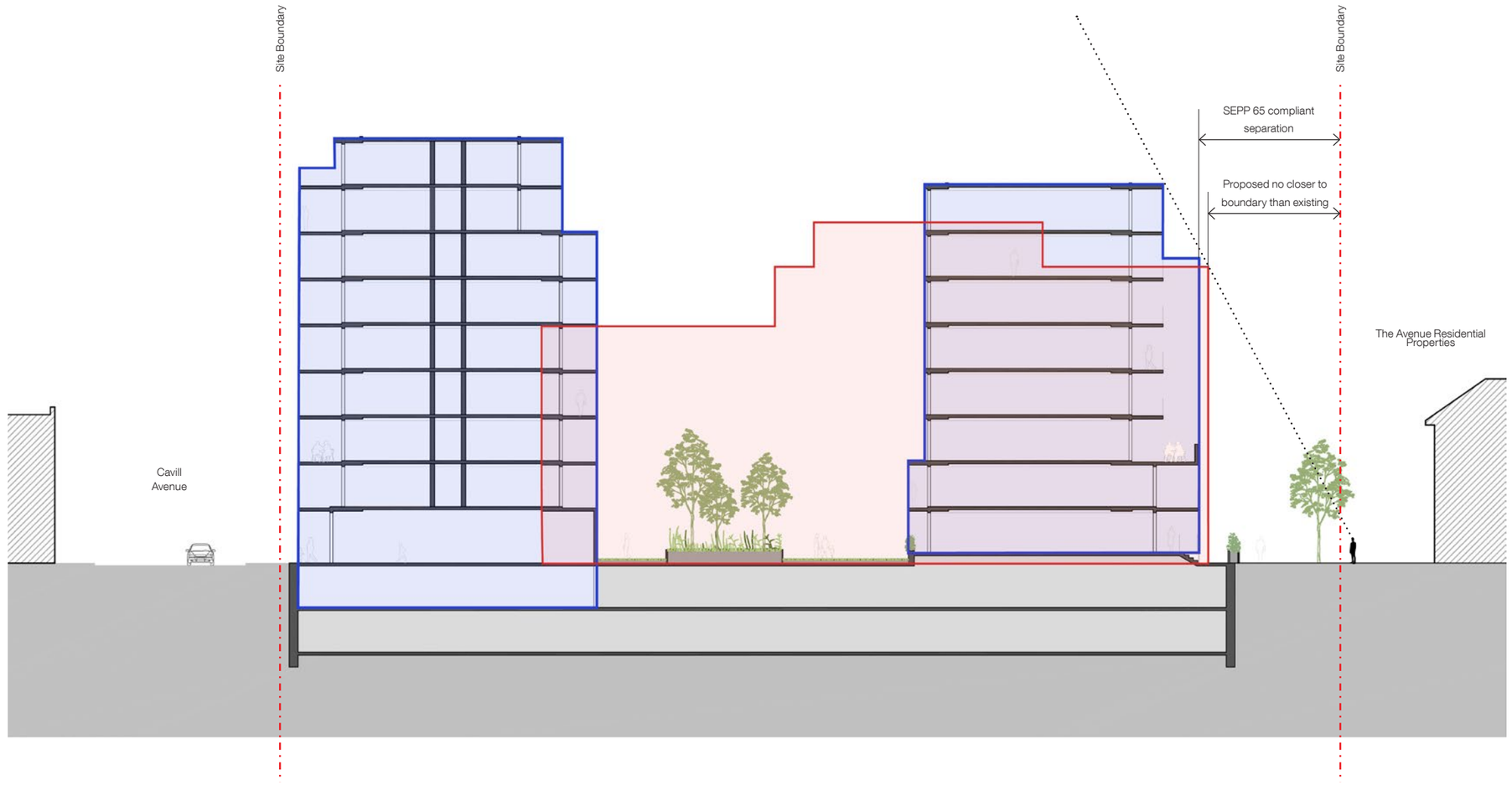
9.0 COMPARISON TO EXISTING

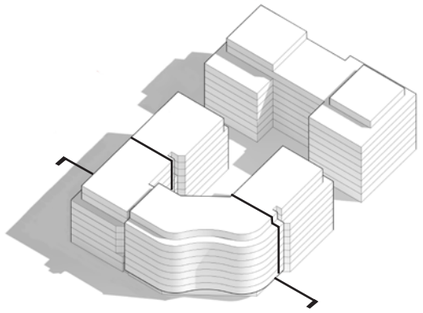
Existing 2 Cavill Avenue Commercial Building(s)

Proposed Mix Use Building

In regard to the massing of the built form, the relationship to the existing residential properties on the western side of The Avenue is of key importance.

The proposed building separation with the boundary in question is in keeping with the principals of SEPP 65 and is of greater distance away from the property line as the current building. Due to the set backs at the upper levels, the building only has marginal impact on solar access on the neighbouring properties early in the morning. Please refer to the later Solar Access studies for more detailed information.





10.0 LIVERPOOL ROAD FRONTAGE

Building A's frontage onto Liverpool Road is of key importance in defining the western gateway of Ashfield's Town Centre.

The proposed curvaceous form of the building follows the curvature of the road within the body of the main elevation whilst at the perceived ground floor(s) of the building, commercial premises imitate the existing 2 - 2.5 storey units to the east and west. Similarly, a canopy will continue and complete the existing 1 - 1.5 storey datum along Liverpool Road. 2 storey residential townhouse across the ground plane of the site will also help to reduce the perceived street wall of the flanking facades.

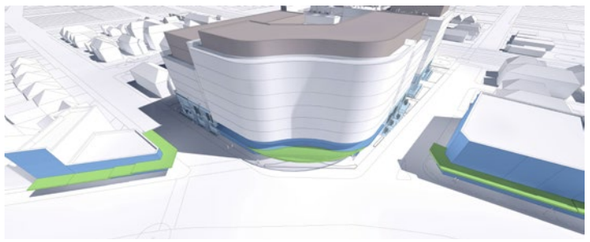
At the upper levels, the built form is set back to reduce the scale of the facade and provide private amenity space for the associated residential units.

1 - 1.5 storey retail canopy

2 - 2.5 storey commercial plinth

2 storey residential townhouses

Top storey residences

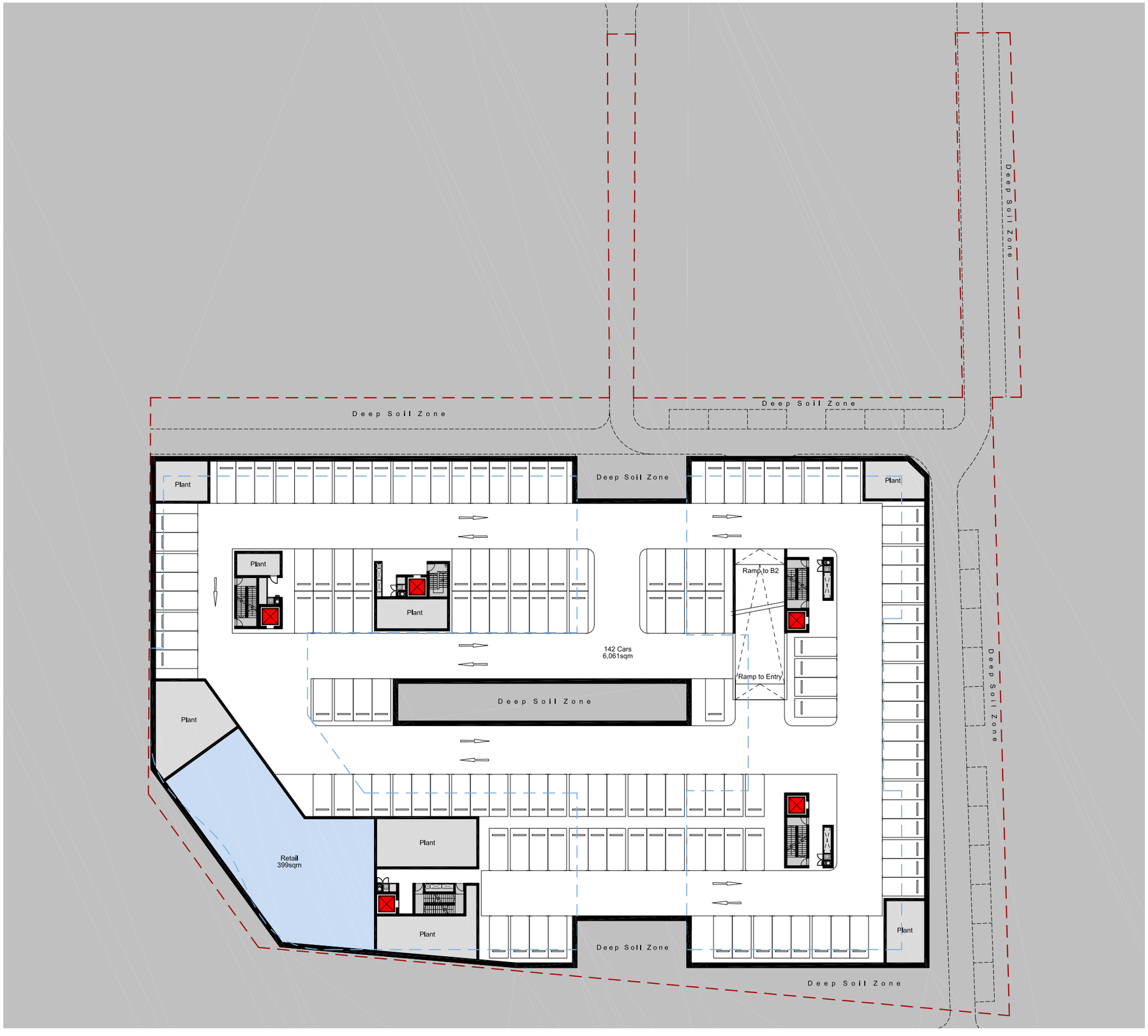


11.0 B02 BASEMENT PLAN

A B 1:500

BATESSMART.™

B01
BASEMENT PLAN



A B 1:500

BATESSMART.

