Sydney Metro

PITT STREET NORTH OVERSTATION DEVELOPMENT

E.4 Shadow Analysis Report

State Significant Development, Development Application (SSD DA)

Prepared for **Pitt Street Developer North Pty LTD**

9 July 2020

Revision C
Issue for DPIE

Walsh² Analysis

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1.0 CONTEXT

1.1 REASONS

This report has been prepared to accompany a detailed State Significant Development (SSD) development application (DA) for a commercial mixed-use Over Station Development (OSD) above the new Sydney Metro Pitt Street North Station. The detailed SSD DA is consistent with the Concept Approval (SSD 17_8875) granted for the maximum building envelope on the site, as proposed to be modified.

The Minister for Planning, or their delegate, is the consent authority for the SSD DA and this application is lodged with the NSW Department of Planning, Industry and Environment (NSW DPIE) for assessment.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 25 October 2019.

The detailed SSD DA seeks development consent for:

- Construction of new commercial tower of approximately 38 storeys
- The tower includes maximum GFA, excluding floor space approved in the CSSI.
- Integration with the approved CSSI proposal including though not limited to:
    - Structures, mechanical and electronic systems, and services; and
    - Vertical transfers.
- Use of spaces within the CSSI 'metro box' building envelope for the purposes of:
    - Retail tenancies;
    - Commercial lobby and commercial amenities;
    - Car parking spaces within the podium for the purposes of the commercial premises; and
    - Loading and services access.
- Utilities and services provision.
- Stratum subdivision (staged).

1.2 THE SITE

The site is located within the Sydney CBD. It has three separate street frontages, Pitt Street to the west, Park Street to the south and Castlereagh Street to the east. The area surrounding the site consists of predominantly commercial high-density buildings and some residential buildings, with finer grain and heritage buildings dispersed throughout.

The site has an approximate area of 3,150.1sqm and is legally described as follows:

- 252 Pitt Street (Lot 20 in DP1255509)

Figure 01 – Location Plan

Source: Urbis

1.2 SYDNEY METRO

Sydney Metro is Australia's biggest public transport program. A new standalone railway, this 21st century network will revolutionise the way Sydney travels.

There are four core components:

- Sydney Metro Northwest (formerly the 36km North West Rail Link)

  This project is now complete and passenger services commenced in May 2019 between Rouse Hill and Chatswood, with a metro train every four minutes in the peak. The project was delivered on time and $1 billion under budget.

- Sydney Metro City & Southwest

  Sydney Metro City & Southwest project includes a new 30km metro line extending metro rail from the end of Metro Northwest at Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

  Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.

  In 2024, customers will benefit from a new fully-air conditioned Sydney Metro train every four minutes in the peak in each direction with lifts, level platforms and platform screen doors for safety, accessibility and increased security.

- Sydney Metro West

  Sydney Metro West is a new underground railway connecting Greater Parramatta and the Sydney CBD. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and supporting employment growth and housing supply between the two CBDs.

  The locations of seven proposed metro stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays.

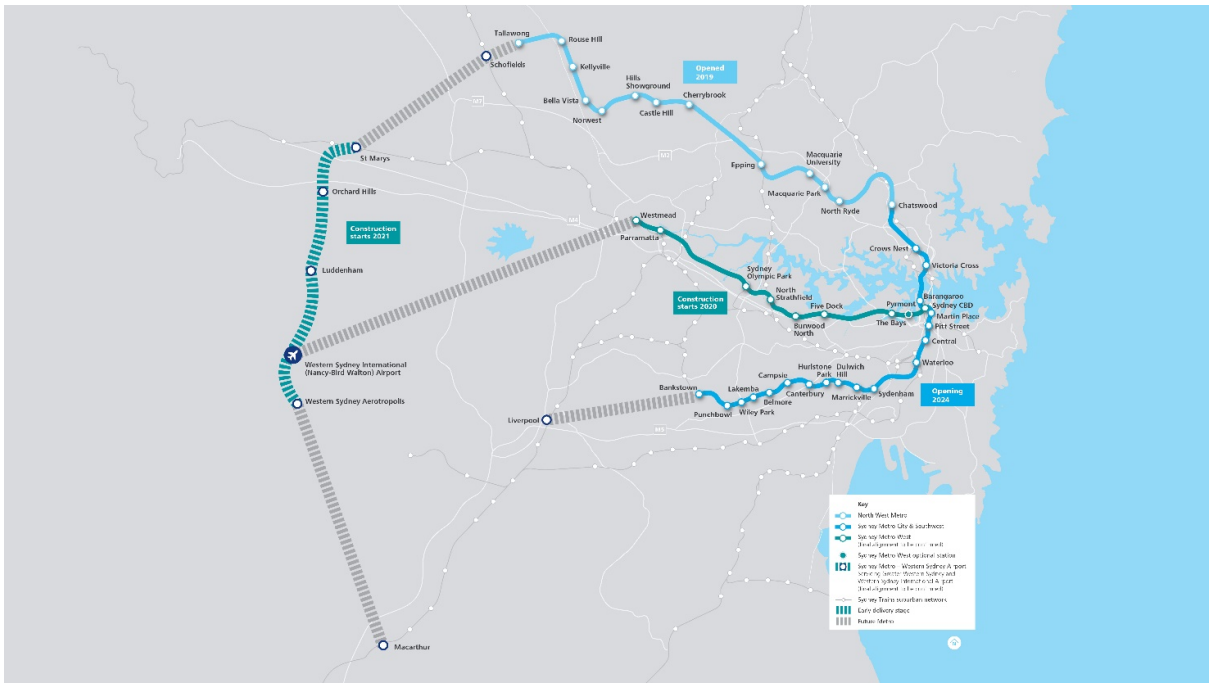
  The NSW Government is assessing an optional station at Pyrmont and further planning is underway to determine the location of a new metro station in the Sydney CBD.

- Sydney Metro – Western Sydney Airport

  Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service. The Australian and NSW governments are equal partners in the delivery of this new railway.

The Sydney Metro Project is illustrated in the Figure below.

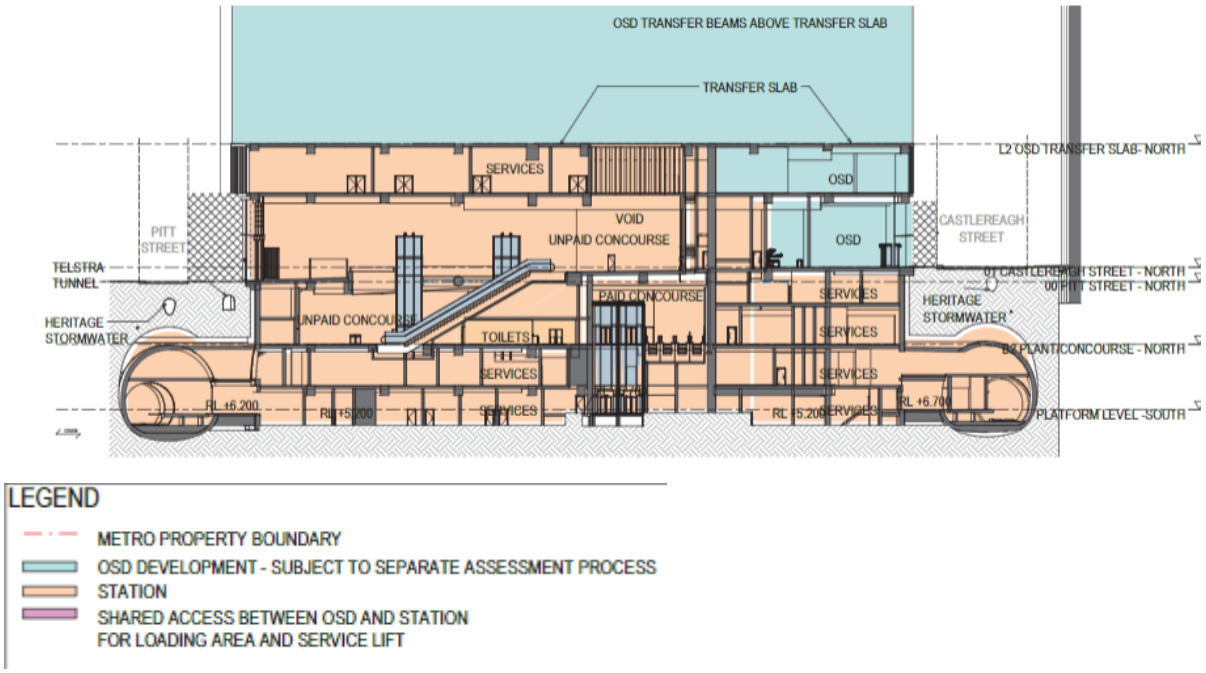
Figure 2 – Sydney Metro Alignment Map



Source: Sydney Metro

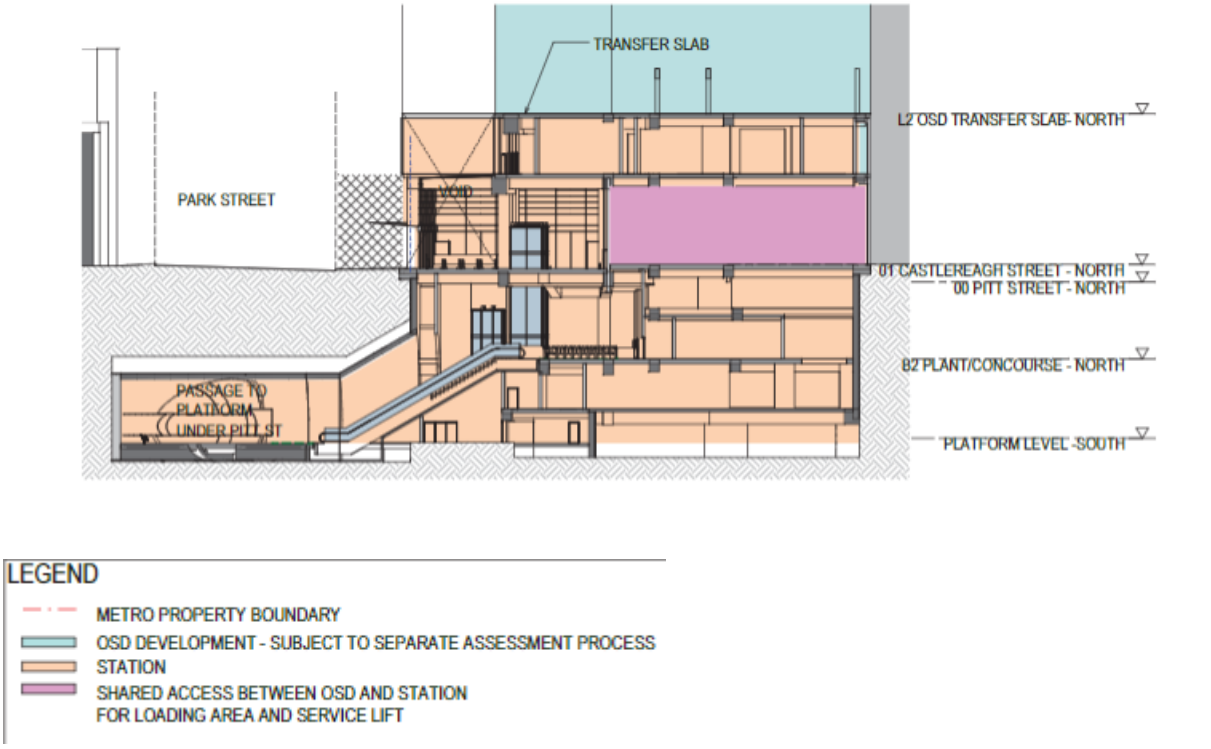
On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest – Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (CSSI Approval). The terms of the CSSI Approval includes all works required to construct the Sydney Metro Pitt Street Station, including the demolition of existing buildings and structures on both sites (north and south). The CSSI Approval also includes construction of below and above ground works within the metro station structure for appropriate integration with over station developments.

Figure 3 – Pitt Street Station – North (East-West Section)



Source: CSSI Preferred Infrastructure Report (TfNSW)

Figure 4 – Pitt Street Station – North (North-South Section)



Source: CSSI Preferred Infrastructure Report (TfNSW)

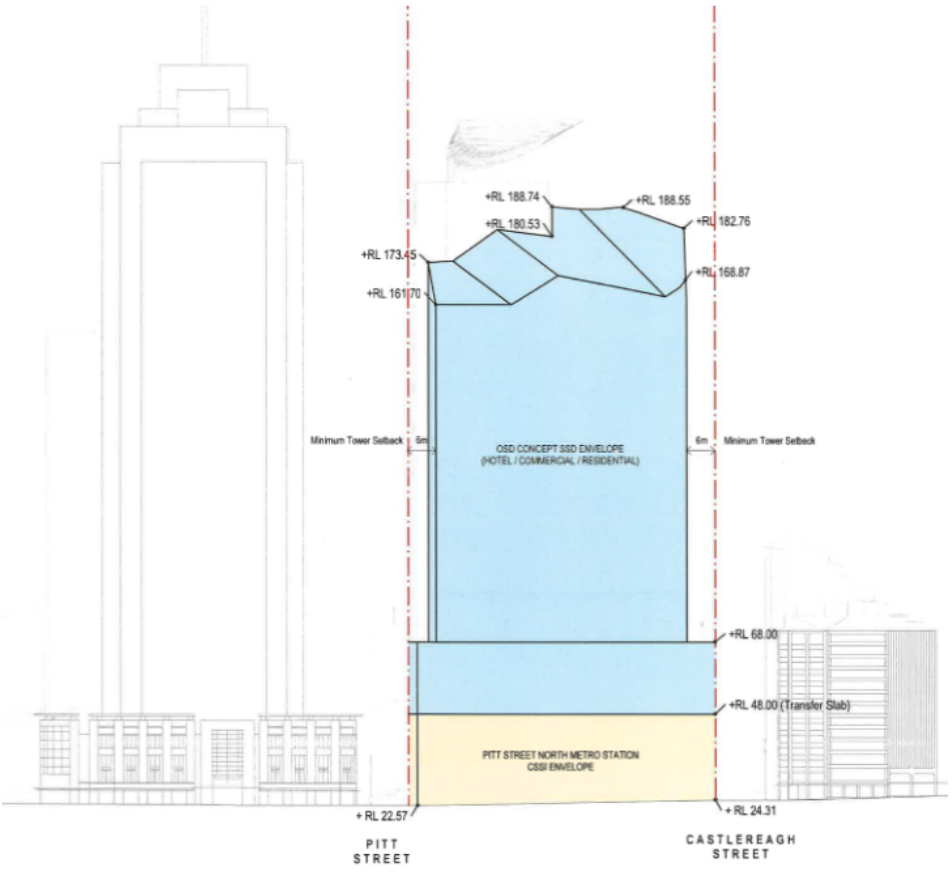
The Preferred Infrastructure Report (PIR) noted that the integration of the OSD elements and the metro station elements would be subject to the design resolution process, noting that the detailed design of the "metro box" may vary from the concept design assessed within the planning approval.

As such in summary:

- The CSSI Approval provides consent for the construction of all structures within the approved "metro box" envelope for Pitt Street North.
- The CSSI Approval provides consent for the fit out and use of all areas within the approved "metro box" envelope that relate to the ongoing use and operation of the Sydney Metro.
- The CSSI Approval provides consent for the embellishment of the public domain, and the architectural design of the "metro box" envelope as it relates to the approved Sydney Metro and the approved Pitt Street North Station Design & Precinct Plan.
- Separate development consent however is required to be issued by the NSW DPIE for the use and fit-out of space within the "metro box" envelope for areas related to the OSD, and notably the construction and use of the OSD itself.

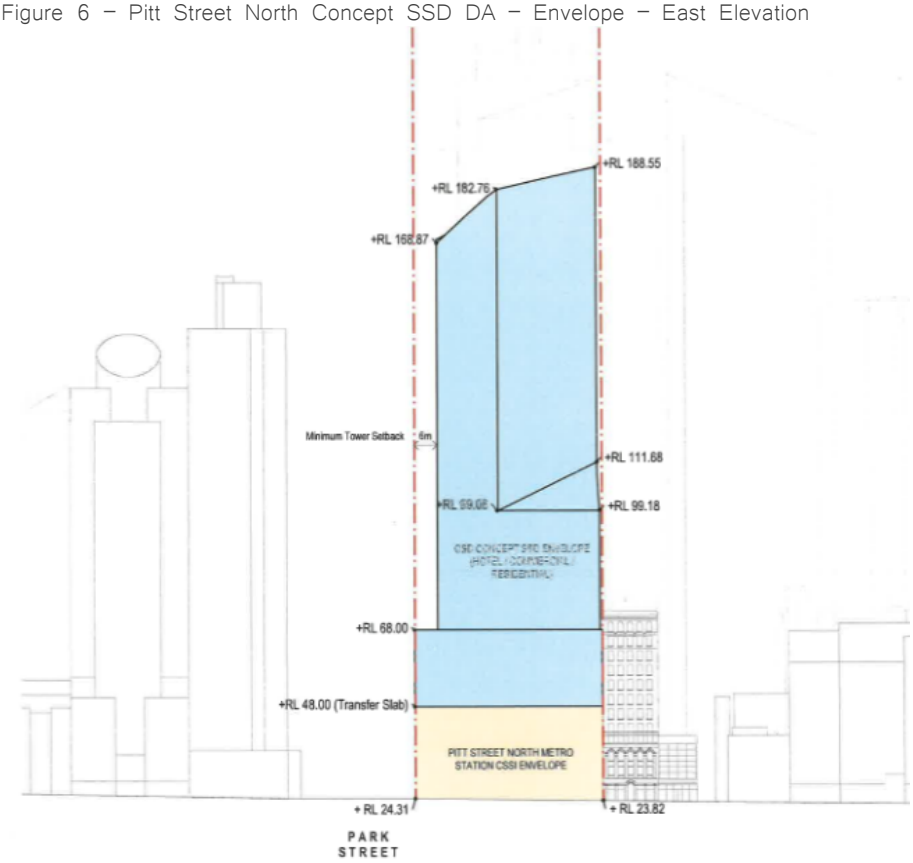
As per the requirements of clause 7.20 of the Sydney Local Environmental Plan 2012, as the OSD exceeds a height of 55 metres above ground level (among other triggers), development consent is first required to be issued in a Concept (formerly known as Stage 1) DA. This is described below.

