



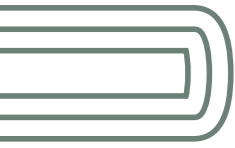
TURNER

23 KIORA RD & 2-6 WILLOCK AVE

MIRANDA, NSW

COUNCIL RFI & RESPONSE

FEBRUARY 2024



1.0 OVERSHADOW ANALYSIS

COUNCIL COMMENT:

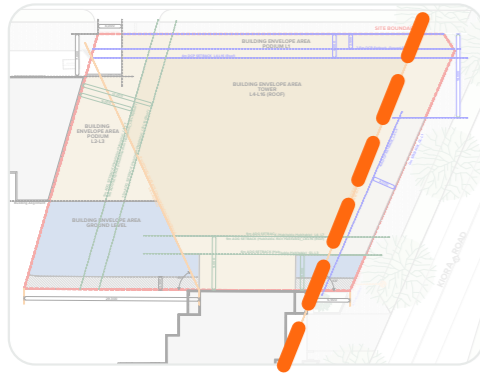
An overshadowing analysis has been provided indicating the impact on adjacent private communal open space and the primary school. However, a complete overshadowing analysis should include the impact on adjacent properties (windows), private open spaces, and shared open spaces. This would assist Council in conducting a holistic assessment of the planning proposal and impacts on adjoining properties.

RESPONSE:

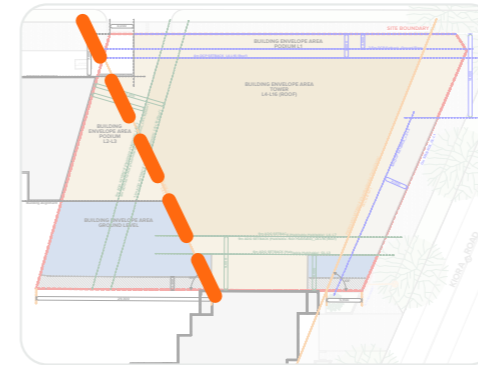
We have conducted a detailed overshadowing analysis of the adjacent southern building, adhering to the Australian Design Guidelines (ADG) minimum requirement of 2 hours of direct solar access to common internal areas on the winter solstice (21 June). Subsequently, our study has primarily focused on the two penthouse-level apartments, revealing clear evidence of non-compliance with the ADG.

1.0 OVERSHADOW ANALYSIS_ PRIMARY CONTROLS

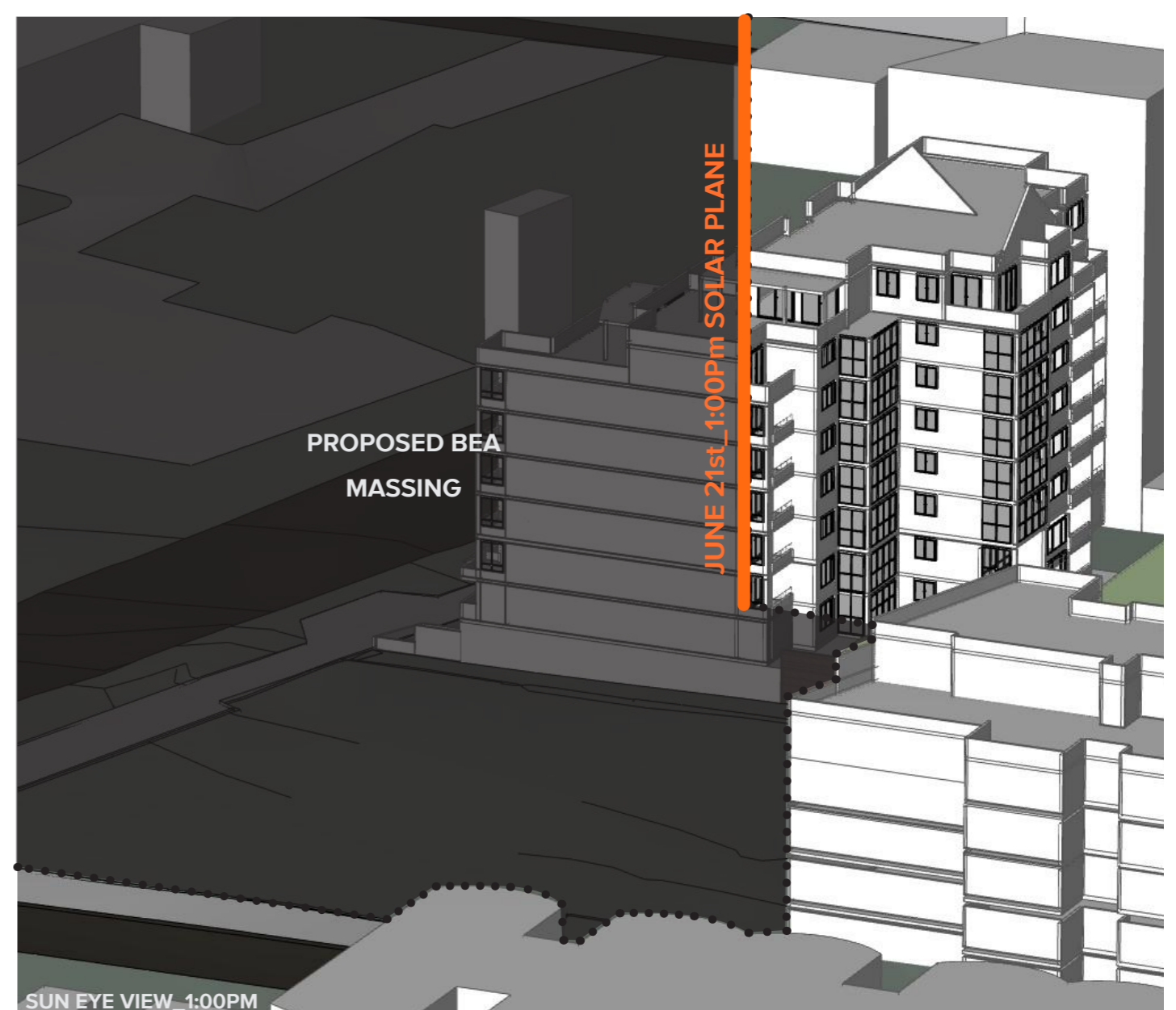
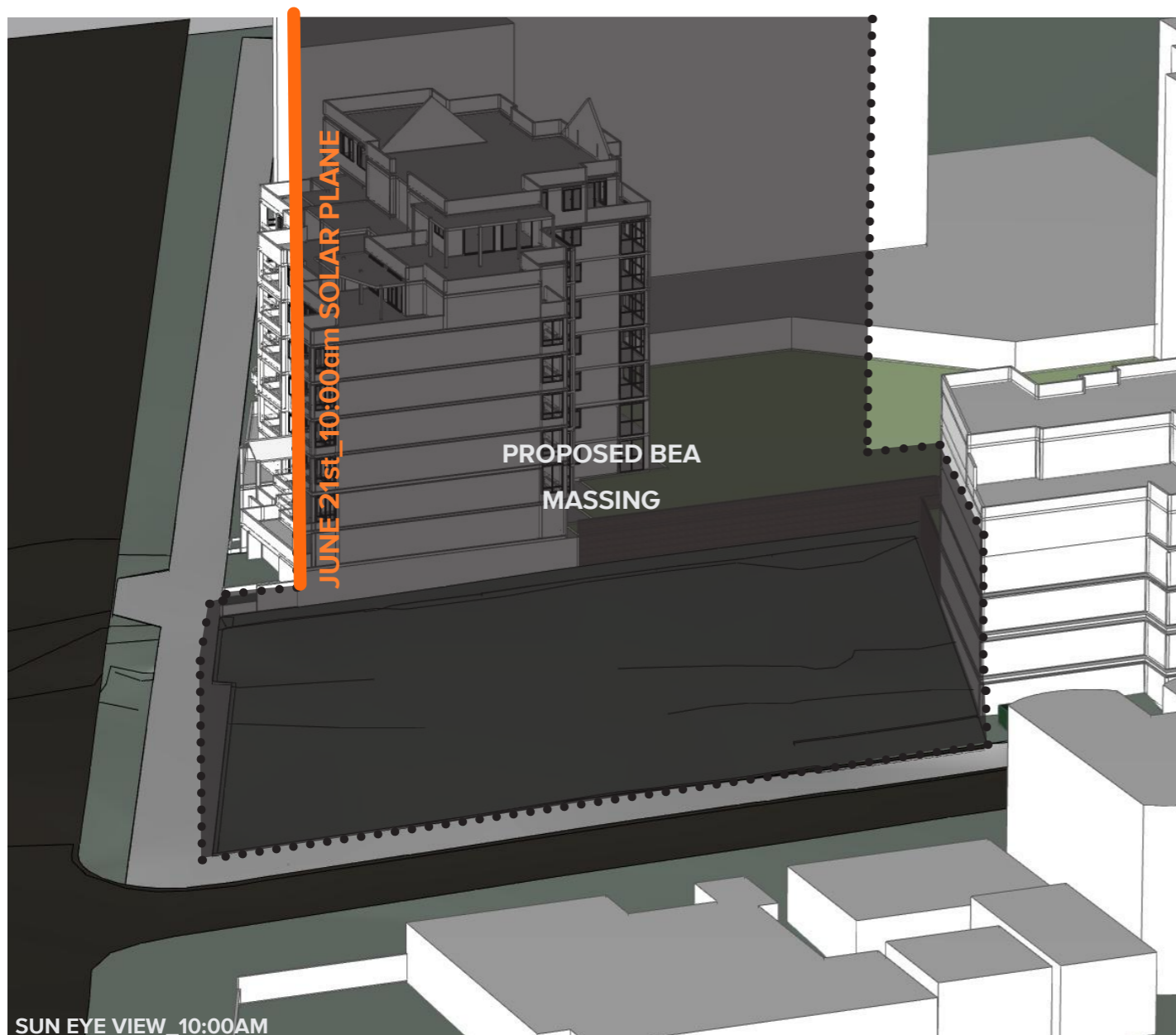
SOLAR PLANES



