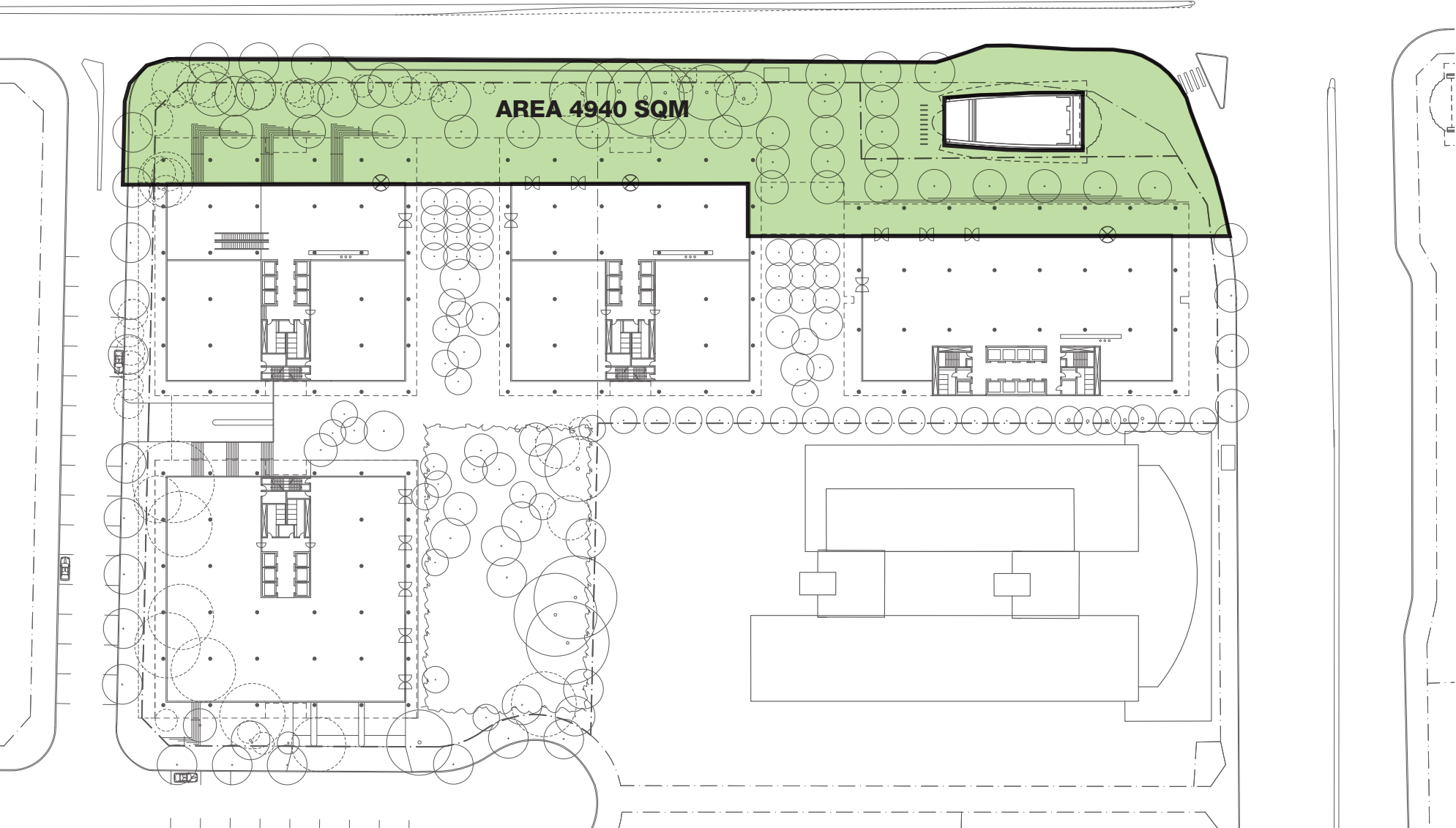




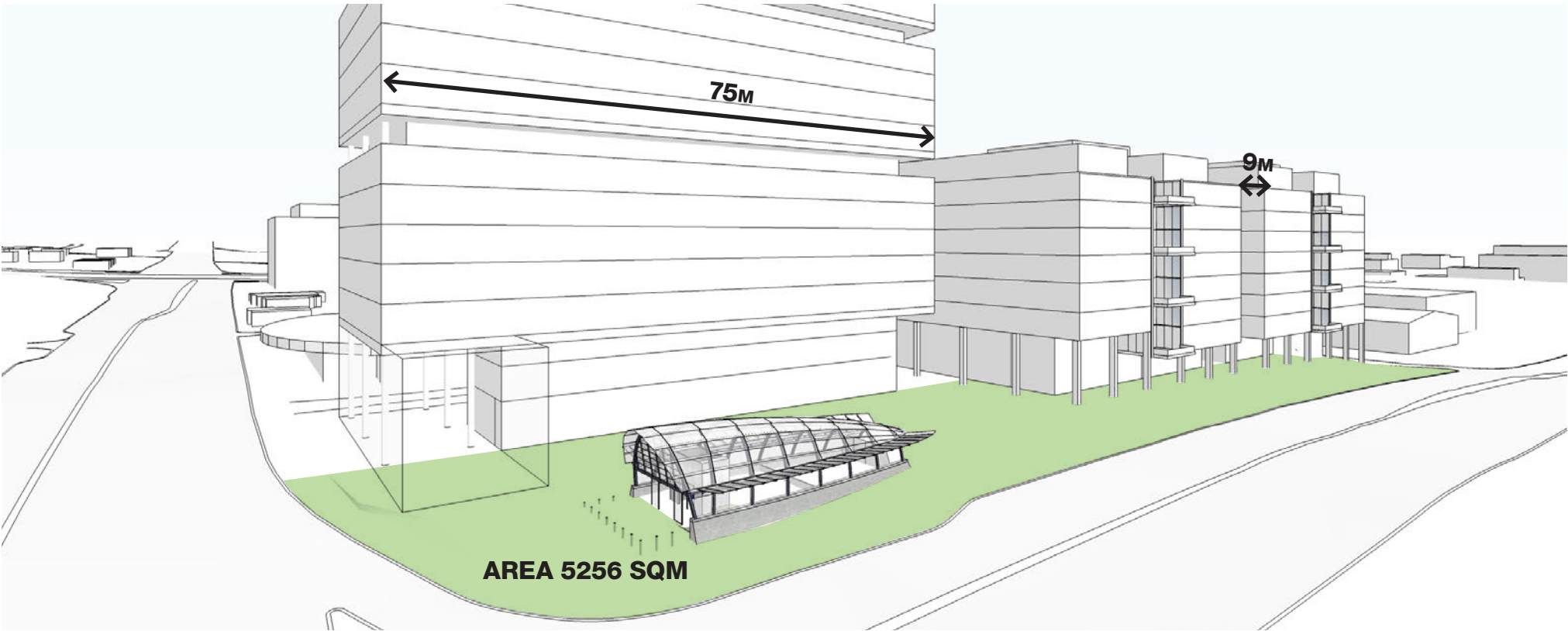
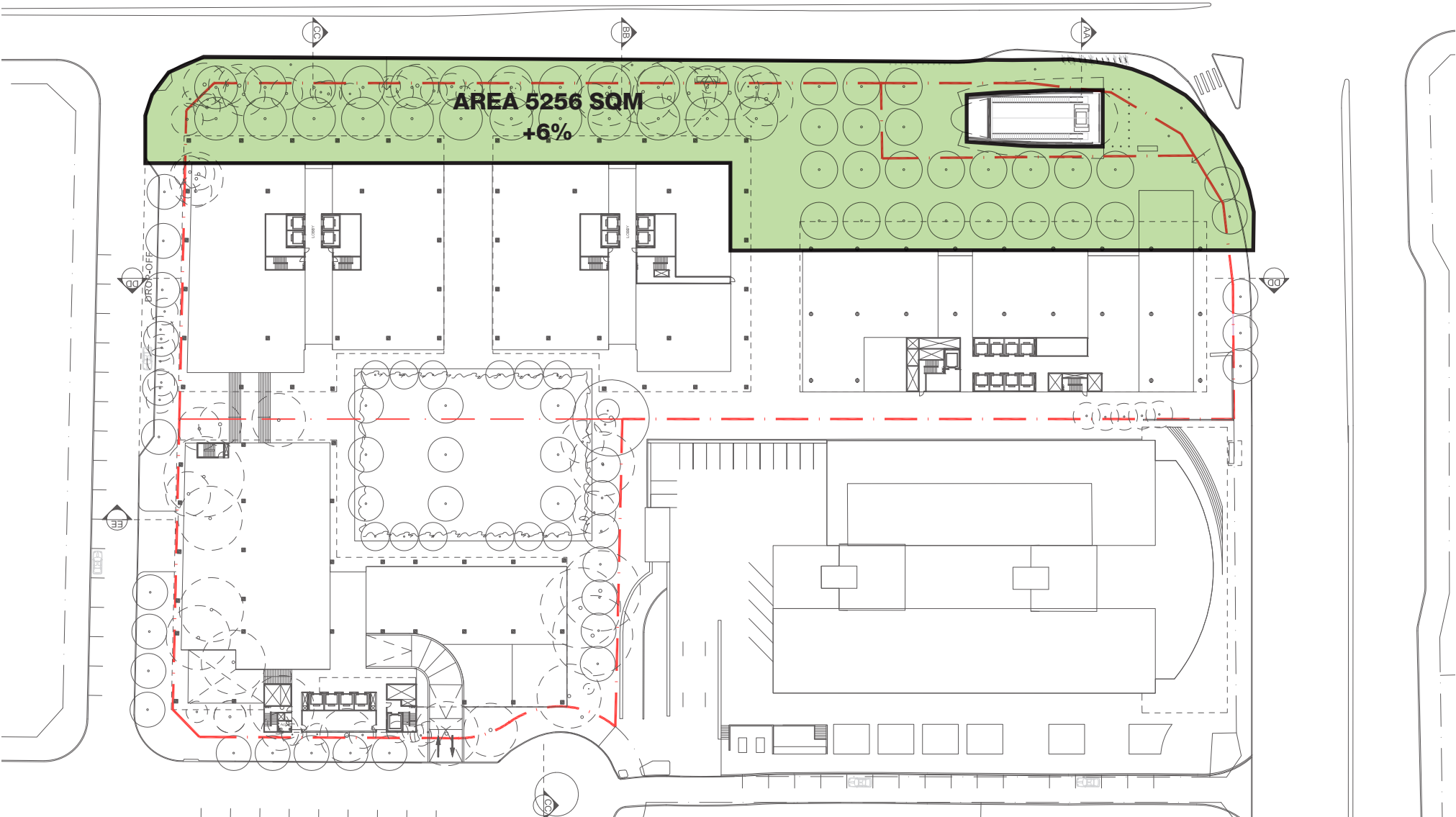
PROPOSED\_PLAZA

# S75W ADJUSTMENTS SCHEME COMPARISON WATERLOO RD

The following diagrams describe the amendments and improvements to the Waterloo Rd boulevard in the Section 75W submission.  
The boulevard has increased by 6% to be 5,256sqm (an increase of 316sqm)



APPROVED SCHEME\_WATERLOO RD

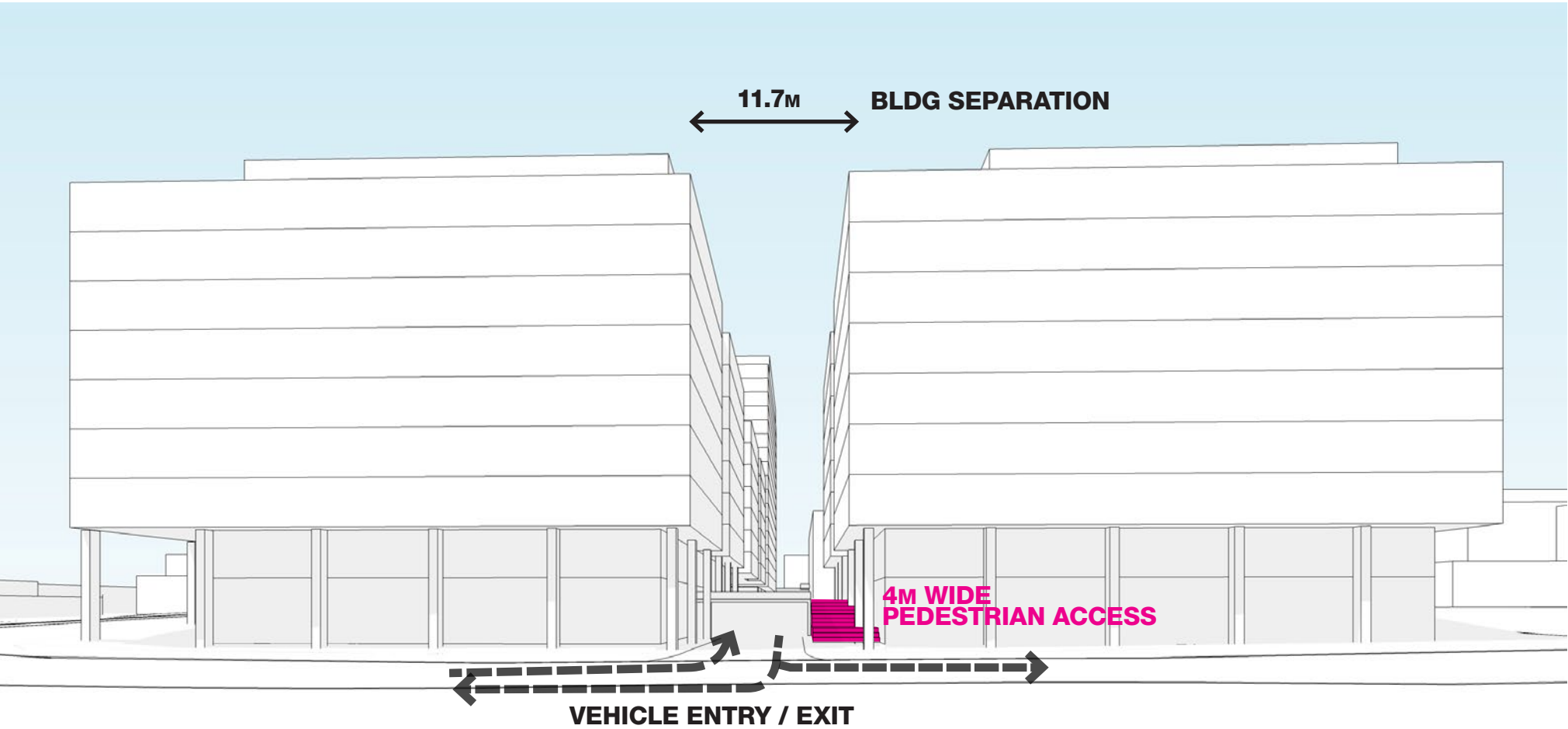
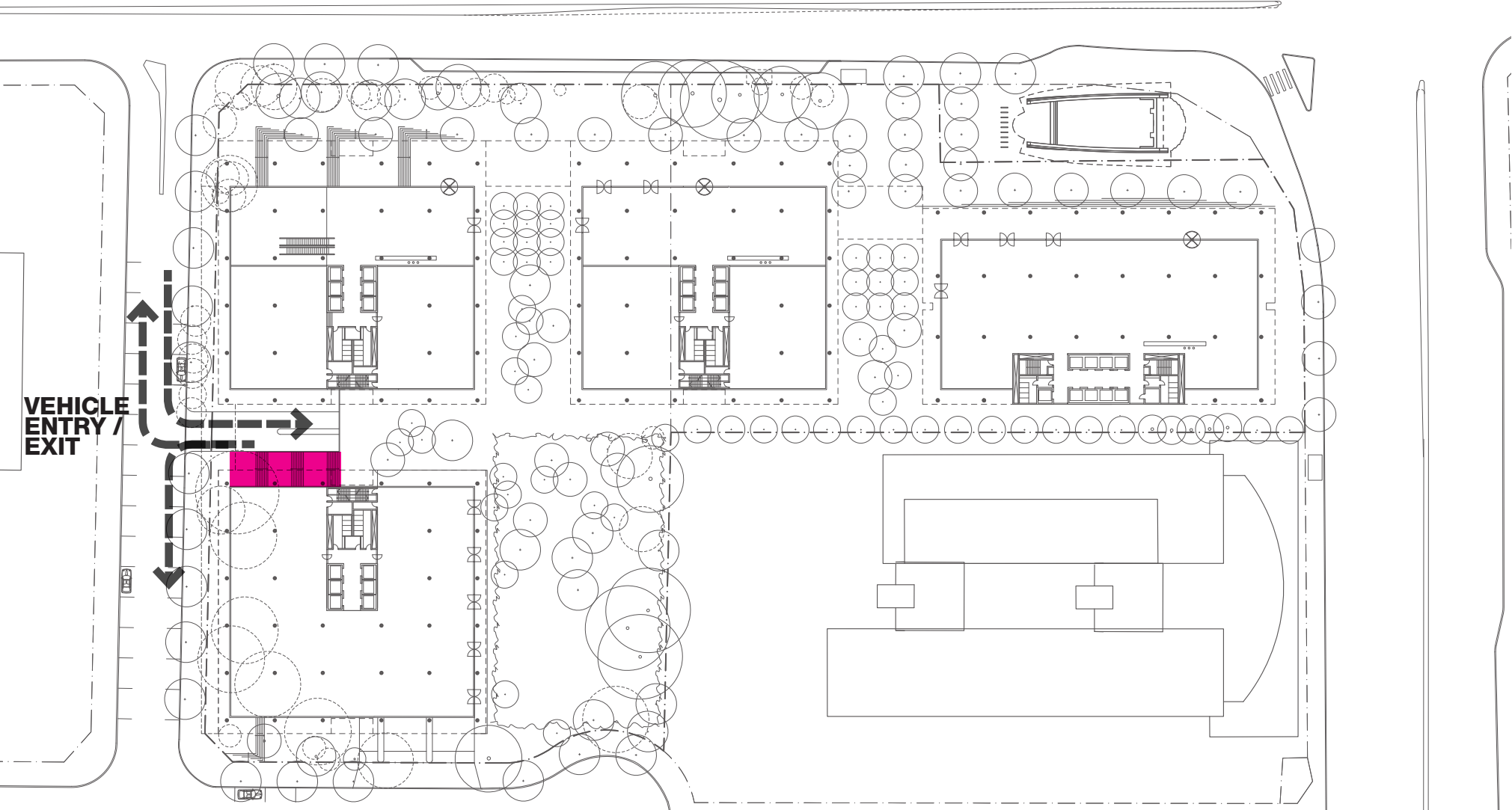


