

T. +61 (2) 9698 8510
E. info@koichitakada.com

Suite 41 and 42, Level 4, 61 Marlborough Street
Surry Hills NSW 2010 Australia

Version

1.0

Woolworths - Rangers Road
Neutral Bay

Design Report
11th March 2022

Koichi
Takada
Architects

koichitakada.com

Design Report

Woolworths Neutral Bay

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1.0 Introduction

Neutral Bay

The site is located in the middle of Neutral Bay, visible from the intersection of Military Road and Rangers Road. The site is located in the North Sydney Council LGA, and is part of subject Site 3 in the Neutral Bay Town Center - Military Road Corridor Planning Study produced in February 2021.

The subject site combines the properties at 3-7 Rangers Road, and 50 Yeo Street, with frontage to Rangers Road to the North, Yeo Street to the South, and access for loading to Military Lane. Development to the East is a mixed use development with apartments above, while the sites to the west are mostly retail and commercial. The sites to the south on Yeo St are a combination of multi-residential and single residential dwellings.

The site falls gently from North to South from RL83 to RL82. There is an existing driveway crossing on Yeo Street, with existing loading dock facilities from Military Lane.

3-7 Rangers Road houses an existing single storey Woolworths supermarket. 50 Yeo Street has an existing 5 Storey office building. For the purpose of this report, the studies include consideration of 183A and 185 Military Road which are the sites directly adjoining the western boundary. These site were considered in the Military Road Corridor Planning Study as part of the Key Site - Site 3 Rangers Road, identified in landowner initiated planning proposals as being able to support taller mixed-use buildings whilst providing much needed open space or community facilities.



Aerial Image - Neutral Bay

Site Context & Analysis

2.0

2.1 Location Plan
Neutral Bay

The Site

Land Area: 4,207 m2

Site 3A: 3,303 m2

Site 3B: 904 m2

Frontage: Rangers Road & Yeo Street

Existing: Supermarket, Retail and Carpark



2.2 Context & Site Photos
Neutral Bay

01. View from Yeo Street of the existing Woolworths supermarket

02. View from the corner of Military Road

03. View from Rangers Road of existing Woolworths Supermarket entry

04. View of adjacent residential developments on the South side of Yeo Street

05. View of adjacent multi-residential development on the eastern boundary - 11 Rangers Road.



2.2 Context & Site Photos
Aerial View

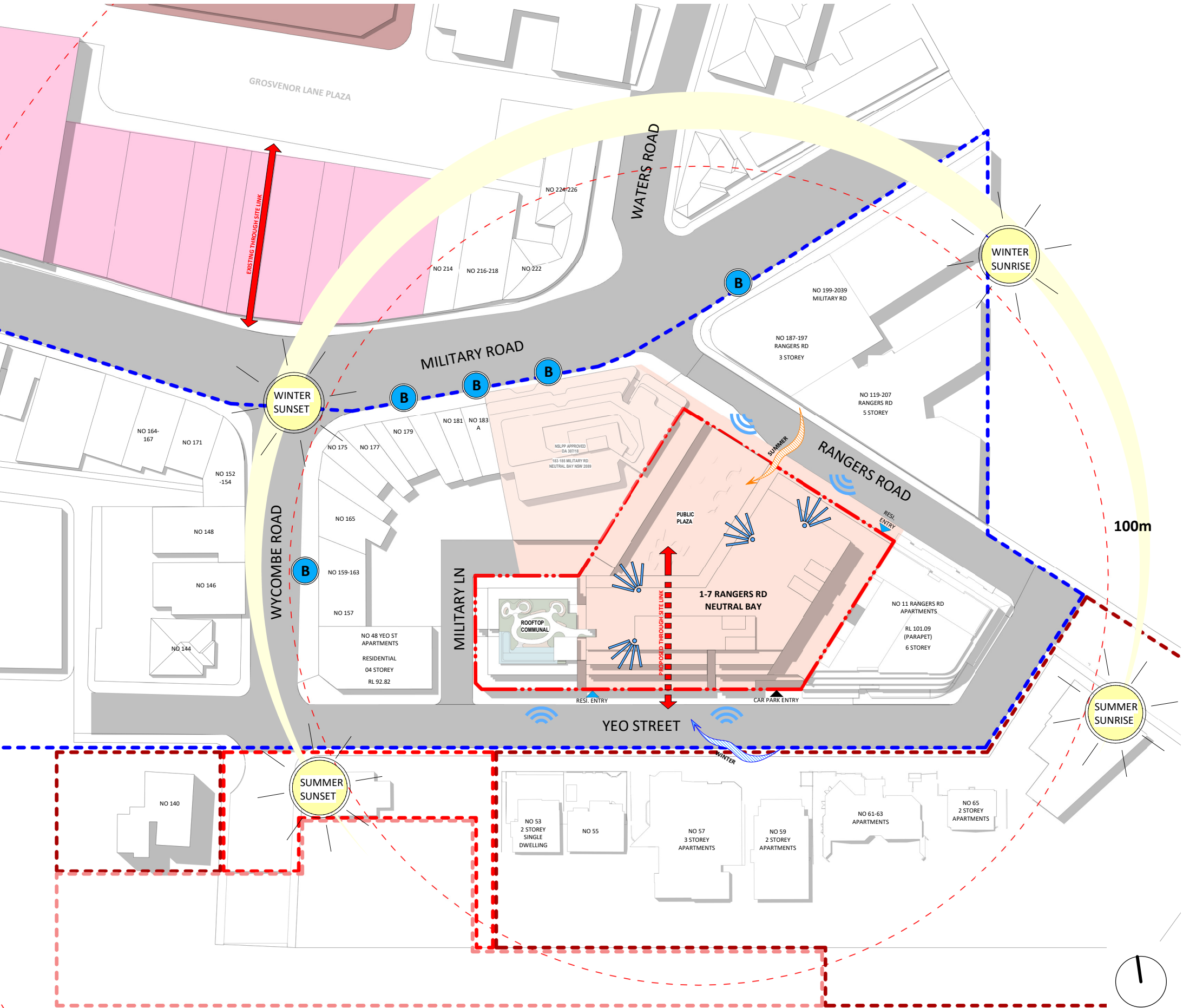


2.2 Context & Site Photos
Aerial View



2.3 Site Analysis
Site Plan

- SITE BOUNDARY
- ZONING - B4 (MIXED USE)
- ZONING - R4 (HIGH DENSITY RESI)
- ZONING - R3 (MEDIUM DENSITY RE
- ZONING - R2 (LOW DENSITY RESI)
- SITE 1 - GROSVENOR LANE NORTH
- SITE 2 - GROSVENOR LANE SOUTH
- SITE 3 - RANGERS ROAD
- BUS SHELTER
- TRAFFIC NOISE
- PREVAILING WIND
- VIEWS
- PROPOSED THROUGH SITE LINK
- EXISTING THROUGH SITE LINK



Military Road Corridor Planning Study

3.0

3.1 Neutral Bay Town Centre
Military Road Corridor Planning Study - Future Directions

NEUTRAL BAY TOWN CENTRE

Neutral Bay Town Center is a vibrant local center with a valued village feel. The location is well serviced with a variety of restaurants, cafes, shops and services. The area is well connected to the CBD and North Sydney centers with the Northern Beaches within easy reach for recreation and work. A decline in local jobs in the area has put pressure on the key development sites, with the Military Road Corridor Planning Study aiming to guide future developments in line with the expectations of the community.

Based on the community consultation and feedback received during the Study, for most new mixed use developments the following changes to the Planning Controls were proposed:

- Increase Non-Residential Floor Space (FSR) from 0.5:1 to 1.2:1
- Increase the maximum height limit from 5 storeys to 6 storeys
- Set new building setbacks at key locations along Military Road and near public open spaces

The adjacent diagrams indicates the boundary along Military Road corridor, with a subsequent Stage 2 area also defined in orange. The Site 3 area is indicated to also include key new public amenities, including a community center and public plaza.

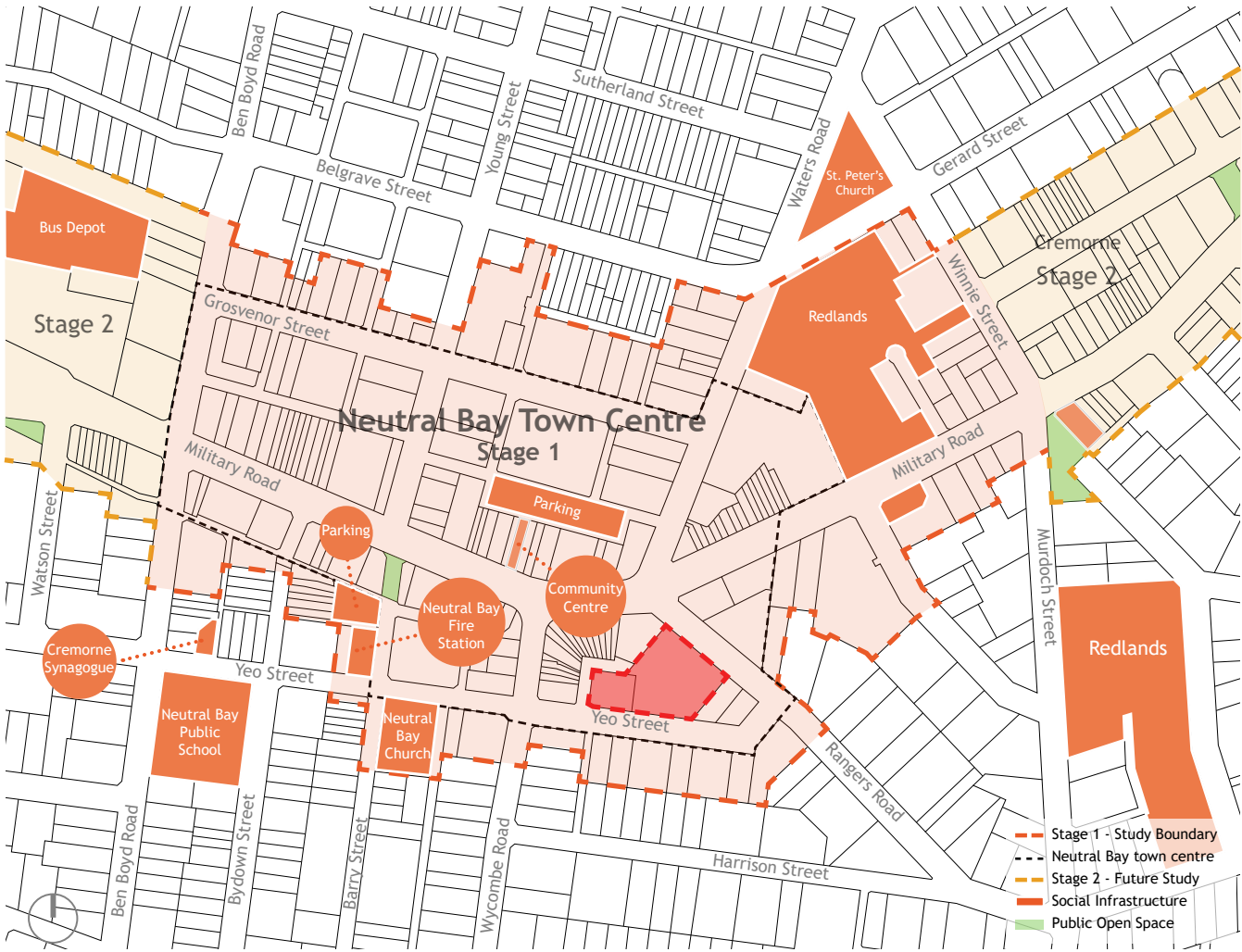


Figure 3 - Stage 1 boundary along Military Road corridor is outlined (orange) along with future Stage 2 study area (yellow). Existing social infrastructure and public open space in the area is also noted.