Figure 5 – Pitt Street North Concept SSD DA – Envelope – South Elevation



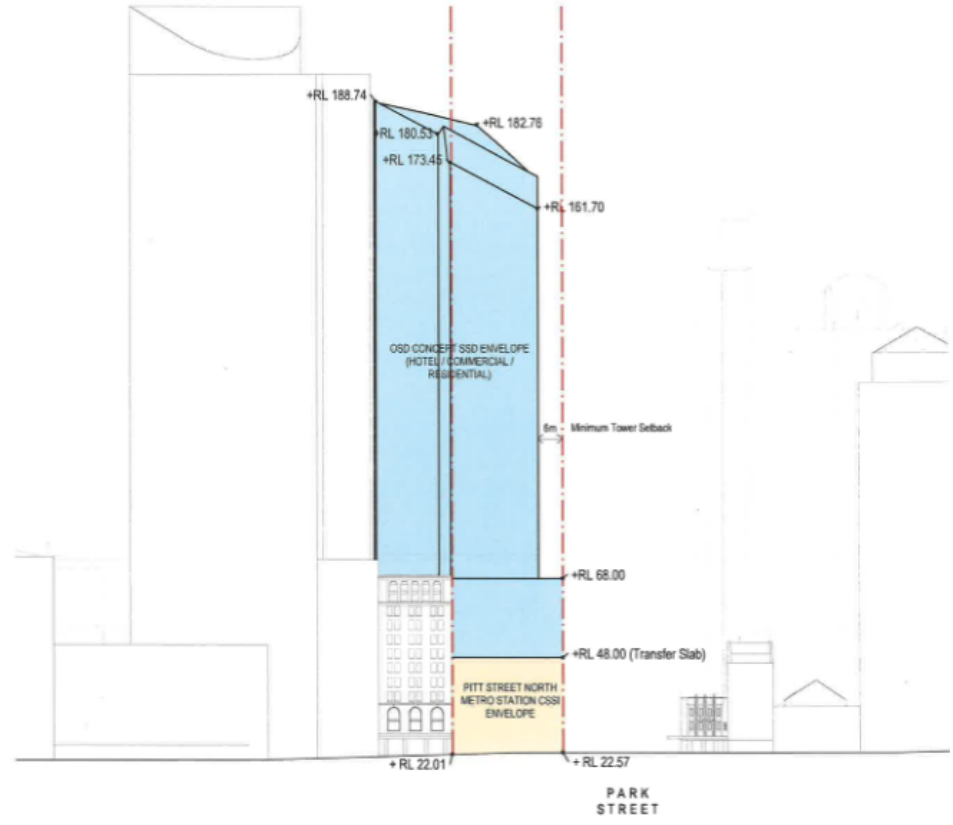
Source: SSD 8875 Concept Stamped Plans

Figure 6 – Pitt Street North Concept SSD DA – Envelope – East Elevation



Source: SSD 8875 Concept Stamped Plans

Figure 7 – Pitt Street North Concept SSD DA – Envelope – West Elevation



Source: SSD 8875 Concept Stamped Plans

2.0 PRELIMINARIES AND SUMMARY

2.1 PRELIMINARIES

This expert opinion report is an analysis and verification of projected **solar access** compliance and overshadowing for the proposal at Pitt Street North Over Station Development.

Our qualifications and experience are summarized in *A.0 APPENDIX A: CREDENTIALS*.

The documents referred to in this report are detailed in *2.1 DOCUMENTS*.

2.2 SUMMARY

2.2.1 OVERSHADOWING TO NEIGHBOURING PROPERTIES

A detailed compliance tables can be found in Appendix C.

Park Regis

The overshadowing impact of the proposal reduces the amount of units receiving 2 hours of solar access to their living room between 9am-3pm from 122/182 (67.0%) down to 61/182 (33.5%), which does not comply with the ADG Design guidance in Objective 3B-2. It should be noted that there is an improvement from the Stage 1 Envelope which reduced solar compliance to 54/192 (29.7%); therefore, the projected solar access has 7 units (3.8%) extra receiving complying solar access.

If we are to expand the hours of compliance to 8am-4pm as outlined later in the report, the overshadowing impact of the proposal reduces the amount of units receiving 2 hours of solar access to their living room from 175/182 (96.2%) down to 154/182 (84.6%). **This calculation is compliant with the Objective 3B-2 of the ADG.** It should also be noted that this is an improvement on Stage 1 which reduced the 8-4 compliance down to 129/182 (70.9%); therefore, the projected solar access has 26 units (13.7%) extra receiving complying solar access.

2.2.2 OVERSHADOWING TO HYDE PARK

During December 21, the proposed building has a small amount of overshadowing to Hyde Park between 2:30pm to 3pm. When looking at the shadow plans produced by Foster + Partners, it is clear that **there has been a large reduction of overshadowing in comparison to the Stage 1 Envelope.**

During September 21, there is no overshadowing of Hyde Park until after 1:30pm. From 1:30-3pm there is additional overshadowing which is highlighted in part 7.1 of the report and Foster + Partners overshadowing plans. It should be made clear that **the overshadowing amount to Hyde Park is less than that of the Stage 1 proposed envelope** and as such this amount of overshadowing has been foreseeable.

During June 21, the proposed building does not overshadow Hyde Park at any time between 12pm-3pm. **It can be concluded that there is no impact to Hyde Park at this time.**

3.0 DOCUMENTS AND INFORMATION

3.1 DOCUMENTS

We base our analysis and opinion on the following drawings and documents:

- 3D digital model first supplied by Foster + Partners:
  - SMCSWSPS-FOS-ALL-AT-DWG-existing context.dwg
  - SMCSWSPS-FOS-OSN-AT-DWG-Envelope.dwg
  - SMCSWSPS-FOS-ALL-AT-DWG-Proposed.dwg

- Additional 3D Model of Park Regis supplied by Cox Architecture in Sketchup format:
  - COMBINED PROPOSED DEVELOPMENT.skp

- Proposed Drawings by Foster and Partners
  SMCSWSPS-FOS-OSN-AT-DWG-000001

- Proposed Shadowing Analysis by Foster and Partners
  - SMCSWSPS-FOS-OSN-AR-REP-000003

- Park Regis Drawings – 304 Pitt St Sydney
  - 1966_0737-01.pdf
  - 1966_0737-02.pdf
  - 1966_0737-03.pdf
  - 1966_0737-04.pdf
  - 1966_0737-05 (2).pdf
  - 1966_0737-06.pdf
  - 1966_0737-07.pdf
  - 1966_0737-08.pdf
  - 1966_0737-09.pdf

Please note, for the purpose of Solar Access, the amendment to the concept building envelope has no impact on Hyde Park or Park Regis due to its height and location; therefore, we have excluded all analysis of the proposed amendments.

3.2 SEARS

The following SEARS have been addressed in our report.

Condition Type: MOD SEARS DC EXTRA	DC or SEARS Reference Number	Title of SEARS/ SSDA Category	Full description from SEARS or Development Consent Doc.	Walsh[2] Analysis Response
SEARS	5	Visual and Amenity Analysis (Solar Analysis)	c) Provide a solar access and overshadowing analysis, comparing the overshadowing impacts of the proposal to the existing situation, the SLEP 2012 - Sun Access Planes, and the approved envelopes at hourly intervals for the dates of 14 April, 31 August, 15 July and 15 January having regard to the impact of the proposal on solar access to Hyde Park. This requirement is in addition to the standard requirement for shadow diagrams at half hourly intervals.	We have provided Views from the Sun in Appendix B for June 21 for the existing and proposed buildings at half hourly intervals from 8am until 4pm. Additionally, we have provided Views from the Sun in Appendix D for the proposed state in on June 21, September 21 and December 21 (factoring in Daylight savings) at half hourly intervals from 12pm until 4pm. We have undertaken compliance tables for the neighbouring residential apartment building of Park Regis to show compliance with Objective 3B-2 of the ADG. This is shown in part 6 of the report and Appendix C. SLEP 2012 Sun Access Plane is covered off by the architects Foster and Partners in the form of an electronic model being provided to City of Sydney.
SEARS	15	Plans and Documents Solar Access Analysis	Solar access analysis report and diagrams: a) including existing and proposed SEPP 65 and ADG compliance tables for all affected neighbouring residential flat buildings b) Hyde Park: half hourly shadow diagrams from 12pm to 3pm for 21st of each month of the year, showing existing and proposed scenarios	We have undertaken compliance tables for the neighbouring residential apartment building of Park Regis to show compliance with Objective 3B-2 of the ADG. This is shown in part 6 of the report and Appendix C. We have provided Views from the Sun in Appendix B for June 21 for the existing and proposed buildings at half hourly intervals from 8am until 4pm. We have provided Views from the Sun in Appendix D for the proposed state in on June 21, September 21 and December 21 (factoring in Daylight savings) at half hourly intervals from 12pm until 4pm. Foster and Partners have provided half hourly existing and proposed shadow plans for 12pm-3pm for each month of the year.

4.0 SOLAR ACCESS

4.1 RELEVANT SOLAR ACCESS STANDARDS

4.1.1 APARTMENT DESIGN GUIDE

The *Apartment Design Guide (ADG)* gives effect to SEPP65 for assessing solar access and other amenity provisions and gives the following quantified recommendations:

Objective 4A-1	
To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	
Design criteria	
1.	Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas
2.	In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter
3.	A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter

4.1.2 The ADG provides a test for acceptable additional overshadowing impact on adjacent multi-residential properties:

Objective 3B-2
Overshadowing of neighbouring properties is minimised during mid winter
Design guidance
Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access
Solar access to living rooms, balconies and private open spaces of neighbours should be considered
Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%

4.1.3 LOCAL CONTROLS

We note that **Solar access (6.1)** *Design criteria* in the ADG are *discretionary controls* which, by virtue of Cl. 6A of SEPP65, take precedence over controls contained in Councils' DCPs.

In quantifying the compliance for solar access for this application, we rely on satisfying the ADG as also satisfying the DCP.

4.2 PREDICTED SOLAR ACCESS: METHODOLOGY

We employ the following analysis methodology.

4.2.1 3D DIGITAL MODEL

For a detailed analysis of overshadowing and solar access, we refer to a 3D model that has been provided by Cox Architecture. A SketchUp file was sent to us on the 03/04/2020 named "COMBINED PROPOSED DEVELOPMENT.skp".

4.2.2 MODEL LOCATION

We have independently geo-located the model and verified the direction of North, by reference to the cadastral grid north.

4.2.3 ACCURACY OF THE MODEL

From the model, we have summarily checked topographical and building dimensions that might otherwise give rise to any errors, by reference to figured RL dimensions. We have also investigated the model to ensure buildings currently under construction have been included. We cannot independently warrant the model dimensions, but we feel confident to rely on the general accuracy of the modelling.

4.2.4 VIEWS FROM THE SUN

The SketchUp software prepares the shadow projections by reference to accurate solar geometry. Because of the complexity of demonstrating the quantification of solar access to glazing and private open space of various orientations, our detailed analysis was performed primarily by using projections known as **'View from the Sun'** taken at half hourly intervals.

A view from the sun shows all sunlit surfaces at a given time and date. It therefore allows a very precise count of sunlight hours on any glazing or horizontal surface, with little or no requirement for secondary calculations or interpolation. The technique is illustrated in Figure 1.

Note that a 'view from the sun' by definition does not show any shadows.

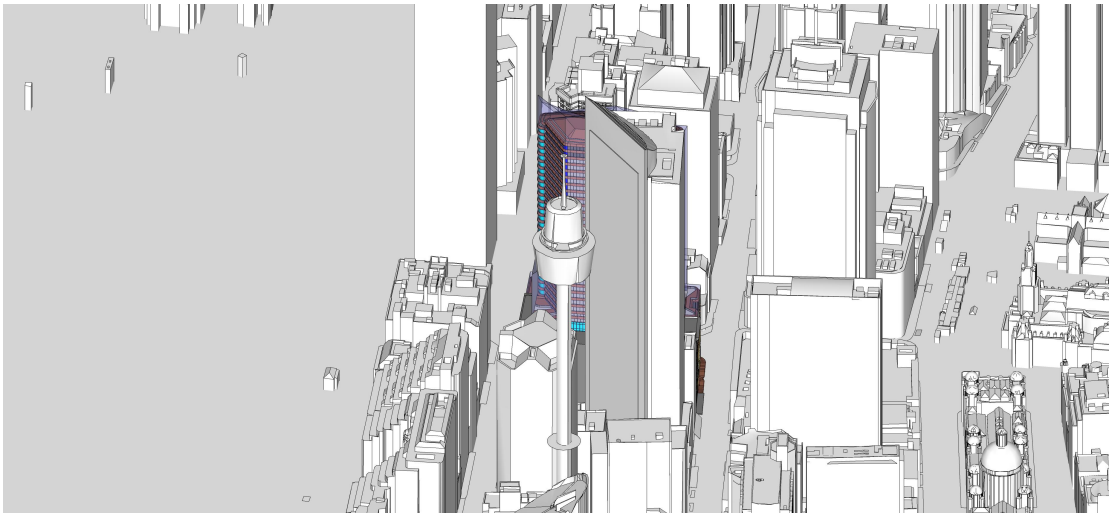


Figure 8: View from the sun, 12pm June 21

4.3 CHARACTERISATION OF SOLAR ACCESS COMPLIANCE

4.3.1 SUN PATCHES ON GLAZING

For the purpose of calculating the compliance with the control, we examine sun patches on the relevant glazing line of each apartment. Because of its key importance in the determination of what is 'effective sunlight' for characterisation of compliance for both glazing and private open space, we refer specifically to the relevant L+EC Planning Principle (The Benevolent Society v Waverley Council [2010] NSWLEC 1082) in that:

- We quantify as complying all sun patches of 'reasonable size', which we generally take to be a minimum of approximately 1m2.
- We ignore very large angles of incidence to the glazing surface, and unusably small areas of sunlit glazing.

There is no accepted standard for the absolute limit of acceptable area of the sun patch on partly shaded glazing. In accordance with the Court's Planning Principle, we consider this to be approximately 1m2 (on the basis that it exceeds 50% of the area of a standard window 1500 x 1200 high which would normally be accepted as complying).

5.0 PREDICTED SOLAR ACCESS

We note that the proposed building is a commercial building and therefore it does not have any solar access requirements. No analysis has been undertaken on the proposed building.

6.0 OVERSHADOWING IMPACT ON NEIGHBOURING PROPERTIES

The views from the sun technic as outlined in 4.2.4 were used to identify potential overshadowing impacts for neighbouring properties.

6.1 POTENTIALLY AFFECTED PROPERTIES

After reviewing the details of Stage 1 DA, we agree that the only residential property that would be affected by the proposed building is Park Regis. This was also the opinion of the Stage 1 approval.

1. Park Regis – 27 Park Street, Sydney

It should be noted that the lower levels of this building are a motel; with apartments located from Level 16 and above

6.2 APPLICABLE CONTROL

6.2.1 The ADG provides a test for acceptable additional overshadowing impact on adjacent multi-residential properties:

Objective 3B-2
Overshadowing of neighbouring properties is minimised during mid winter
Design guidance
Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access
Solar access to living rooms, balconies and private open spaces of neighbours should be considered
Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%

6.3 PARK REGIS APARTMENTS

This building is situated immediately to the south of the proposed site, and can be expected to be most impacted by any additional shadows. We undertook the detailed quantification of the present and projected solar access status of individual apartments.

Appendix C reports the full table of direct sun access for all individual apartments in Park Regis, and highlights the periods of loss of sun exposure for individual apartments due to the overshadowing.

Table 2 below summarises the existing and projected solar access status for Park Regis.

	EXISTING	STAGE 1 ENVELOPE	PROJECTED	% CHANGE FROM EXISTING	% CHANGE FROM STAGE 1 ENVELOPE
>2 hrs 9-3 Living	122 / 182 = 67.0%	54 / 182 = 29.7%	61 / 182 = 33.5%	-33.5%	+3.8%
>2 hrs 8-4 Living	175 / 182 = 96.2%	129 / 182 = 70.9%	154 / 182 = 84.6%	-11.6%	+13.7%
No sun	0 / 182 = 0%	0 / 182 = 0%	0 / 182 = 0%	0%	0%

Table 2: Summary of Overshadowing to Park Regis Apartments

The overshadowing impact of the proposal reduces this proportion to 61/182 (33.5%), which does not comply with the ADG Design guidance when looking at standard hours. As a large portion of the apartments face East, the sun prior to 9am is very beneficial to those apartments. We refer to the judgment by Brown C. in the matter of Botany Development Pty Ltd v Botany Council LEC 10360 of 2013, at paras. 79 through 87 where extended hours could be implemented for certain sites.

Based off the above, when looking at the hours of 8am-4pm, solar compliance reduces from 175/182 (96.2%) to 154/192 (84.6%). There is only a reduction of 11.6% which is compliant with the Objective 3B-2 of the ADG.