The placement of the solar plane along the eastern boundary is determined by the angle at which the adjacent development begins casting a shadow on itself during the winter solstice (21st of June) at 10:00am. The apartments on the eastern facade of the adjacent development fail to meet the ADG minimum requirement of 2 hours of solar access.



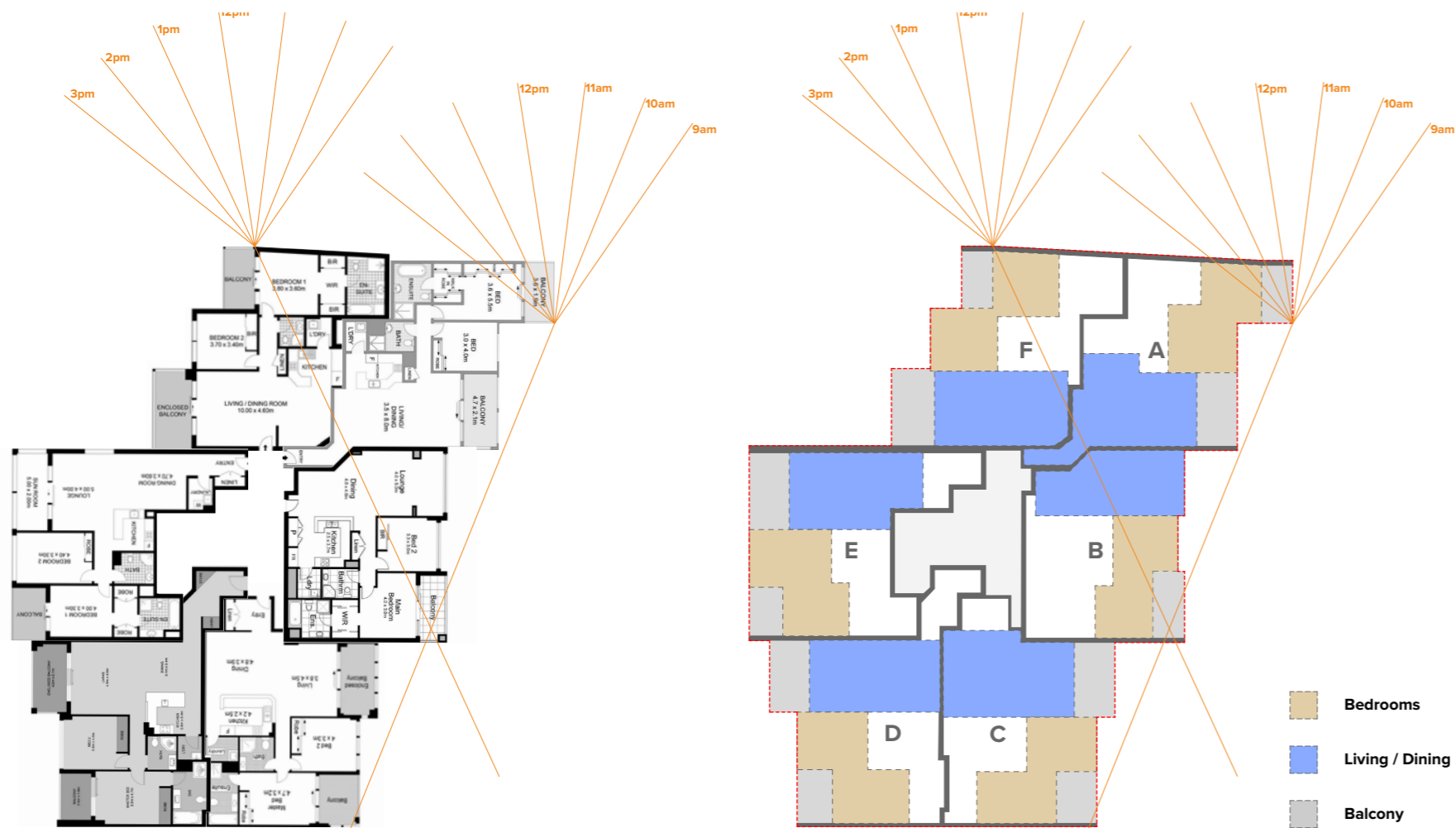
The placement of the solar plane along the western boundary is determined by the angle at which the adjacent development begins meeting the ADG requirement of 2 hours of solar access, starting at 1:00pm on the winter solstice (21st of June). This ensures there are no overshadowing implications.



