

# **Attachment A3**

**Urban Design Report Appendices**

# I—Appendices

- Survey
- Envelope Drawings
- Public Art Strategy
- Landscape Principles
- Residential Amenities Studies
- Shadow Diagrams

# Survey

## NOTES

- THESE NOTES AND LEGEND (IF SHOWN) FORM PART OF THE PLAN AND SURVEY AND MUST REMAIN WITH THE PLAN IN ANY REPRODUCTION IN WHOLE OR PART.
- THE CAD FILE USES METRES AS ITS BASE UNIT AND IS IN A "GROUND" COORDINATE SYSTEM. IF THE SURVEY IS STATED AS MGA, ANY POINT IN THE FILE WILL BE AN APPROXIMATE MGA COORDINATE.
- SOME SYMBOLS REPRESENTING PHYSICAL STRUCTURES SUCH AS POWER POLES AND PITS ARE DIAGRAMMATIC ONLY AND DO NOT NECESSARILY REPRESENT THE ACTUAL SIZE AND EXTENT OF THESE FEATURES.
- THE SURVEY INFORMATION SHOWN HERE WAS PREPARED FOR A SPECIFIC PURPOSE FOR THE CLIENT SHOWN. THIS INFORMATION IS NOT INTENDED TO BE USED FOR ANY OTHER PURPOSE OR BY ANYONE NOT AUTHORISED BY THIS CLIENT.
- BOUNDARY DIMENSIONS AND AREAS HAVE BEEN DETERMINED BY CURRENT CADASTRAL SURVEY AND THE BOUNDARY AND EASEMENT LINES IN THE ELECTRONIC FILE HAVE BEEN INCLUDED USING THOSE SURVEYED DIMENSIONS. THE TITLE DIMENSIONS SHOWN ON THE HARD COPY PLAN TAKE PRECEDENCE OVER THE LINES IN THE ELECTRONIC FILE.
- THE TITLE/S TO THE SUBJECT LAND HAS BEEN REVIEWED AND THE POSITION OF ALL EASEMENTS AFFECTING THE LAND ARE SHOWN. THE TERMS OF ANY EASEMENT, RESTRICTION ON THE USE OF LAND OR COVENANT AFFECTING THE LAND HAVE NOT BEEN INVESTIGATED. LEASES AND OTHER NOTATIONS MAY ALSO EXIST WHICH AFFECT THE LAND.
- UNDERGROUND SERVICES OTHER THAN THOSE SHOWN HAVE NOT BEEN INVESTIGATED. PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION WORK ON THE SITE, THE RELEVANT SERVICE AUTHORITY SHOULD BE CONTACTED TO ESTABLISH DETAILED LOCATION AND DEPTH.
- THIS SURVEY IS LIMITED TO IMPROVEMENTS AND OTHER DETAIL WHICH WERE VISIBLE AND ACCESSIBLE AT THE TIME OF SURVEY. THE LOCATION OF DETAIL SUCH AS PRIVATE UNDERGROUND SERVICE LINES AND BUILDING FOUNDATIONS WITHIN THE SITE IS UNKNOWN.
- THE COORDINATES WITHIN THIS DRAWING RELATE TO THE DATUM SHOWN IN THE TITLE BLOCK. REFER TO A REGISTERED LAND SURVEYOR FOR FURTHER CLARIFICATION. CAUTION SHOULD BE TAKEN WHEN IMPORTING INFORMATION OBTAINED FROM OTHER SUB-CONSULTANTS OR SOURCES TO ENSURE THAT THE DATA IS ON A MATCHING COORDINATE SYSTEM.
- CONTOURS SHOWN HEREON DEPICT THE GENERAL TOPOGRAPHY ONLY. EXCEPT AT SPOT LEVELS SHOWN, THEY DO NOT NECESSARILY REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT.
- CONTOUR INTERVAL 0.5m
- ANY GUTTER, RIDGE, ROOF AND WINDOW DETAILS AND LEVELS SHOWN HAVE BEEN OBTAINED VIA INDIRECT SURVEY METHODS WHERE VISIBLE FROM GROUND LEVEL AND ARE SHOWN ON THIS PLAN IN THEIR APPROXIMATE LOCATION FOR THE PURPOSE OF GENERAL SITE ANALYSIS ONLY.
- ANY TREE CANOPIES, TRUNK DIAMETERS AND HEIGHTS SHOWN ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED BY FURTHER SURVEY WORKS IF CRITICAL TO DESIGN OR SITE ANALYSIS.
- SMALL TREES, SHRUBS, GARDEN FEATURES, PATHWAYS AND OTHER MINOR DETAIL MAY NOT BE SHOWN ON THIS PLAN, FOR THE PURPOSES OF THIS SURVEY.

ORIGIN OF LEVELS: PM 43307  
R.L. 16.752 (AHD)

ORIGIN OF MGA 2020 CO-ORDINATES  
E 333955.491  
N 6250722.208

## LEGEND:

- FL FLOOR LEVEL
- DCK DECK
- DS DOOR SILL
- PAR PARAPET
- PP POWER POLE
- RF ROOF
- RDG RIDGE
- SGN ROAD SIGN
- SIC SEWER INSPECTION COVER
- TG TOP OF GUTTER
- TP TOP OF PERGOLA
- TK TOP OF KERB
- TGG TOP OF GRATE
- TRW TOP OF WALL
- TF TOP OF FENCE (GLASS)
- VER VERANDAH
- US UNDERSIDE OF BUILDING
- COL COLUMN
- SL DRAINAGE PIT SURFACE LEVEL
- INV DRAINAGE PIT INVERT LEVEL
- VER VERANDAH
- AMN AMNING
- GRW DENOTES GROUND LEVEL WALL
- LSW DENOTES LEVEL 5 WALL
- L6W DENOTES LEVEL 6 WALL

- Comms Pit/Manhole
- Drainage Manhole
- Electrical Power Pole
- Gas Meter
- Miscellaneous Manhole
- Sewer Vent
- Sewer Lamphole
- Sign Post
- Tree (Canopy spread, trunk diameter, Height)
- Water Meter
- Water Tap

NOTATIONS SHOWN ON CERTIFICATE OF TITLE LOT 1 D.P. 778342

AFFECTING THE LAND:

(A) EASEMENT FOR SUPPORT VARIABLE WIDTH BENEFITTING THE SUBJECT LAND (VIDE DP778342)

CREATED BY DEALING AA977313

SUBSTATION PREMISES No 7901 IS LOCATED AT BASEMENT 3 & 4.

EASEMENTS FOR ELECTRICITY PURPOSES EXIST AT BASEMENT 1 & 4.

RIGHTS OF WAY EXIST AT BASEMENT 1, 2 & 3

EASEMENT FOR ELECTRICITY CABLE RISER EXISTS AT BASEMENT 1 & 2.

SITE OF SUBSTATION PREMISES, RIGHTS OF WAY AND EASEMENTS FOR ELECTRICITY HAVE NOT BEEN SHOWN FOR CLARITY PURPOSES

RESTRICTIONS AS31262, 724697

THE TERMS AND LOCATIONS OF COVENANTS & RESTRICTIONS HAVE NOT BEEN INVESTIGATED.

*Daniel Gerard Williams*

DANIEL GERARD WILLIAMS  
REGISTERED SURVEYOR  
BEVERIDGE WILLIAMS  
447 KENT STREET, SYDNEY 2000

SEE SHEET 7

SEE SHEET 2

SEE SHEET 3

SEE SHEET 6

SEE SHEET 5

SEE SHEET 4

MARKET

STREET

SUSSEX

STREET

KENT

STREET

1  
DP 83716  
No. 160 - 166  
MULTI LEVEL CONCRETE,  
METAL & GLASS  
COMMERCIAL BUILDING

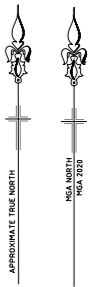
SP 30930  
No. 379 - 381  
MULTI LEVEL RENDERED  
BRICK COMMERCIAL  
BUILDING

BOUNDARY CORNER  
MGA2020  
E.333938.494  
N.6250825.240

1  
DP 778342  
3606m<sup>2</sup>  
No. 383  
MULTI LEVEL CONCRETE,  
GLASS & METAL  
COMMERCIAL BUILDING  
WITH CARPARK BELOW

3  
DP 789759  
No. 2  
MULTI LEVEL RENDERED  
GLASS COMMERCIAL  
BUILDING WITH  
CARPARK BELOW

BOUNDARY CORNER  
MGA2020  
E.333944.792  
N.6250772.847



VER	BY	AMENDMENTS	DATE
A	V.M.	INITIAL ISSUE	30.09.22
B	V.M.	TRUE NORTH ADDED	07.10.22
C	D.W.	CO-ORDINATES SHIFTED FROM GDA94 TO MGA2020	11.10.22
D			
E			
F			
G			

• SERVICE AUTHORITY PITS, MANHOLES, POLES, MARKER POSTS, ETC., WHERE SIGHTED AT TIME OF SURVEY, HAVE BEEN LOCATED. THE SURVEY DOES NOT INCLUDE INVESTIGATION OR LOCATION OF UNDERGROUND INFRASTRUCTURE. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON OR ADJACENT TO THE SITE IT IS THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTORS TO APPLY FOR AND OBTAIN UP TO DATE PLANS THROUGH A NEW DEAL BEFORE YOU DIG SEARCH AND TO CONTACT ALL THE RELEVANT AUTHORITIES TO ESTABLISH AND CONFIRM THE DETAILED LOCATION AND DEPTH OF ALL UNDERGROUND SERVICES.



CLIENT:  
Charter Hall Holdings Pty Ltd



**Beveridge Williams**  
Land Development Consultants  
Registered Surveyors

Sydney (02) 9283 6677  
www.beveridgewilliams.com.au

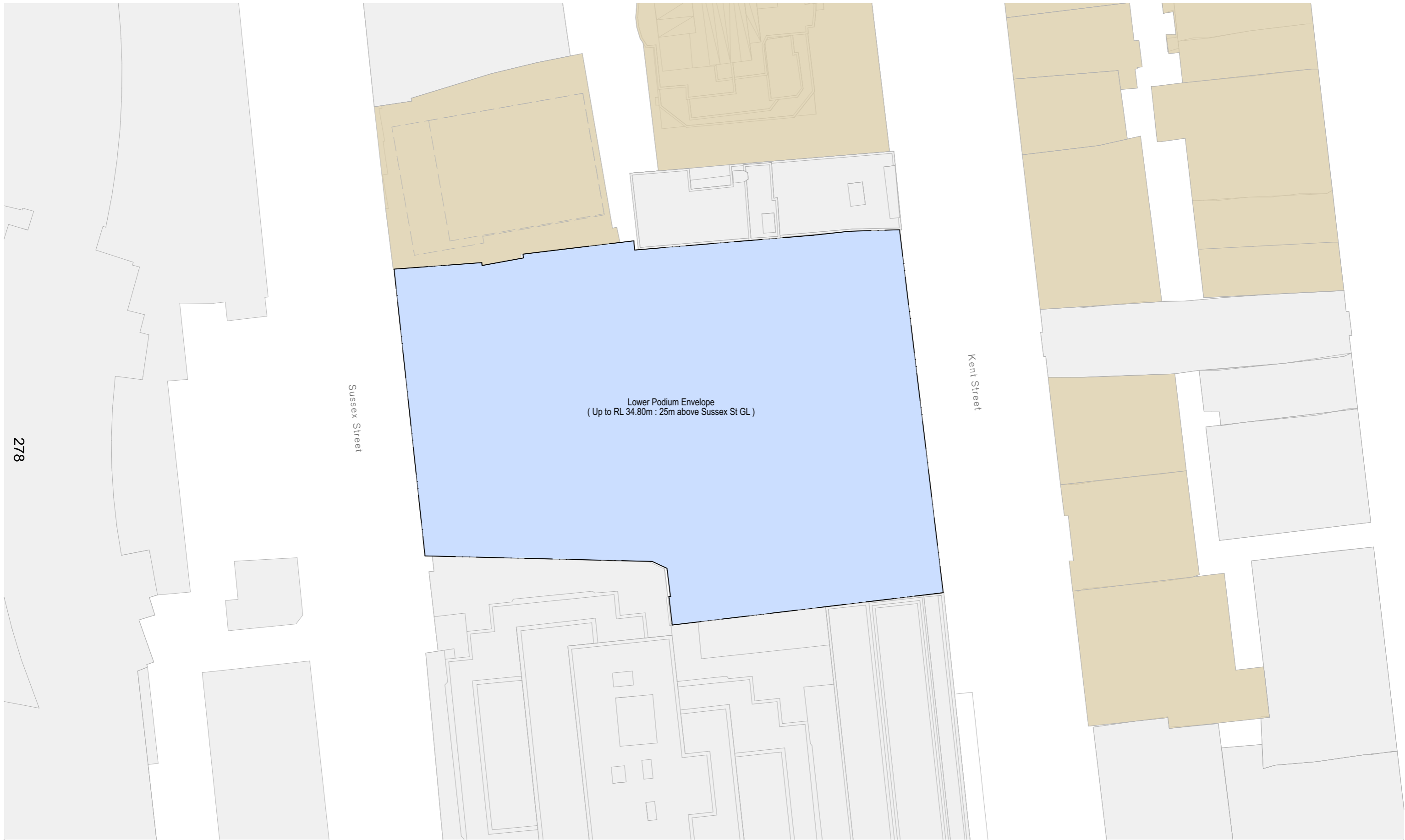
DETAILS:  
DETAIL SURVEY PLAN FOR  
DEVELOPMENT APPLICATION PURPOSES  
LOT 1 DP 778342  
383 KENT STREET SYDNEY

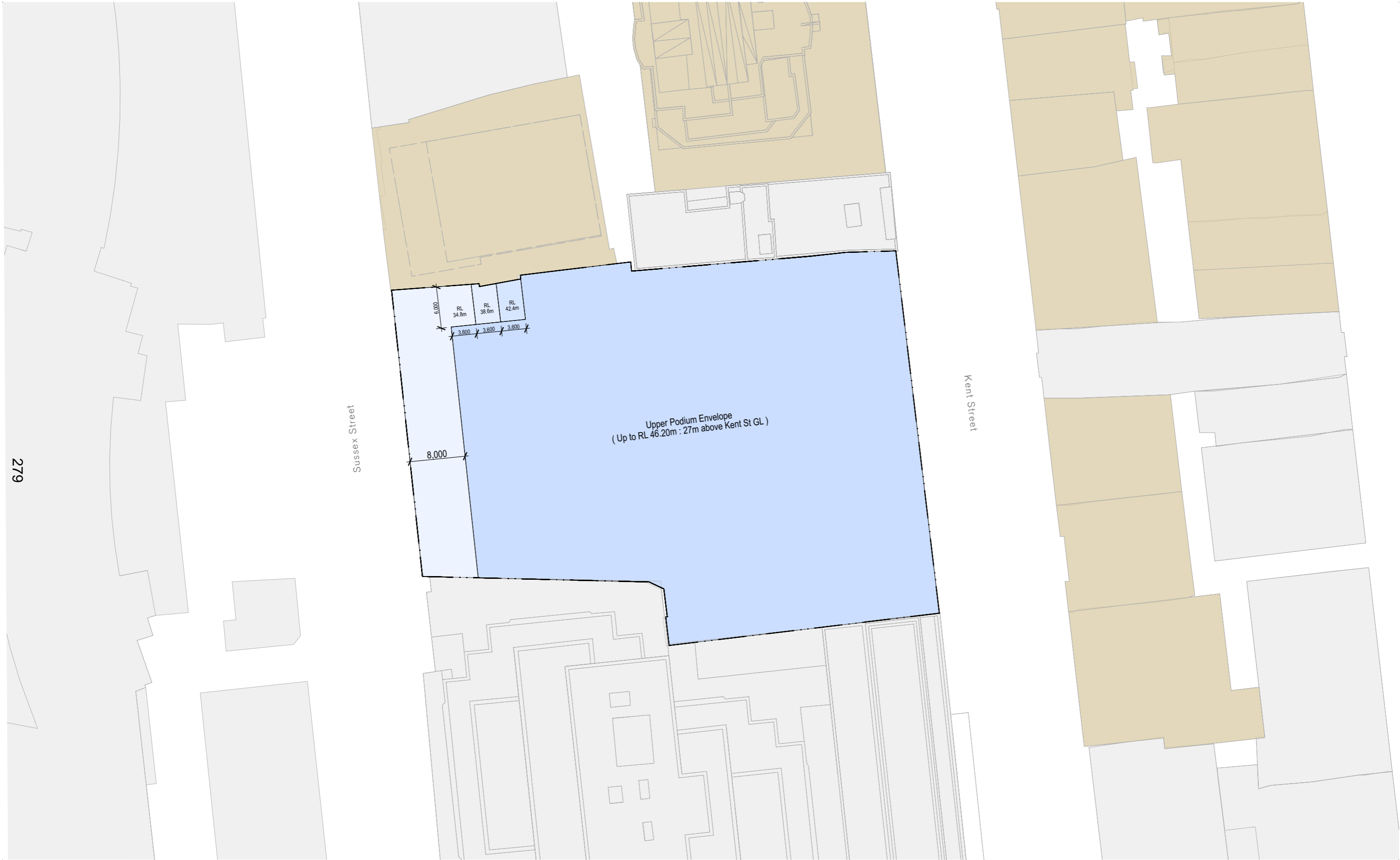
ORIGINAL SCALE	SHEET SIZE
1:300	A1
CAD REFERENCE: 2201978_DET3D_221011	
0 6 12 18	
SCALE: ON ORIGINAL DRAWING AT 1:300	

