

# WATERLOO METRO QUARTER OVER STATION DEVELOPMENT

Environmental Impact Statement  
Appendix L – Solar Access

**SSD-79307746 Central Precinct**

Detailed State Significant Development  
Development Application

Prepared for **WL Developer Pty Ltd**

September 2025



## DOCUMENT CONTROL

Version	Status	Date	Prepared By	Reviewed By
1	Initial	12 September 2025	TYT / YCY	GEL / MJP
2	Final – SSDA Submission	23 September 2025	YCY	GEL

### NOTE

The information contained in this document produced by RWDI is solely for the use of the client identified on the front page of this report. Our client becomes the owner of this document upon full payment of our Tax Invoice for its provision. This document must not be used for any purposes other than those of the document's owner. RWDI undertakes no duty to or accepts any responsibility to any third party who may rely upon this document.

### RWDI

RWDI is a team of highly specialised consulting engineers and scientists working to improve the built environment through three core areas of practice: building performance, climate engineering, and environmental engineering. More information is available at [www.rwdi.com](http://www.rwdi.com).



## EXECUTIVE SUMMARY

This Solar Access Report has been prepared by RWDI Australia Pty Ltd (RWDI) to accompany a State Significant Development Application (SSDA) for Waterloo Metro Quarter (WMQ) located at 150 Cope Street, Waterloo (“the Project”). This report pertains to the detailed Central Precinct SSD (SSD-79307746).

This report has been prepared to address Item 6 of the Planning Secretary’s Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Infrastructure and Housing (DPHI) on 13 February 2025.

Simulations were performed to assess the communal spaces’ ability in the Central Precinct to access direct sunlight.

All of the communal living areas of the Central Precinct receive sufficient sunlight access between 9:00 am and 3:00 pm on 21 June satisfying the requirements of the Housing SEPP 2021 and provisions of the City of Sydney DCP 2012.

The rooftop communal open space satisfies the City of Sydney DCP 2012. The Level 3 terrace provides a continuous 6 hours of solar access, however based on the wrap-around design the eastern aspect receives sunlight until 12:45 pm, with the western aspect receiving sunlight from 1:00 pm, and thus does not meet the strict area metric, despite providing a high level of amenity and satisfying the intent of the solar access requirements.

Given these findings, the development is considered to enjoy a high level of solar access and be in accordance with the intent of the City of Sydney DCP 2012 and, as such, warrants approval.



# TABLE OF CONTENTS

DOCUMENT CONTROL.....	II
EXECUTIVE SUMMARY .....	III
<b>1 INTRODUCTION .....</b>	<b>2</b>
<b>2 BACKGROUND .....</b>	<b>4</b>
<b>2.1 Methodology .....</b>	<b>4</b>
<b>2.2 Assumptions and Limitations.....</b>	<b>6</b>
2.2.1 Meteorological Data .....	6
2.2.2 Study and Surrounds Models .....	6
<b>2.3 Direct Solar Access Criteria.....</b>	<b>7</b>
<b>3 RESULTS .....</b>	<b>8</b>
<b>4 CUMULATIVE IMPACT ASSESSMENT (CIA).....</b>	<b>9</b>
<b>5 CONCLUSION .....</b>	<b>13</b>
<b>6 GENERAL STATEMENT OF LIMITATIONS.....</b>	<b>14</b>

# LIST OF APPENDICES

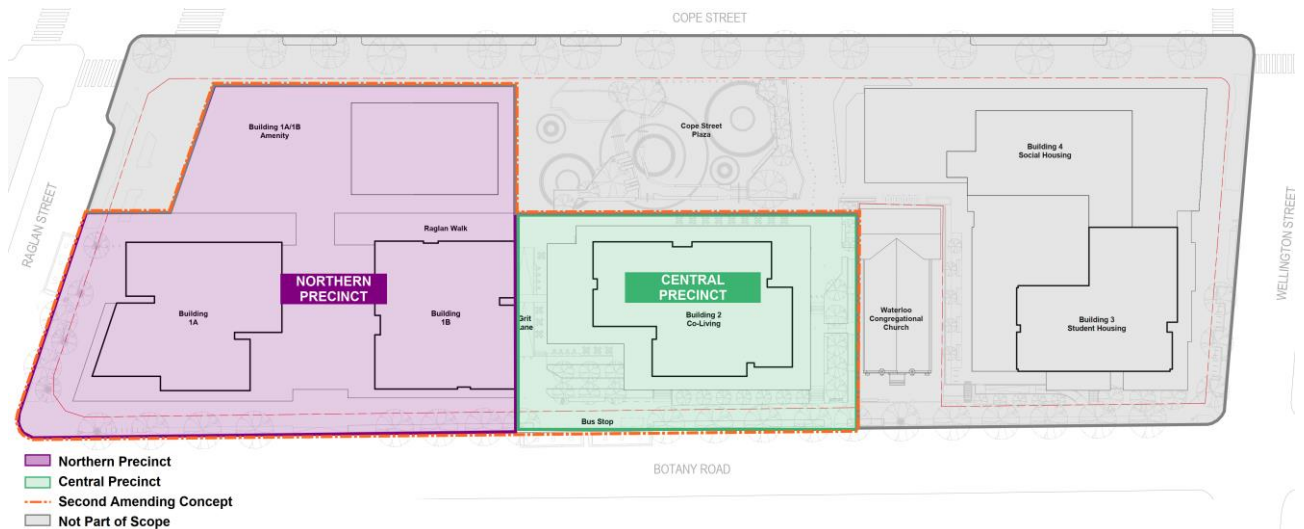
Appendix A:	Sun View Diagrams
Appendix B:	Communal Living Areas and Communal Open Spaces Mark Up
Appendix C:	Tabular Results of the Direct Solar Access Study (9:00 am to 3:00 pm)

# 1 INTRODUCTION

This report has been prepared by RWDI Australia Pty Ltd (RWDI) on behalf of WL Developer Pty Ltd (the applicant) to accompany a State Significant Development Application (SSDA) for the detailed Central Precinct SSD (SSD-79307746), located within the Waterloo Metro Quarter (WMQ) at 150 Cope Street, Waterloo. This SSD will replace the previous detailed approval applying to the Central precinct.

This report has been prepared to respond to Item 6 of the Planning Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Infrastructure and Housing (DPHI) on 13 February 2025.

The figure below indicates the land to which this DA applies in relation to the overall WMQ site (shaded in Green).



**Figure 1: Land to which Scoping Reports Apply**

This application seeks consent for the design, construction and operation of a 26 storey (including plant level) mixed use building within the Central Precinct (the site) of the WMQ estate. The proposal comprises a Co-living housing tower above a three storey podium containing retail and community facility in the form of a childcare centre. Specifically, the proposal comprises:

- Ground level retail tenancies, community facility, and childcare, co-living and shared basement access lobbies
- Community centre in the form of a childcare centre at Level 1 and Level 2
- A Co-living housing tower from Levels 3 to 24 comprising:
  - o Self-contained co-living accommodation rooms across 20 levels, with capacity for around 500 rooms
  - o Indoor and outdoor communal amenity at Levels 3 and 24
  - o Communal space also provided on each accommodation level;
- Ground level vehicular access from Church Square shared zone to the shared basement, delivery of a pedestrian thoroughfare through the site, landscaping and public domain works.
- Indicative building signage zones



This application is submitted for concurrent assessment with a DA to amend the Waterloo Metro Over Station Development (OSD) Concept DA (SSD 9393) (the Concept DA) - referred to as the Second Amending Concept DA. The Second Amending Concept DA seeks consent to modify the existing concept approval as it relates to the Northern and Central Precincts, by amending the building envelopes to redistribute floor space to suit a new mix of land uses. This Central Precinct SSD will be consistent with the Concept DA as amended.

Separately, a Detailed SSDA for the detailed design, construction and operation of the Northern Precinct (SSD-79307758) and a Section 4.55 Modification Application to modify the approved detailed Basement SSDA (SSD 10438), will be concurrently submitted with this application.

**Table 1: SEARs Compliance Table**

SEARs Request	Response / Location in Report
<p><b>Item 6 - Environmental Amenity</b></p> <ul style="list-style-type: none"> <li>• Address how good internal and external environmental amenity is achieved, including <b>access to natural daylight</b> and ventilation, pedestrian movement throughout the site, access to landscape and outdoor spaces.</li> <li>• Assess amenity impacts on the surrounding locality, including lighting impacts, reflectivity, <b>solar access</b>, visual privacy, view loss and view sharing, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential or other sensitive land uses must be demonstrated.</li> <li>• Provide a solar access analysis of the overshadowing impacts of the development within the site, on surrounding properties and public spaces (during summer and winter solstice and spring and autumn equinox) at hourly intervals between 9am and 3pm, when compared to the existing situation and a compliant development (if relevant).</li> <li>• For applicable developments, provide an assessment of the development against the Housing SEPP and the Apartment Design Guide.</li> </ul>	<p>Section 3</p>

## 2 BACKGROUND

### 2.1 Methodology

RWDI was engaged to assess the Central Precinct's ability to access direct sunlight (i.e., to the communal living areas and communal open spaces). The analysis was based on computational 3D modelling of the proposed development and its surrounding context, combined with meteorological data for Sydney.

The screening analysis was conducted using RWDI's in-house proprietary *Eclipse* simulation engine, as per the steps outlined below:

- The assessment began with the development of a 3D model of the area of interest (as shown in Figure 2). The windows facing indoor communal living areas and the floor level of any communal outdoor open spaces were isolated and subdivided into many smaller triangular patches approximately 0.005 m<sup>2</sup> in area (see Figure 3).
- At fifteen-minute increments from 9:00am to 3:00pm on June 21, the expected solar position was determined, and "virtual rays" were drawn from the sun to each triangular patch of the surfaces. Any rays which were not obstructed by a building are considered exposed to direct sunlight. This approach results in solar access durations which are accurate to within 15 minutes, and solar exposure areas accurate to within 0.005 m<sup>2</sup>.
- The effects of overshadowing are presented using "sun view" diagrams at these same times. These are orthographic views of the proposed building from the location of the sun. As such, any locations in the images which are not visible would be in shadow.

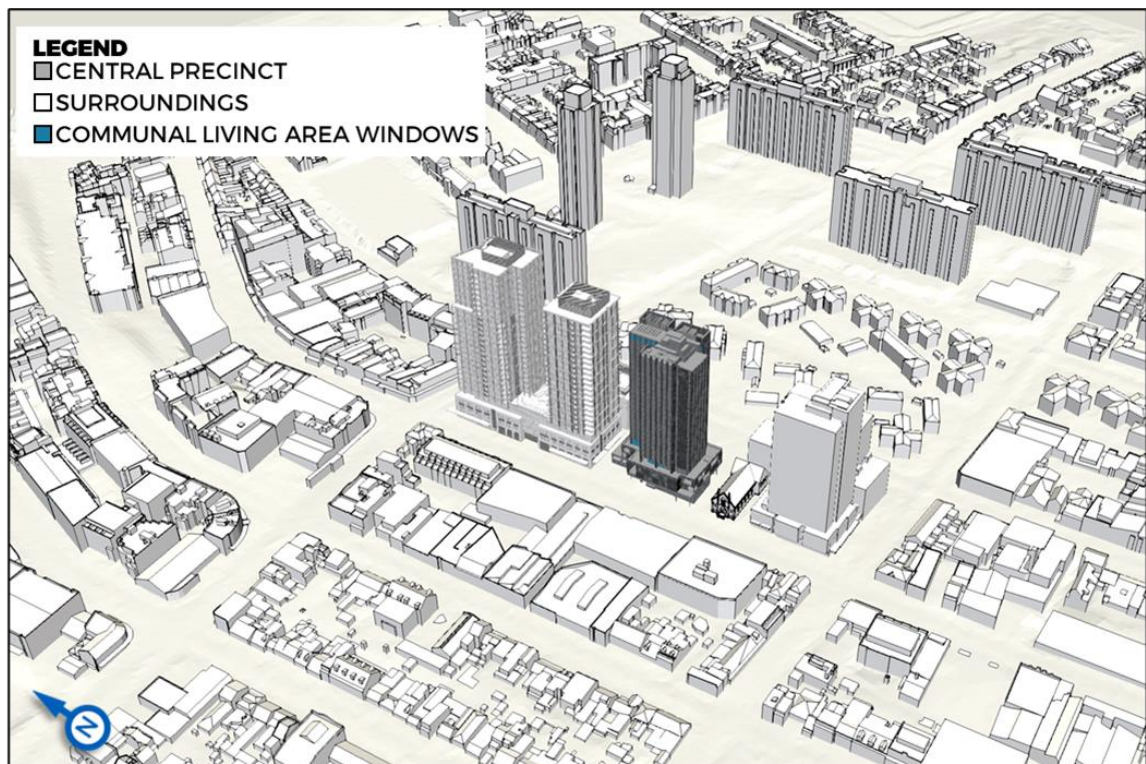


Figure 2: 3D Computer Model of the Project and Surrounding Context

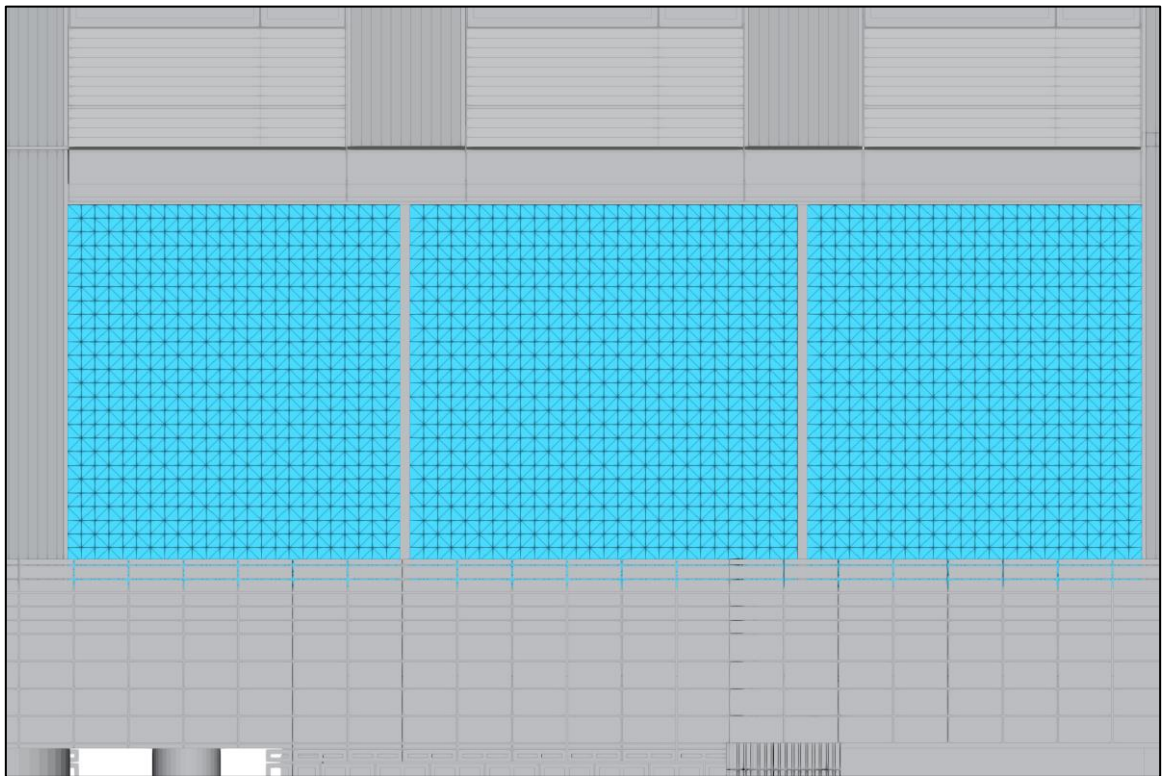


Figure 3: Close-up of an Indoor Communal Living Area's Window Surface, showing Surface Subdivision

## 2.2 Assumptions and Limitations

### 2.2.1 Meteorological Data

This model has been geolocated to a reference latitude and longitude of (-33.89794, 151.200156).