1.0 OVERSHADOW ANALYSIS

EXISTING CONTEXT - EASTERN SOLAR PLANE

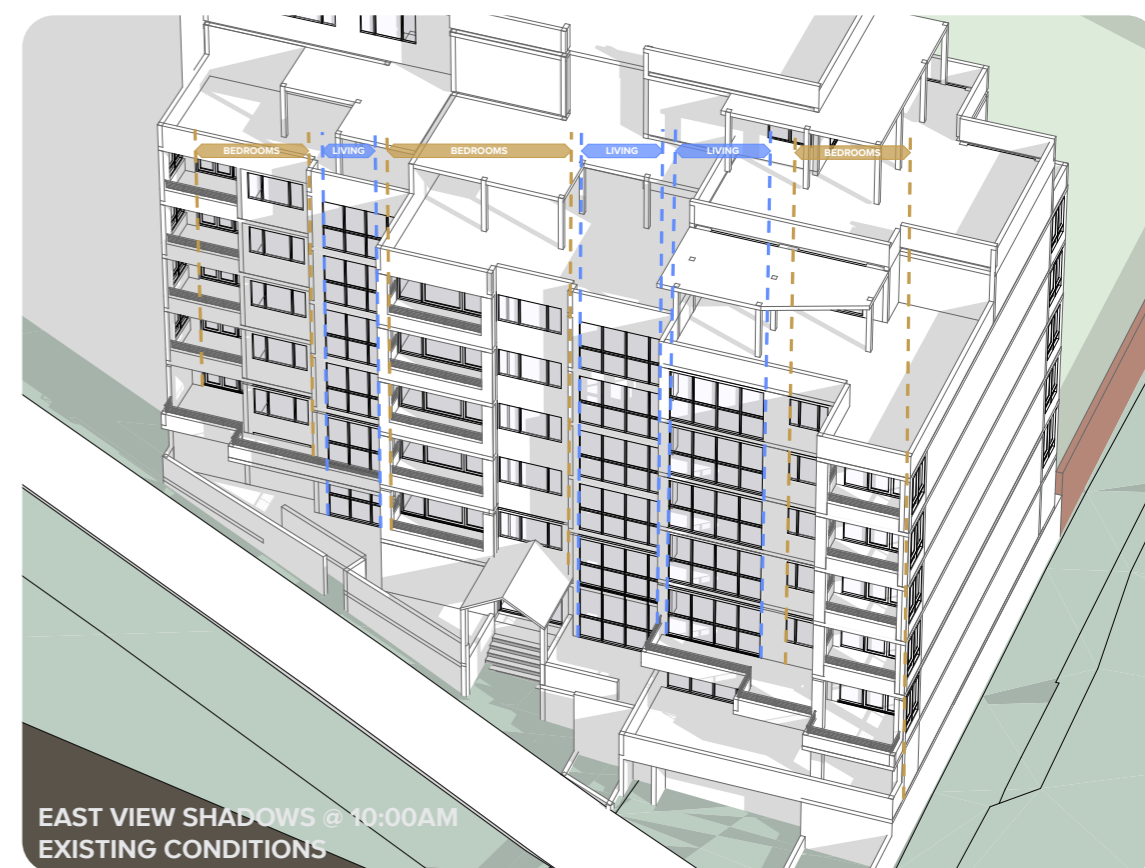
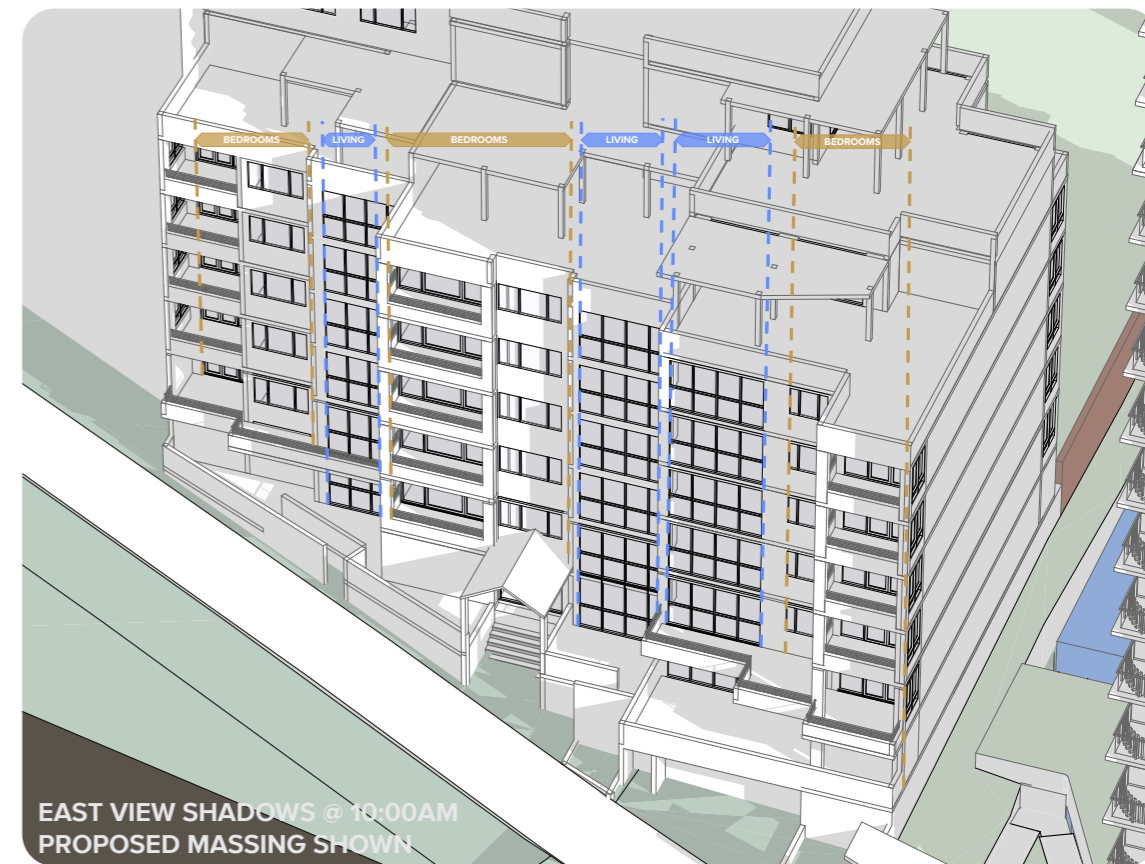
The placement of the solar plane along the eastern boundary is determined by the angle at which the adjacent development begins casting a shadow on itself during the winter solstice (21st of June) at 10:00am. Causing minor additional non-compliance with the ADG. (see below)



MARKETING FLOOR PLANS OF ADJACENT BUILDING WITH SOLAR ACCESS

ADG ZONING OF FLOOR PLANS OF ADJACENT BUILDING WITH SOLAR ACCESS

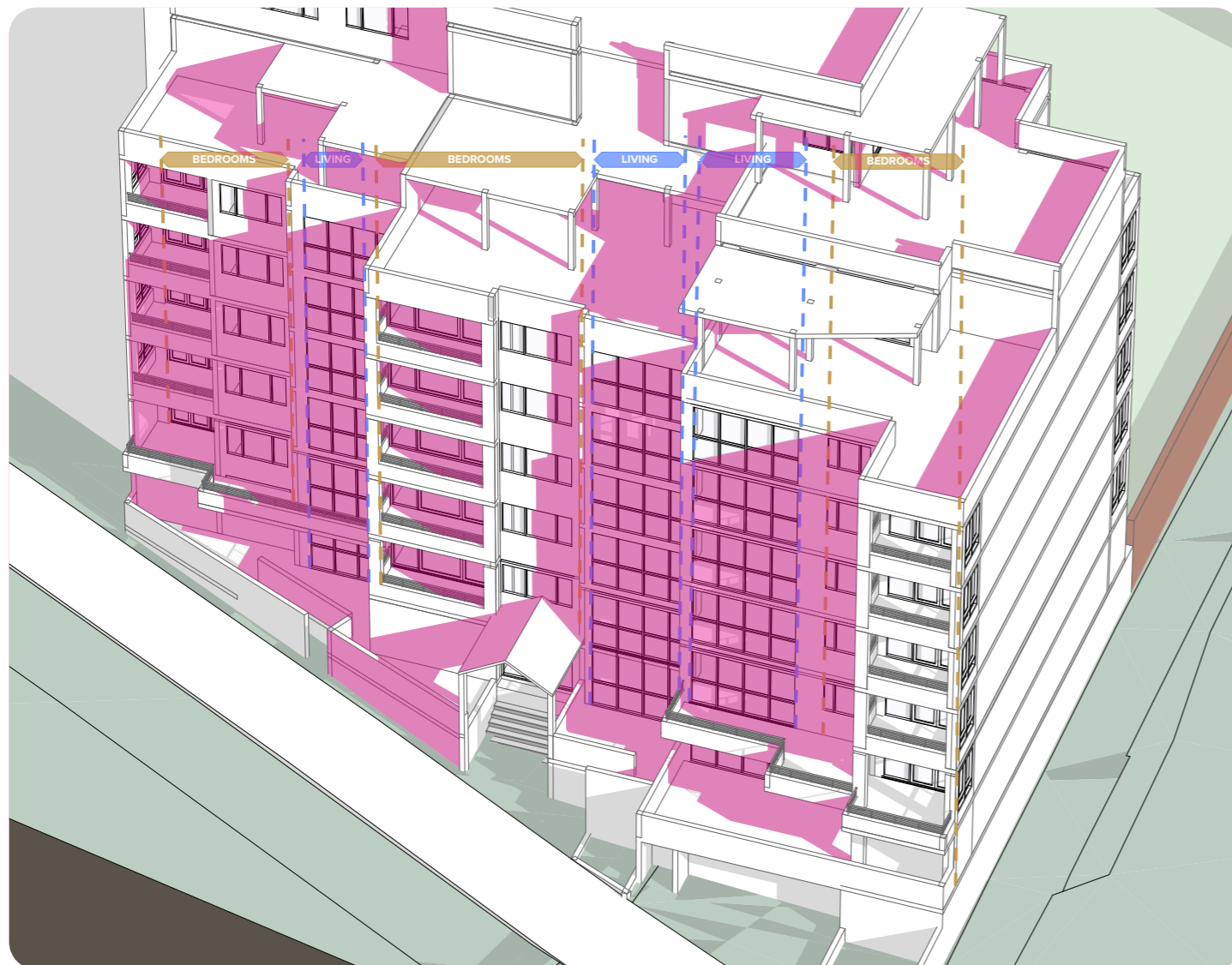
Notwithstanding this, the apartments on the eastern facade of the adjacent development already fail to meet the ADG minimum requirement of 2 hours of solar access, and therefore the proposed development is not the sole determining factor for this non-compliance.