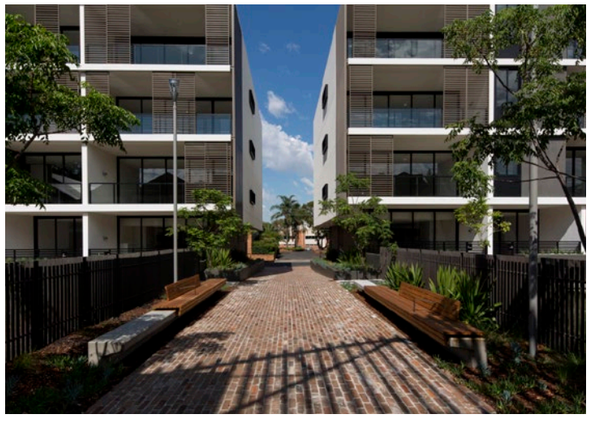
PROOF OF CONCEPT

SITE PLAN

A B

1:500

BATESSMART.™



Example Precedent Images

PROOF OF CONCEPT

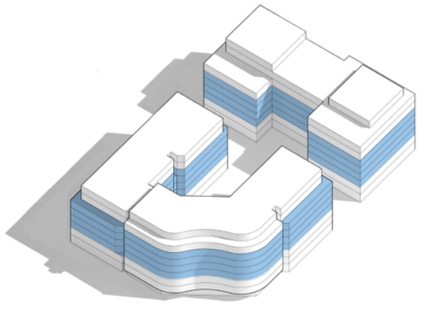
LEVEL 01 PLAN

A B

1:500

BATESSMART.™

LEVELS 02 - 05 PLAN



A B

1:500

BATESSMART.

LEVEL 06 PLAN

A B

1:500

BATESSMART.™

LEVEL 07 PLAN

A B

1:500

BATESSMART.

