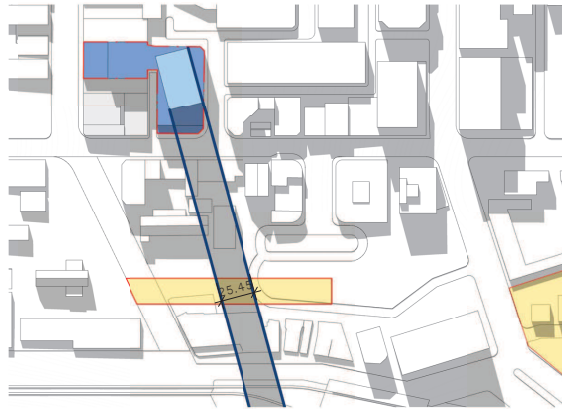


INVESTIGATION & ANALYSIS

Proposed Envelope

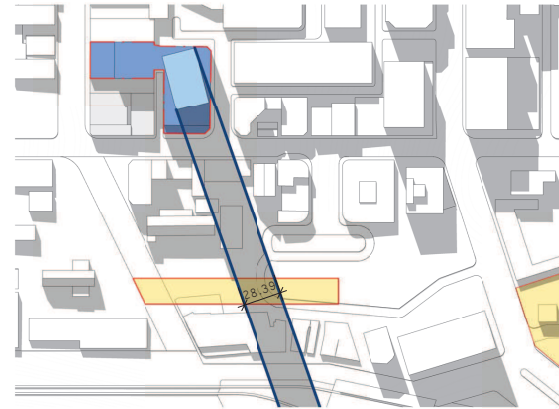
Parramatta Square Shadow Analysis 12pm-2pm

Further detailed shadow analysis has been undertaken on the proposed Parramatta Square public domain strip at 15min intervals and identifies the shadow speed and minimal impact of the proposed building envelope.



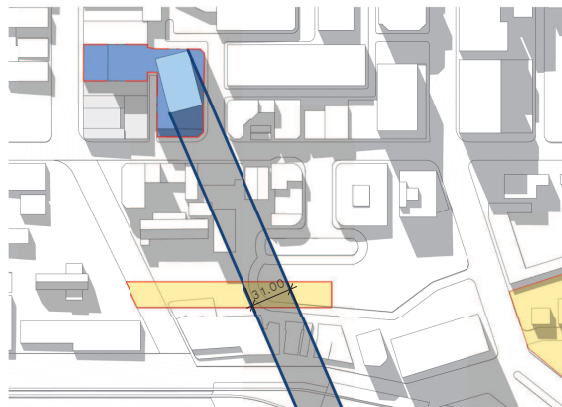
17% shadow

12:00PM



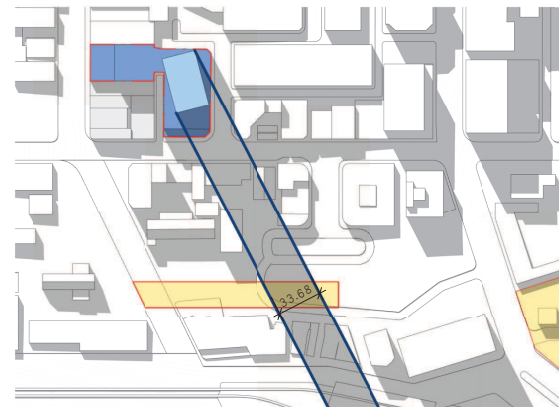
19% shadow

12:15PM




21% shadow

12:30PM



23% shadow

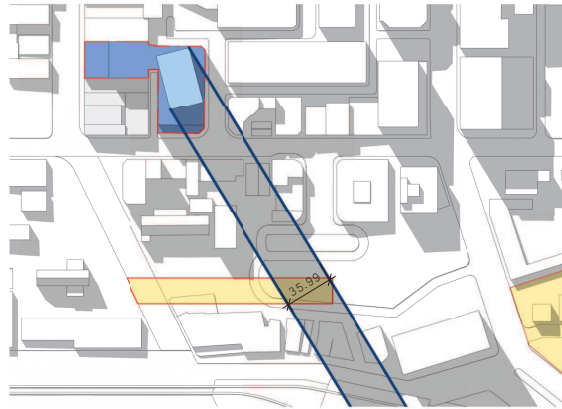
12:45PM

 12pm-2pm No overshadowing window



INVESTIGATION & ANALYSIS

Proposed Envelope
 Parramatta Square Shadow Analysis
 12pm-2pm



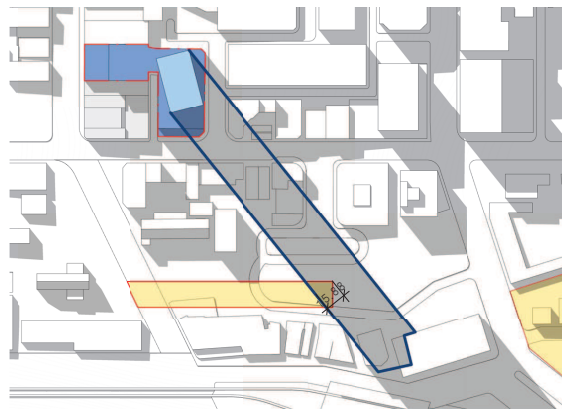
23% shadow

1:00PM



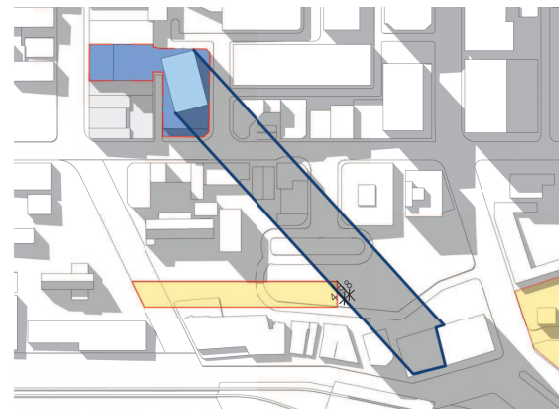
15% shadow

1:15PM



5% shadow

1:30PM



0% shadow

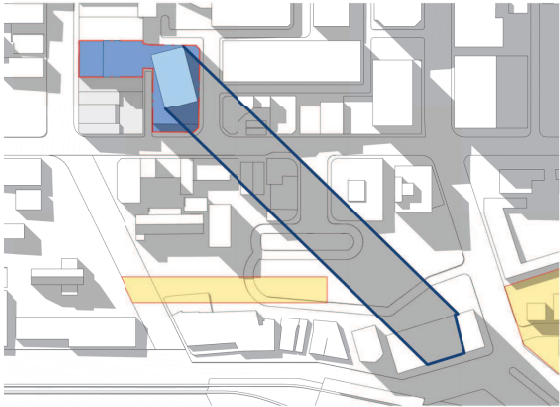
1:45PM

 12pm-2pm No overshadowing window




INVESTIGATION & ANALYSIS

Proposed Envelope
Parramatta Square Shadow Analysis
12pm-2pm



0% shadow

2:00PM

 12pm-2pm No overshadowing window



INVESTIGATION & ANALYSIS

Proposed Envelope

Lancer Barracks Shadow Analysis - 2PM

DCP 2011 REF FIGURE 4.3.3.1.13

Based on the following analysis there is no impact on Lancer Barracks at the prescribed time.



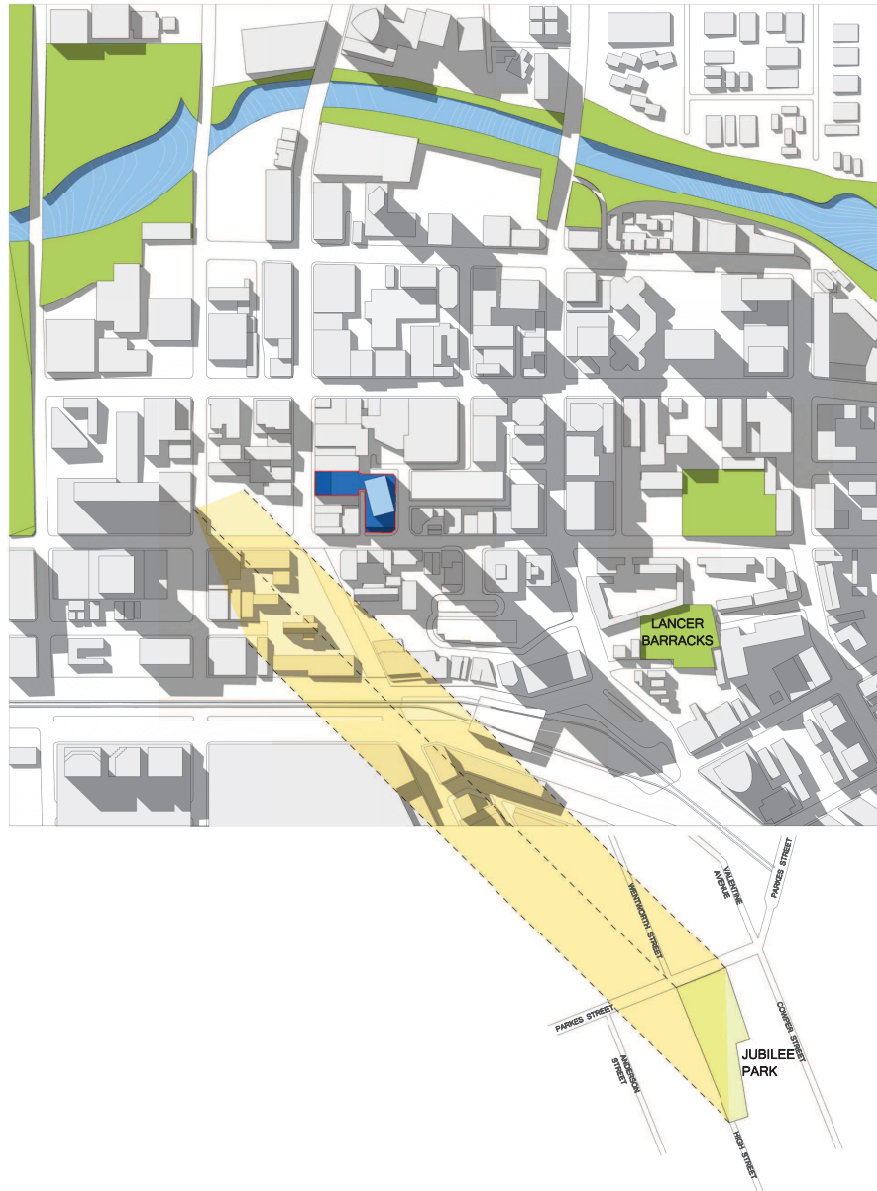
INVESTIGATION & ANALYSIS

Proposed Envelope

Jubilee Park Shadow Analysis - 2PM

DCP 2011 REF FIGURE 4.3.3.1.14

Based on the following analysis there is no impact on Jubilee Park.