PROPOSED SCHEME\_WATERLOO RD

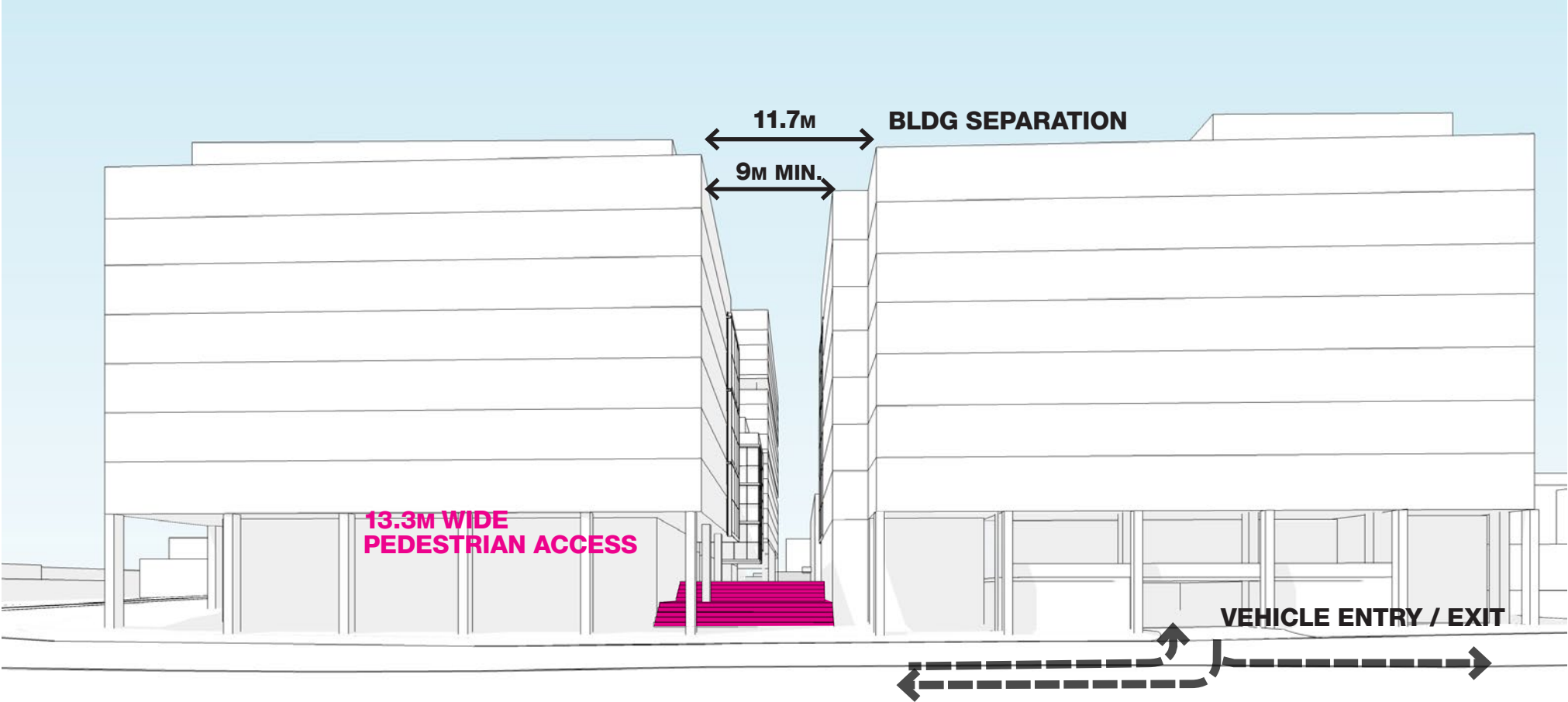
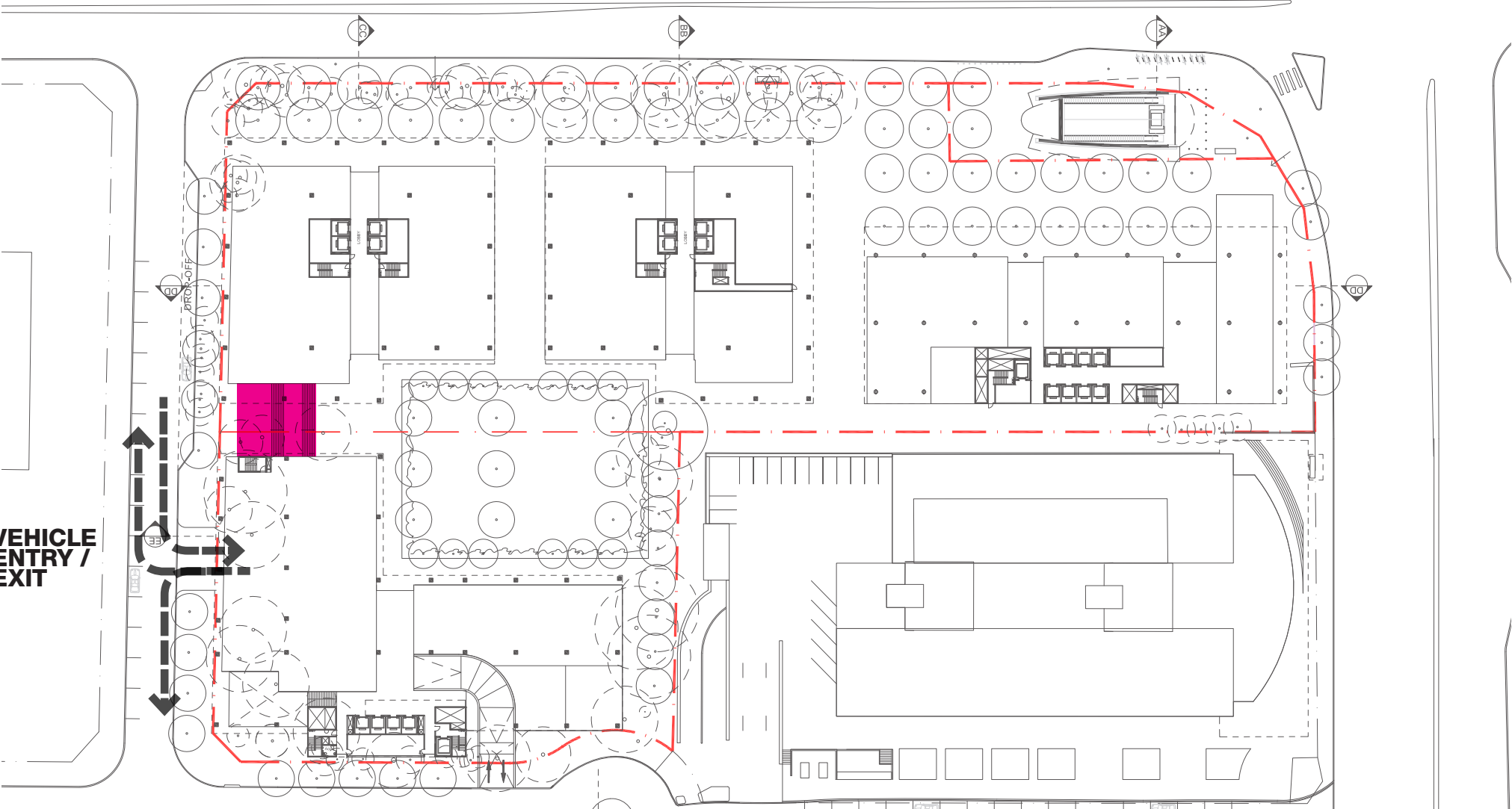


# S75W ADJUSTMENTS SCHEME COMPARISON COOLINGA ST ENTRY

The following diagrams describe the amendments and improvements to the Coolinga Street entry in the Section 75W submission.  
The pedestrian thoroughfare width has increased by 9m as a result of the vehicle carpark entry re-location to within the building facade.



APPROVED SCHEME\_COOLINGA ST



PROPOSED SCHEME\_COOLINGA ST

# S75W ADJUSTMENTS SCHEME COMPARISON PARK

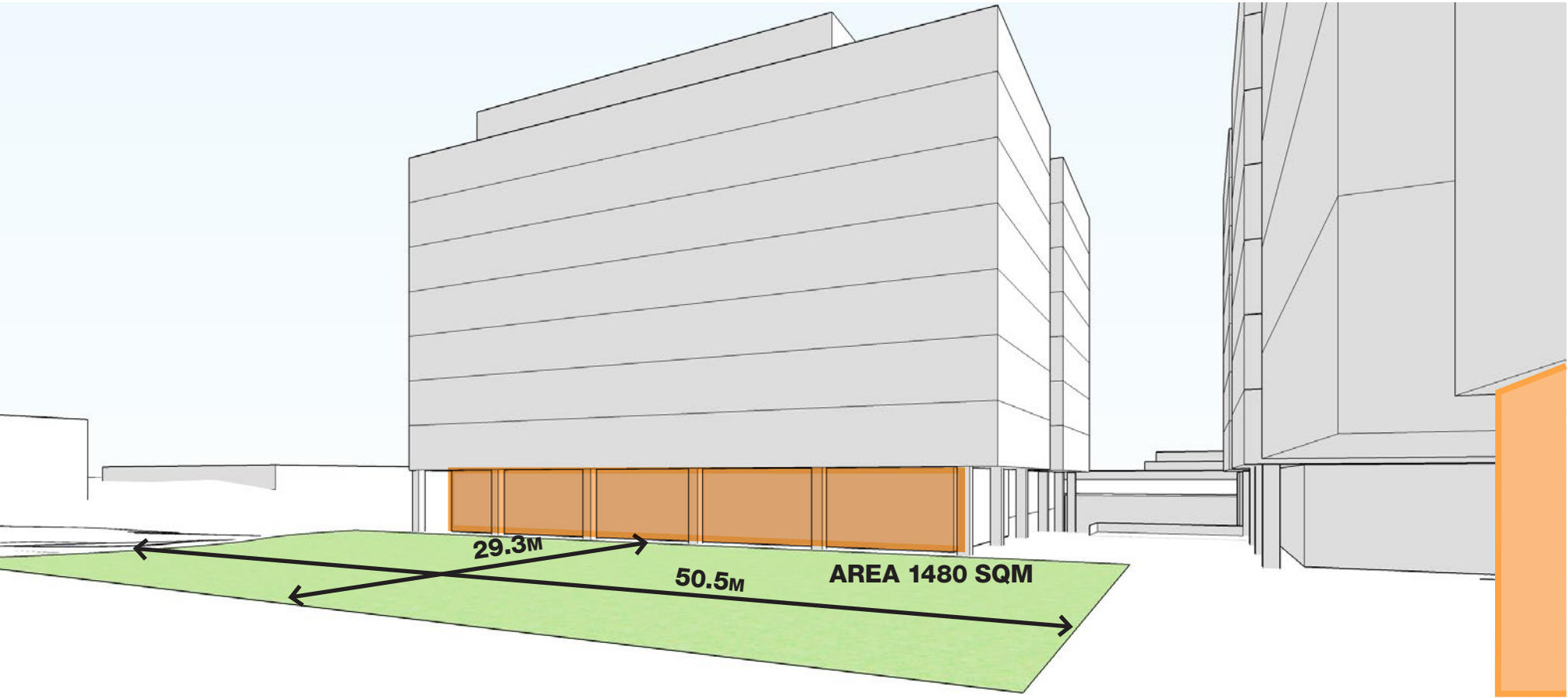
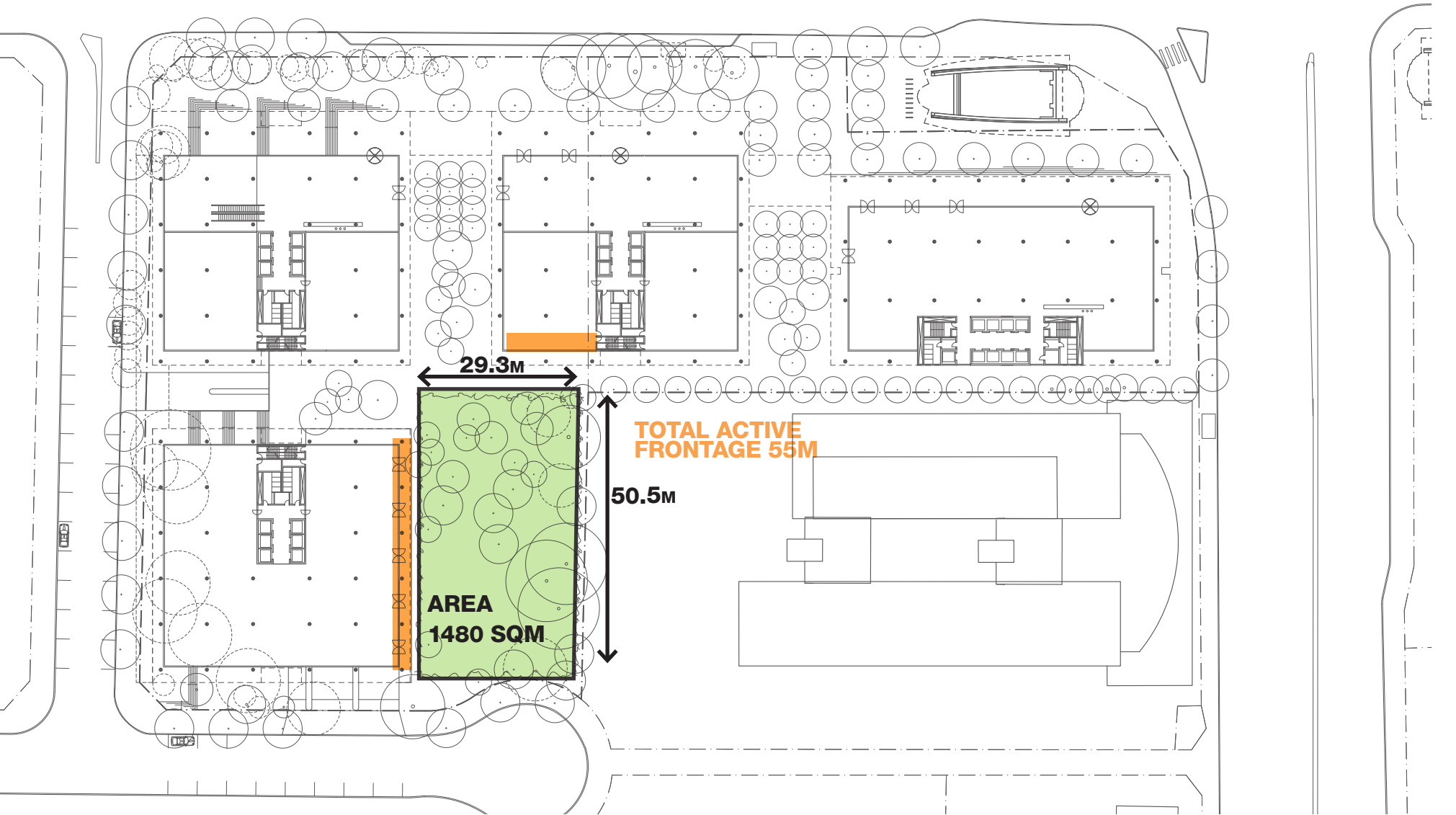
The following diagrams describe the amendments and improvements to the central park in the Section 75W submission.