PROOF OF CONCEPT

LEVEL 08 PLAN

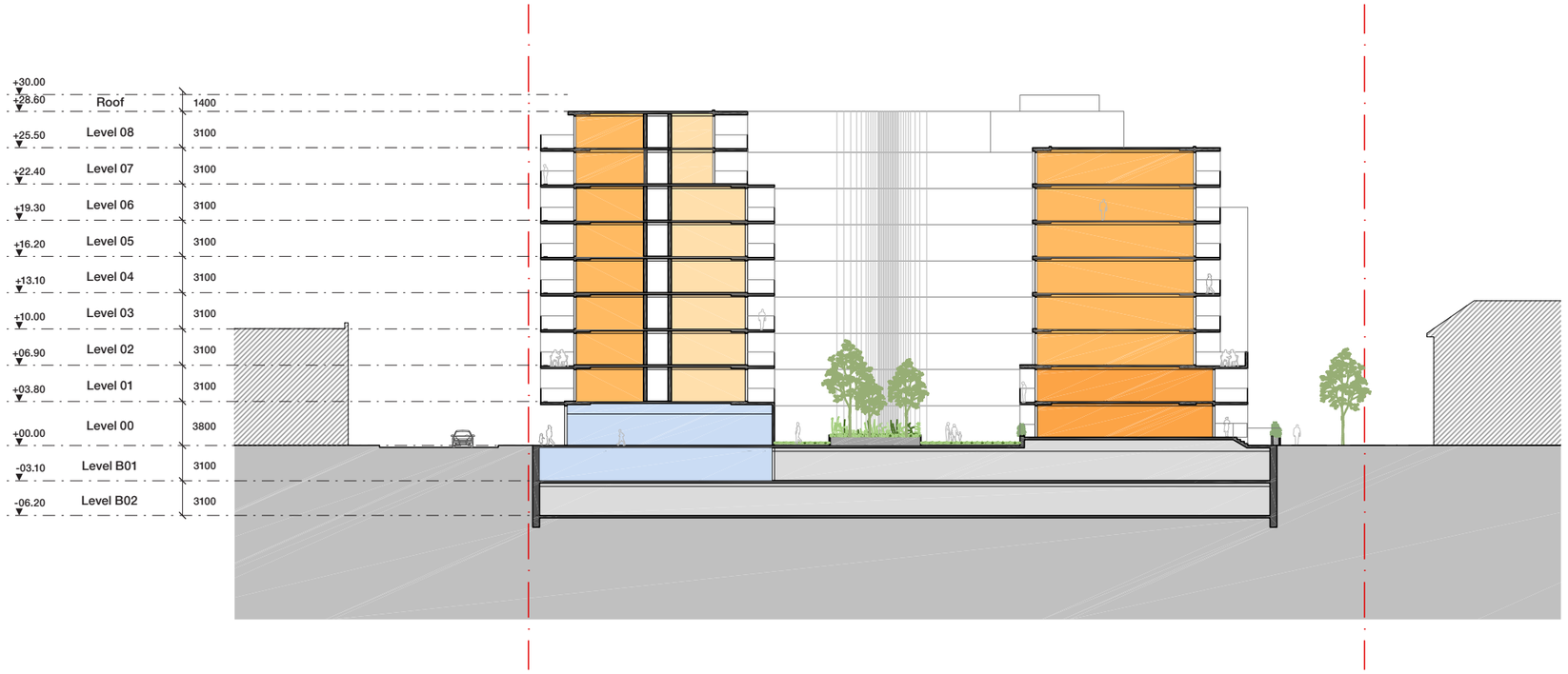
A B

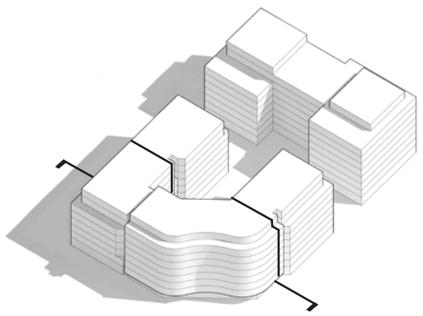
1:500

BATESSMART

Example Precedent Images

SITE SECTION A



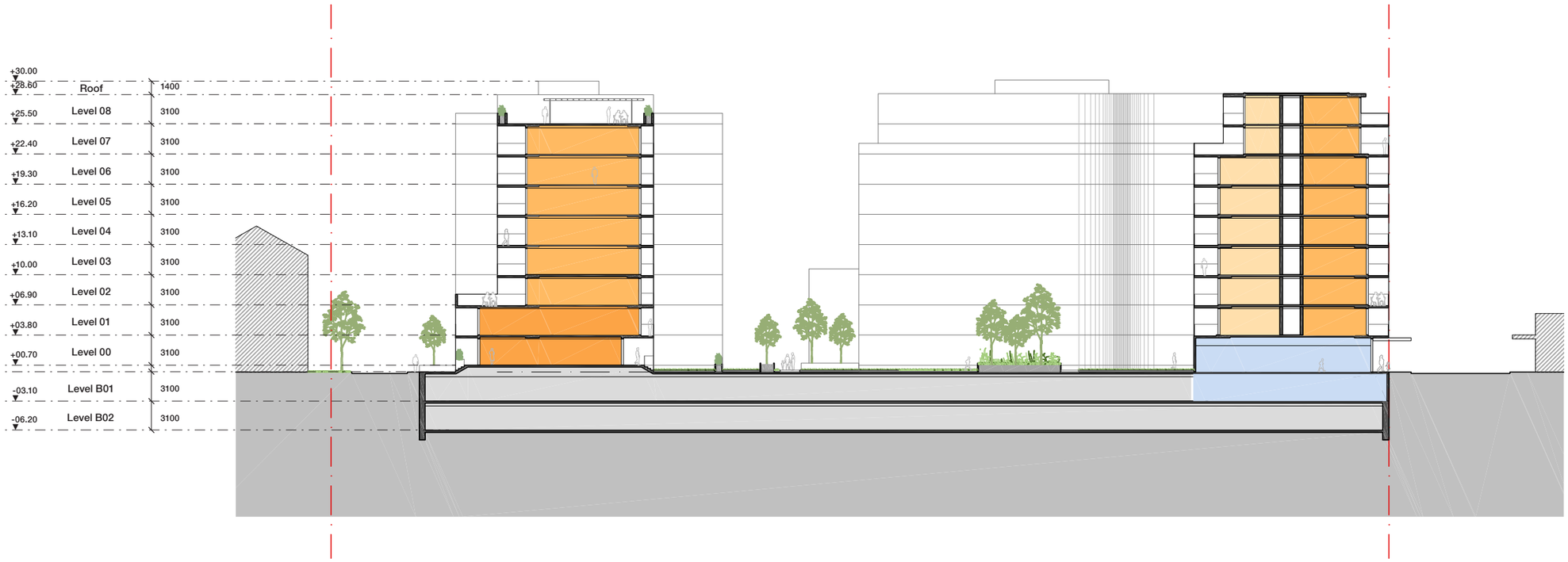


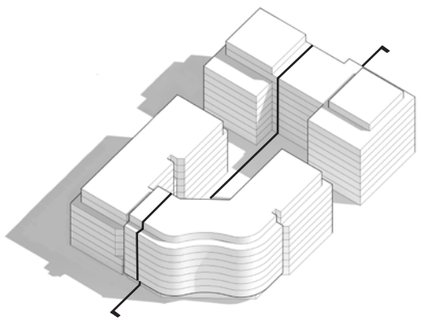
A B

1:500

BATESSMART.

SITE SECTION B



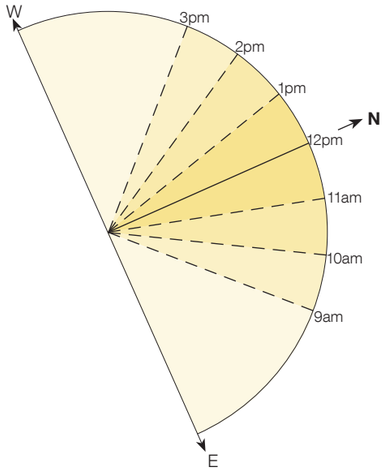


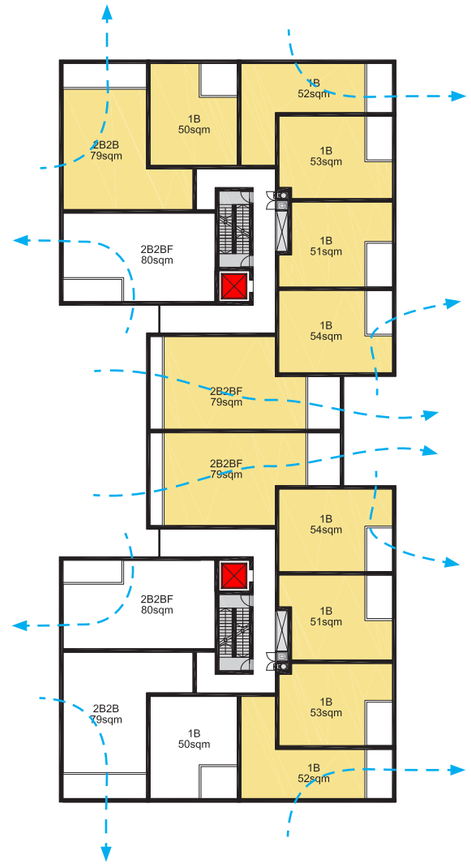
A B

1:500

BATESSMART.

12.0 SOLAR ACCESS / CROSS VENT PERFORMANCE





Typical Floor Study

Solar Access - 28 / 39 apartments = 72%

Cross Ventilation - 24 / 39 apartments = 62%

Measured at mid winter (21st June)

A B 1:500

BATESSMART.

13.0 AREA SCHEDULE

Summary - Areas		
Site Area	8,421	m²
Building A - GEA	19,706	m²
Building B - GEA	13,939	m²
Total - GEA	**33,645**	**m²**
GFA Efficiency Ratio	0.75	
Building A - GFA	15,529	m²
Building B - GFA	9,734	m²
Total - GFA	**25,263**	**m²**
Target - GFA	25,263	m²
	-	m²
Basement B01 - GEA	6,220	m²
Basement B02 - GEA	6,220	m²
Total Basement - GEA	**12,440**	**m²**
FSR	**3.00**	**:1**

Summary - Car Parking

Refer to separate Traffic and Parking Impact Assessment Report by others

Summary - Unit Mix

Type	Target Area	No.	Mix	Target Mix
Studio	35 m²	2	1%	TBC
1 Bed	50 m²	99	35%	TBC
1 Bed Flexi	56 m²	14	5%	TBC
2 Bed 1 Bath	70 m²	18	6%	TBC
2 Bed 2 Bath	75 m²	54	19%	TBC
2 Bed Flexi	80 m²	64	22%	TBC
3 Bed	95 m²	2	1%	TBC
Terrace (3 B)	130 m²	32	11%	TBC
Total		**285**	100%	100%

Notes

GEA = Gross Envelope Area
Complete planning envelope and allows for articulation. Otherwise defined as Maximum Permissable Envelope

GBA = Gross Built Area
Measured from the outside face of the external walls / glazing etc. including balconies

GFA = Gross Floor Area
Measured in accordance with the standard instrument definition

NSA = Net Saleable / Lettable Area
The sum of the internal apartments and / or retail tenancies - measured to the inside face of external and party walls

Building A Level	Use	Height	Envelope Efficiency	GEA	GBA	GFA	Resi NSA	Retail GLAR	Total NSA	Units	Studio	1B	1BF	2B1B	2B2B	2BF	3B	Terrace	Solar Access	Cross-Ventilation
		m	GFA/GEA	m²	m²	m²	m²	m²	m²		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Roof		1.40																		
Level 8	Residential	3.10	79%	1,021	1,021	805	700			9	0	3	0	2	0	2	2	0	9	9
Level 7	Residential	3.10	81%	1,973	1,921	1,596	1,450			19	0	2	4	2	6	5	0	0	15	16
Level 6	Residential	3.10	80%	2,180	2,121	1,749	1,650			22	0	7	2	2	6	5	0	0	15	12
Level 5	Residential	3.10	77%	2,422	2,295	1,853	1,750			23	0	7	2	2	6	6	0	0	16	12
Level 4	Residential	3.10	77%	2,422	2,295	1,853	1,750			23	0	7	2	2	6	6	0	0	16	12
Level 3	Residential	3.10	77%	2,422	2,295	1,853	1,750			23	0	7	2	2	6	6	0	0	16	12
Level 2	Residential	3.10	77%	2,422	2,295	1,853	1,750			23	0	7	2	2	6	6	0	0	16	12
Level 1	Resi dential	3.10	75%	2,422	2,295	1,807	1,700			9	1	1	0	0	3	4	0	0	5	4
Ground Floor	Resi / Comm.	3.80	73%	2,422	2,017	1,761	900	687		15	0	0	0	0	0	0	0	15	11	11
Basement B1	Commercial					399		399												
Total		30.00	78.8%	19,706	18,555	15,529	13,400	1,086	14,486	166	1	41	14	14	39	40	2	15	119	100
					94% of GEA	84% of GBA			93% of GFA		1%	25%	8%	8%	23%	24%	1%	9%	72%	60%

Building B Level	Use	Height	Envelope Efficiency	GEA	GBA	GFA	Resi NSA	Retail GLAR	Total NSA	Units	Studio	1B	1BF	2B1B	2B2B	2BF	3B	Terrace	Solar Access	Cross-Ventilation
		m	GFA/GEA	m²	m²	m²	m²	m²	m²		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Roof		1.40																		
Level 8	Residential	3.10	59%	994	744	591	850			7	0	0	0	4	2	1	0	0	7	7
Level 7	Residential	3.10	79%	1,325	1,283	1,042	900			14	0	8	0	0	3	3	0	0	10	7
Level 6	Residential	3.10	70%	1,660	1,472	1,165	1,000			16	0	10	0	0	2	4	0	0	12	10
Level 5	Residential	3.10	70%	1,660	1,472	1,165	1,000			16	0	10	0	0	2	4	0	0	12	10
Level 4	Residential	3.10	70%	1,660	1,472	1,165	1,000			16	0	10	0	0	2	4	0	0	12	10
Level 3	Residential	3.10	70%	1,660	1,472	1,165	1,000			16	0	10	0	0	2	4	0	0	12	10
Level 2	Residential	3.10	70%	1,660	1,472	1,165	1,000			16	0	10	0	0	2	4	0	0	12	10
Level 1	Residential	3.10	73%	1,660	1,506	1,206	1,200			1	1	0	0	0	0	0	0	0	1	0
Ground Floor	Residential	3.80	64%	1,660	1,264	1,070	950			17	0	0	0	0	0	0	0	17	11	10
Total		30.00	69.8%	13,939	12,157	9,734	8,900	0	8,900	119	1	58	0	4	15	24	0	17	89	74
					87% of GEA	80% of GBA			91% of GFA		1%	49%	0%	3%	13%	20%	0%	14%	75%	62%