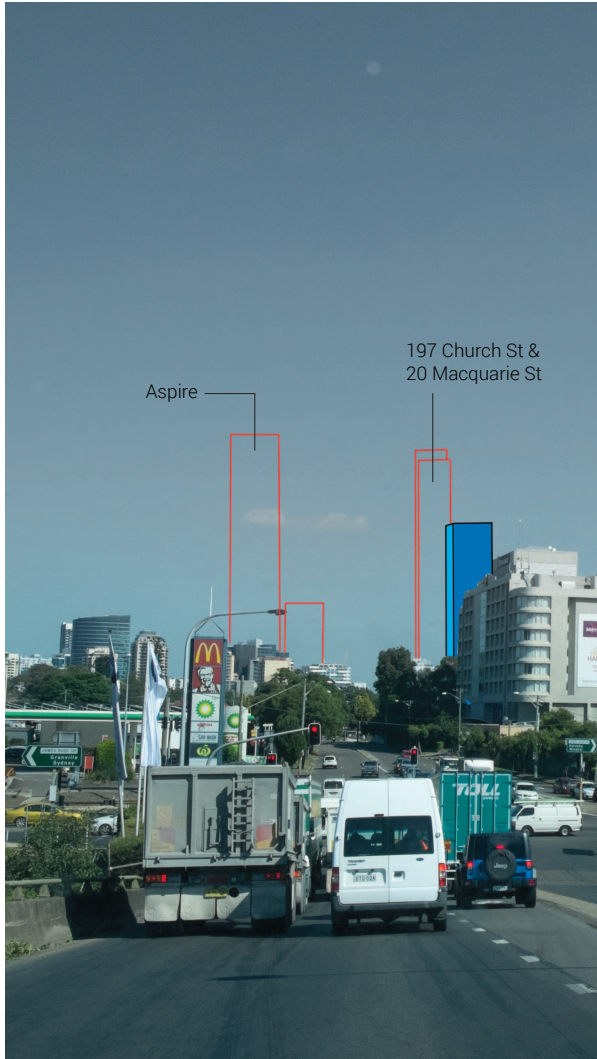
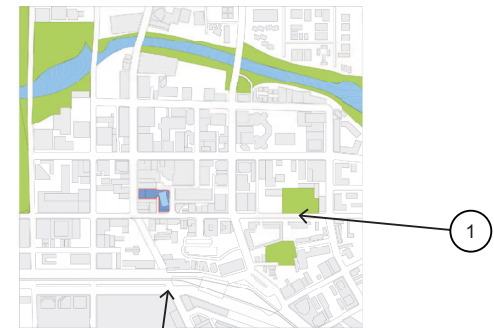
INVESTIGATION & ANALYSIS

Proposed Envelope

View Corridors

Photo overlays from key view corridors across the city have been undertaken showing the proposed building envelope and proposed towers from surrounding developments.

- Proposed Tower
- Potential Future Developments



1. Looking West from James Ruse Drive and Hassall Street



2. Looking North along Church Street and Great Western Highway

NOTE: Surrounding Building Information - Parramatta Future Generation, Investing in Western Sydney, Parramatta City Council, Nov 2014; The "Greenway" Arcade by Willana Associates; 11 Hassall Street Height Analysis, Apr 2014 by JBA.

48 Macquarie & 220 Church Street | Urban Design Analysis

DISCLAIMER: All drawings are based on existing scanned pdfs and other gathered data. All dimensions are indicative only and subject to survey confirmation

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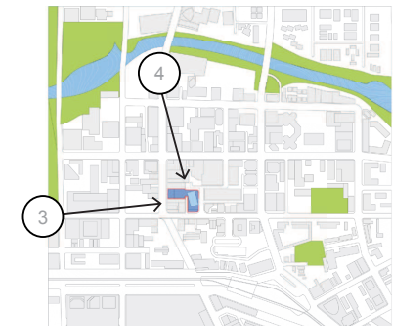
cronepartners | 36

INVESTIGATION & ANALYSIS

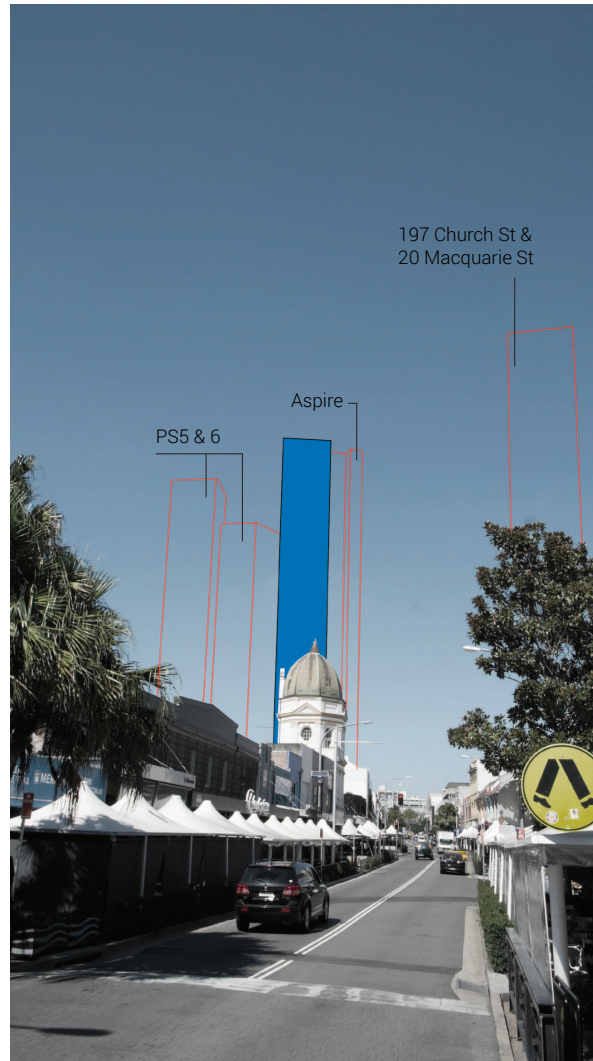
Proposed Envelope

View Corridors

- Proposed Tower
- Potential Future Developments



3. Looking East from Macquarie and O'Connell Street



4. Looking South along Church Street

NOTE: Surrounding Building Information - Parramatta Future Generation, Investing in Western Sydney, Parramatta City Council, Nov 2014; The "Greenway" Arcade by Willana Associates; 11 Hassall Street Height Analysis, Apr 2014 by JBA.

48 Macquarie & 220 Church Street | Urban Design Analysis

DISCLAIMER: All drawings are based on existing scanned pdfs and other gathered data. All dimensions are indicative only and subject to survey confirmation

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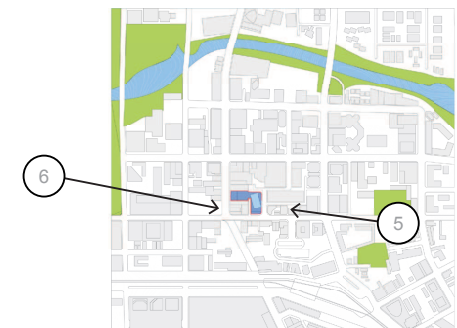
cronepartners | 37

INVESTIGATION & ANALYSIS

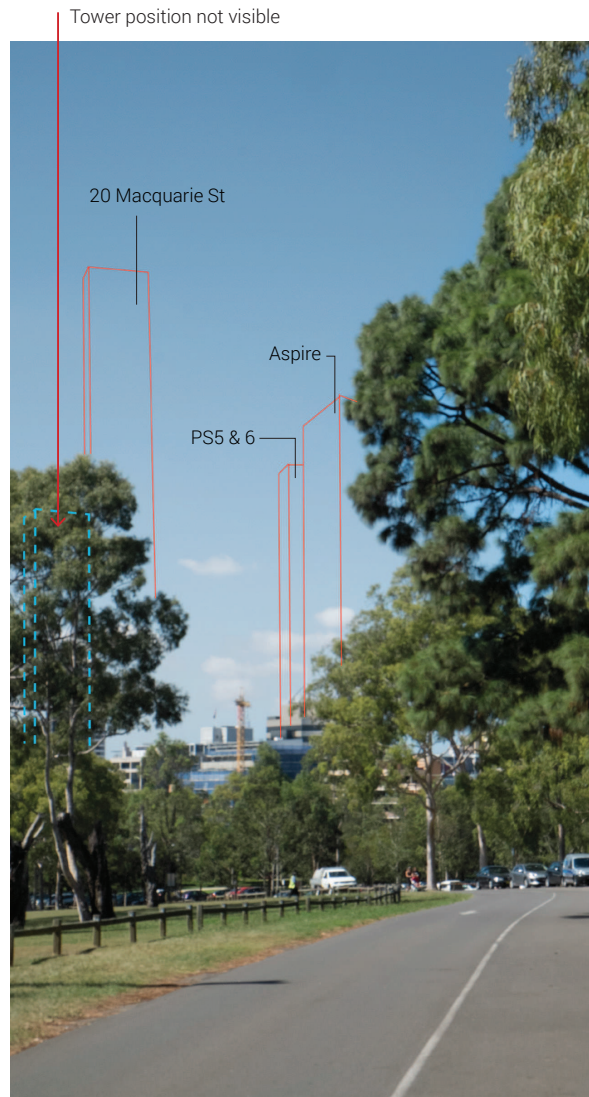
Proposed Envelope

View Corridors

- Proposed Tower
- Potential Future Developments



5. Looking West from Macquarie and Hassall Street



6. Looking South-East from Government House

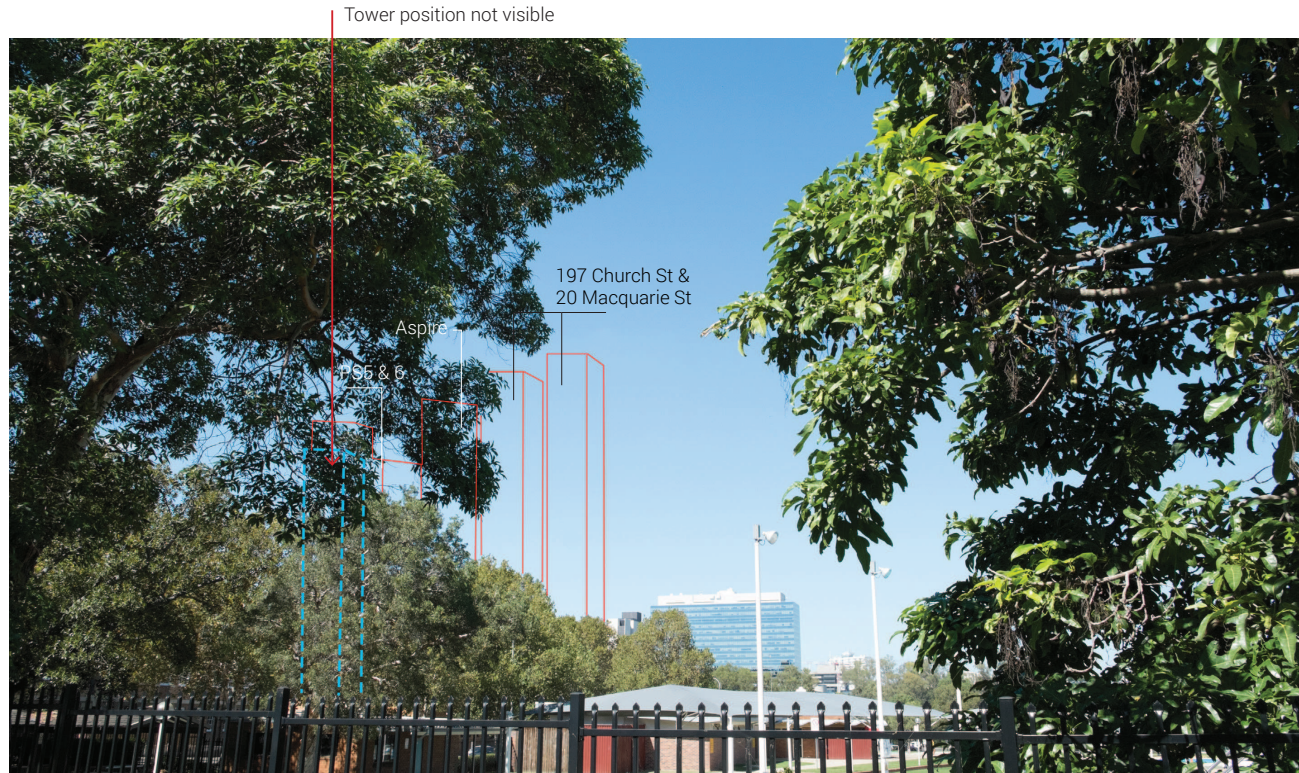
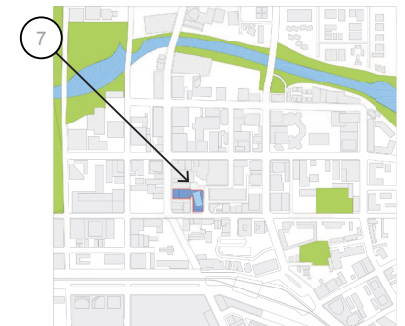
NOTE: Surrounding Building Information - Parramatta Future Generation, Investing in Western Sydney, Parramatta City Council, Nov 2014; The "Greenway" Arcade by Willana Associates; 11 Hassall Street Height Analysis, Apr 2014 by JBA.