### 2.2.2 Study and Surrounds Models

The analysis was conducted based on 3D models of the Project provided to RWDI on the following dates.

- **Building 1A and 1B (Northern Precinct):** Woods Bagot Pt Ltd to RWDI on August 11, 2025;
- **Building 2 (Central Precinct):** Bates Smart to RWDI on August 15, 2025;
- **Building 3 and 4:** Bates Smart to RWDI on August 18, 2025 (already approved, included as massing only in this assessment).

At the time this solar access study was carried out, the final revision of the architectural drawings had not yet been issued, and the analysis was based on the 3D models available at that time. The design has since remained consistent, with no changes affecting the solar access outcomes. Therefore, the results of this report are fully applicable to Appendix E Architectural Drawings Revision 01.

The surrounding model was generated based on publicly available data and previous RWDI projects in the area. This analysis included the existing surrounding context and buildings currently under construction (anticipated to be completed at the time of completion of subject development) and excluded proposed developments that are currently under assessment or approved (i.e., not yet under construction). All data sources were cross-checked against LiDAR data published by the NSW Department of Finance, Services, and Innovation. This dataset was also used to generate the ground surface and has a stated vertical and horizontal accuracy of 0.3m and 0.8m, respectively (both at a 95% confidence interval).

For the purposes of this analysis, all elements of the proposed building have been treated as fully opaque to light and any shading provided by vegetation (i.e. trees) was neglected.

For any communal open space that is enclosed by glazed balustrades, this analysis assumes that the glazed balustrades do not drastically attenuate direct sunlight. In other words, this study assumes direct sun passing through the glazed balustrades on its way to the finished floor of an indoor communal living area counts equally to a truly direct sunlight in the assessment.

The results presented in this report are highly dependent on both the form and materiality of the Project. Should there be any changes to the design, it is recommended that RWDI be contacted and requested to review their potential effects on the findings of this report.



## 2.3 Direct Solar Access Criteria

The State Environmental Planning Policy (SEPP) Housing 2021 has standards for solar access outlined for co-living housing, and the City of Sydney Development Control Plan (DCP) 2012 also outlines solar access provisions for boarding houses and student accommodation. These standards and provisions can be used as the Design Criteria for the Central Precinct (a co-living accommodation), which are stipulated:

### State Environmental Planning Policy (SEPP) Housing 2021: Part 3 – 69

- **Design Criteria 1:** at least 3 hours of direct solar access between 9:00 am and 3:00 pm on 21 June (mid-winter) in at least 1 communal living area.

### City of Sydney Development Control Plan (DCP) 2012 Section 4.4.1.4

- **Provision 2c:** indoor communal living areas are to be located to receive a minimum of 2 hours of solar access to at least 50% of the windows during 9:00 am and 3:00 pm on 21 June.
- **Provision 4a:** communal outdoor open space is to be located and designed to generally be north-facing to receive at least 2 hours of solar access to at least 50% of the area during 9:00 am and 3:00 pm on 21 June.



## 3 RESULTS

The results of the analysis of the Central Precinct between 9:00 am and 3:00 pm on 21 June are summarised below. The sun view diagrams are presented in Appendix A from 8:00 am to 4:00 pm on 21 June. For the purpose of this assessment, the communal living area and communal open spaces are marked up in Appendix B. A summary of solar access to these spaces is provided in Appendix C.

### Communal Living Area

- 2 communal living areas on the Central Precinct (at levels 3 and 24) receive more than 3 hours of sunlight access to their windows between 9:00 am and 3:00 pm on 21 June, satisfying the requirements of the Housing SEPP 2021 Design Criteria 1.
- All communal living areas will have access to at least 1 m<sup>2</sup> of direct sunlight for at least 2.5 hours between of 9:00 am and 3:00 pm on 21 June, satisfying Provision 2c of Section 4.4.1.4 of the City of Sydney DCP 2012 that at least 50% of the windows achieve at least 2 hours.
- A summary of solar access to Communal Living Areas between the hours of 9:00 am and 3:00 pm on 21 June is provided in Table C1 of Appendix C.

### Communal Open Spaces

- The communal open space on Level 24 achieves access to sunlight for 50% of the area for 3 hours between of 9:00 am and 3:00 pm on 21 June, satisfying Provision 2c of Section 4.4.1.4 of the City of Sydney DCP 2012 that at least 50% achieve 2 hours.
- The communal open space on Level 3 wraps around the tower, with the eastern aspect having access to sunlight from 9:00 am to 12:45 pm, and the western aspect achieving access from 1:00 pm to 3:00 pm. The design does not meet the 50% metric of Provision 2c of Section 4.4.1.4 of the City of Sydney DCP 2012, despite providing continuous access to sunlight. Therefore, in our opinion, the design satisfies the intent to provide a high level of amenity.
- A summary of solar access to Communal Open Spaces between the hours of 9:00 am and 3:00 pm on 21 June is provided in Table C2 of Appendix C.

## 4 CUMULATIVE IMPACT ASSESSMENT (CIA)

As outlined in the Department of Planning, Housing and Infrastructure's "Cumulative Impact Assessment Guidelines for State Significant Projects" project level cumulative impact assessment (CIA) is considered for the impacts of the proposed Waterloo Metro Quarter development in combination with other reasonably foreseeable and wind significant future projects within the vicinity (See Figure 4). This CIA is also proportionate to the scale and significance of the Proposed Development and the considered future projects.



**Figure 4: Nearby Future Developments**

The development of Redfern North Eveleigh, and Redfern Place are located over 500 m away from the proposed development and will not impact solar access to the proposed development.

The adjacent re-development of the Waterloo Estate is separated into multiple precincts (See Figure 5). The southern precinct adjacent of Waterloo Estate adjacent to the proposed development will be a park (See Figure 6) which will not reduce solar access to the proposed development. Waterloo North has the potential to impact solar exposure to the proposed development; however, this sub-precinct is understood to be the last to be re-developed, and as such, RWDI is not aware that a massing envelope has yet been established. Notwithstanding this, the current assessment has already considered the shadowing afforded by existing buildings in the precinct, and it is anticipated that future re-development of the north precinct is unlikely to significantly increase shadowing to the proposed development. Therefore, the cumulative impact of future significant developments is unlikely to have a significant impact on the findings presented in Section 3 of this report.

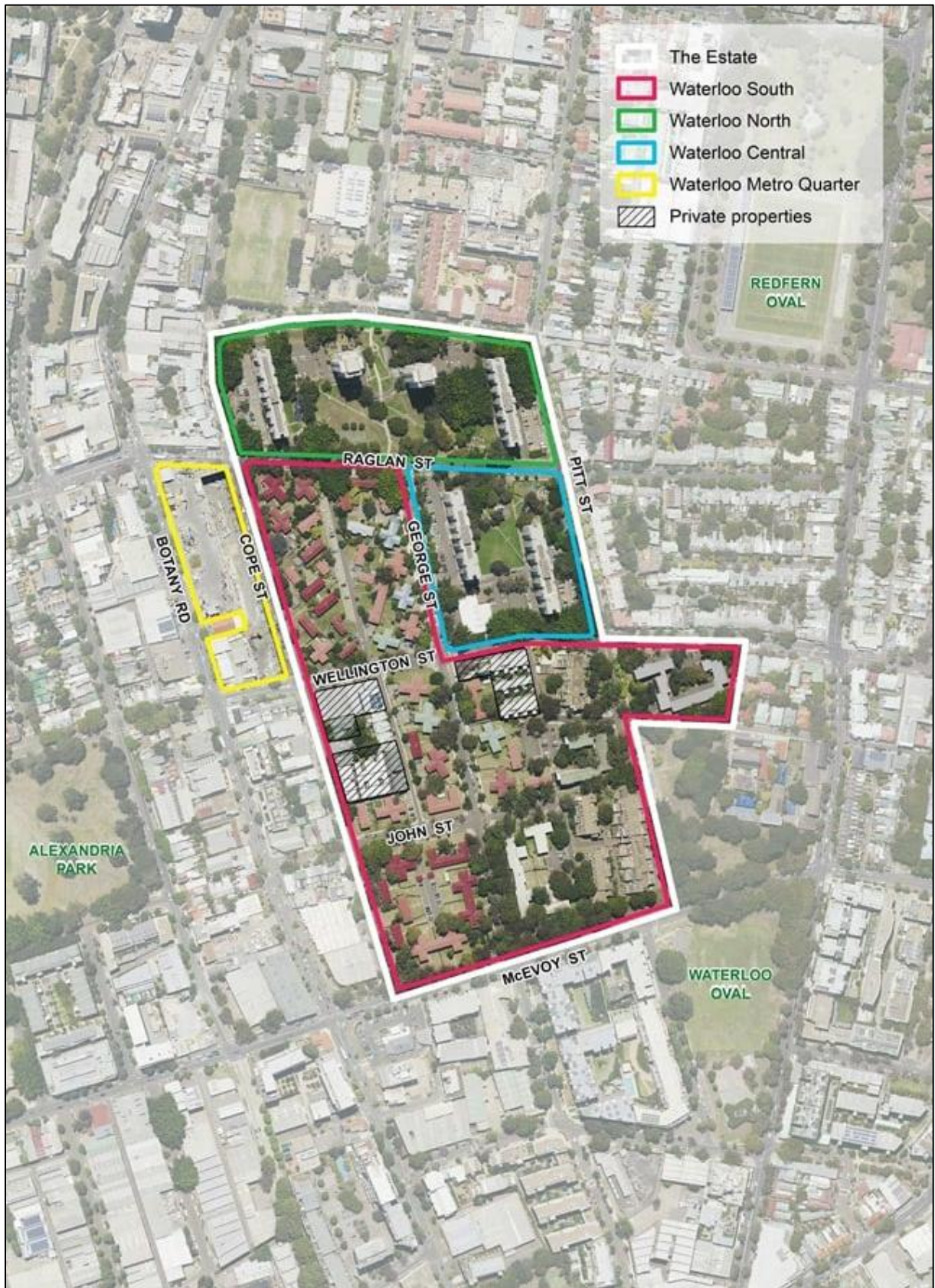


Figure 5: Waterloo Renewal Project Development Areas (Extract from CoS planning proposal webpage)



Figure 6: Waterloo South building heights map (Extract from Planning NSW Waterloo South webpage)



It is also worth noting that the proposed development will not cast any shadow on the buildings of the southern precinct of the Waterloo Estate until after 2 PM, as shown in the sun-view diagrams in Appendix A. The impacts are expected to be very similar to those of the approved scheme (SSD10441) of the proposed development, owing only to slight changes to Building 2's envelope. As such, the impact on future solar access to the Waterloo Estate redevelopment is likely to be negligible.



## 5 CONCLUSION

All of the communal living areas of the Central Precinct receive sufficient sunlight access between 9:00 am and 3:00 pm on 21 June satisfying the requirements of the Housing SEPP 2021 and provisions of the City of Sydney DCP 2012.

The rooftop communal open space satisfies the City of Sydney DCP 2012. The Level 3 terrace provides a continuous 6 hours of solar access, however based on the wrap-around design the eastern aspect receives sunlight until 12:45 pm, with the western aspect receiving sunlight from 1:00 pm, and thus does not meet the strict area metric, despite providing a high level of amenity and satisfying the intent of the solar access requirements.

Given these findings, the development is considered to enjoy a high level of solar access and be in accordance with the intent of the City of Sydney DCP 2012 and, as such, warrants approval.



## 6 GENERAL STATEMENT OF LIMITATIONS

This report entitled *Waterloo Metro Quarter Central Precinct – SSDA Solar Access Analysis* was prepared by RWDI Australia Pty Ltd (“RWDI”) for WL Developer Ptd Ltd (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared.

Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilise the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

# APPENDIX A

SUN VIEW DIAGRAMS

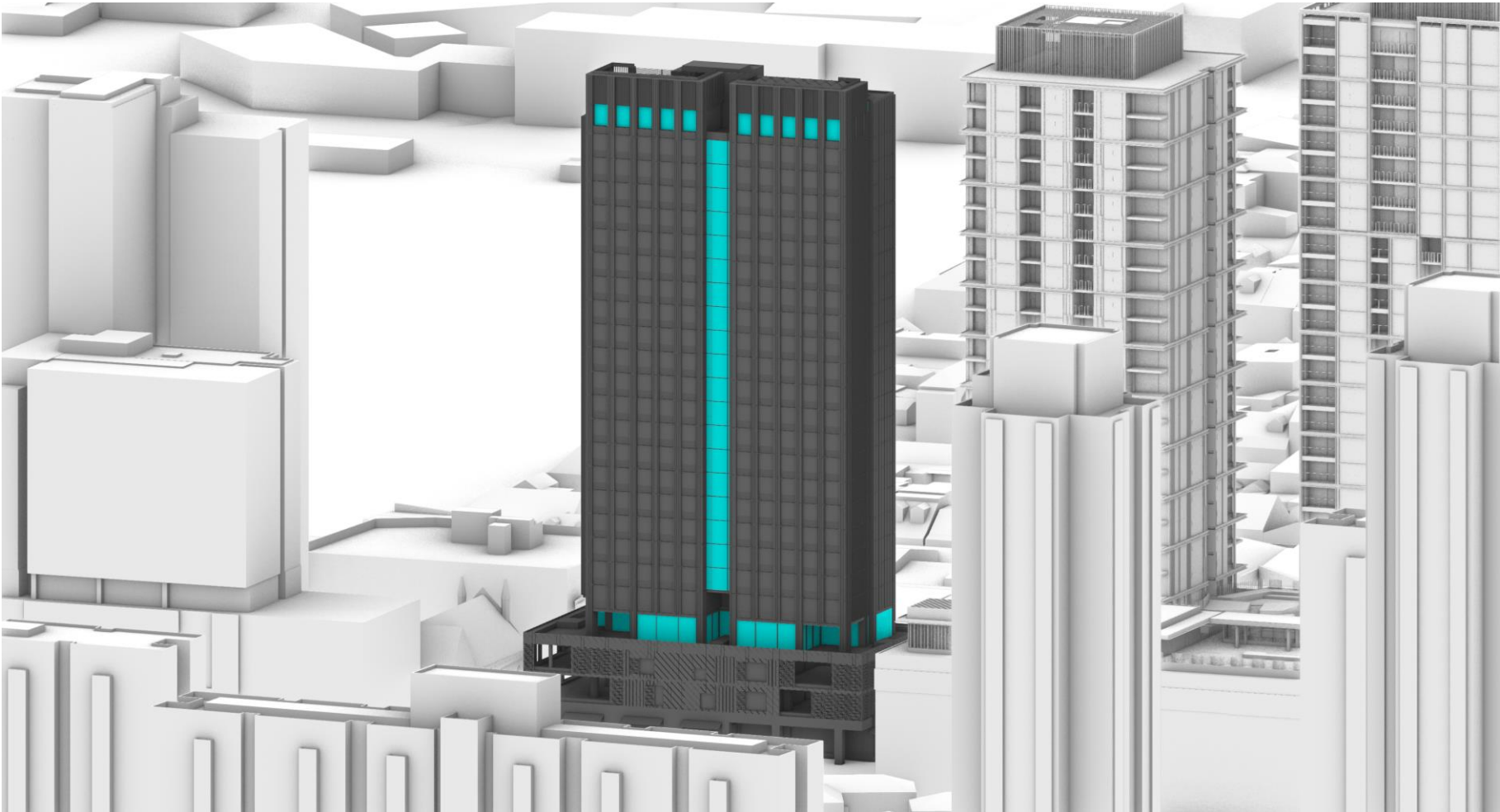
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 08:00 AEST



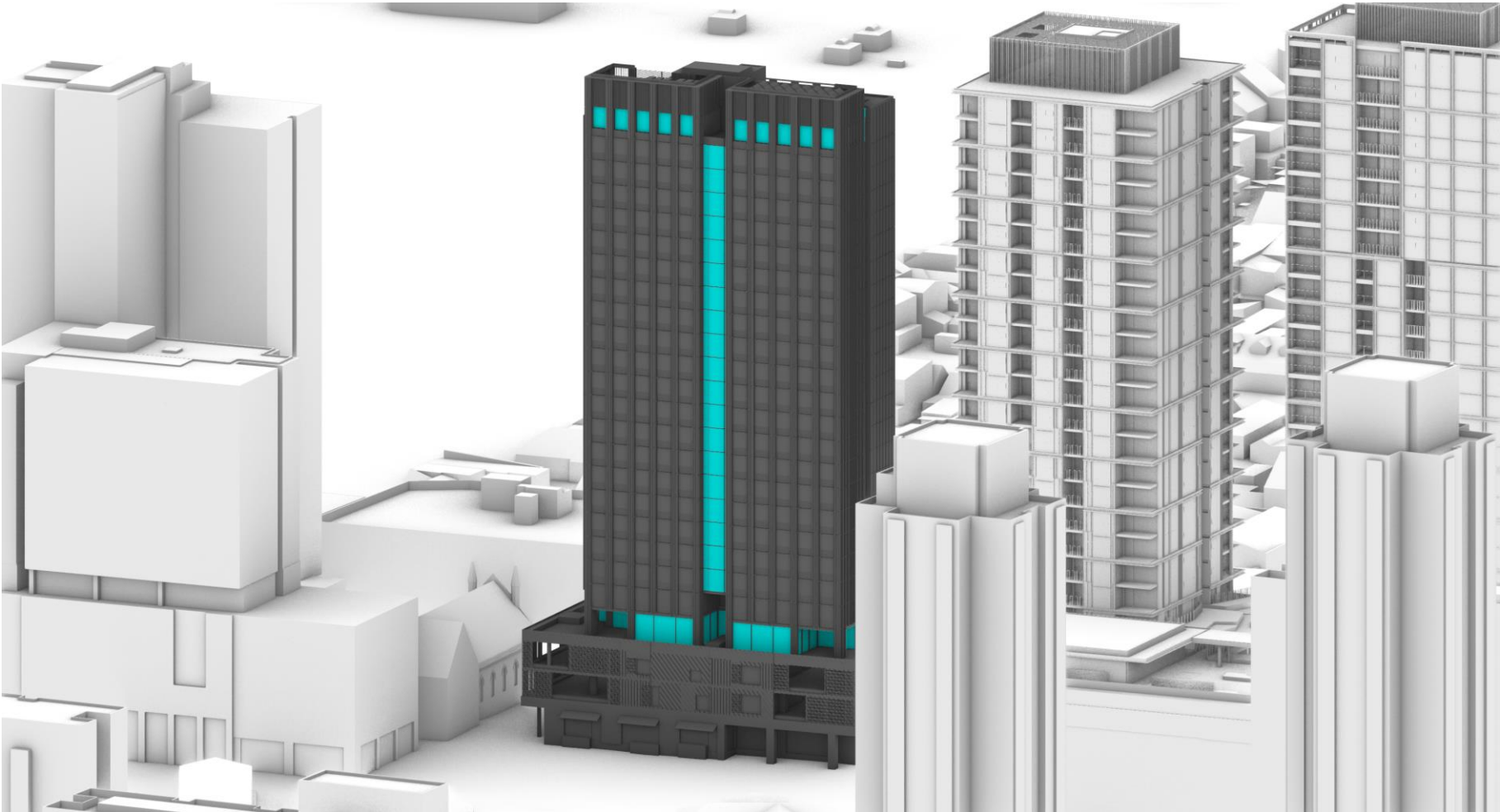
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 08:15 AEST



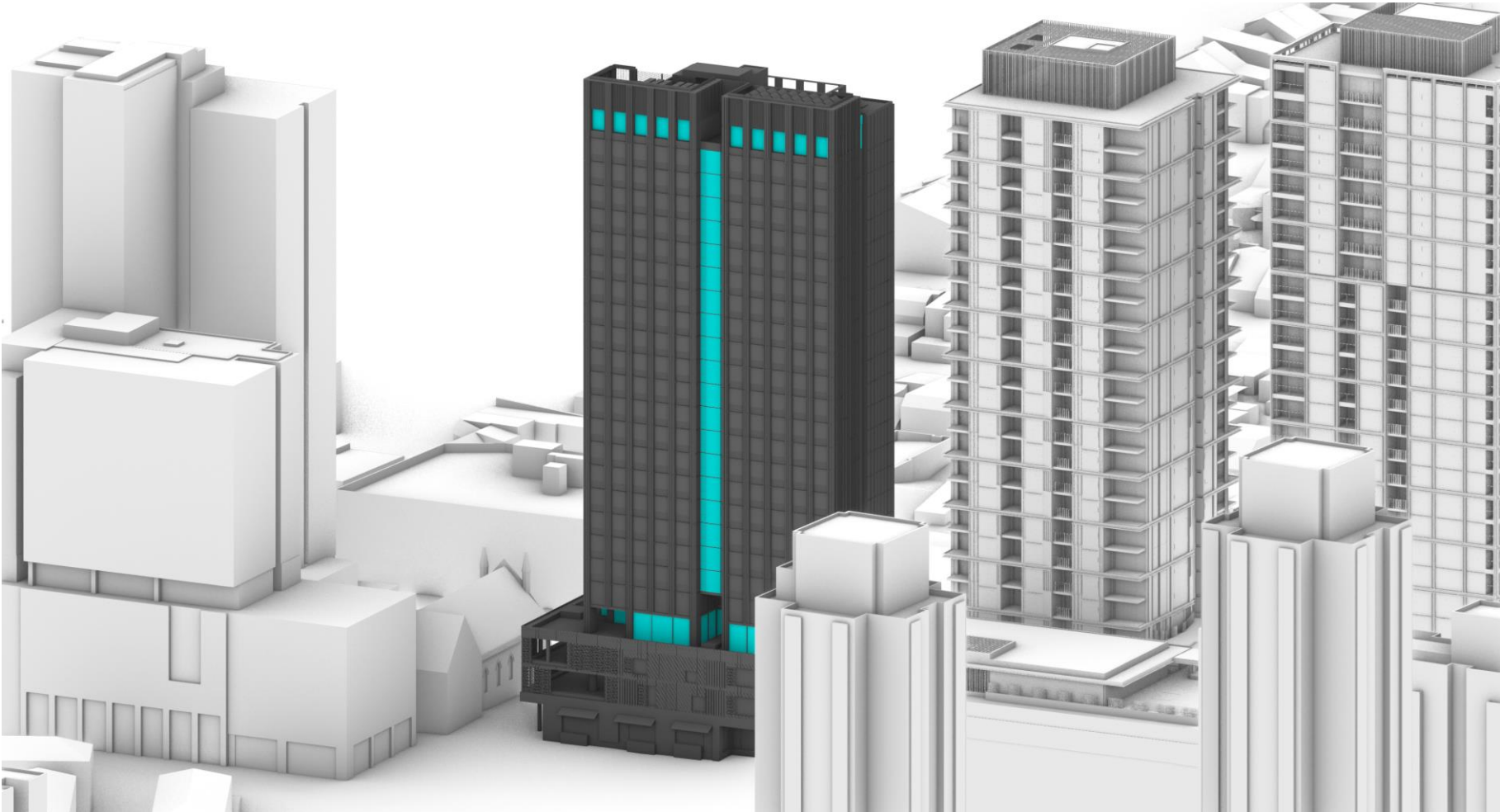
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 08:30 AEST



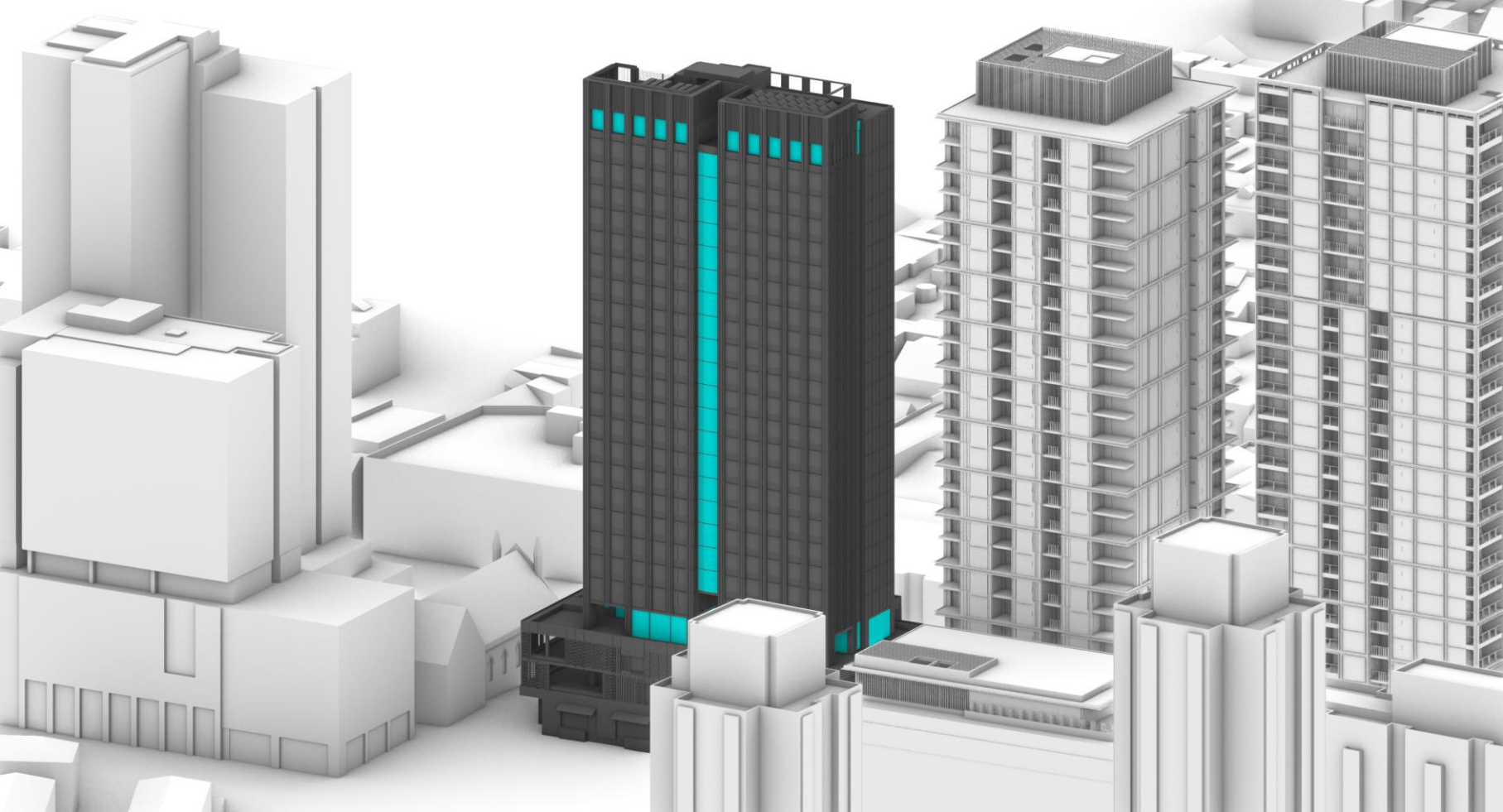
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 08:45 AEST