7.0 HYDE PARK

7.1 OVERSHADOWING OF HYDE PARK

We have investigated the overshadowing of Hyde Park and shown all the Views from the Sun from 12pm to 4pm on June 21, September 21 and December 21 in Appendix D. This covers off the winter and summer solstice as well as the spring equinox.

During December 21, the proposed building does not overshadow Hyde Park until just after 2:30pm. Between 2:30pm-3pm there is a small amount of shadow onto Hyde Park, but this shadow is half the amount of shadow that a building that maximises the Stage 1 Envelope would have cast. Careful consideration of the building form has therefore reduced the amount of overshadowing to Hyde Park.

During September 21, there is no overshadowing of Hyde Park until after 1:30pm. At 2:00pm, majority of the shadow is cast onto the buildings at 50-60 Park Street, with an area of additional overshadowing at the location circled in Red on the below image (Figure 9). This shadow moves at 2:30 to be at the location shown in Figure 9 by a blue. The 3pm shadow location is shown in Figure 9 with a yellow circle. It should be made clear that the **overshadowing amount to Hyde Park is less than that of the Stage 1** proposed envelope and as such this amount of overshadowing has been foreseeable. For detailed shadow diagrams comparing Existing, Stage 1 and Proposed, please refer to Foster + Partners Shadow Analysis dated May, 2020.

During June 21, the proposed building does not overshadow Hyde Park at any time between 12pm-3pm. This is because the building mainly overshadows 201 Elizabeth Street instead of Hyde Park. **It can be concluded that there is no impact to Hyde Park at this time.** It should be noted that if the site was to have a building that maximised on the Stage 1 Envelope, there would be additional shadow on Hyde Park in June.

Figure 9: Aerial View of Hyde Park (Image from Google Maps)

8.0 CONCLUSIONS

8.1 OVERSHADOWING OF PARK REGIS

The overshadowing impact of the proposal reduces the amount of units receiving 2 hours of solar access to their living room between 9am-3pm from 122/182 (67.0%) down to 61/182 (33.5%), which does not comply with the ADG Design guidance in Objective 3B-2.

If we are to expand the hours of compliance to 8am-4pm as outlined earlier in the report, the overshadowing impact of the proposal reduces the amount of units receiving 2 hours of solar access to their living room from 175/182 (96.2%) down to 154/182 (84.6%). **This calculation is compliant with the Objective 3B-2 of the ADG.**

It is also important to note that there has been some improvement in solar access compliance in comparison to Stage 1 Envelope. As noted in part 6.3 of the report, **there has been an increase of 3.8% in compliance between 9-3pm, and 13.7% in compliance from 8am-4pm when compared to Stage 1 Envelope**. The views in Appendix B have the Stage 1 Envelope left on so that the reduction in overshadowing is clear.

8.2 OVERSHADOWING OF HYDE PARK

During December 21, the proposed building has a small amount of overshadowing to Hyde Park between 2:30pm to 3pm. When looking at the shadow plans produced by Foster + Partners, it is clear that **there has been a large reduction of overshadowing compared to the Stage 1 Envelope.**

During September 21, there is no overshadowing of Hyde Park until after 1:30pm. From 1:30-3pm there is additional overshadowing which is highlighted in part 7.1 of the report and Foster + Partners overshadowing plans. It should be made clear that **the overshadowing amount to Hyde Park is less than that of the Stage 1 proposed envelope** and as such this amount of overshadowing has been foreseeable.

During June 21, the proposed building does not overshadow Hyde Park at any time between 12pm-3pm. **It can be concluded that there is no impact to Hyde Park at this time.**

A.0 APPENDIX A: CREDENTIALS

Walsh^2 Analysis provides opinion based services primarily in relation to analysis and reporting of solar access and overshadowing compliance of multi residential projects.

Scott Walsh is a Director of Walsh^2 Analysis. He developed his specialised expertise under Steve King, a well-known expert in the field.

Scott started working for Steve King in 2011 as a tutor of Environmental Design at the University of New South Wales. From 2013 Scott has contracted to Steve King to undertake modelling and numerical analysis of solar access to large apartment projects. Over a number of years Scott contributed significantly to fine-tune the way the analysis was undertaken, and assisted in providing to the architects feedback in regards to areas that could be adjusted to improve solar access.

Scott holds a Masters of Architecture from the University of New South Wales as well as a Bachelor of Architecture. He is a registered architect in New South Wales *(10366)* and the Australian Capital Territory *(2624)* and a director of Walsh^2 Architects.

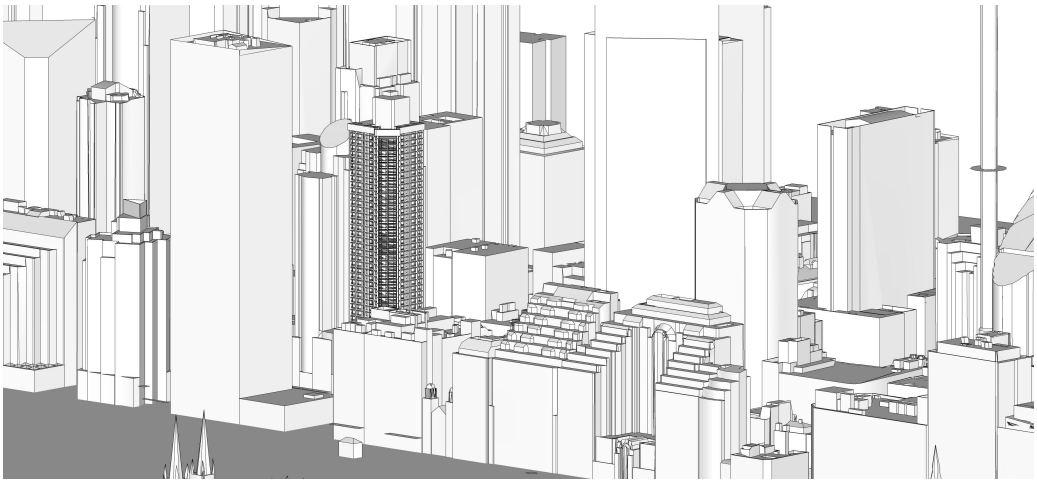
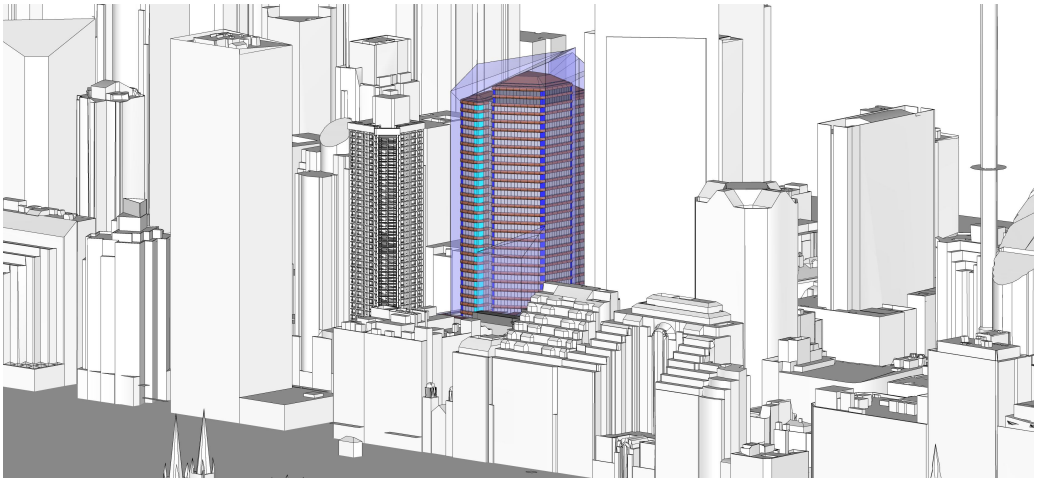
Stewart Cowan holds a Masters of Architecture at University of Technology Sydney. Stewart also assisted Steve King in undertaking modelling and numerical analysis work from early 2015.

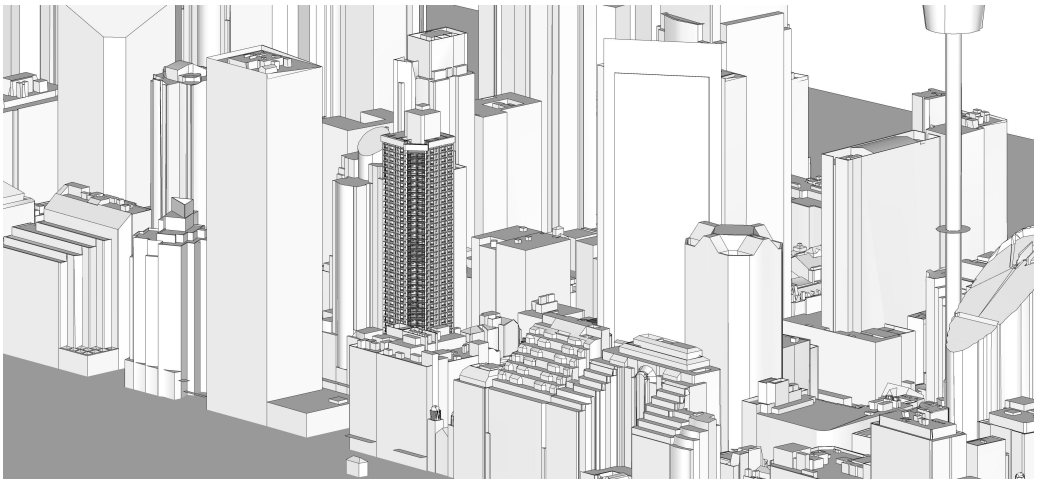
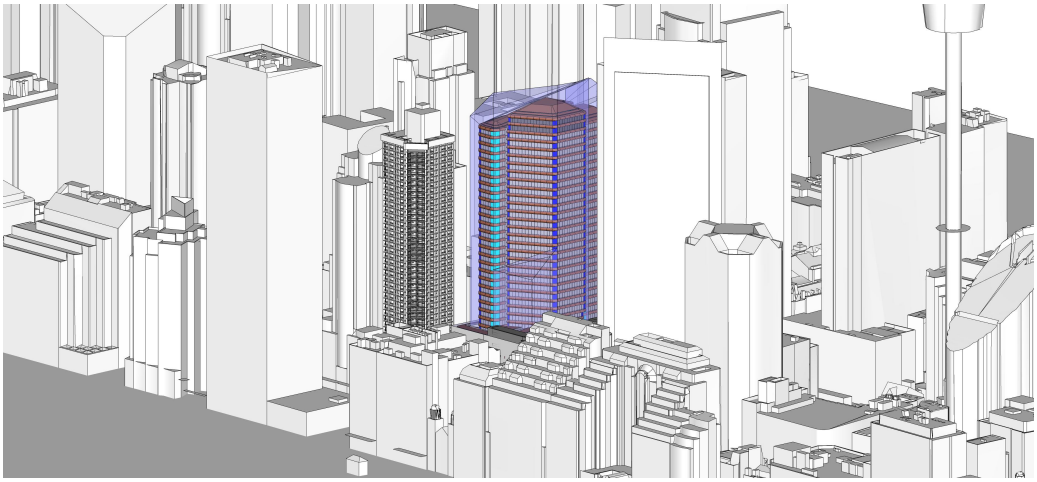
Steve King:

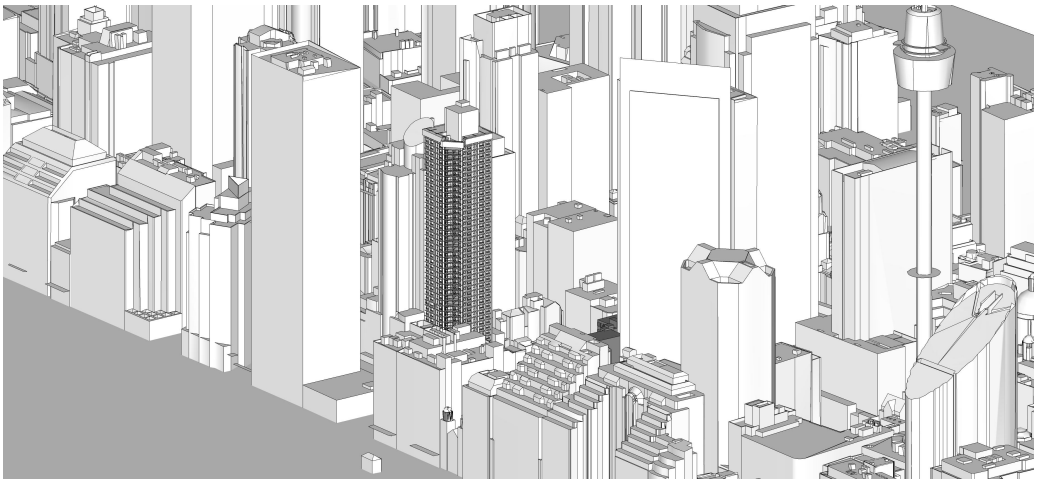
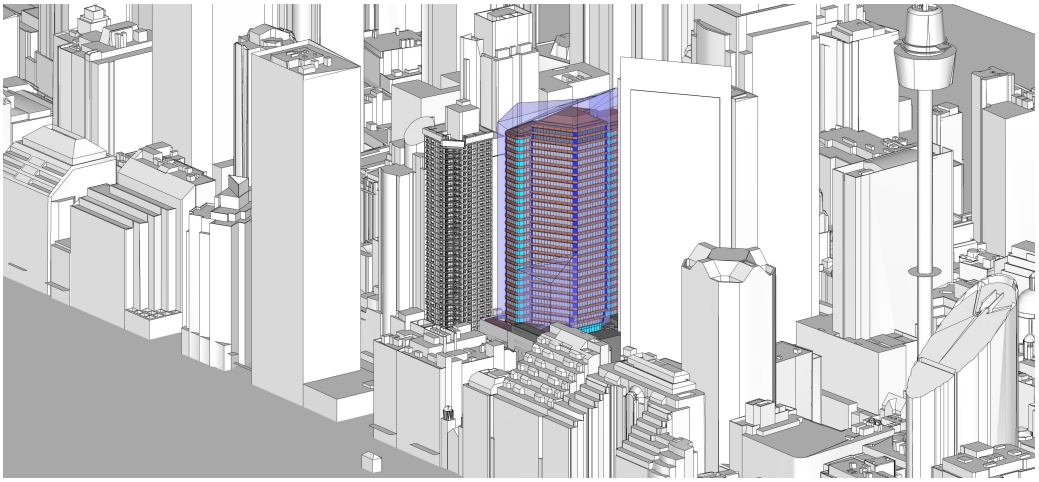
> *I am pleased to provide my commendation and support for Walsh^2 Analysis. Scott and Stewart have undertaken solar access and overshadowing analysis of over 150 apartment buildings from as small as 10 units up to over 1000 units. I have relied on their technical expertise and accuracy to provide advice to architects, planners and to the Land and Environment Court, including independent third-party peer review of others' characterisation and reporting of compliance.*

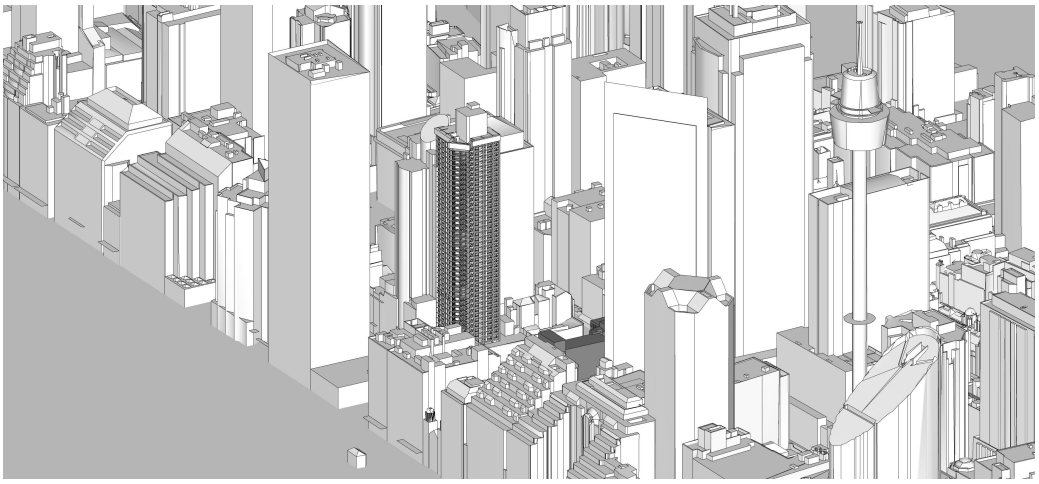
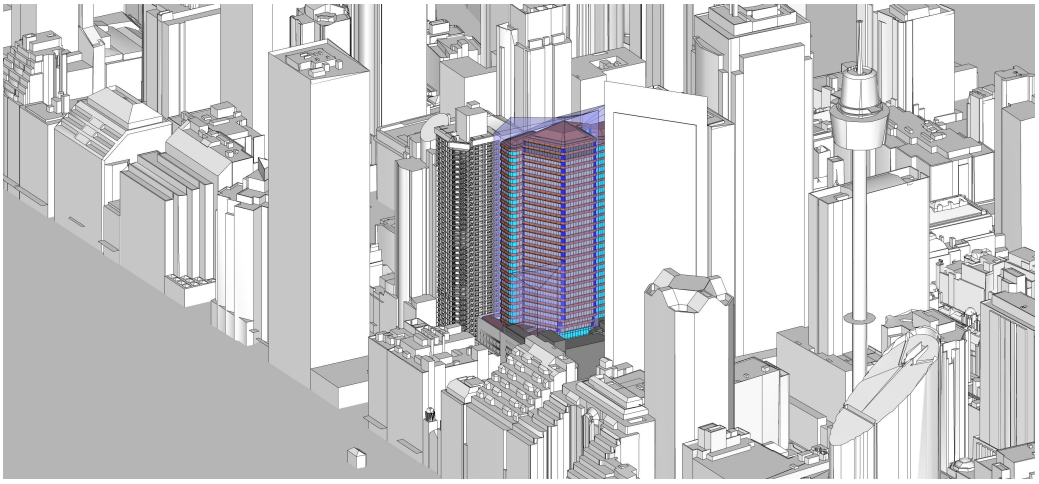
B.0 APPENDIX B: VIEWS FROM THE SUN