INVESTIGATION & ANALYSIS

Proposed Envelope

View Corridors

- Proposed Tower
- Potential Future Developments



7. Looking South-East from Pirtek Stadium

NOTE: Surrounding Building Information - Parramatta Future Generation, Investing in Western Sydney, Parramatta City Council, Nov 2014; The "Greenway" Arcade by Willana Associates; 11 Hassall Street Height Analysis, Apr 2014 by JBA.



BUILDING ENVELOPE DRAWINGS

BUILDING ENVELOPE DRAWINGS

The massing envelope drawings aim to establish parameters that enable flexibility and innovation during any potential detailed design or competitive design phases.

Some of these parameters include;

- An opportunity to create a key new built element for Parramatta that will make a positive contribution to the city skyline and will serve as a future landmark.
- Establish active edges for the podium levels, providing human scale, a consistent street edge, and integrating the development with its immediate context
- Establish a built form and massing for the tower that responds to local urban context.
- Provide for increased permeability across the site.
- Provide for development flexibility; the envelope can accommodate a variety of tower and podium proportions to address future economic, market and social demands.

While potential uses and floorplate levels are noted in the massing envelope drawings, the final mix and individual plate heights will be determined during the detailed design or competitive design processes.

Any final design will need to adhere to the boundaries and limits defined by the building envelope.