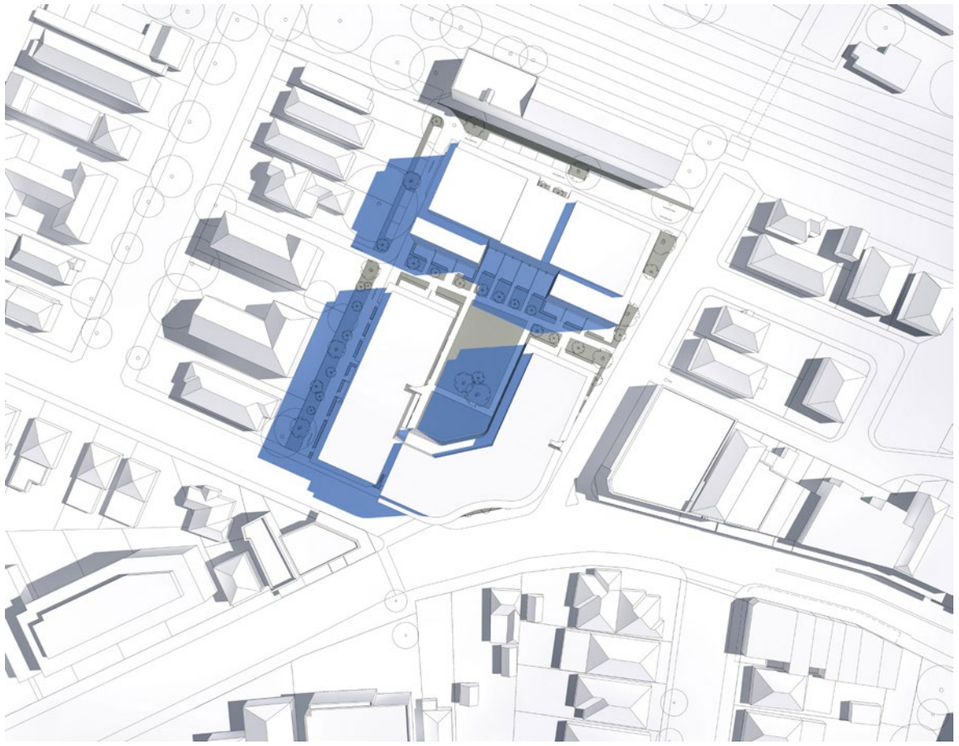
Total	Envelope Efficiency	GEA	GBA	GFA	Resi NSA	Retail GLAR	Total NSA	Total Units	Studio	1B	1BF	2B1B	2B2B	2BF	3B	Terrace	Solar Access	Cross-Ventilation
	75.1%	**33,645**	**30,712**	**25,263**	**22,300**	**1,086**	**23,386**	285	**2**	**99**	**14**	**18**	**54**	**64**	**2**	**32**	**208**	**174**
			91% of GEA	82% of GBA			93% of GFA		**1%**	**35%**	**5%**	**6%**	**19%**	**22%**	**1%**	**11%**	**73.0%**	**61.1%**
TARGET AREAS:		GEA 33,684		GFA 25,263				0%	0%	0%	0%	0%	0%	0%	0%	0%	70%	60%

14.0
SHADOW ANALYSIS

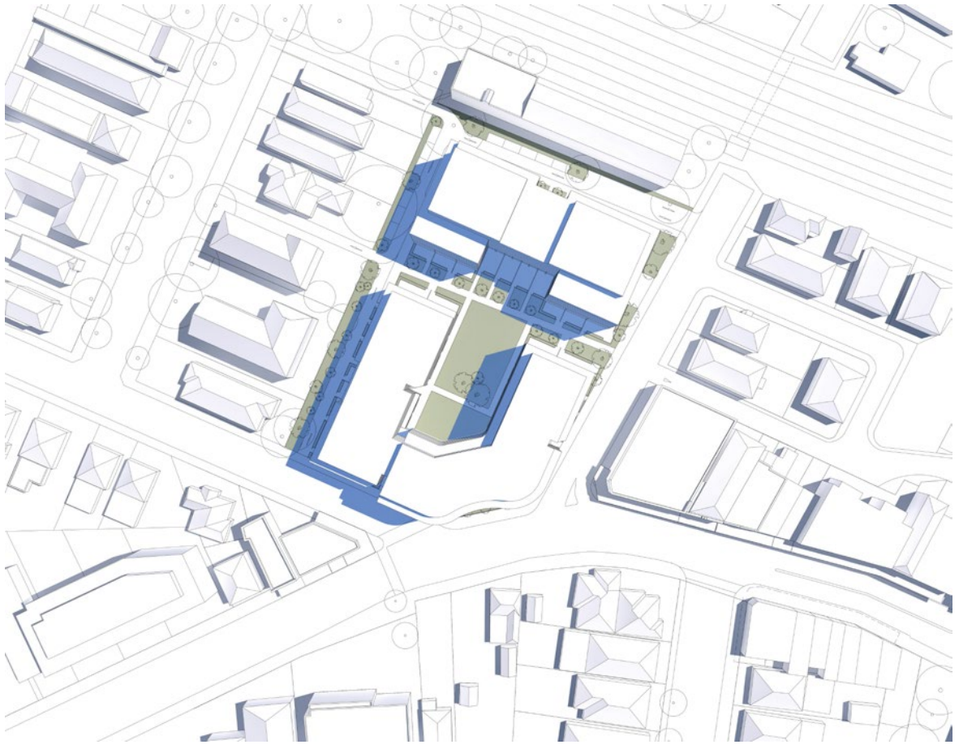
Shadow Impact Analysis - Mid-Summer - 21st December

The following diagrams demonstrate the impact of the proposed design on the local context at mid summer - representing when the sun is highest in the sky and therefore the 'best case' scenario for solar access.