SURVEYOR:	V.M.
DRAWN:	J.T.
CHECKED:	V.M.
SURVEY DATE:	07.09.2022
VERTICAL DATUM:	AHD
HORIZONTAL DATUM:	MGA 2020

PROJECT No.	2201978
DRAWING REF.	DETAIL 3D
VERSION	A
SHEET	1 OF 7

# Proposed Envelope Drawings





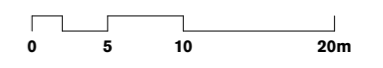
279



280

**Envelope - Tower Roof Plan**

Charter Hall - 383 Kent Street

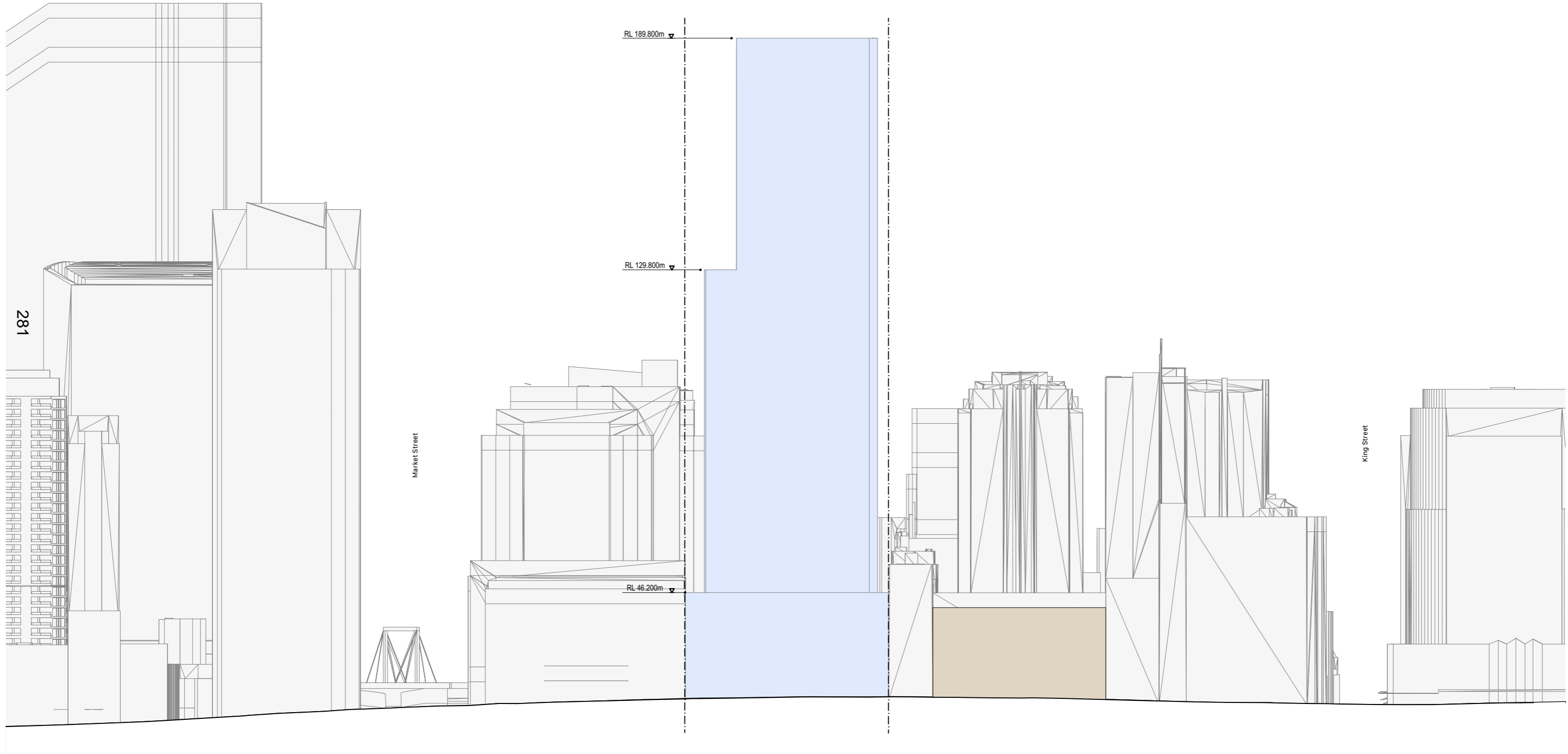


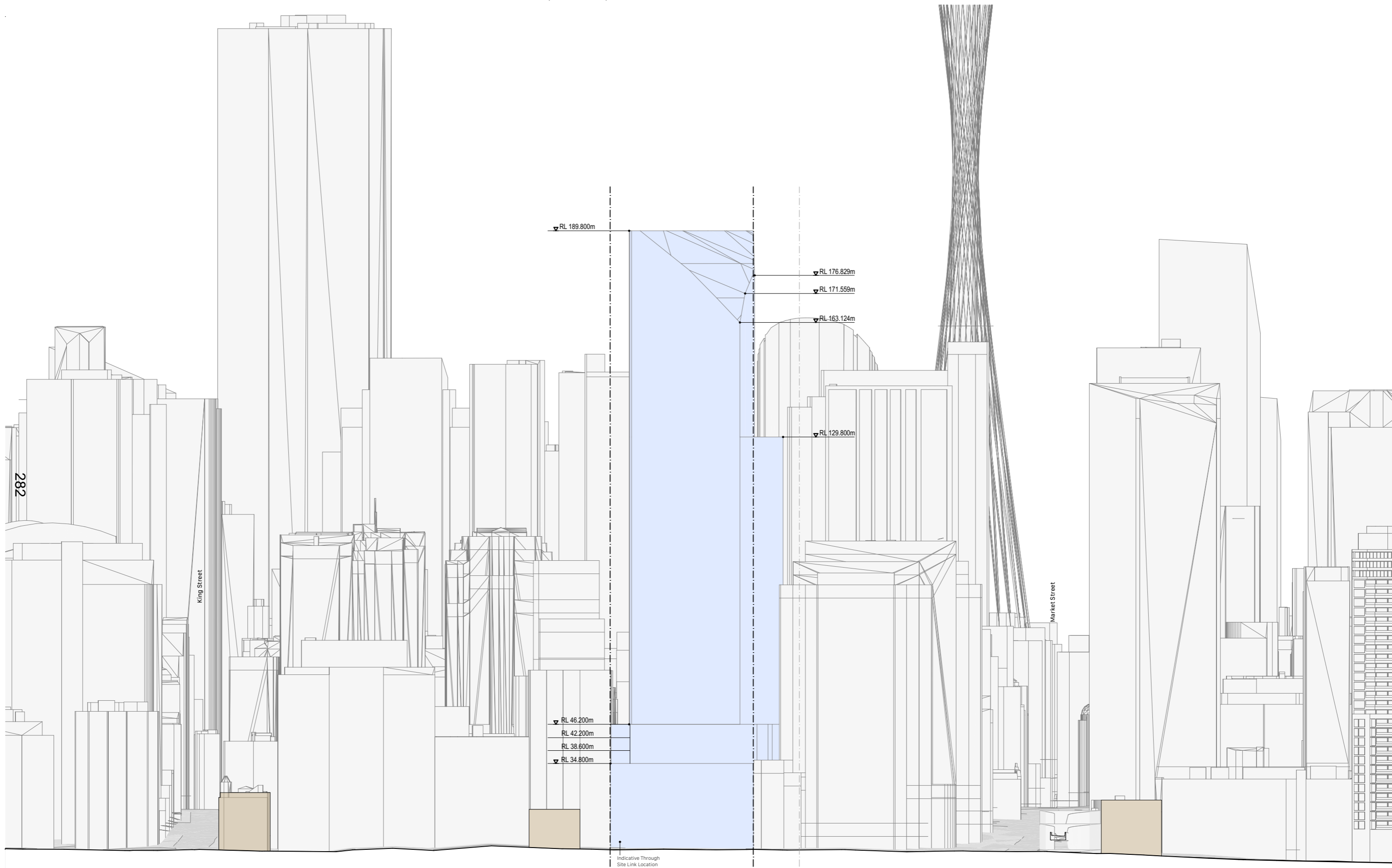
1:500 @ A3



2/2/2024

For Information





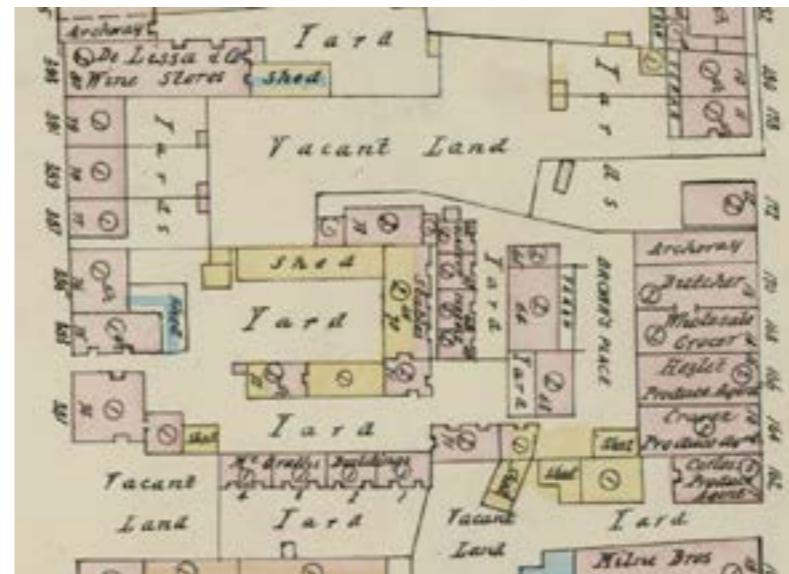


# Public Art Strategy

## History of the Site

This mid-block site sits within the western fabric of Sydney's CBD, a part of a greater structure of fine grain pedestrian pathways from ridgeline to shore, carved out streets facilitating trade and sustenance for the colony. Once tracks and freshwater rivulets passed through rocky escarpments shaded by angophora and interspersed with Gadi Trees which gave the people of this Country their name.

A century after invasion, the landscape could not have changed more - this was the height of maritime trade. Slopes were flattened to take the wheels of drays and wagons, trees felled for building and fuel, shorelines reclaimed and transformed by wharves, waterways diverted and covered over. The roads of Sussex Street became a hive of activity feeding the colony with produce from a growing agricultural sector and from around the world.



Site in the 1800s indicates multiple produce agents and wholesalers



Angophora and Gadi Trees



### Theme 1 — Ridge to Shore, Freshwater to Saltwater

Arising from Yerrabigan's revealing of Country, this place was once the path from ridge to shore, from freshwater to saltwater. The landscape was shaded by angophora

canopies and populated by Gadi Trees whose spikes were used for fishing. A steep escarpment is traced at this site evident in early images as the land was carved out for Sussex Street.



### Produce Trade — Cockle Bay and Sussex Street

A less celebrated element of Sydney's history were the plethora of produce traders who lined the streets adjacent to the cockle bay wharves. This was a hive of activity - processions of drays and wagons were 'unceasing...in business hours.. blocks are almost as frequent as those of handsome equipages in Oxford Street, London'



<https://trove.nla.gov.au/newspaper/article/71484758/5353037>

# Public Art Strategy

## Artwork Procurement Methodology

In accordance with the City of Sydney's objectives, fjc has devised a preliminary methodology and program to select and engage an artist.

This process will allow for sufficient time for the design to be developed and integrated into the building fabric whilst considering the constraints of the construction program.

The process is outlined as follows:

### 1 Art Strategy

A preliminary art strategy (Public Art Plan) will be established prior to art committee and artist selection.

### 2 Art Committee Selection

An art committee will be selected including local curators and cultural leaders (such as First Nations elders, cultural institution leaders such as museums) to assist in the public art procurement process.

Their selections will be based on their knowledge of contemporary Australian Art, First Nations Art and / or local traditional knowledge, site specific knowledge). They will be supported by client and design team representatives.

### 3 Brief Development and Issue

The committee will provide input into the brief and offer resources to assist artists in understanding the physical, spatial and cultural context.

A limited Expression of Interest based on a list of artists suggested by the Art Committee and reviewed by the City of Sydney will be confirmed through an EOI process.

The EOI will allow assessment of the artists' work, availability, methodology and capacity to complete the work within the program and response to the artist agreement provided.

### 4 Shortlist Design Concept

A minimum of 3 and maximum of 5 artists will be invited to undertake a paid design concept over a 4 week period. The concept will include a detailed methodology statement and a response to the evaluation criteria.

### 5 Engagement of the Artist

The successful artist is awarded a contract. Further detail to be provided in the detailed Public Art Plan. .

### 6 Design Development, Fabrication and Installation

A detailed program will be agreed. For the design development, fabrication, installation and commissioning of the artwork within the framework of the overall construction program. Within this program will be a series of staged presentations to the client, contractor and committee as well as coordination sessions with the design team and building contractor.

### 7 Final Public Art Report

A Final Public Art Report will be to issued City of Sydney as specified in the Interim Guidelines for Public Art in Private Developments

### 8 Budget

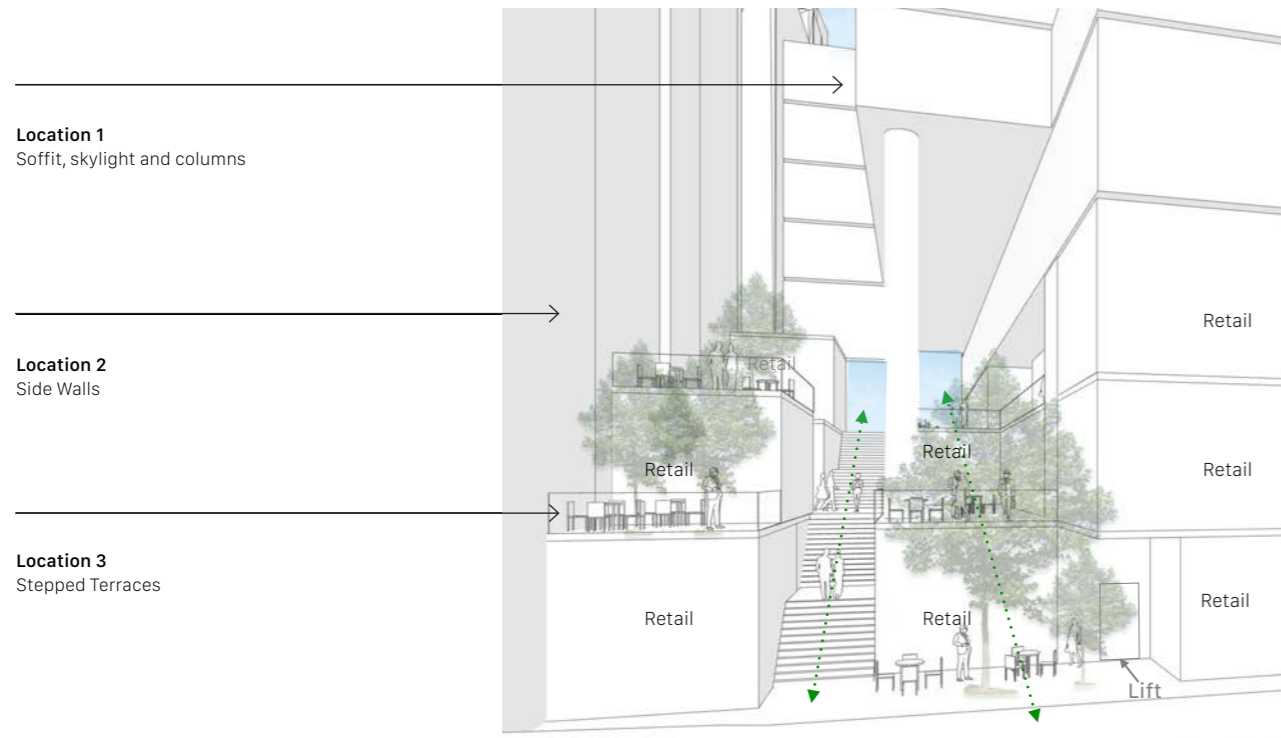
The budget for the work is outlined in the Public Benefit Offer / VPA



/ Angophora, Jade Oakley and Jessica

# Public Art Strategy

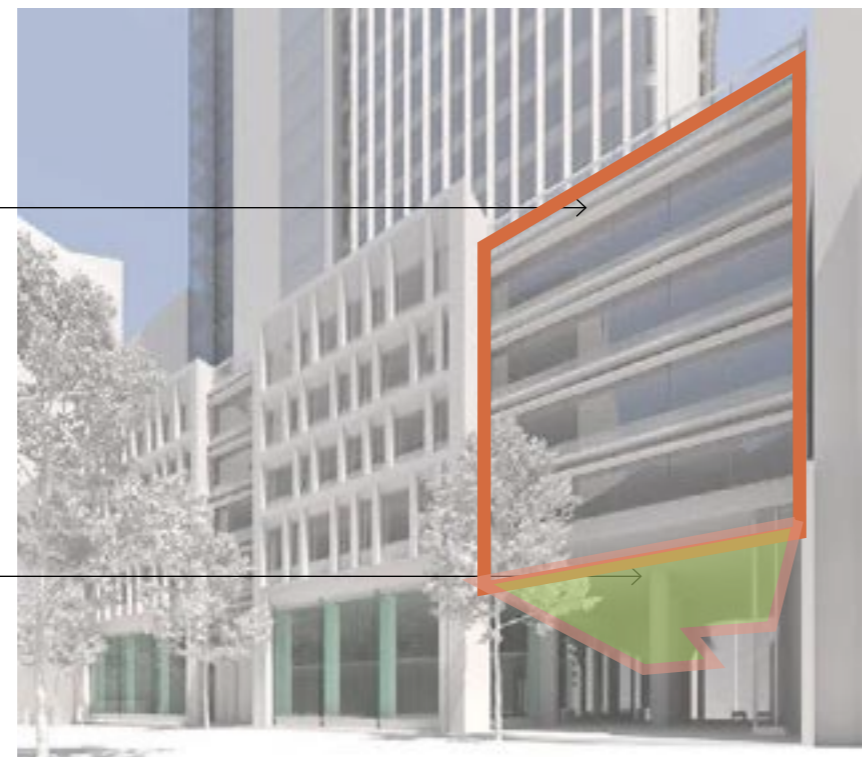
## Indicative Artwork Locations



/ Through site link viewed from Sussex Street

Locations for public art can be combined, such as creating a facade and soffit work as a gateway to the through site link, or offered as separate canvasses / collaborations. An artist collaboration for the new Kent Street facade would provide enhanced wayfinding and inspirational pedestrian experience. Other locations can celebrate the change in levels and descent to the shoreline as well as the Sussex St heritage of produce trade and commerce.