The park has increased by 30% to be 1,930sqm (an increase of 450sqm).

In addition to the size, the proportion and location has been amended to create significant increase in park frontage (50% increase) to achieve more retail activation at ground level and improve passive surveillance.

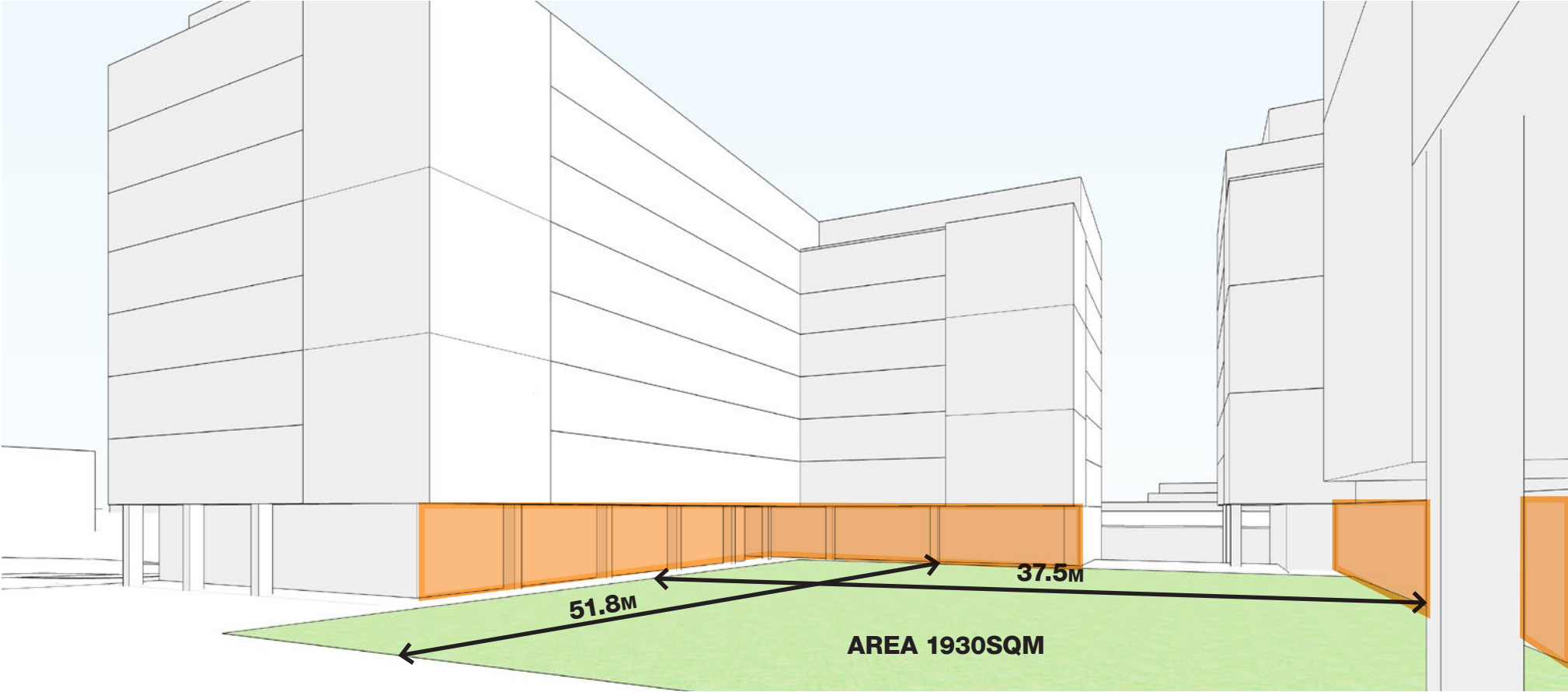
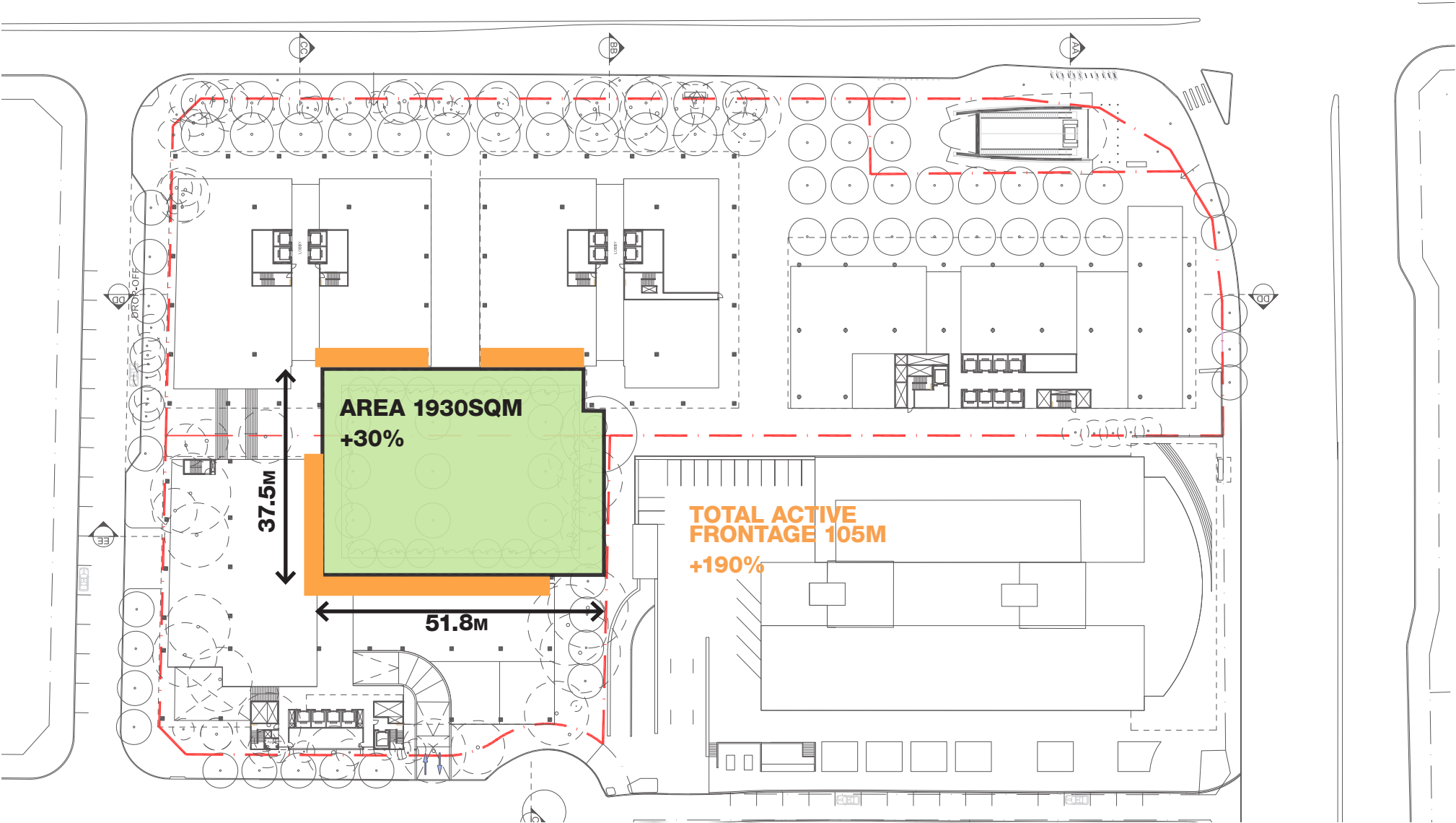
As describe in this later in the report, the daylight access is also improved with the alterations to the building footprints.

As a result more daylight access is achieved to improve the amenity and usability of the park.