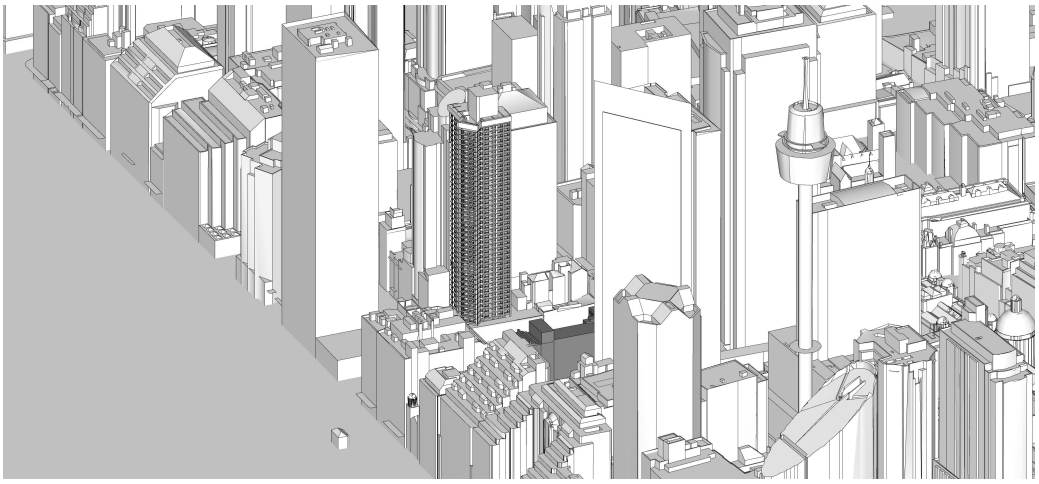
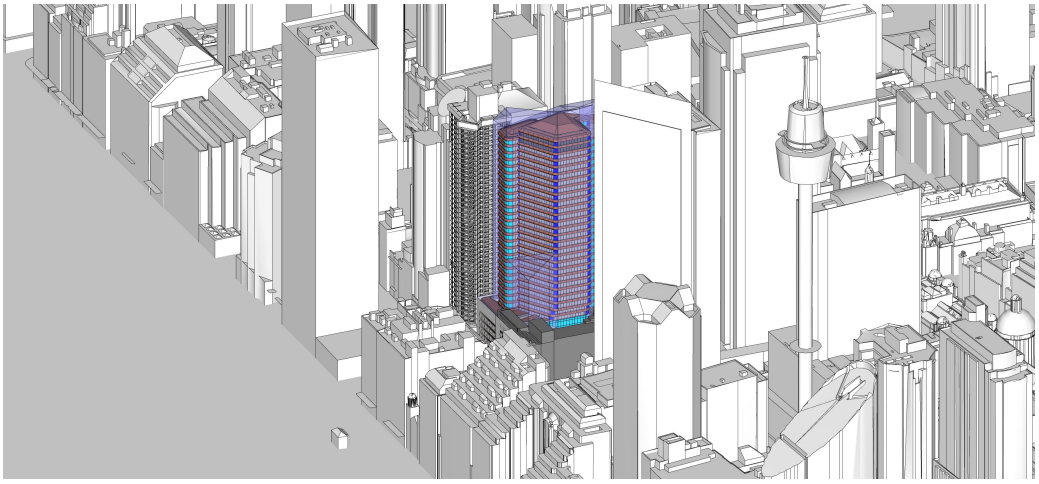
The table shows half-hourly views of solar access projections for **June 21.**

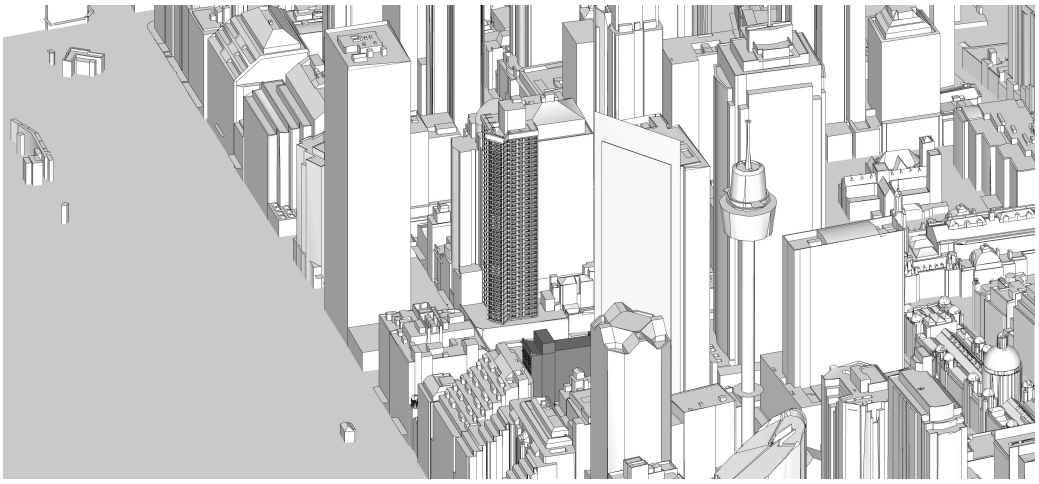
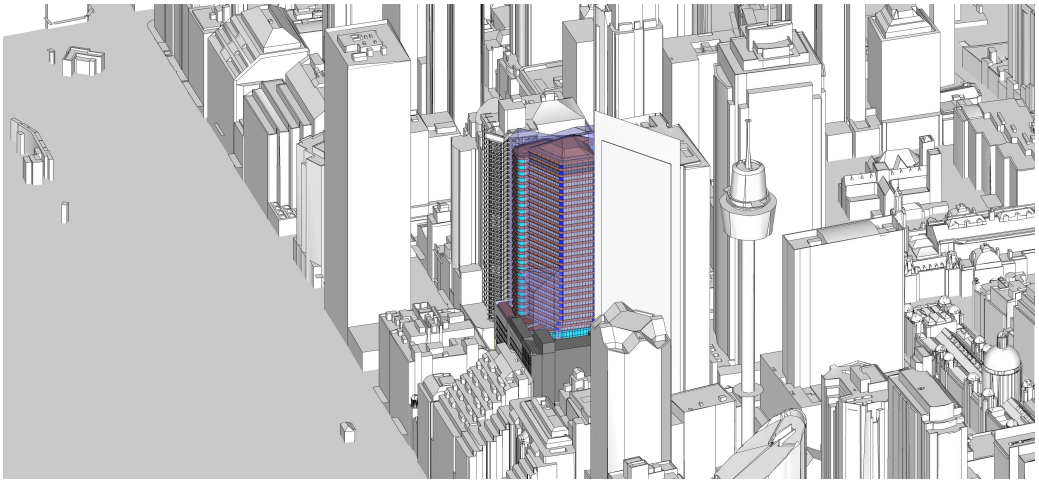
8.00 EXISITNG	
8.00 PROPOSED	

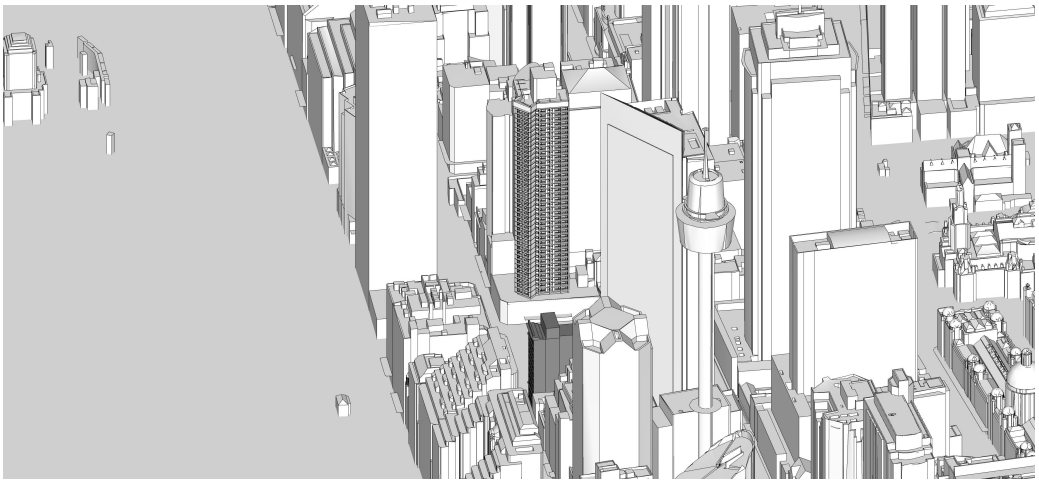
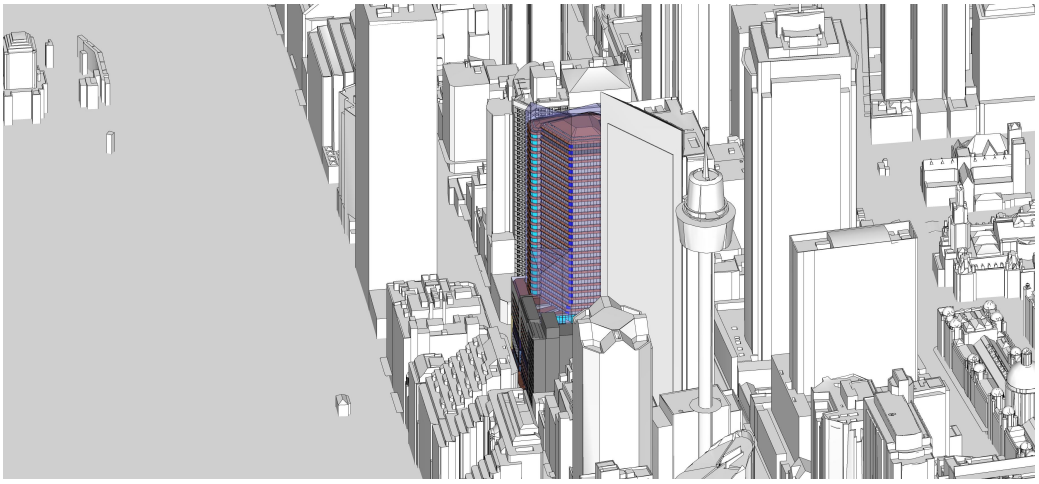
8.30 EXISITNG	
8.30 PROPOSED	

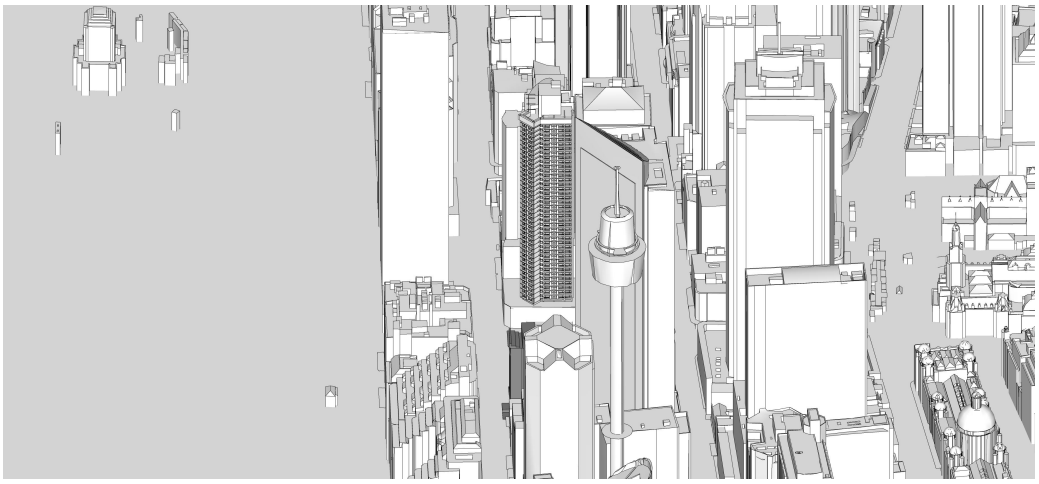
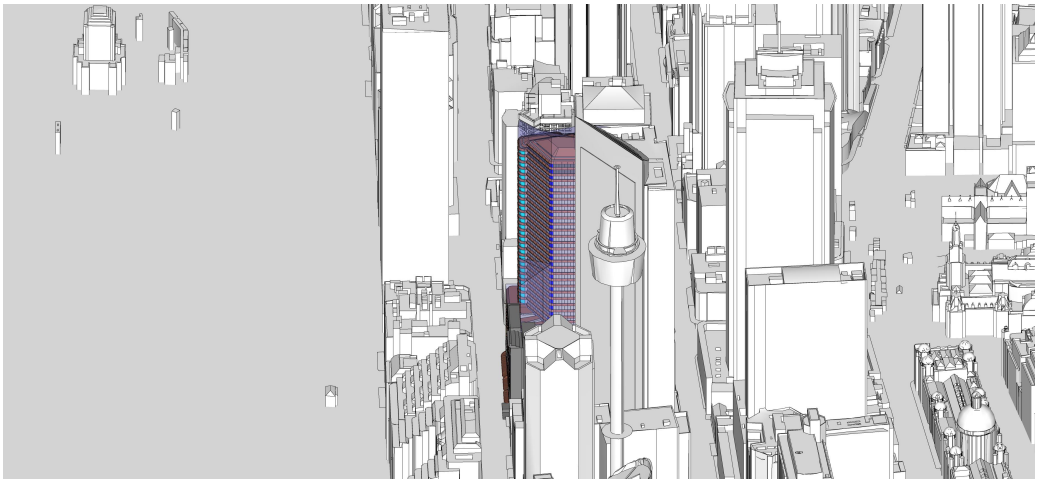
9.00 EXISITNG	
9.00 PROPOSED	

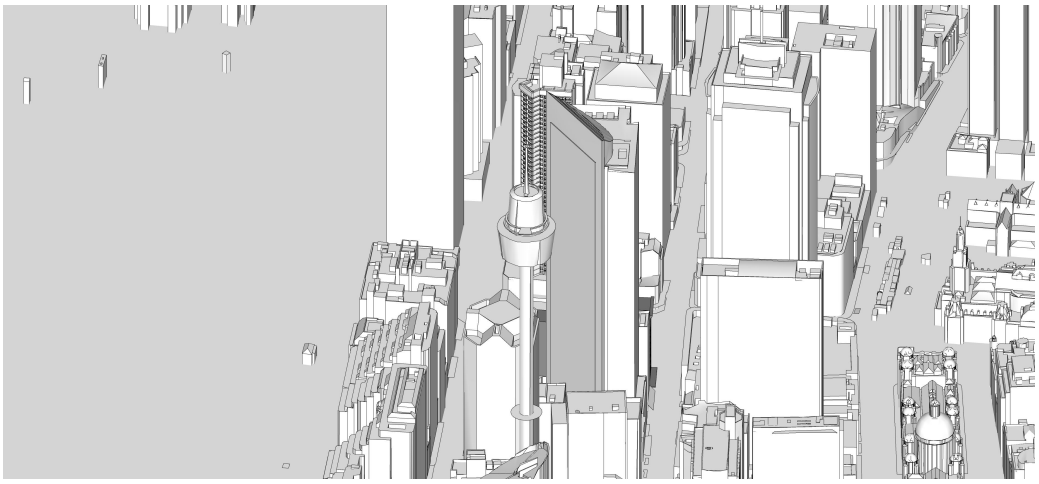
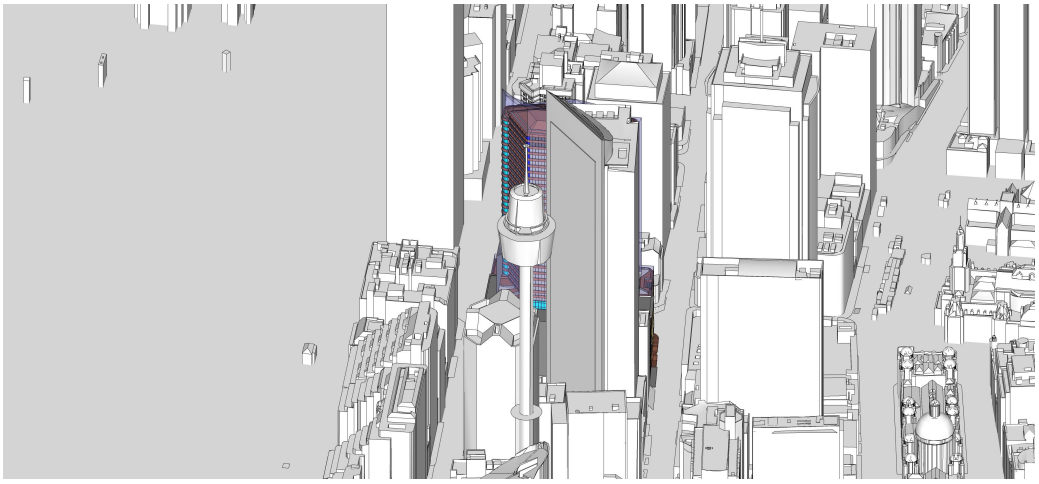
9.30 EXISITNG	
9.30 PROPOSED	