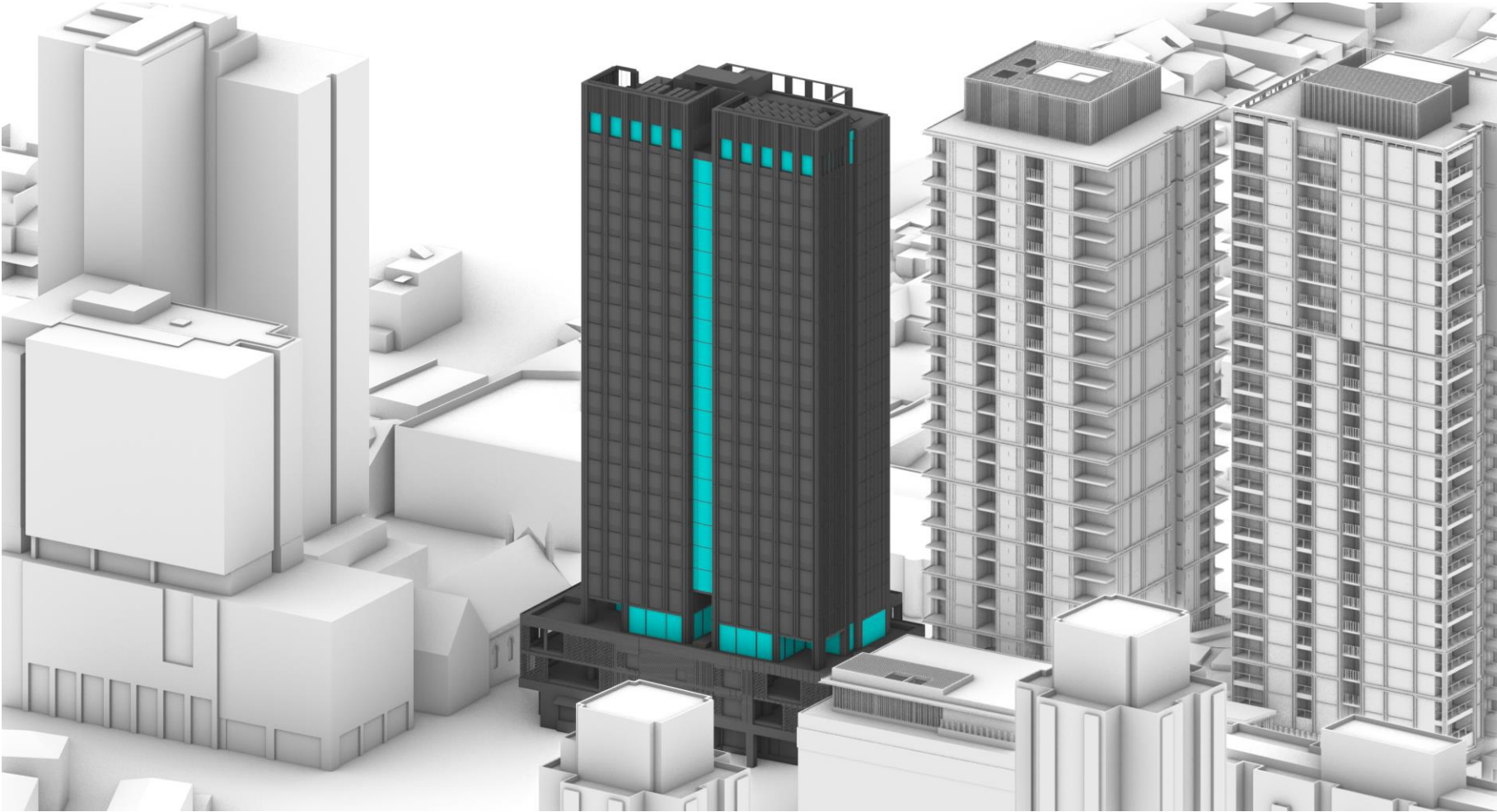
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 09:00 AEST



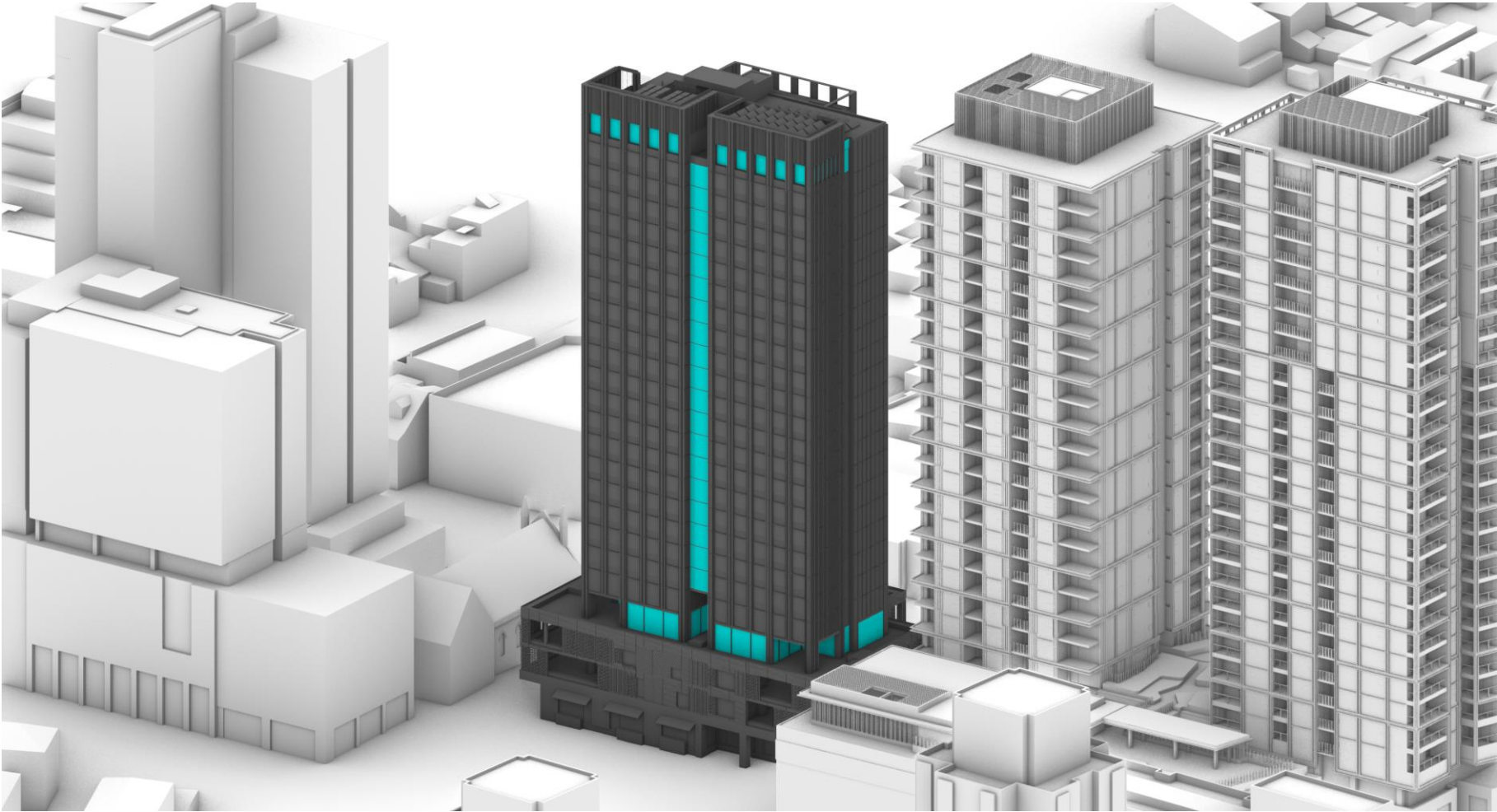
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 09:15 AEST



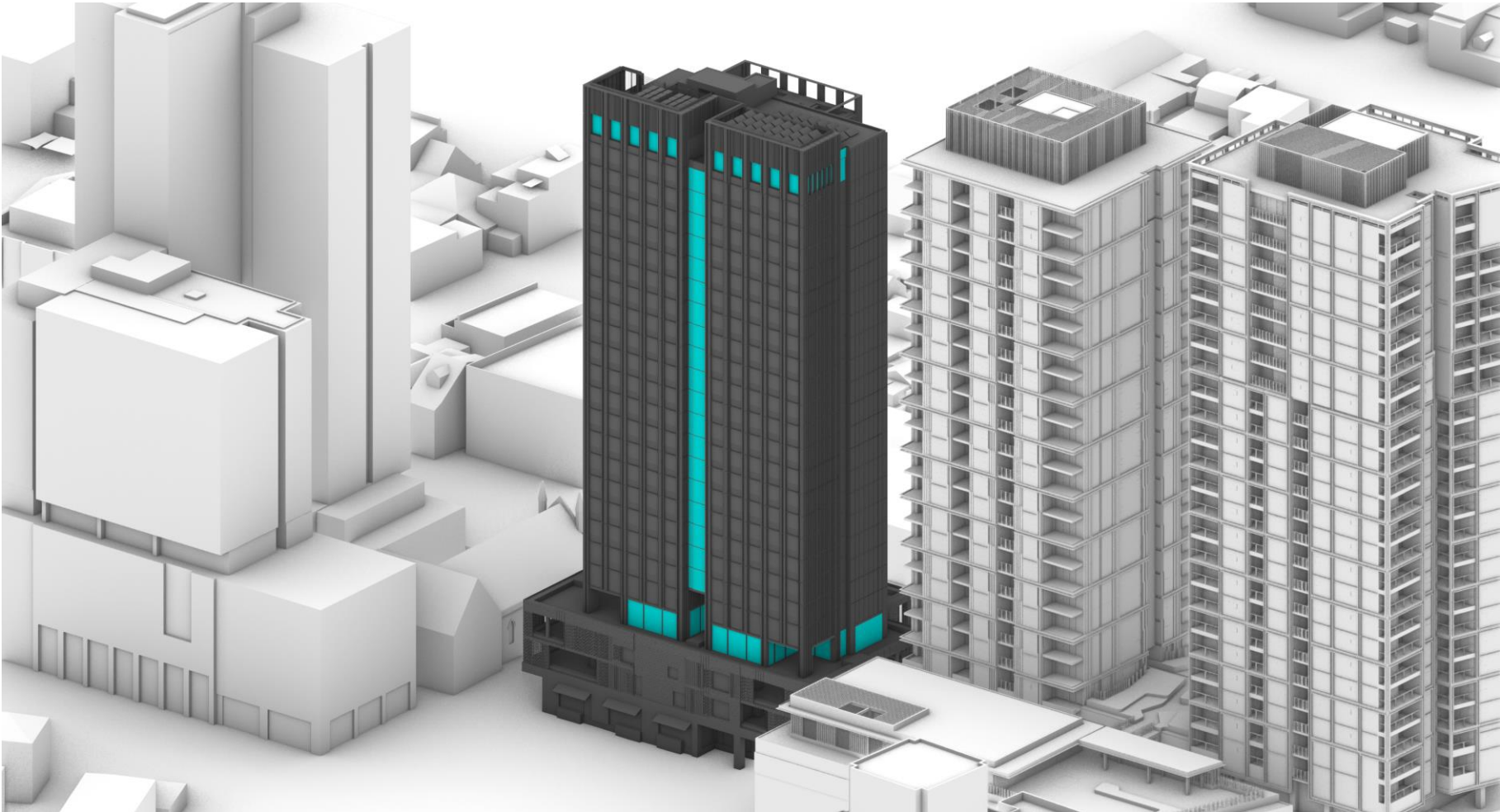
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 09:30 AEST



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 09:45 AEST



# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

**Jun 21 - 10:00 AEST**



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 10:15 AEST



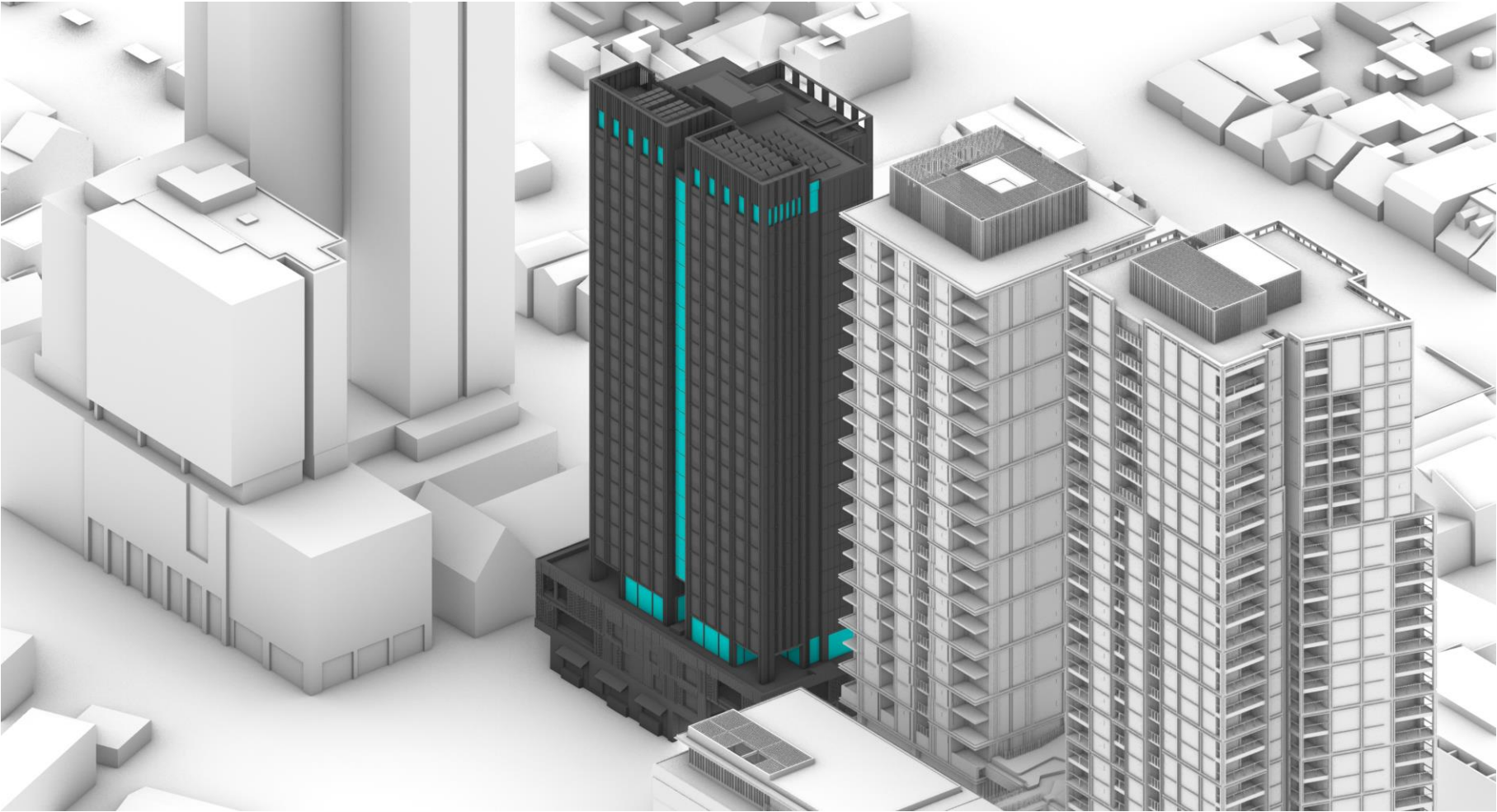
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 10:30 AEST