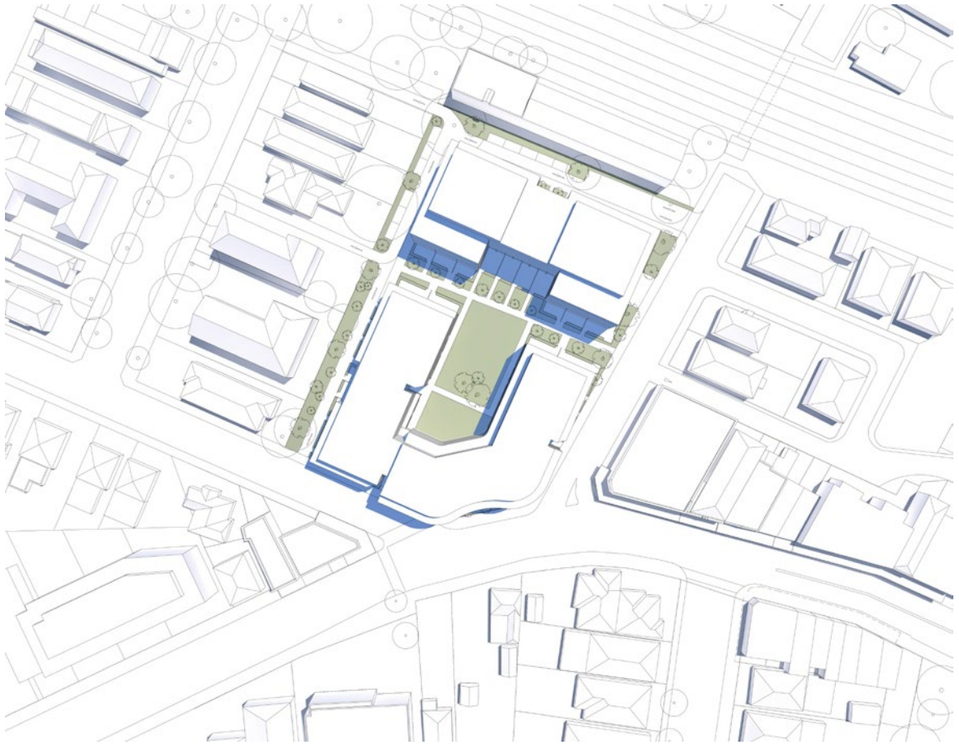
09:00



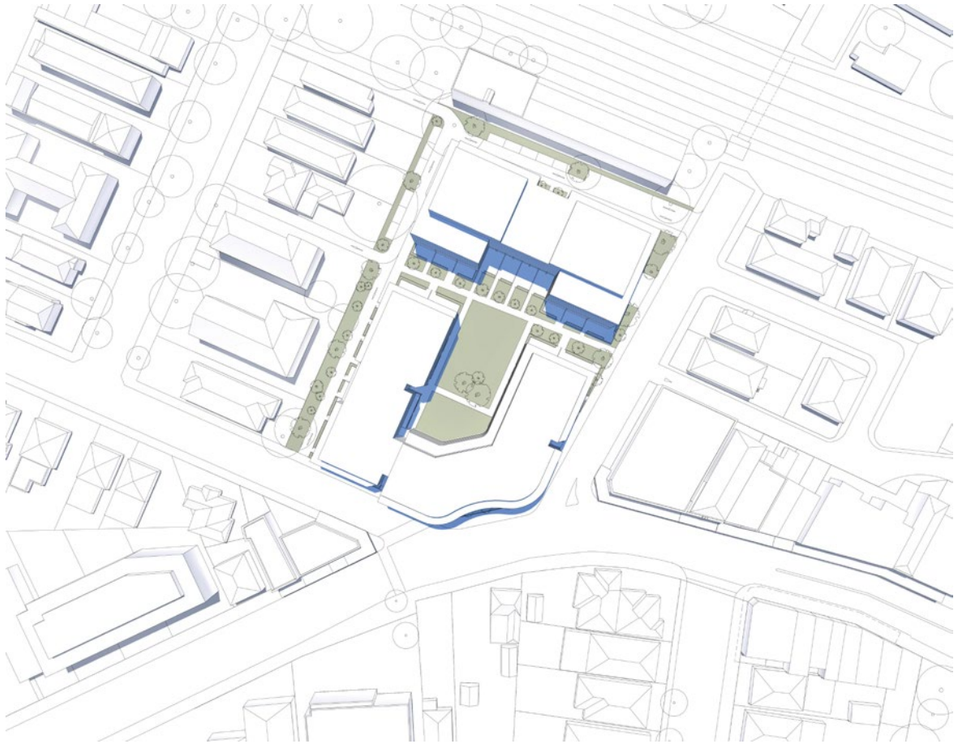
10:00



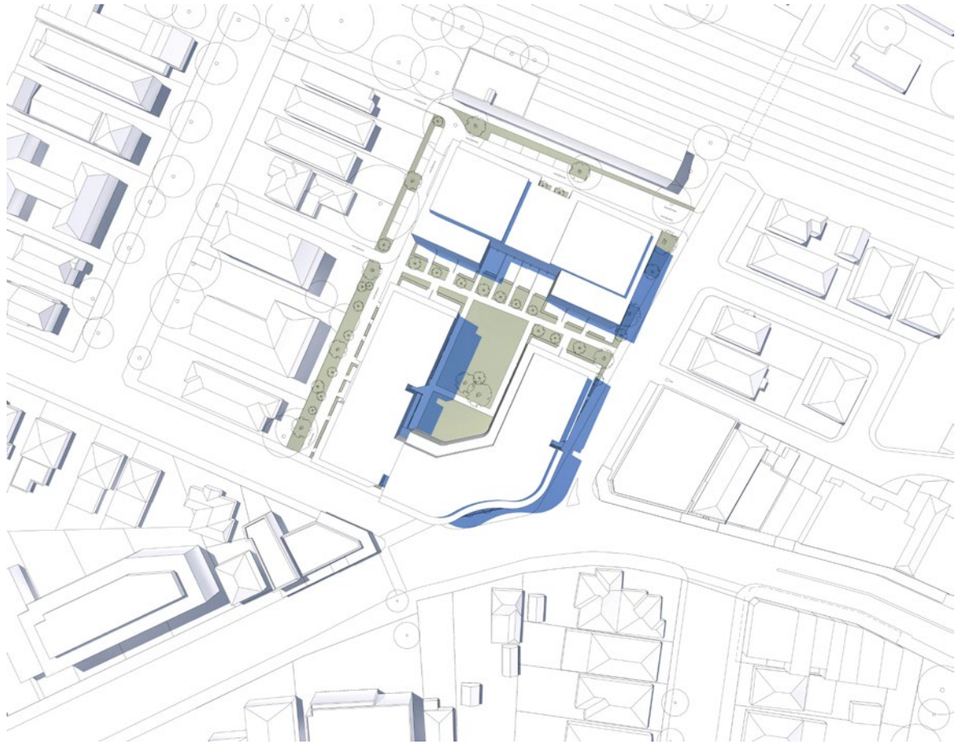
11:00



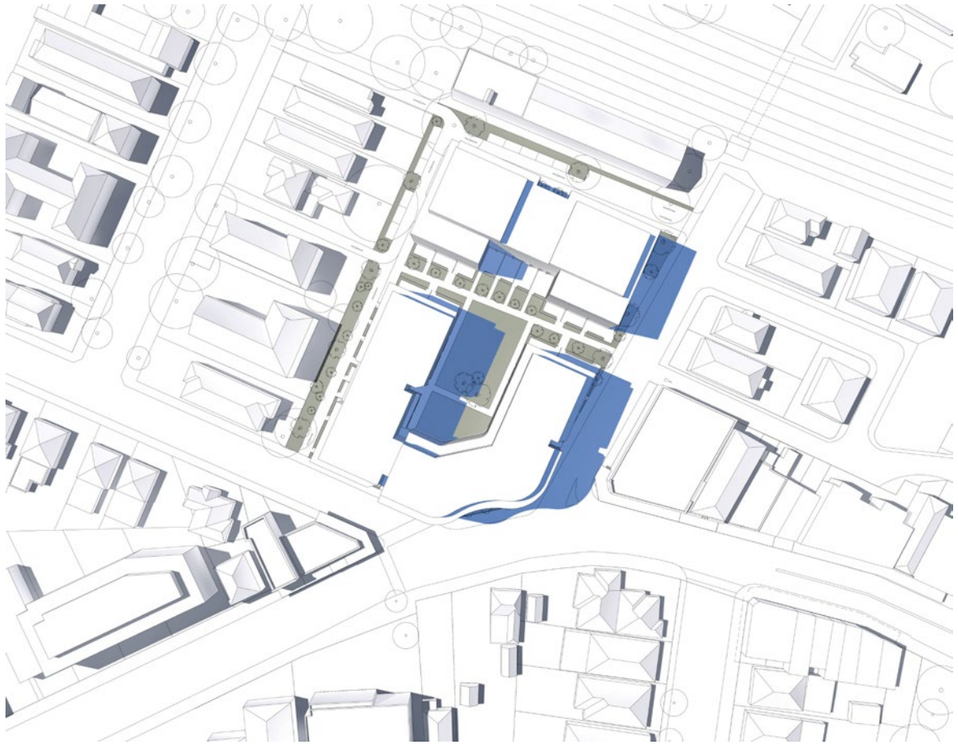
12:00



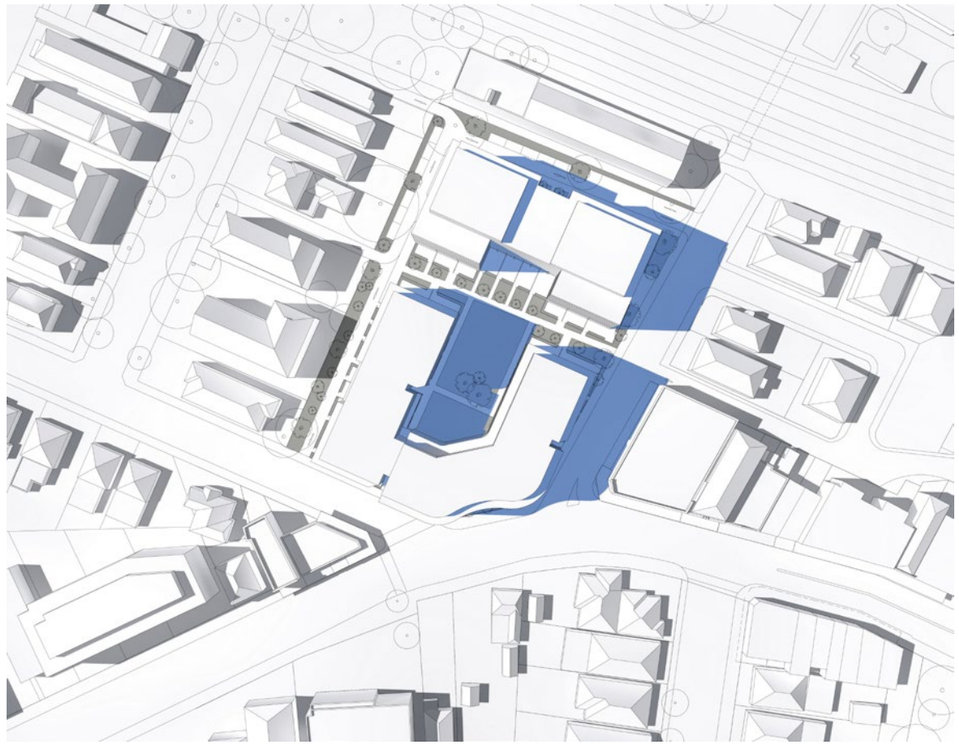
13:00



14:00



15:00

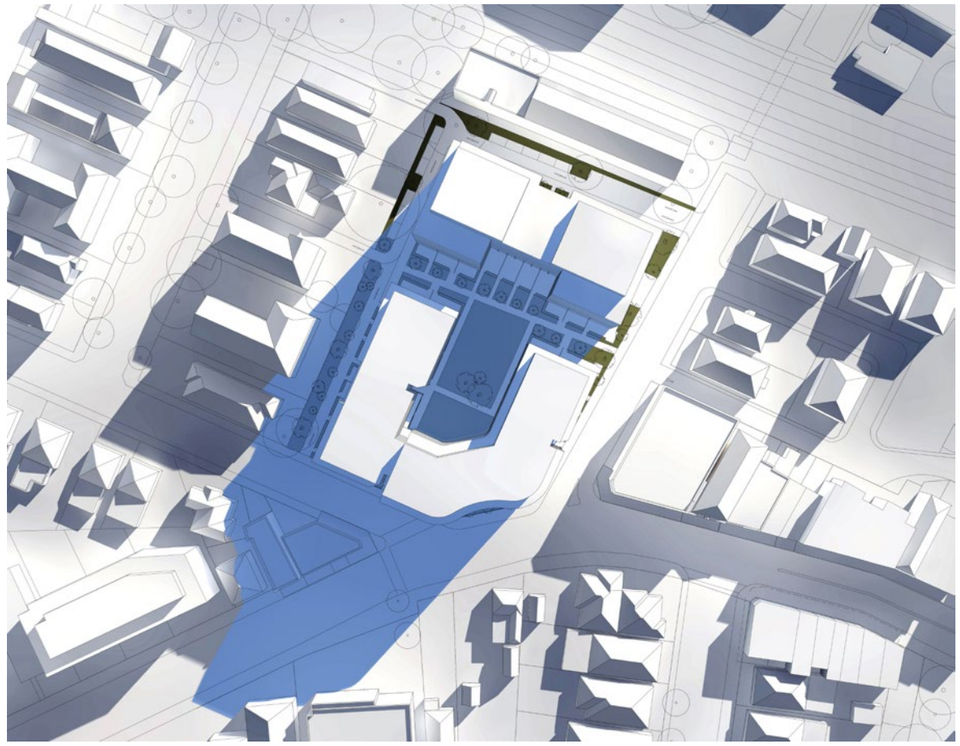