Site Plan

Basement Envelope

Lower Podium Envelope

Upper Podium Envelope

Tower Envelope

Section AA

Section BB

North Elevation

South Elevation

East Elevation

West Elevation

3D Massing

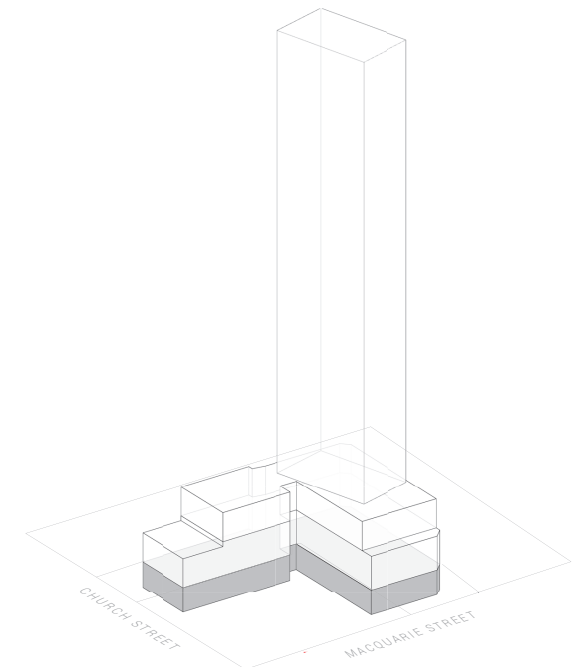
BUILDING ENVELOPE DRAWINGS

Site Plan



BUILDING ENVELOPE DRAWINGS

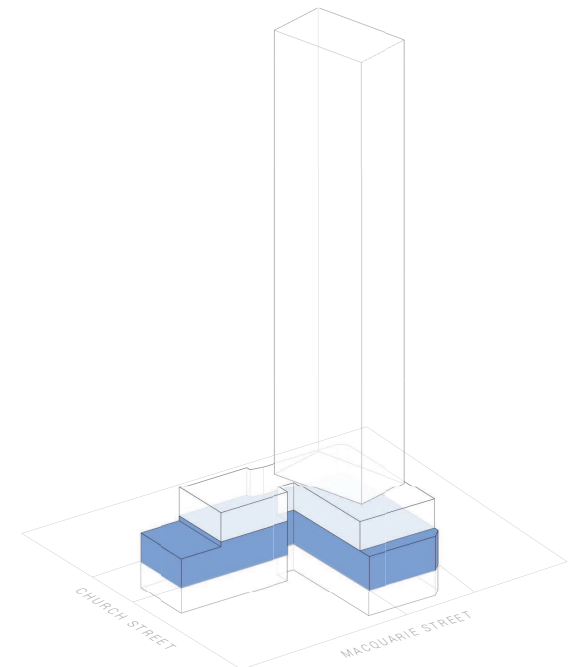
Basement Envelope



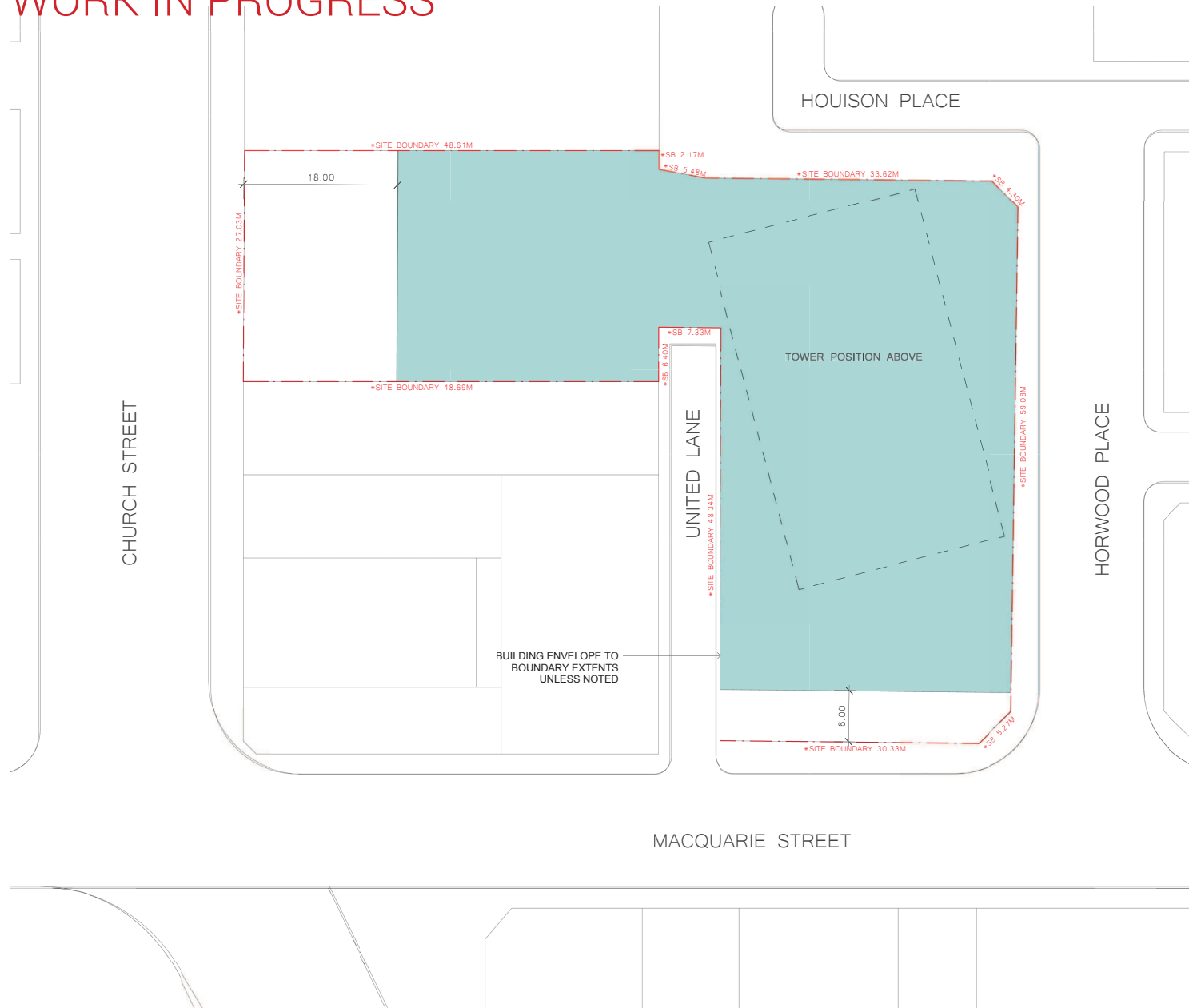


BUILDING ENVELOPE DRAWINGS

Lower Podium Envelope

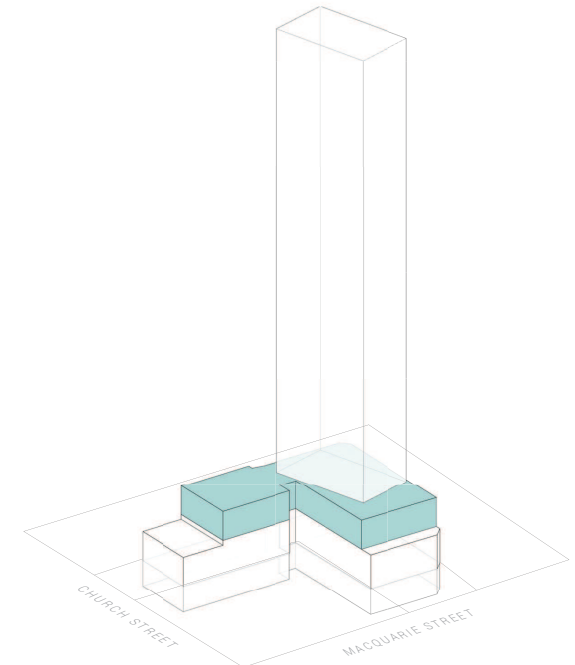


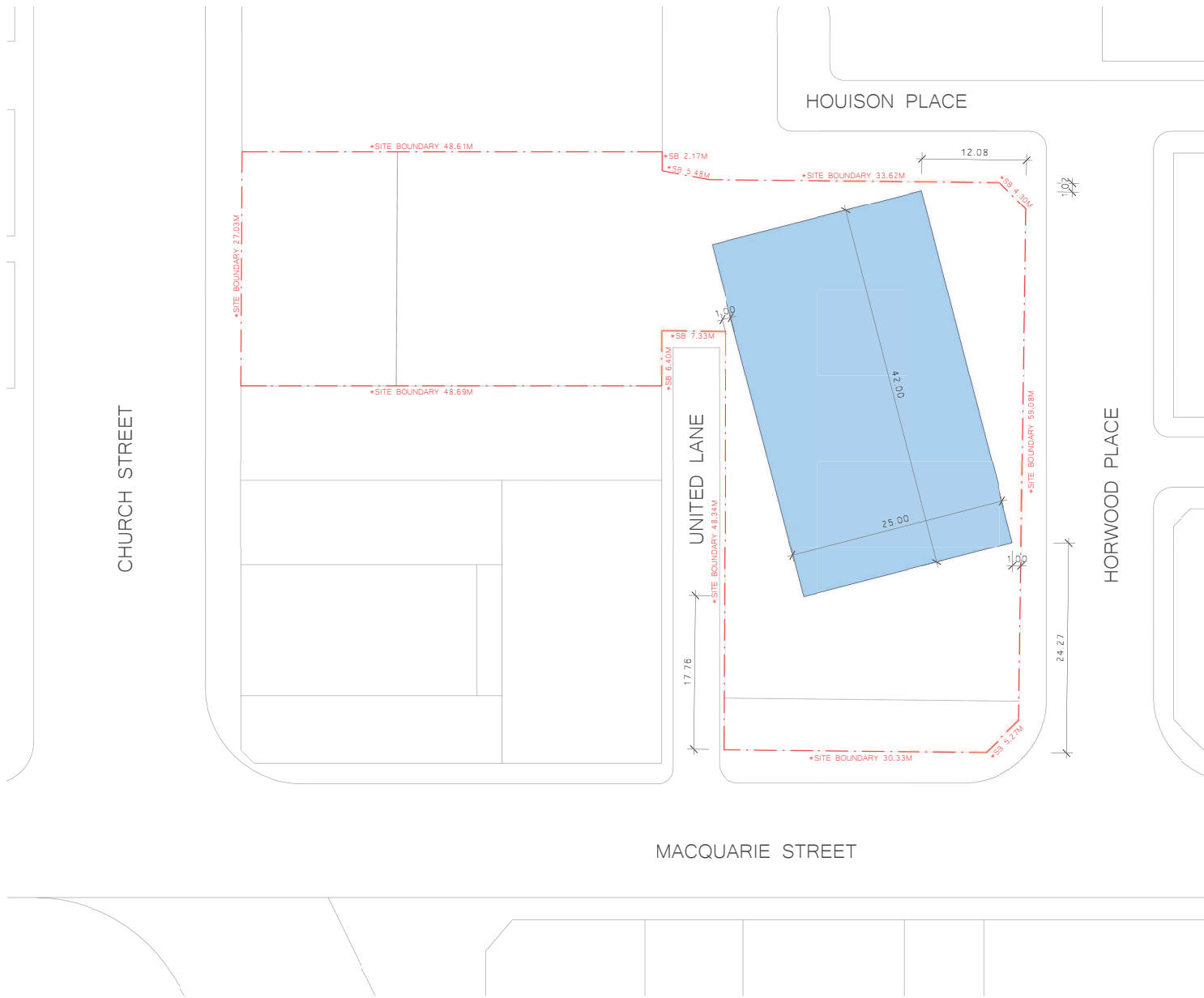
WORK IN PROGRESS



BUILDING ENVELOPE DRAWINGS

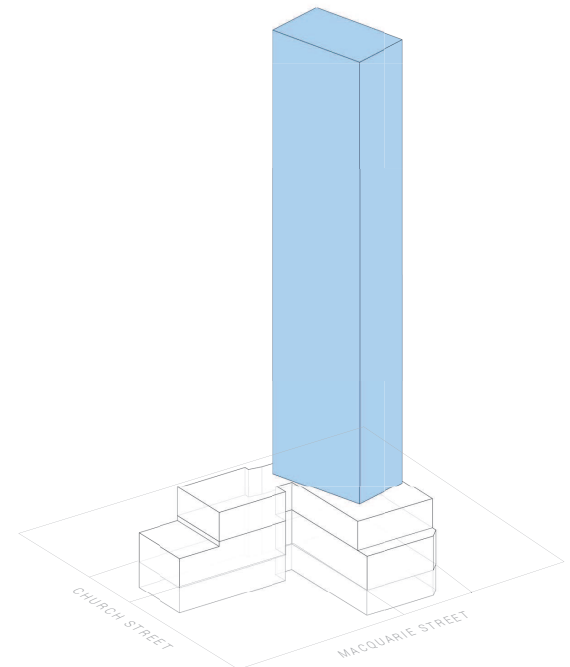
Upper Podium Envelope





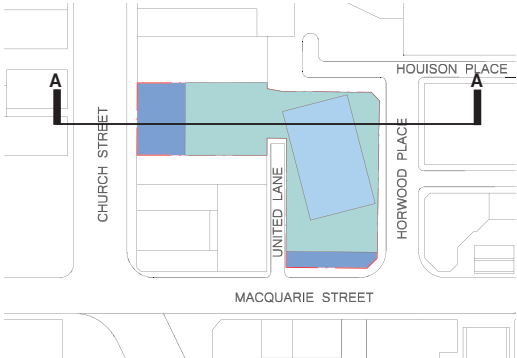
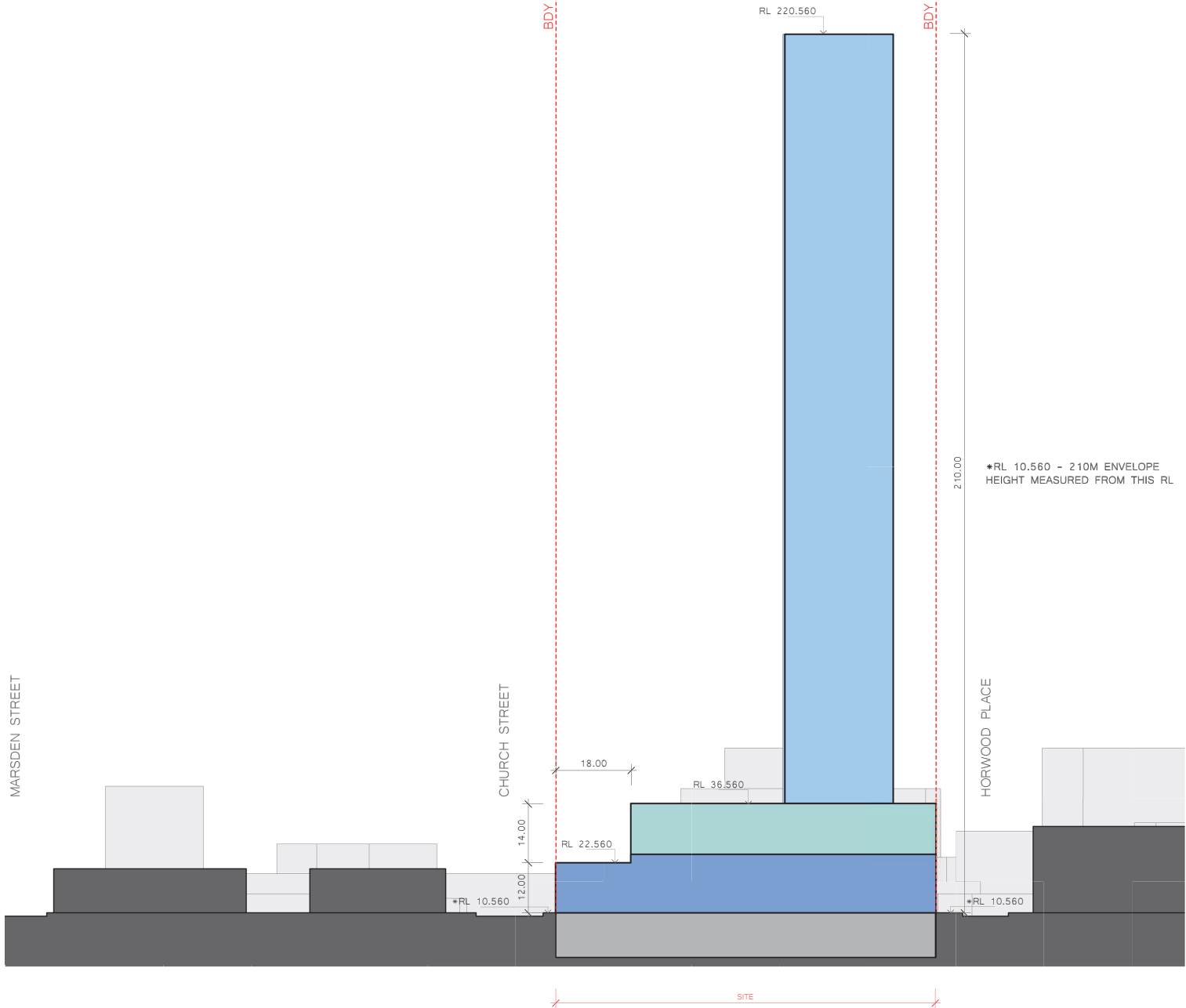
BUILDING ENVELOPE DRAWINGS