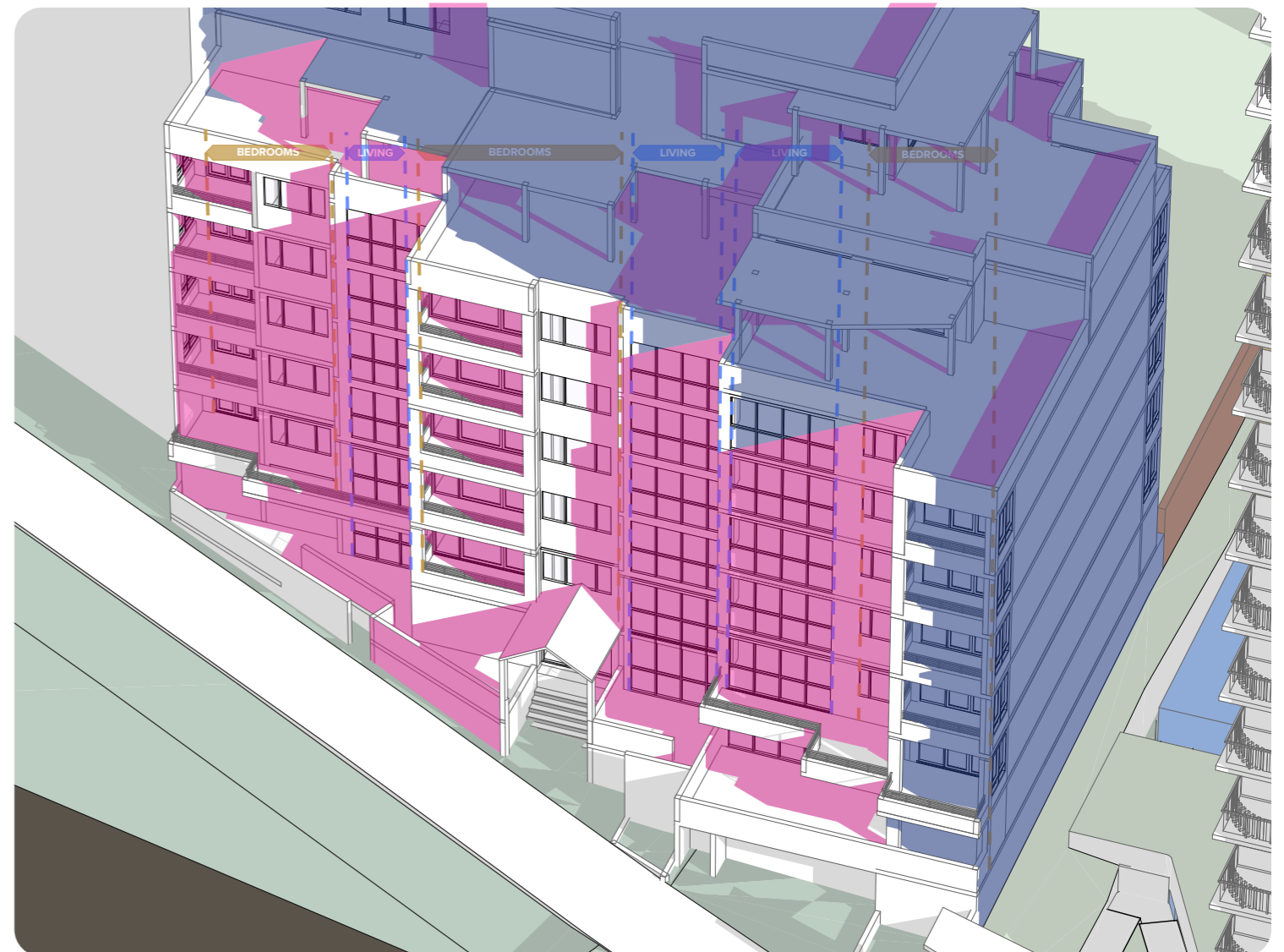
1.0 OVERSHADOW ANALYSIS

DETAILED COMPARISON_ EXISTING & PROPOSED SHADOW

EAST VIEW SHADOWS @ 10:00AM
EXISTING CONDITIONS



EAST VIEW SHADOWS @ 10:00AM
PROPOSED MASSING SHOWN



As depicted in the comparison diagram above, which illustrates the current conditions of the adjacent development's eastern facade at 10 am (time at which it casts a shadow on itself), and the shadow cast under by the proposed building envelope and Eastern Solar plane, we can determine that there is no negative impact on the typical apartment floor plates. Refer to pages 7, 8 & 9 for detailed Penthouse overshadowing analysis.

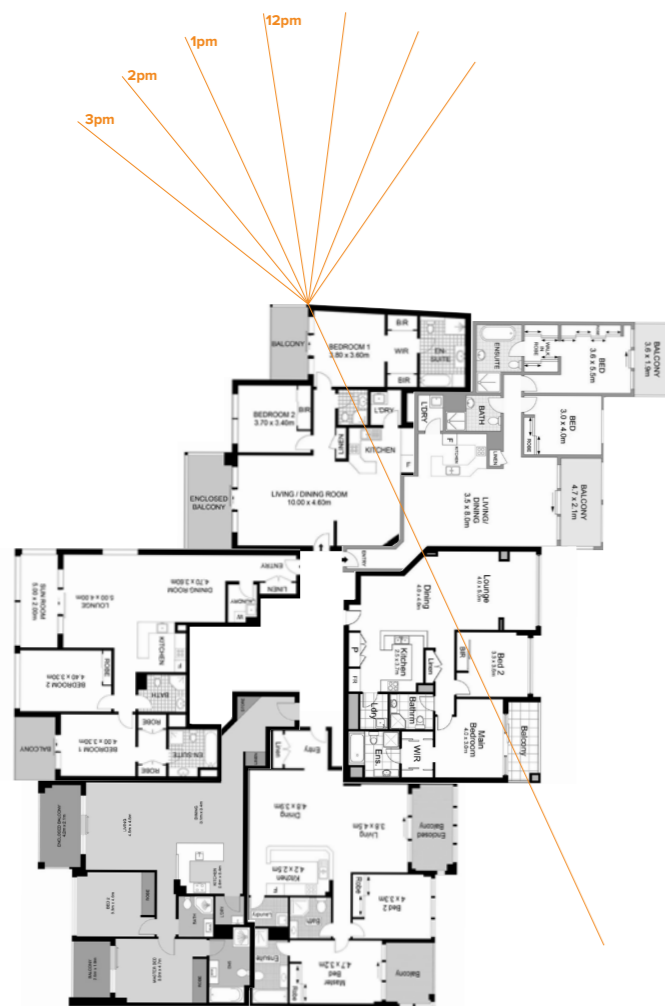
LEYEND

- SHADOW CAST BY EXISTING SITE CONDITIONS
- SHADOW CAST BY PROPOSED BUILDING ENVELOPE

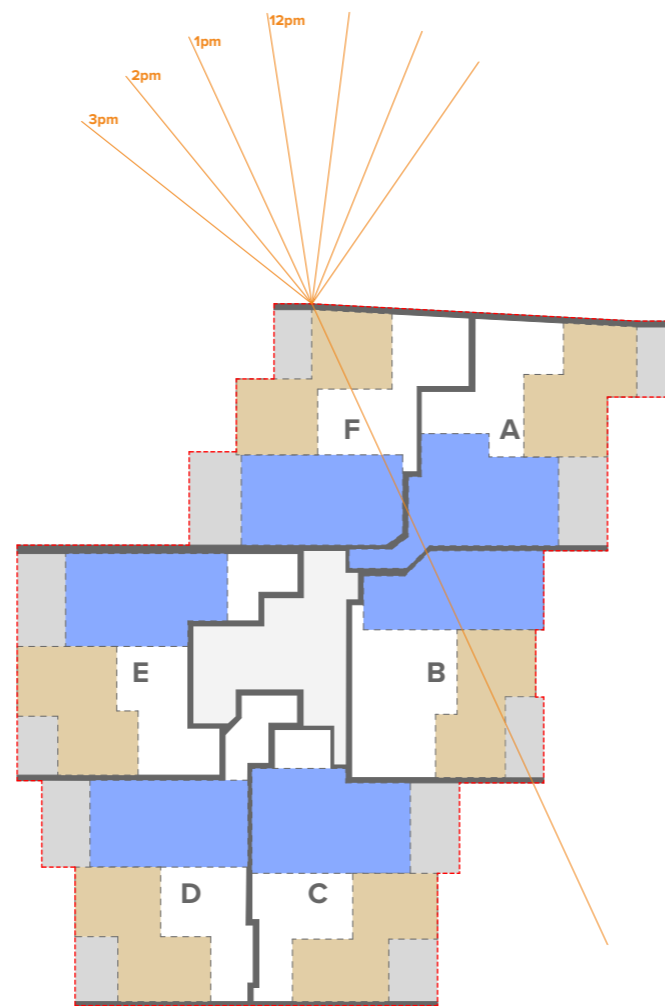
1.0 OVERSHADOW ANALYSIS

EXISTING CONTEXT - WESTERN SOLAR PLANE

The placement of the solar plane along the western boundary is determined by the angle at which the adjacent development begins meeting the ADG requirement of 2 hours of solar access, starting at 1:00pm on the winter solstice (21st of June). This ensures there are no overshadowing implications.