3.1 Neutral Bay Town Centre
Military Road Corridor Planning Study - Future Directions



Figure 5 - Council owned assets and proposed locations of new facilities in Neutral Bay town centre.

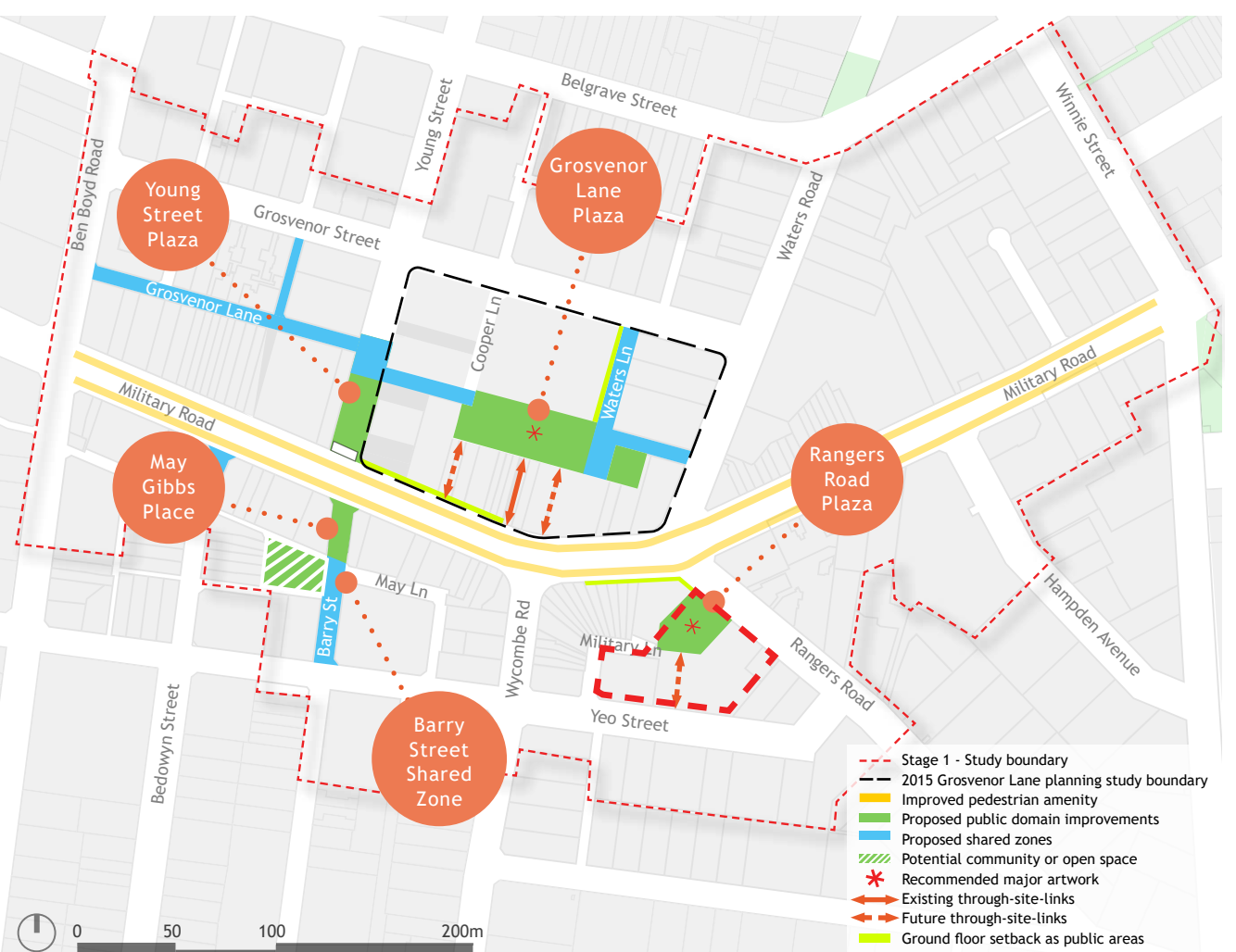


Figure 12 - Proposed public domain strategy for Neutral Bay town centre. This strategy focuses on pedestrian and public domain improvements throughout the town centre including the provision of new open space.

3.1 Neutral Bay Town Centre
Planning Controls

BUILDING HEIGHTS & FLOORSPACE

The special Site 3 area is indicated for an increased building height transitioning from 12 storeys, 8 storeys and 6 storeys. The height controls contemplate an increase above the current heights to accommodate the increase of the Non-Residential FSR up to 2:1, as well as the allowance for significant community facilities.

The increased height is considered appropriate with a transition from 12 storeys on Military Road stepping down to 6 storeys toward the residential interfaces.

The subject development site has two Non-Residential FSR minimum controls, outlines below:

Site 3A: Minimum 2:1 FSR

Site 3B: Minimum 1.2:1 FSR

Based on the site areas, the average FSR control across the development site is:

Site 3 combined average: Minimum 1.83:1 FSR

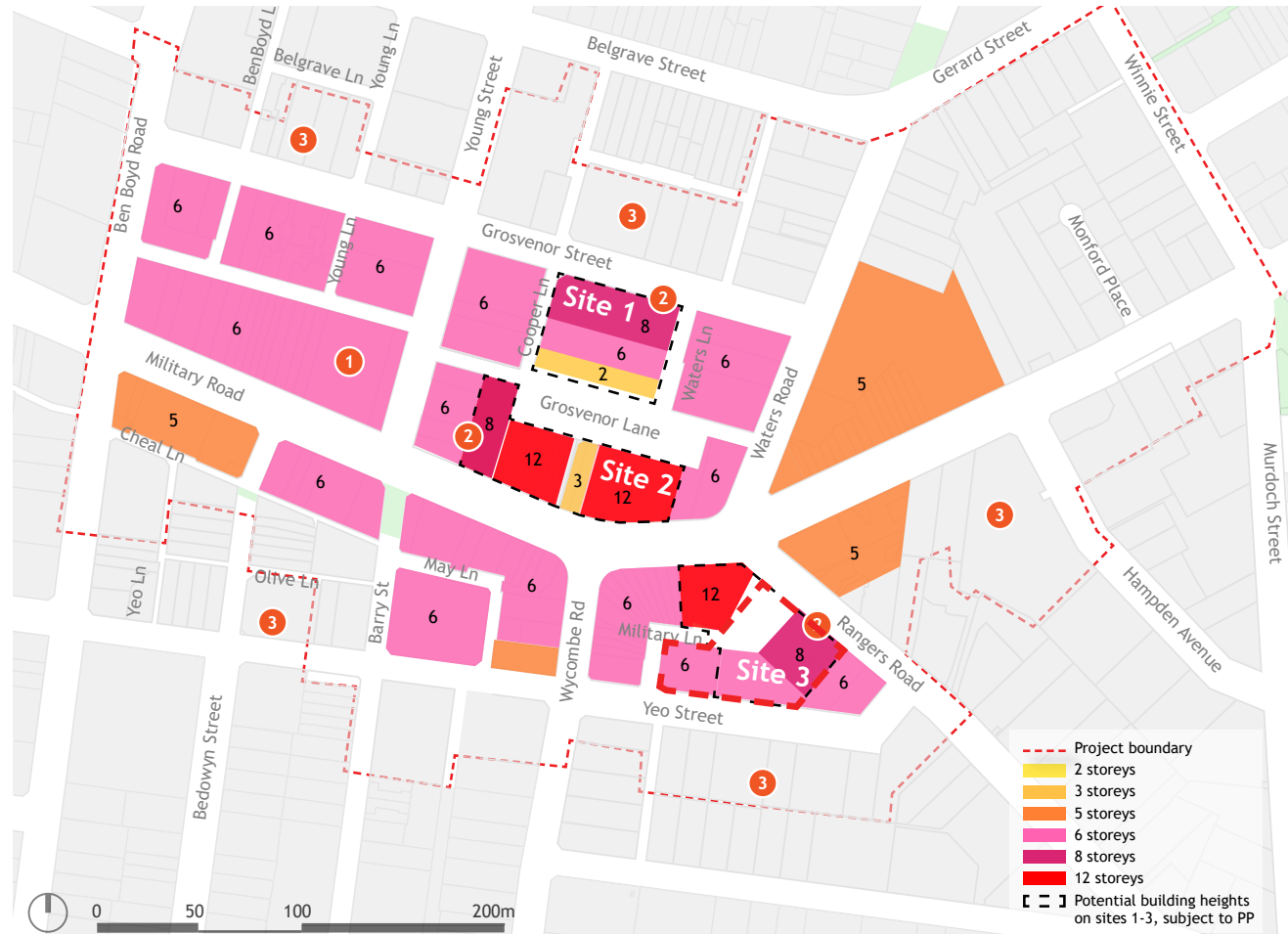


Figure 35 - Proposed new building heights controls (in storeys) in Neutral Bay town centre. A slight increase in the maximum building heights will cater to future jobs growth. The potential heights within the three outlined sites will first require detailed planning proposals and negotiations for VPAs or in-kind contributions before changes to the NSLEP 2013 are considered.

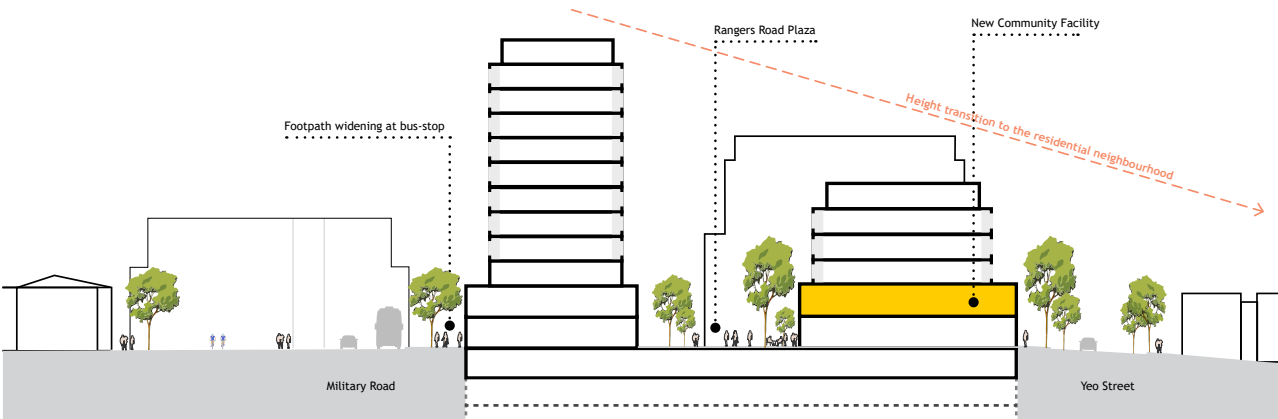


Figure 70 - Section of Site 3 - Rangers Road

3.1 Neutral Bay Town Centre
Planning Controls



Figure 20 - (Top right) Proposed minimum increases to non-residential FSR in the NSLEP 2013 and further increases through planning proposals. (Bottom right) Indicative diagram showing increase as floor storeys.