Tower Envelope



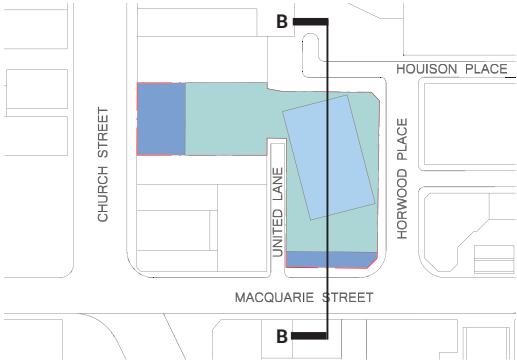
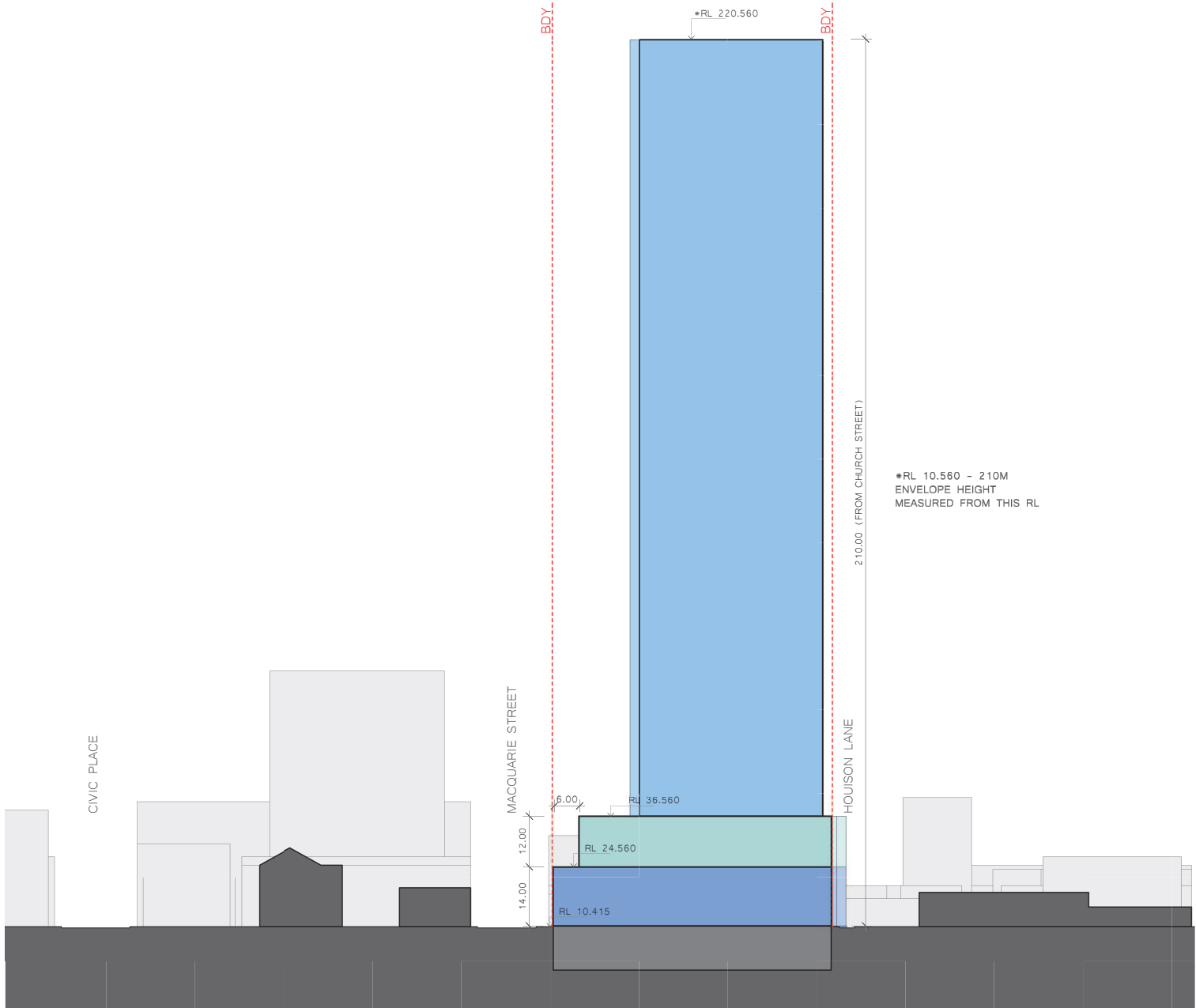
BUILDING ENVELOPE DRAWINGS

Section AA



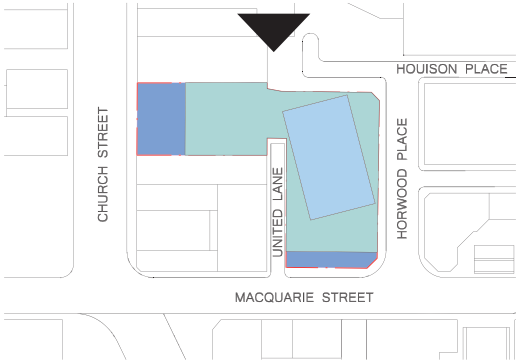
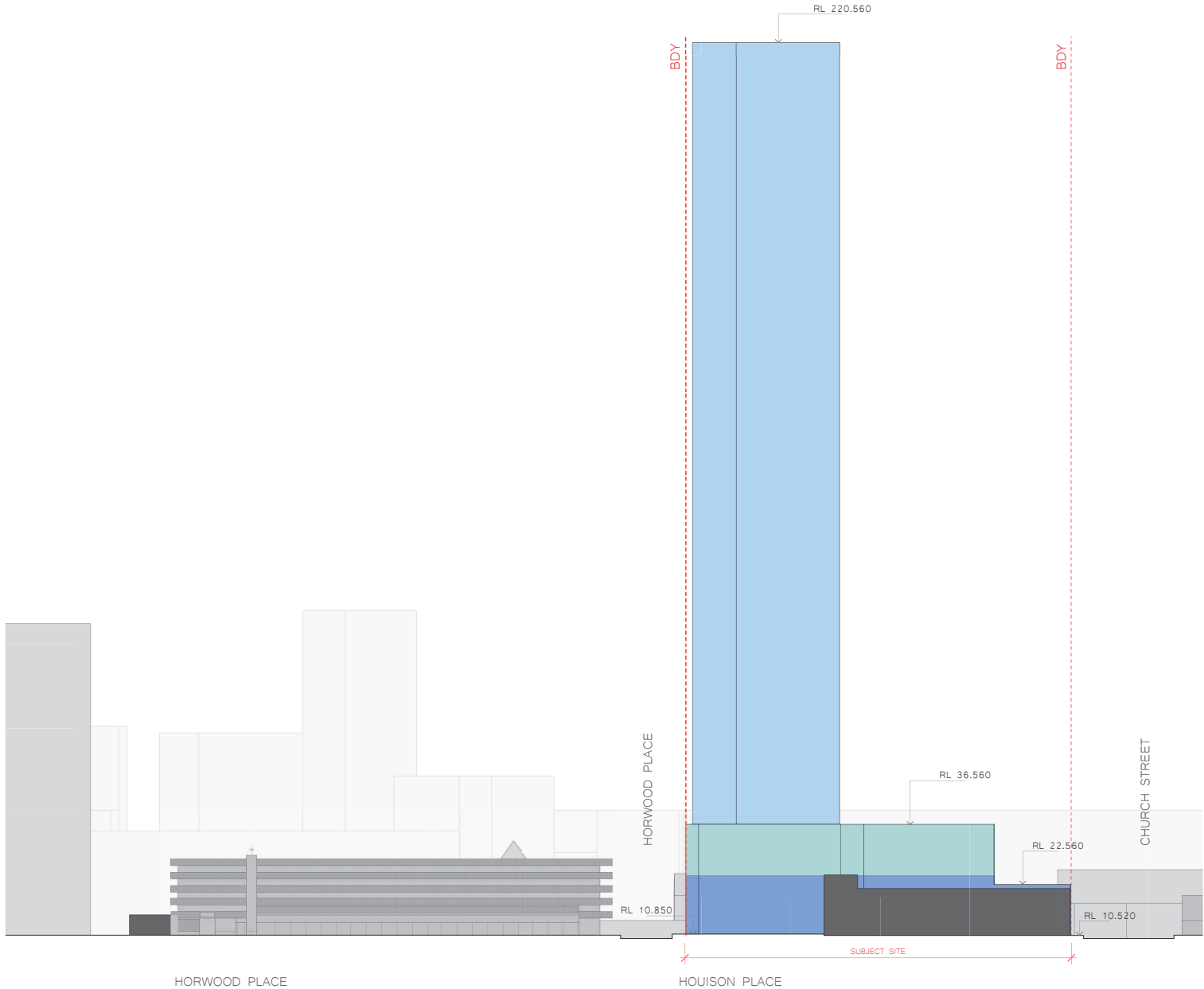
BUILDING ENVELOPE DRAWINGS