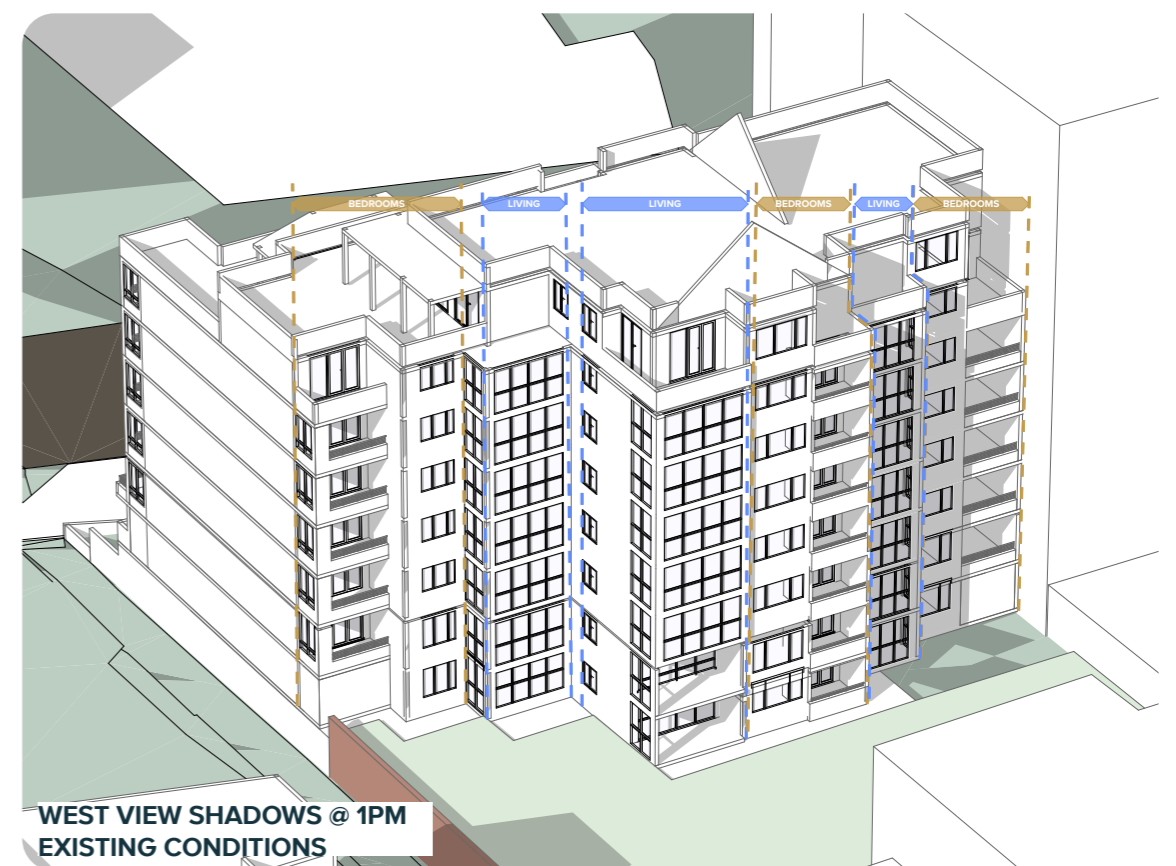
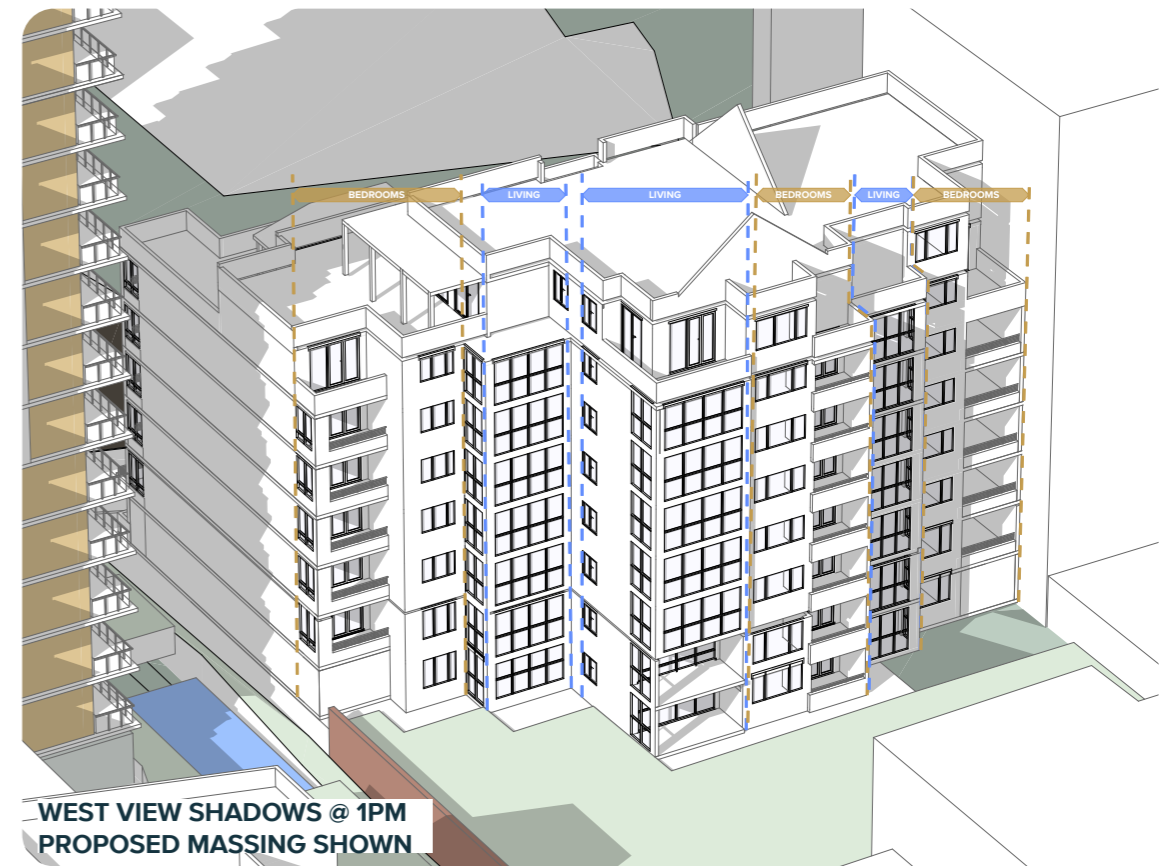
MARKETING FLOOR PLANS OF ADJACENT BUILDING WITH SOLAR ACCESS



ADG ZONING OF FLOOR PLANS OF ADJACENT BUILDING WITH SOLAR ACCESS

- Bedrooms
- Living / Dining
- Balcony

The apartments on the western facade of the adjacent development meet the ADG minimum requirement of 2 hours of solar access and will continue to meet the ADG minimum following our proposed development.