**Location 4**  
Kent Street Facade Gateway  
above through site link



**Location 1**  
Soffits, skylights and  
columns

/ Kent Street Facade with new facade element above through site link

## Benchmarks



/ Angophora Image



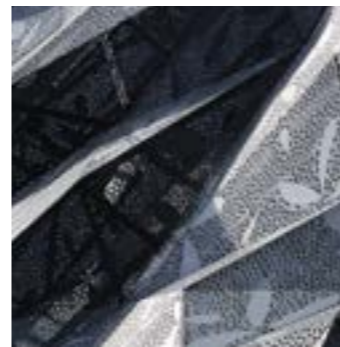
/ Angophora, Jade Oakley and Jessica



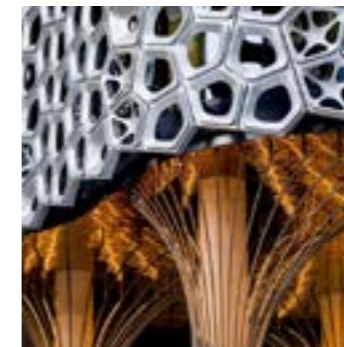
/ Atmospheric Wave Wall, Olafur Eliasson



/ Uprooted, Doris Salcedo



/ Office Building Ginza, Yoshihiro Amano



/ The Sound that Light Makes, Alexander Knox



/ Hunger Moon, Ugo-Rondinone



/ Hunger Moon, Ugo-Rondinone



/ Historic Image of Sussex Street



/ Historic Image of Sussex Street



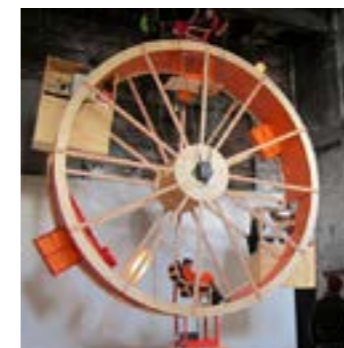
/ Goodbye Horses, Sandrine Pelletier



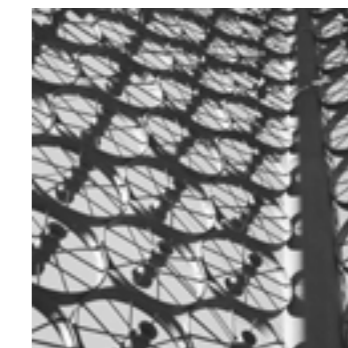
/ Wheels, Susan Zoccola



/ Image of Tea Chests



/ In Orbit, Alex Schweder Ward Shelley



/ Wheel Art, L.J. Maasdam

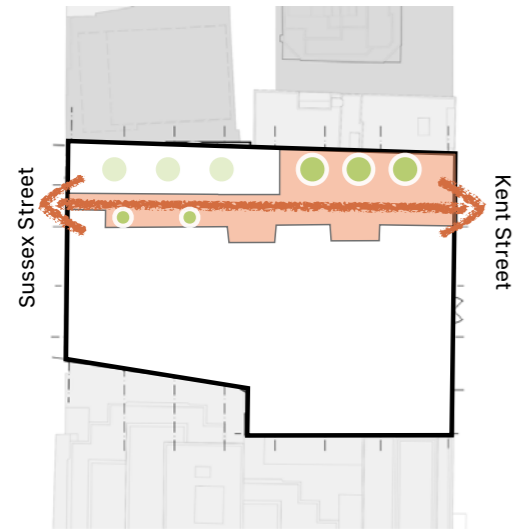


/ Stacked, Ai Wei Wei

# Landscape Strategy & Design Principles

## I — Design Requirements

### Through Site Link



The Sydney DCP proposes a through site link for the 383 Kent St site that will continue East to connect with an existing through site link network up to Hyde Park and West towards Darling Harbour and across the water to Pyrmont and Ultimo.

The through site link aligns with breaks between buildings and must be accessible 24 hours a day, direct with clear height of at least 6m, and provide bike access. The through site link presents an opportunity to create a safe, active, and well connected green space.

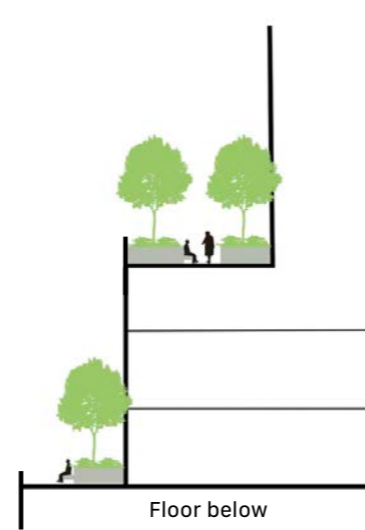
### Podium Terraces



Larger tenant terraces to be provided on various podiums and roof levels to create generous accessible outdoor space for landscaping.

It offers key opportunities to increase tree canopy coverage within the site, and incorporate outdoor meeting collaborative spaces and various amenities for events and functions.

### Roof Garden



A series of green roofs and green atriums / wintergreens shall face toward the prime views and outlook that are interconnected as viewed from the city.

A 100% fresh single pass naturally ventilated spaces, integrated inter-floor stairs and no-touch control on all building operations, fixtures and doorways combine to encourage easy and healthy movement and collaboration.

### WSUD (water sensitive urban design)



Planting in podium terraces and rooftop garden helps to create sustainable WSUD system. In response to 'Green roof and Walls Policy' the site will offer vegetation coverage through at least 30% of available rooftop space.

The green roof will include facilities for water collection infrastructure. Green facades will be covered with climbing plants that's liveable and resilient to urban climate.

### Canopy coverage/ Green Star Targets



In accordance with the City of Sydney 'Greening Strategy' and 'Urban forest', 15% canopy targets for the central business district (i.e. Sydney CBD) should be provided on site mainly within podium and terraces.

The 'Green Star Targets' states that the development should provide 15% of horizontal or vertical landscaping. 5% of building is allocated to horizontal or vertical gardens easily accessible to occupants. The development aims to meet such target across the site within 10 years of completion of the development.

# Landscape Strategy & Design Principles

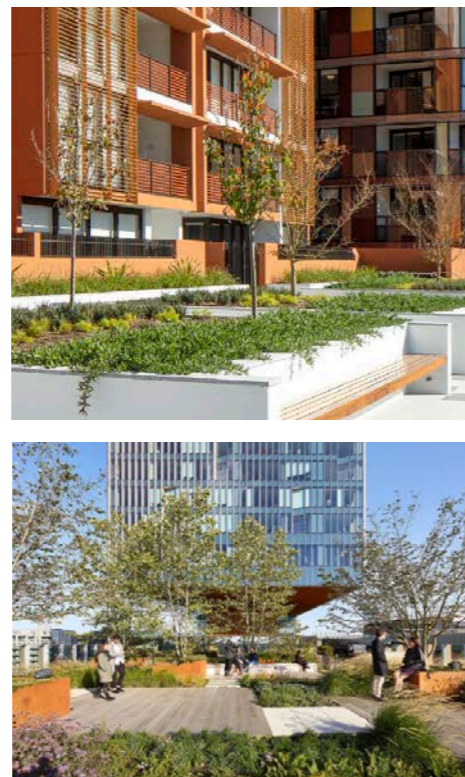
## II — Design Principles

### Through Site Link



Establish an active, well defined and safe through-site link as part of the east west linkage.

### Podium Terraces



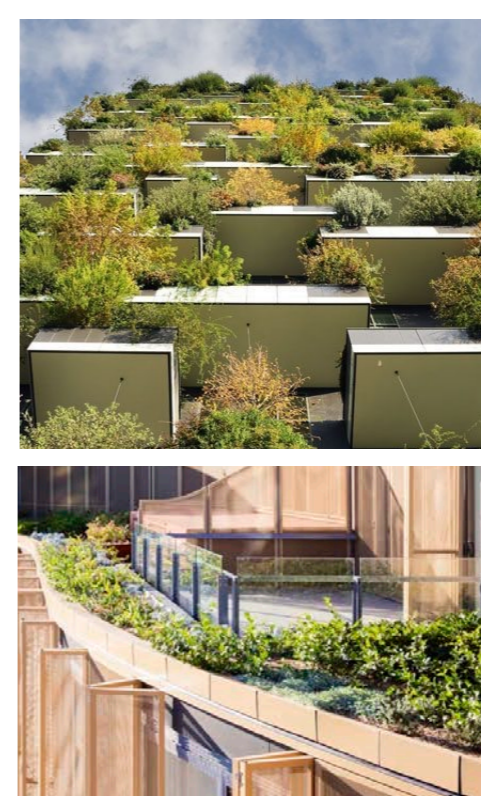
Maximise open space within podium terraces of the building, the space functions as social area for larger events, and key opportunity to provide tree canopy.

### Roof Garden



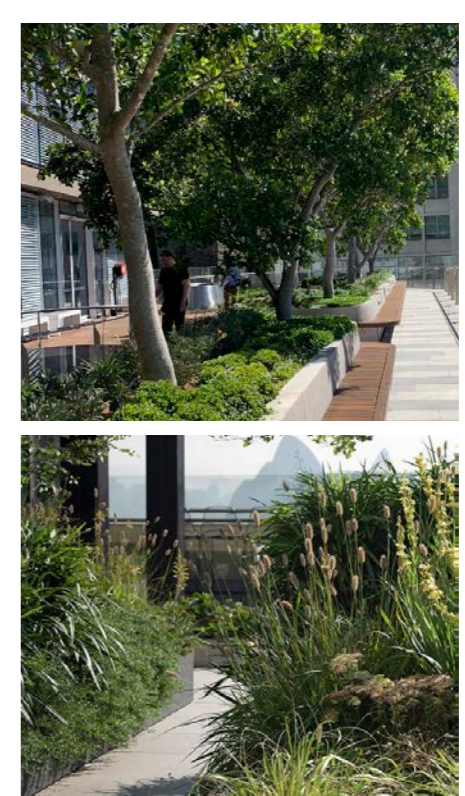
The winter garden at rooftop area is flexible at size and located along facade to benefits tenant amenity

### WSUD



Green roof and green walls as an sustainable integrated system within the building.

### Canopy coverage



Increased urban canopy cover and vegetation on terraces and rooftop to achieve the City of Sydney Greening Sydney 2030 policy

# Residential Amenity

surrounding Residential Building ID Map

Surrounding Residential Building - ID Map



288

# Residential Amenity

365 Kent Street - Building Separation

Existing Residential Building Separation and Building Envelope

289



# Residential Amenity

365 Kent Street - Building Separation

Proposed Residential Building Separation and Building Envelope

290

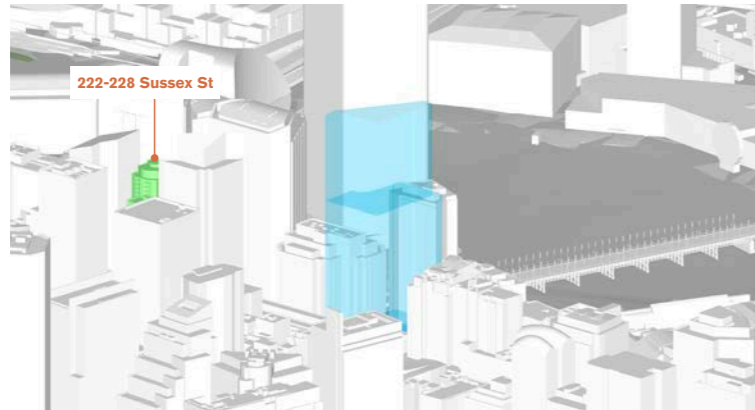




# Residential Amenity

Solar Access to 228-228 Sussex St & 25 Market Street

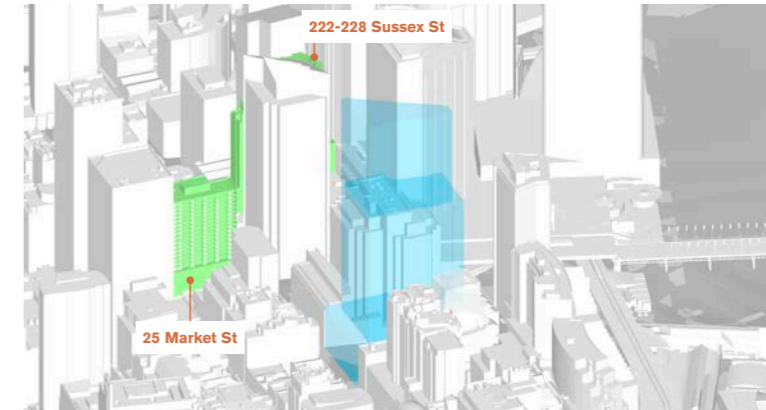
## Sun Eye Views - Potential Impact on Solar Access



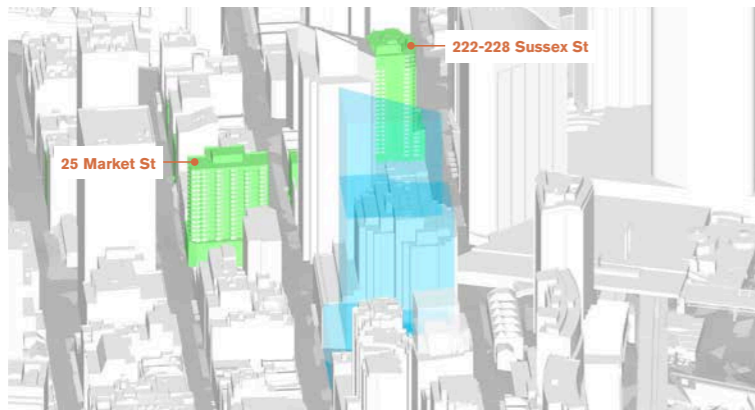
21st June - 9am



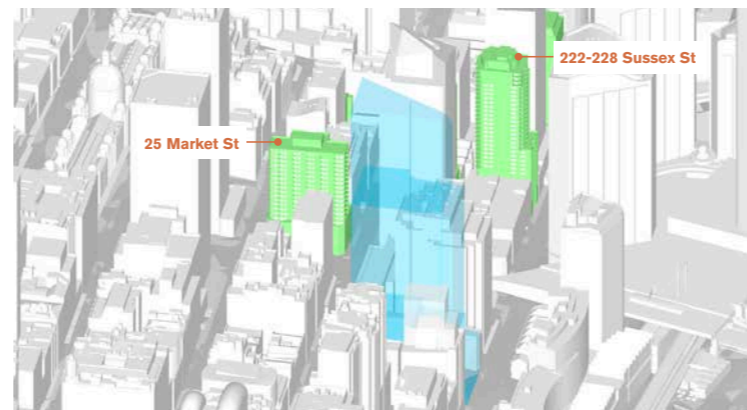
21st June - 10am



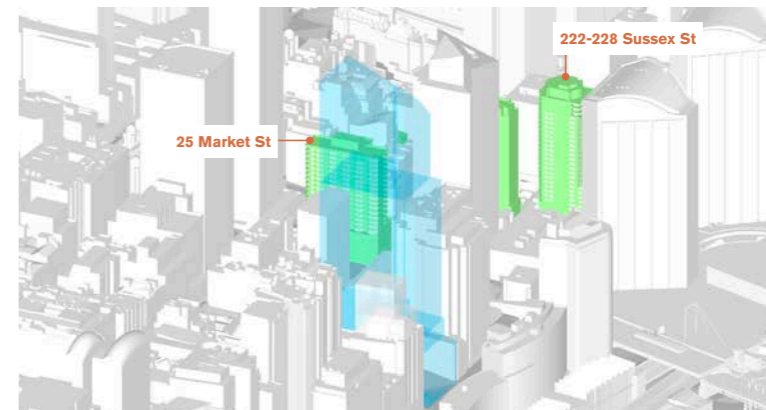
21st June - 11am



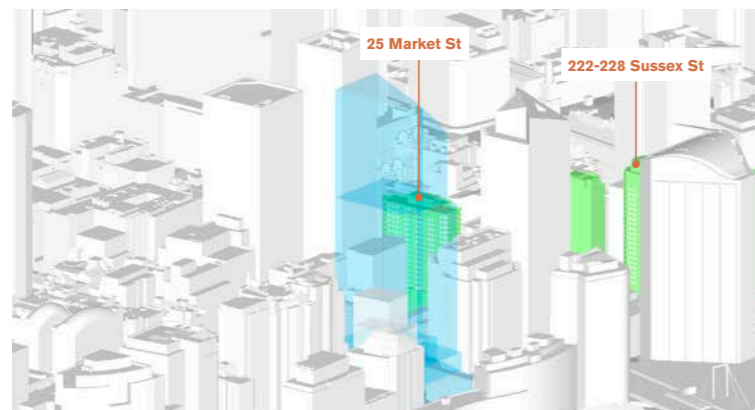
21st June - 12pm



21st June - 1pm



21st June - 2pm



21st June - 3pm

### Residential Building Identification

- 222-228 Sussex Street
- 25 Market Street : Detailed analysis is required.