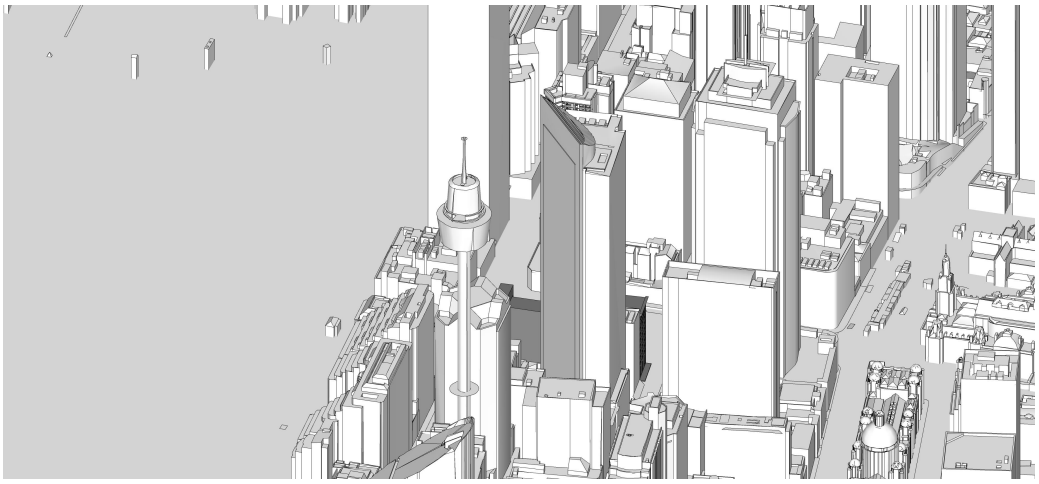
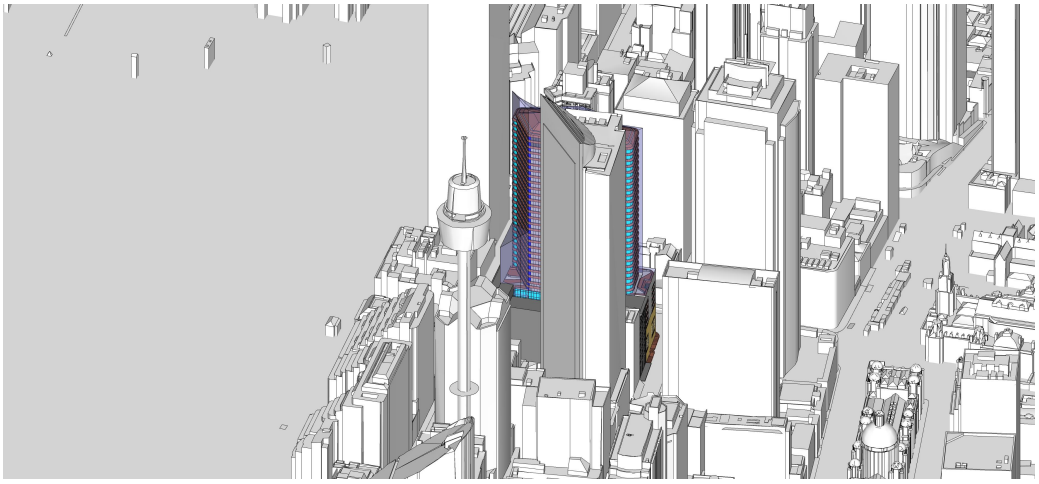
10.00 EXISITNG	
10.00 PROPOSED	

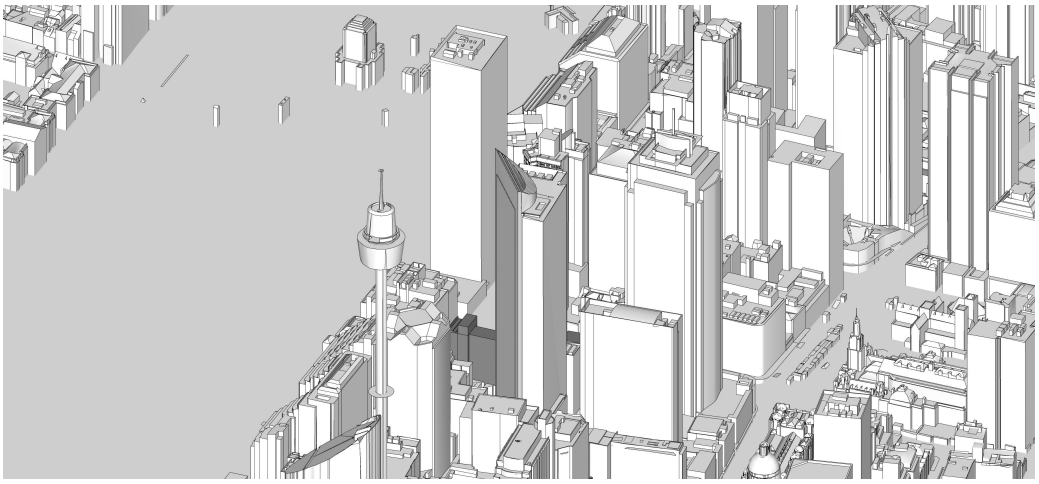
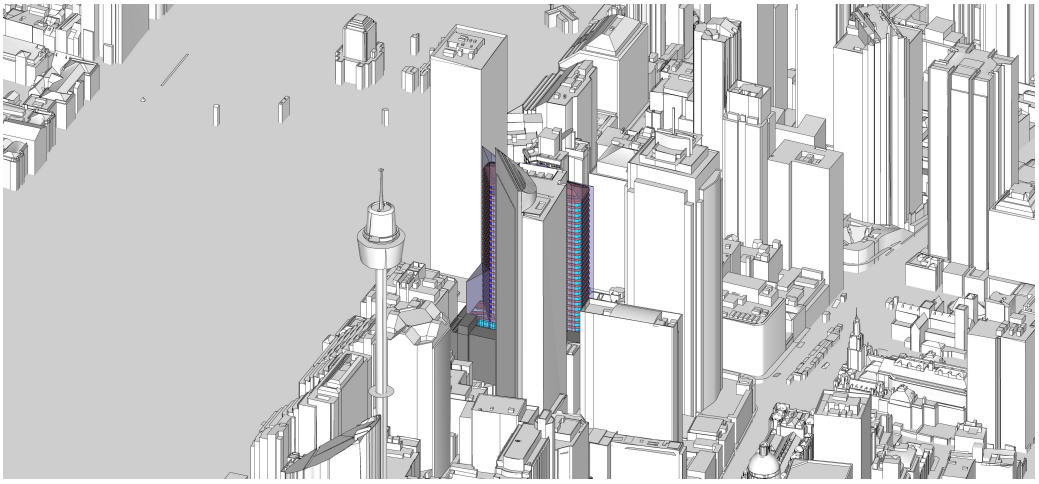
10.30 EXISITNG	
10.30 PROPOSED	

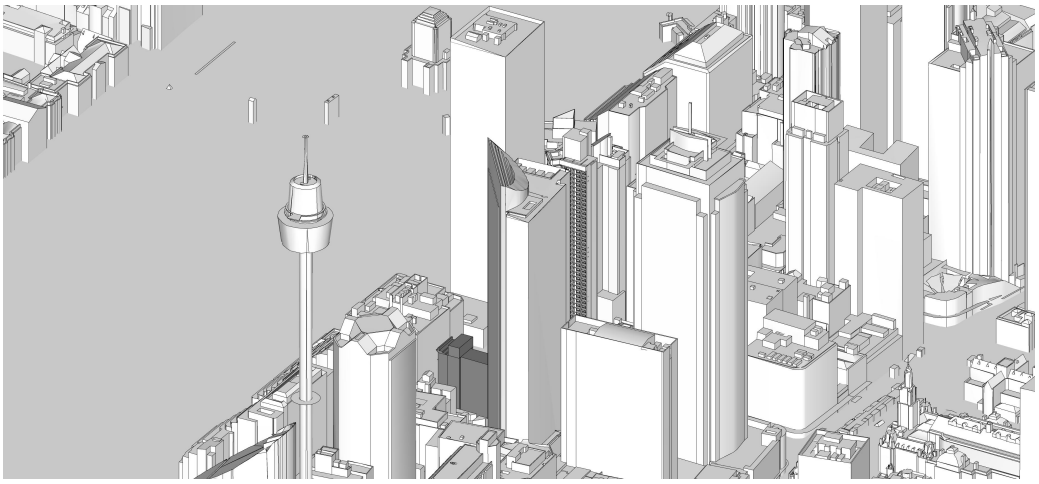
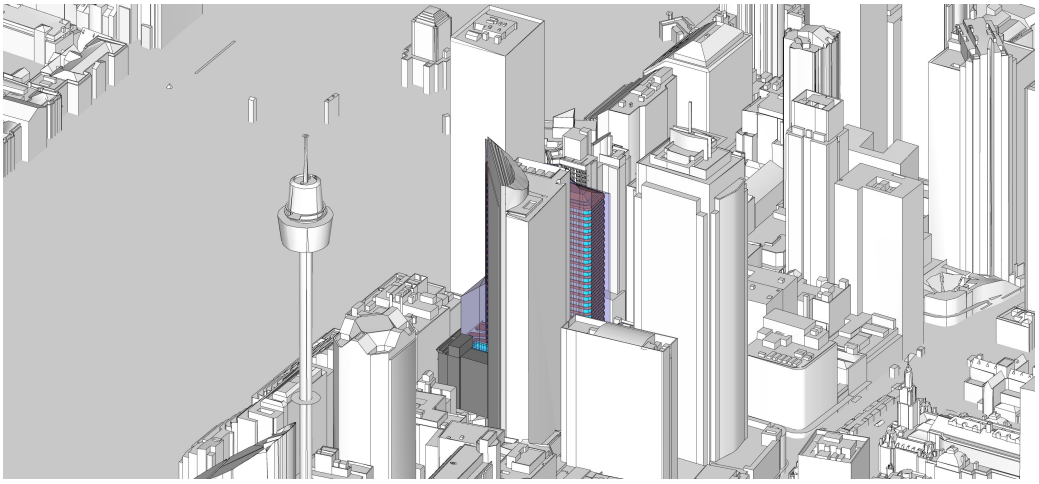
11.00 EXISITNG	
11.00 PROPOSED	

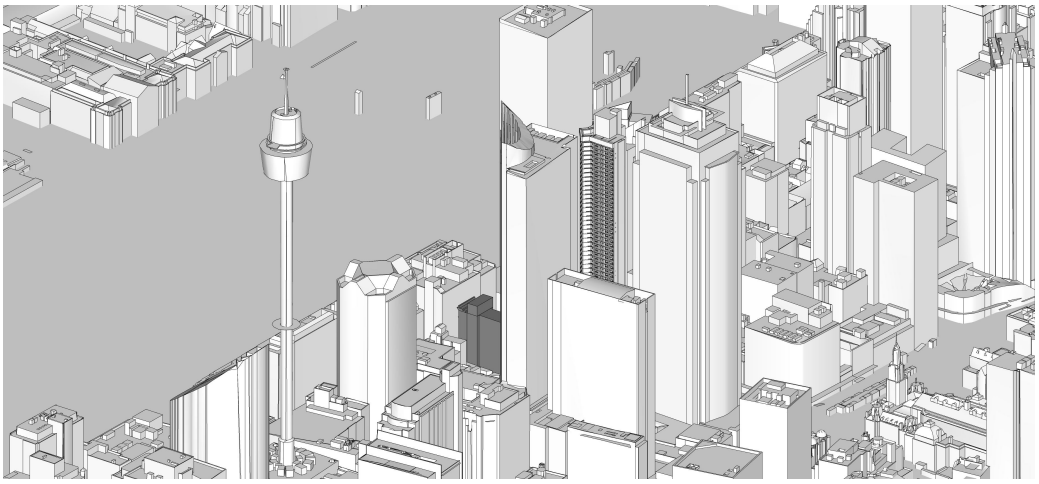
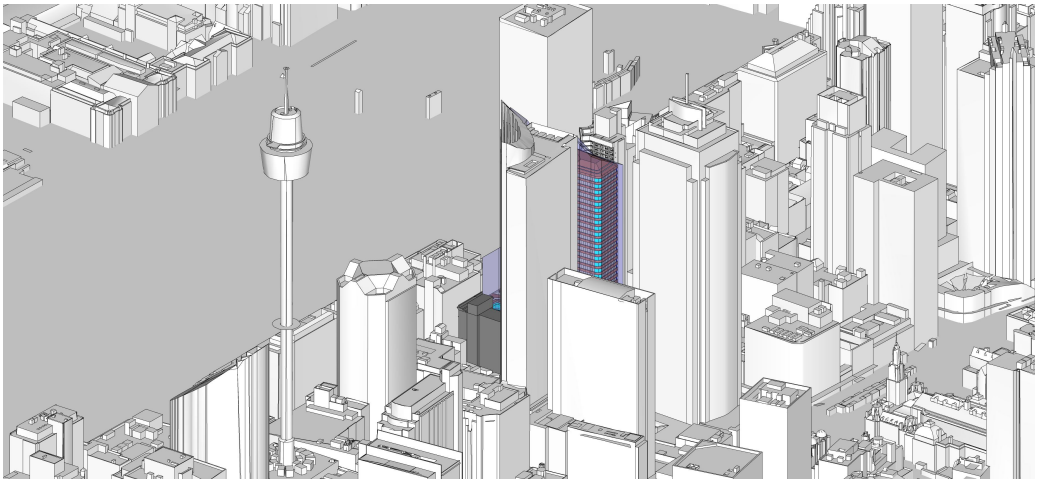
11.30 EXISITNG	
11.30 PROPOSED	

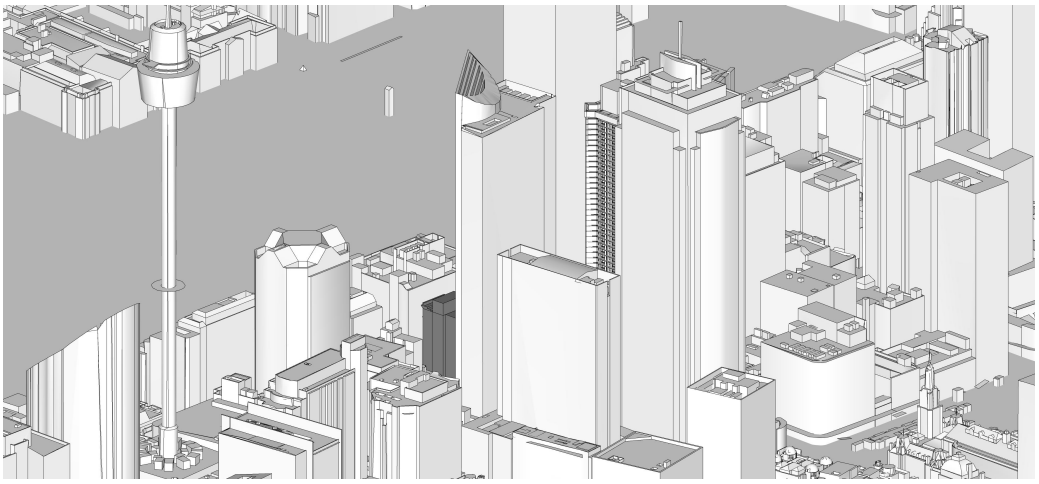
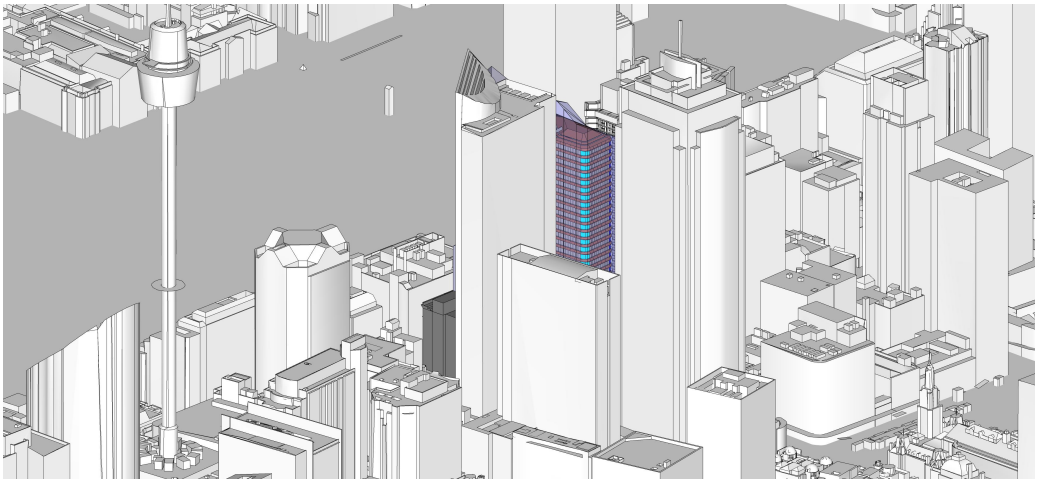
12.00 EXISITNG	
12.00 PROPOSED	