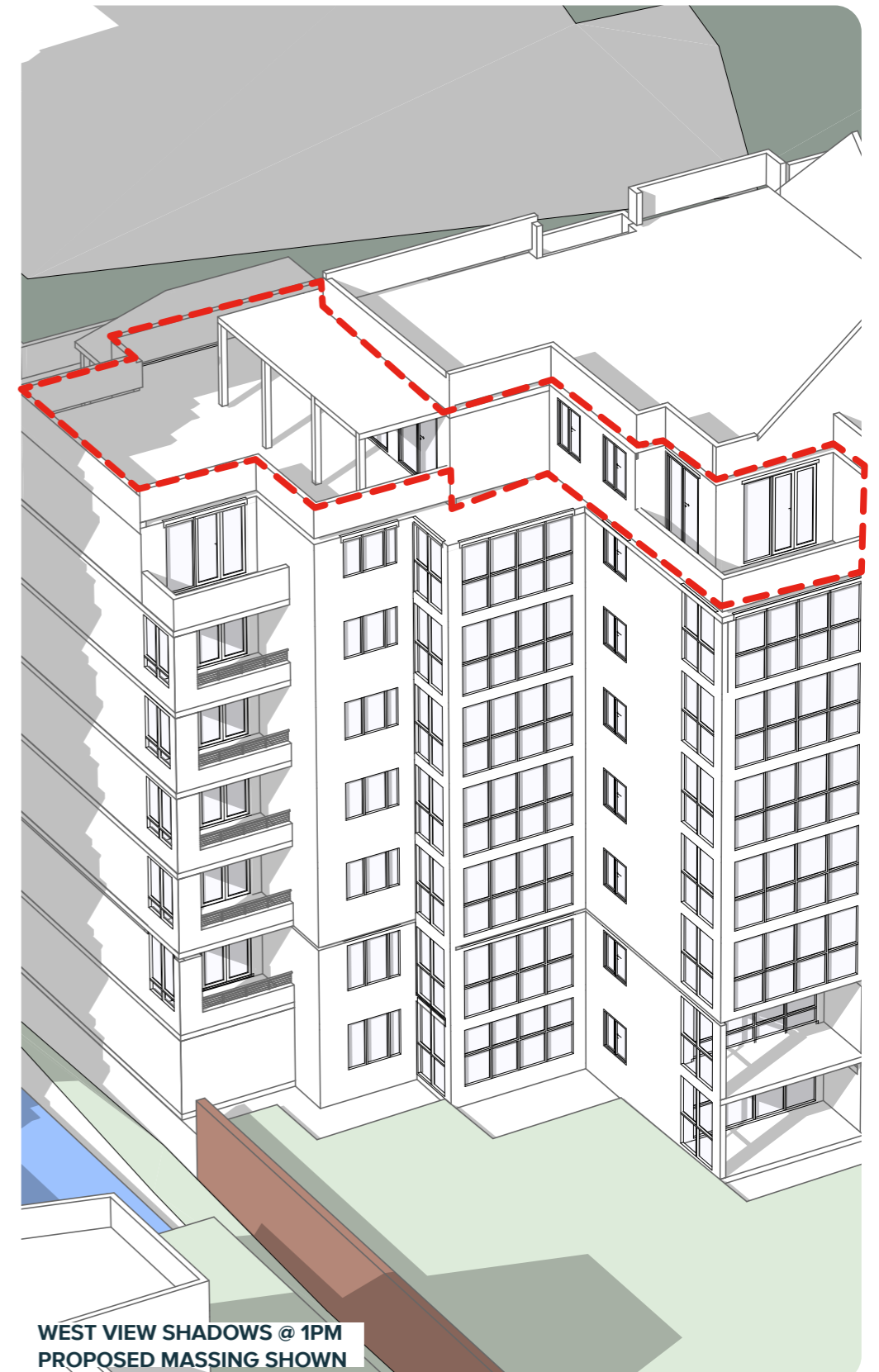
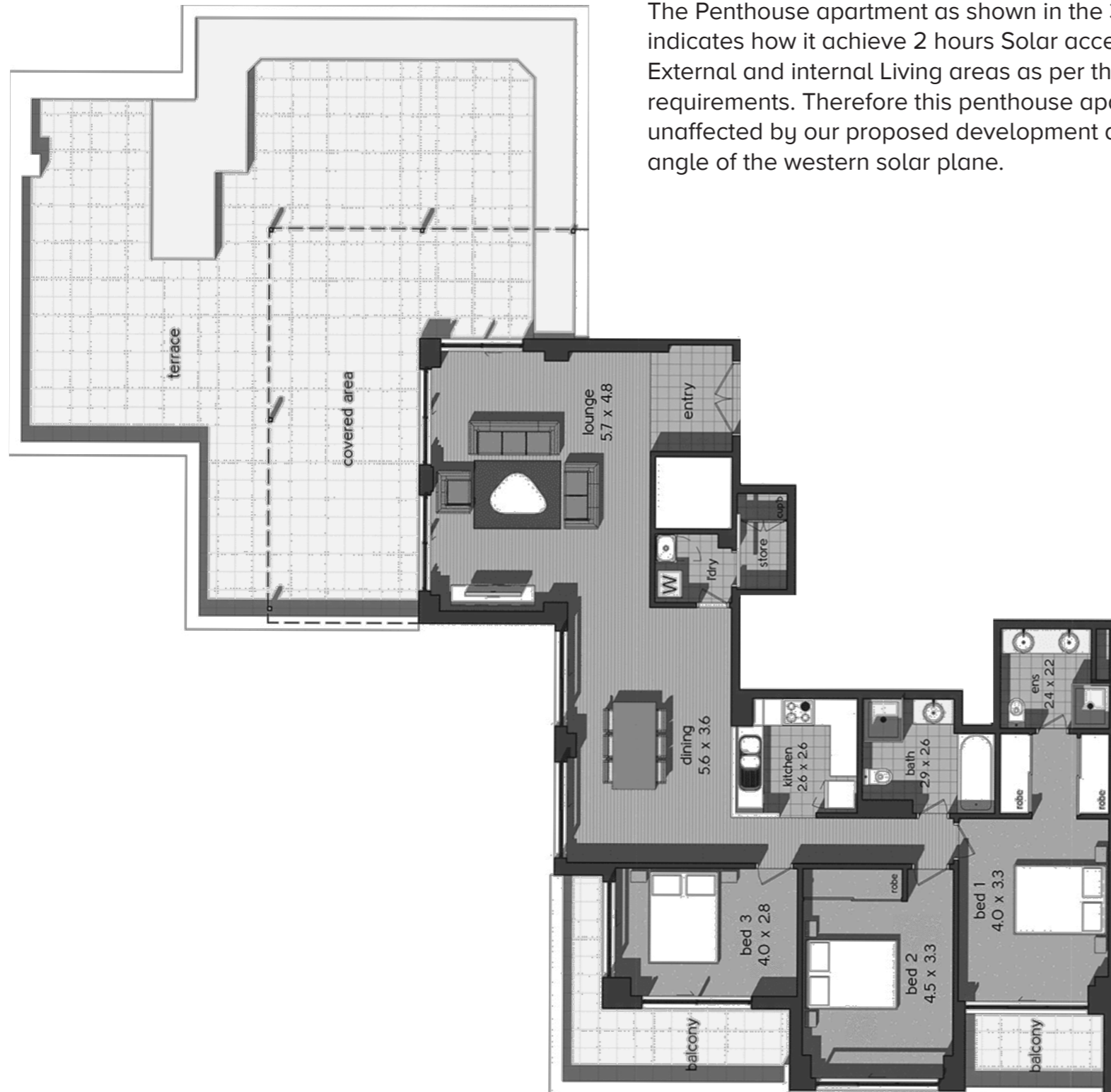