APPROVED SCHEME\_PARK





PROPOSED SCHEME\_PARK

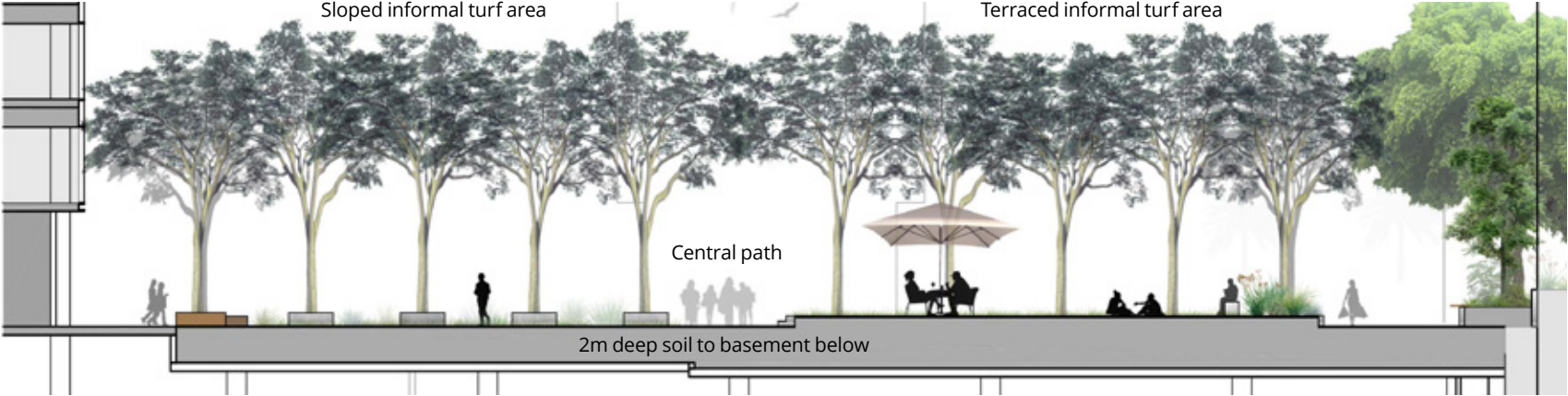


# S75W ADJUSTMENTS PROPOSED PARK



Detail Plan

Scale 1:250

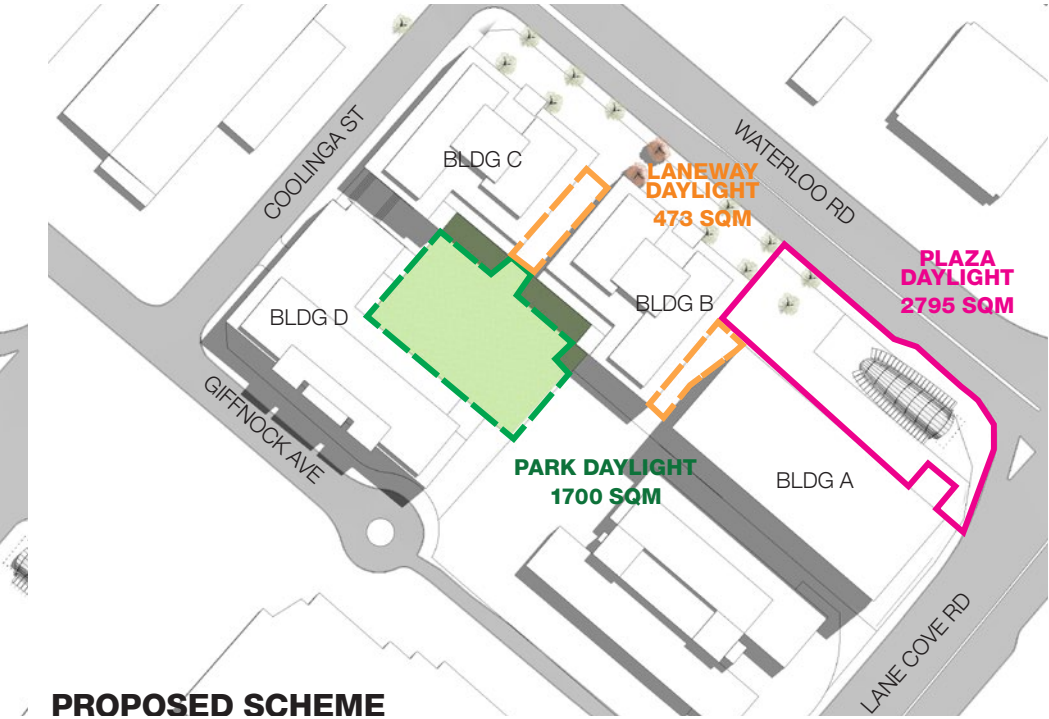
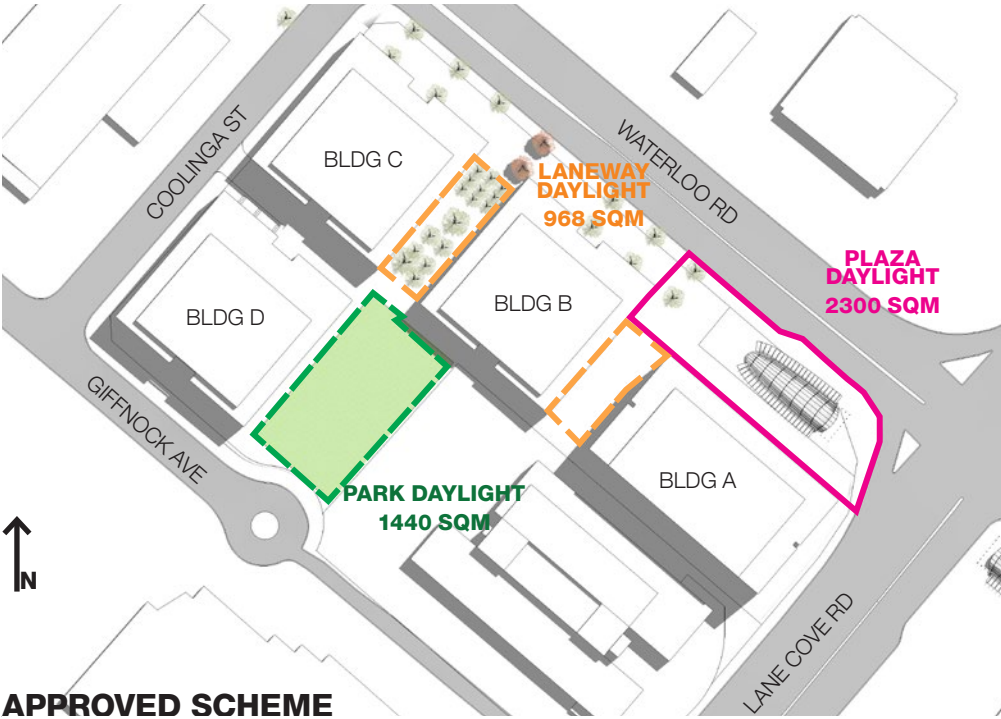
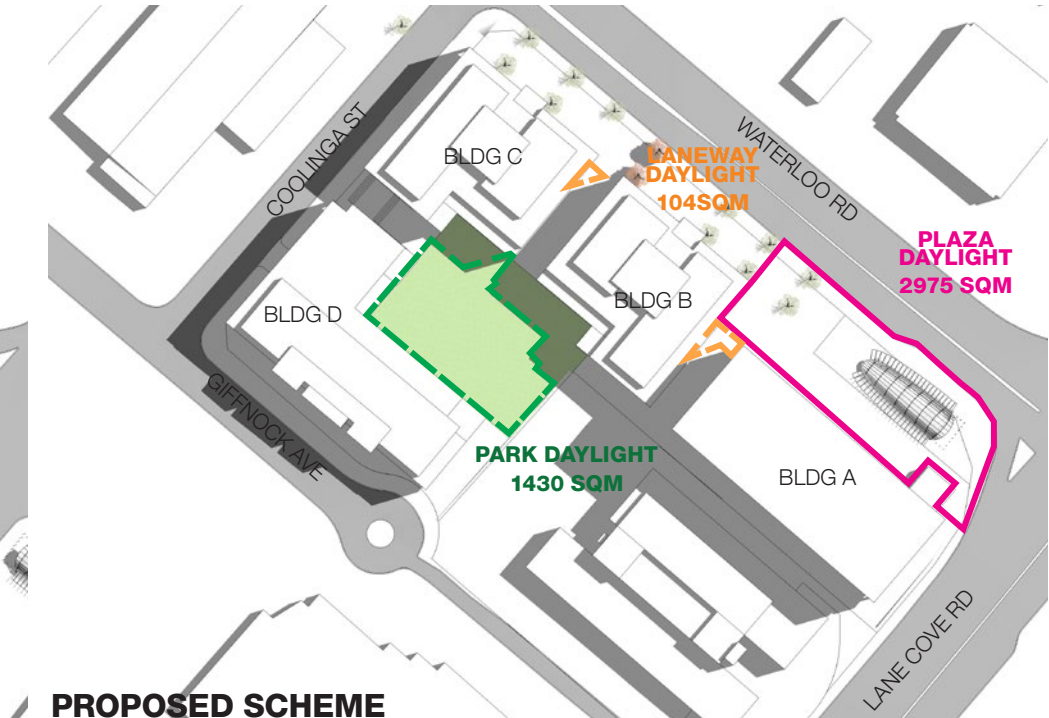
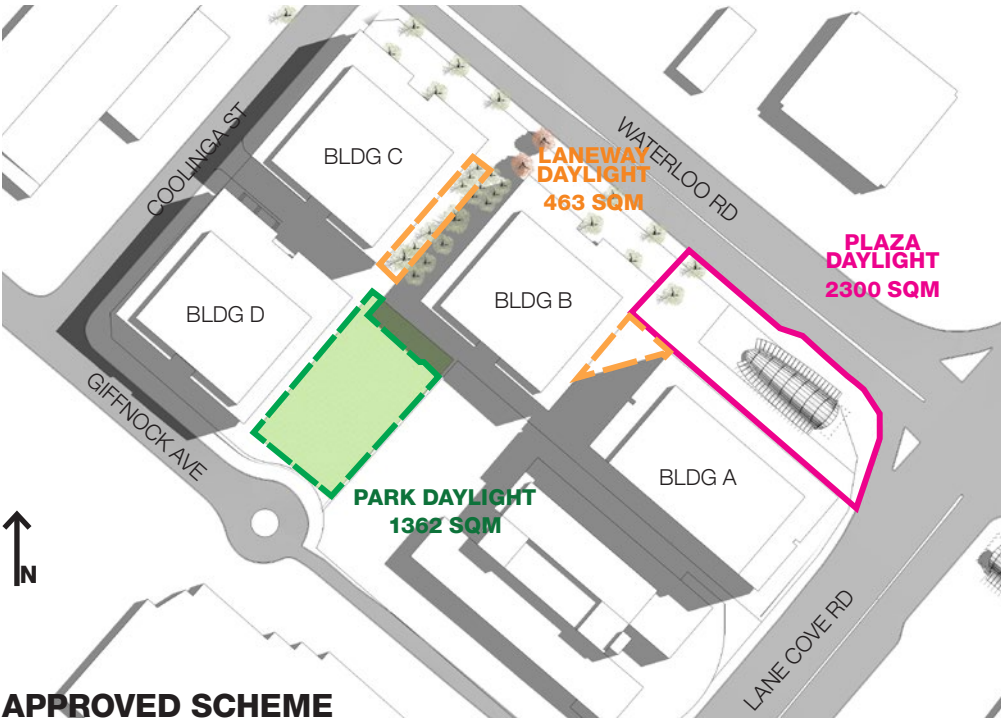
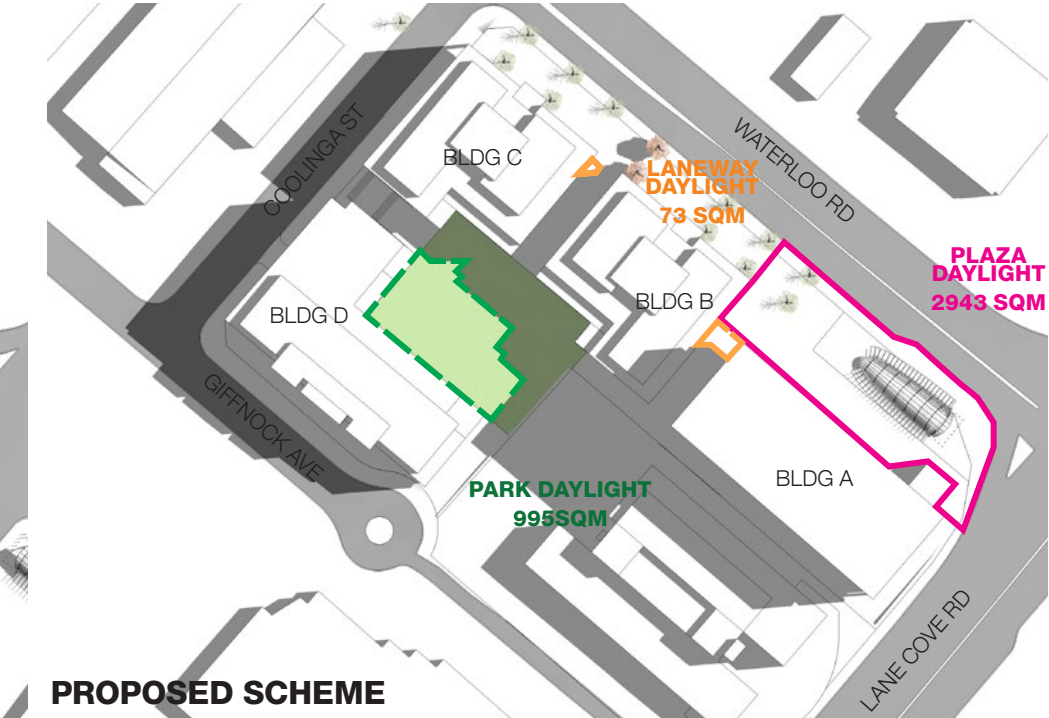
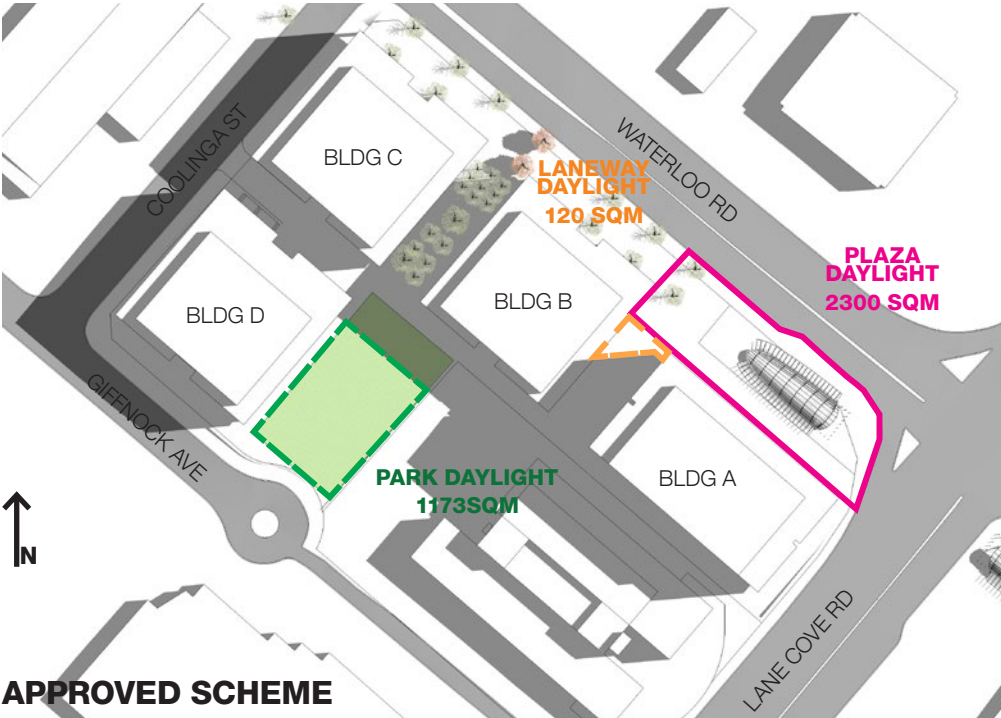




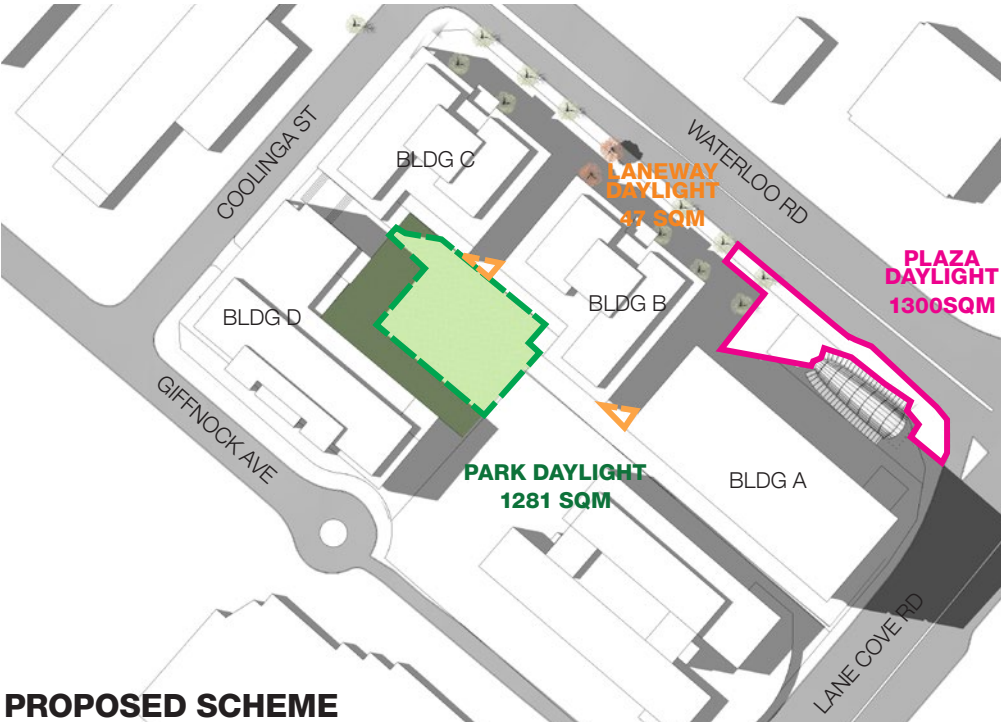
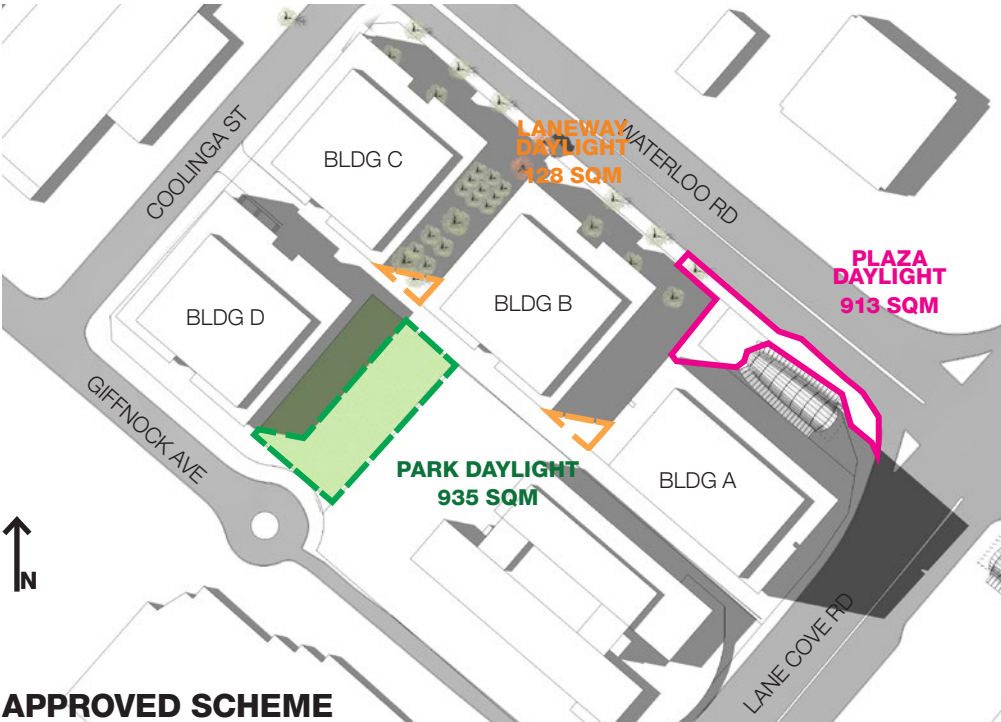
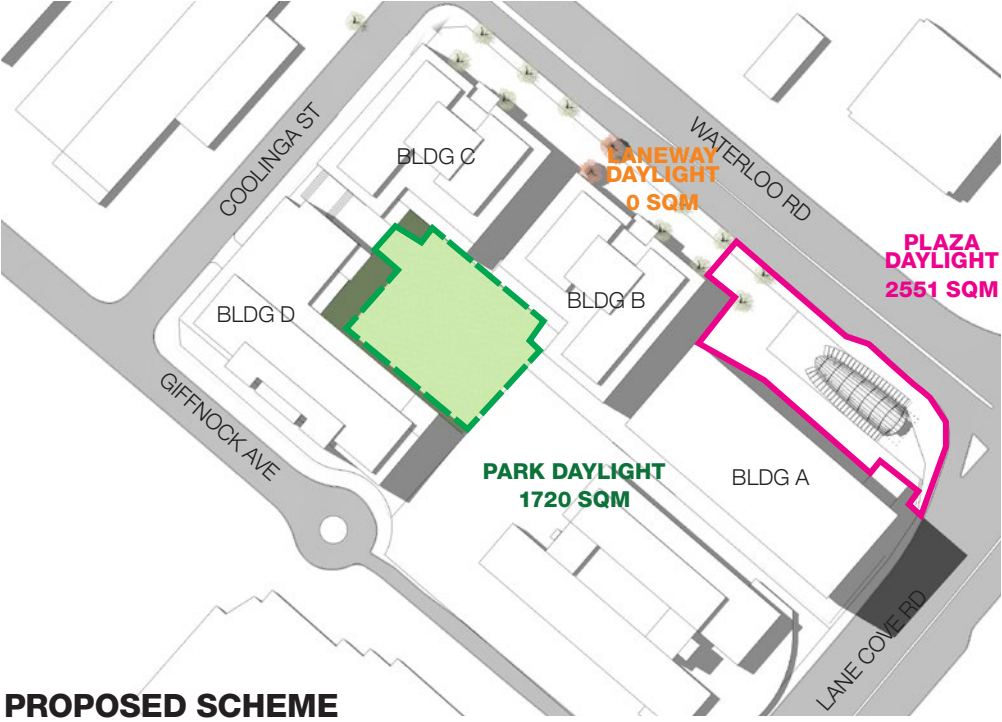
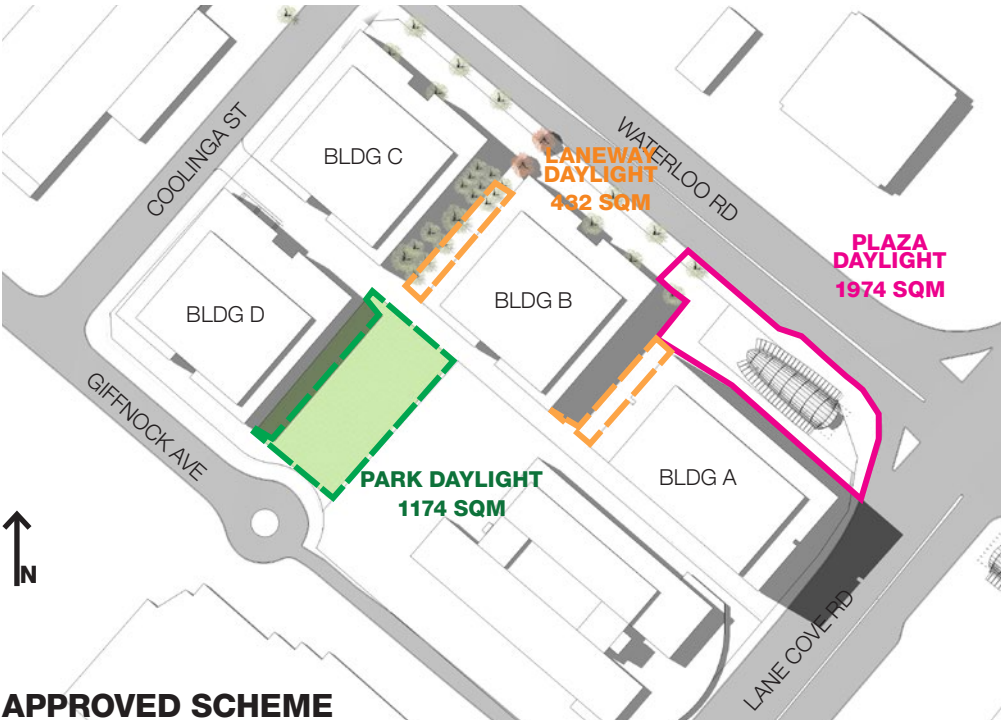
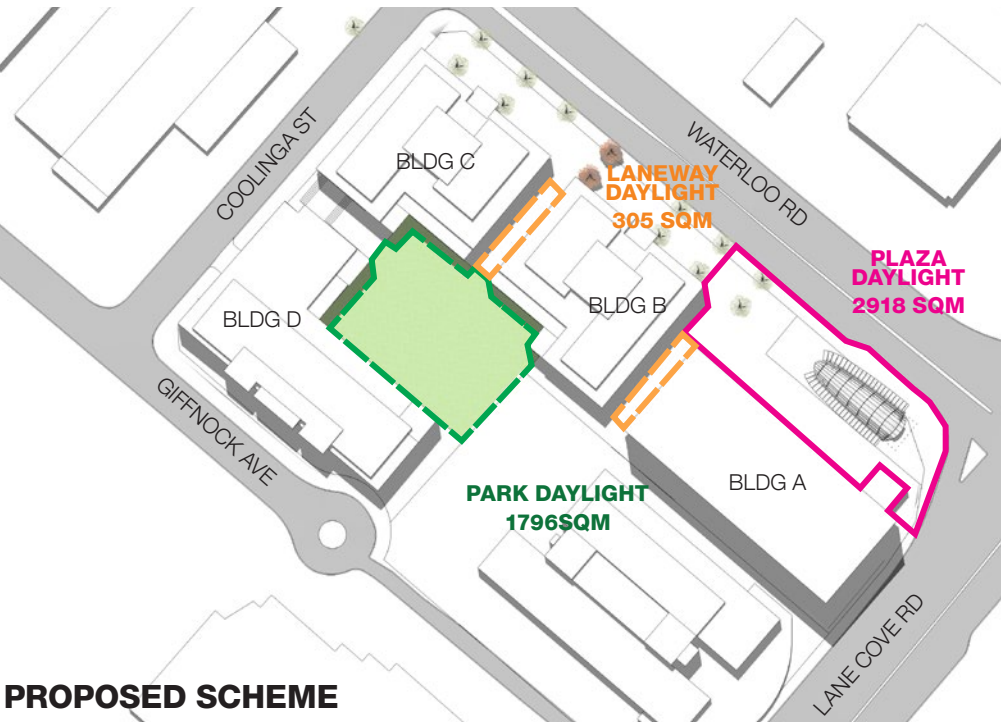
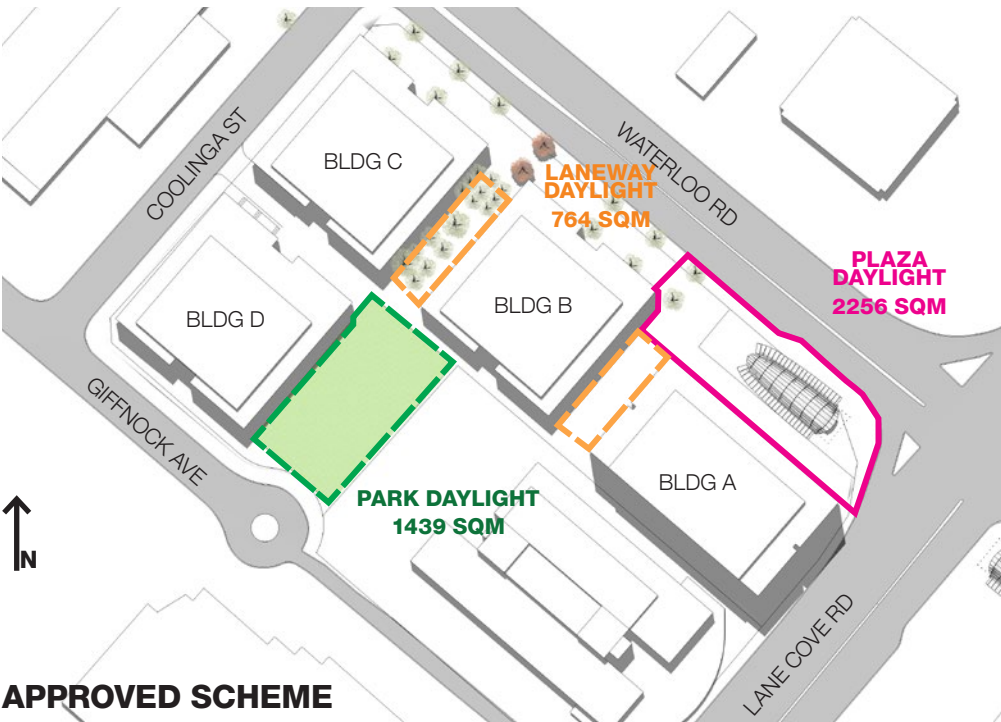
# S75W ADJUSTMENTS