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 10:45 AEST



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 11:00 AEST



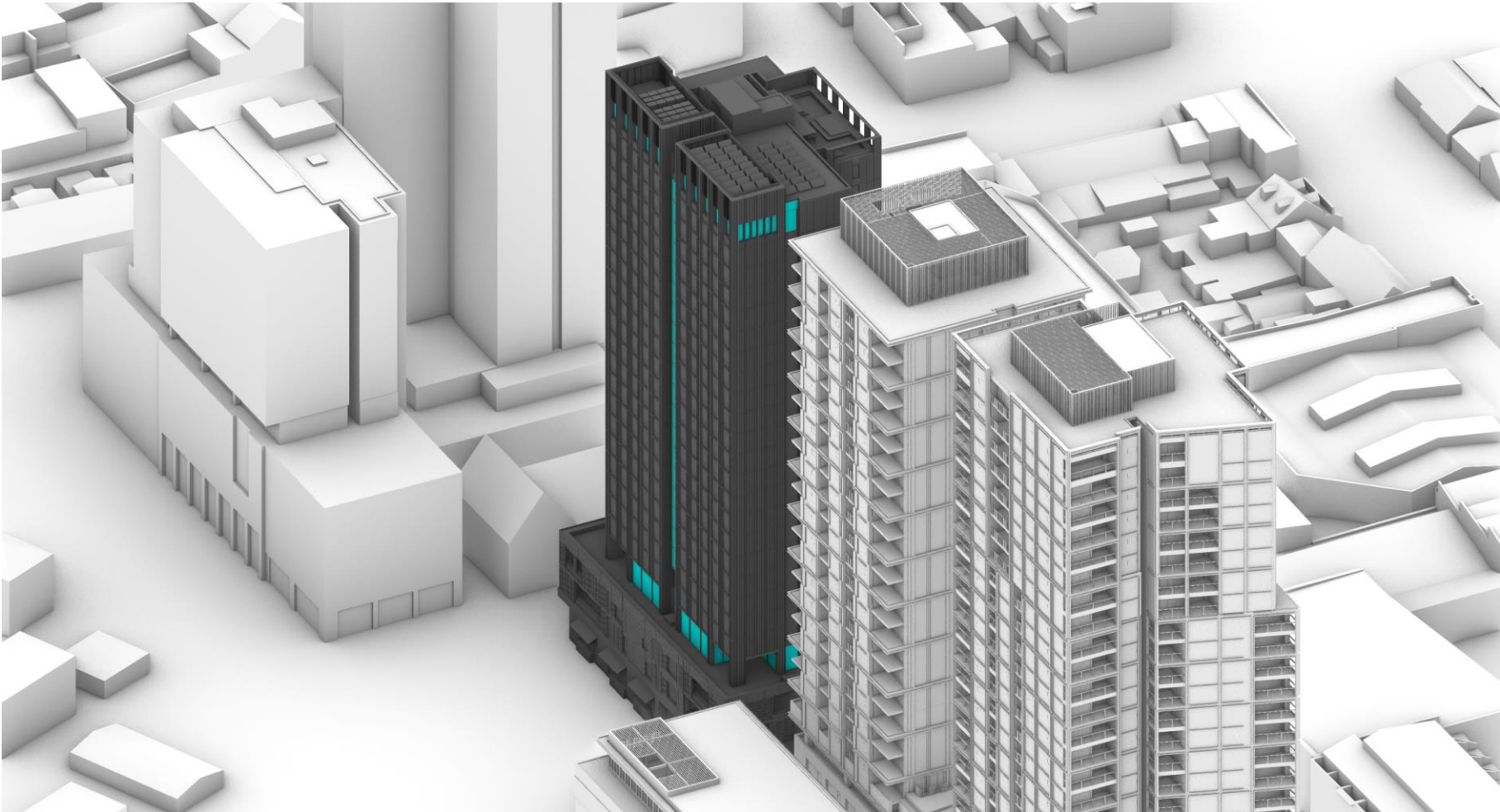
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 11:15 AEST



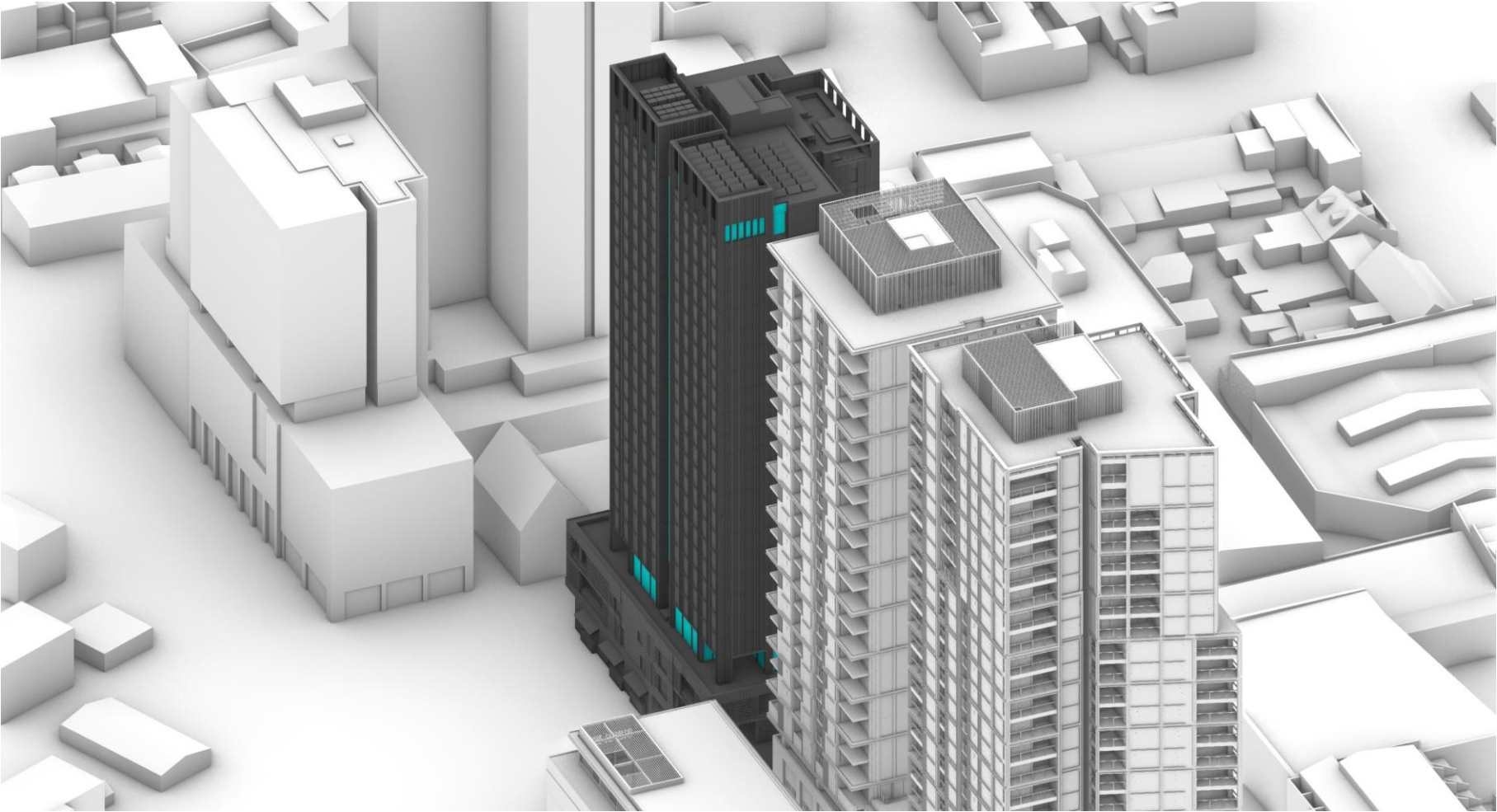
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 11:30 AEST



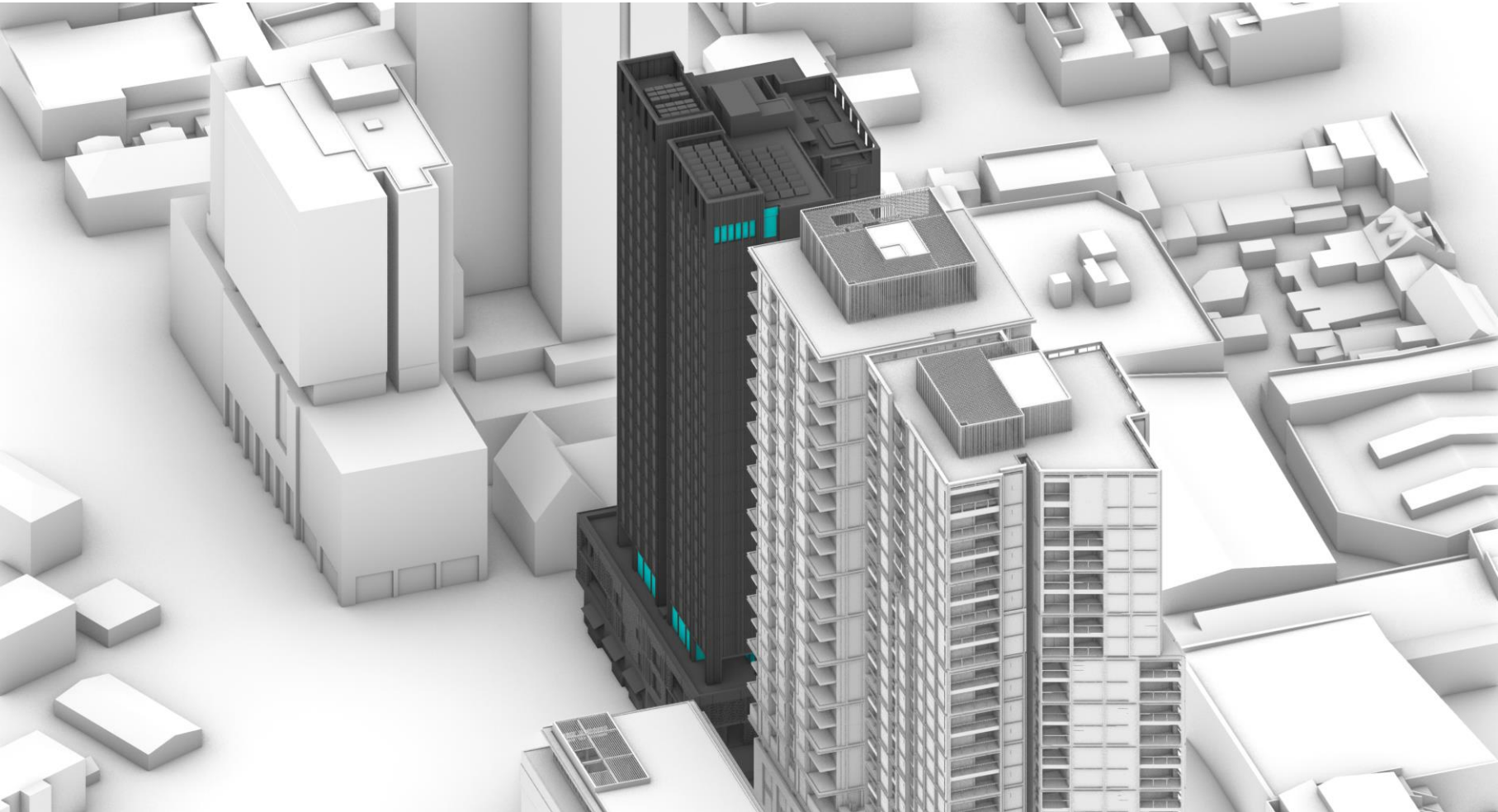
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 11:45 AEST



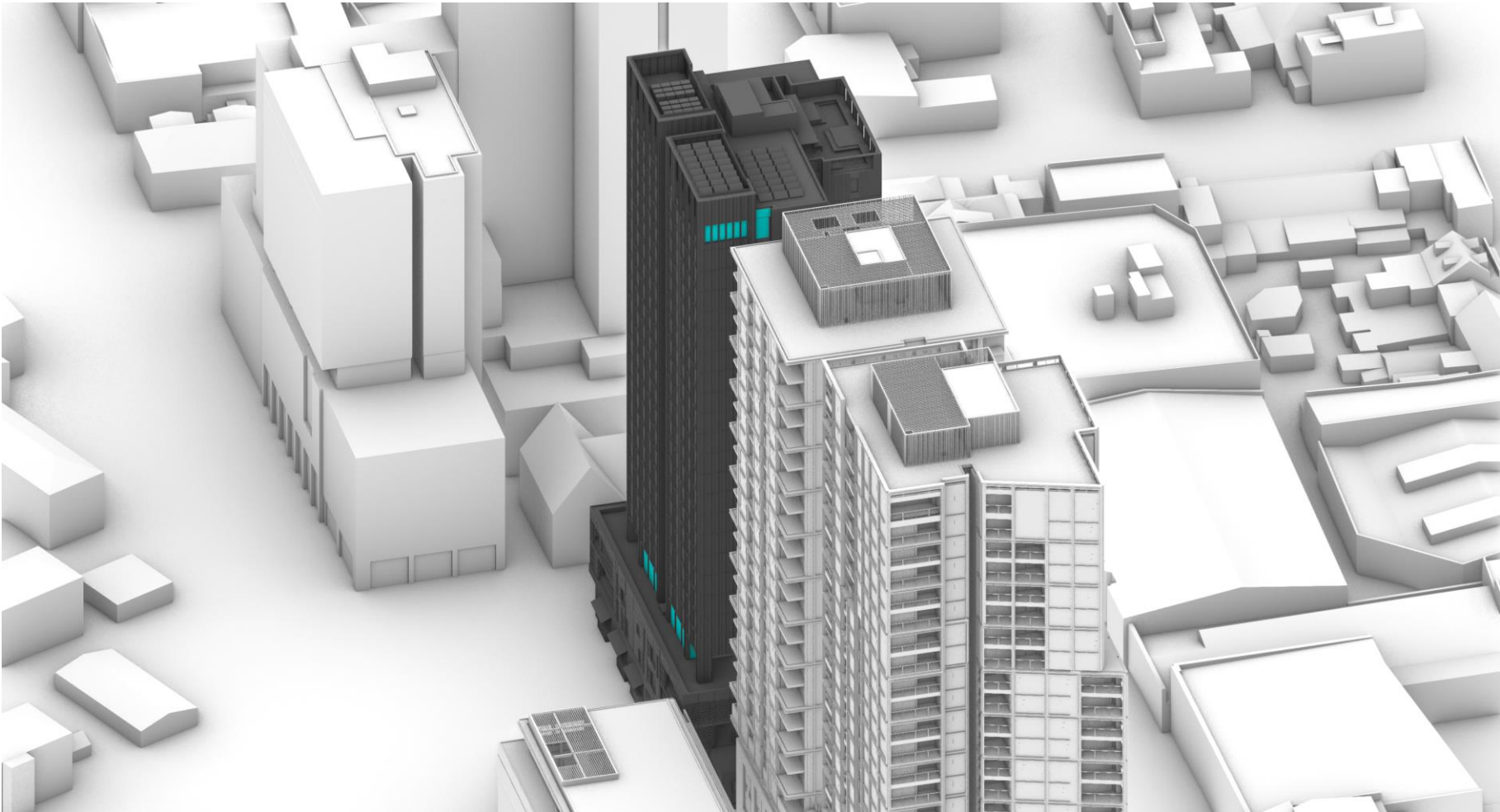
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 12:00 AEST