1.0 OVERSHADOW ANALYSIS

SOLAR ANALYSIS

EXISTING CONTEXT - PENTHOUSE APARTMENT 1

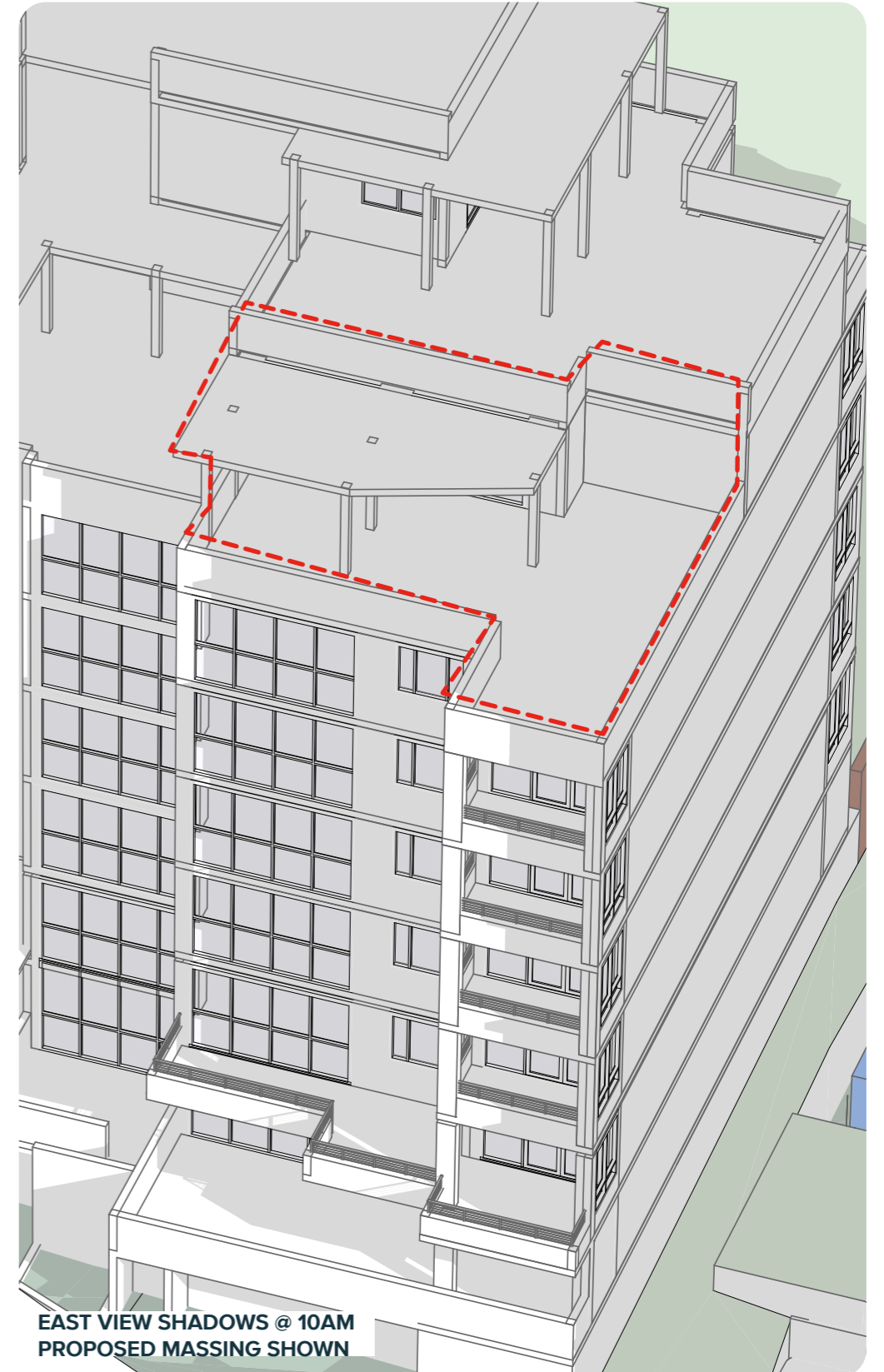
The Penthouse apartment as shown in the 3D View indicates how it achieve 2 hours Solar access to the External and internal Living areas as per the ADG requirements. Therefore this penthouse apartment is unaffected by our proposed development due to the angle of the western solar plane.



1.0 OVERSHADOW ANALYSIS

SOLAR ANALYSIS

EXISTING CONTEXT - PENTHOUSE APARTMENT 2



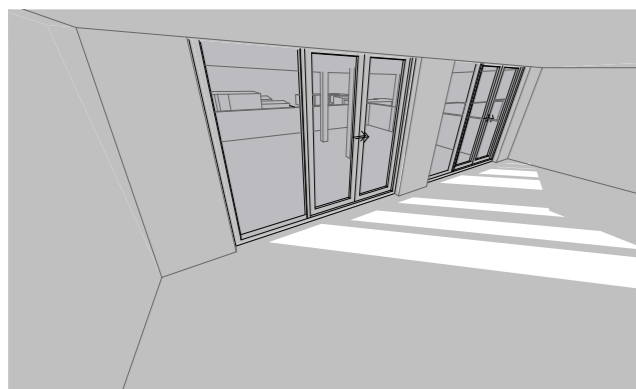
EAST VIEW SHADOWS @ 10AM
PROPOSED MASSING SHOWN

3.03 BUILDING ENVELOPE_PRIMARY CONTROLS

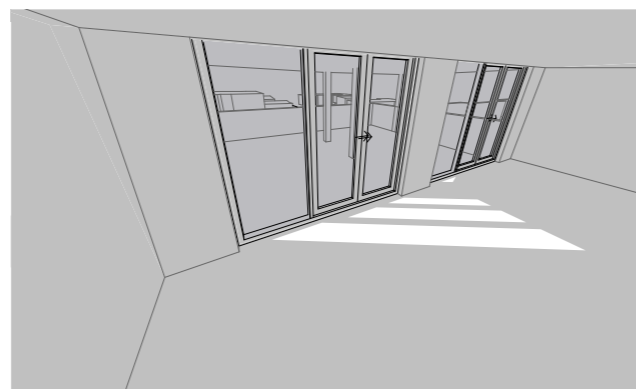
DETAILED SOLAR ANALYSIS

EXISTING CONTEXT - PENTHOUSE APARTMENT 2 INTERNAL

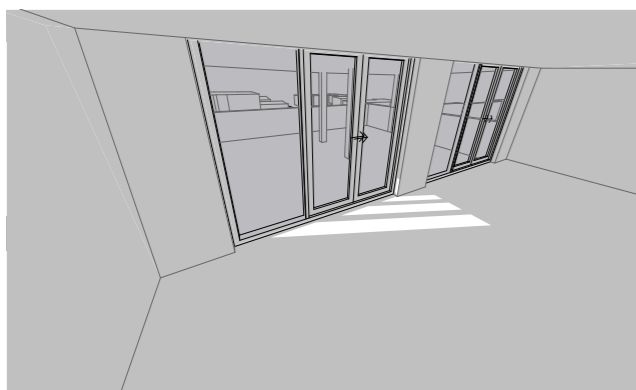
The Penthouse apartment in question fails to achieve 2 hours Solar access to the Living area as per the ADG requirements. The views below highlight the internal views at Winter Solstice from 9:00am - 11:05am to indicate the impact of the current development in existing condition. As seen below at 11:00am the internal views show how the apartment fails to achieve solar access to minimum 1m² of the internal area.



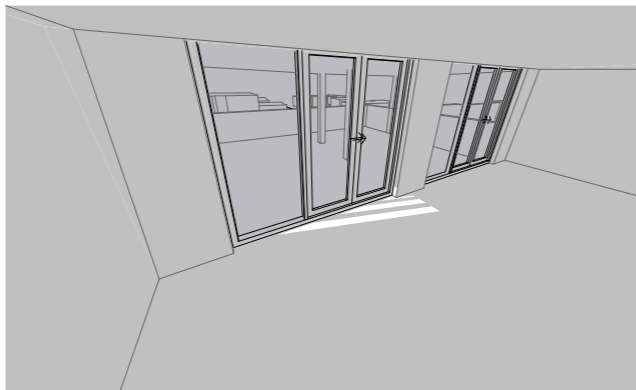
9am Penthouse



9.30am Penthouse



10am Penthouse



10.30am Penthouse



11am Penthouse



11.05am Penthouse

ADG Extract

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

Design guidance

The design maximises north aspect and the number of single aspect south facing apartments is minimised

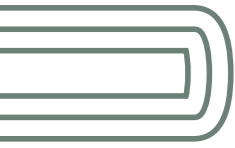
Single aspect, single storey apartments should have a northerly or easterly aspect

Living areas are best located to the north and service areas to the south and west of apartments

To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used:

- dual aspect apartments
- shallow apartment layouts
- two storey and mezzanine level apartments
- bay windows

To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes



2.0 ACCESS

COUNCIL COMMENT:

Safe and convenient pedestrian access should be facilitated along the southern side of Willock Avenue, where Council has consistently required the footpath width to be extended. This issue was raised with consultants Ethos Urban and McLaren Traffic, prior to the lodgement of the application, in August 2023. At present, the architectural drawings responds to requirement by providing a 2.5m setback on ground floor with overhead cantilever design on upper levels. The cantilever design does not enhance streetscape design on Willock Avenue. An increased setback on upper levels could affect floor space yield.