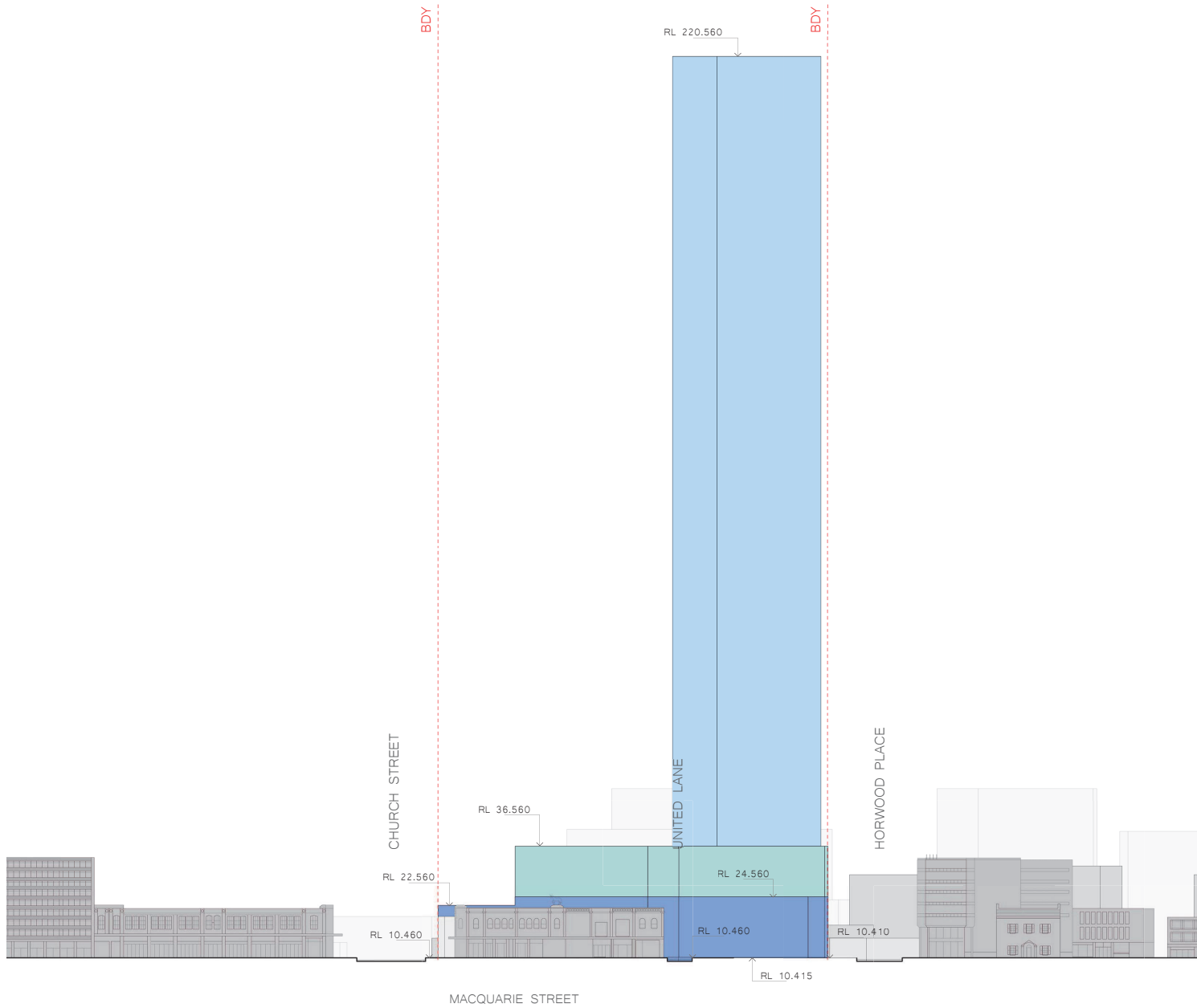
Section BB



BUILDING ENVELOPE DRAWINGS

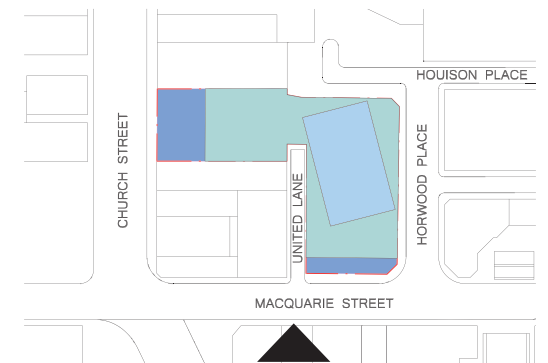
North Elevation





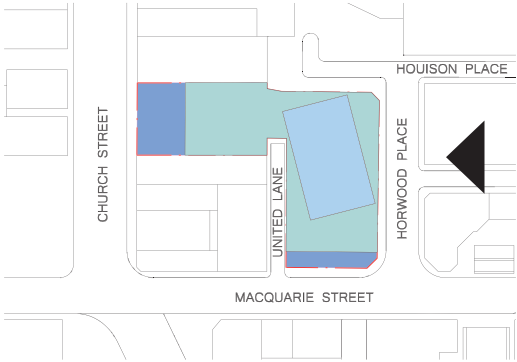
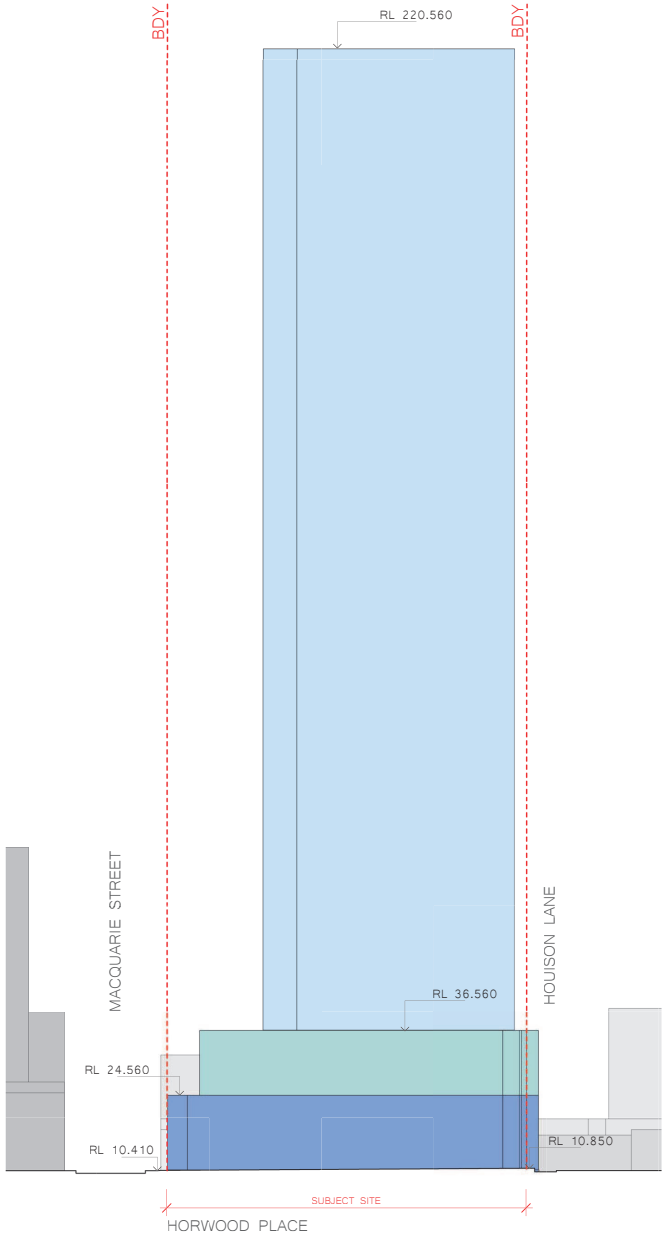
BUILDING ENVELOPE DRAWINGS

South Elevation



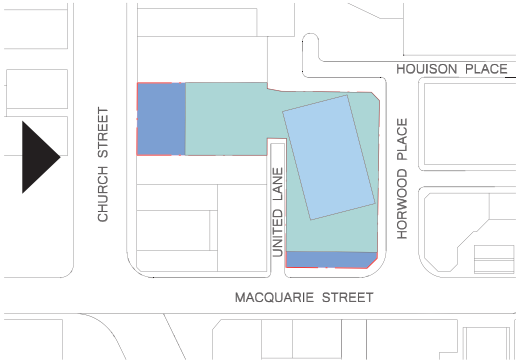
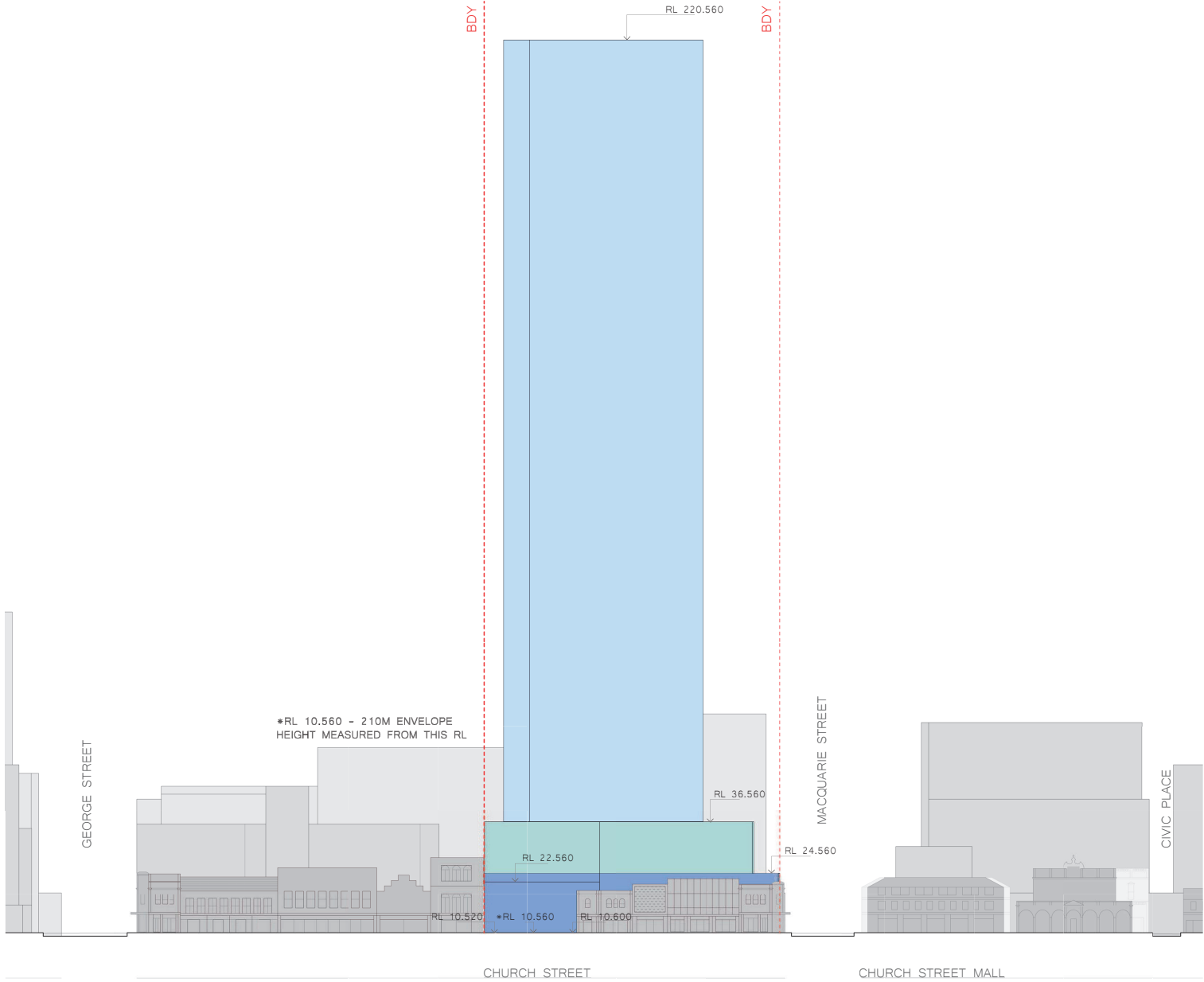
BUILDING ENVELOPE DRAWINGS