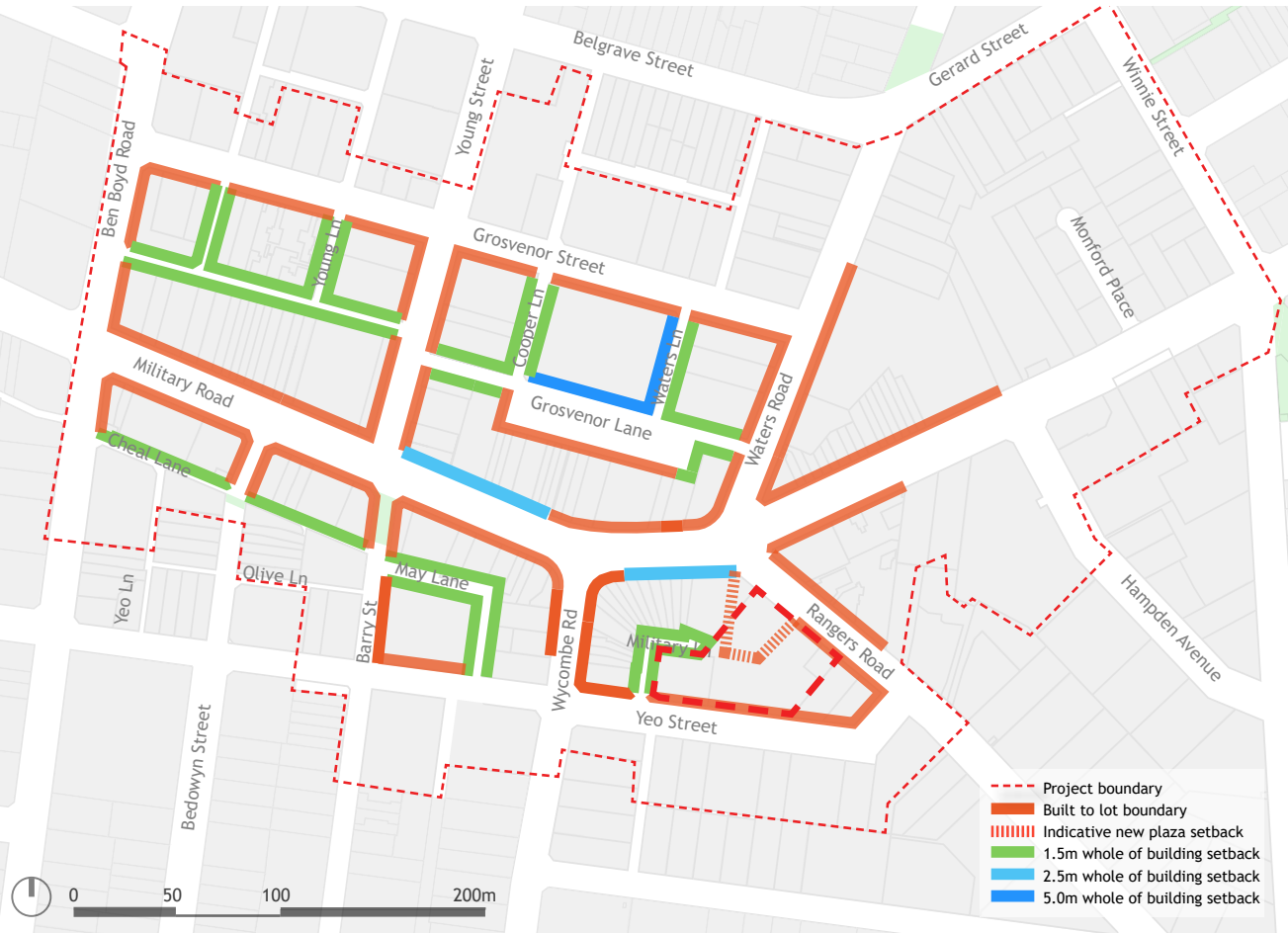
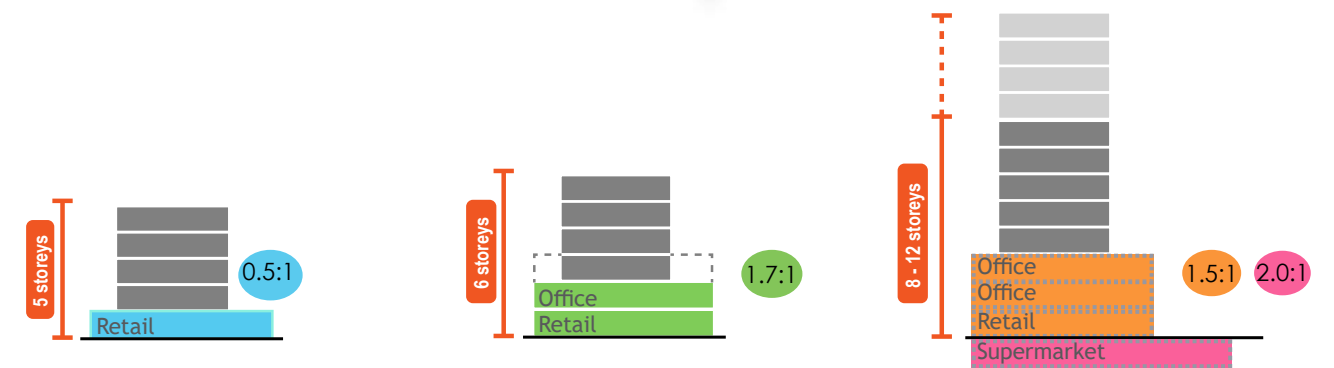


Figure 43 - Proposed minimum whole of building setback requirements. These setbacks will allow for the widening of footpaths and allow for deep soil zones to help rebuild Neutral Bay's tree canopies. At Grosvenor Lane it will provide a larger future plaza space and allow redirection of vehicles.

3.2 Site 3 - Rangers Road
Site Specific Objectives

A new public plaza on the southern side of Military Road can be delivered by relocating the current supermarket underground. This would provide much needed open space and expanded retail opportunities to support population growth.

There is currently a high volume of pedestrian movement in the area from the supermarket making it an ideal location for more public domain space. The plaza would be activated by shops, restaurants, and cafes along the edges, creating a vibrant and safe open space for the community.

Key Objectives:

1. Underground the existing supermarket to support a 1,000m2 plaza that has good year round solar access
2. Create a Through-Site Link from the new plaza to Yeo Street
3. Promote active edges around the plaza such as retails, cafes and outdoor dining. This includes a continuous line of fine-grain retail flowing into the space from Military Road.
4. Encourage alfresco dining and other late-night trading opportunities in the plaza
5. Entries into the supermarket or underground parking should be integrated along the edges of the plaza to ensure the plaza is not encumbered by built structures
6. Add landscaping, paving, major artwork, on street bicycle parking and street furniture

The development proposal seeks to deliver the Rangers Road Plaza, a high quality community facility that will activate and reinvigorate the public domain.



Figure 15 - Artist's impression of the future Ranger Road Plaza. The space will be activated by retail, cafes and restaurants along the edges and a continuous, open plaza which can host a variety of community events.

3.2 Site 3 - Rangers Road
Increased Employment Capacity

Increased Employment Capacity

Current planning controls with North Sydney Council's LEP 2013, specifically the non-residential floor space ratio (FSR) could result in a reduction of 1,500 jobs in the Neutral Bay area, far below the expected demand by 2036.

Under the current controls, sites have a minimum non-residential FSR of 0.5:1. By increasing the minimum non-residential FSR in the mixed use zone, this reduction in employment can be reversed. The objection of increasing the non-residential FSR from 1.2:1 and above, means Ground Floor retail is retained, but also in the levels above, providing a variety o retail, commercial and community uses.

The adjacent aerial image indicates the proposed built form envelopes and the contemplated building heights. An increase in the building heights allows for the increase of the employment generating floorspace, as well as to offset the public domain enhancements including the delivery of a 1,000m2 public plaza.



Figure 47 - Aerial of indicative proposed development envelope. The built form maximum heights (in storeys) will be achieved through planning proposals that are subject to further public exhibition processes. An increase of one storey is proposed across the town centre which would be through an amendment to the NSLEP 2013.

3.3 Built Form Framework
Planning Control Summary

Public benefits

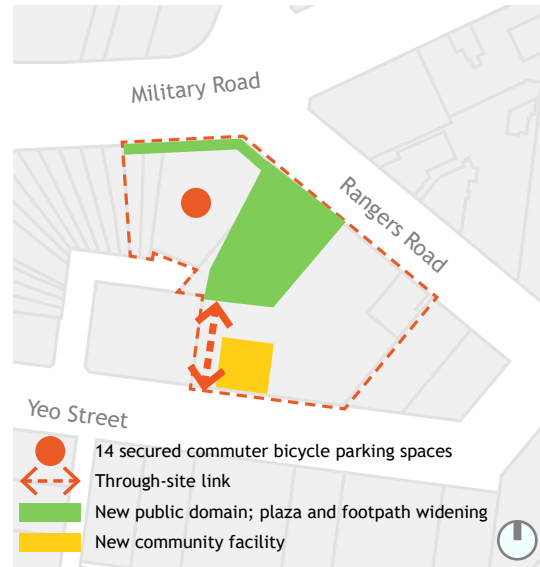


Figure 74 - Public benefits

New community facility (1,000m²)
Public plaza (1,000m²)
Through-site-link
2.5m whole of building setback along Military Road that includes deep soil zones for large trees
Secured public commuter bicycle parking (14 spots)

Maximum building height

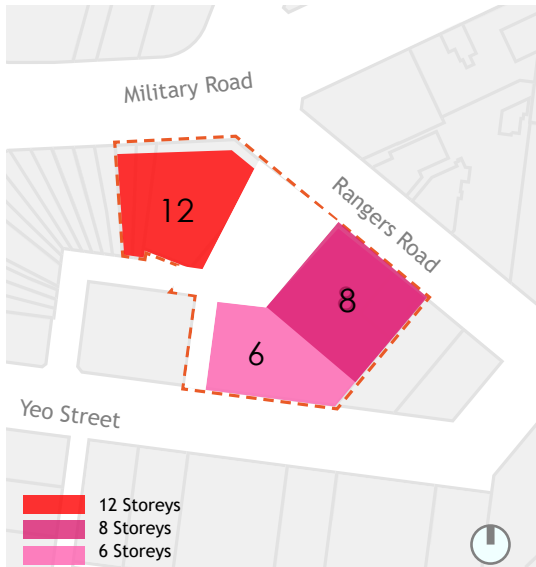


Figure 75 - Proposed maximum building heights

Maximum building heights at 6, 8 and 12 storeys

Solar access

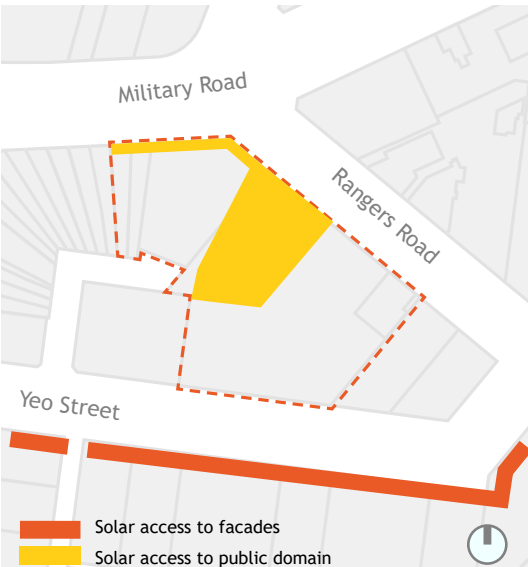


Figure 76 - Solar access requirements

Aim to maintain minimum of 2 hours of sunlight to 70% of residential dwellings within a building consistent with the solar provisions of NSDCP 2013 and SEPP65
Built form should demonstrate improvements to solar access to the surrounding public domain compared to existing controls