# Residential Amenity

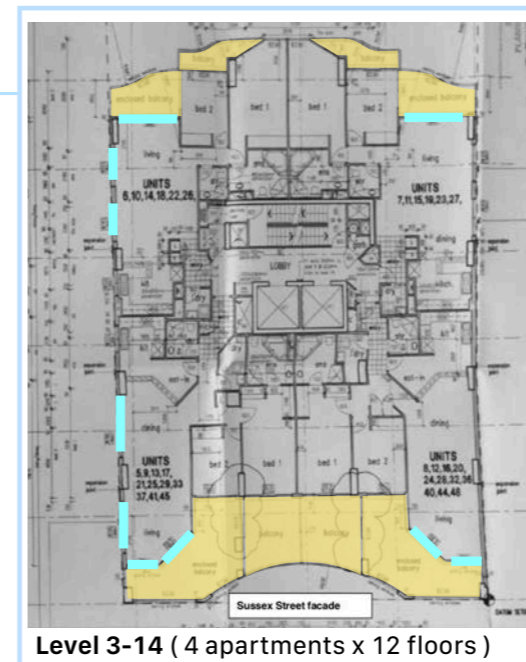
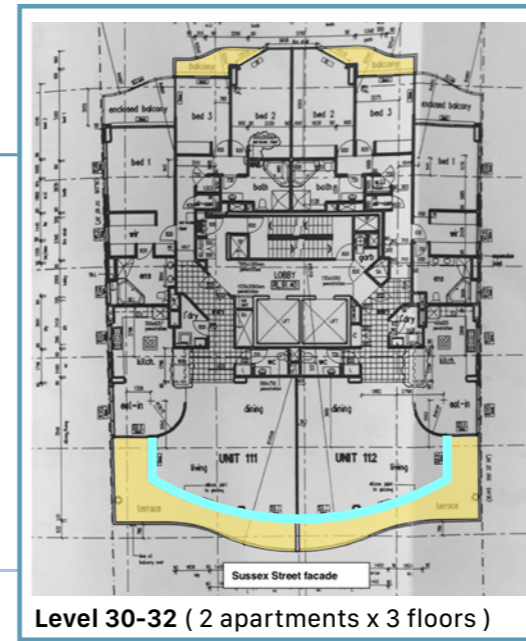
Detailed Solar Access Studies 222-228 Sussex St

Residential

292



222-228 Sussex Street  
Total 114 apartments

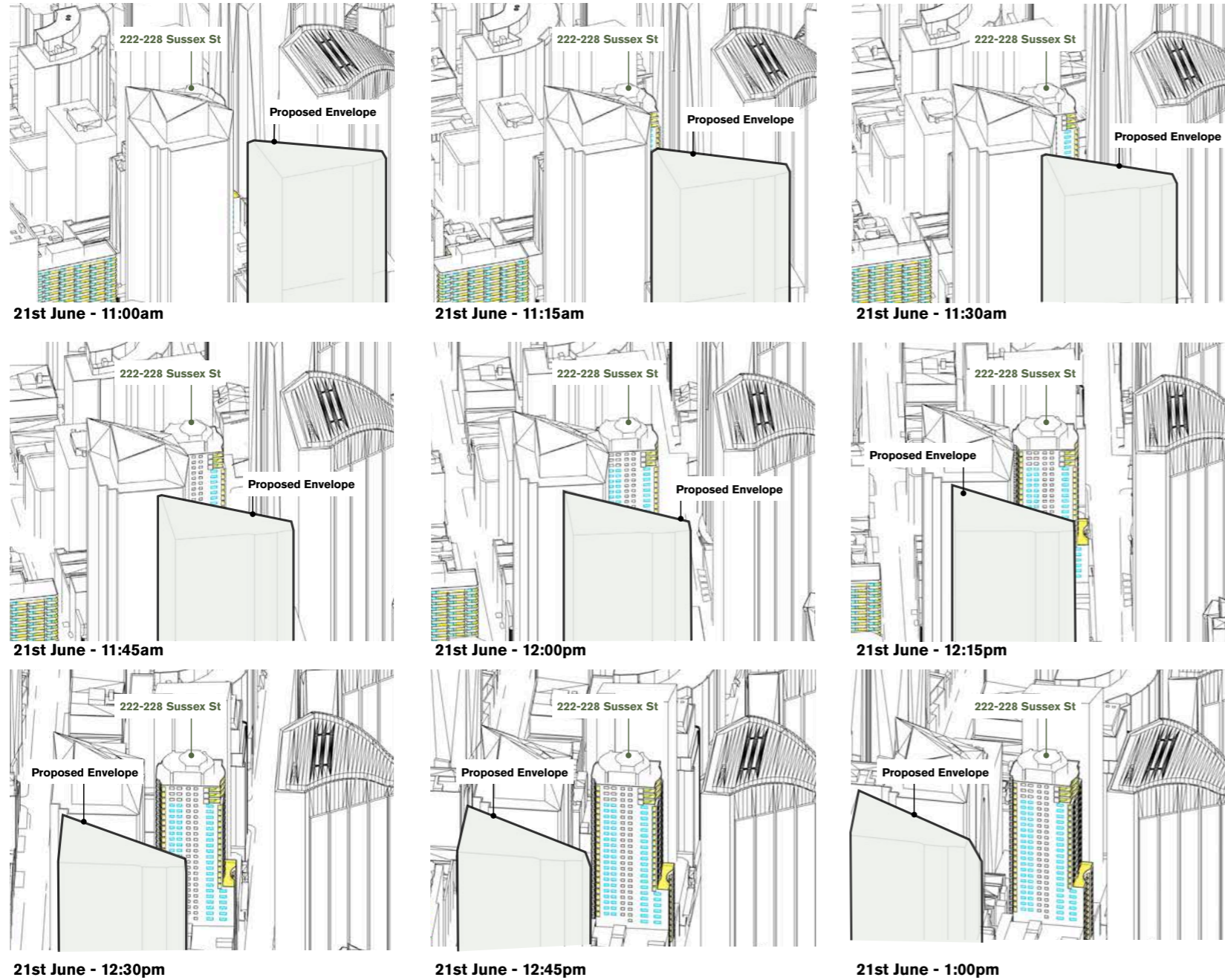


— Living room windows  
 Private open space

# Residential Amenity

Detailed Solar Access Studies 228-228 Sussex St

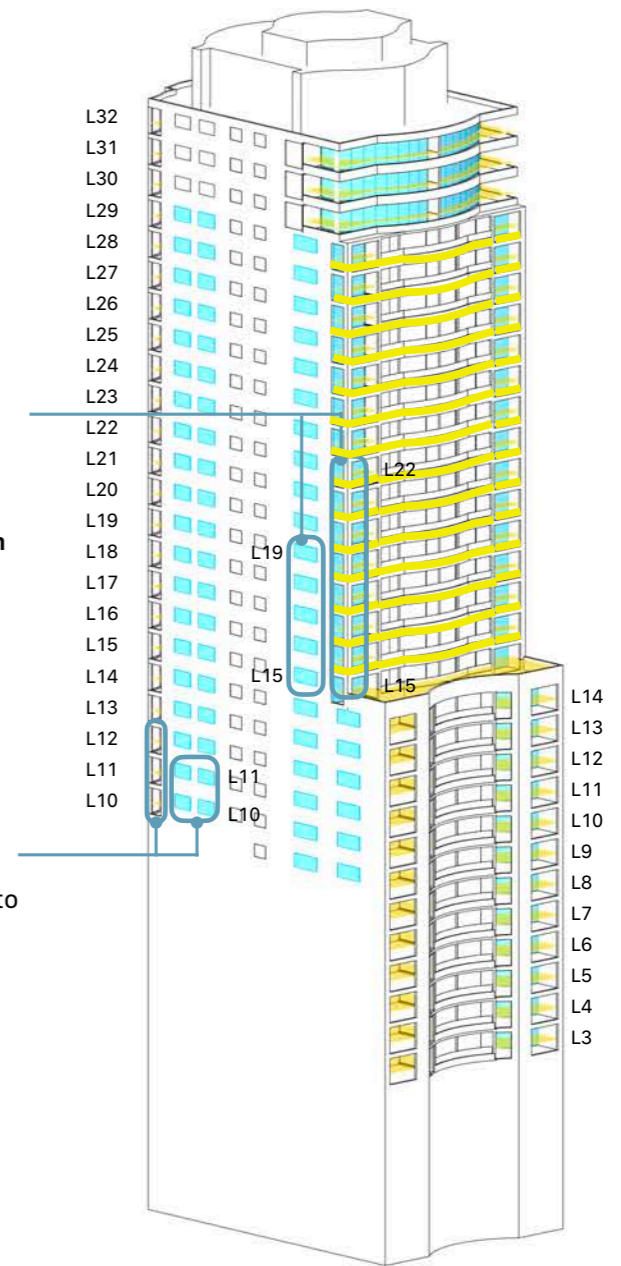
## Detailed Sun Eye Views



**5 living room windows and 8 balconies** reduced from 2hrs+ to **less than 2hrs** in midwinter. However, they still receive **1h45m** Sun Access.

**2 living room windows and 3 balconies** reduced from 2hrs+ to **less than 2hrs** in midwinter. However, they still receive **1h30m** Sun Access.

- Living room windows
- Private open space



# Residential Amenity

Detailed Solar Access Studies 222-228 Sussex St

Sun Eye View Analysis - Existing <-> Proposed

## 222-228 Sussex Street/ Solar Impact Summary

- **8 tower apartments** (5 living room windows and 8 balconies) reduced from 2hrs+ to **less than 2hrs** in midwinter. However, they still receive **1h45m** Sun Access.  
(Potentially those apartments can receive 2hrs+ sun access if the analysis is conducted in **1minute interval**.)
- **3 podium apartments** (2 living room windows and 3 balconies) reduced from 2hrs+ to **less than 2hrs** in midwinter. However, they still receive **1h30m** Sun Access.

### Impact Summary:

- 7 living rooms (out of 114 apartments - 6%)
- 11 balconies (out of 114 apartments - 9%) are impacted and now receive less than 2h at winter solstice.
- However, they still receive 1.5 or more hours and the impact is considered minimal and **reasonable in a high density CBD context**.
- positive covenant (SP 53413.3) requires **any windows on the northern and southern boundary** to be **bricked up** at council's direction **if there is adjacent construction within 12 metres**. These windows are therefore **non-essential**. **5.1.2(1), (2) and (3)** has been achieved.

Living Spaces - Existing Solar Access				Living Spaces - Proposed Solar Access			
0 H	less than 2H	2H or more	Total units	0 H	less than 2H	2H or more	Total units
70	0	44	114	70	7	37	114
61.4%	0.0%	38.6%		61.4%	6.1%	32.5%	

Balconies - Existing Solar Access				Balconies - Proposed Solar Access			
0 H	less than 2H	2H or more	Total units	0 H	less than 2H	2H or more	Total units
32	44	38	114	32	55	27	114
28.1%	38.6%	33.3%		28.1%	48.2%	23.7%	

### DCP Clause 5.1.2(6)

*When considering the likely impacts of a development on surrounding developments any adverse impacts on existing private views, visual privacy, solar and daylight access are considered reasonable where compliance with **Section 5.1.1 and 5.1.2(1), (2) and (3)** has been achieved.*

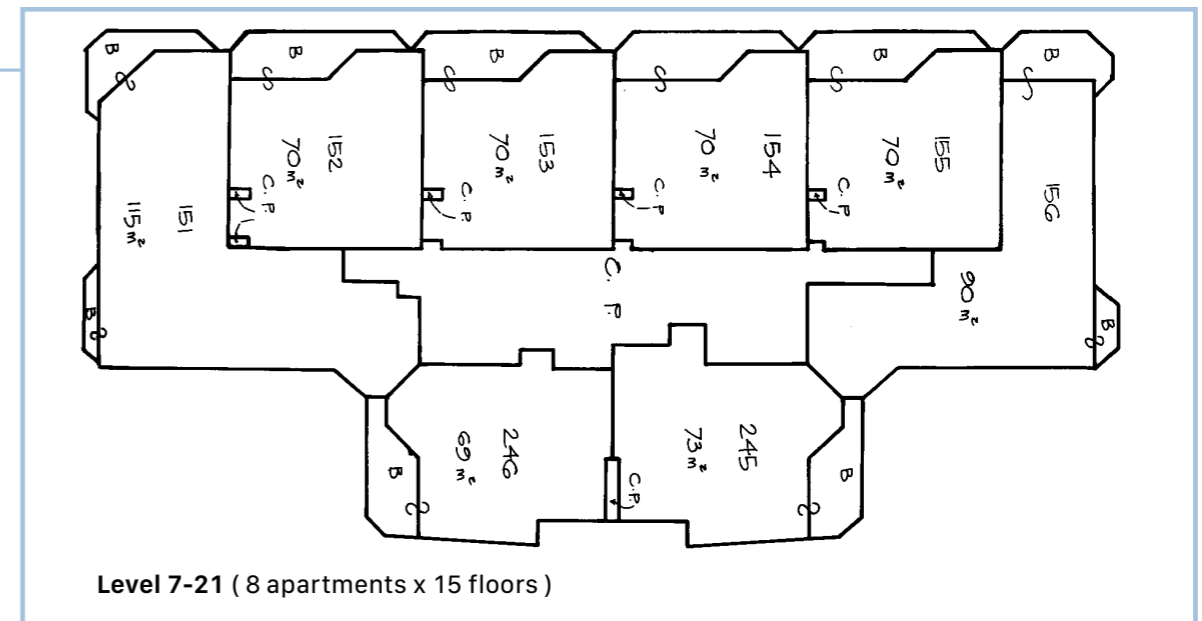
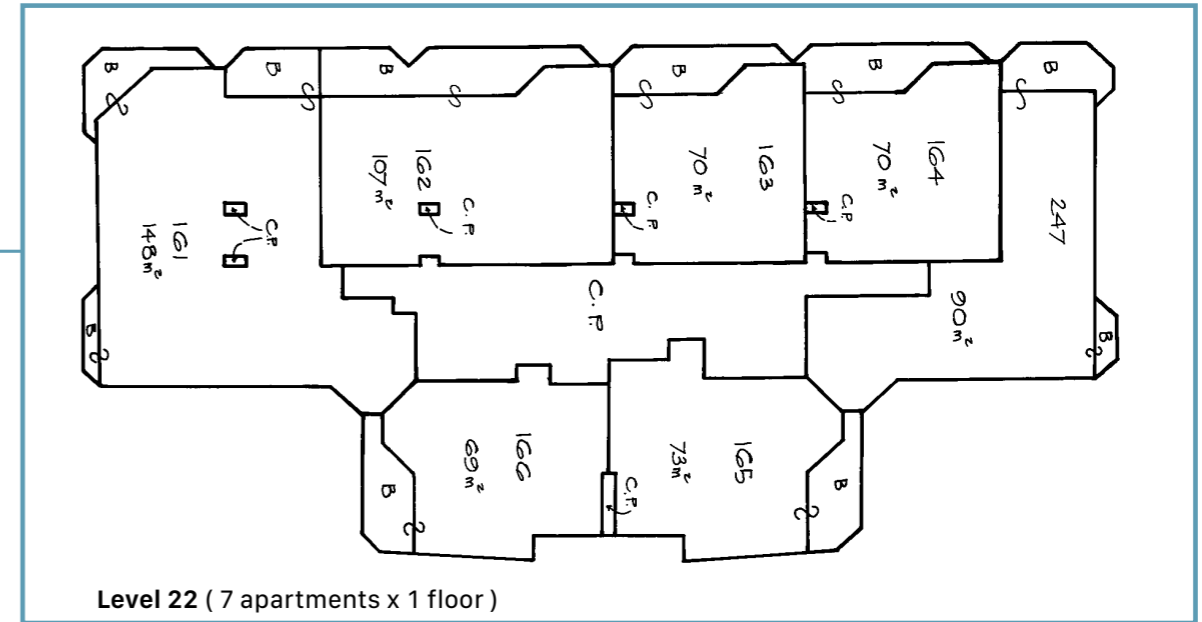
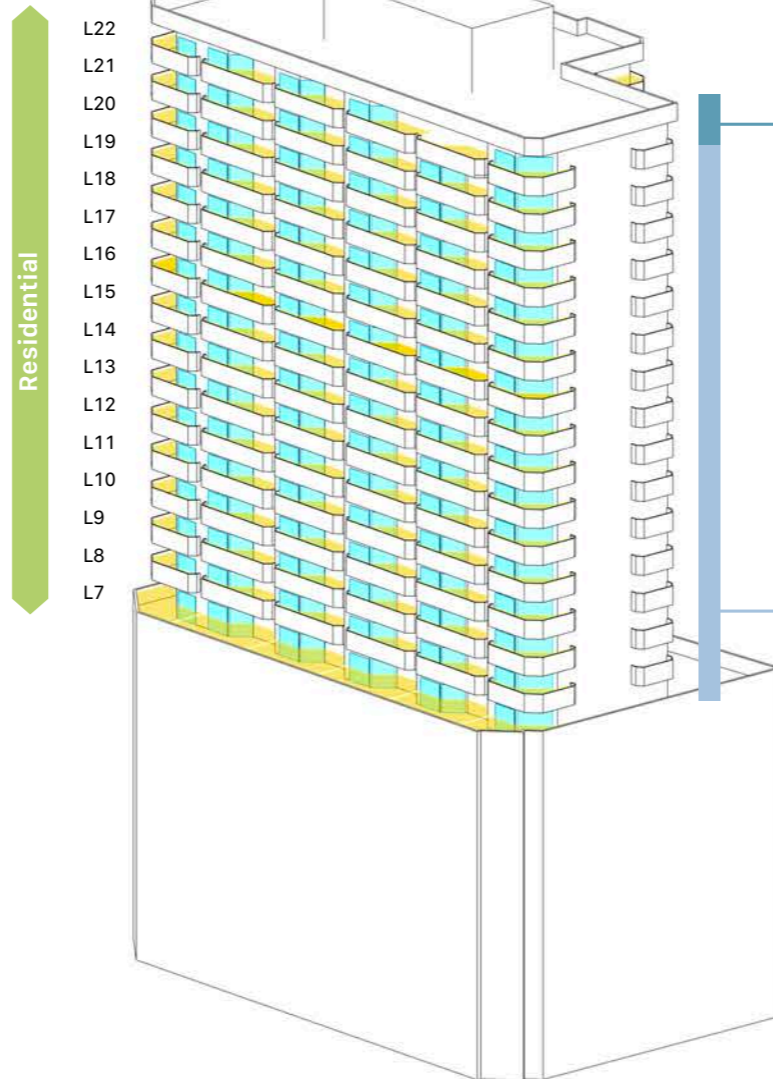
# Residential Amenity