RESPONSE:

Following our Public Domain interface Interface Design Pillars, the New Salvation Army Holistic Community Center on Willock Avenue prioritizes community well-being. It preserves natural and existing Trees, offers inviting outdoor spaces, and ensures year-round comfort with weather protection. With its human-scale design and interactive facade, the center encourages connectivity and provides a welcoming space for all.

In addition to this and following the Sutherland Council Meeting on August 22, 2023, concerning the Windsor Rd public domain, it became evident that there was support for implementing a 2.5m setback at ground level, along with residential apartments (mostly balconies) cantilevering overhead. Regardless of whether the building cantilevered above, it was understood that the active pedestrian footpath would require a covered canopy in any scenario.

2.0 ACCESS_WILLOCK AVE. PUBLIC DOMAIN

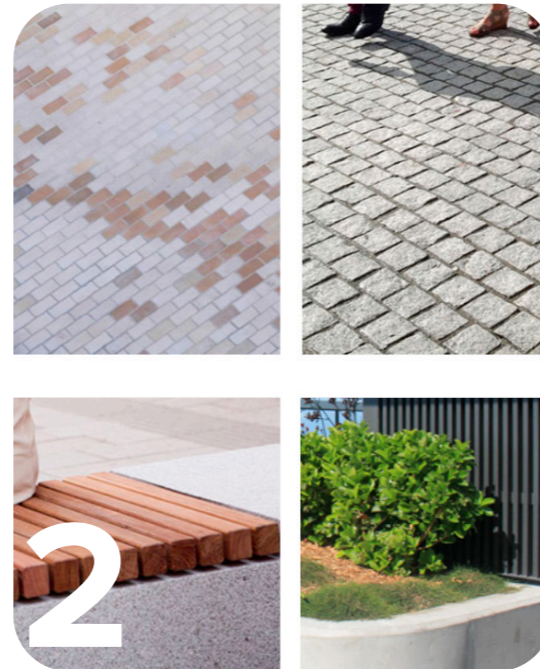
DESIGN PILLARS

CONTEXTUAL



Street level facade alignment with the remainder of Willock Avenue.

FIT FOR PURPOSE



High quality materials and finishes suitable for the public domain interface

GREEN



Significant tree canopy coverage, and street level landscaping considerations

CONNECTED



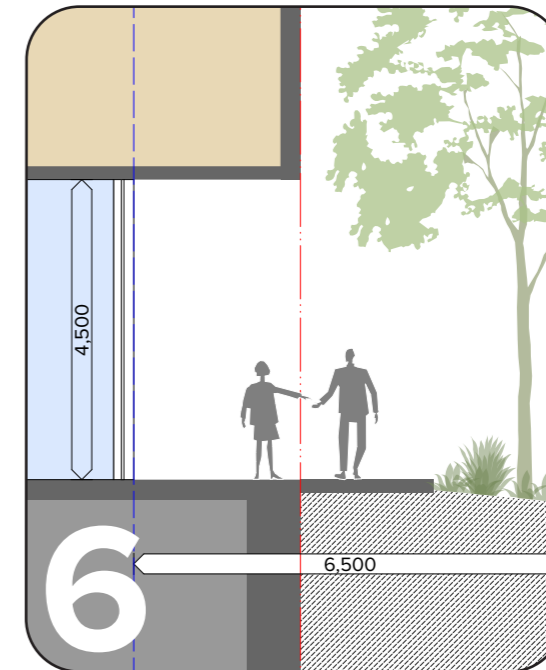
Allows for places to meet, relax, sit.

ACTIVE



Permeable, active facades that allow for all day uses and passive surveillance.

SAFE

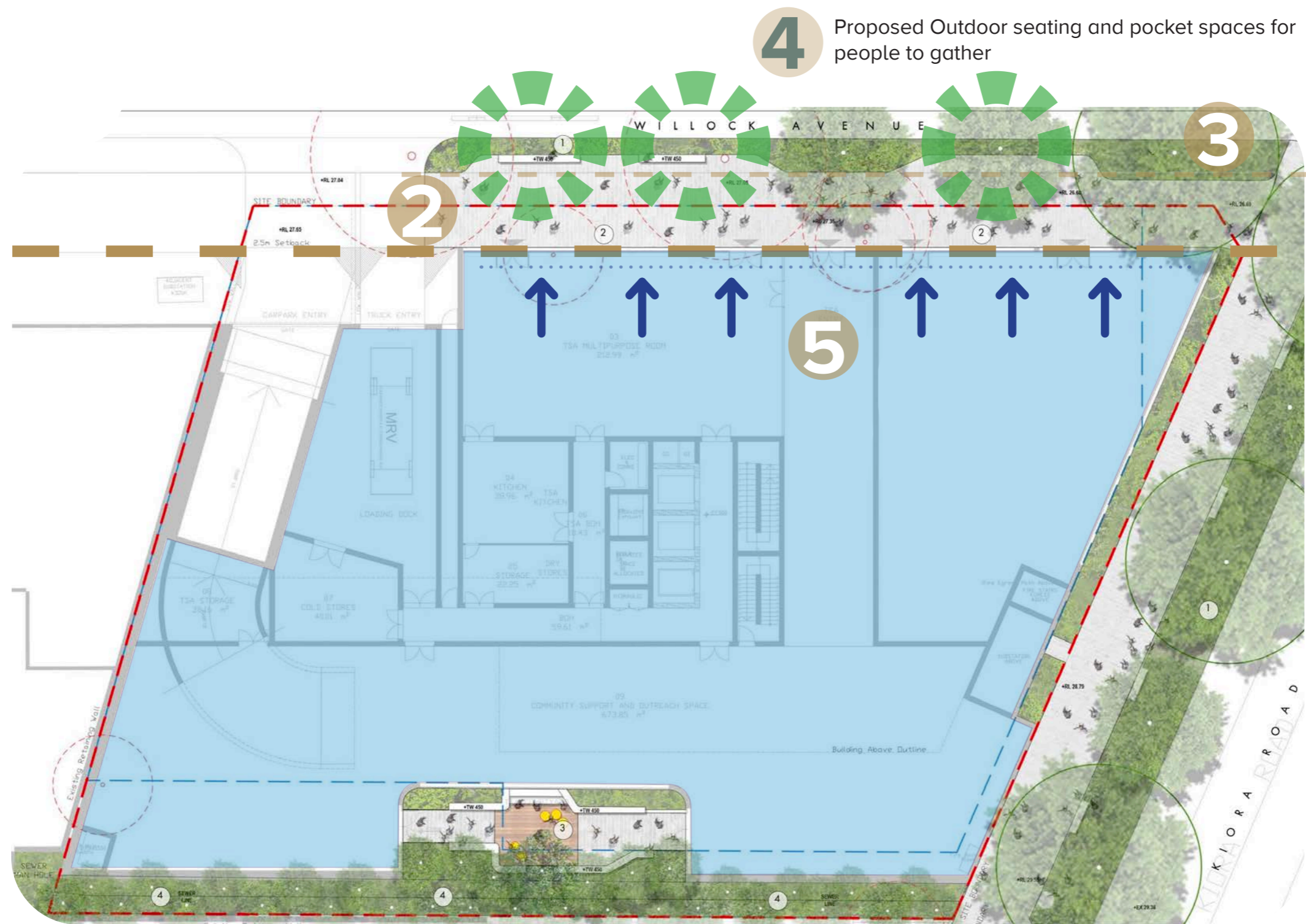


Wide, inviting, well lit.

2.0 ACCESS_WILLOCK AVE. PUBLIC DOMAIN

GROUND LEVEL INTERFACE

1
Ground Level Setback aligns with existing Willock Ave. street-scape



4 Proposed Outdoor seating and pocket spaces for people to gather

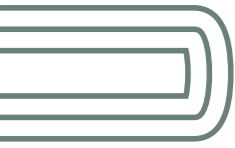
6 Spacious 4-meter-wide footpath

Source: Planning Proposal Landscape Report

2.0 ACCESS_WILLOCK AVE. PUBLIC DOMAIN



Perspective of Willock Avenue Facing South East
Note: Indicative CGI for Planning proposal only



TURNER