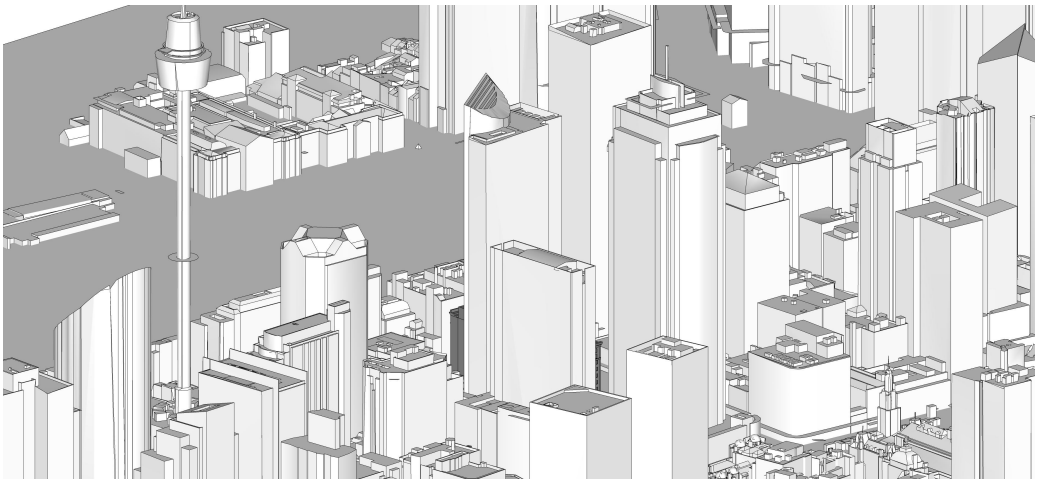
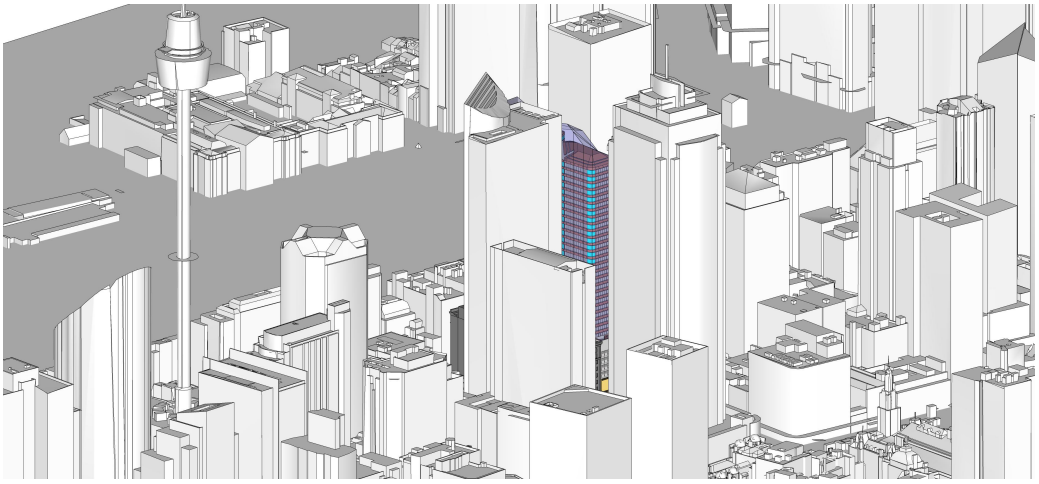
12.30 EXISITNG	
12.30 PROPOSED	

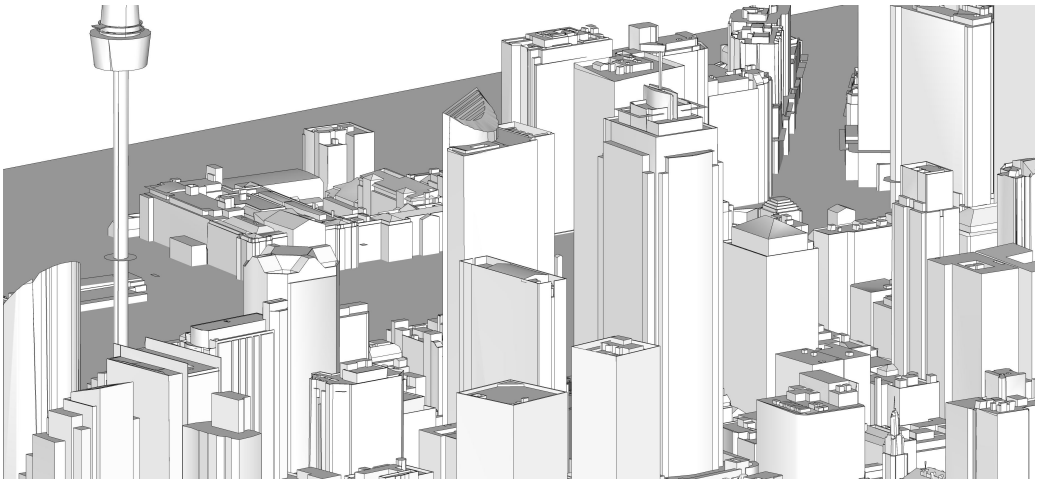
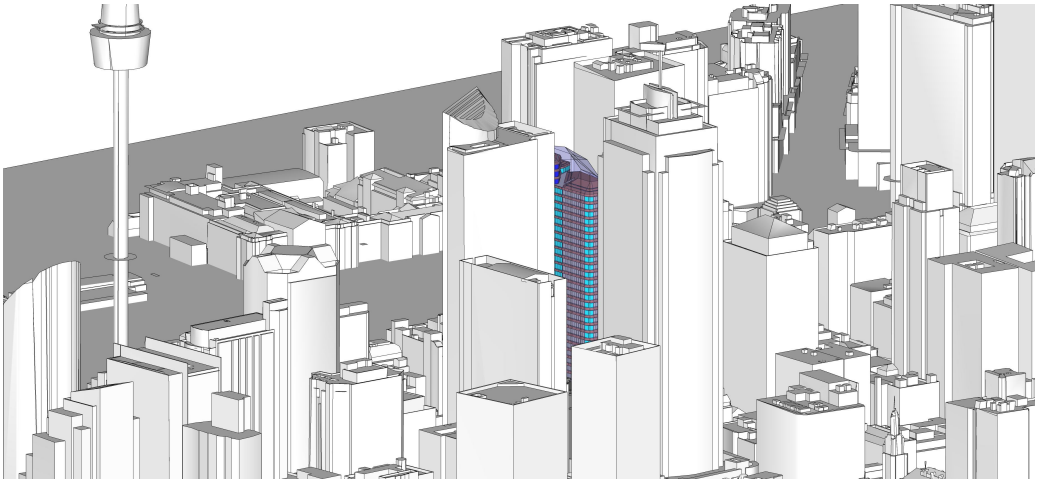
1.00 EXISITNG	
1.00 PROPOSED	

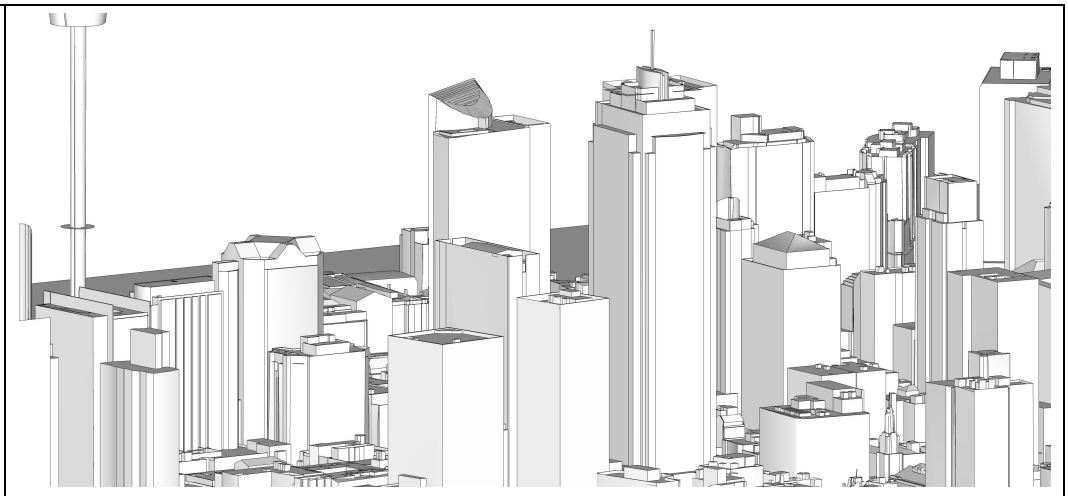
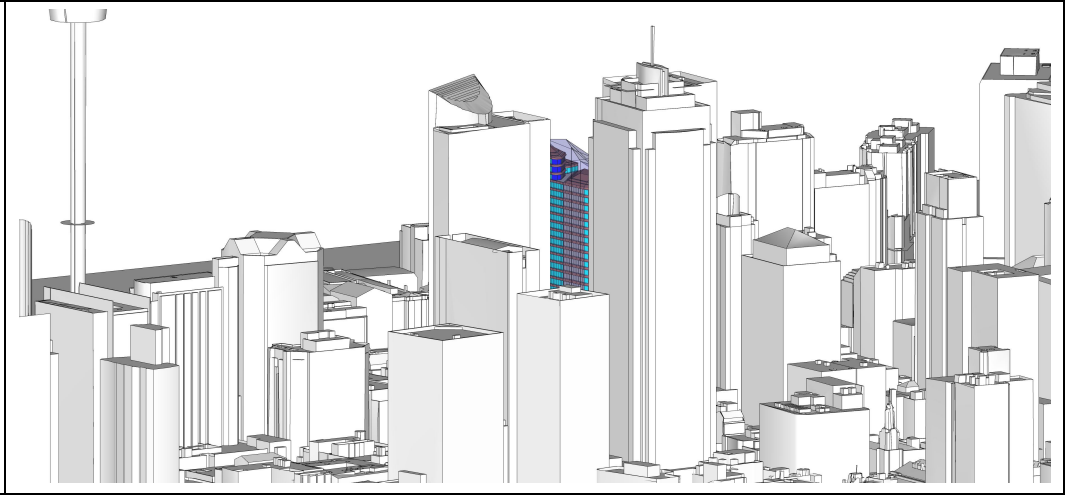
1.30 EXISITNG	
1.30 PROPOSED	

2.00 EXISITNG	
2.00 PROPOSED	

2.30 EXISITNG	
2.30 PROPOSED	

3.00 EXISITNG	
3.00 PROPOSED	

3.30 EXISITNG	
3.30 PROPOSED	

4.00 EXISITNG	
4.00 PROPOSED	

C.0 APPENDIX C: COMPLIANCE TABLE OF PARK REGIS

The following table sets out in detail the solar access status of each apartment.

		Solar access																Solar compliance				
LEVEL	UNIT	8	830	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>3 hrs 9-3	>2 hrs 9-3 (>3hrs 8-4)	>2 hrs 9-3	>2hrs 8-4	No sun
PARK REGIS - EXISTING																							
																			104	18	0	53	0
																			57.1%	9.9%	0.0%	29.1%	0.0%
																					67.0%	**96.2%**	
LEVEL	UNIT	8	830	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>3 hrs 9-3	>2 hrs 9-3 (>3hrs 8-4)	>2 hrs 9-3	>2hrs 8-4	No sun
PARK REGIS - STAGE 1 ENVELOPE																							
																			3	49	2	75	0
																			1.6%	26.9%	1.1%	41.2%	0.0%
																					29.7%	**70.9%**	
PARK REGIS - PROPOSED																							
																			7	52	2	93	0
																			3.8%	28.6%	1.1%	51.1%	0.0%
																					33.5%	**84.6%**	
PARK REGIS - COMPARISON TABLE																							
LEVEL 16	UNIT 16.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 16.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 16.03	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
	UNIT 16.04	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N			YES		
	UNIT 16.05	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N			YES		
	UNIT 16.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 16.07	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 16.08	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 17	UNIT 17.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 17.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 17.03	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
	UNIT 17.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 17.05	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 17.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 17.07	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 17.08	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 18	UNIT 18.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 18.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 18.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 18.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			

		Solar access																Solar compliance				
LEVEL	UNIT	8	830	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>3 hrs 9-3	>2 hrs 9-3 (>3hrs 8-4)	>2 hrs 9-3	>2hrs 8-4	No sun
	UNIT 18.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 18.06	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 18.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 19	UNIT 19.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 19.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 19.03	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
	UNIT 19.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 19.05	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 19.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 19.07	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 19.08	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 20	UNIT 20.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 20.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 20.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 20.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 20.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 20.06	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 20.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 21	UNIT 21.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 21.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 21.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 21.04	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 21.05	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 21.06	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 22	UNIT 22.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 22.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 22.03	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
	UNIT 22.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 22.05	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 22.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 22.07	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 22.08	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 23	UNIT 23.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 23.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 23.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 23.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 23.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 23.06	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 23.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 24	UNIT 24.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 24.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 24.03	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
	UNIT 24.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 24.05	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 24.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 24.07	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	

		Solar access																	Solar compliance				
LEVEL	UNIT	8	830	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>3 hrs 9-3	>2 hrs 9-3 (>3hrs 8-4)	>2 hrs 9-3	>2hrs 8-4	No sun
	UNIT 24.08	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 25	UNIT 25.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 25.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 25.03	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
	UNIT 25.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 25.05	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 25.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 25.07	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 25.08	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 26	UNIT 26.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 26.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 26.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 26.04	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 26.05	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 26.06	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 27	UNIT 27.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 27.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 27.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 27.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 27.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 27.06	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 27.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 28	UNIT 28.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 28.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 28.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 28.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 28.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 28.06	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 28.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 29	UNIT 29.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 29.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 29.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 29.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 29.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 29.06	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 29.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 30	UNIT 30.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 30.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 30.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 30.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 30.05	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
LEVEL 31	UNIT 31.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 31.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 31.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 31.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 31.05	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	

		Solar access																	Solar compliance				
LEVEL	UNIT	8	830	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>3 hrs 9-3	>2 hrs 9-3 (>3hrs 8-4)	>2 hrs 9-3	>2hrs 8-4	No sun
	UNIT 31.06	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 32	UNIT 32.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 32.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 32.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 32.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 32.05	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 32.06	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 33	UNIT 33.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 33.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 33.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 33.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 33.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 33.06	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 33.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 34	UNIT 34.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 34.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 34.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 34.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 34.05	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
LEVEL 35	UNIT 35.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 35.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 35.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 35.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	N	N	N		YES			
LEVEL 36	UNIT 36.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 36.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 36.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 36.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 36.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 36.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	Y	N	N	N		YES			
	UNIT 36.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 37	UNIT 37.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 37.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 37.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 37.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 37.05	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 37.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	Y	N	N	N		YES			
	UNIT 37.07	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 38	UNIT 38.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 38.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 38.03	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
	UNIT 38.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 38.05	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 38.06	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 38.07	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	Y	N	N	N		YES			
	UNIT 38.08	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 39	UNIT 39.01	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	

		Solar access																Solar compliance				
LEVEL	UNIT	8	830	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>3 hrs 9-3	>2 hrs 9-3 (>3hrs 8-4)	>2 hrs 9-3	>2hrs 8-4	No sun
	UNIT 39.02	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 39.03	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
	UNIT 39.04	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N					
LEVEL 40	UNIT 40.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 40.02	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 40.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 40.04	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 40.05	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	N				YES	
LEVEL 41	UNIT 41.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 41.02	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 41.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N		YES			
	UNIT 41.04	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	N	Y	N	N	N		YES			
	UNIT 41.05	Y	Y	Y	Y	N	N	N	N	N	N	N	Y	N	N	N	N	N				YES	
LEVEL 42	UNIT 42.01	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 42.02	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	YES				
	UNIT 42.03	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	Y	Y	N	N	N	YES				
	UNIT 42.04	Y	Y	Y	Y	Y	N	N	Y	N	N	N	Y	Y	Y	N	N	N	YES				
	UNIT 42.05	Y	Y	Y	Y	N	N	N	Y	N	N	N	Y	Y	N	N	N	N		YES			
	UNIT 42.01	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 42.02	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	N	YES				
	UNIT 42.03	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	H	Y	Y	Y	N	N	N	YES				
	UNIT 42.01	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N				YES	
	UNIT 42.02	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	YES				
	UNIT 42.03	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	YES				