Detailed Solar Access Studies 25 Market Street

Residential



25 Market Street  
Total 127 apartments



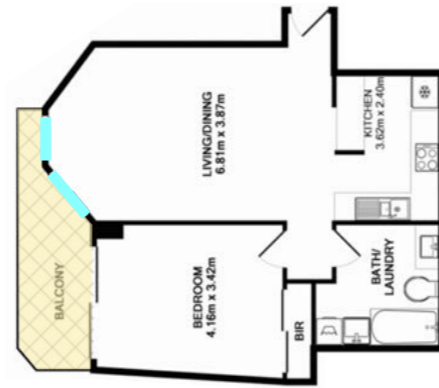
# Residential Amenity

Detailed Solar Access Studies 25 Market Street

## Living Room Windows and Private Open Spaces



Type A



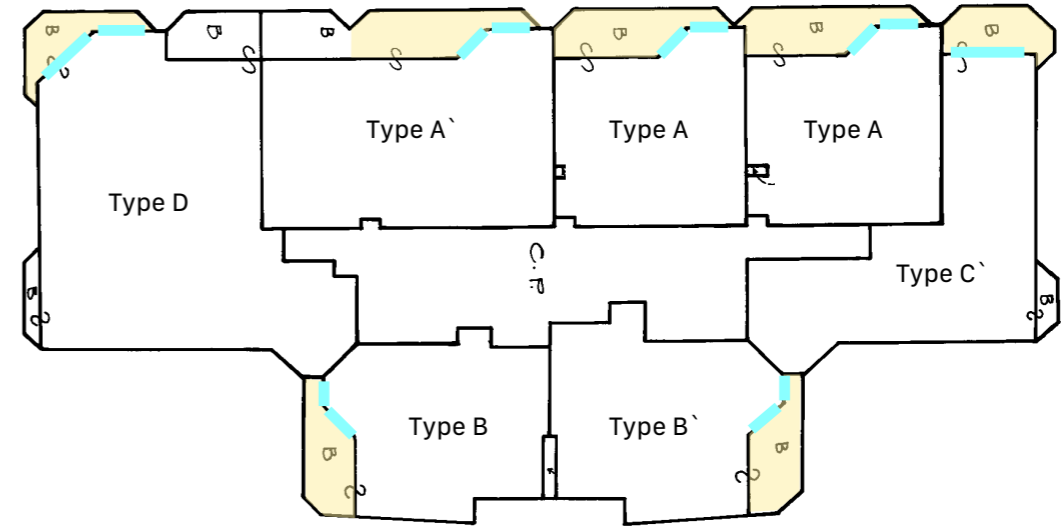
Type B



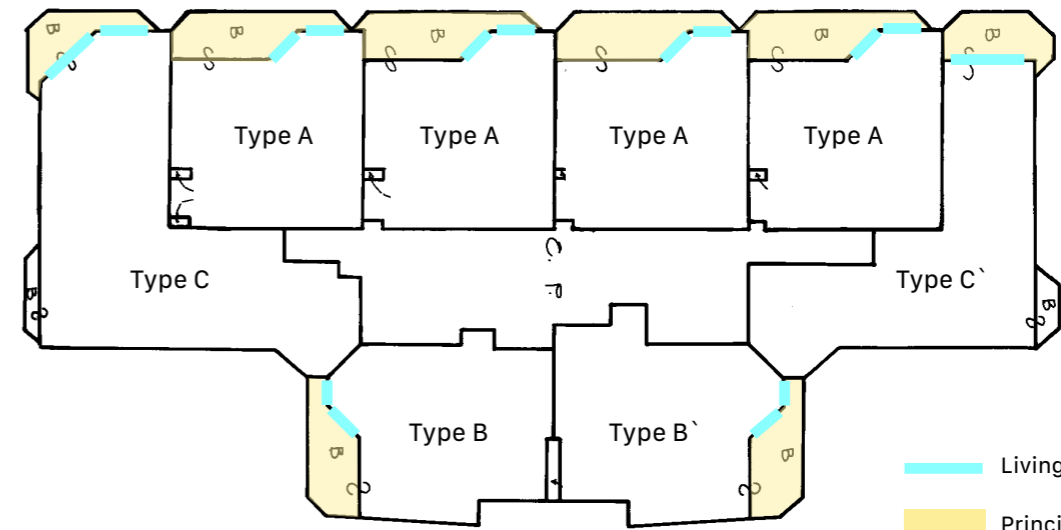
Type C



Type D



Level 22 ( 7 apartments / floor )



Level 7-21 ( 8 apartments / floor )

— Living room windows  
 — Principle private open space

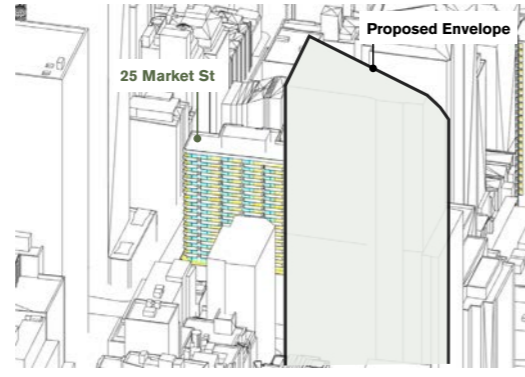
# Residential Amenity

Detailed Solar Access Studies 25 Market Street

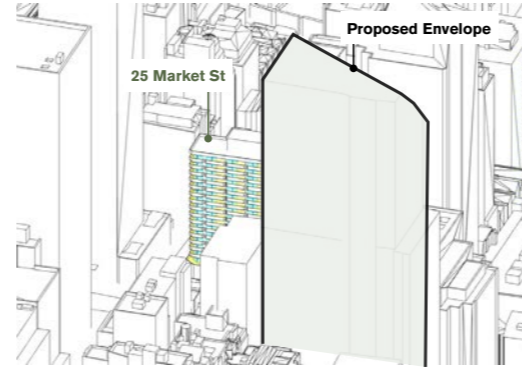
## Detailed Sun Eye Views



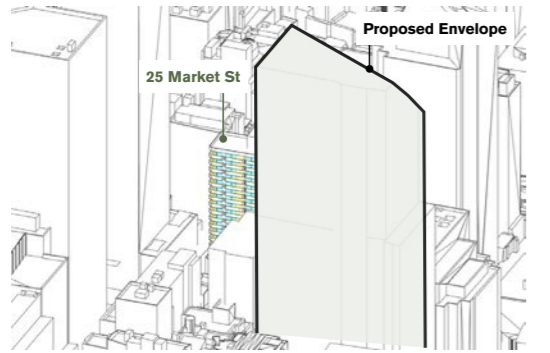
21st June - 1:00pm



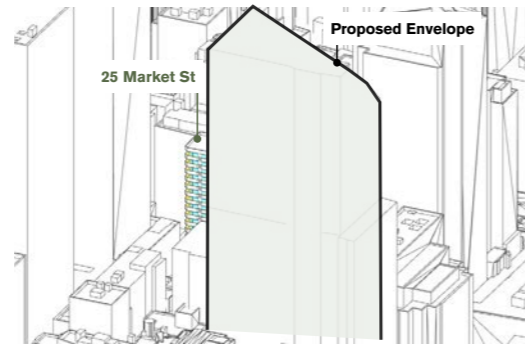
21st June - 1:15pm



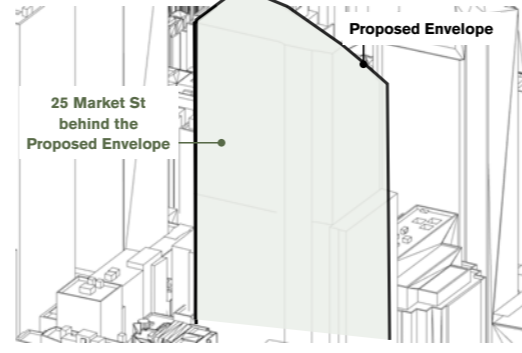
21st June - 1:30pm



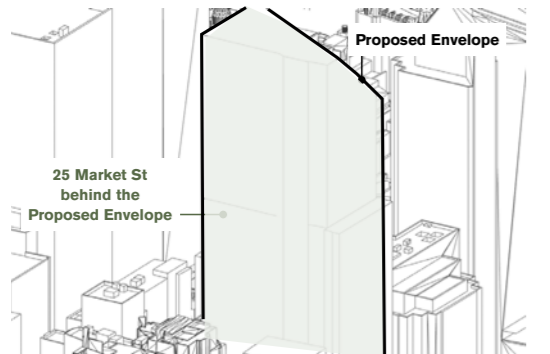
21st June - 1:45pm



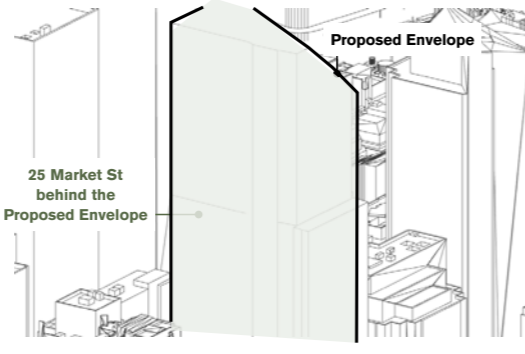
21st June - 2:00pm



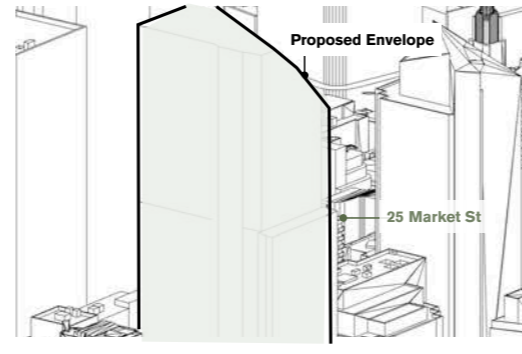
21st June - 2:15pm



21st June - 2:30pm



21st June - 2:45pm



21st June - 3:00pm



**90 apartments** still receive **2hrs+** Sun Access with Proposed Envelope, which is **70.4%** of total apartments. (Comply)

**5 apartments** reduced from 2hrs+ to **less than 2hrs** in midwinter. However, they still receive **1h45m** Sun Access to both living space and balconies after reduction.

■ Living room windows  
■ Private open space

# Residential Amenity

Detailed Solar Access Studies 25 Market Street

Sun Eye View Analysis - Existing <-> Proposed

## 25 Market Street/ Solar Impact Summary

- **5 apartments** reduced from 2hrs+ to **less than 2hrs** in midwinter.
- The impact to those 5 apartments **maintain 1h 45min of sunlight** to the living room and the private open space falling only slightly short of the 2hrs ADG minimum control.
- The impact is very minimal (3.9% of apartments)
- **Proposed solar access** still **comply** with ADG minimum requirement of 70% of total apartment receiving 2hrs sun access.

### DCP Clause 5.1.2(6)

*When considering the likely impacts of a development on surrounding developments any adverse impacts on existing private views, visual privacy, solar and daylight access are considered reasonable where compliance with **Section 5.1.1 and 5.1.2(1), (2) and (3)** has been achieved.*

Living Spaces - Existing Solar Access				Living Spaces - Proposed Solar Access			
0 H	less than 2H	2H or more	Total units	0 H	less than 2H	2H or more	Total units
32	0	95	127	32	5	90	127
25.2%	0.0%	74.8%		25.2%	3.9%	70.9%	

Balconies - Existing Solar Access				Balconies - Proposed Solar Access			
0 H	less than 2H	2H or more	Total units	0 H	less than 2H	2H or more	Total units
32	0	95	127	32	5	90	127
25.2%	0.0%	74.8%		25.2%	3.9%	70.9%	

298



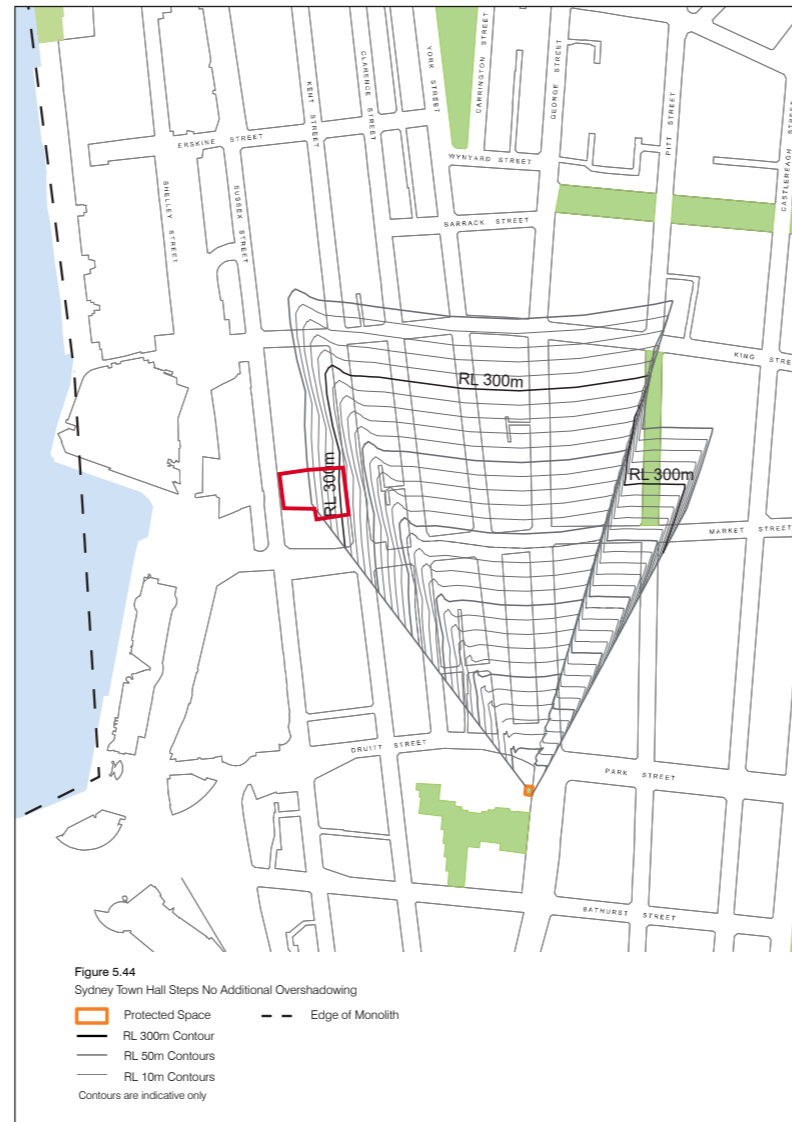
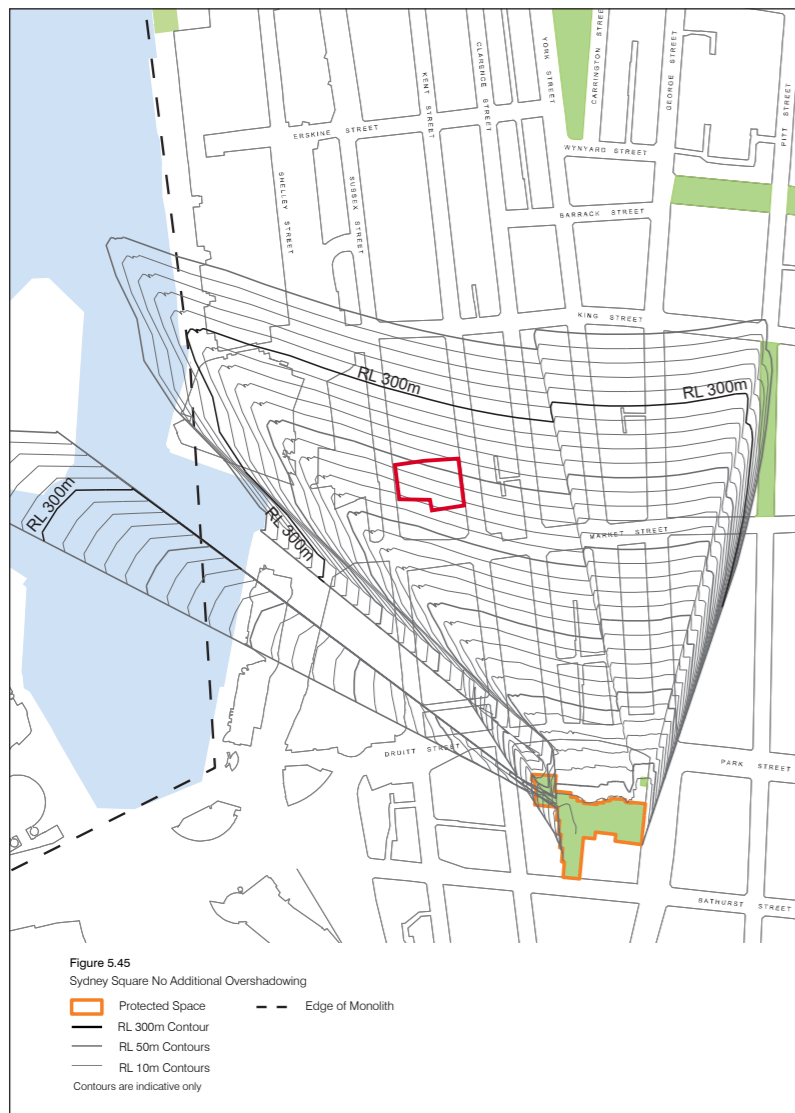
# Shadow Diagrams

## NAO Controls

The site is affected by 'no additional overshadowing controls' for the following public spaces

- Sydney Square
- Sydney Town Hall Steps
- Future Town Hall Square

299



# Shadow Diagrams

## Methodology

The site is affected by 3 different NAO controls. Contour maps have been included in the CSPS that provide a guide on maximum achievable building heights for sites affected by these NAOs.

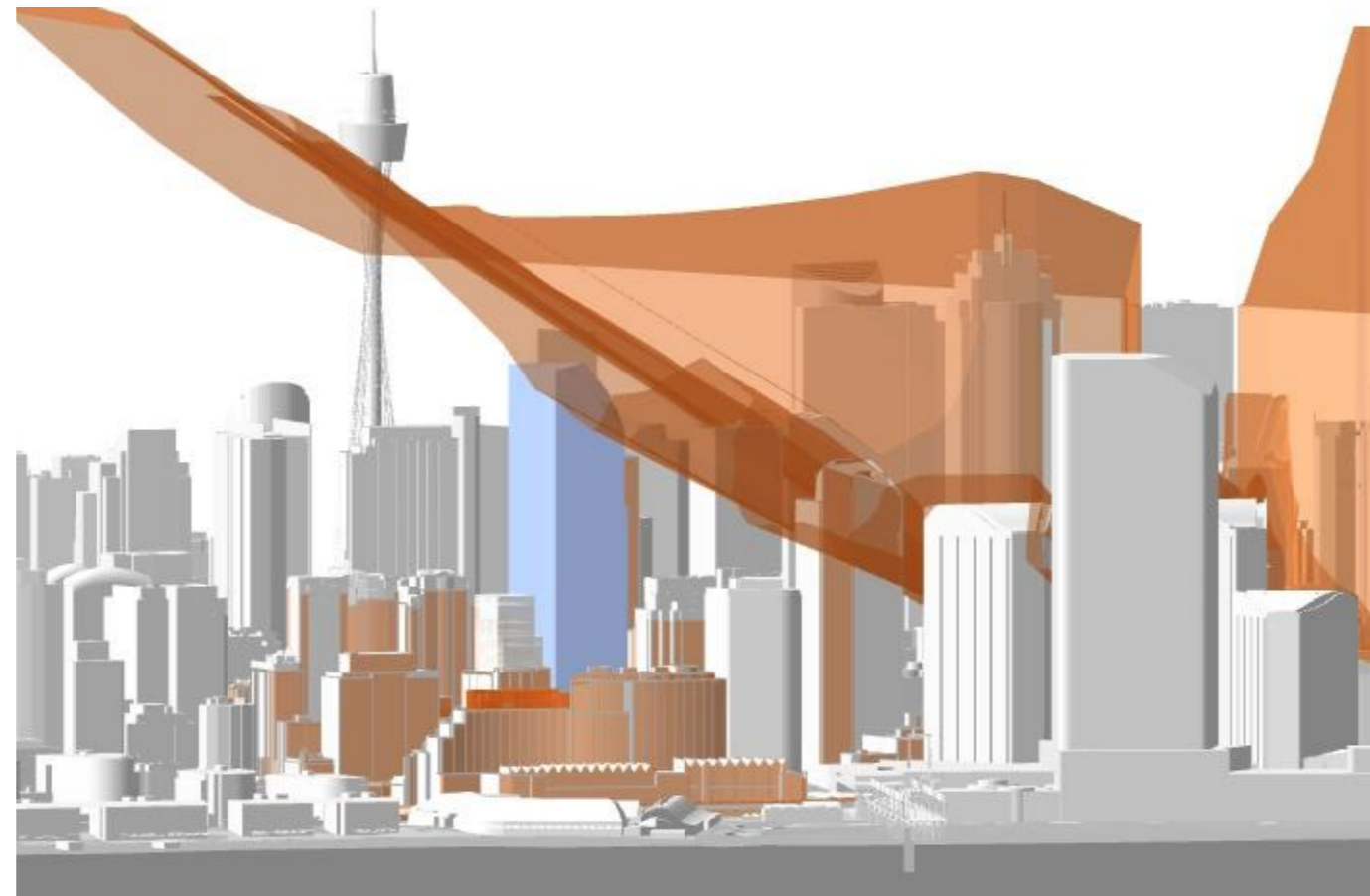
Additionally, COS provided a fully modelled and complex NAO plane with all relevant existing buildings. The plane was provided as a 3d model as part of the 383 Kent Street IDE file.