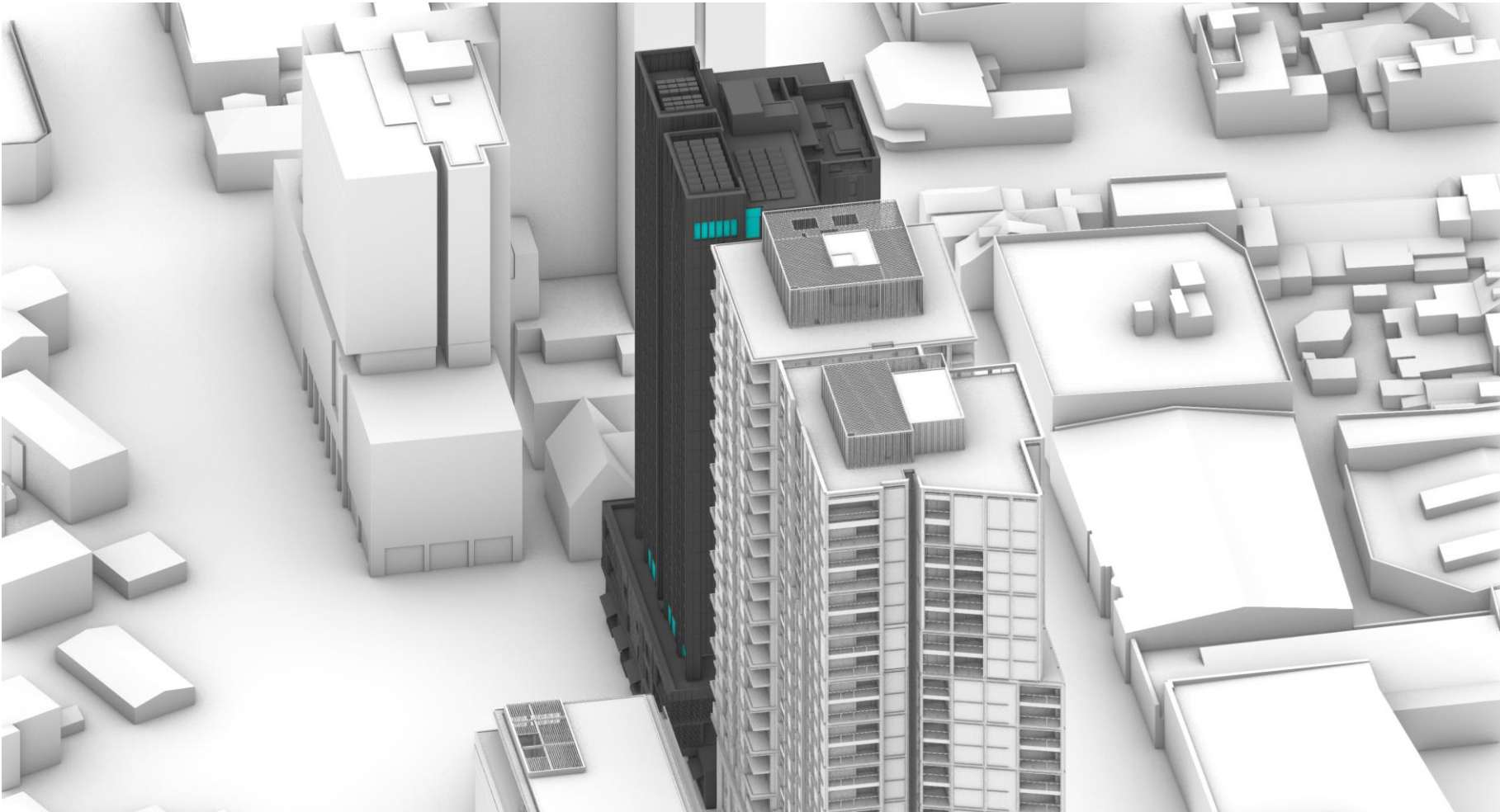
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 12:15 AEST



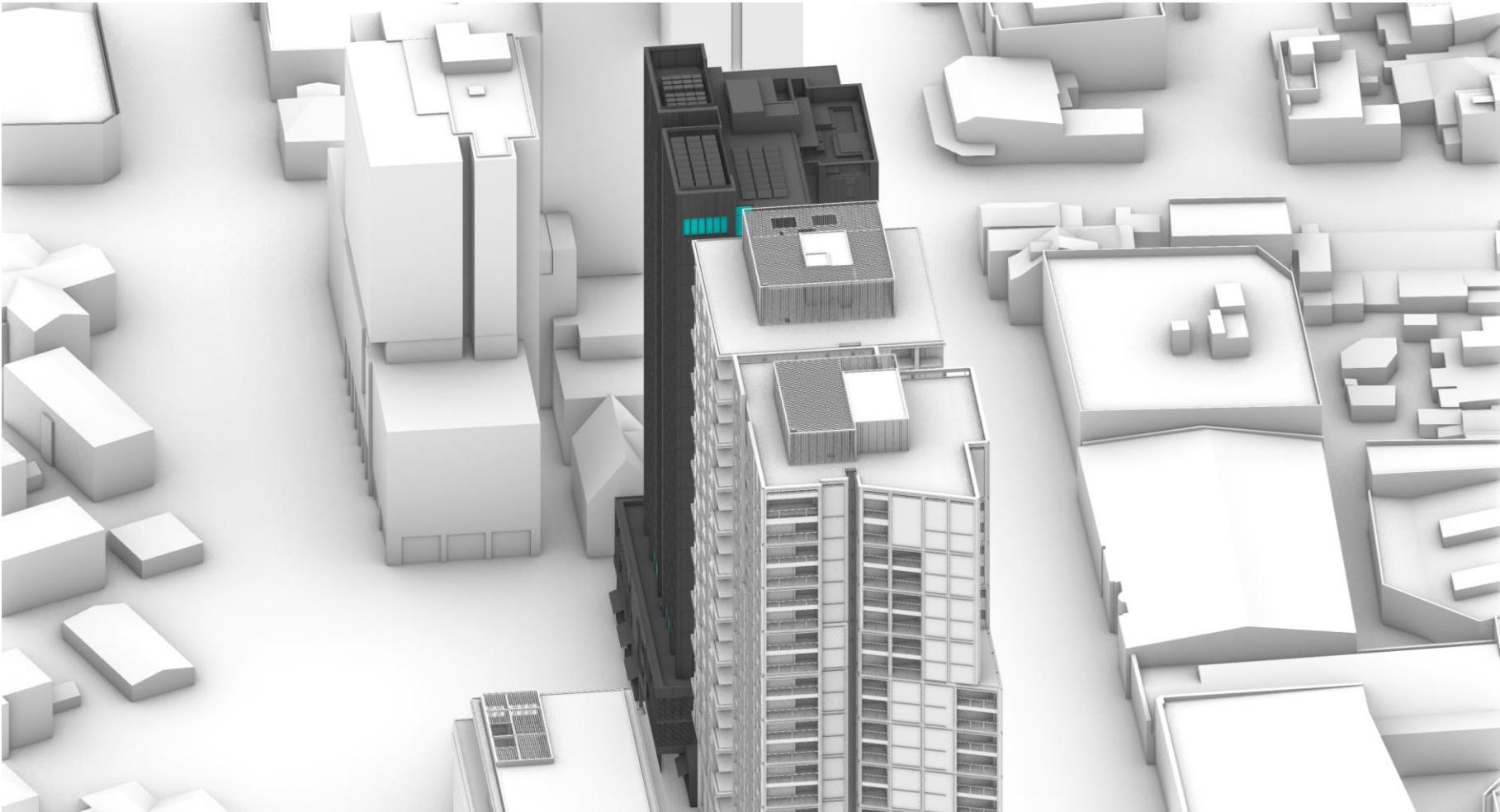
# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

**Jun 21 - 12:30 AEST**



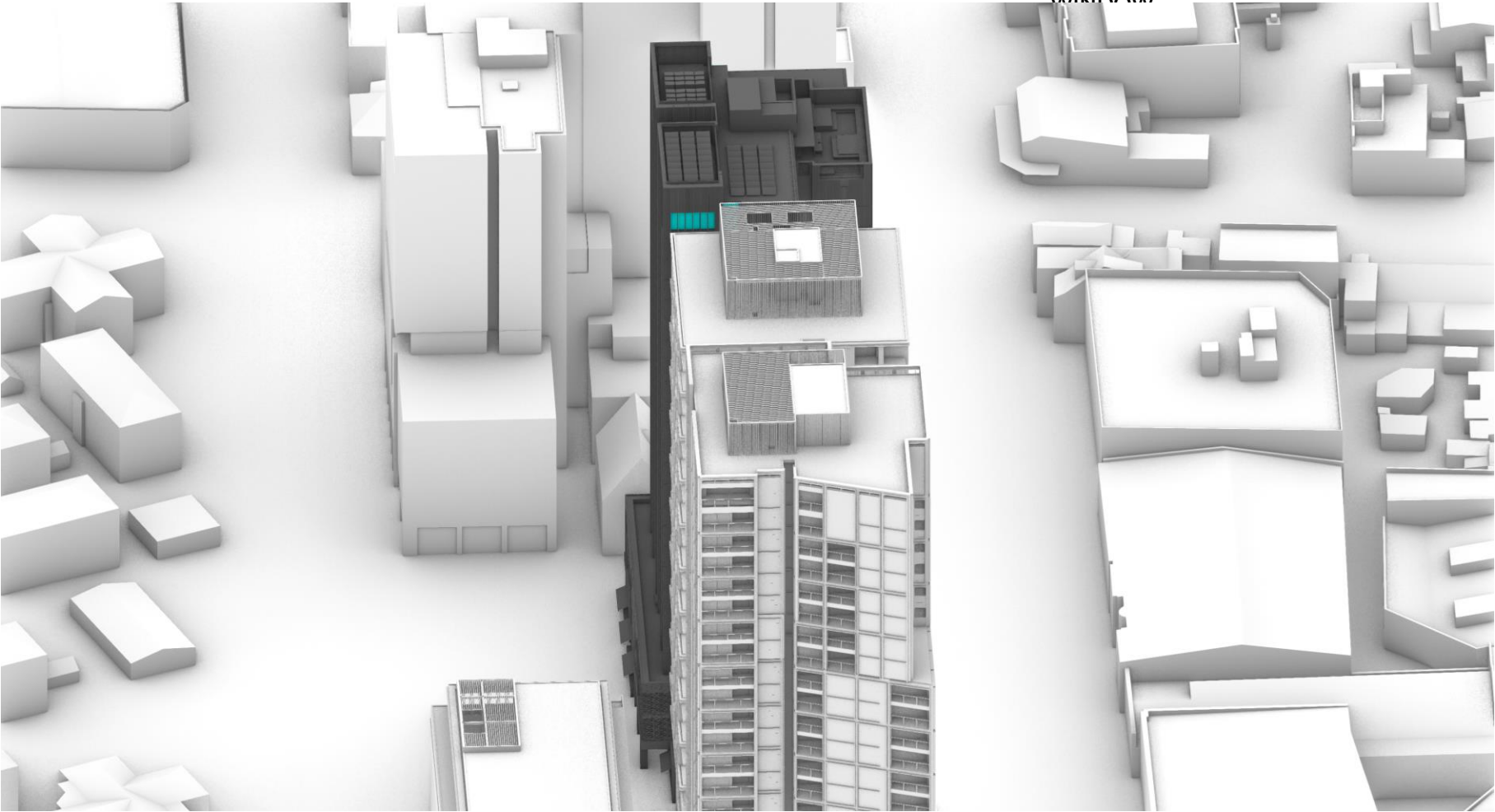
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 12:45 AEST



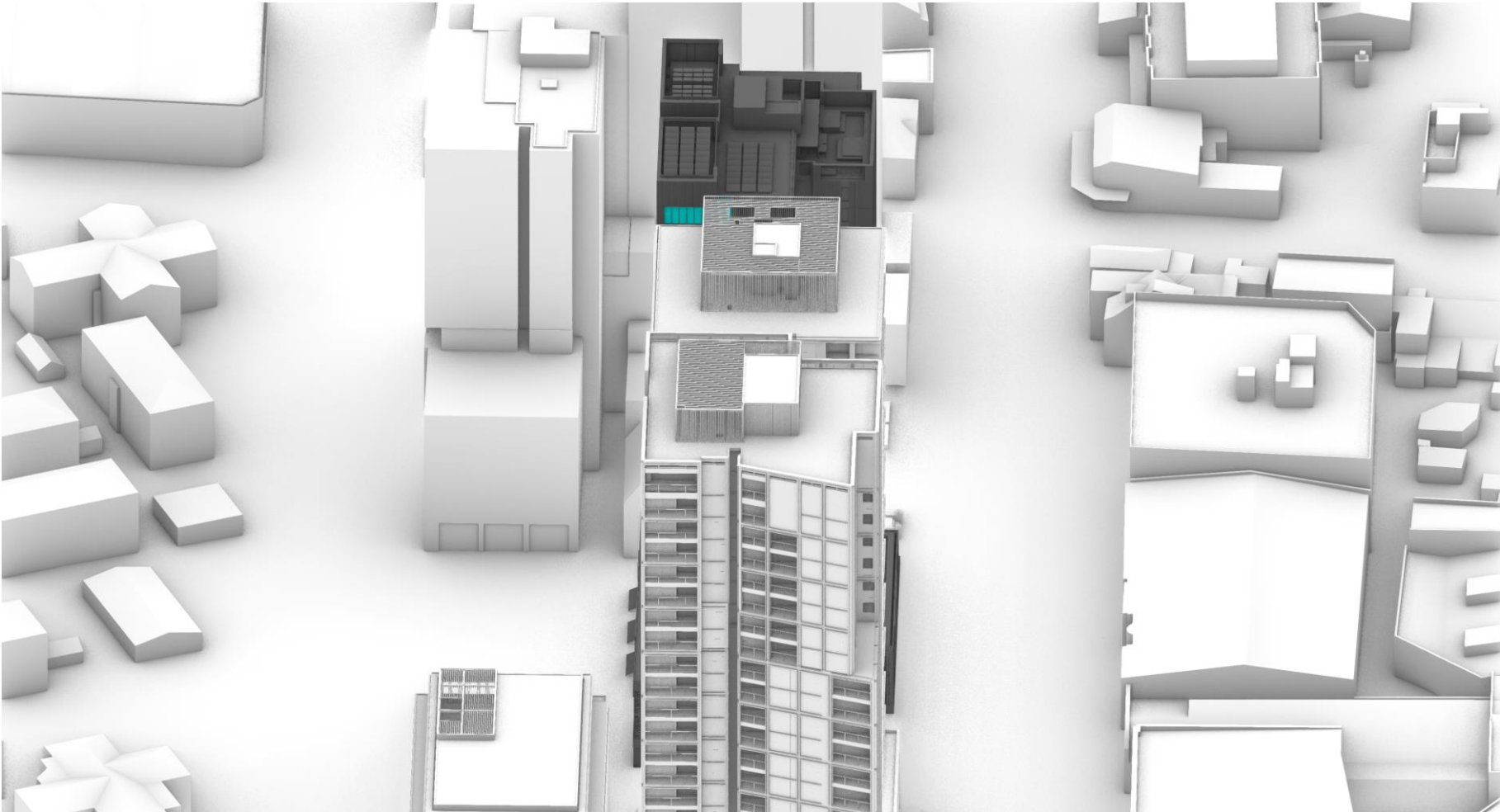
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 13:00 AEST