Underground parking

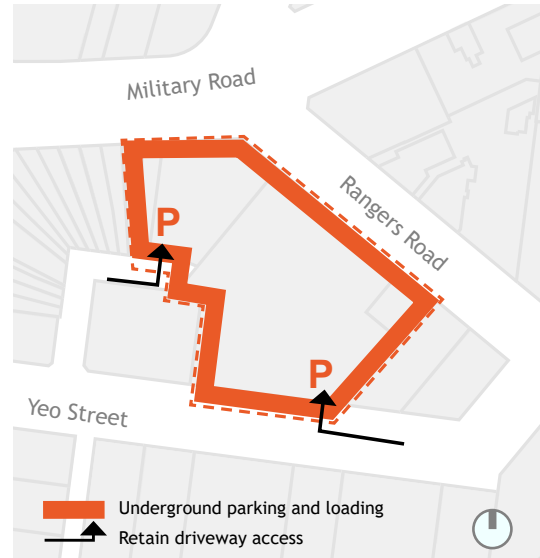


Figure 77 - Underground parking

Underground basement including parking and loading with minimum impacts to the local streets

Whole of building setbacks



Figure 78 - Whole of building setbacks

Provide 2.5m whole of building setback from Military Road to widen footpath and provide better amenity

Above podium setbacks

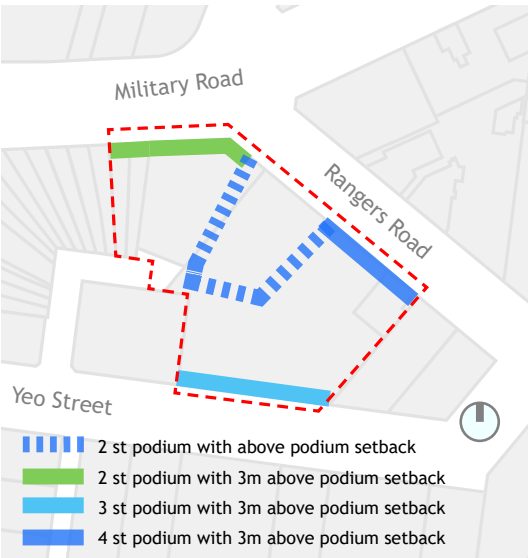


Figure 79 - Above podium setbacks

Provide podium height that responds to the context
Provide a podium level around the new plaza that reinforce the village atmosphere
Side setbacks according SEPP65

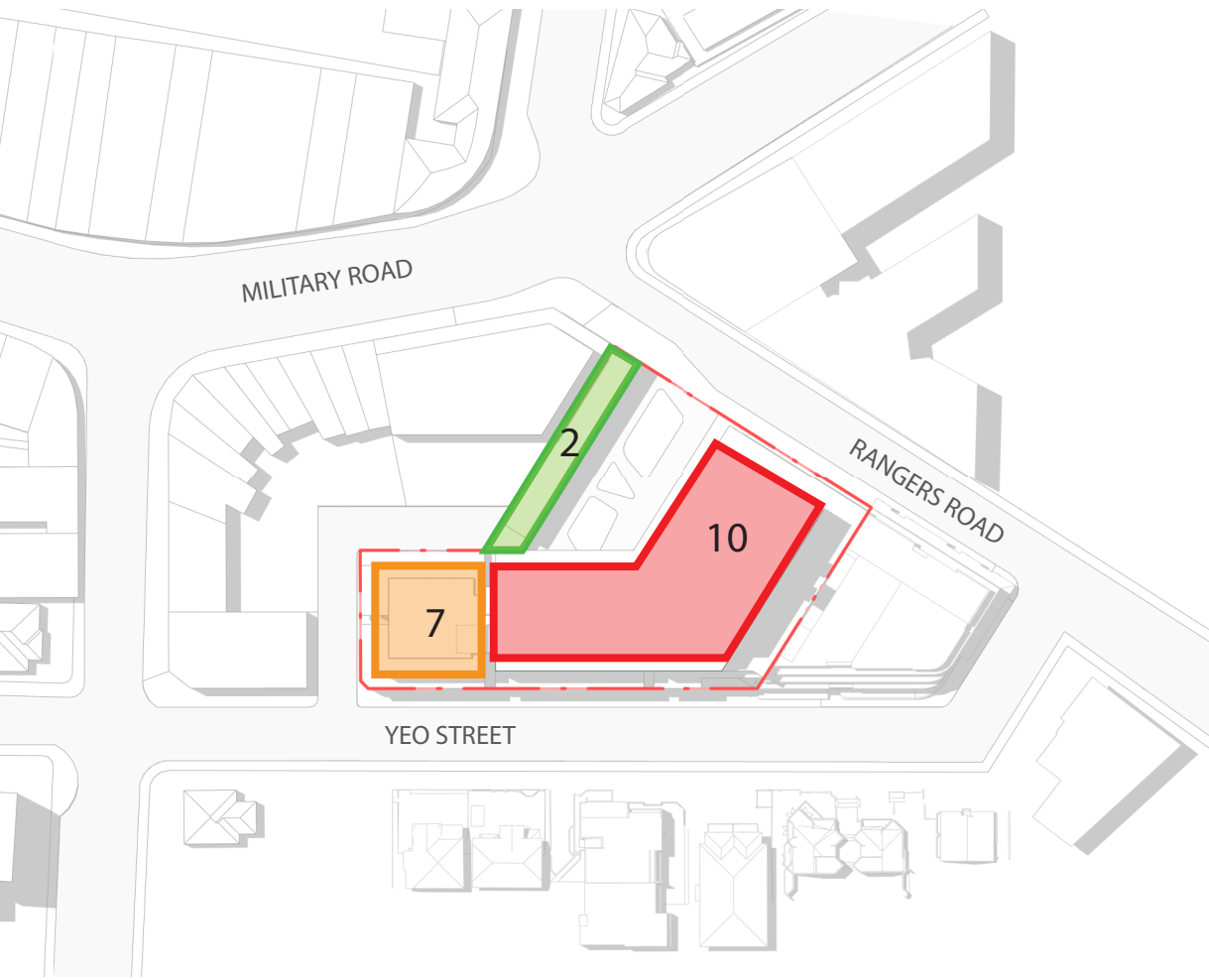
Built Form Proposal

4.0

4.1 Project Summary
Key Controls

	CONTROL	PROPOSED
SITE AREA	4,207 m2	Site 3A: 3,303m2 Site 3B: 904m2
FSR (Non-Residential GFA)	Site 3A: 2:1 Site 3B: 1.2:1	Site 3A: 6,606m2 Site 3B: 1,084.8m2
MASTERPLAN HEIGHT	Site 3: 12, 8 and 6 storeys	10 and 7 storeys
SETBACKS	Rangers Road - 4 storey podium 3m setback on levels above Plaza - 2 storey podium, 3m setback on levels above Yeo Street - 3 storey podium to boundary with 3m boundary setback above 1.5m Laneway setback	Rangers Road - 4 storey podium 3m setback on levels above Plaza - 2 storey podium, 3m setback on levels above Yeo Street - 3 storey podium to boundary with 3m boundary setback above 0m Laneway setback
BUILDING ENVELOPE	12 storey facing Military Road, 8 storey facing Rangers Road and 6 storey facing Yeo Street	10 storey facing Rangers Road transitioning from 10 to 7 storeys facing Yeo Street
PLAZA AREA	1000m2	1,020m2 (Plaza approx 18.5m x 44m)
PLAZA SOLAR ACCESS	800m2	(*includes Through Site Link) 559m2 at 10am
PUBLIC DOMAIN REQUIREMENT	DEVELOPMENT SITE TOTAL 1,125m2	TOTAL 1,020m2
MASTERPLAN SITE 3: TOTAL 1250m2	(exc. 2.5m setback Military Road Cnr = 125m2)	Plaza = 880m2 Through Site Link = 160m2
COMMUNITY CENTRE	1000m2	Community Center to be allocated to adjacent site within SITE 3 Masterplan Area
APARTMENT NUMBERS		91 Apartments
CROSS VENTILATION	60% CROSS VENTILATIONS	58 of 91 = 64%
SOLAR ACCESS	70% SOLAR ACCESS (2HRS - MID WINTER)	71 of 91 = 78%
CARPARKING NUMBERS		350 Car Spaces
COMMUNAL OPEN SPACE	25% OF SITE AREA	1,020 Plaza + 268m2 Level 7 Rooftop
DEEP SOIL	7%	TOTAL = 1,288m2 / 30.6% 0% - FULL BASEMENT FOR SUPERMARKET