East Elevation

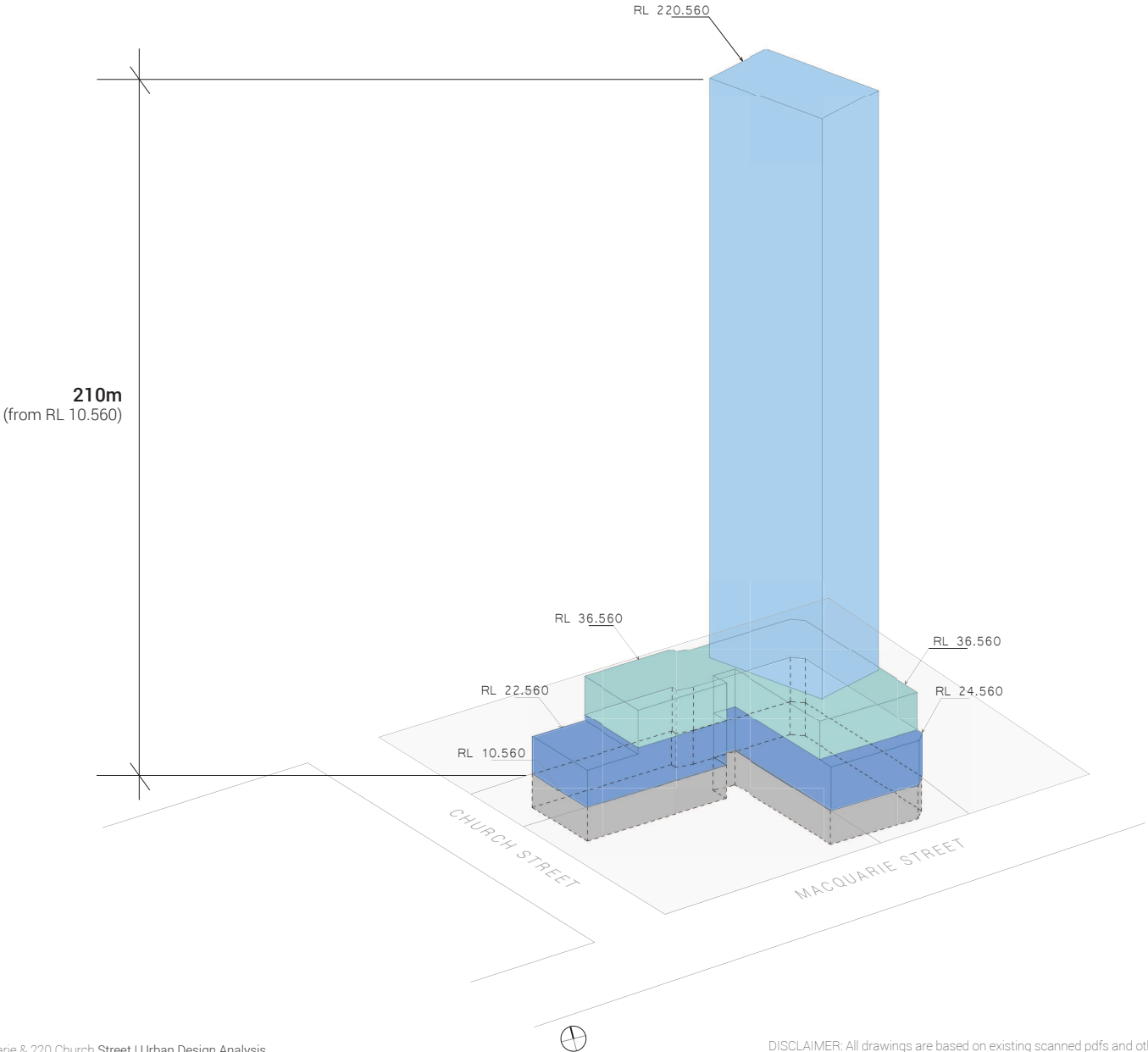


BUILDING ENVELOPE DRAWINGS

West Elevation



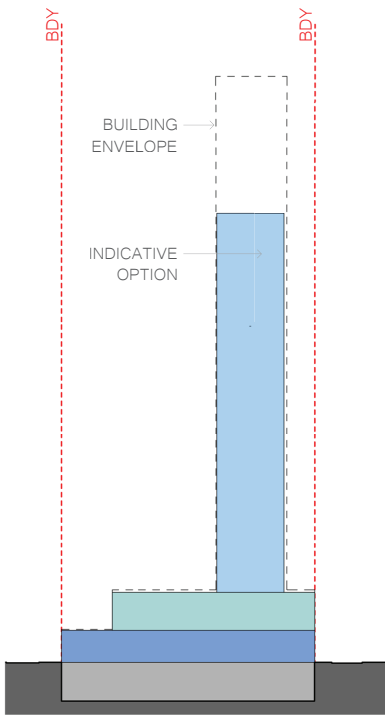
BUILDING ENVELOPE DRAWINGS



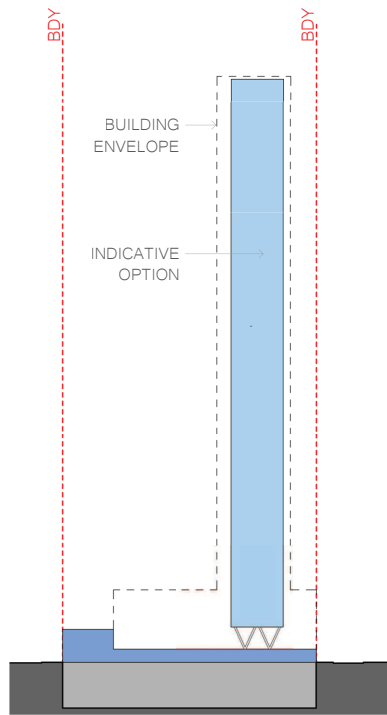
3D Massing

- Tower Envelope
- Upper Podium Envelope
- Lower Podium Envelope
- Basement Envelope

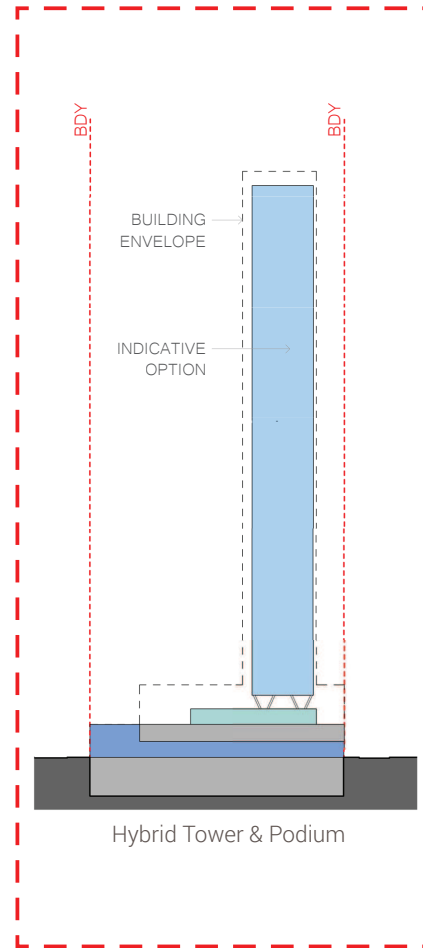
INDICATIVE SCHEME



Maximize Podium GFA



Maximize Tower GFA



Hybrid Tower & Podium

INDICATIVE SCHEME

INDICATIVE SCHEME

The indicative scheme aims to show the potential GFA that can be achieved within the proposed envelope. It has enough flexibility to accommodate a variety of tower and podium proportions to address any future economic, market and social demands as well as buildability issues.

- The adjacent diagrams describe some of these;
- Maximise podium GFA, with larger floorplate and shorter tower.
 - Maximise tower GFA, with taller slender tower and minimal podium
 - Hybrid tower and podium, with tall slender tower and medium sized podium

Being an indicative scheme only, the final design and outcome will be subject to a detailed design or competitive design process and subsequently a development approvals process

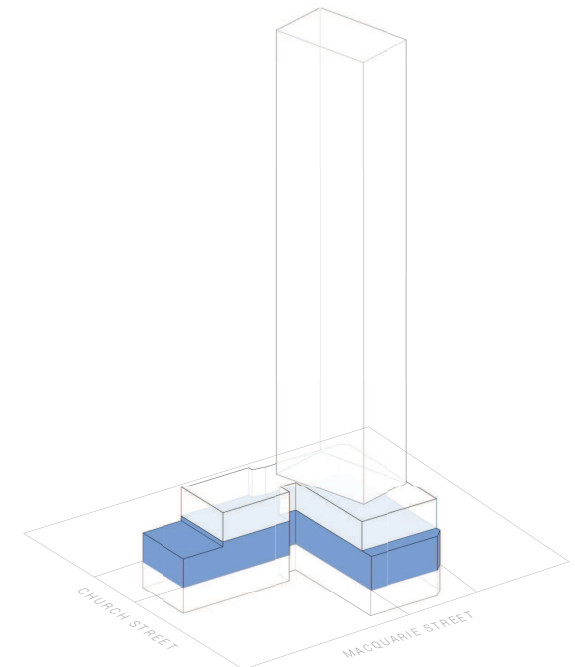
- Ground Floor Plan
- Level 1 Plan
- Typical Tower Plan
- Section AA
- Area Schedule
- 3D Montages



INDICATIVE SCHEME

Ground Floor Plan

- Maximise exposure to major frontages
- Encourage retail variety, including large retail and pocket retail.
- Promote through-site links and street activation zones identified in the future vision of Parramatta.
- Reduce the visible impact of service areas, entries / exits.

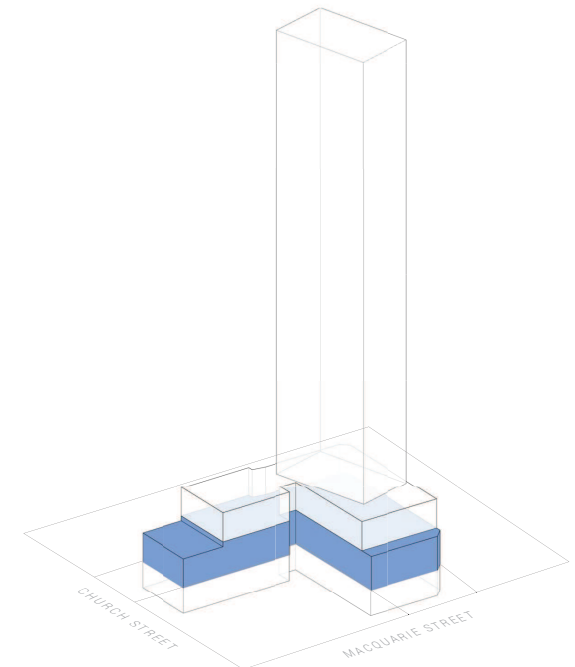




INDICATIVE SCHEME

Level 1 Plan

- Maximise exposure to major frontages with activated zones.
- Sleeve any service or carpark program with articulated façade that reads as one with the entire podium volume.