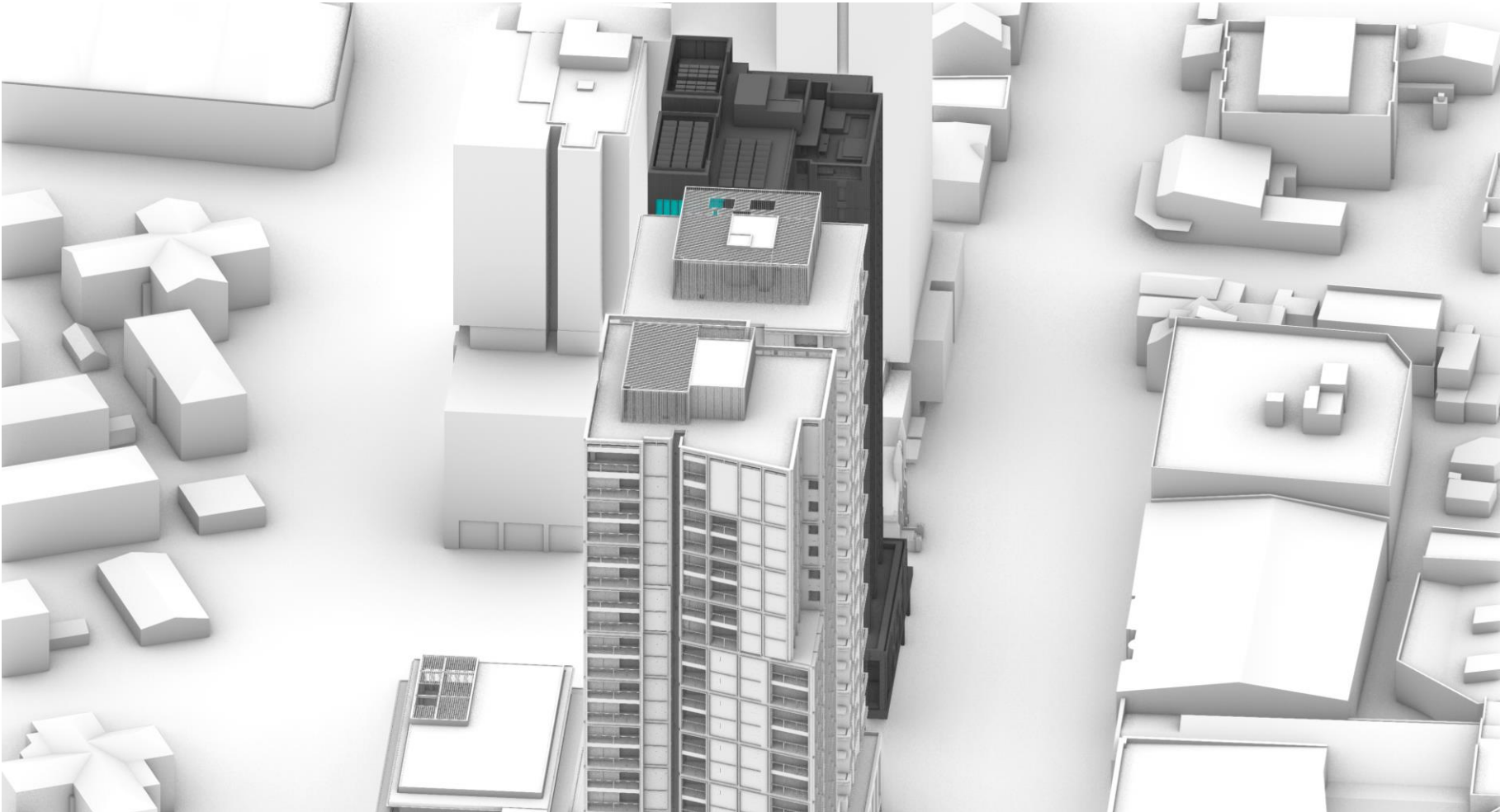
# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 13:15 AEST



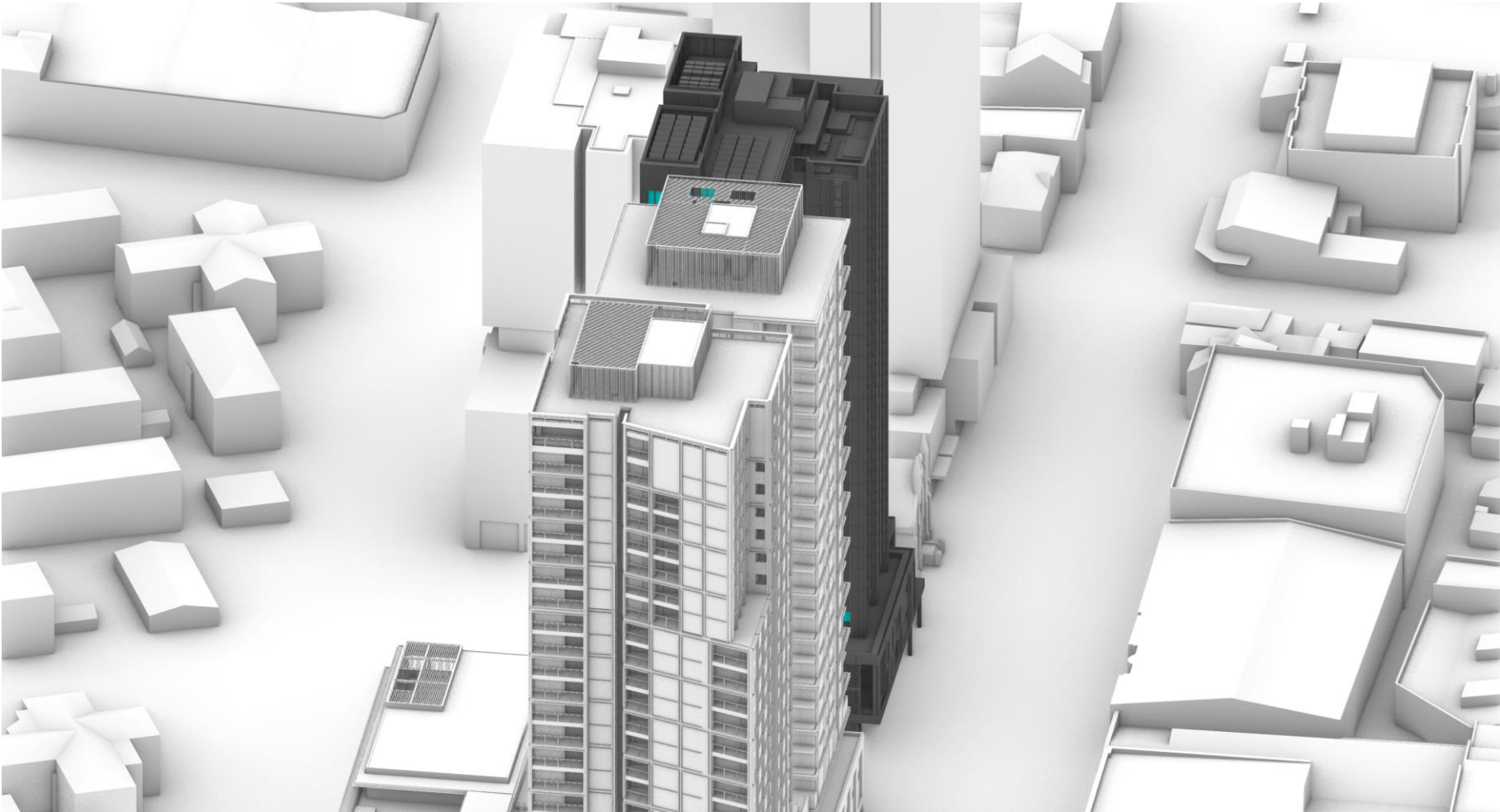
# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

**Jun 21 - 13:30 AEST**



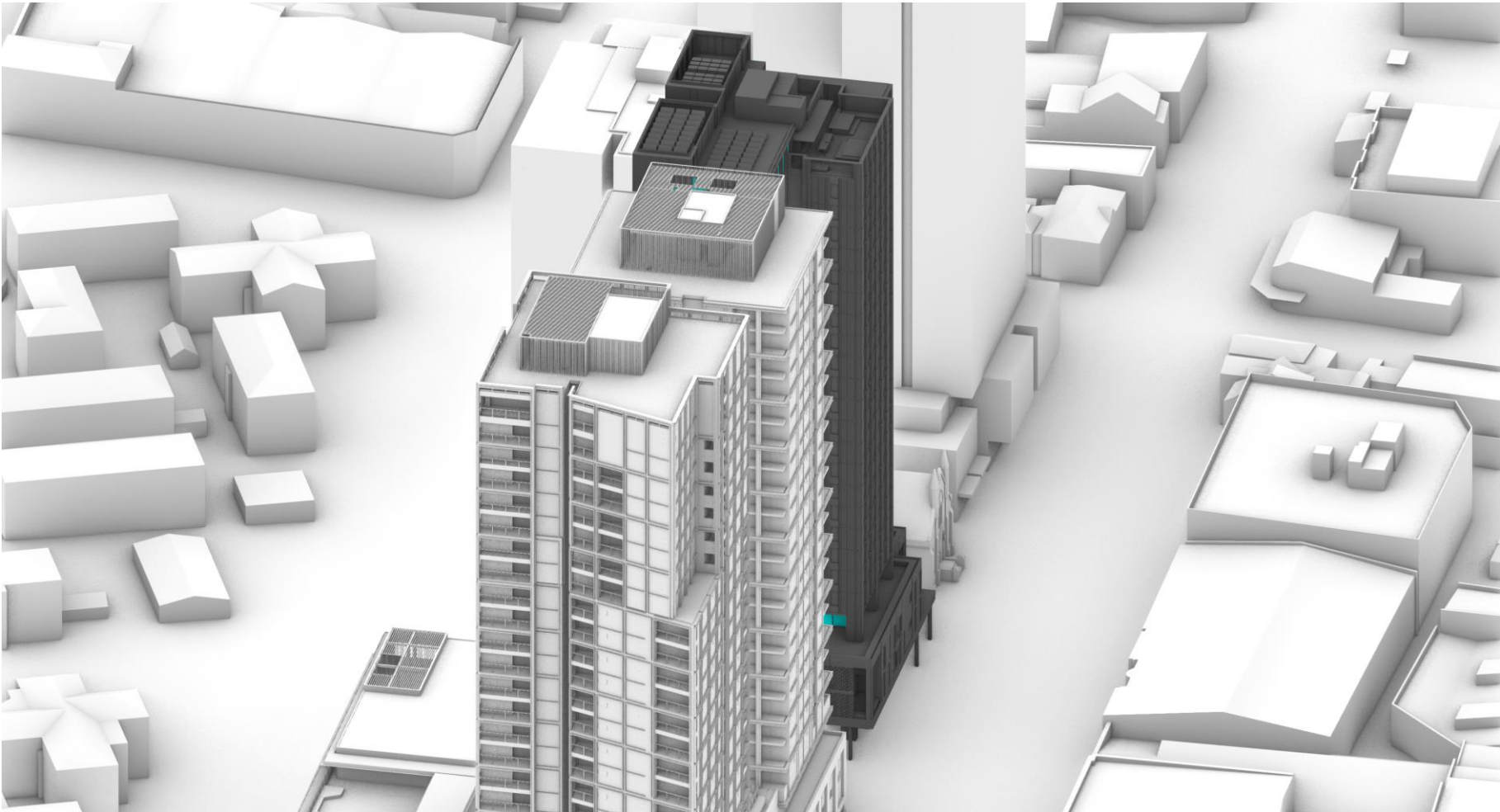
# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