4.2 Built Form Proposal
Detailed Design Considerations

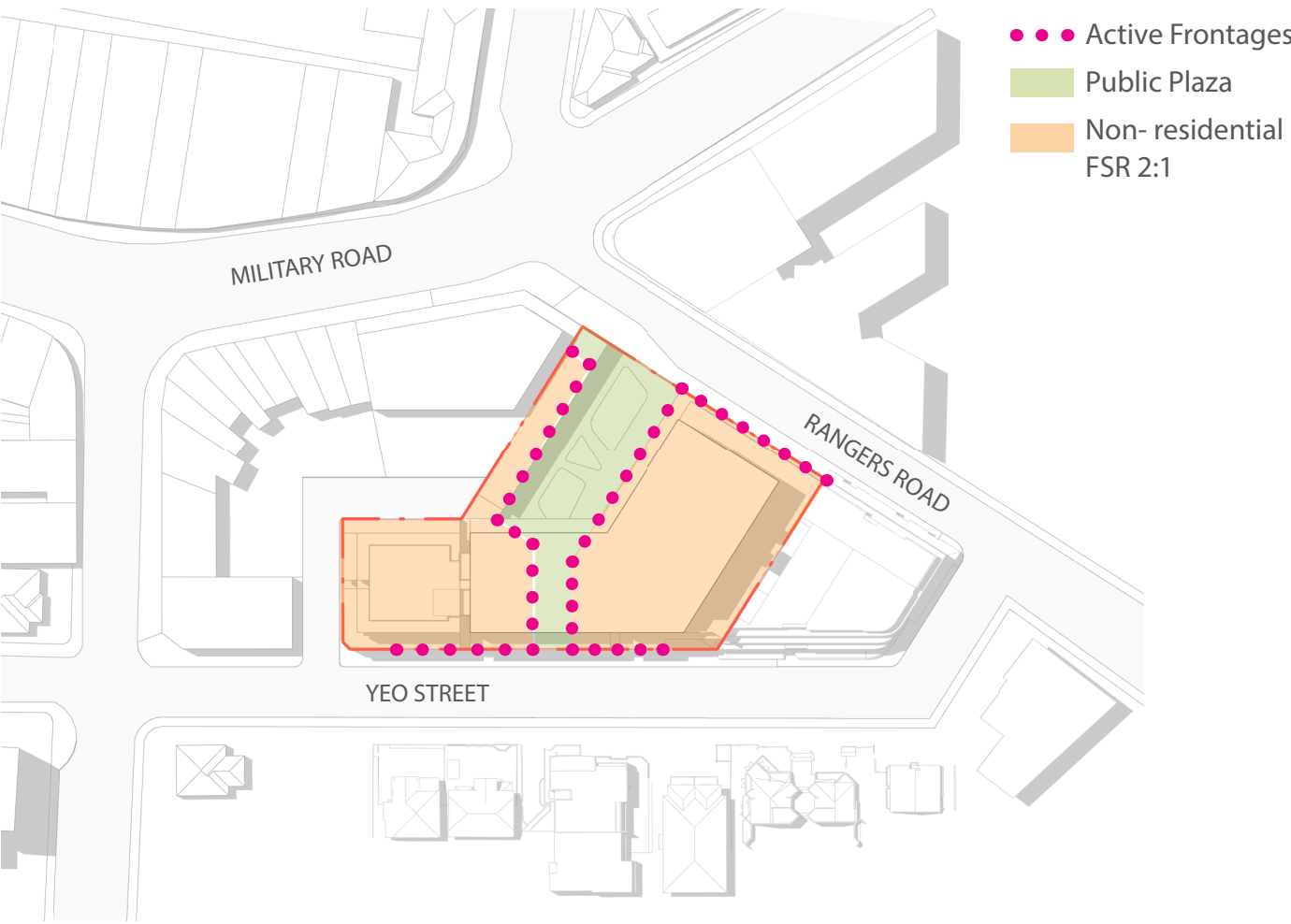


Maximum Building Heights

The design consideration in the masterplan is for varied height controls from 12 storeys (to the corner of Military Road), transitioning to 8 storeys and 6 storeys. The intent of the masterplan to transition in height from Military Road to Yeo Street has been accommodated in the proposal, however an increase to 10 storeys and 7 storeys is proposed in order to accommodate an equivalent GFA as the masterplan massing.

Masterplan - 8 storeys & 6 storeys

Proposal - 10 storeys & 7 storeys

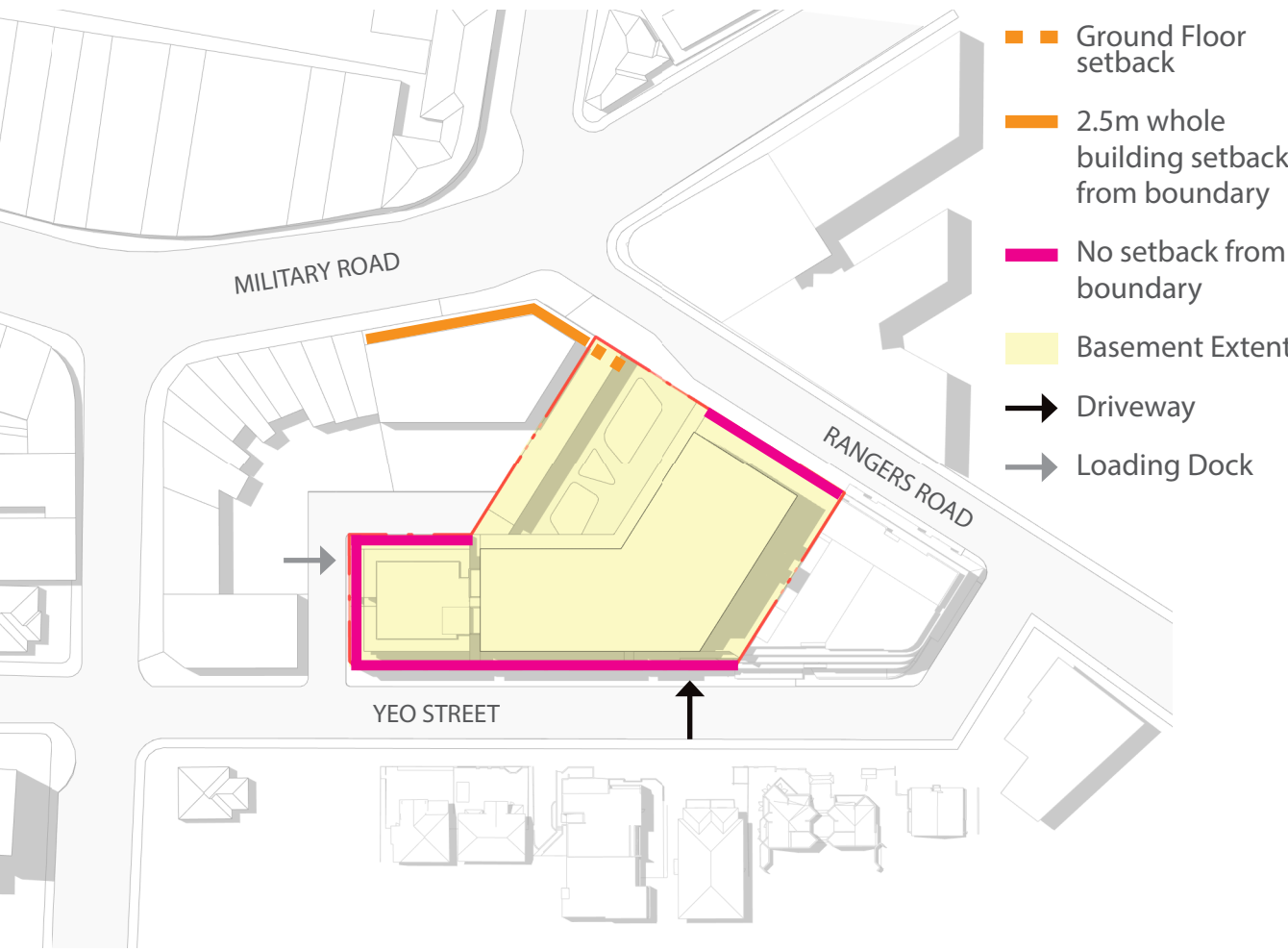


Active Frontages + FSR Controls

The controls stipulate that all frontages facing the new public plaza as well as street facing frontages should be active frontages. This enables the continued activation of the new public precinct.

It is also a requirement to achieve a minimum FSR of 2:1 for all non-residential programs of the development. This is aided by the requirement to achieve a public plaza, active frontages to all edges of the plaza as well as podiums adjacent to the new through-site link in an effort to activate this corridor of Neutral Bay and provided an elevated level of public amenity.

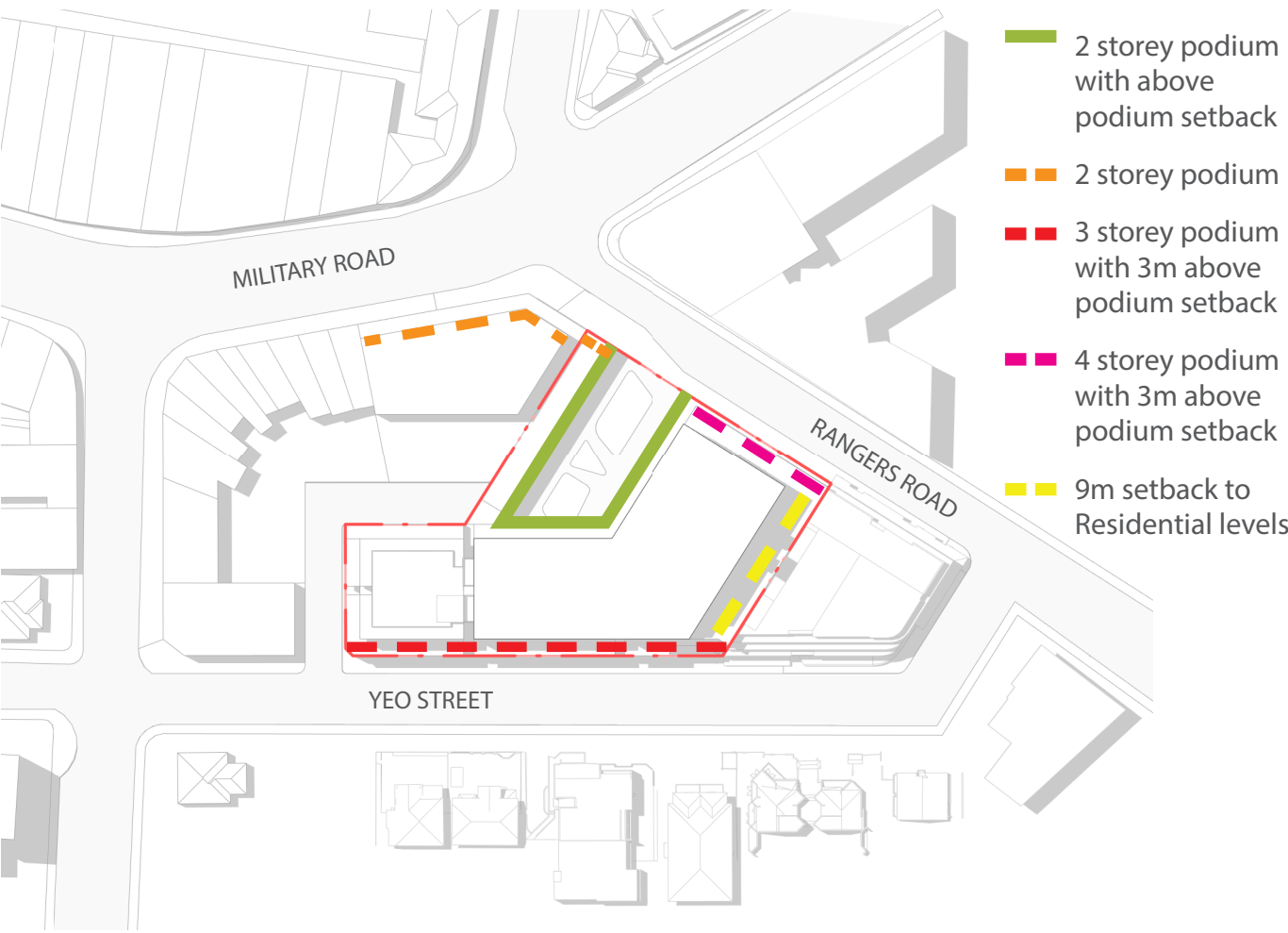
4.2 Built Form Proposal
Detailed Design Considerations



Underground Parking

The masterplan highlights the requirement for a 2.5m setback from Military Road whereas podiums facing Rangers Road and Yeo Street can be built to the boundary. To allow future flexibility to the remainder of Site 3 a Ground Floor setback and 2-storey retail strip is proposed on the North-West boundary.

The vehicle entry position from Yeo Street complies with the masterplan, with the loading dock facilities for the basement supermarket retained in the current position on site where it is least visible and does not conflict with pedestrian movement. The functionality of the Loading Dock means that a 1.5m Laneway widening has not been proposed. As per the masterplan, an underground basement fills the site.