SHADOW ANALYSIS

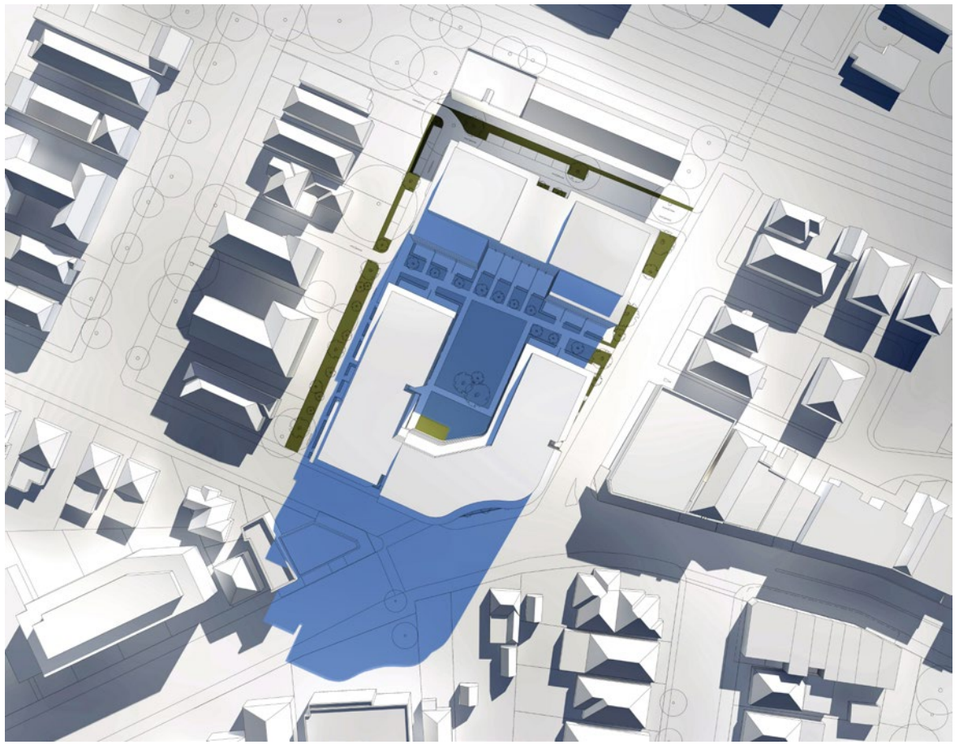
Shadow Impact Analysis - Mid-Winter - 21st June

The following diagrams demonstrate the impact of the proposed design on the local context at mid winter - representing when the sun is lowest in the sky and therefore the 'worst case' scenario for solar access.