## SCHEME COMPARISON PARK DAYLIGHT ACCESS

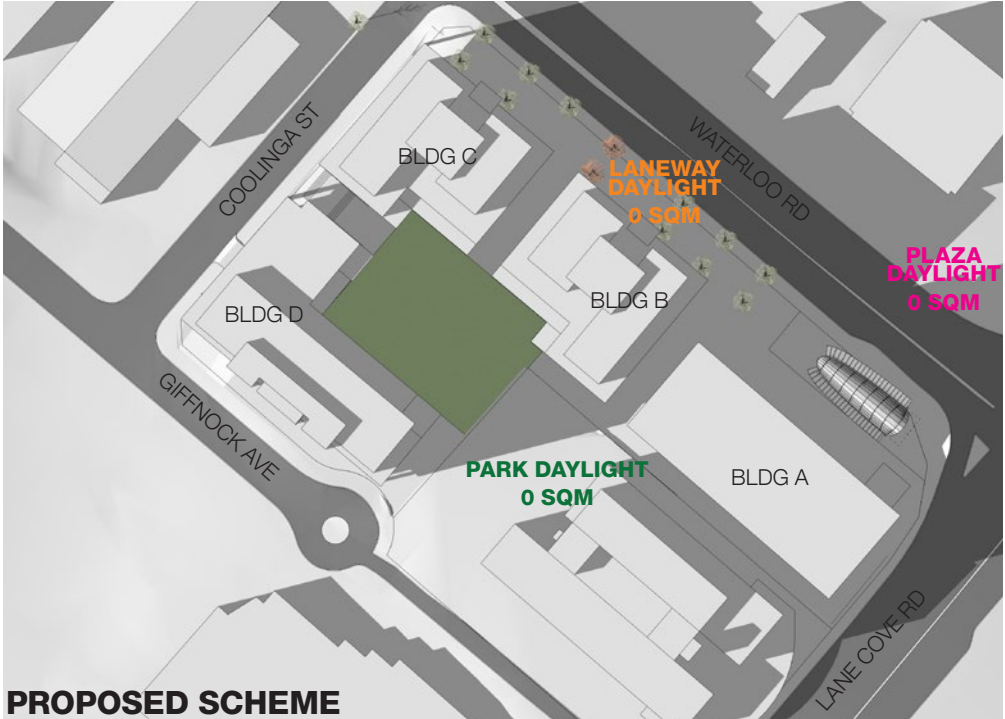
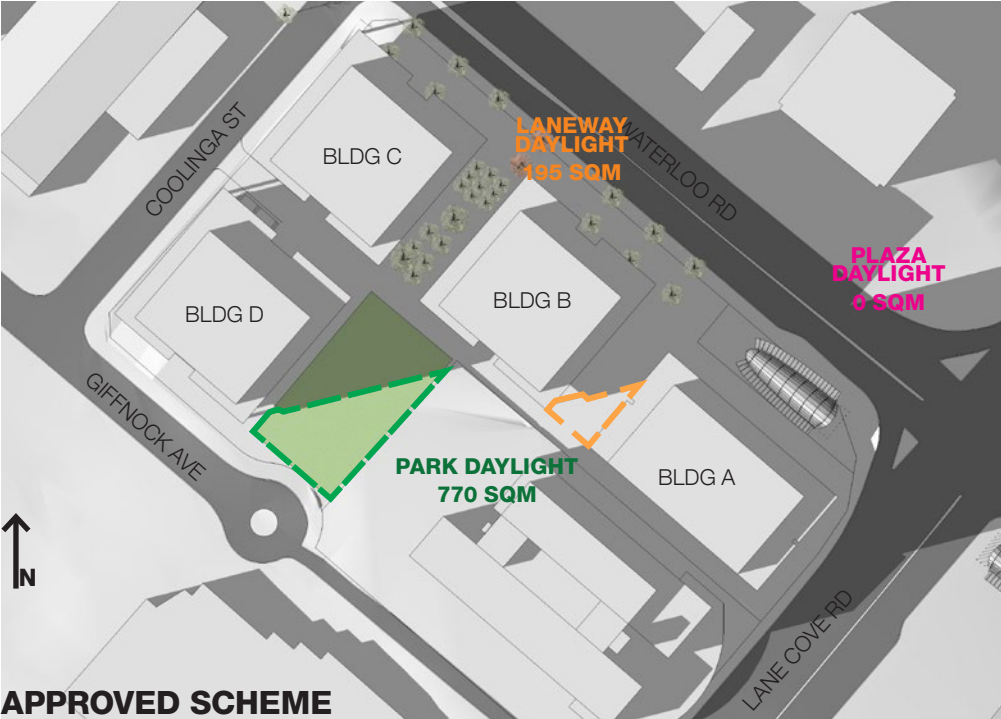
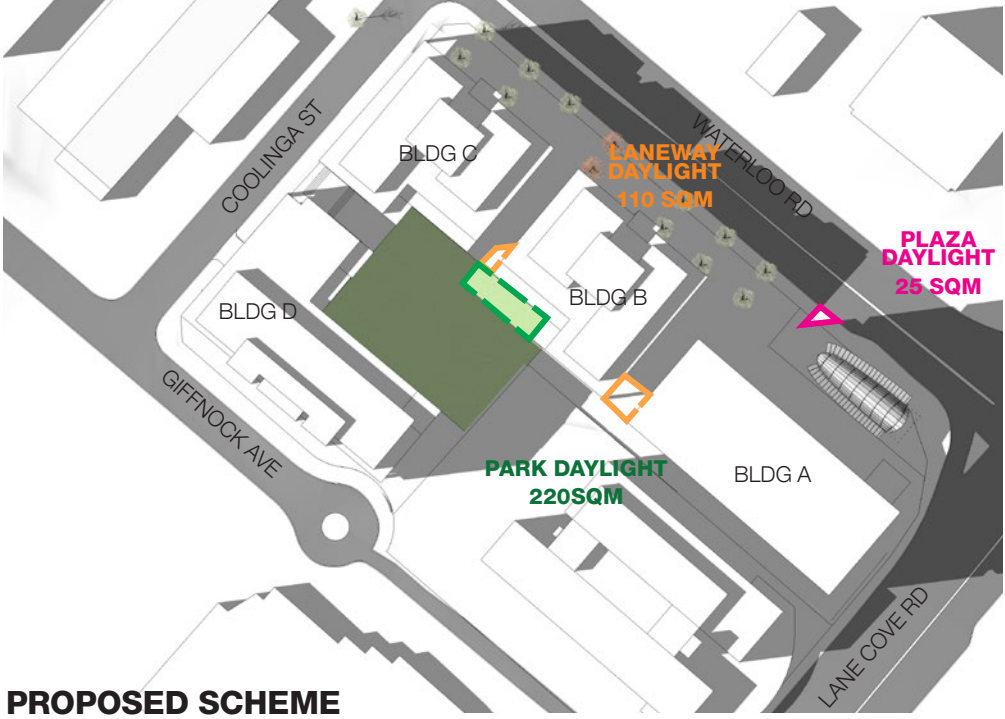
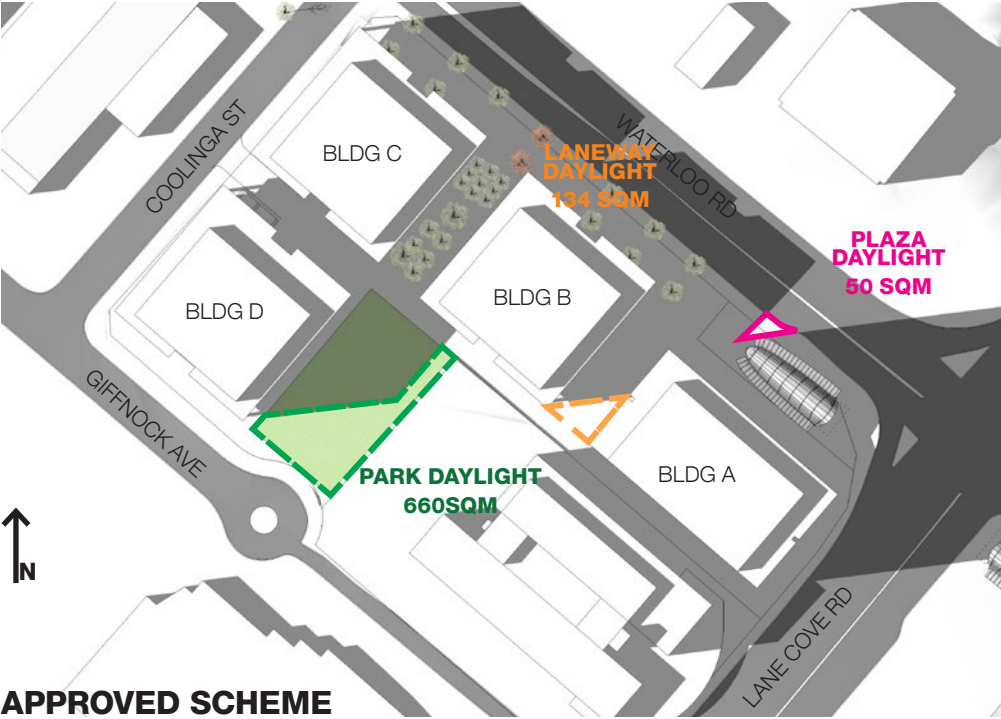
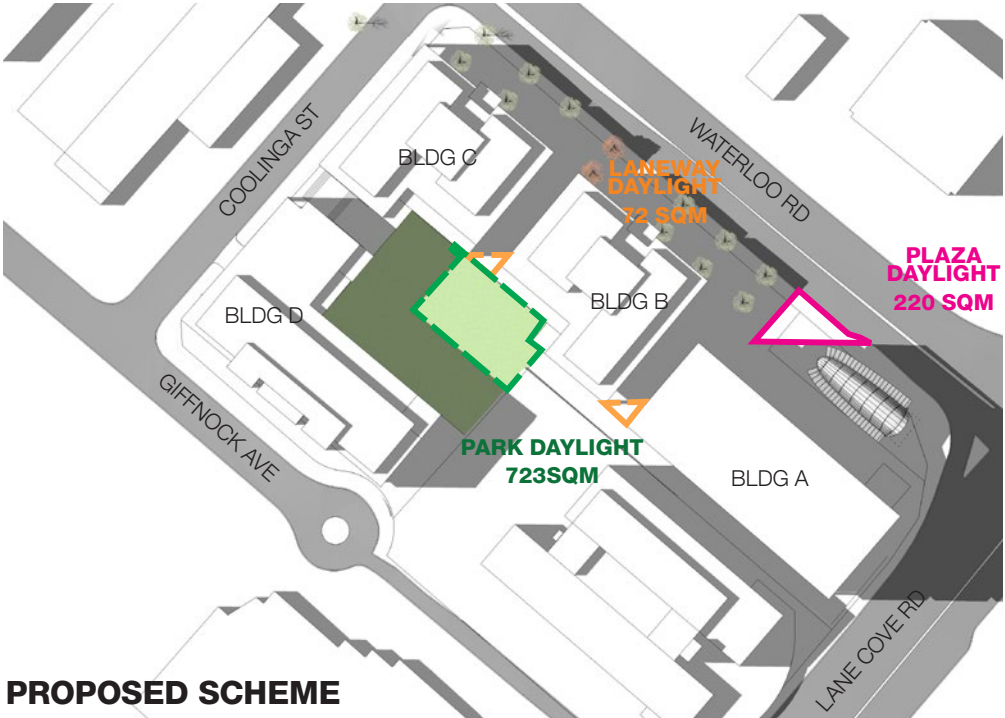
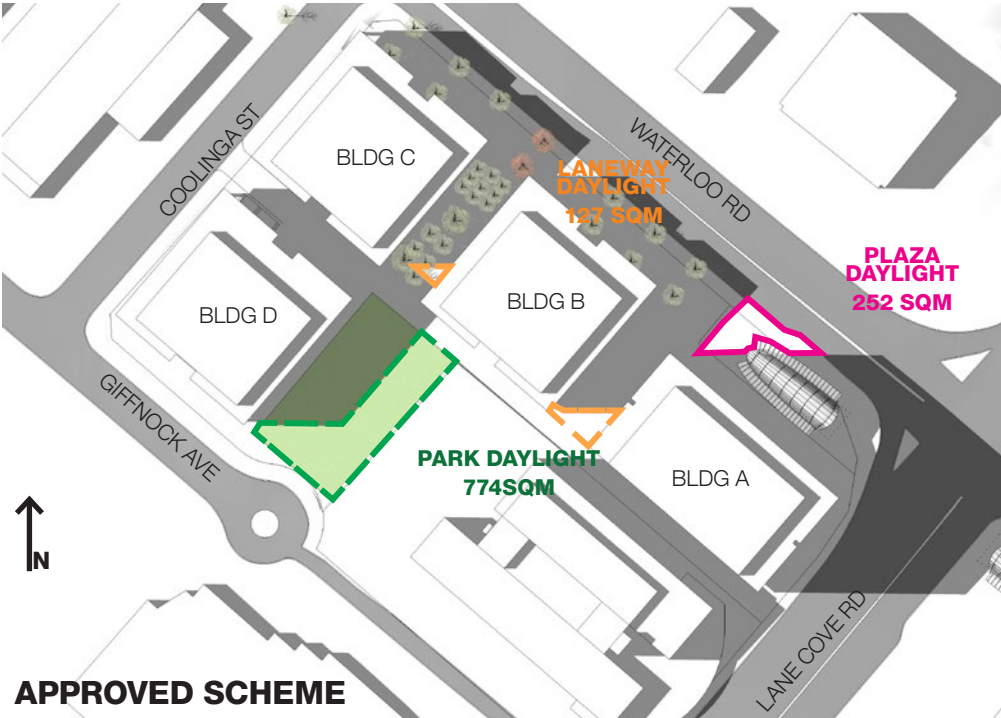
### SUMMER SOLSTICE