The NAO was used as a cutting plane to define the top of the envelope ensuring that no elements would protrude the protective plane and no additional overshadowing would be caused by the proposed envelope.

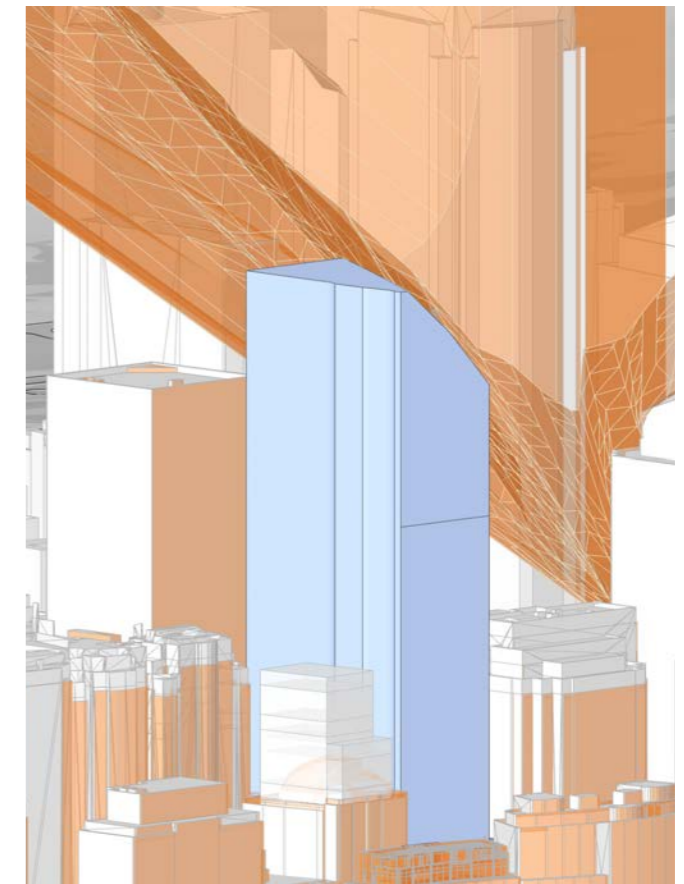
The proposed envelope sits below this NAO.

Shadow impacts were studied between sunrise (7.10am) and sunset (4.50pm) at winter solstice (21 June)

The shadow diagrams demonstrate that the proposed envelope for 383 Kent Street will not cause any additional overshadowing to the protected spaces.



/ 3D Model with NAO plane (orange) and 383 Kent Street envelope (in blue)



/ 383 Kent Street envelope (in blue) cut off by NAO (orange)

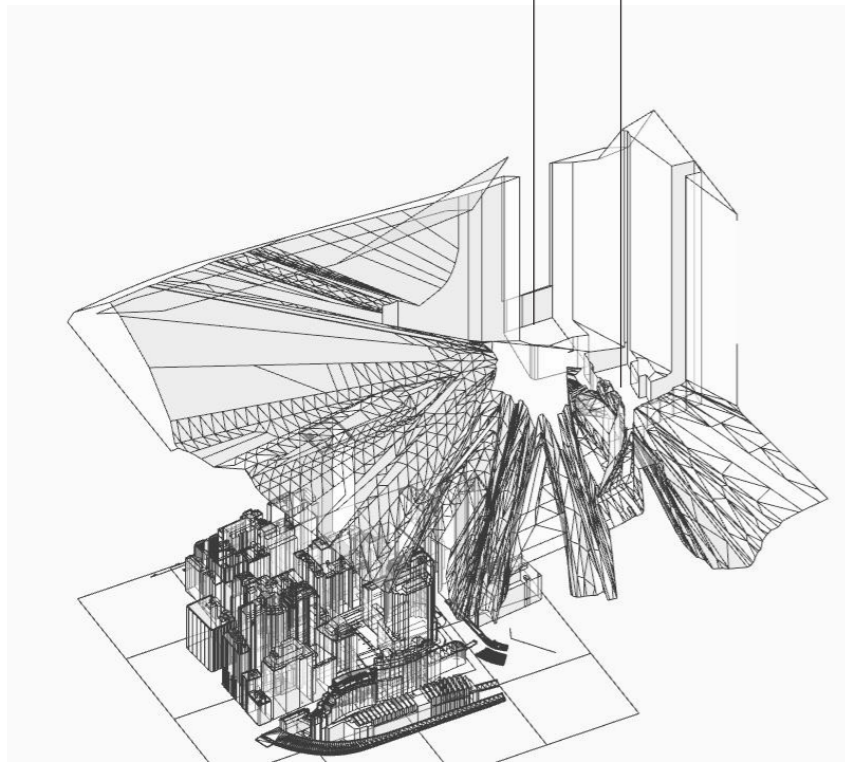
# Shadow Diagrams

NAO

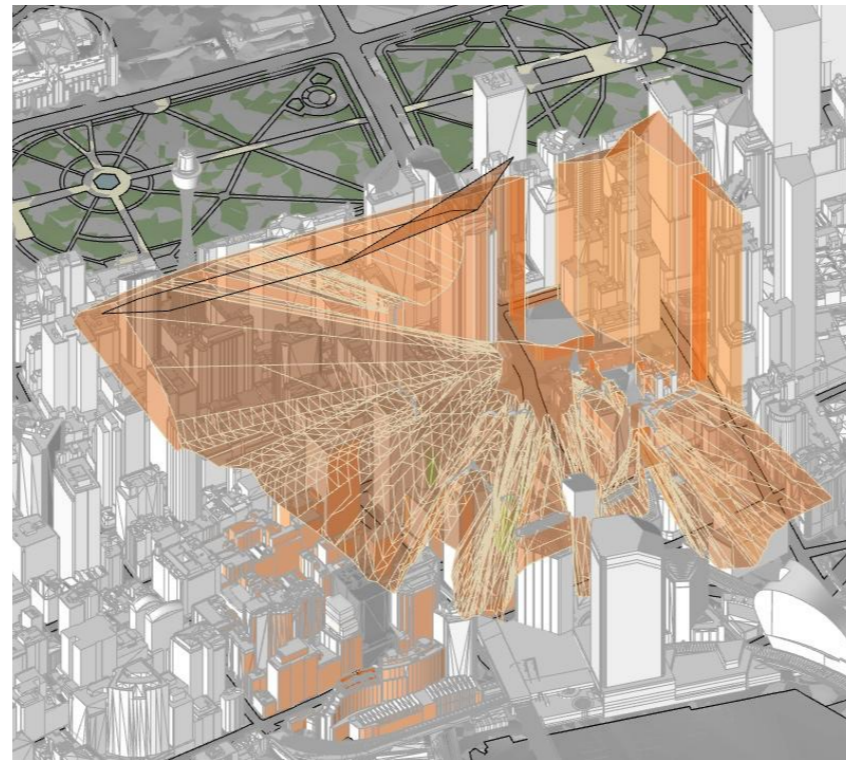
301

Future Town Hall Square

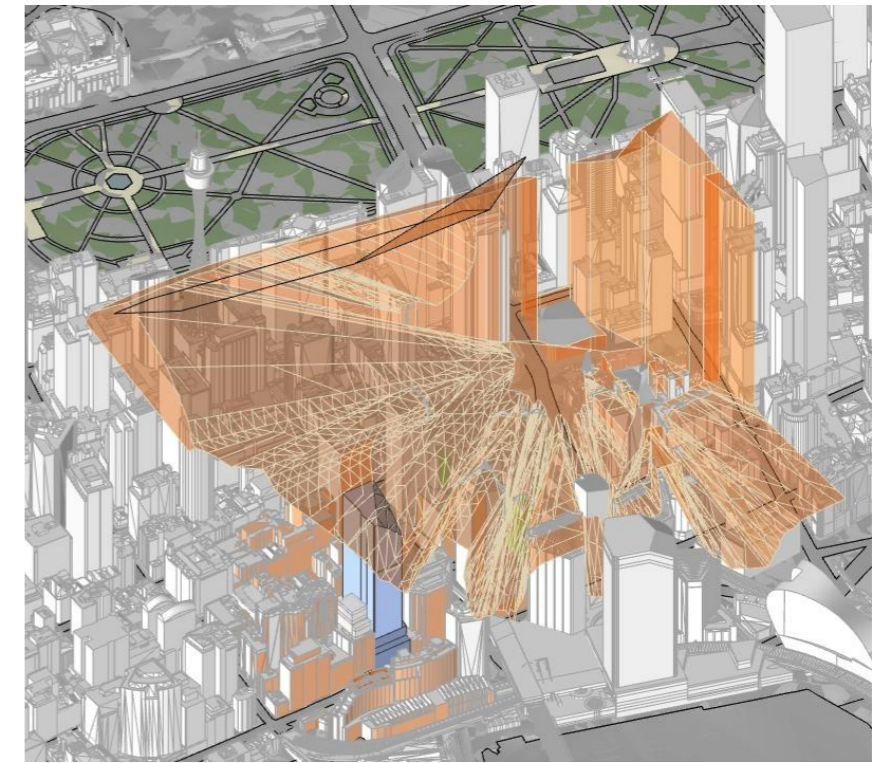
Sydney Square



/ NAO plane provided



/ NAO plane inserted into existing model



/ Model with NAO plane and proposed envelope

# Shadow Diagrams

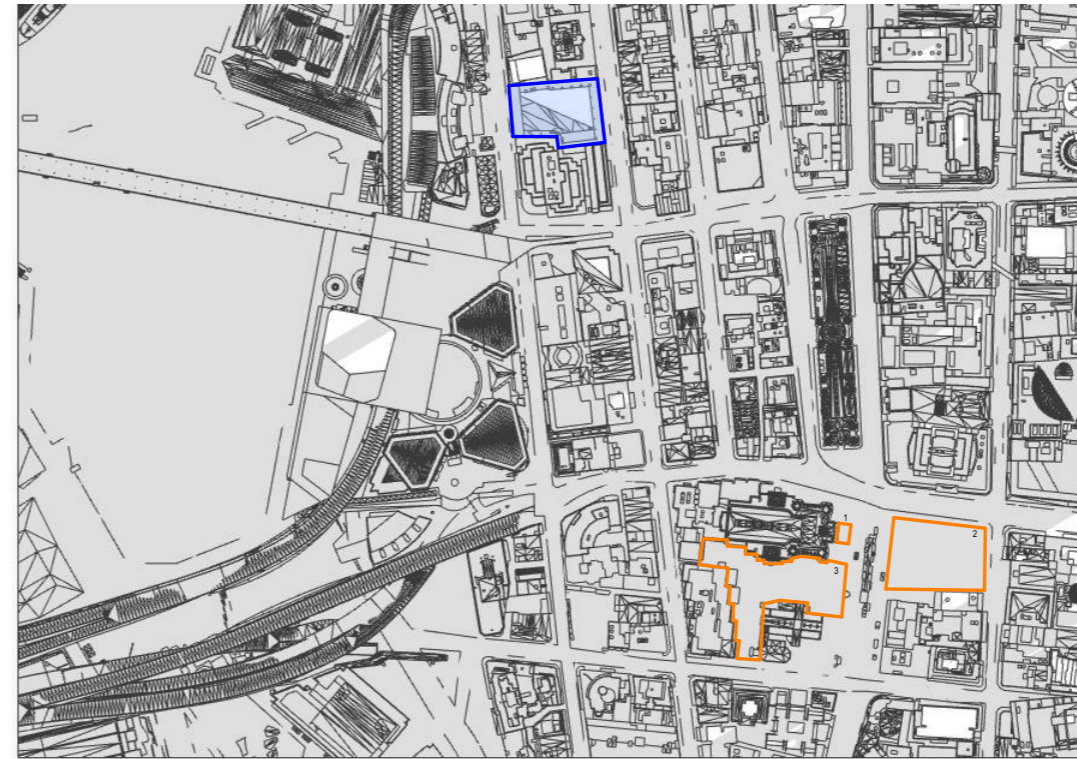
Winter Solstice - 7.10am(sunrise) & 8am



1 PLAN 7.10am 383 KS (e)  
EXISTING

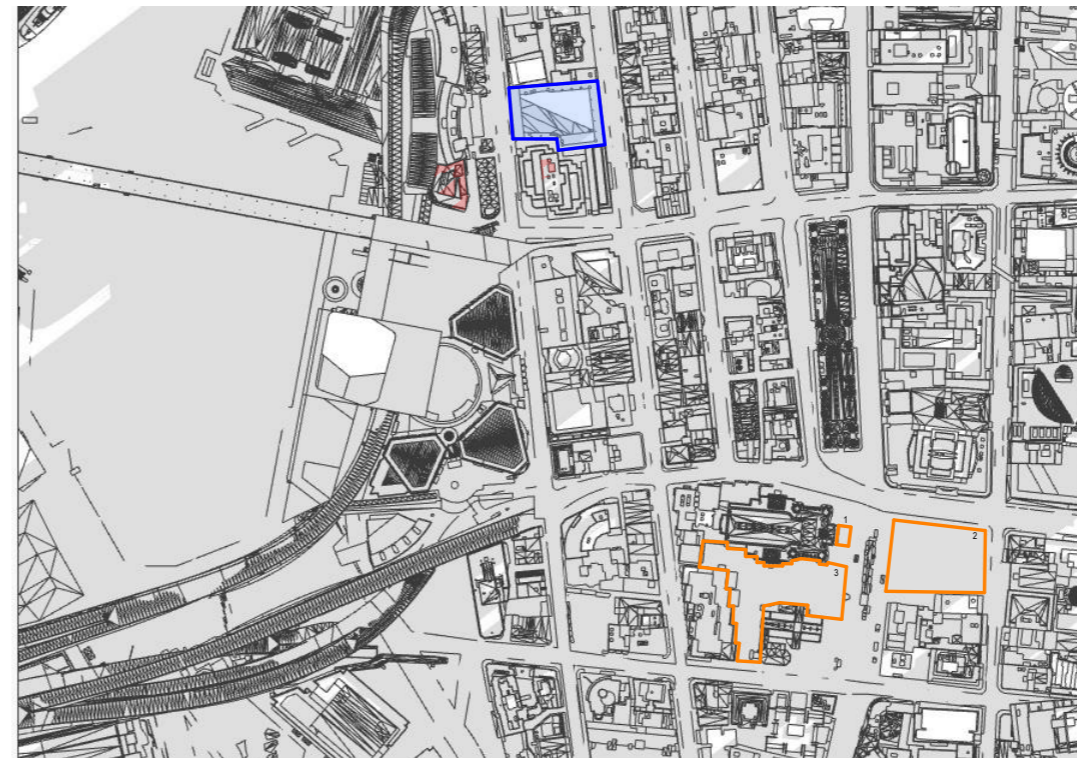


1 PLAN 8am 383 KS (e)  
EXISTING



2 PLAN 7.10am 383 KS (p)  
PROPOSED

NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS



2 PLAN 8am 383 KS (p)  
PROPOSED

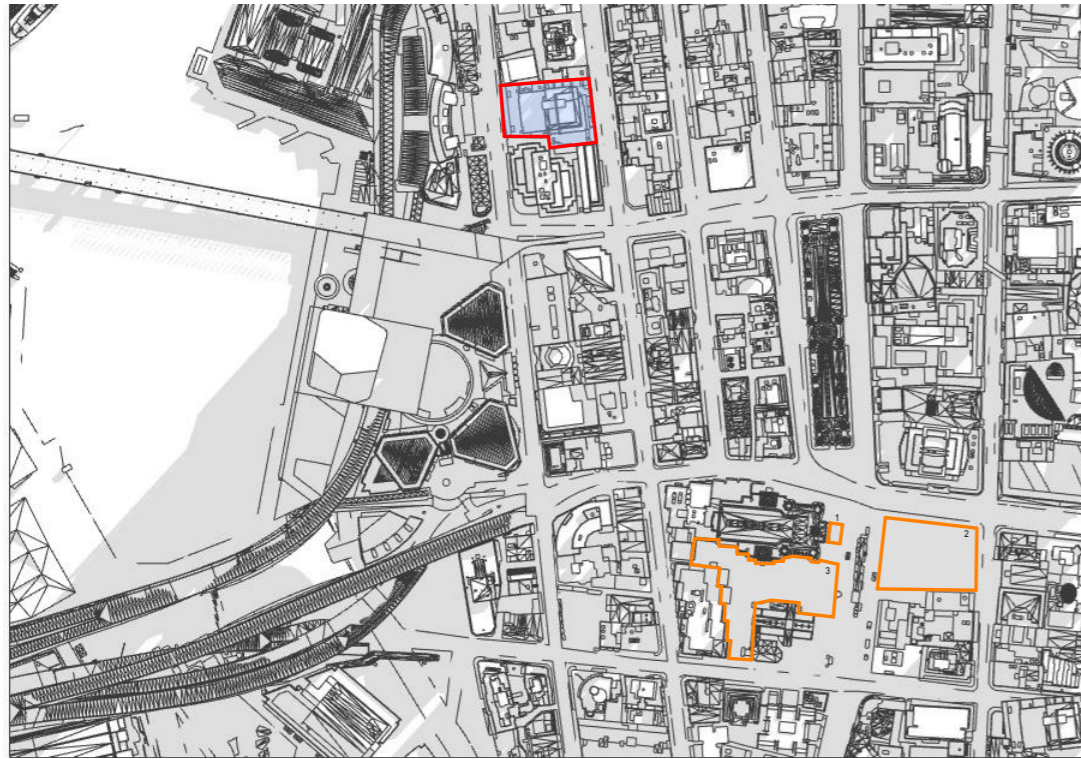
NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