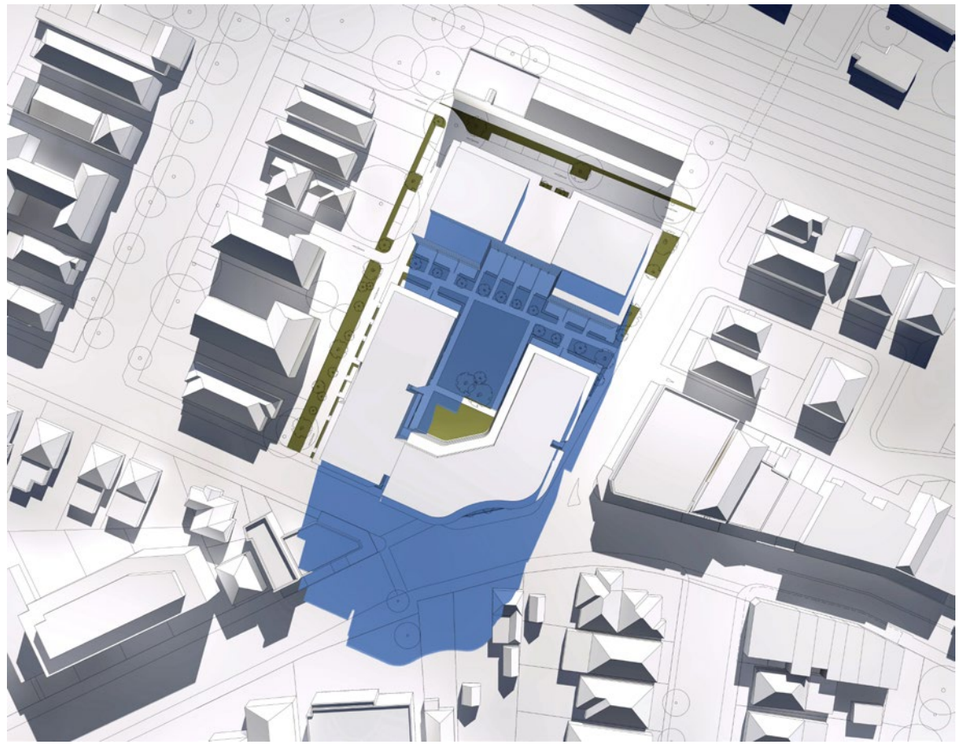
09:00



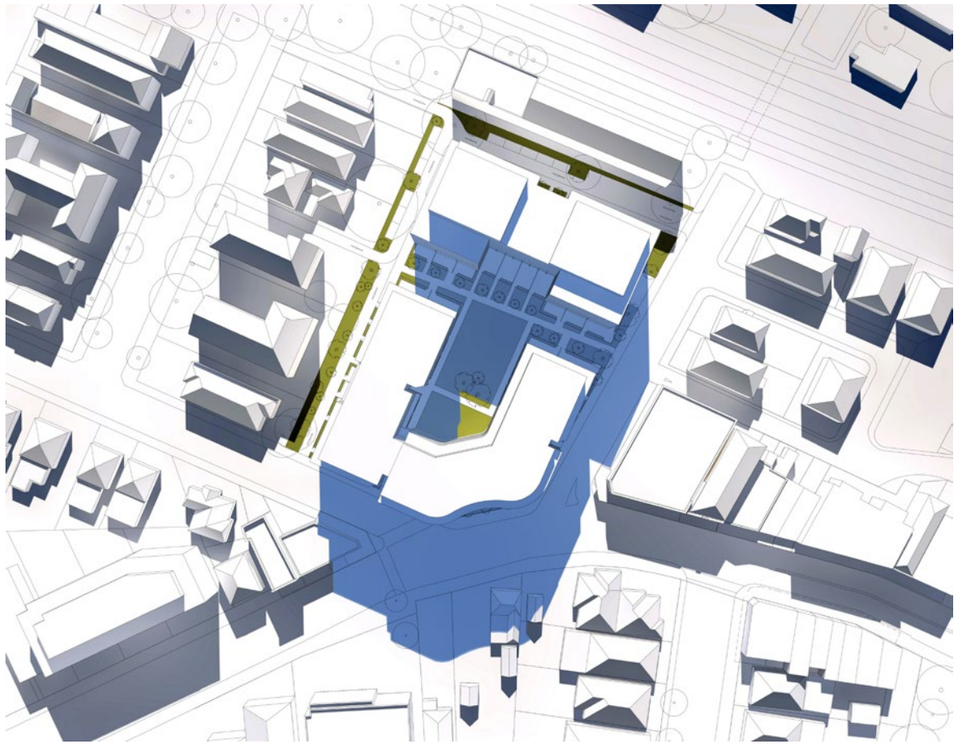
10:00



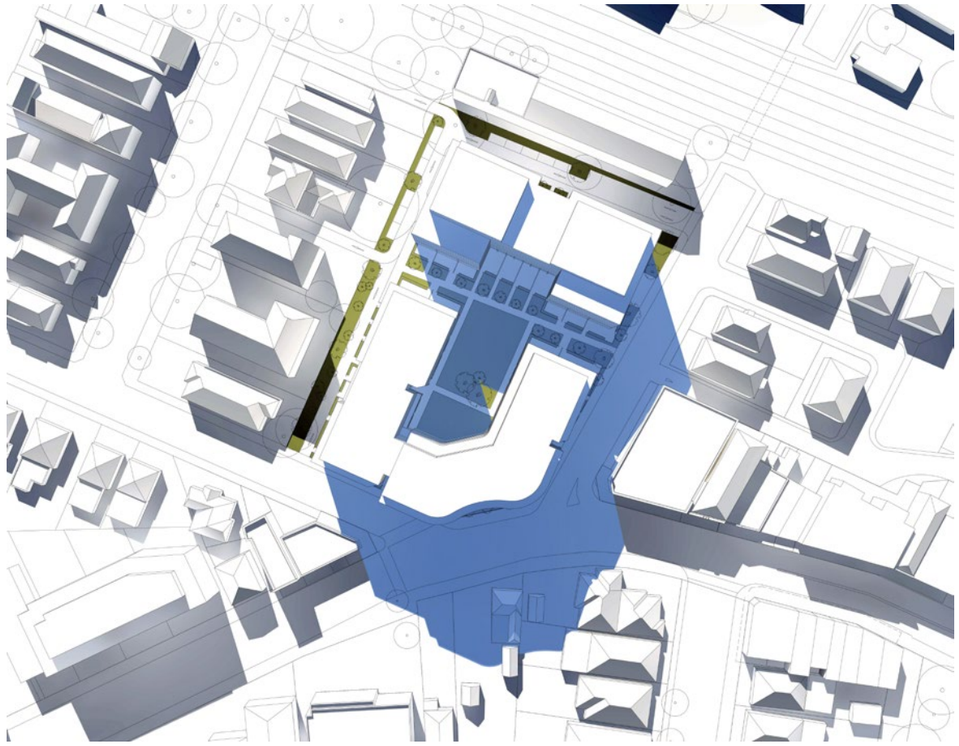
11:00



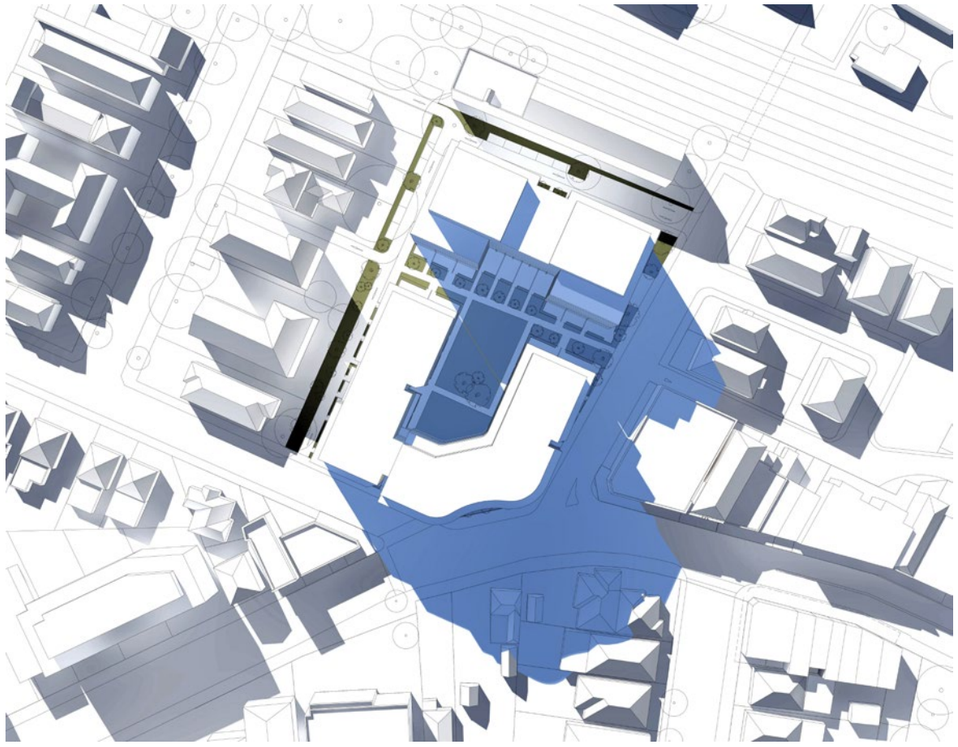
12:00



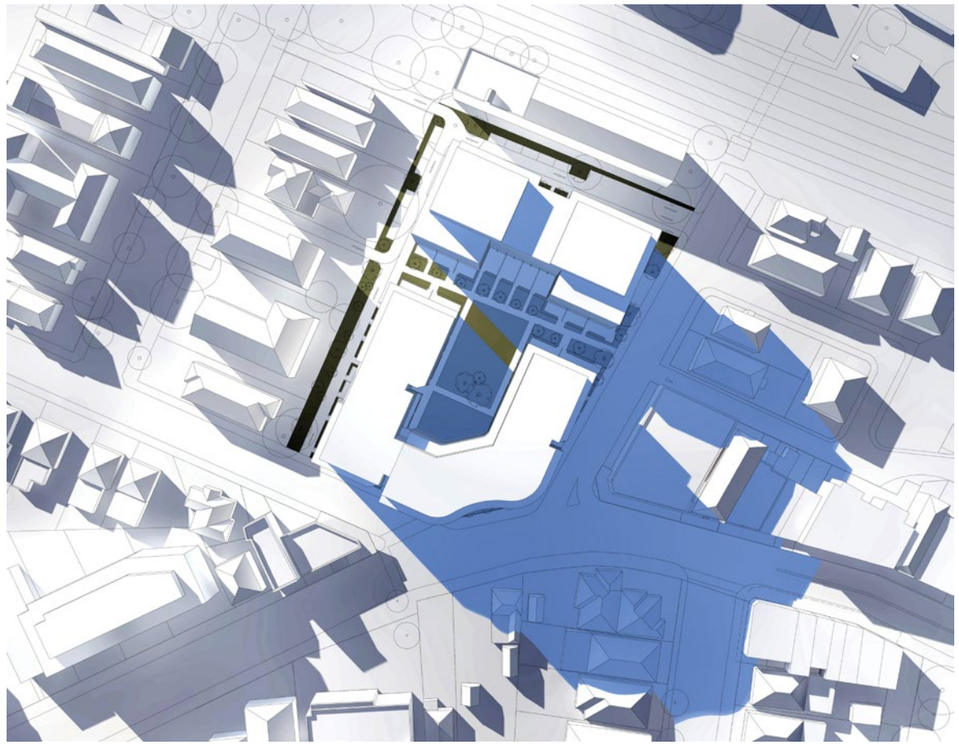
13:00



14:00



15:00



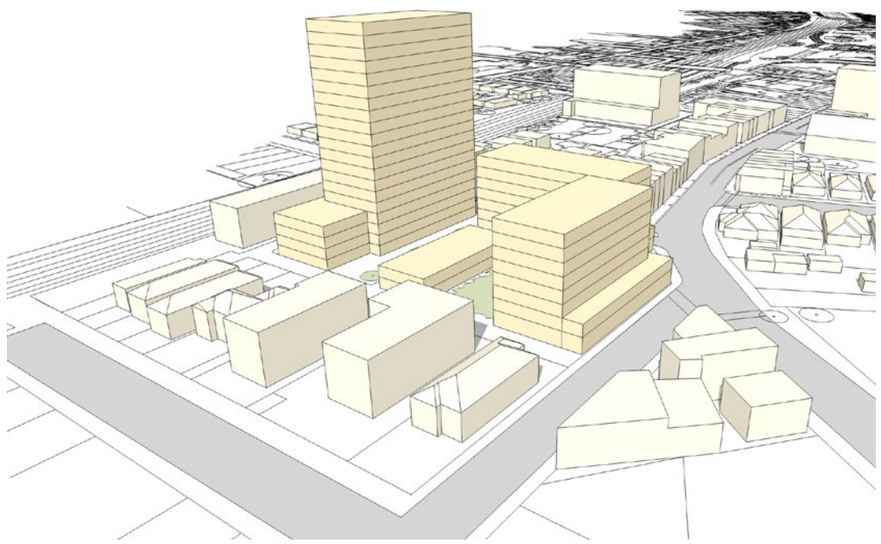
15.0
APPENDICES

Appendix 01 - Previous Design Studies

APPENDIX 01
PREVIOUS DESIGN STUDY 01

FSR - 3.25:1
Maximum Height - 67 metres

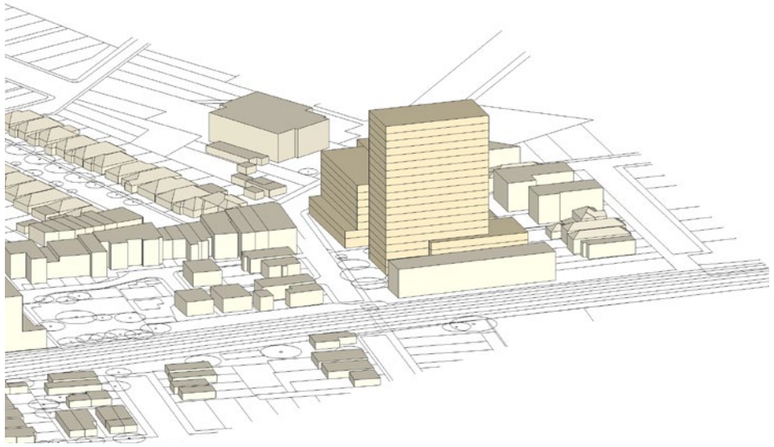
This design concept option responded to the scale of the adjacent existing buildings and connections while increasing the built density to take maximise the advantages of the close proximity to the Ashfield station and location within the designated Town Centre.



1:1000

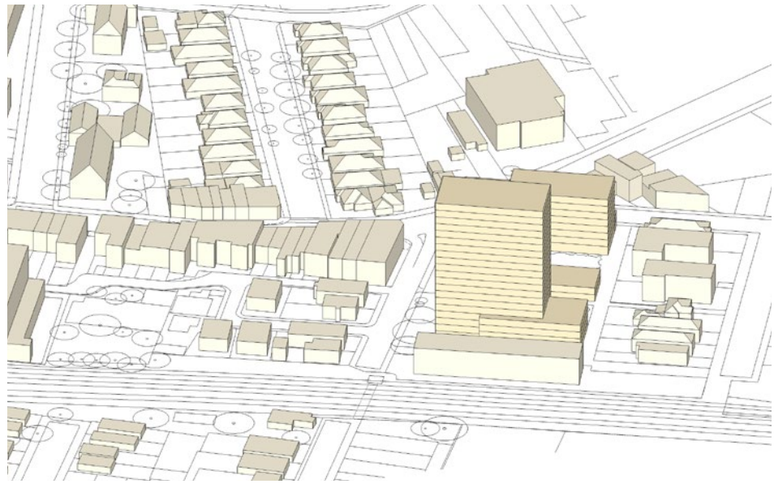
VIEWS FROM THE SUN

The location and height of the proposed buildings gives consideration to maintaining solar access to both the proposed and existing buildings. The proposed tower element does not overshadow the heritage conservation area to the south.