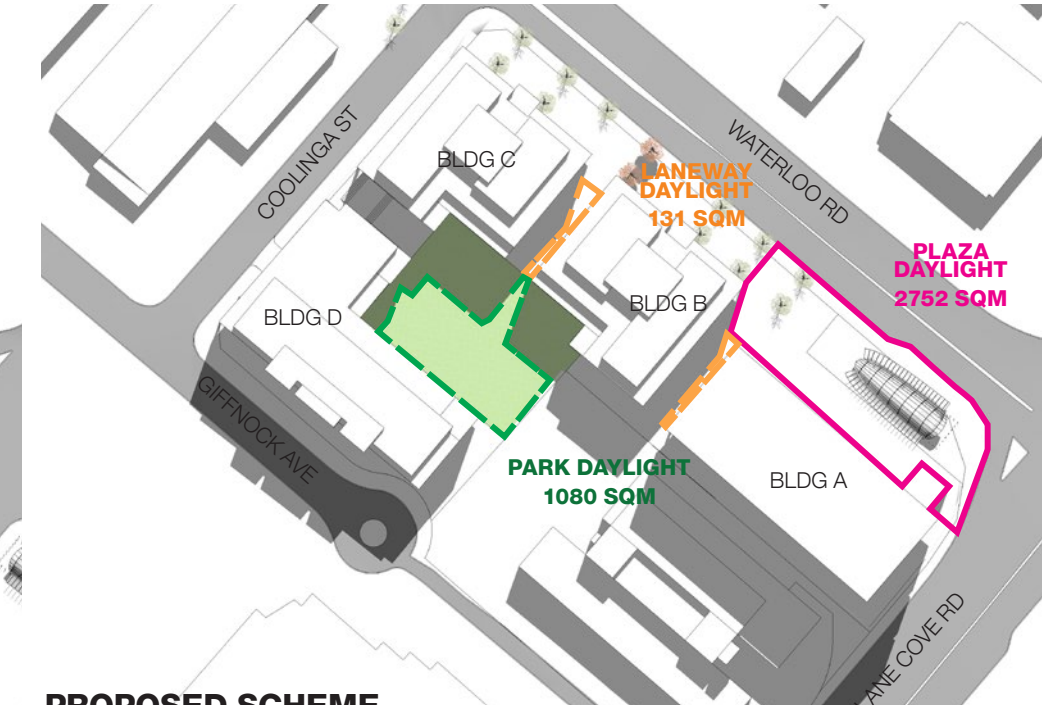
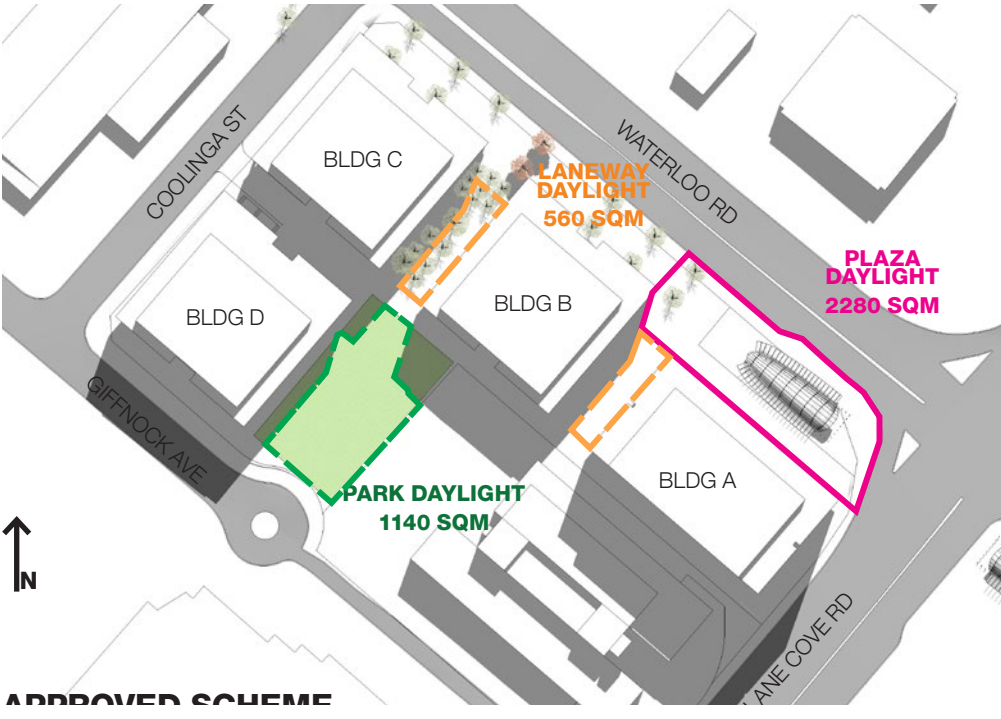
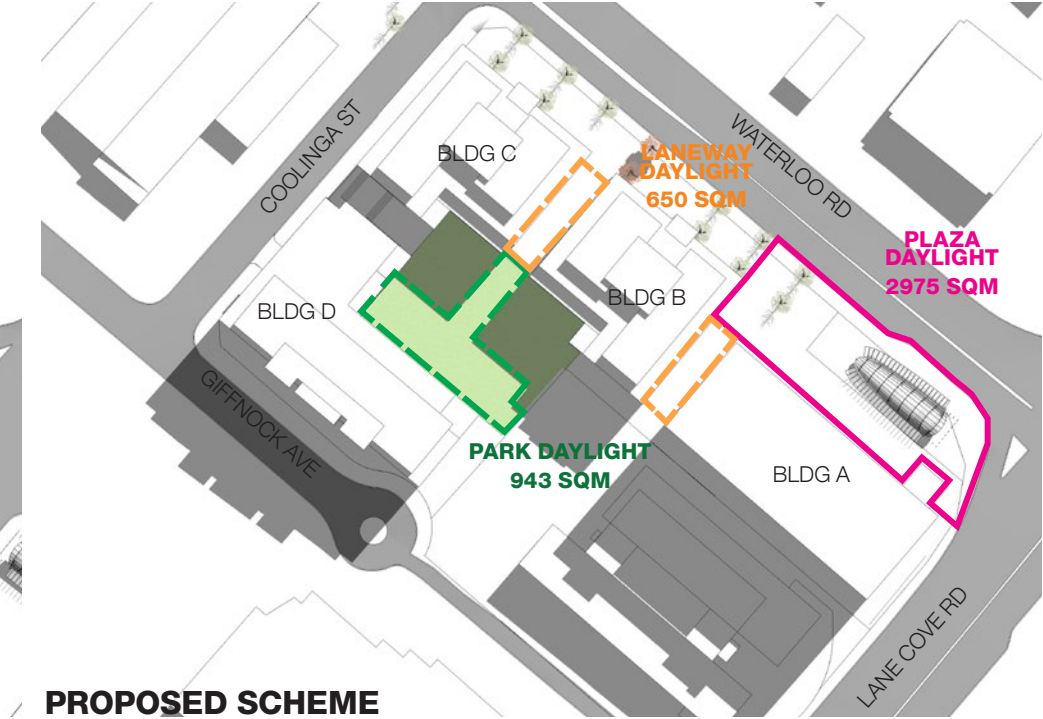
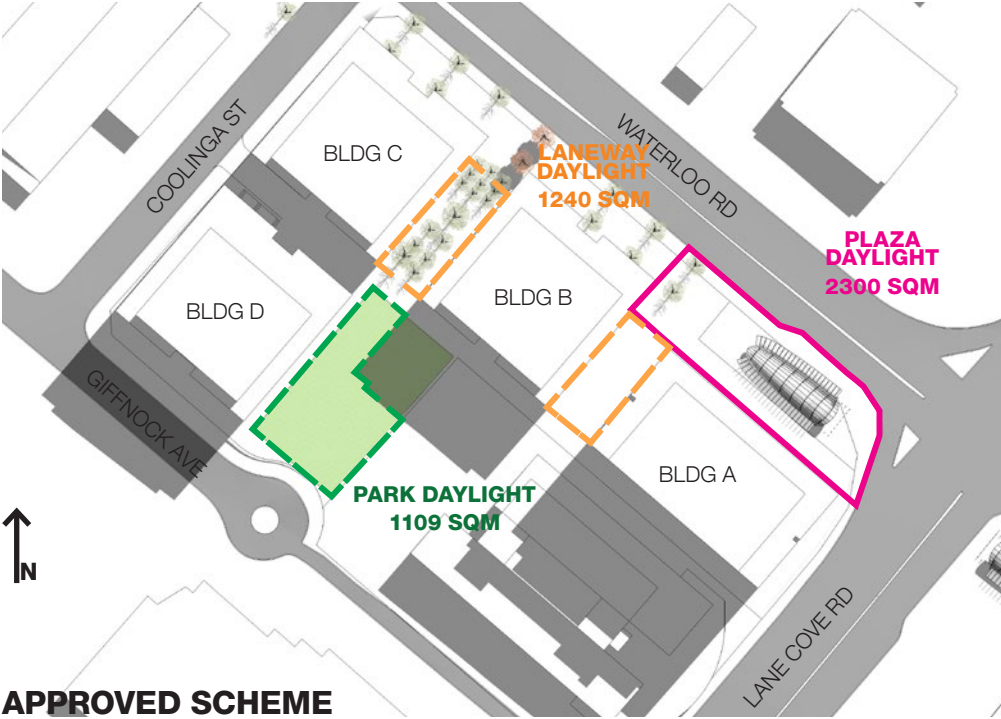
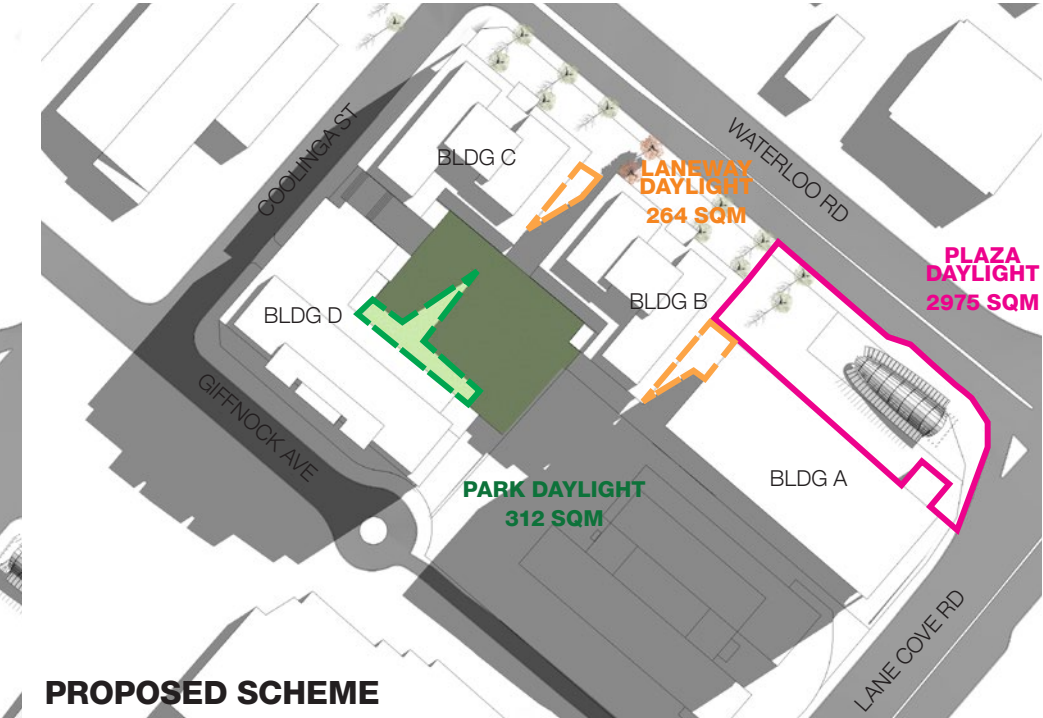
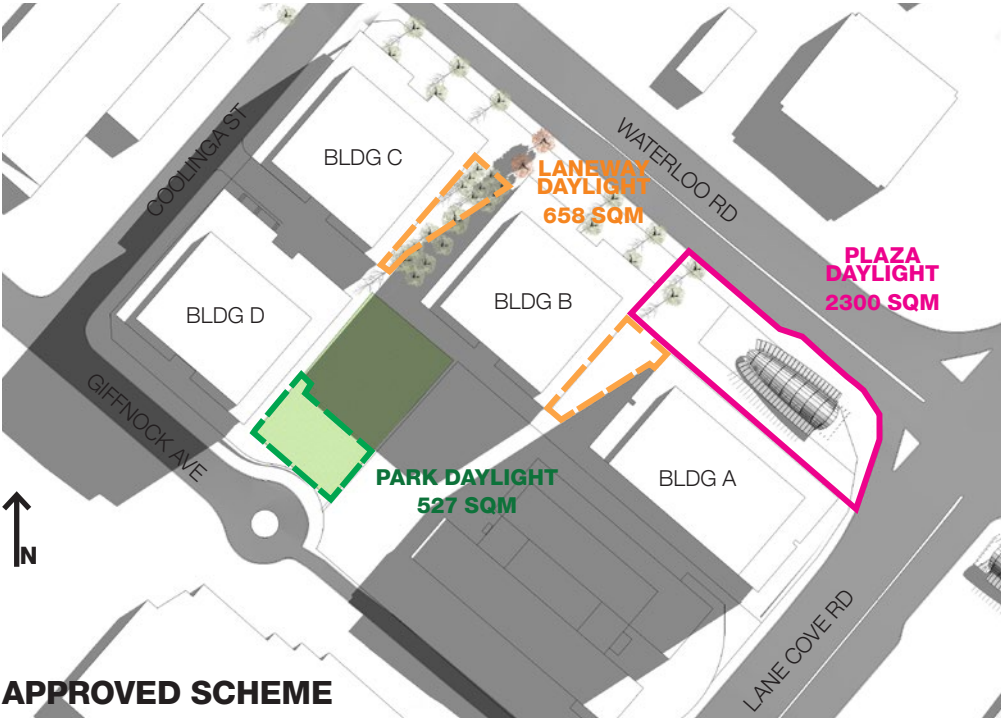