## LEGEND

- 1 TOWN HALL STEPS
- 2 FUTURE TOWN HALL SQUARE
- 3 SYDNEY SQUARE
- 383 KENT STREET EXISTING BUILDING
- 383 KENT STREET PROPOSED ENVELOPE
- ADDITIONAL OVERSHADOWING FROM PROPOSED ENVELOPE

# Shadow Diagrams

Winter Solstice - 9am & 10am



1 PLAN 9am 383 KS (e)  
EXISTING

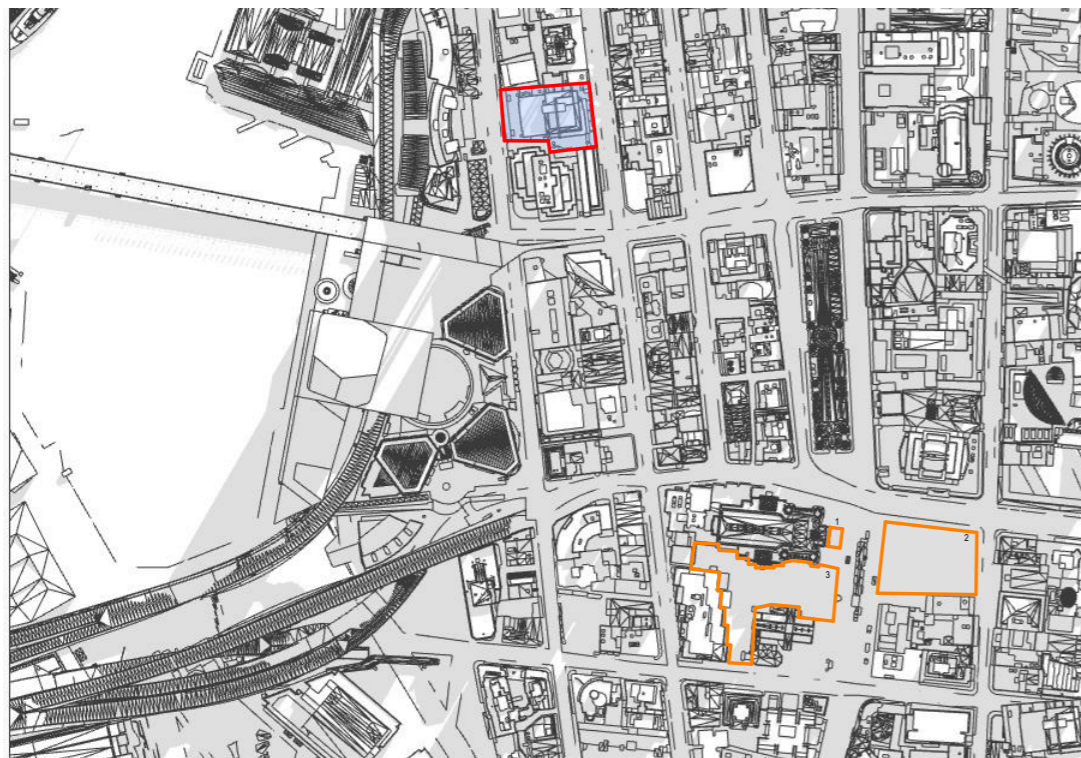


2 PLAN 9am 383 KS (p)  
PROPOSED

NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

LEGEND

- 1 TOWN HALL STEPS
- 2 FUTURE TOWN HALL SQUARE
- 3 SYDNEY SQUARE
- 383 KENT STREET EXISTING BUILDING
- 383 KENT STREET PROPOSED ENVELOPE
- ADDITIONAL OVERSHADOWING FROM PROPOSED ENVELOPE



1 PLAN 10am 383 KS (e)  
EXISTING

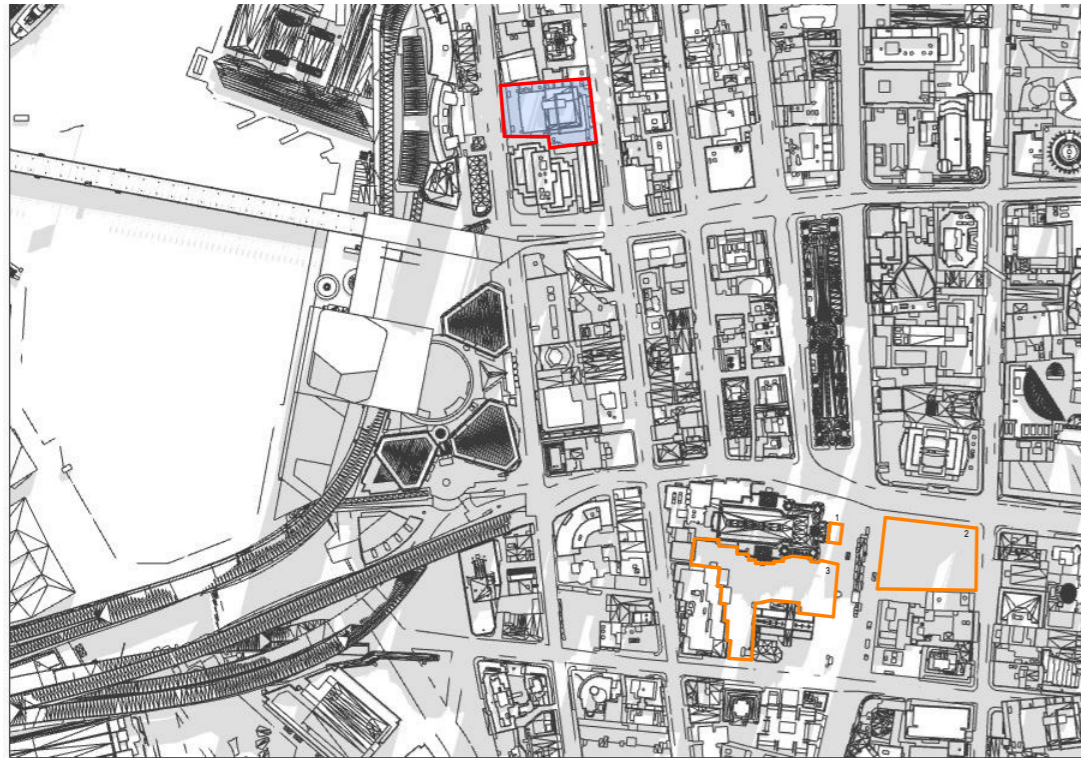


2 PLAN 10am 383 KS (p)  
PROPOSED

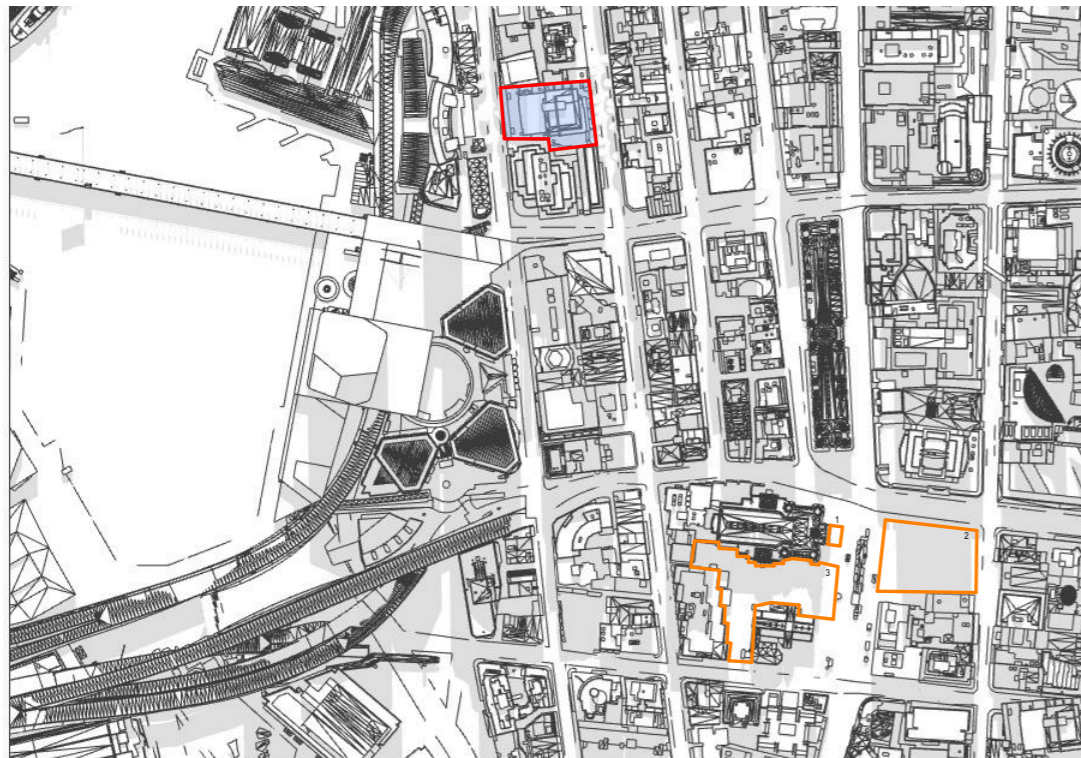
NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

# Shadow Diagrams

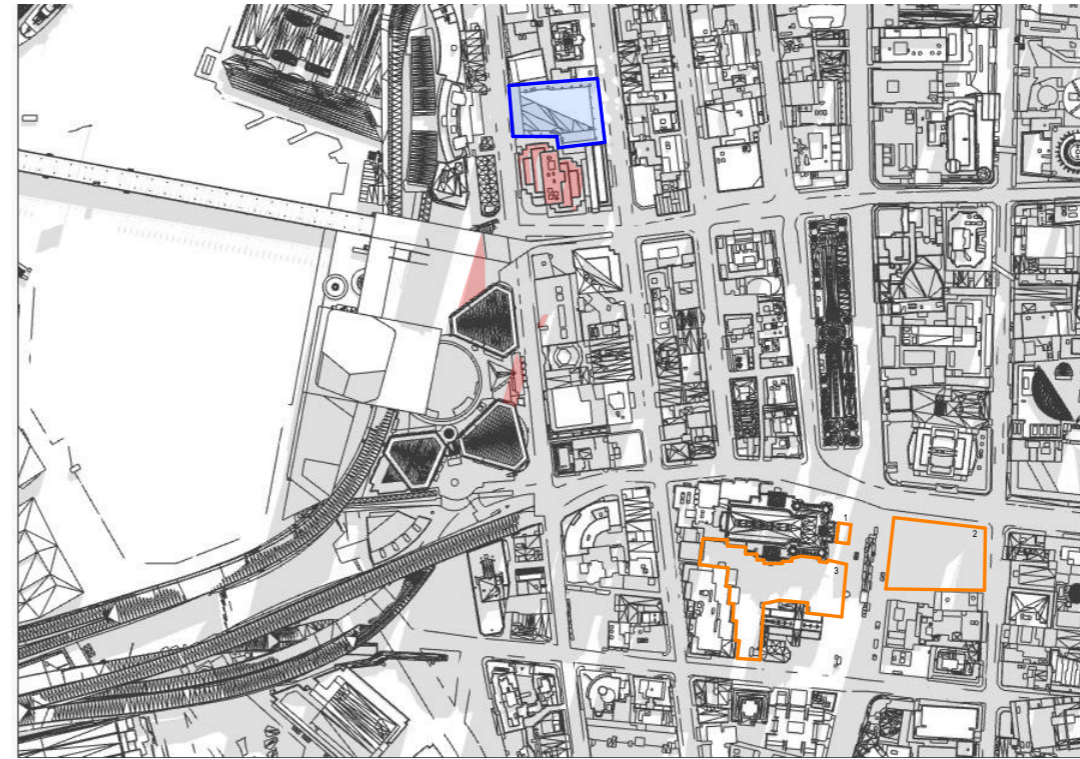
Winter Solstice - 11am & 12pm



**1** PLAN 11am 383 KS (e)  
EXISTING

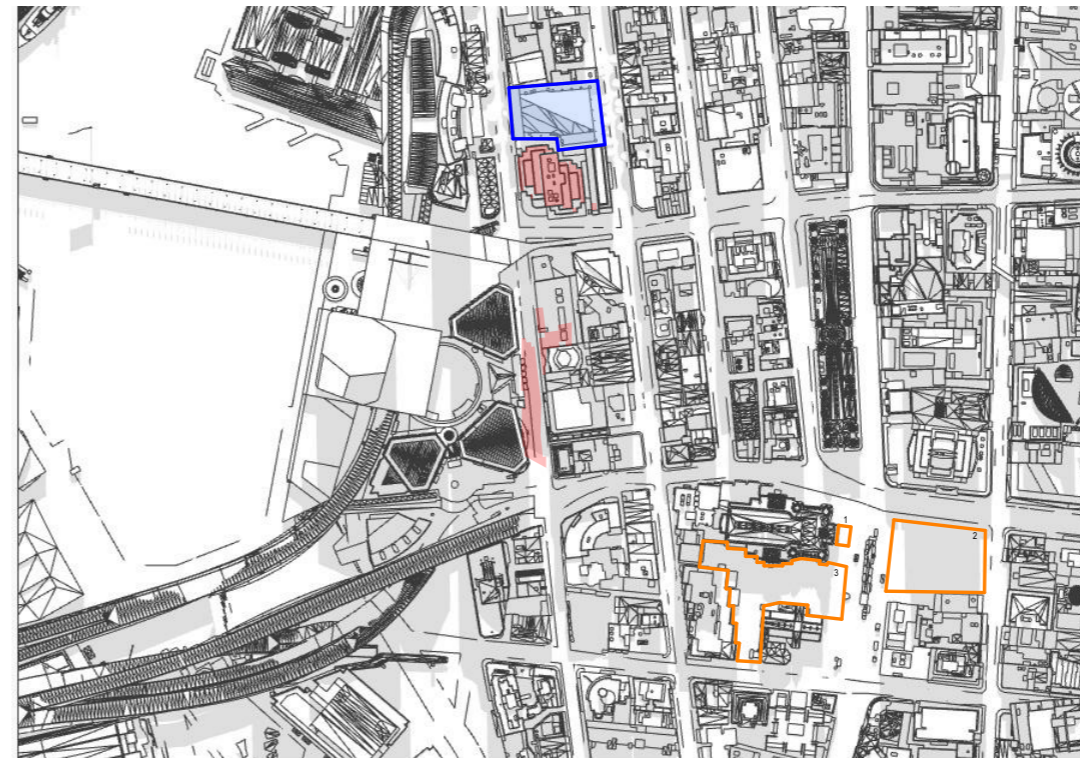


**1** PLAN 12pm 383 KS (e)  
EXISTING



**2** PLAN 11am 383 KS (p)  
PROPOSED




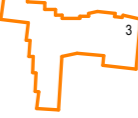



NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS



**2** PLAN 12pm 383KS (p)  
PROPOSED

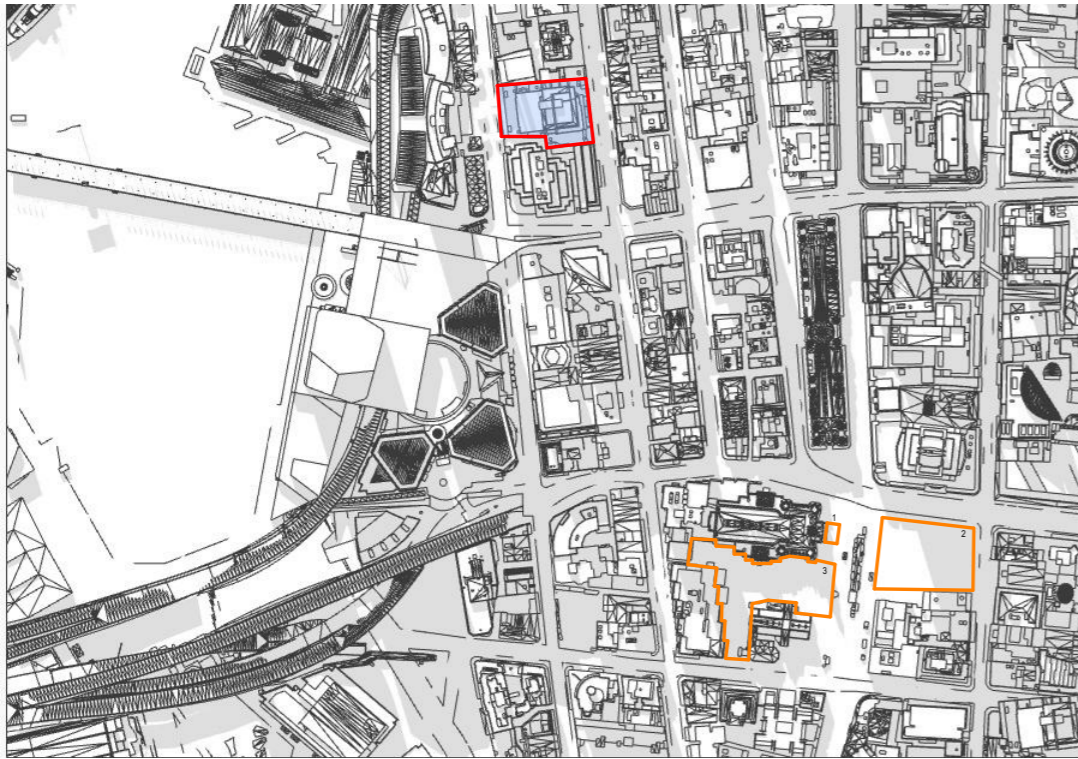
NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

**LEGEND**

-  No Additional Overshadowing Control
-  1 - Town Hall Steps
-  2 - Future Town Hall Square
-  3 - Sydney Square
-  383 KENT STREET EXISTING BUILDING
-  383 KENT STREET PROPOSED ENVELOPE
-  ADDITIONAL OVERSHADOWING FROM PROPOSED ENVELOPE