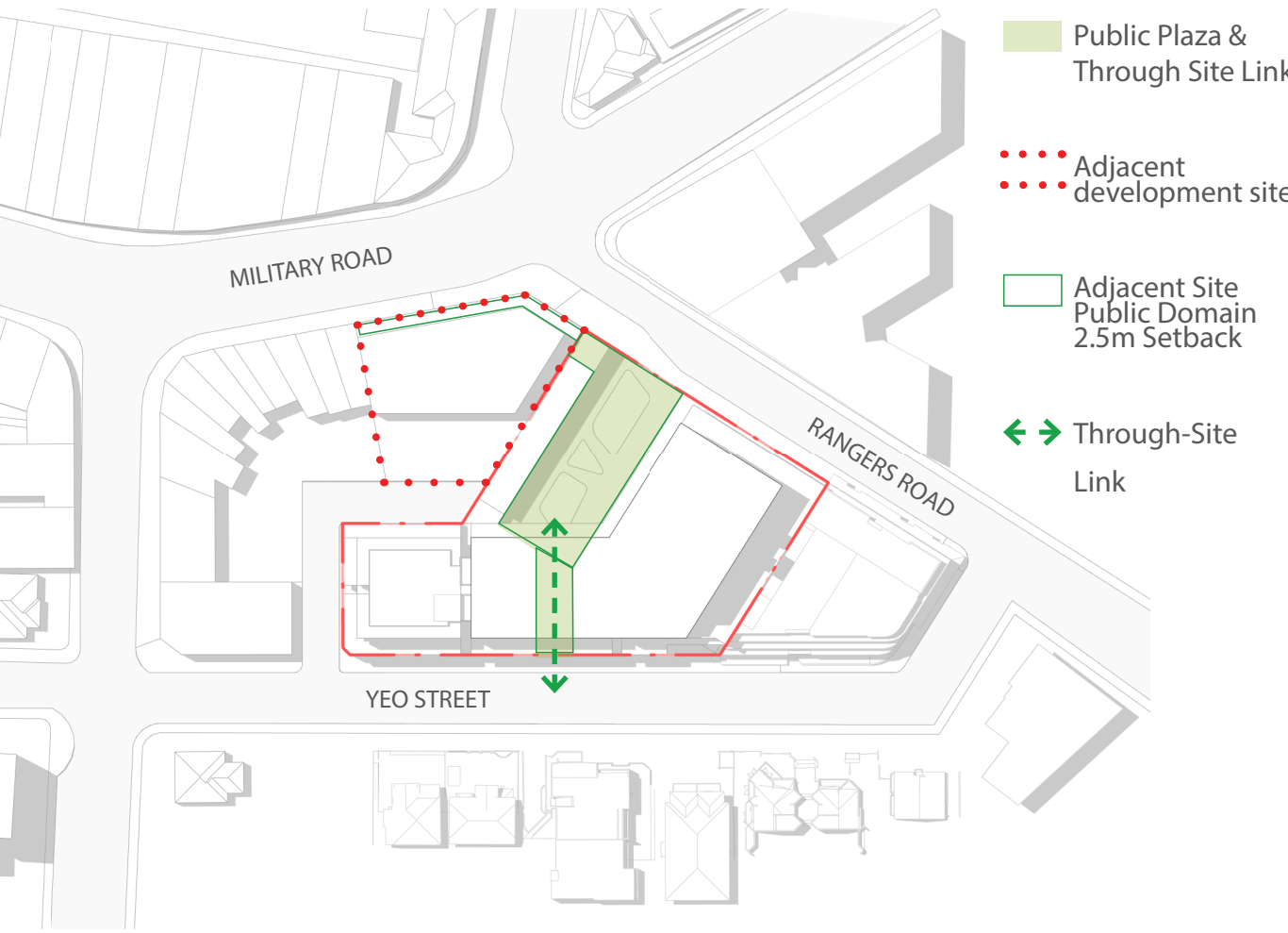


Above Podium Setbacks

The above podium setbacks are in line with the masterplan. The Rangers Road frontage proposed a 4 storey podium with a 3m setback above. Yeo Street proposes a 3 storey podium with a 3m setback above. The proposal also incorporates a 2 storey awning to provide a more pedestrian scale and further enhance the transition in height. The Retail and Commercial facing the new public plaza is expressed as a continuous 2 storey podium with a 3m setback above.

The setback from the Eastern boundary achieves a minimum of 9m in the Residential levels to allow adequate ADG compliance. The resulting 10 storey mass has a reduced building depth (21m) when compared to the masterplan building depth (33m) in order to provide appropriate residential amenity and layouts.

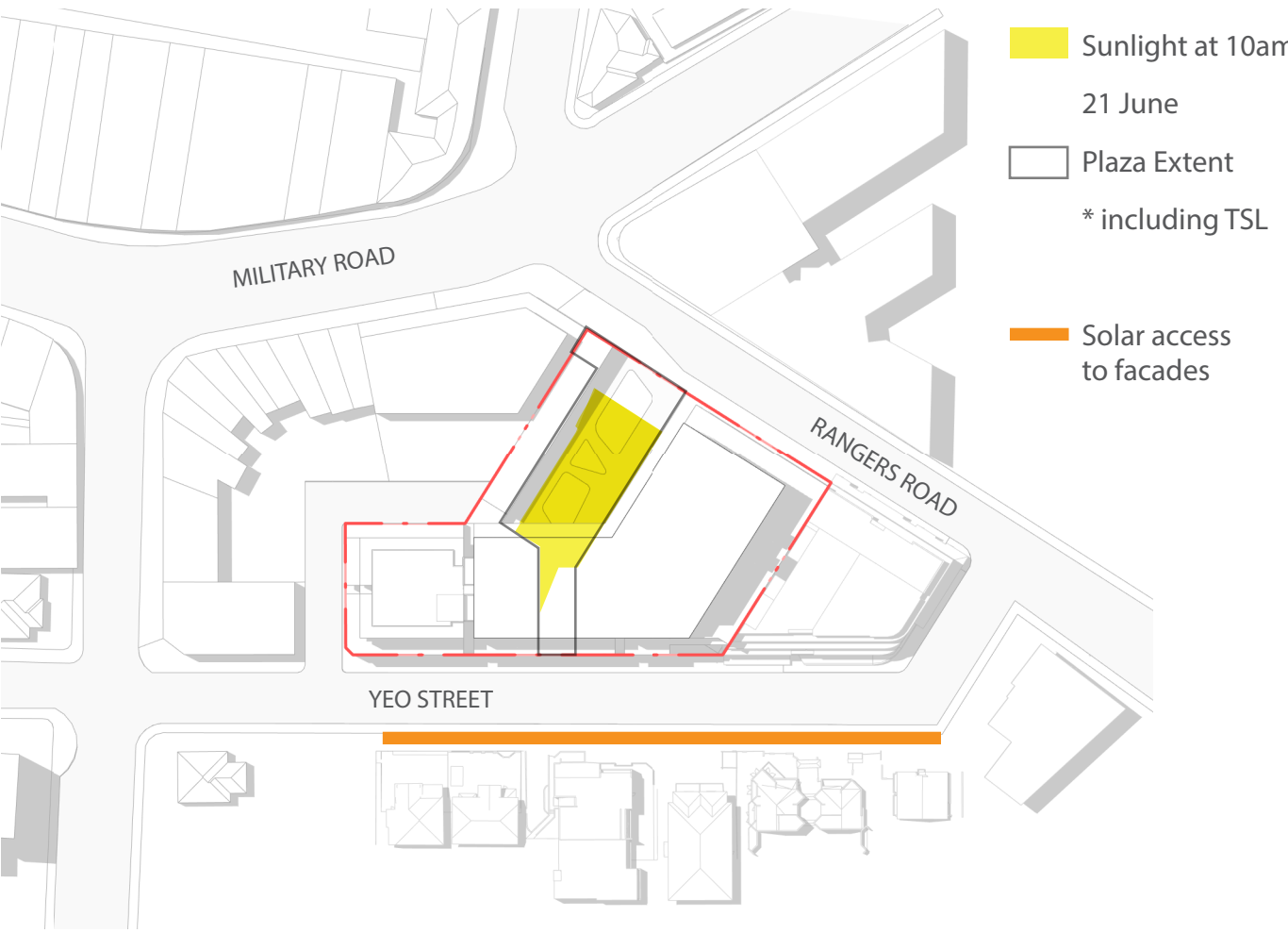
4.2 Built Form Proposal
Detailed Design Considerations



Public Benefit

The masterplan highlights the requirement for 1250m² of new public domain area, comprising a new 1000m² plaza, 2.5m setback from Rangers Road, and a through-site link between Rangers Road and Yeo Street. The masterplan also requires a 1,000m² community facility, and allowance for commuter bicycle parking (14 spots).

As the development site area is a partial component of the Masterplan Site 3, the proposal assumes a future development on the adjacent site would also seek to deliver a portion of the public benefits. The public plaza will be delivered under this proposal, with the community center allocated to a future development of the Adjacent Development Site.

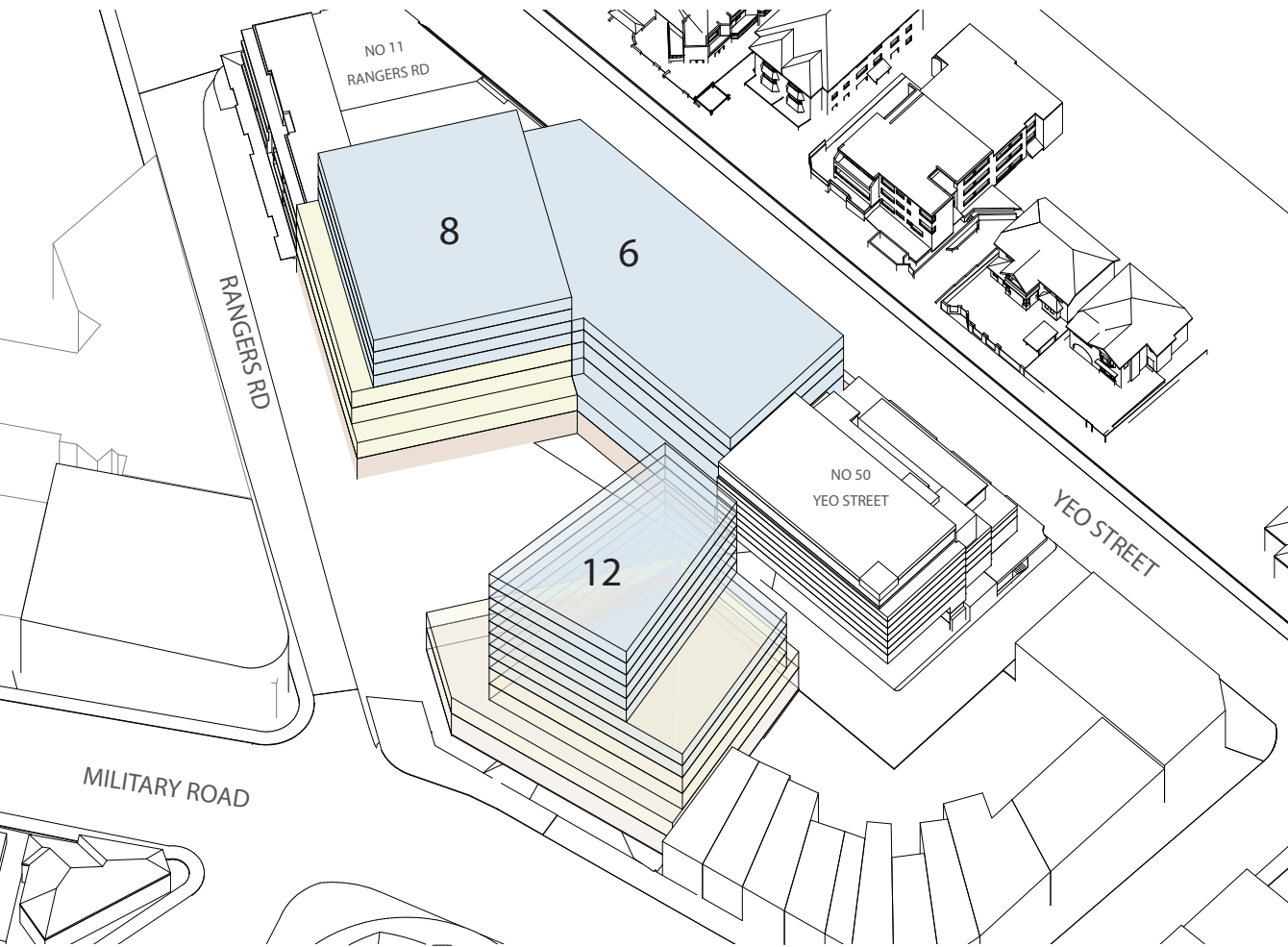


Solar Access

The masterplan massing is modeled to achieve an increased amount of sunlight to the public plaza than the existing controls.. The above diagram illustrates a total of 559m² of sunlight in the plaza on 21 June at 10am, which is 55% of the total plaza area.