**Jun 21 - 13:45 AEST**



# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

**Jun 21 - 14:00 AEST**



# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

**Jun 21 - 14:15 AEST**



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 14:30 AEST



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 14:45 AEST



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 15:00 AEST



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 15:15 AEST



# SUN VIEW DIAGRAM



**LEGEND**

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

**Jun 21 - 15:30 AEST**



# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

Jun 21 - 15:45 AEST



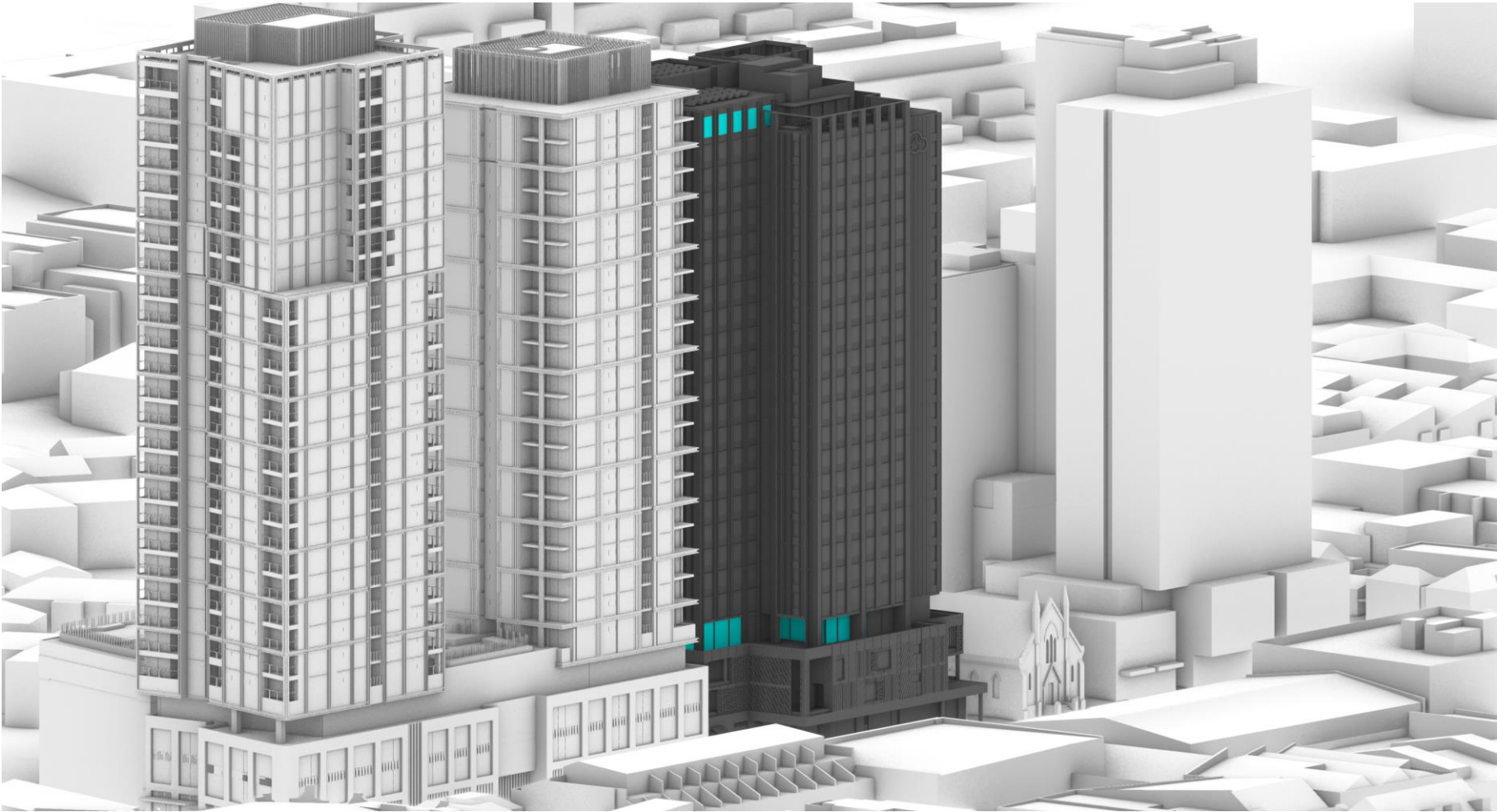
# SUN VIEW DIAGRAM



### LEGEND

- PROJECT
- SURROUNDINGS
- COMMUNAL LIVING AREA WINDOW

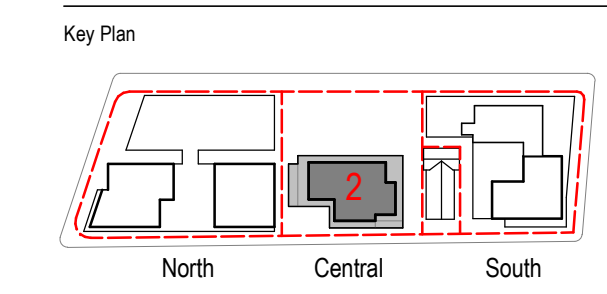
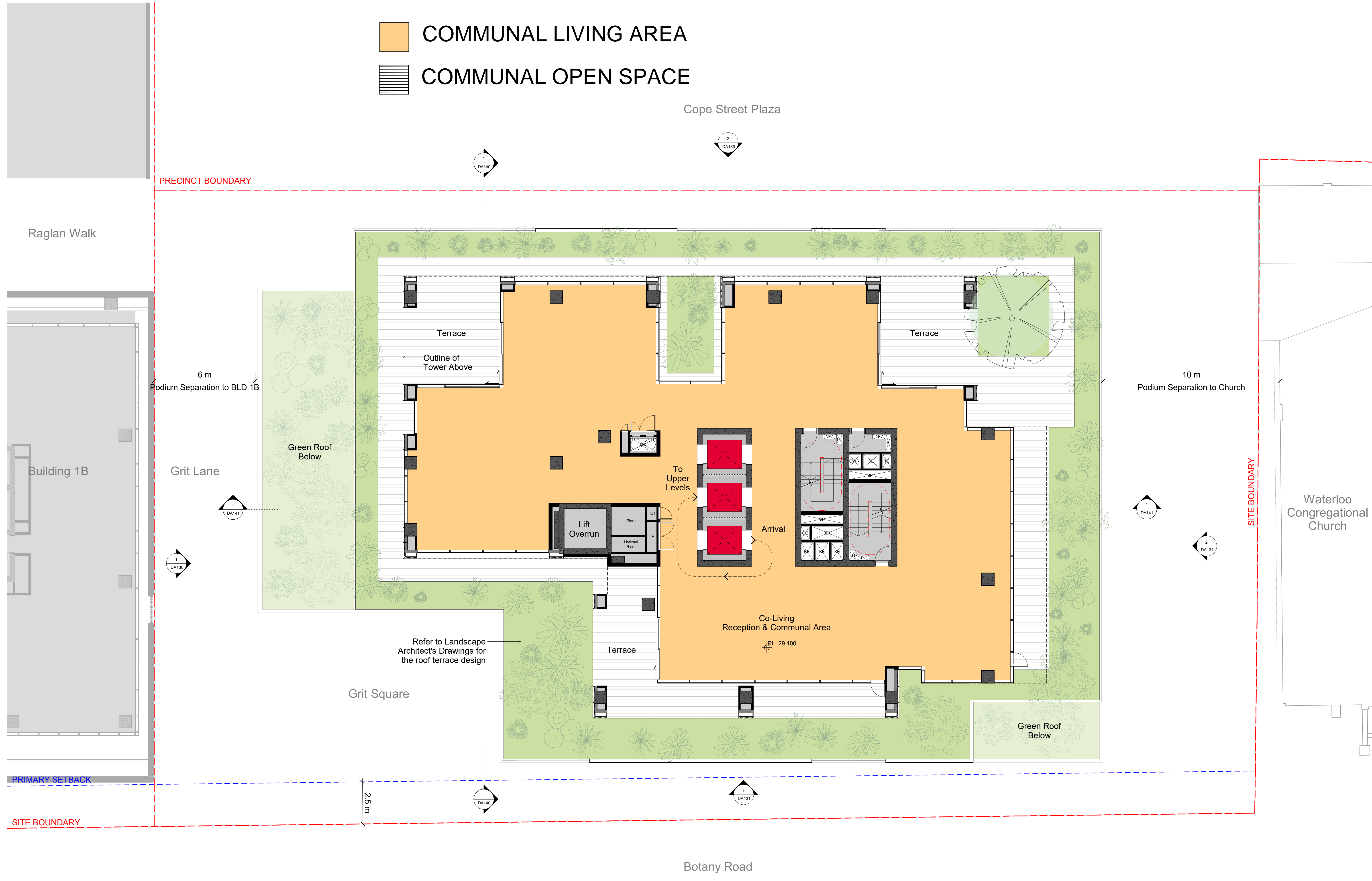
Jun 21 - 16:00 AEST



The page features a decorative background. On the left, there is a blue right-angled triangle. A large, light grey circle overlaps the right side of this triangle, creating a white crescent-shaped area between them. The text 'APPENDIX B' is centered within the grey circle.

# APPENDIX B

Notes  
 No material may be reproduced without prior permission  
 Contractor must verify all dimensions on site before commencing work or preparing shop drawings.  
 Do not scale drawings.



Client  
**WATERLOO COLLECTIVE**  
 JOHN HOLLAND | mirvac

NSW GOVERNMENT | SYDNEY METRO

Consultant  
**BATESSMART**

Consultant  
**Aileen Sage**

Project  
 WATERLOO METRO QUARTER DEVELOPMENT  
 Central Precinct - Building 2

Project number	Size check
S12398.A	25mm
Checked DS/RT	Approved Approver
Sheet size B1	Scale 1:100

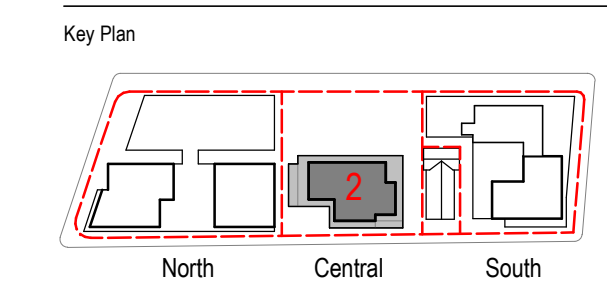
Sheet title  
**General Arrangement Level 03**

Status	Revision
SSDA ISSUE	01
Sheet number	WMQ-BD2-BSA-AR-DRG-DA103

Notes  
 No material may be reproduced without prior permission  
 Contractor must verify all dimensions on site before commencing work or preparing shop drawings.  
 Do not scale drawings.



**Note**  
 Base building only the subject of this DA. Fit out design indicative and for test fit purposes only.



Client  
**WATERLOO COLLECTIVE**  
 JOHN HOLLAND | mirvac

NSW GOVERNMENT | sydney METRO

Consultant  
**BATESSMART**

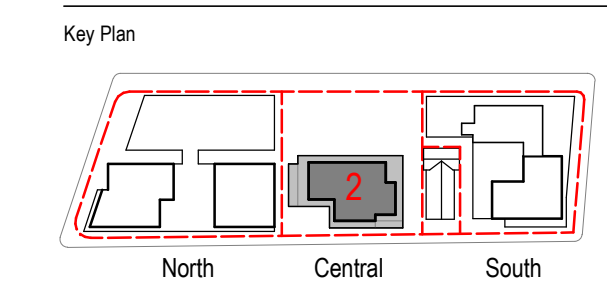
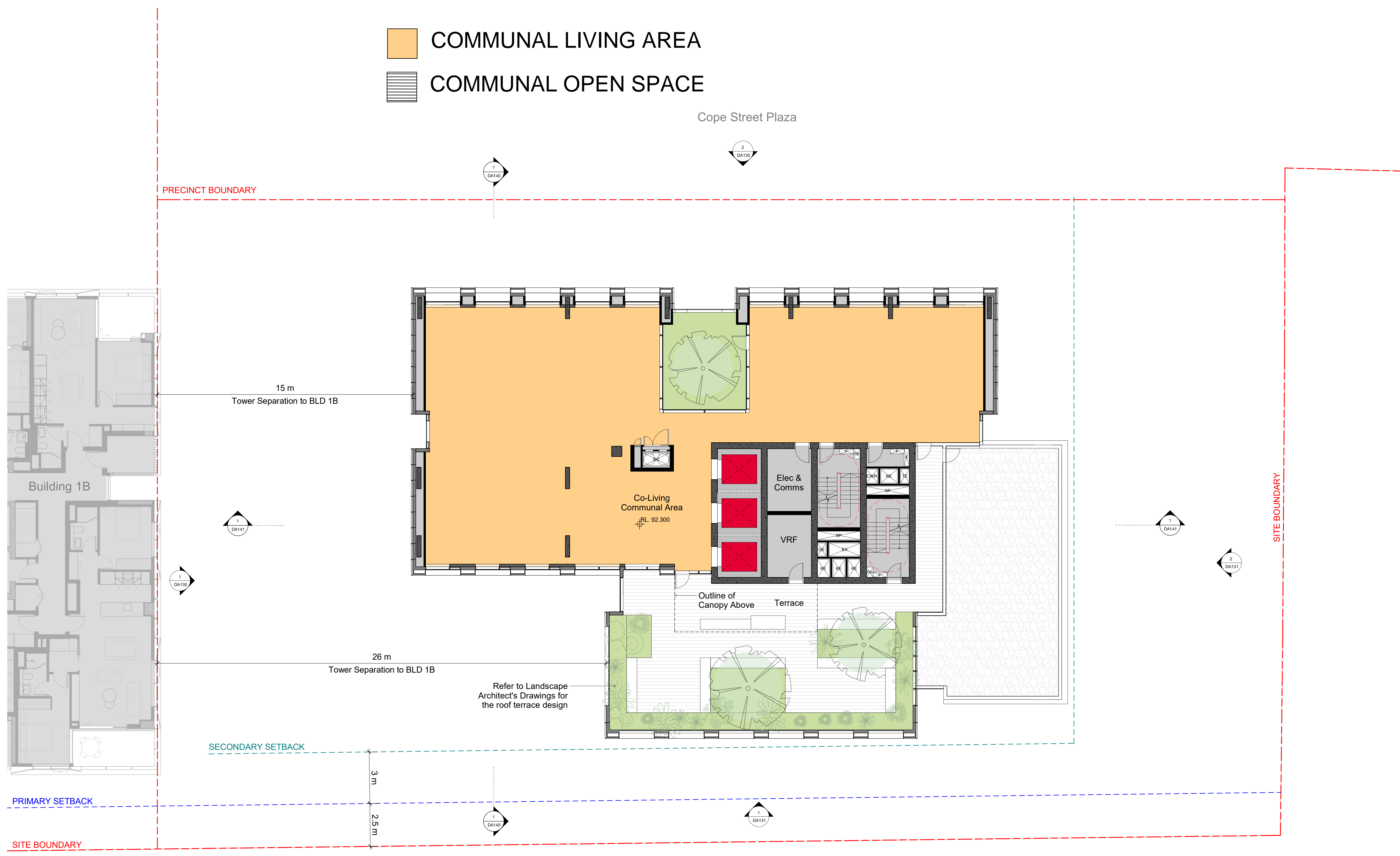
Consultant  
**Aileen Sage**

Project  
 WATERLOO METRO QUARTER DEVELOPMENT  
 Central Precinct - Building 2

Project number	Size check
S12398.A	25mm
Checked DS/RT	Approved NB
Sheet size B1	Scale 1:100

Sheet title  
 General Arrangement  
 Level 05-23 - Typical

Notes  
 No material may be reproduced without prior permission  
 Contractor must verify all dimensions on site before commencing work or preparing shop drawings.  
 Do not scale drawings.



Client  
**WATERLOO COLLECTIVE**  
 JOHN HOLLAND | mirvac

NSW GOVERNMENT | SYDNEY METRO

Consultant  
**BATESMART**

Consultant  
**Aileen Sage**

Project  
 WATERLOO METRO QUARTER DEVELOPMENT  
 Central Precinct - Building 2

Project number	Size check
S12398.A	25mm
Checked DS/RT	Approved Approver
Sheet size B1	Scale 1:100

Sheet title  
 General Arrangement  
 Level 24

The background features a large, light grey curved shape on the right side, and a blue curved shape on the left side that overlaps the grey one. The text 'APPENDIX C' is centered within the grey area.

# APPENDIX C

**Table C1: Direct Solar Access Results for Communal Living Area Windows (June 21, 9:00 am - 3:00 pm)**

Level	Any Sunlight		1m <sup>2</sup> Window Area		50% Window Area	
	Number Of Hours	Time(s)	Number Of Hours	Time(s)	Number Of Hours	Time(s)
3	5.00	09:00-12:30 and 13:30-15:00	5.00	09:00-12:30 and 13:30-15:00	0.00	No Solar Access
5	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
6	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
7	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
8	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
9	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
10	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
11	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
12	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
13	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
14	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
15	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
16	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
17	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
18	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
19	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
20	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
21	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
22	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
23	2.50	09:00-11:30	2.50	09:00-11:30	1.50	09:00-10:30
24	6.00	09:00-15:00	6.00	09:00-15:00	0.00	No Solar Access

**Table C2: Direct Solar Access Results for Communal Open Spaces (June 21, 9:00 am - 3:00 pm)**

Level	Any Sunlight		50% Floor Area	
	Number Of Hours	Time(s)	Number Of Hours	Time(s)
3	6.00	09:00-15:00	0.00	No Solar Access
24	6.00	09:00-15:00	3.00	12:00-15:00