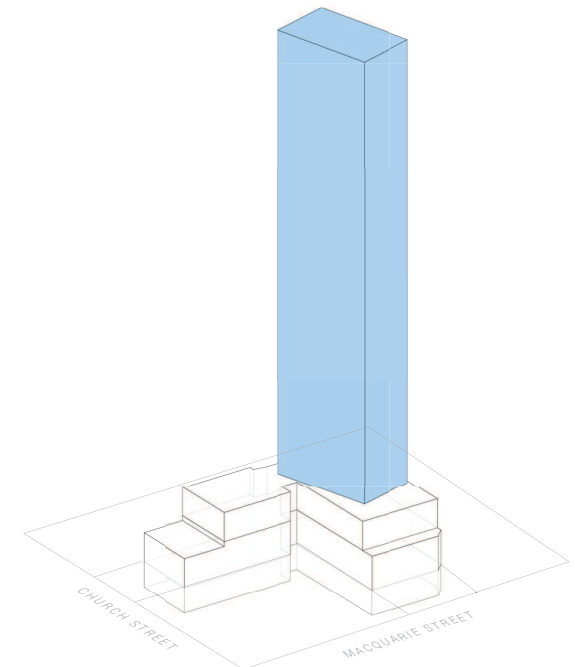


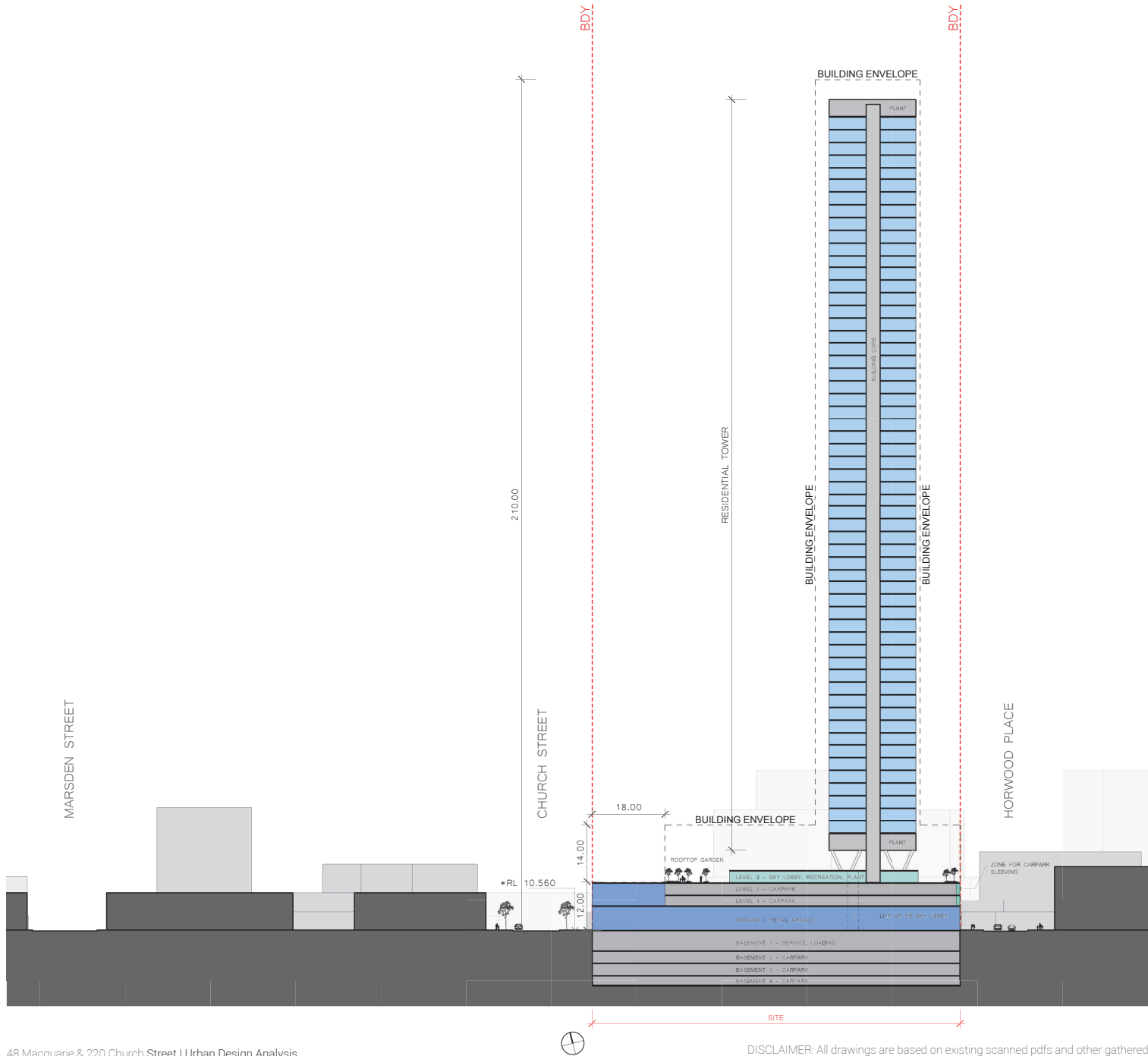


INDICATIVE SCHEME

Typical Tower Plan

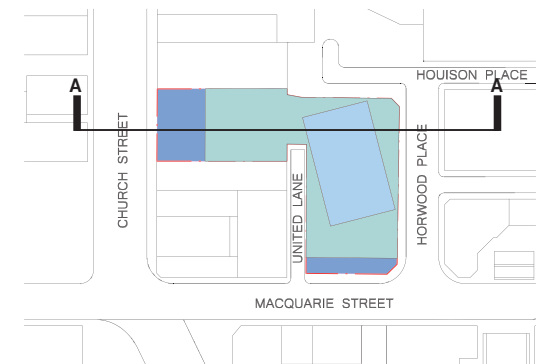
- Apartment sizes that adhere to market and SEPP 65 recommendations
- Maximise apartment amenity, such as sunlight and cross-ventilation, that adheres to market and SEPP 65 recommendations
- Floorplate size and orientation that encourages a tall slender tower with minimal Parramatta Square impact





INDICATIVE SCHEME

Section AA



48 Macquarie & 220 Church St, Parramatta			Mixed Use Tower		CA3265						
Level	Use	floor to floor height (m)	RL(m)	GBA	GFA incl balcony	Unit Typology					Cars
						Studio	1 Bed	2 Bed	3 Bed +	Total	
Roof			214.26								
Level 62	Plant	5.00	209.26	777m ²							
Level 59	Residential	2.10	207.16	777m ²	676m ²	0	0	4	2	6	
Level 60	Residential	3.10	204.06	777m ²	676m ²	0	0	4	2	6	
Level 59	Residential	3.10	200.96	777m ²	676m ²	0	0	4	2	6	
Level 58	Residential	3.10	197.86	777m ²	676m ²	0	0	4	2	6	
Level 57	Residential	3.10	194.76	777m ²	676m ²	0	0	4	2	6	
Level 56	Residential	3.10	191.66	777m ²	676m ²	0	0	4	2	6	
Level 55	Residential	3.10	188.56	777m ²	676m ²	0	0	4	2	6	
Level 54	Residential	3.10	185.46	777m ²	676m ²	0	0	4	2	6	
Level 53	Residential	3.10	182.36	777m ²	676m ²	0	0	4	2	6	
Level 52	Residential	3.10	179.26	777m ²	676m ²	0	0	4	2	6	
Level 51	Residential	3.10	176.16	777m ²	676m ²	0	0	4	2	6	
Level 50	Residential	3.10	173.06	777m ²	676m ²	0	2	6	0	8	
Level 49	Residential	3.10	169.96	777m ²	676m ²	0	2	6	0	8	
Level 48	Residential	3.10	166.86	777m ²	676m ²	0	2	6	0	8	
Level 47	Residential	3.10	163.76	777m ²	676m ²	0	2	6	0	8	
Level 46	Residential	3.10	160.66	777m ²	676m ²	0	2	6	0	8	
Level 45	Residential	3.10	157.56	777m ²	676m ²	0	2	6	0	8	
Level 44	Residential	3.10	154.46	777m ²	676m ²	0	2	6	0	8	
Level 43	Residential	3.10	151.36	777m ²	676m ²	0	2	6	0	8	
Level 42	Residential	3.10	148.26	777m ²	676m ²	0	2	6	0	8	
Level 41	Residential	3.10	145.16	777m ²	676m ²	0	2	6	0	8	
Level 40	Residential	3.10	142.06	777m ²	676m ²	0	2	6	0	8	
Level 39	Residential	3.10	138.96	777m ²	676m ²	0	2	6	0	8	
Level 38	Residential	3.10	135.86	777m ²	676m ²	0	2	6	0	8	
Level 37	Residential	3.10	132.76	777m ²	676m ²	0	2	6	0	8	
Level 36	Residential	3.10	129.66	777m ²	676m ²	0	2	6	0	8	
Level 35	Residential	3.10	126.56	777m ²	676m ²	0	2	6	0	8	
Level 34	Residential	3.10	123.46	777m ²	676m ²	0	2	6	0	8	
Level 33	Plant	5.00	118.46	777m ²							
Level 32	Residential	3.10	115.36	777m ²	676m ²	0	2	6	0	8	
Level 31	Residential	3.10	112.26	777m ²	676m ²	0	2	6	0	8	
Level 30	Residential	3.10	109.16	777m ²	676m ²	0	2	6	0	8	
Level 29	Residential	3.10	106.06	777m ²	676m ²	0	2	6	0	8	
Level 28	Residential	3.10	102.96	777m ²	676m ²	0	2	6	0	8	
Level 27	Residential	3.10	99.86	777m ²	676m ²	0	2	6	0	8	
Level 26	Residential	3.10	96.76	777m ²	676m ²	0	2	6	0	8	
Level 25	Residential	3.10	93.66	777m ²	676m ²	0	2	6	0	8	
Level 24	Residential	3.10	90.56	777m ²	676m ²	0	2	6	0	8	
Level 23	Residential	3.10	87.46	777m ²	676m ²	0	2	6	0	8	
Level 22	Residential	3.10	84.36	777m ²	676m ²	0	2	6	0	8	
Level 21	Residential	3.10	81.26	777m ²	676m ²	0	2	6	0	8	
Level 20	Residential	3.10	78.16	777m ²	676m ²	0	2	6	0	8	
Level 19	Residential	3.10	75.06	777m ²	676m ²	0	2	6	0	8	
Level 18	Residential	3.10	71.96	777m ²	676m ²	1	4	4	0	9	
Level 17	Residential	3.10	68.86	777m ²	676m ²	1	4	4	0	9	
Level 16	Residential	3.10	65.76	777m ²	676m ²	1	4	4	0	9	
Level 15	Residential	3.10	62.66	777m ²	676m ²	1	4	4	0	9	
Level 14	Residential	3.10	59.56	777m ²	676m ²	1	4	4	0	9	
Level 13	Residential	3.10	56.46	777m ²	676m ²	1	4	4	0	9	
Level 12	Residential	3.10	53.36	777m ²	676m ²	1	4	4	0	9	
Level 11	Residential	3.10	50.26	777m ²	676m ²	1	4	4	0	9	
Level 10	Residential	3.10	47.16	777m ²	676m ²	1	4	4	0	9	
Level 9	Residential	3.10	44.06	777m ²	676m ²	1	4	4	0	9	
Level 8	Residential	3.10	40.96	777m ²	676m ²	1	4	4	0	9	
Level 7	Residential	3.10	37.86	777m ²	676m ²	1	4	4	0	9	
Level 6	Residential	3.10	34.76	777m ²	676m ²	1	4	4	0	9	
Level 5	Residential	3.10	31.66	777m ²	676m ²	1	4	4	0	9	
Level 4	Residential	3.10	28.56	777m ²	676m ²	1	4	4	0	9	
Level 3	Sky Lobby / Recreation	6.00	22.56	2,695m ²	800m ²						
Level 2	Carpark	3.00	19.56	3,458m ²							61
Level 1	Retail / Carpark	6.00	16.56	3,458m ²	500m ²						61
Ground	Retail	6.00	10.56	3,458m ²	3,200m ²						
Basement 1	Plant / Loading / Carpark	5.00	5.56	3,458m ²							77
Basement 2	Carpark	3.10	2.46	3,458m ²							93
Basement 3	Carpark	2.10	3.46	3,457m ²							93
Basement 4	Carpark	3.10	-0.64	3,458m ²							93
Total				72,743m²	42,356m²	15	122	286	20	443	480
Maximum Allowable GFA				42,366m²	10m² UNDER						

General Notes:-

- GBA - Gross Building Area - Total Building Area
- GFA - Gross Floor Area - As per PC Council Definition
- NLA - Net Lettable Area - As per PCA method of measurement
- NSA - Net Saleable Area - As per PCA method of measurement
- All areas and numbers are based on concept drawings and are subject to final design and survey

SEPP 65 - Residential Flat Design Code

SEPP 65 RULES OF THUMB	% of apts	No of apts	COMPLIANCE (Yes or No)
Sunlight Access to Living Rooms & Private Open Space	70%	of apartments should receive 3hrs btw 9am & 3pm June 21	yes
Cross Ventilation	60%	of apartments should be naturally cross ventilated	yes
South Aspect (SW-SE) Units	10%	of single aspect apartments (maximum)	yes
Natural Ventilation to Kitchen	25%	of apartments should have access to natural ventilation	yes
Accessibility	20%	of apartments require barrier free access	yes
Deep Soil Zone	25%	of open space area on site (at least 1.3m soil depth)	yes
Open Space	25%	of site area (between 25-30%)	yes
Private Open Space		For each apartment at ground level, 25m ² (min depth 4m)	n/a
Apartment Mix		Appropriate apt mix for location	yes
Single Aspect Apartments		Maximum 8m in depth	no
Rear wall of kitchen		no more than 8m from window	yes
Balcony depth		minimum of 2m	yes
Minimum ceiling heights		2.7m in habitable rooms; 2.4m non-habitable rooms	yes
Building Depth		apt buildgn depth of 10-18m	no
Building Separation		Compliance with Building separation min standards	yes
Internal Circulation		Max 8 units per core / Corridor	yes
Storage		Studio 6m3 1B 8m3 2B 8m3 3B plus 10m3	yes
Stormwater Management		Reduce the volume impact of stormwater on infrastructure by retaining it on site.	yes

INDICATIVE SCHEME

Area & SEPP65 Tables





INDICATIVE SCHEME

Montage

View from Parramatta Square looking North-East

INDICATIVE SCHEME

Montage

View from Church Street



INDICATIVE SCHEME

Montage

View from Macquarie Street