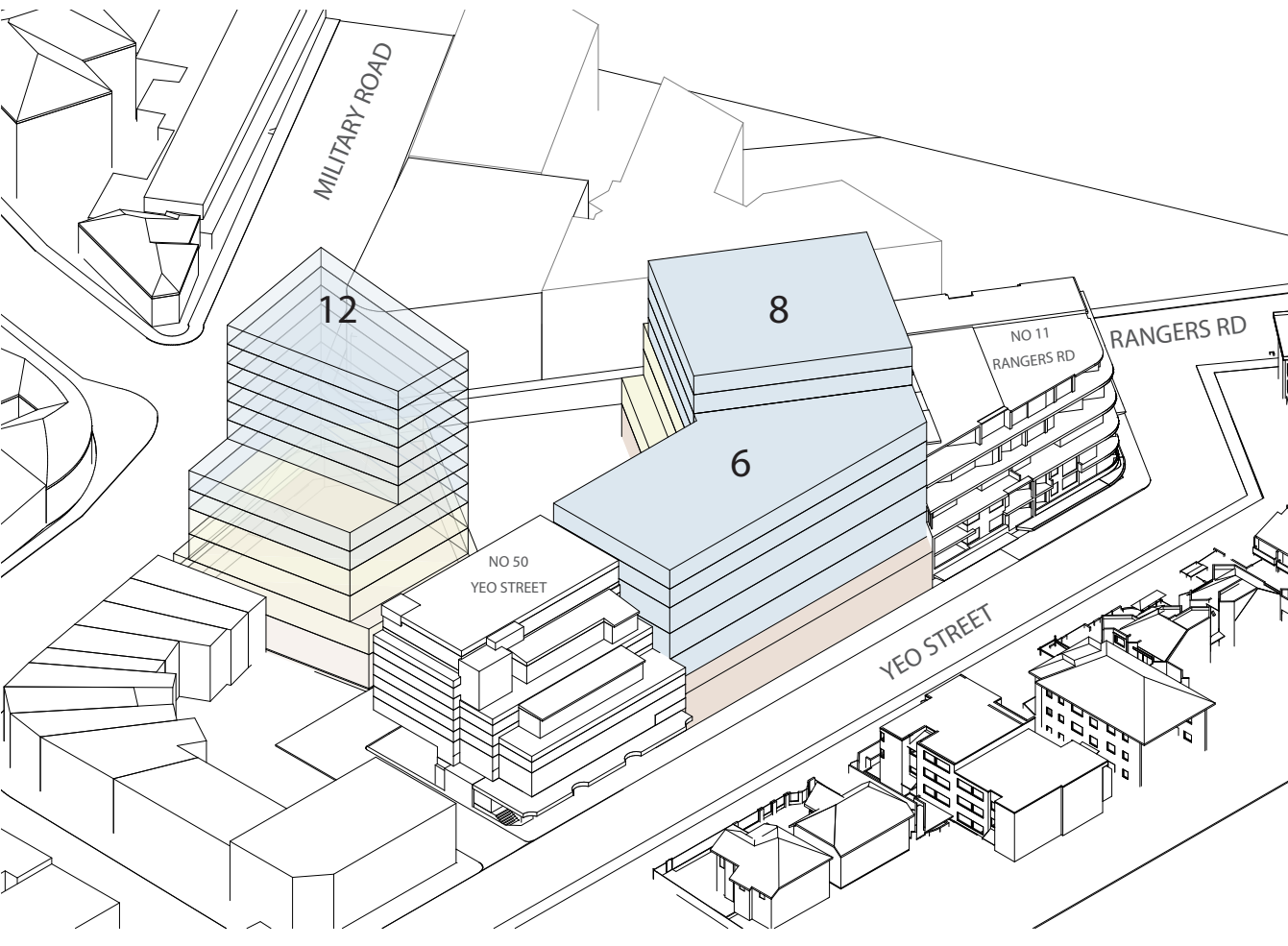
Detailed shadow studies have also been prepared to illustrate the solar impacts to the residential properties on Yeo Street. The studies illustrate a comparison from the masterplan massing and proposed massing, specifically the additional storey proposed on Yeo Street. The additional height has a minimal impact when compared to the masterplan, with the majority of primary living areas and private open space oriented away from the affected Yeo Street facade.

4.3 Masterplan Massing Comparison
Masterplan Massing Diagrams



Neutral Bay Corridor Strategy Scheme
Image 01

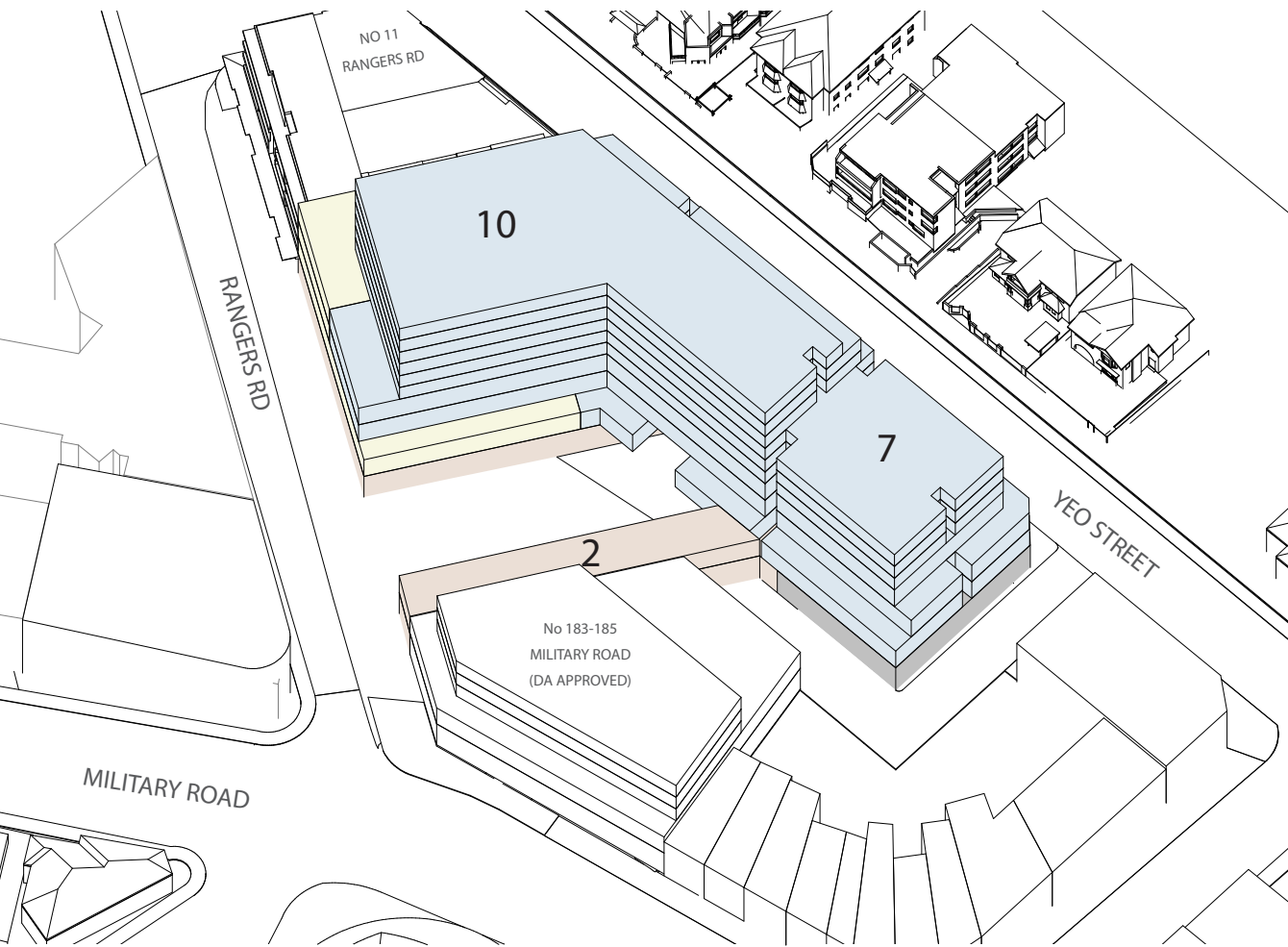
The North Sydney Council Neutral Bay Center Future Directions Plan highlights a maximum building height of 12 storeys. The 12 storey tower is located on the adjacent site at 183-185 Military Road. This site is not subject to this planning proposal, however has been considered in the design, massing and allocation of areas on the subject site.



Neutral Bay Corridor Strategy Scheme
Image 02

The Image 02 view shows the masterplan massing from Yeo Street. Site 3 did not include the site at 50 Yeo Street, an existing 5 Storey commercial building. This site has been included in the proposal.