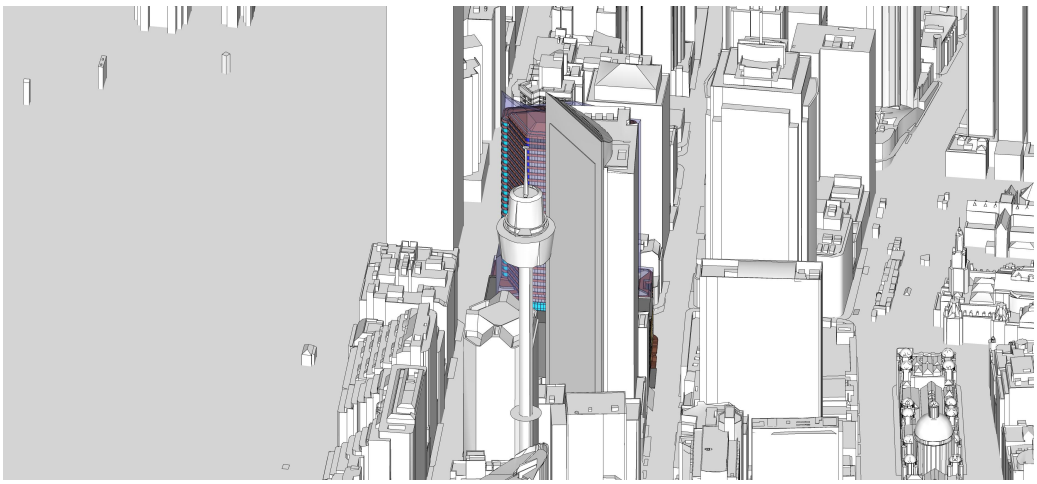
Unit Count	182

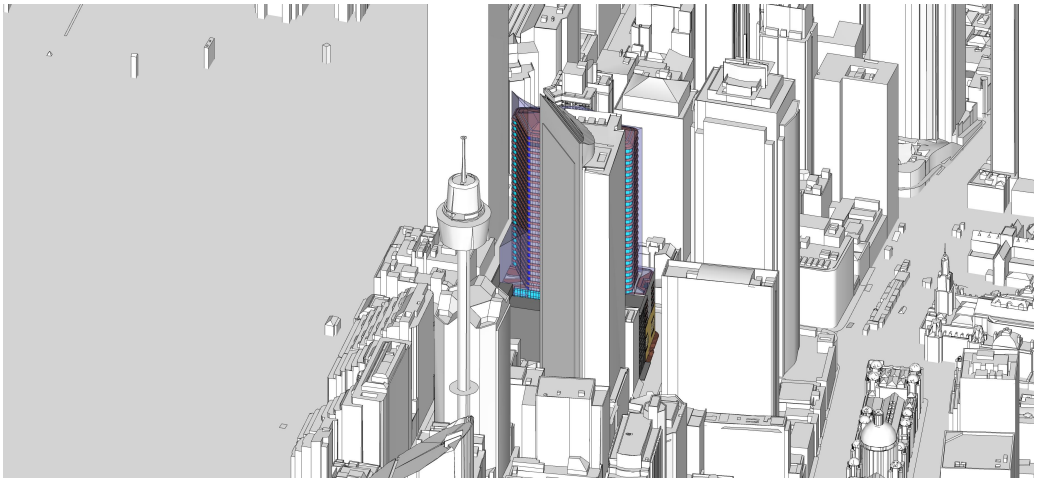
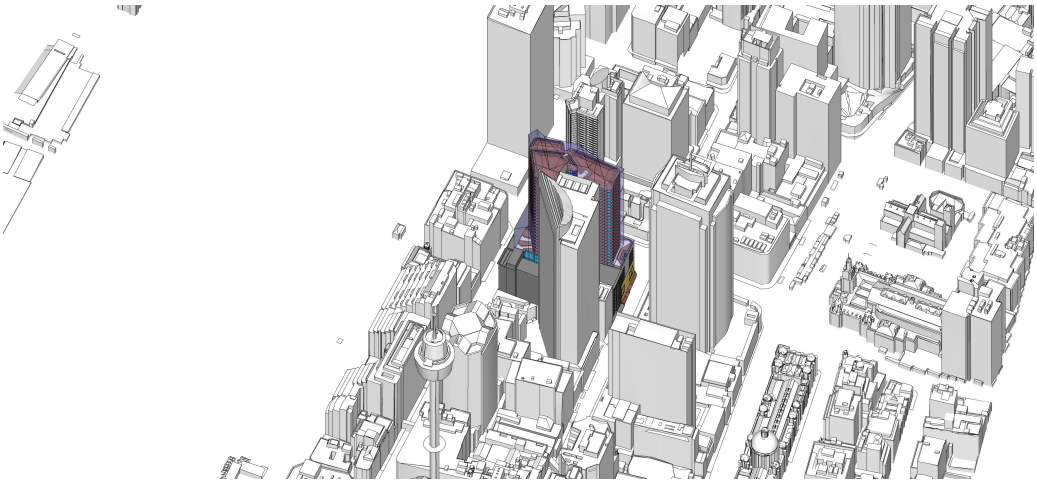
	>3 hrs 9-3	>2 hrs 9-3 (>3hrs 8-4)	>2 hrs 9-3	>2hrs 8-4	No sun
	7	52	2	93	0
	3.8%	28.6%	1.1%	51.1%	0.0%
			33.5%	**84.6%**	

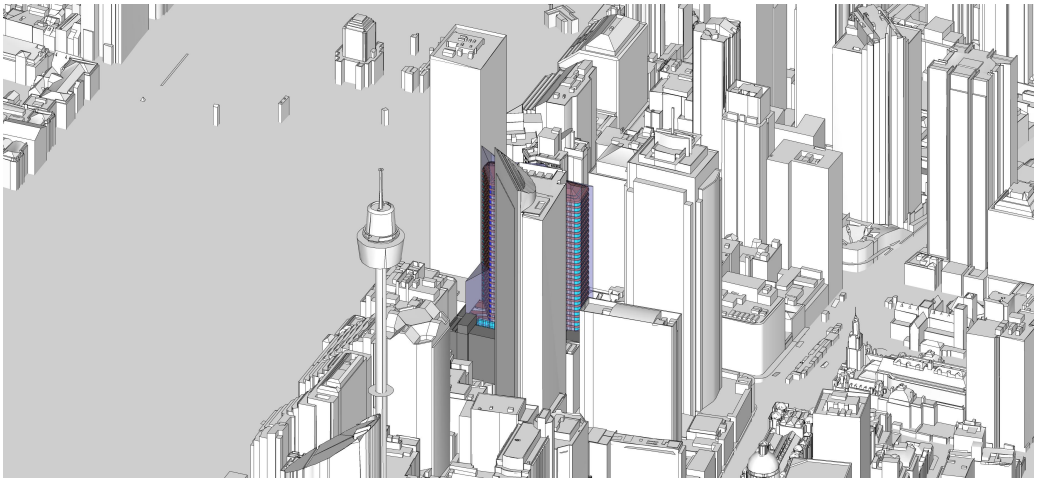
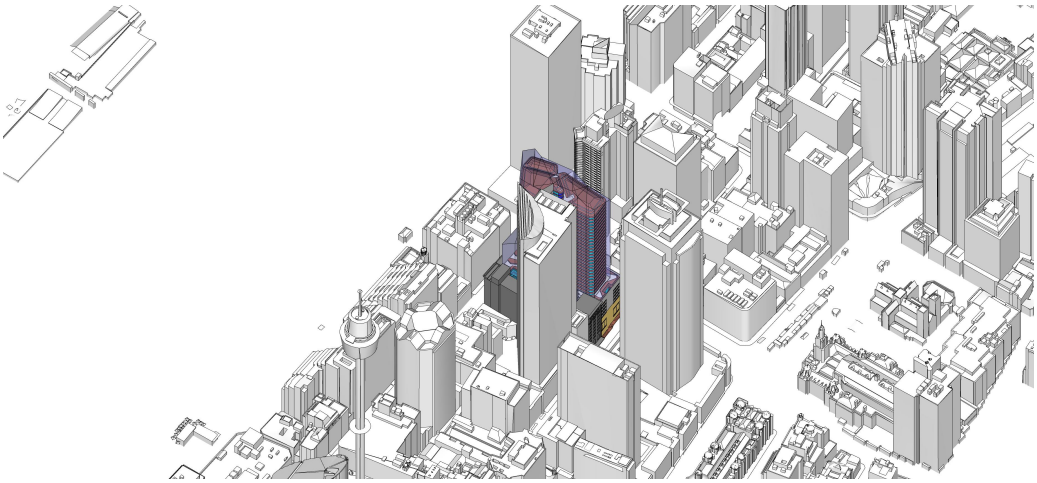
N	NO COMPLYING SOLAR ACCESS
Y	COMPLYING SOLAR ACCESS TO LIVING ROOM
H	COMPLYING SOLAR ACCESS TO HABITABLE ROOM
N	LIVING NOW OVERSHADOWED
N	HABITABLE NOW OVERSHADOWED
HH	LIVING OVERSHADOWED BUT HABITABLE ROOM GETS SUN

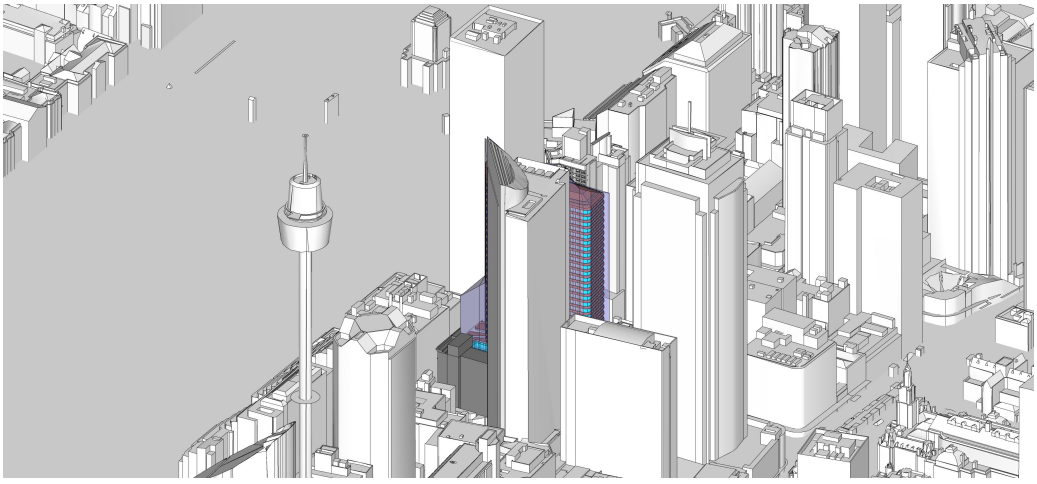
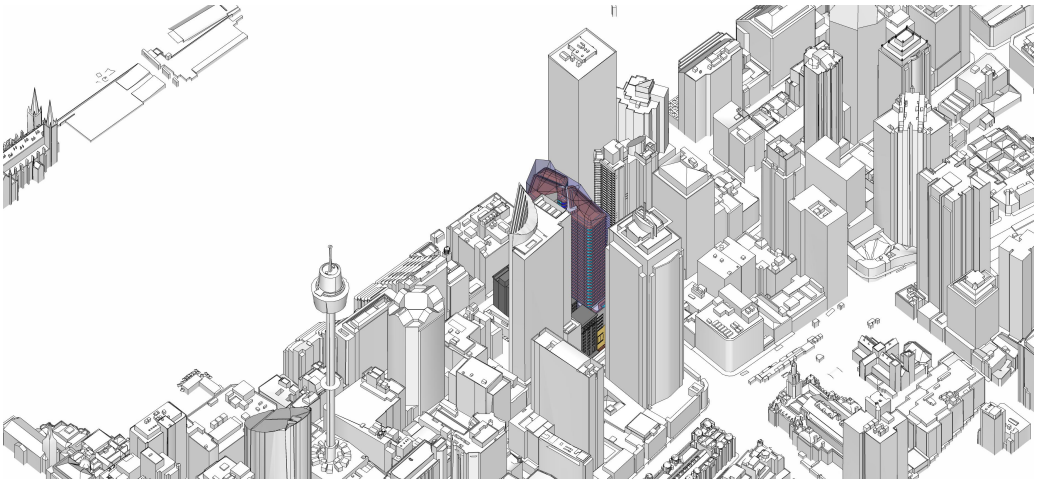
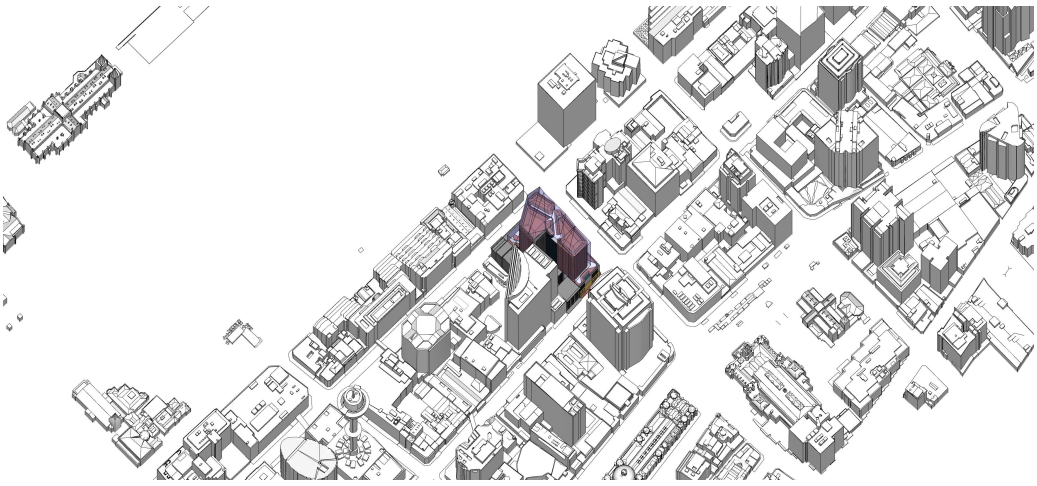
D.0 APPENDIX D: VIEWS FROM SUN (HYDE PARK)

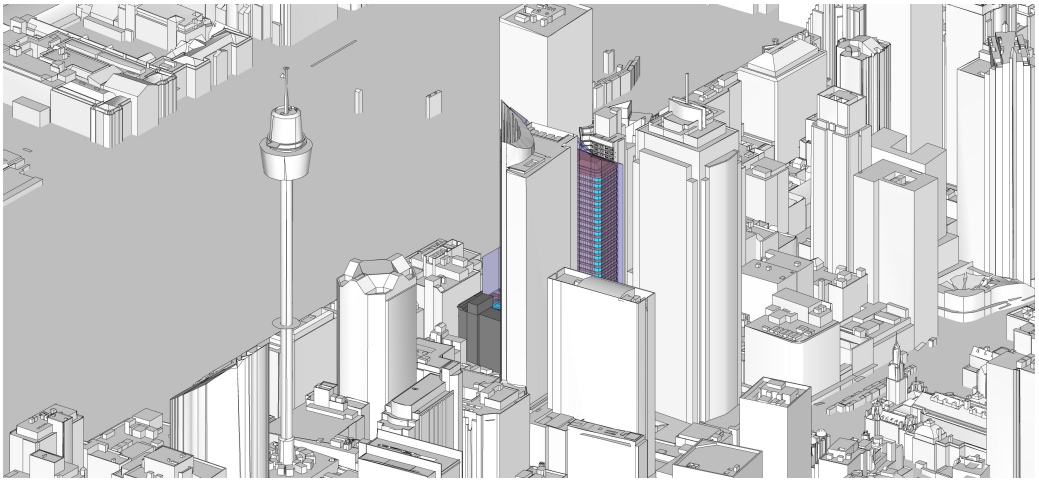
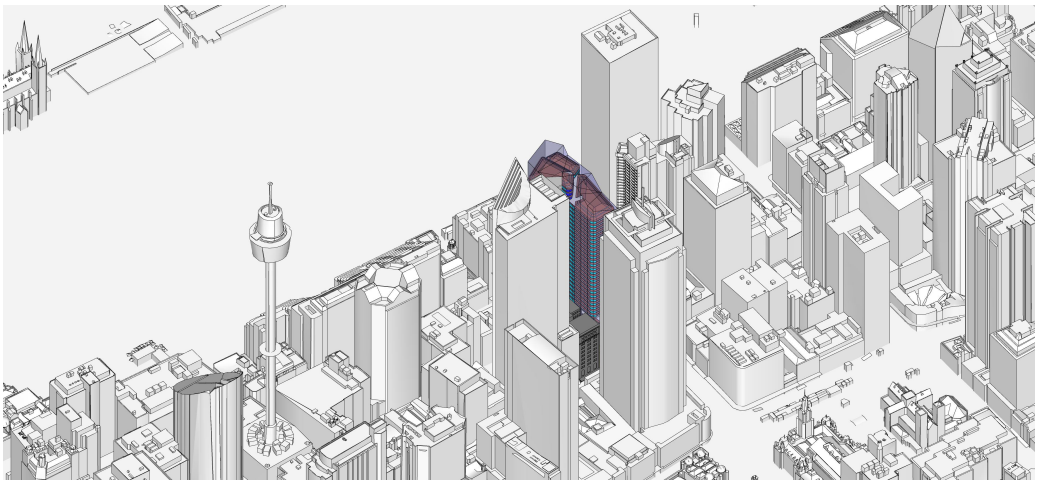
The table shows half-hourly views of solar access projections for June, September and December 21 from 12pm-4pm.