# Shadow Diagrams

Winter Solstice - 1pm & 2pm




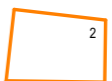
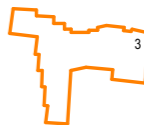



**1** PLAN 1pm 383 KS(e)  
EXISTING

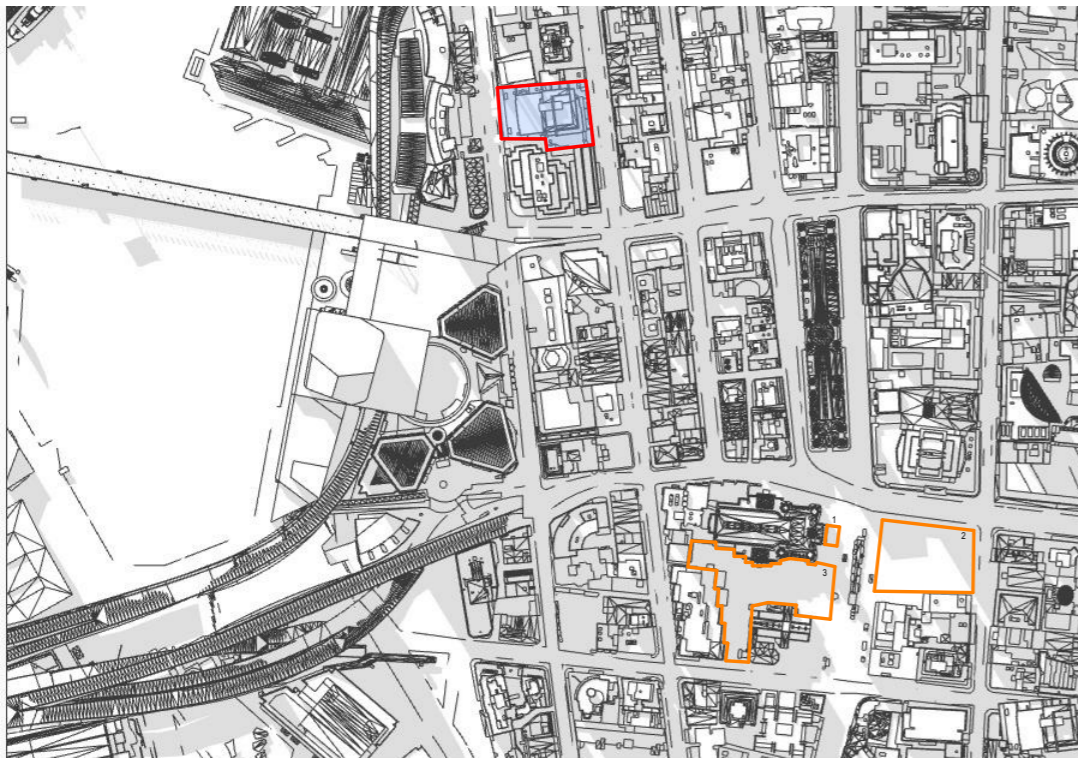


**2** PLAN 1pm 383KS (p)  
PROPOSED

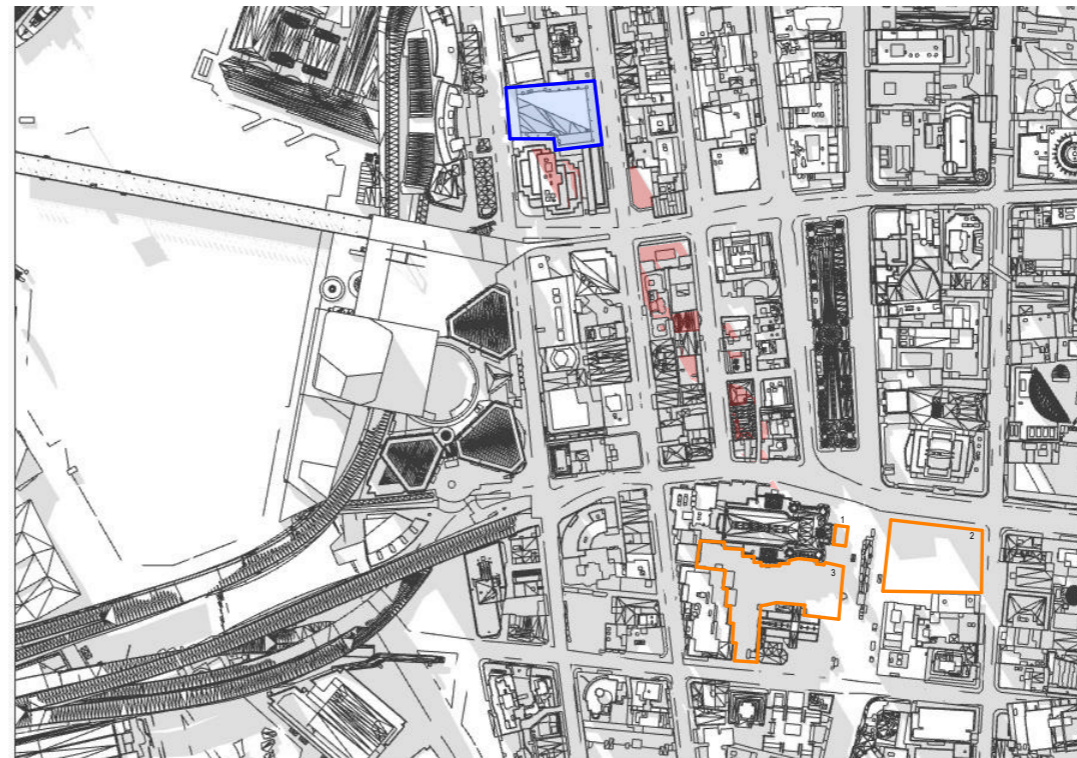
NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

**LEGEND**

-  1 TOWN HALL STEPS
-  2 FUTURE TOWN HALL SQUARE
-  3 SYDNEY SQUARE
-  383 KENT STREET EXISTING BUILDING
-  383 KENT STREET PROPOSED ENVELOPE
-  ADDITIONAL OVERSHADOWING FROM PROPOSED ENVELOPE



**1** PLAN 2pm 383 KS (e)  
EXISTING



**2** PLAN 2pm 383 KS (p)  
PROPOSED

NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

# Shadow Diagrams

Winter Solstice - 3pm & 4pm



1 PLAN 3pm 383 KS (e)  
EXISTING UNDER NAO

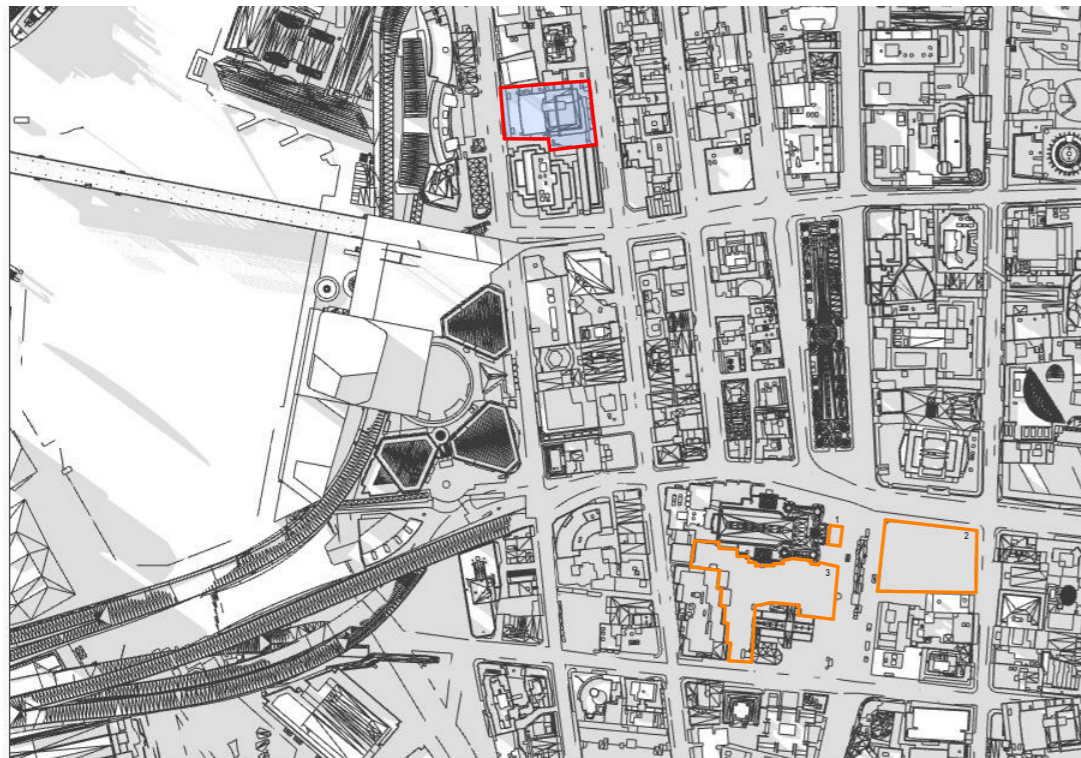


2 PLAN 3pm 383 KS (p)  
PROPOSED UNDER NAO

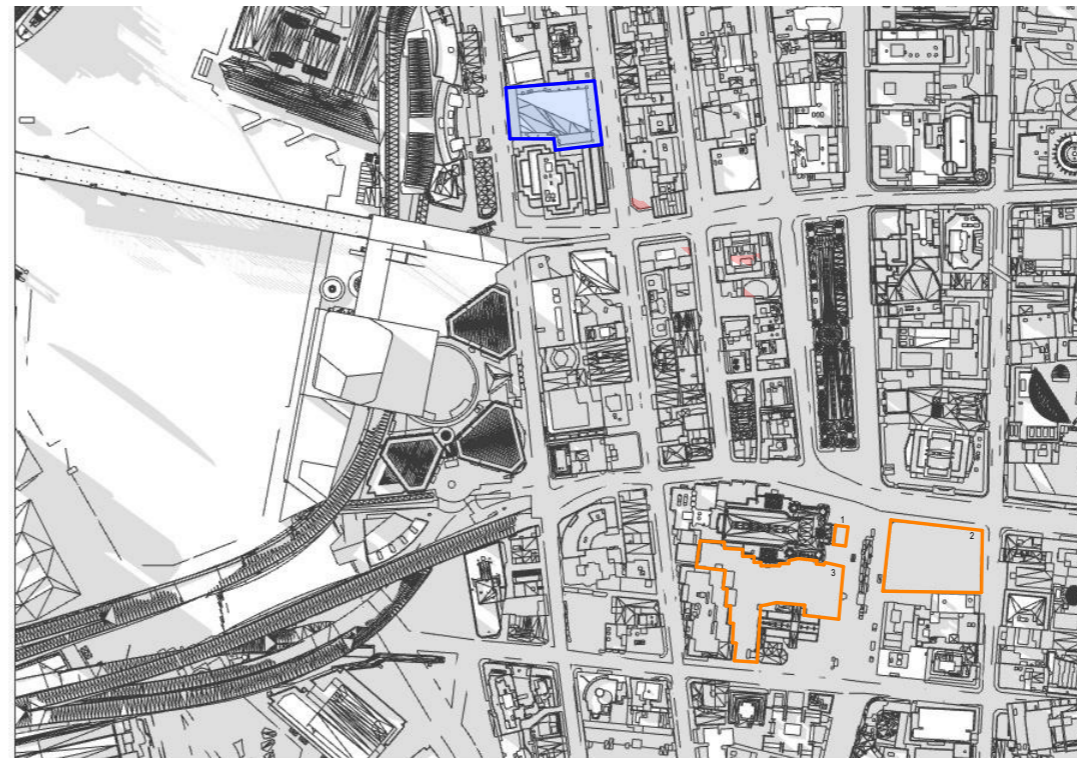
NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

## LEGEND

- 1 TOWN HALL STEPS
- 2 FUTURE TOWN HALL SQUARE
- 3 SYDNEY SQUARE
- 383 KENT STREET EXISTING BUILDING
- 383 KENT STREET PROPOSED ENVELOPE
- ADDITIONAL OVERSHADOWING FROM PROPOSED ENVELOPE



1 PLAN 4pm 383 KS (e)  
EXISTING



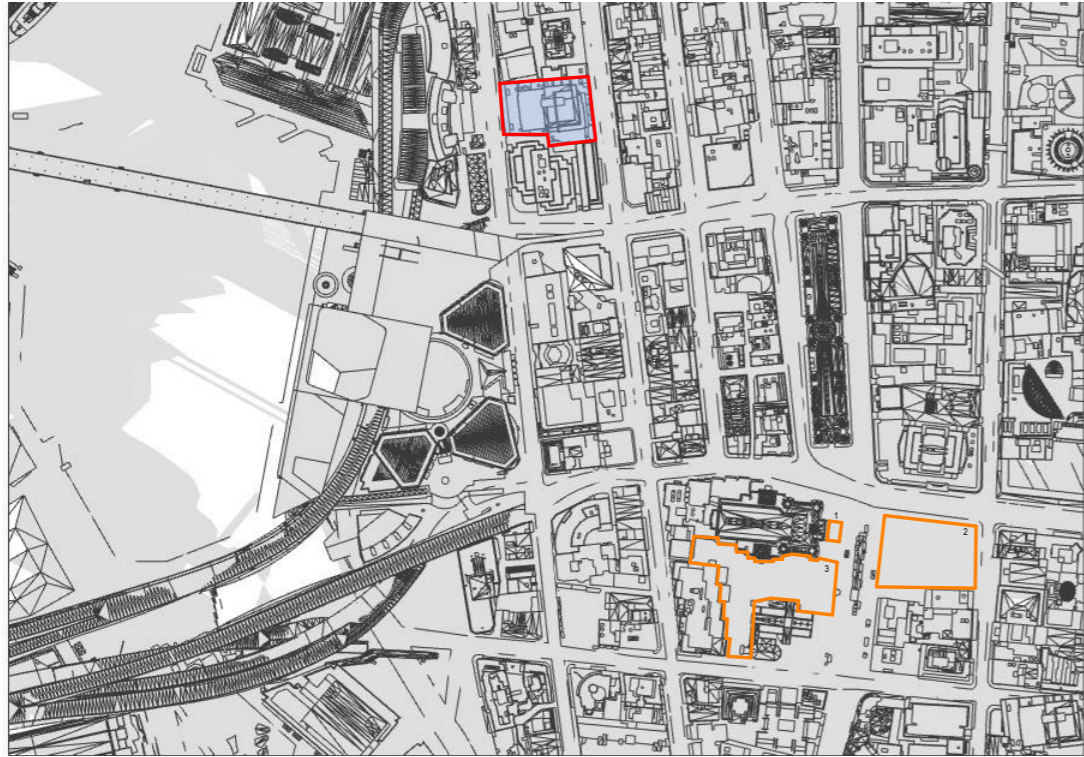
2 PLAN 4pm 383 KS (p)  
PROPOSED

NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

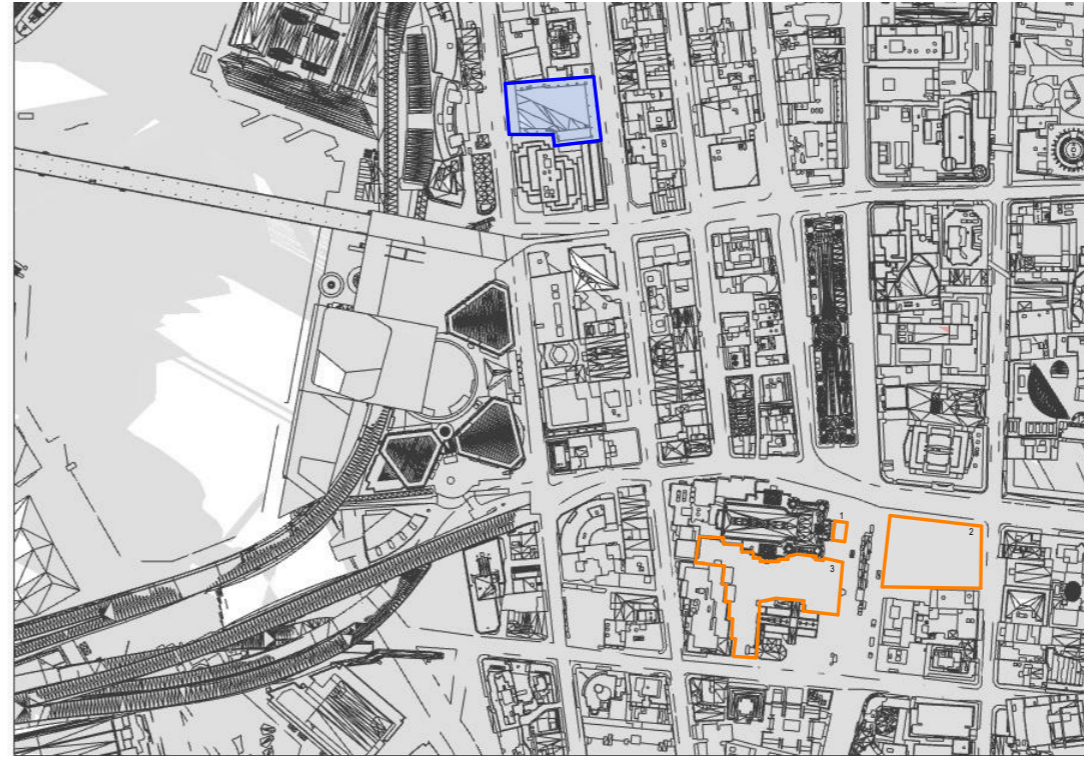


# Shadow Diagrams

Winter Solstice - 4.50pm (sunset)





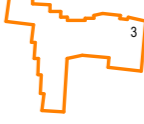



**1** PLAN 4.50pm (sunset) 383 KS (e)  
EXISTING



**2** PLAN 4.50pm (sunset) 383 KS (p)  
PROPOSED

NO ADDITIONAL OVERSHADOWING TO SYDNEY SQUARE,  
FUTURE TOWN HALL SQUARE & TOWN HALL STEPS

**LEGEND**

-  TOWN HALL STEPS
-  FUTURE TOWN HALL SQUARE
-  SYDNEY SQUARE
-  383 KENT STREET EXISTING BUILDING
-  383 KENT STREET PROPOSED ENVELOPE
-  ADDITIONAL OVERSHADOWING FROM PROPOSED ENVELOPE