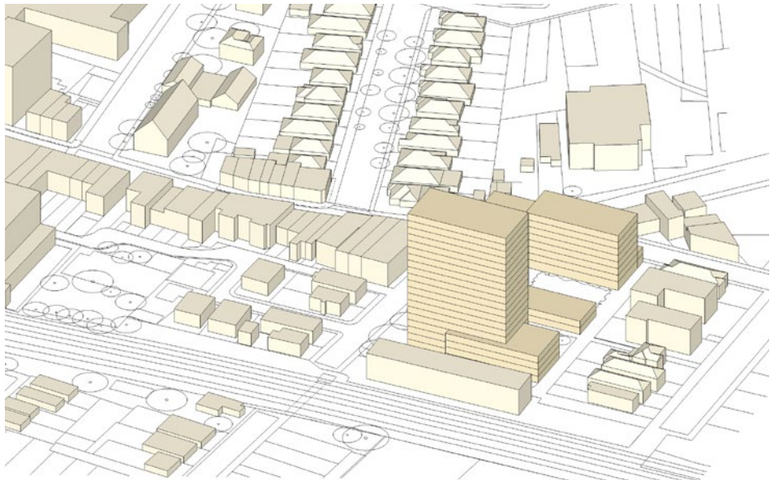


Winter 9am

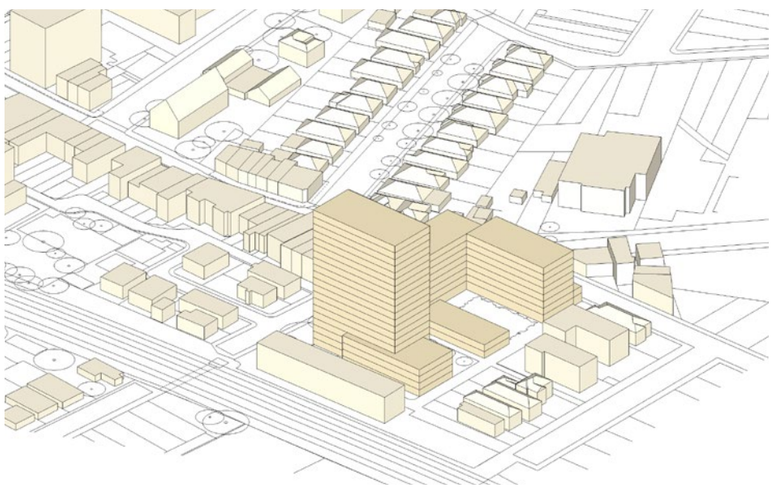
Winter 10am



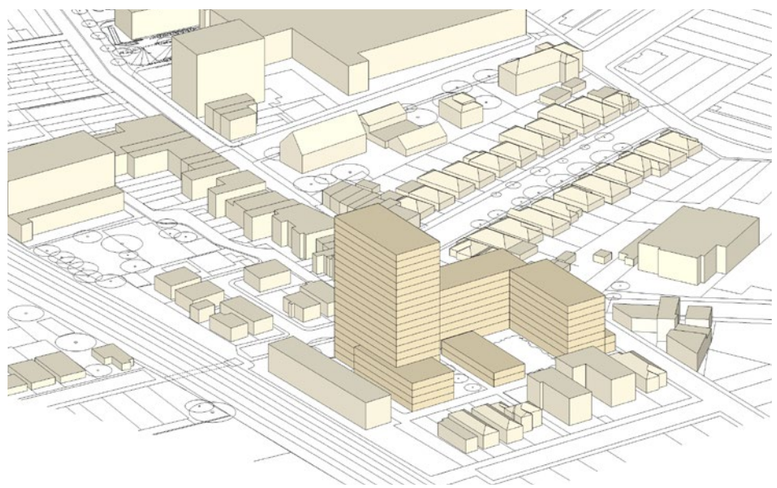
Winter 11am



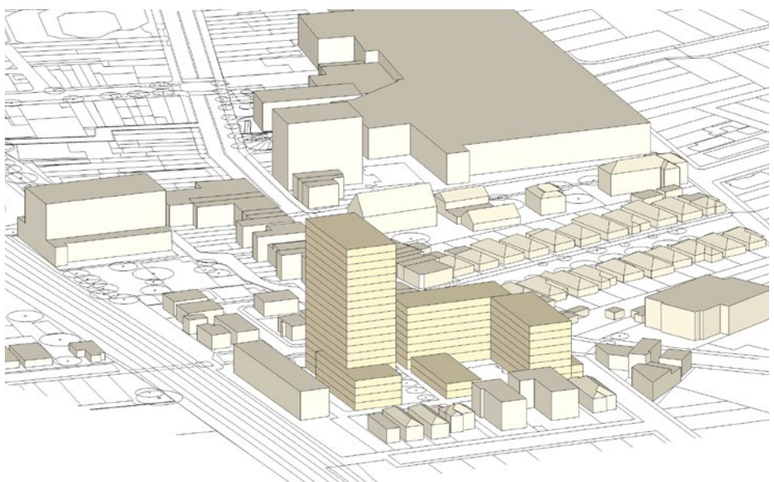
Winter 12am



Winter 1 pm



Winter 2 pm



Winter 3 pm

APPENDIX 01
PREVIOUS DESIGN STUDY 02

FSR - 3.00:1
Maximum Height - 29 metres

BLD A

Level	No	GBE	GFA
Ground	1	1758	1352
Levels 1 to 7	6	10548	8111
Level 8	1	1423	1094
Total	8	13729	10558

BLD B

Level	No	GBE	GFA
Ground	1	884	680
Levels 1 to 8	7	6188	4759
Total	8	7072	5438

BLD C

Level	No	GBE	GFA
Ground	1	1344	1034
Levels 1 to 9	8	10752	8268
Total	9	12096	9302
TOTAL		32897	25298
		Site Area	8421
		FSR	3.00

NOTE/ PAGE 29, SECTION 2B APARTMENT DESIGN GUIDE

Gross Building Envelope (GBE) is 30% greater than the achievable floor space area to allow for building components that do not count as GFA but contribute to building design and articulation such as balconies, lifts, stairs and open circulation space

CARPARK ENTRY/EXIT

1:1,000

BATESSMART

MASSING STUDY