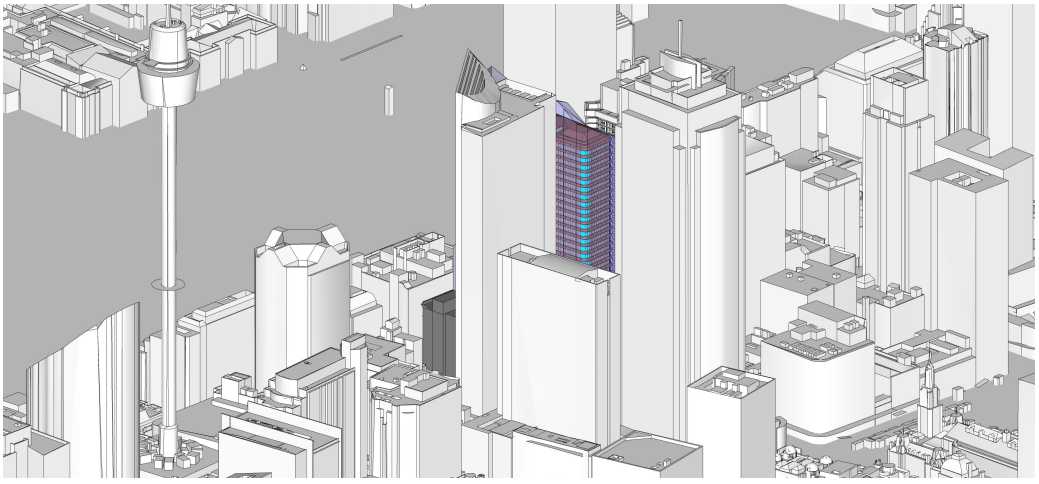
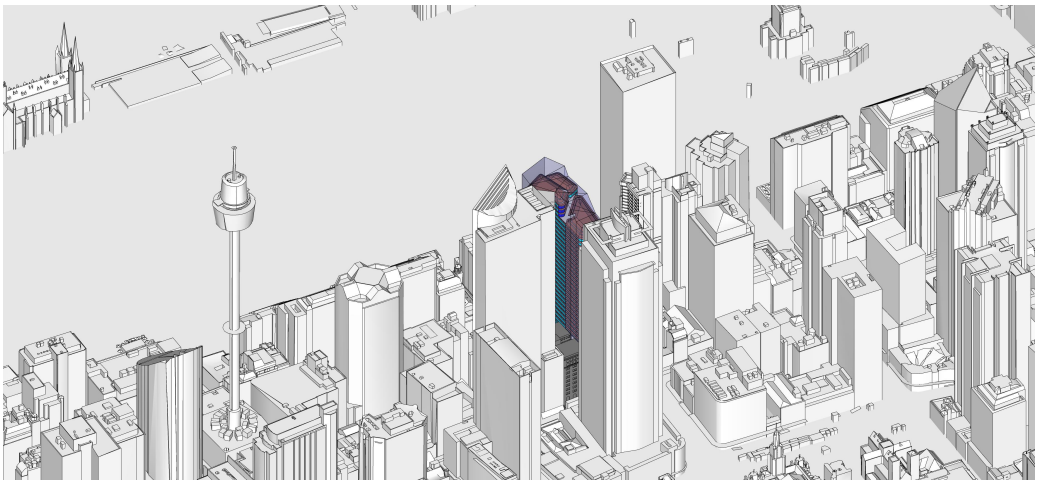
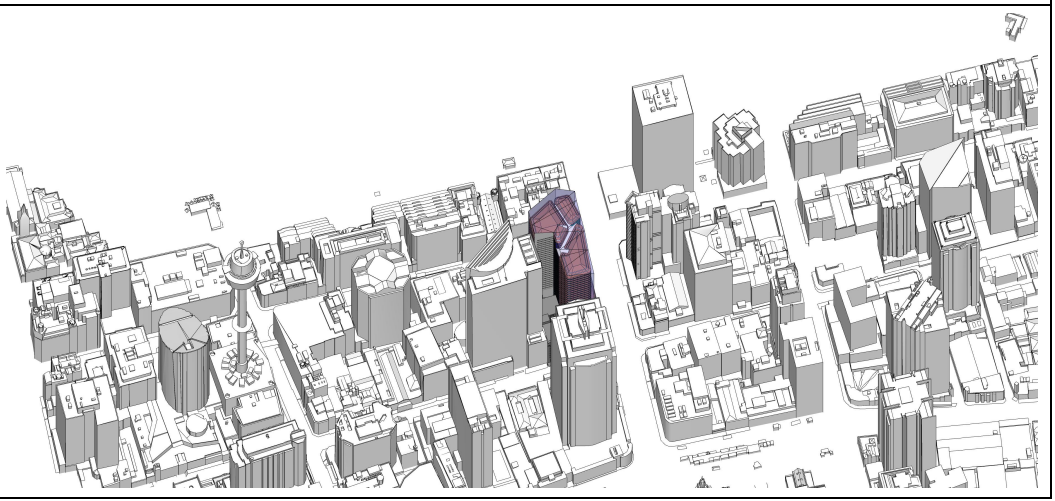
12.00 JUNE	
12.00 SEPT	
12.00 DEC	

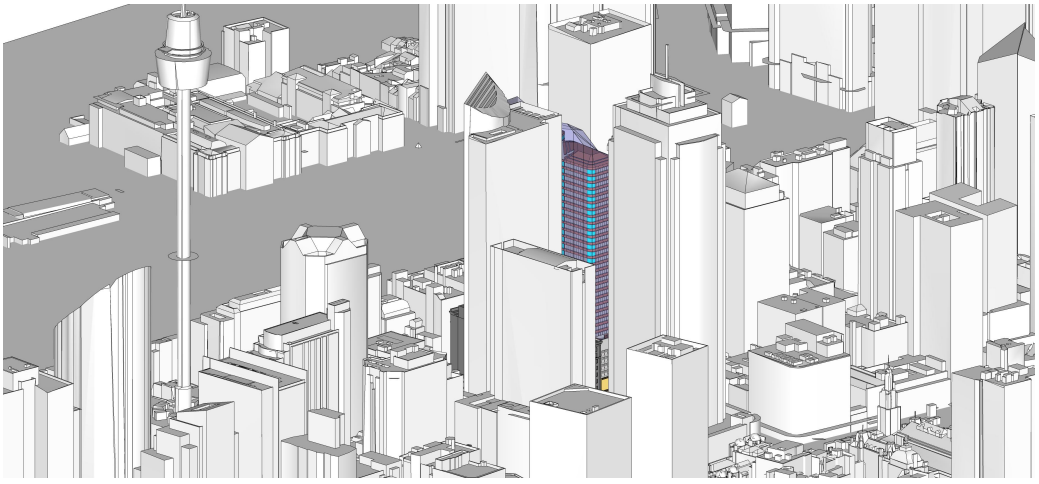
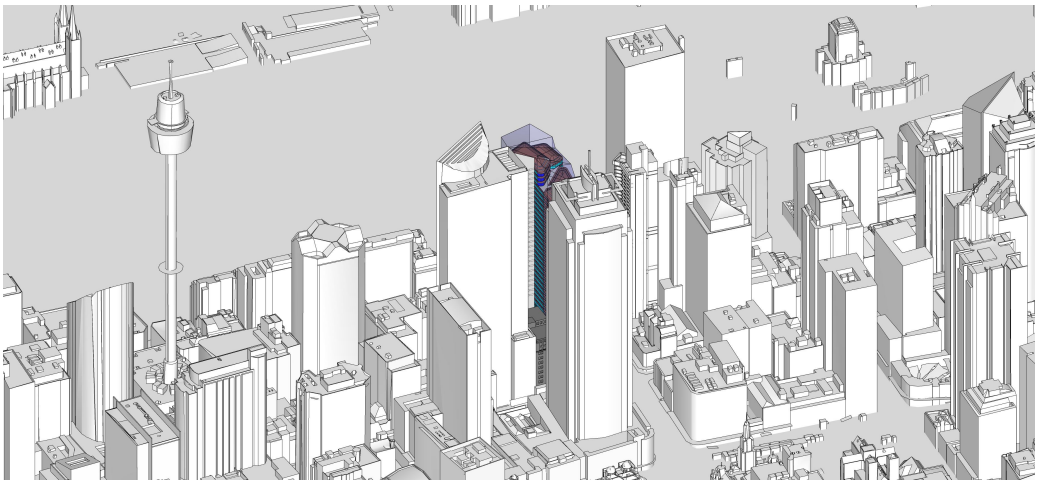
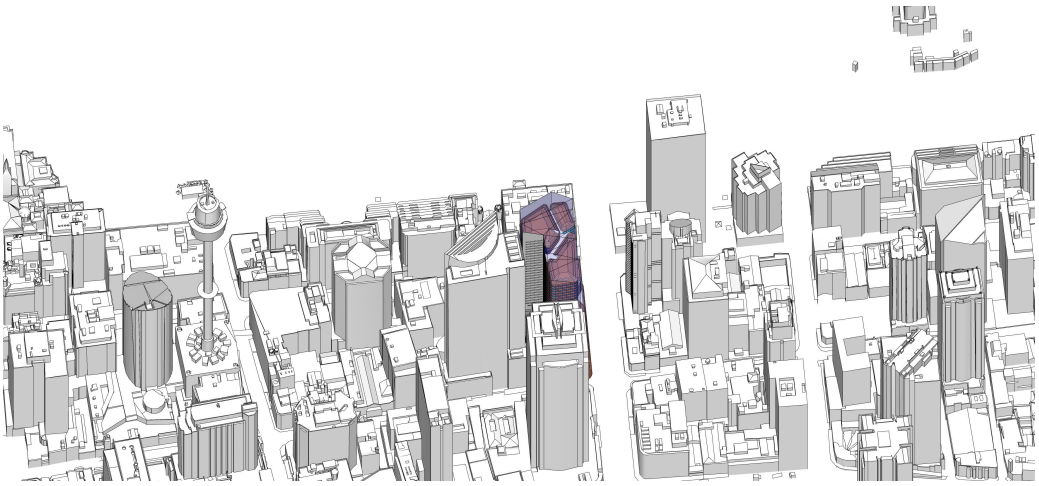
12.30 JUNE	
12.30 SEPT	
12.30 DEC	

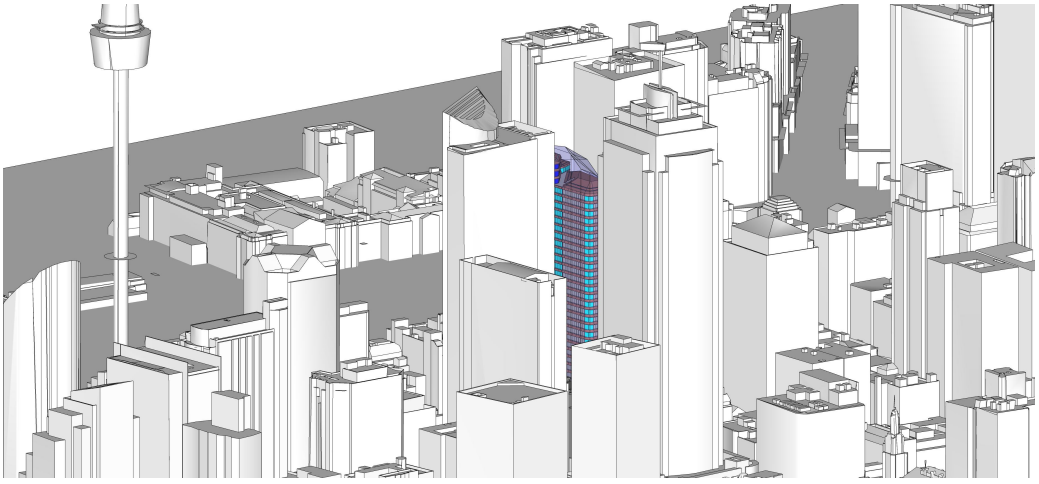
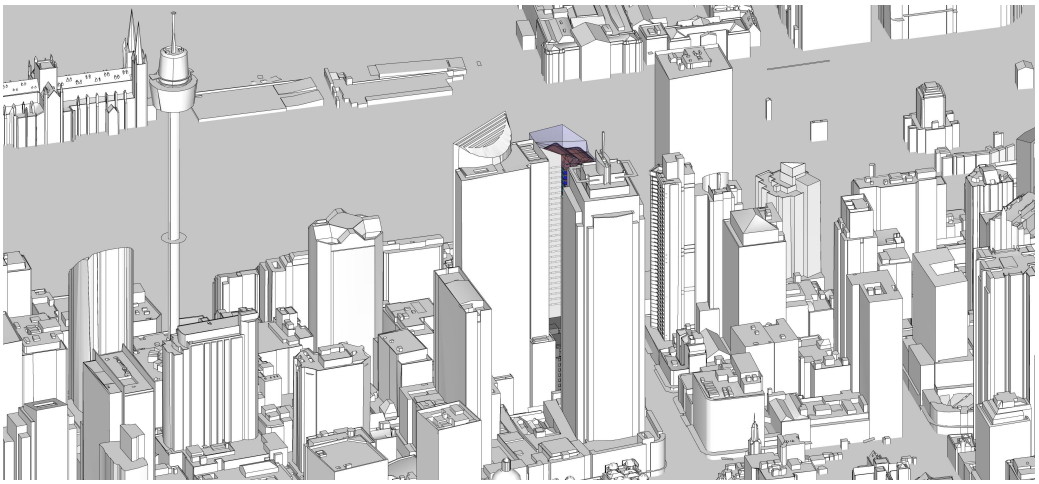
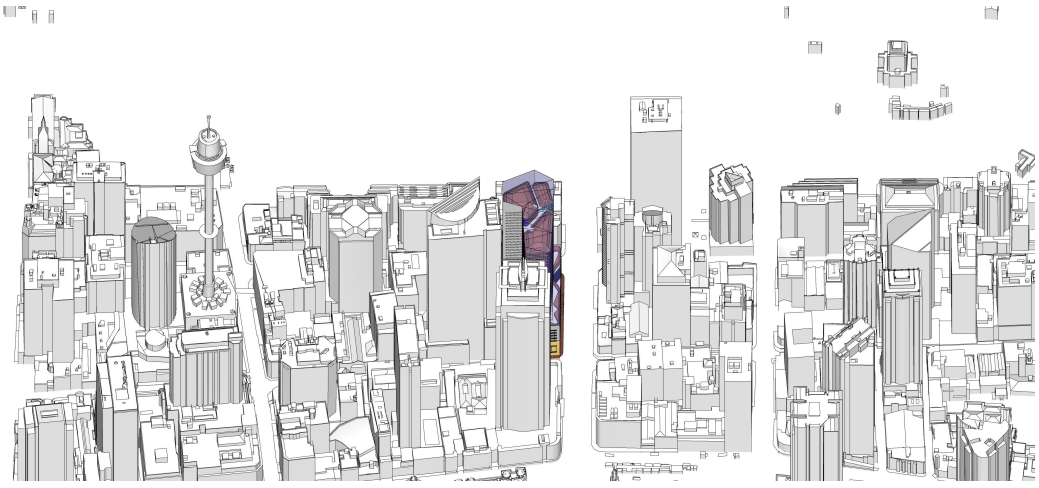
1.00 JUNE	
1.00 SEPT	
1.00 DEC	

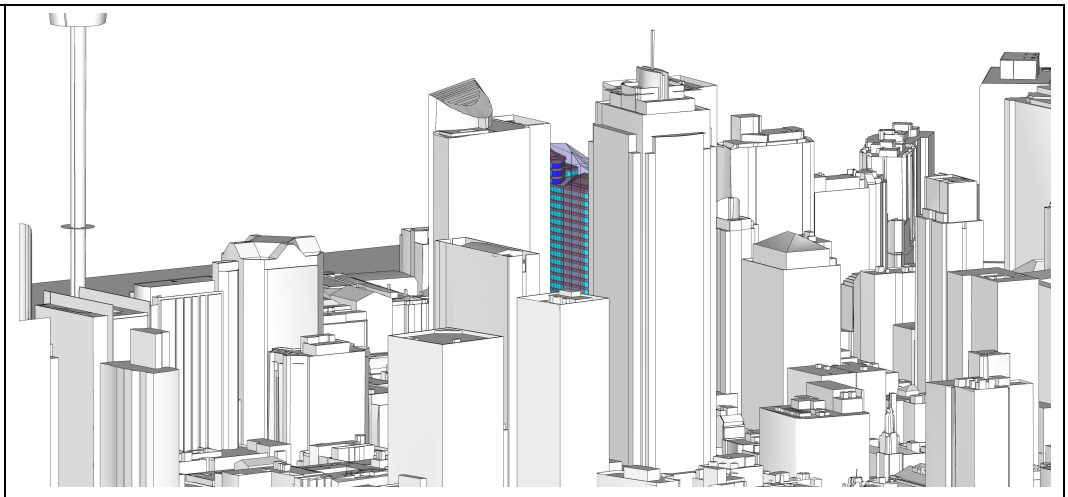
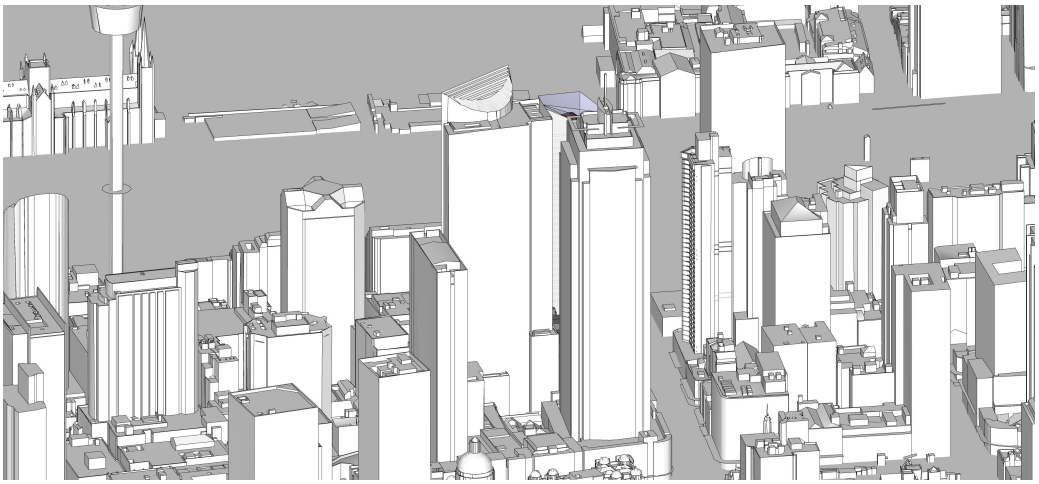
1.30 JUNE	
1.30 SEPT	
1.30 DEC	

2.00 JUNE	
2.00 SEPT	
2.00 DEC	

2.30 JUNE	
2.30 SEPT	
2.30 DEC	

3.00 JUNE	
3.00 SEPT	
3.00 DEC	

3.30 JUNE	
3.30 SEPT	
3.30 DEC	

4.00 JUNE	
4.00 SEPT	
4.00 DEC