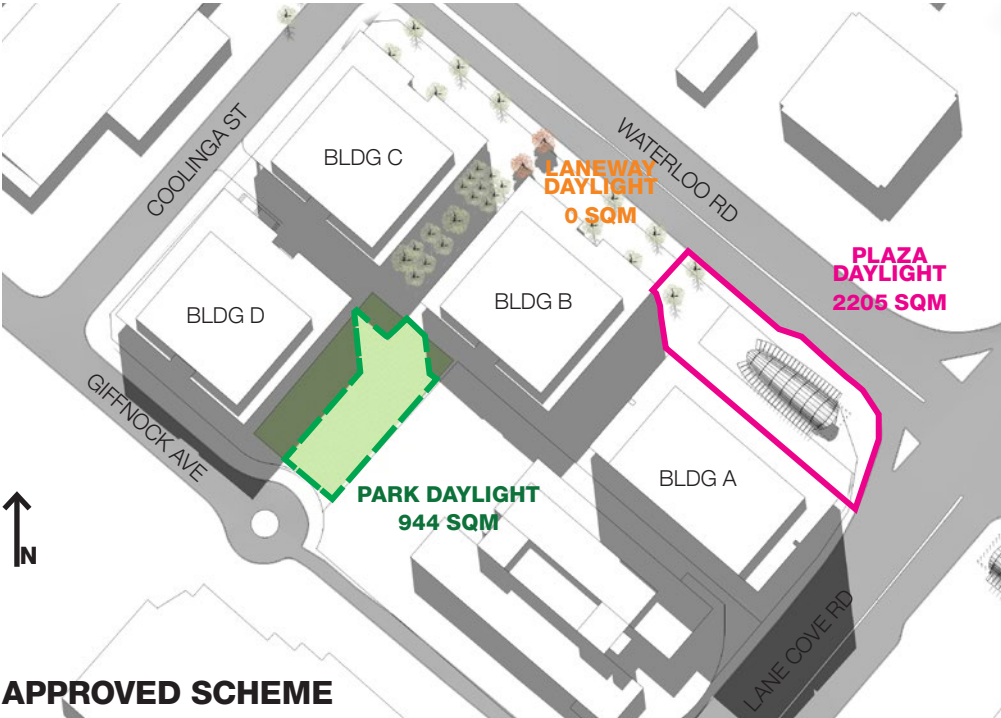
# S75W ADJUSTMENTS

## SCHEME COMPARISON PARK DAYLIGHT ACCESS

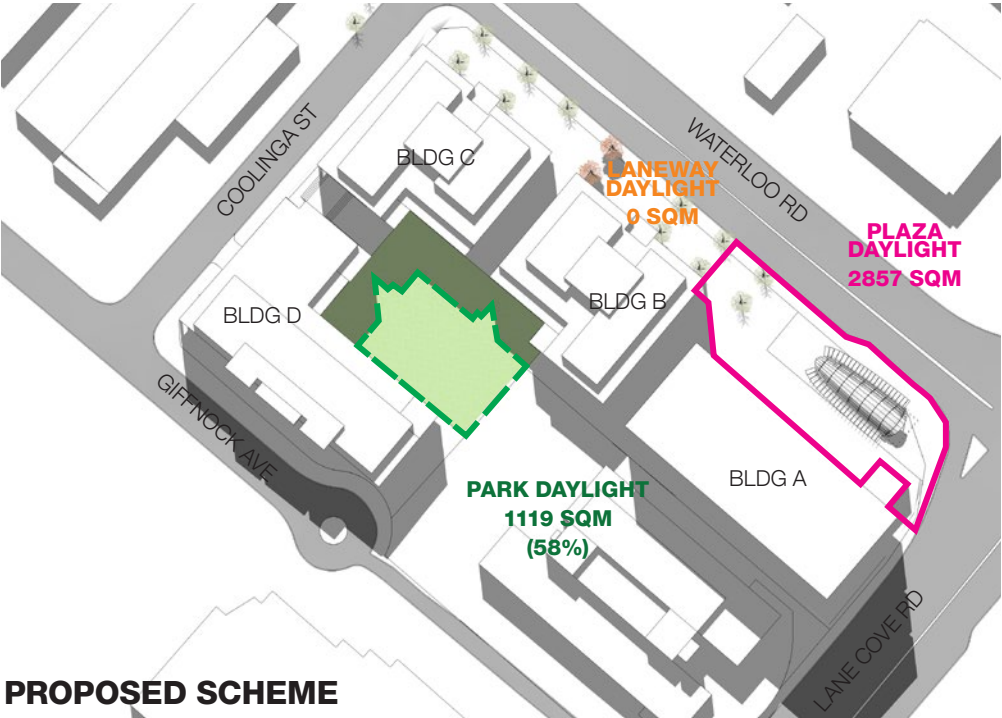
### EQUINOX



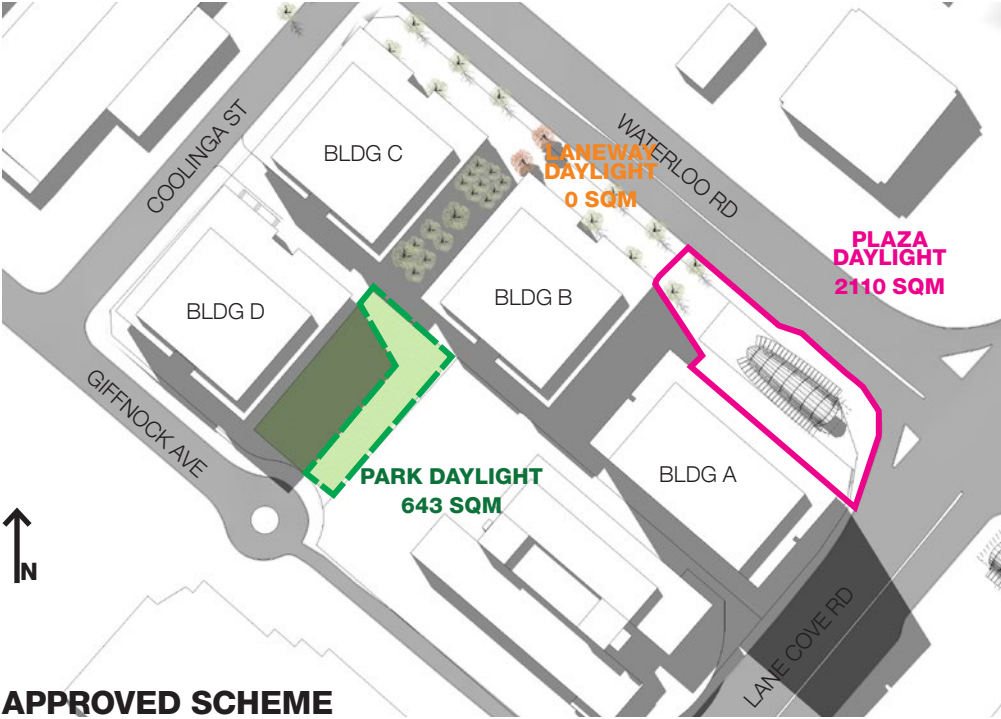




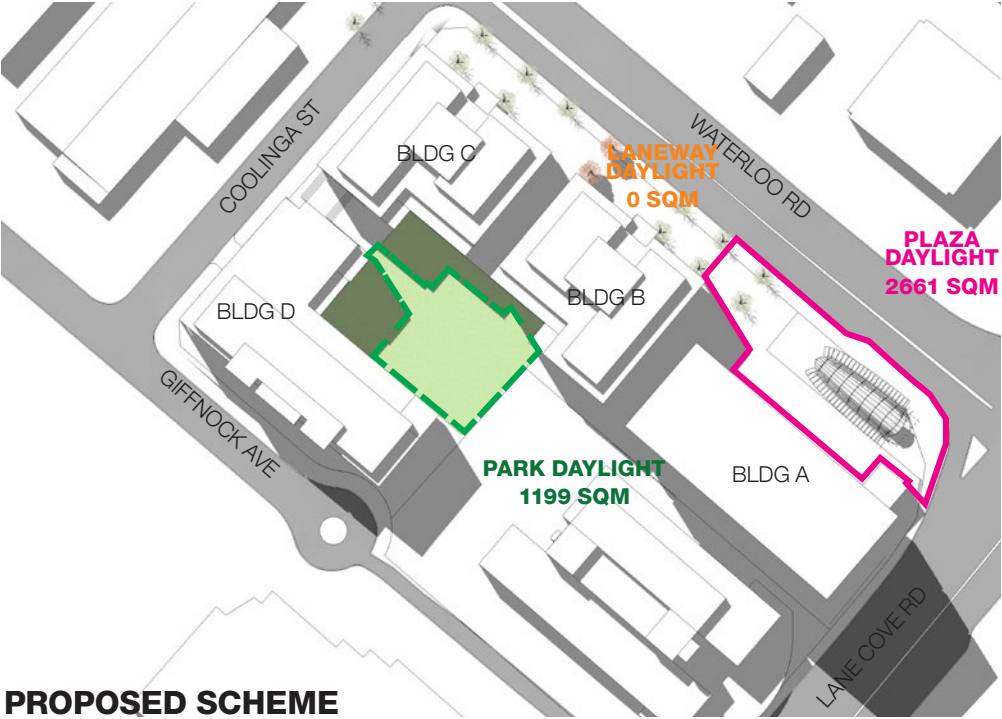
**APPROVED SCHEME**  
*September 23rd/ March 21st 12pm*



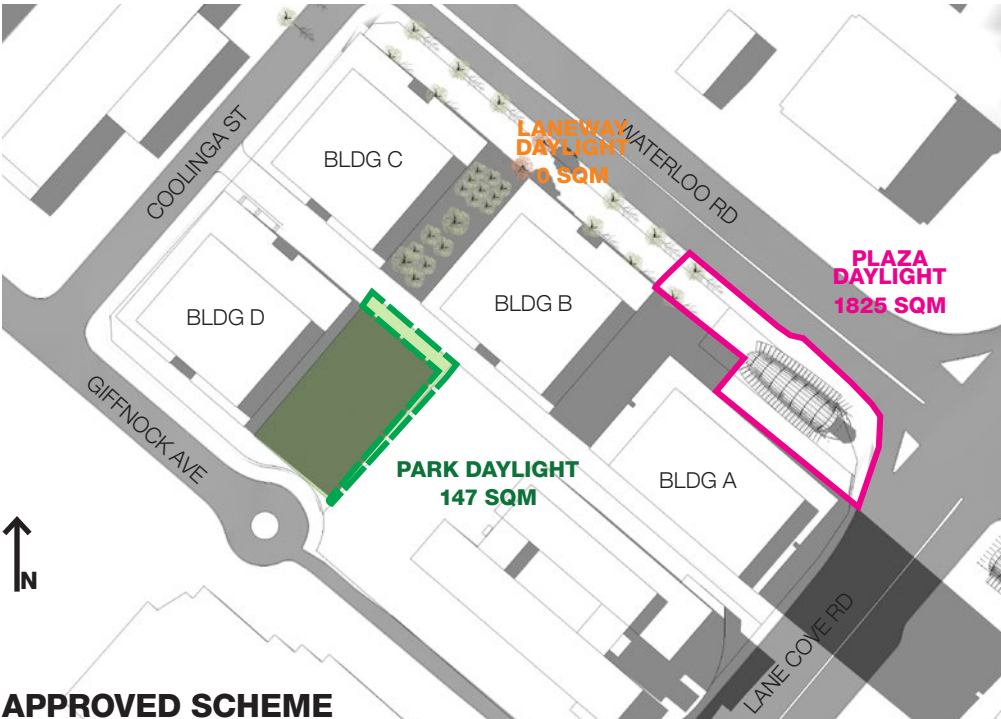
**PROPOSED SCHEME**



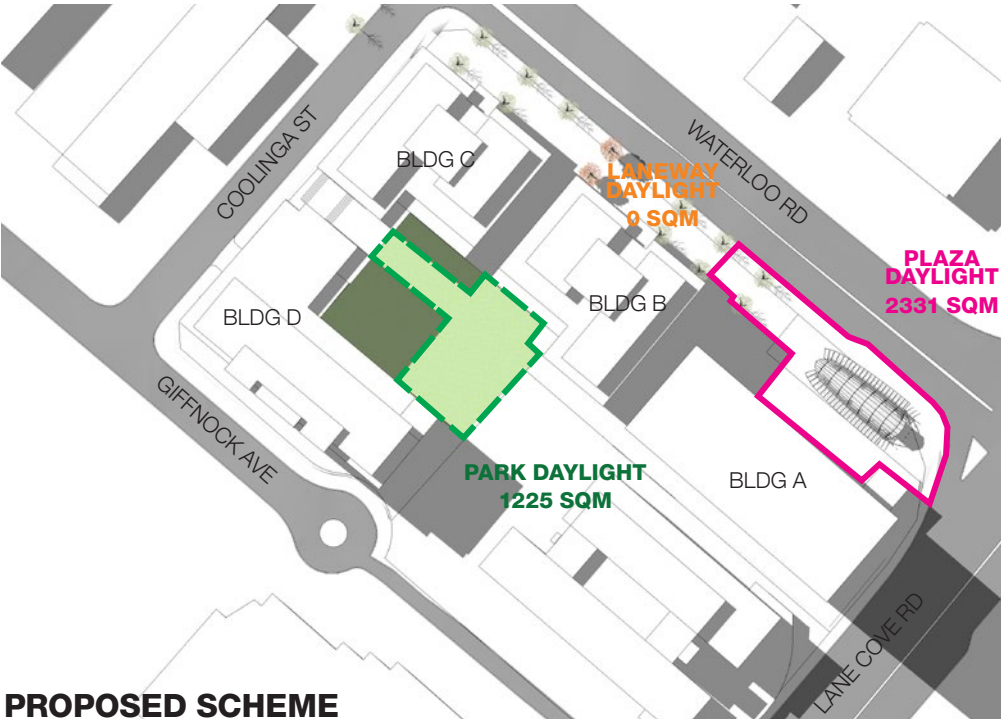
**APPROVED SCHEME**  
*September 23rd/ March 21st 1pm*



**PROPOSED SCHEME**

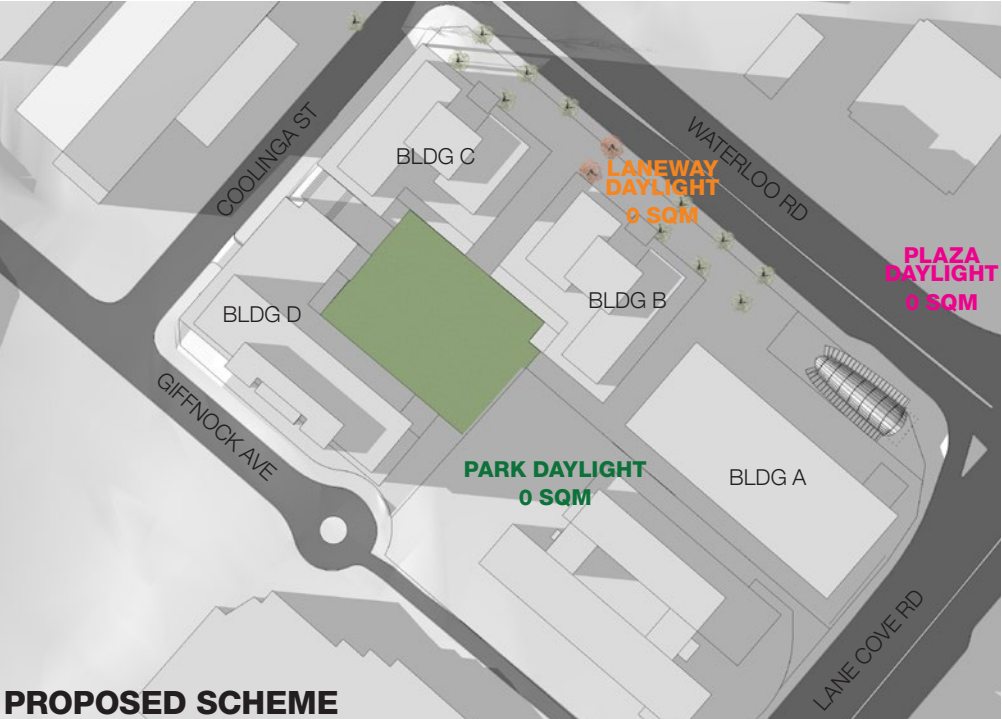
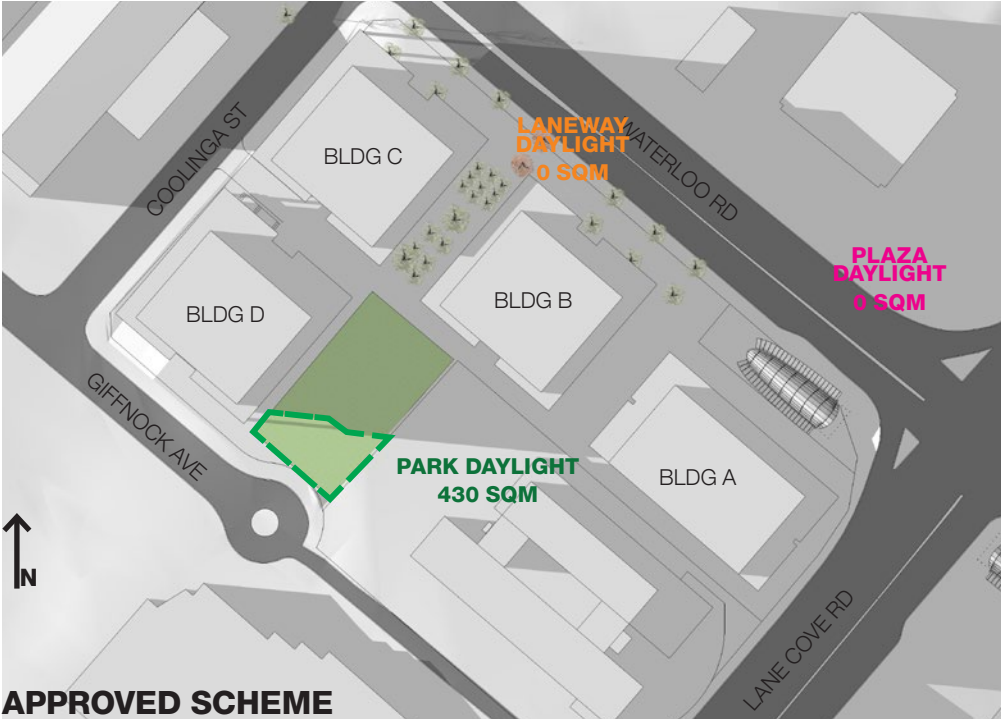
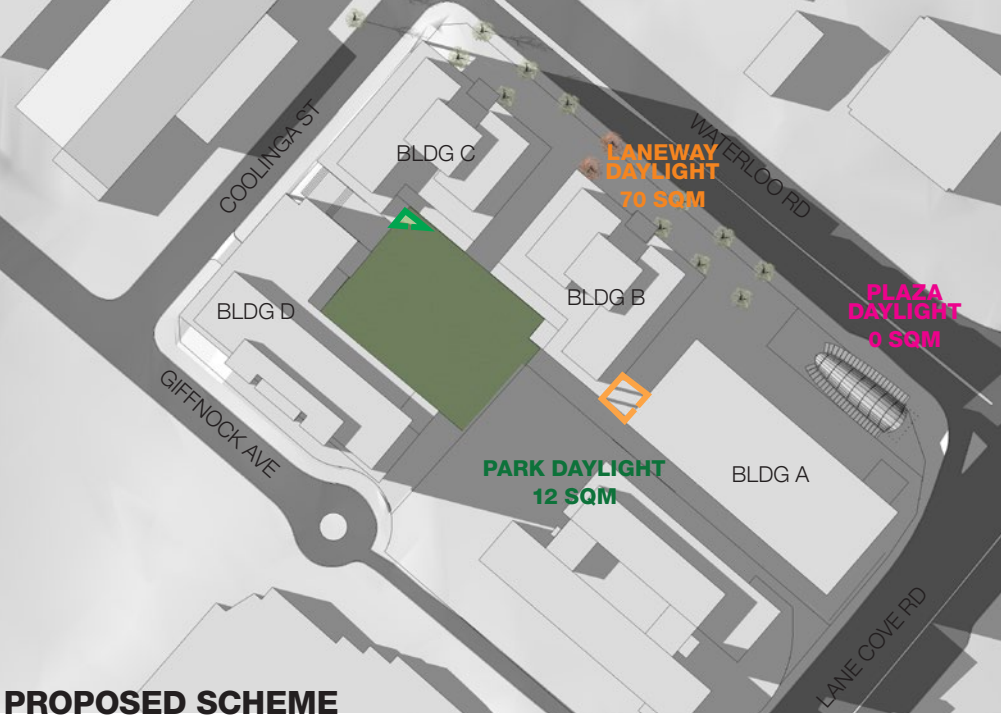
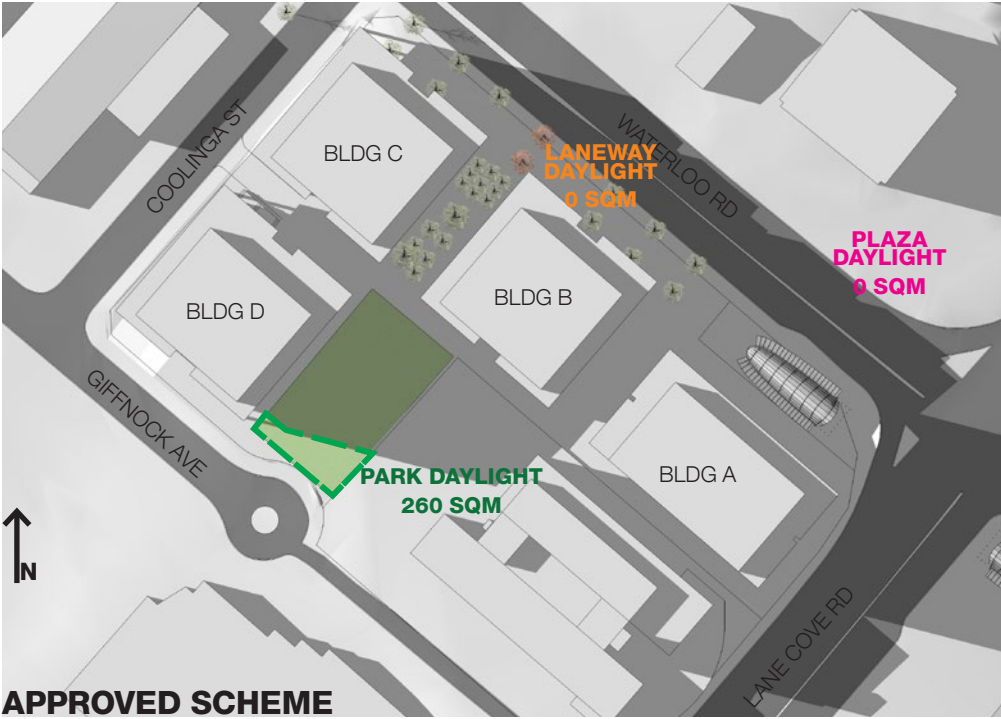
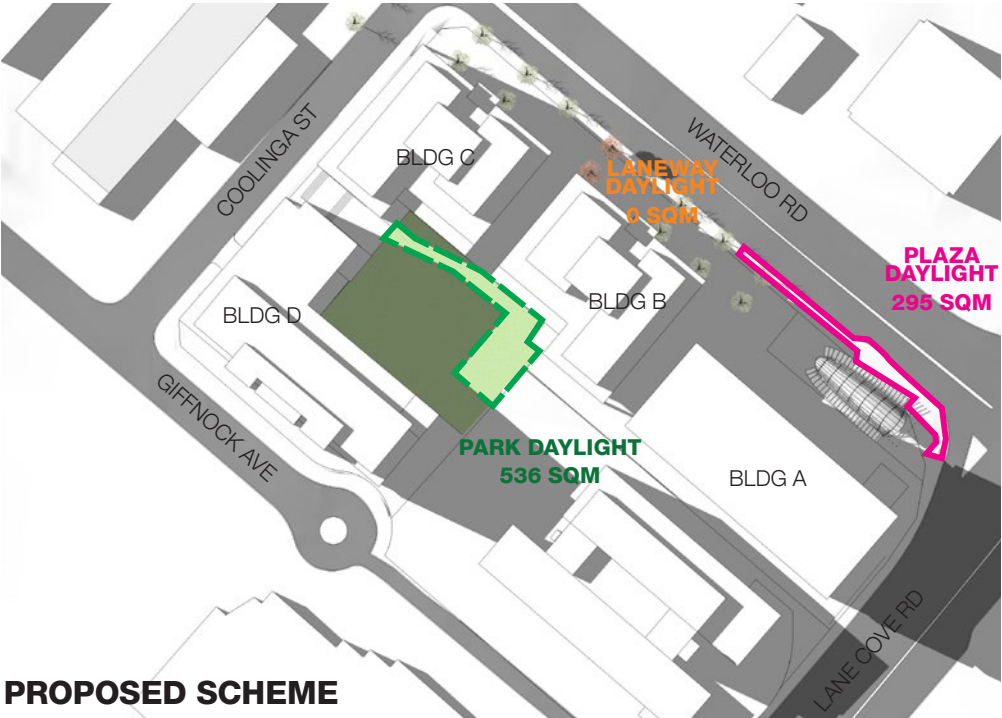
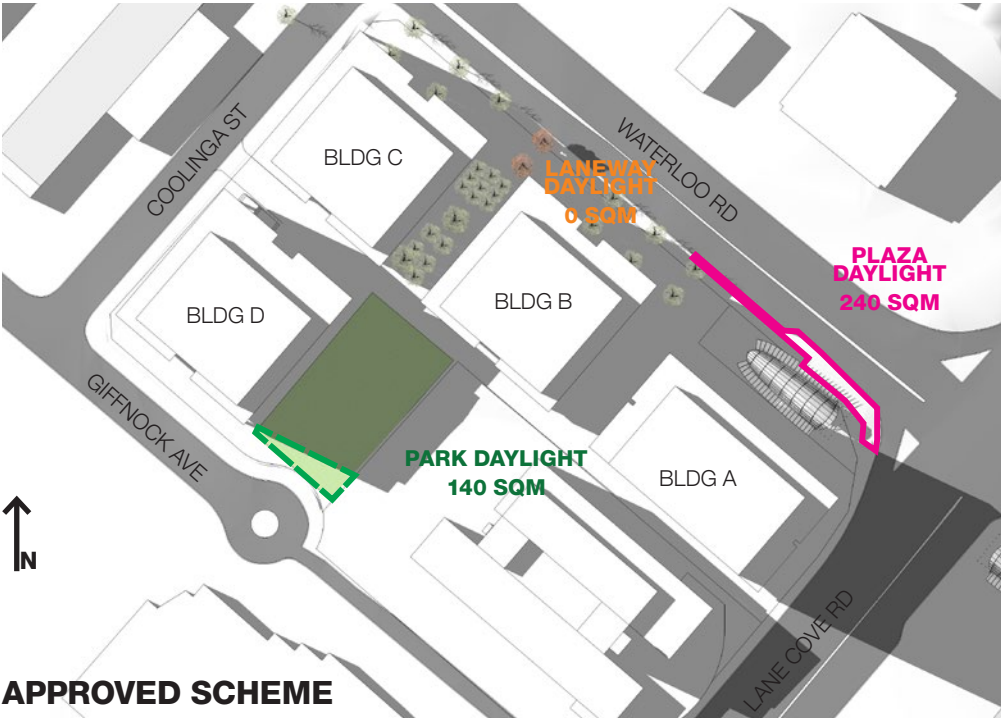


**APPROVED SCHEME**  
*September 23rd/ March 21st 2pm*



**PROPOSED SCHEME**





# S75W ADJUSTMENTS SCHEME COMPARISON SUMMARY

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TOTAL PUBLIC DOMAIN	11,921 m <sup>2</sup>	10,920 m <sup>2</sup>	○	
TOTAL RETAIL AREA	1,858 m <sup>2</sup>	3,819 m <sup>2</sup>	++	
TOTAL GFA	83,368 m <sup>2</sup>	83,368 m <sup>2</sup>	+	
SITE LINKS				
- STATION TO COOLINGA ST	218M	200.5M	+	
- STATION TO GIFFNOCK AVE	265M	182.5M	+	

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- TOTAL HOURS SUMMER SOLSTICE	9,724 m <sup>2</sup>	9,865 m <sup>2</sup>	+	
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LANEWAY SOLAR ACCESS 9AM-5PM				
- TOTAL HOURS WINTER SOLSTICE	2,305 m <sup>2</sup>	1,063 m <sup>2</sup>	○	
- TOTAL HOURS SUMMER SOLSTICE	3,331 m <sup>2</sup>	1,184 m <sup>2</sup>	○	
- TOTAL HOURS EQUINOX	2,458 m <sup>2</sup>	1,115 m <sup>2</sup>	○	
SUB-TOTAL	8,094 m <sup>2</sup>	3,362 m <sup>2</sup>	○	

PLAZA SOLAR ACCESS 9AM-5PM				
- TOTAL HOURS WINTER SOLSTICE	14,902 m <sup>2</sup>	18,658 m <sup>2</sup>	++	
- TOTAL HOURS SUMMER SOLSTICE	12,345 m <sup>2</sup>	15,727 m <sup>2</sup>	++	
- TOTAL HOURS EQUINOX	13,260 m <sup>2</sup>	16,846 m <sup>2</sup>	++	
SUB-TOTAL	40,507 m <sup>2</sup>	51,231 m <sup>2</sup>	++	

TOTAL SOLAR ACCESS 9AM - 5PM	65, 296 m <sup>2</sup>	72,708 m <sup>2</sup>	++	
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# S75W ADJUSTMENTS PUBLIC BENEFIT IMPROVEMENTS

## *Public Benefits:*

- a. Improved activation through vibrant, retail laneway strategy*
- b. Increased size of Station Plaza*
- c. Increased size of Waterloo Rd Plaza*
- d. Wider separation at Coolinga Street entry without a vehicle cross-over*
- e. Larger park size*
- f. Increased visibility of park from surrounding streets*
- g. Increased daylight access to park*
- h. Activated park via retail frontages*
- i. Pedestrian-focused precinct*





# SHADOW DIAGRAMS

## S75W SCHEME

### Legend

- Development boundary
- Proposed Shadow
- Existing Buildings
- Existing Shadow
- Outline of shadow - Approved masterplan
- Outline of envelope - Approved masterplan