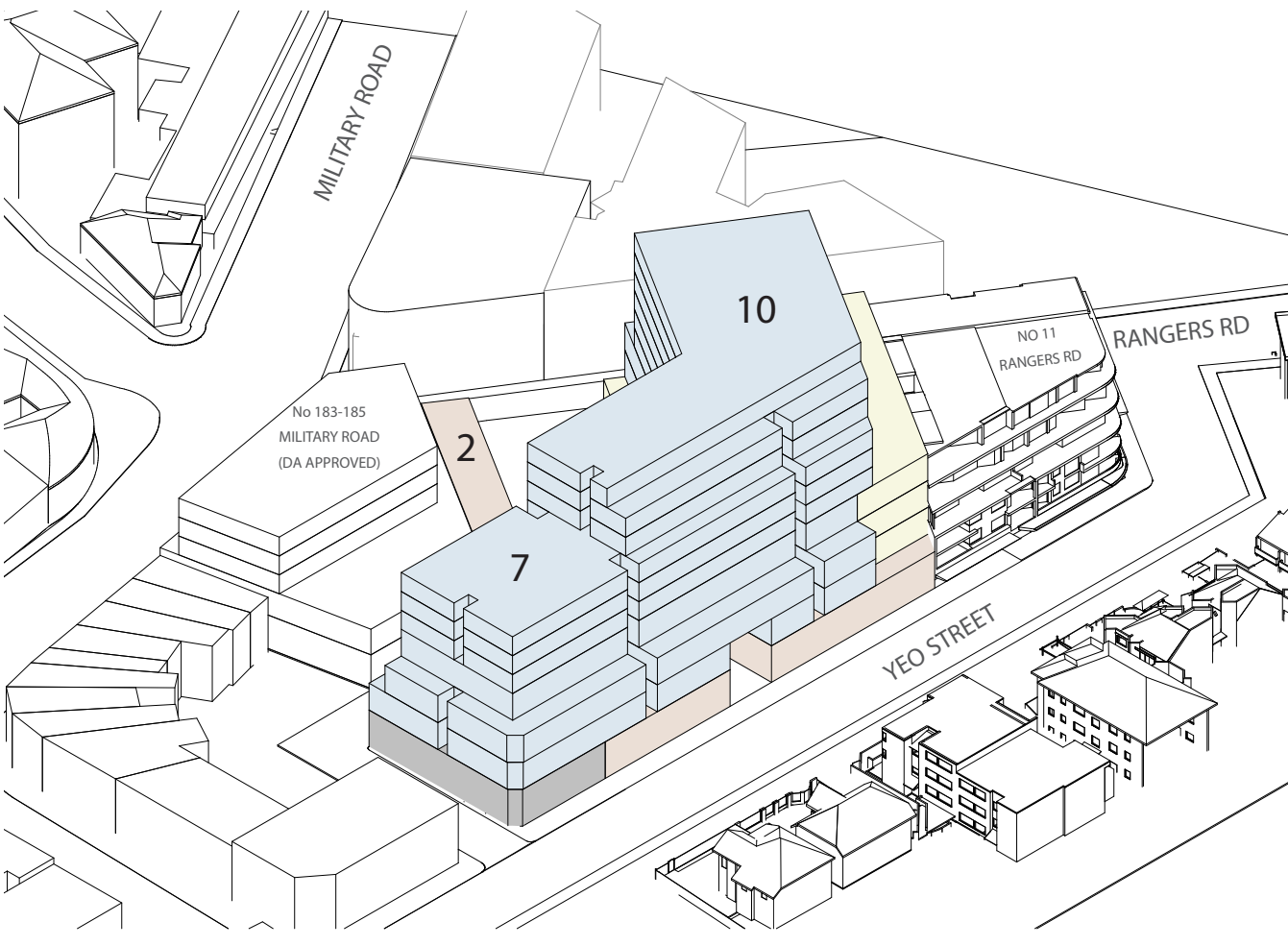
4.3 Masterplan Massing Comparison
Proposed Massing Diagrams



Proposed Scheme
Image 01

The height, bulk and scale is generally consistent with the precincts' masterplan connecting into the wider context and relating to the height of the 70's apartment buildings that exist on Military Road.

The proposal transitions in height – being the highest towards Military Road and stepping down to Yeo street to respect the lower scale nature of the residential properties. Setbacks in the building form, create a strong podium reading, carrying the shopfront typology along Rangers Road and the new Plaza, creating a pedestrian scale and highly activated ground plane. The gradual stepping reduces the perceived bulk and scale from Yeo Street.



Proposed Scheme
Image 02

The building form has been broken into distinct forms to break down the mass and create articulation between the podium, and upper floors. Vertical slots provide a break in the Yeo Street frontage, used to provide natural light and ventilation to the corridors.

An 8m wide, double height Through-Site Link creates a visual and physical connection through the site, allowing increased retail frontage, pedestrian links from Rangers Road to Yeo Street, and a visual connection throughout the plaza.

Design Response

5.0

5.1 Design Inspiration
Natural Landscape

Inspired by the naturally occurring landscape character of Neutral Bay, the design integrates public activation with a natural and refined aesthetic, providing an activated, unique and integrated public domain. The gentle curves of the sandstone gully's and Angophora Trees that have existed in Neutral Bay's natural context, inspired an architectural language that is organic, curved, and sophisticated. The natural facade ties into Neutral Bay's past and aims to invigorate Rangers Road with community facilities and public domain activation.

The design combines natural materials, with a fine-grain detail – the natural textures and organic lines distinguish a unique architectural language for Neutral Bay that aims to be more connected with the landscape than the built form.

Rangers Road and Yeo Street are activated with outdoor dining which enhances the public domain, and allows not only outdoor seating, but also community events such as weekend markets, outdoor performance, and spill over from the community facilities with the plaza. The through-site link and plaza incorporates high quality paving, new landscape and canopy trees, and prioritizes the pedestrian movement.

01-04: Reference Image - Natural Landscape character of Neutral Bay

05: Artists Impression, View of Plaza - Ivolve Studios



5.1 Design Inspiration
Design Vision

The design will be visually connected to Military Road, with open corners to Rangers Road, the wide Plaza entry an large open space will promote outdoor dining, children's play and community interaction. The perimeter retail to the Plaza expresses a double height volume to enhance the layers of activation both at the ground floor and level 1. The through site link visually connects the plaza to Yeo Street, activating the side streets and inviting public into the development from all directions.

The outdoor dining is covered and protected by the feature awning, allowing the spill out of retail/cafe tenants to engage with the public domain, while providing a protected path of travel for pedestrians. The feature awning is supported with organic columns reminiscent of the branches of a tree, greenery spills over the awning effectively continuing the landscape character from the public domain up onto the building façade.

- 01: Reference Image - Arch geometry
- 02: Reference Image - Integrated greenery
- 03: Reference Image - Outdoor Seating
- 04: Reference Image - Light Coloured brickwork
- 05: Artsist Impression, View from Rangers Road - Involve Studios



Connection to Country

6.0

6.1 Designing with Country
Acknowledgment of Country

We respectfully acknowledge the Traditional Custodians of the lands where we live and work. We acknowledge their unique ability to care for Country and deep spiritual connection to it. We honour Elders past, present and emerging whose knowledge and wisdom has and will ensure the continuation of cultures and traditional practices.

On Cammeraygal Country

The Northern shore of Port Jackson has been the ancestral lands of the Cammeraygal and Wallumedgal people of the Kuringgai Nation with evidence that suggest the area has been occupied for at least 5,800 years. This Country is dominated by strong ridgelines that fall into valleys and creek lines that stretch out with finger like protrusions into the harbour. The Cammeray clan occupy the area of Neutral Bay with its various coves and caves that provided plentiful camp and fishing grounds. Westward of Lane cover all the way to Parramatta was largely occupied by the Wallumedgal clan. The borders between the clans are not clearly defined and share very similar language that is also found in the southern Eora Nation tribes but they are very much interconnected through marital and ties, culture and customs.

The ridges served as creation song lines for Cammeraygal and Wallumedgal people to traverse Country. One of the main song lines follows the ridge from Middle head all the way through to Willoughby Bay before splitting off through to Middle harbour. These areas provided plenty of hunting grounds and routes for trade between clans.



6.2 Codesign Process
Integrated Process

We envision that the codesign process will involve engaging with Indigenous partners, including Cammeraygal knowledge holders, and other Indigenous organisations.

Through a series of workshops, we envision that the co-design group would identify narratives embedded in Country, express their aspirations for the development, and provide design direction to inform an Indigenous design strategy to guide the development. The group would then be involved in the design development and project progression throughout the life-cycle of the project, from its concept inception through to the ongoing care of the project.

We envision that the strategy may look to tap into the spirit of Cammeray Country, to foster an ongoing connection between Country and those that inhabit the spaces; in turn informing a set of design principles to function as a framework for design moves.

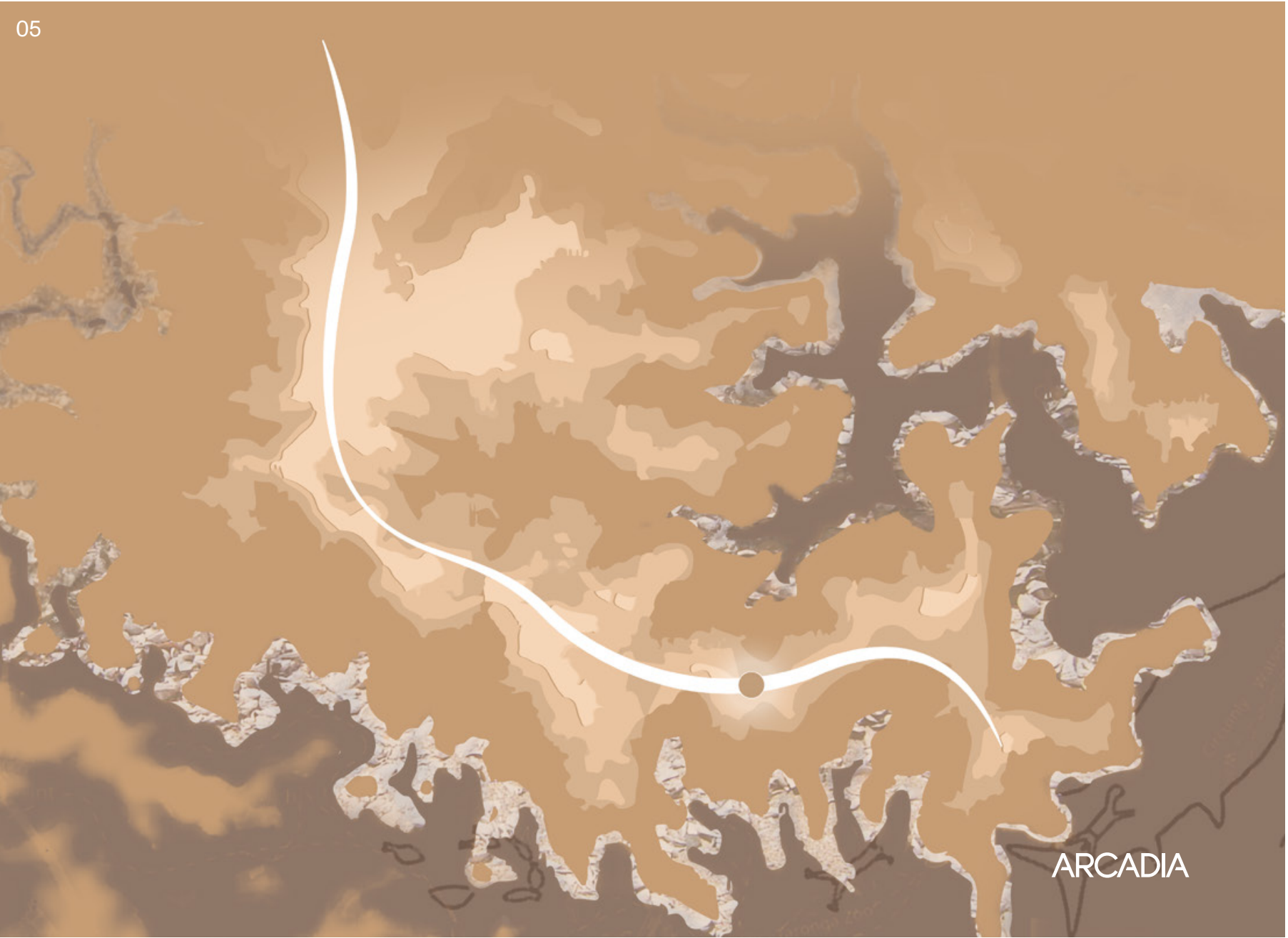
01: Reference Image - Aboriginal Rock Carving

02: Reference Image - Aboriginal Painting

03: Reference Image - Aboriginal Painting

04: Reference Image - Natural Landscape

05: Arcadia Image - Ridgeline



6.2 Codesign Process
Landscape Integration

Neutral Bay Marketplace

A vibrant marketplace offering outdoor retail experience for urban dweller to gather and meet. It creates an urban edge living accommodating future community needs, celebrating diversity and inclusivity while offering outdoor dining and amenities for the residents.

Create a diverse public domain typology that provides moments to engage with the ground floor retail activation and community uses. The ground plane experience traverses from civic along Rangers Road to community space at the central part of the public domain and fine grain activation.

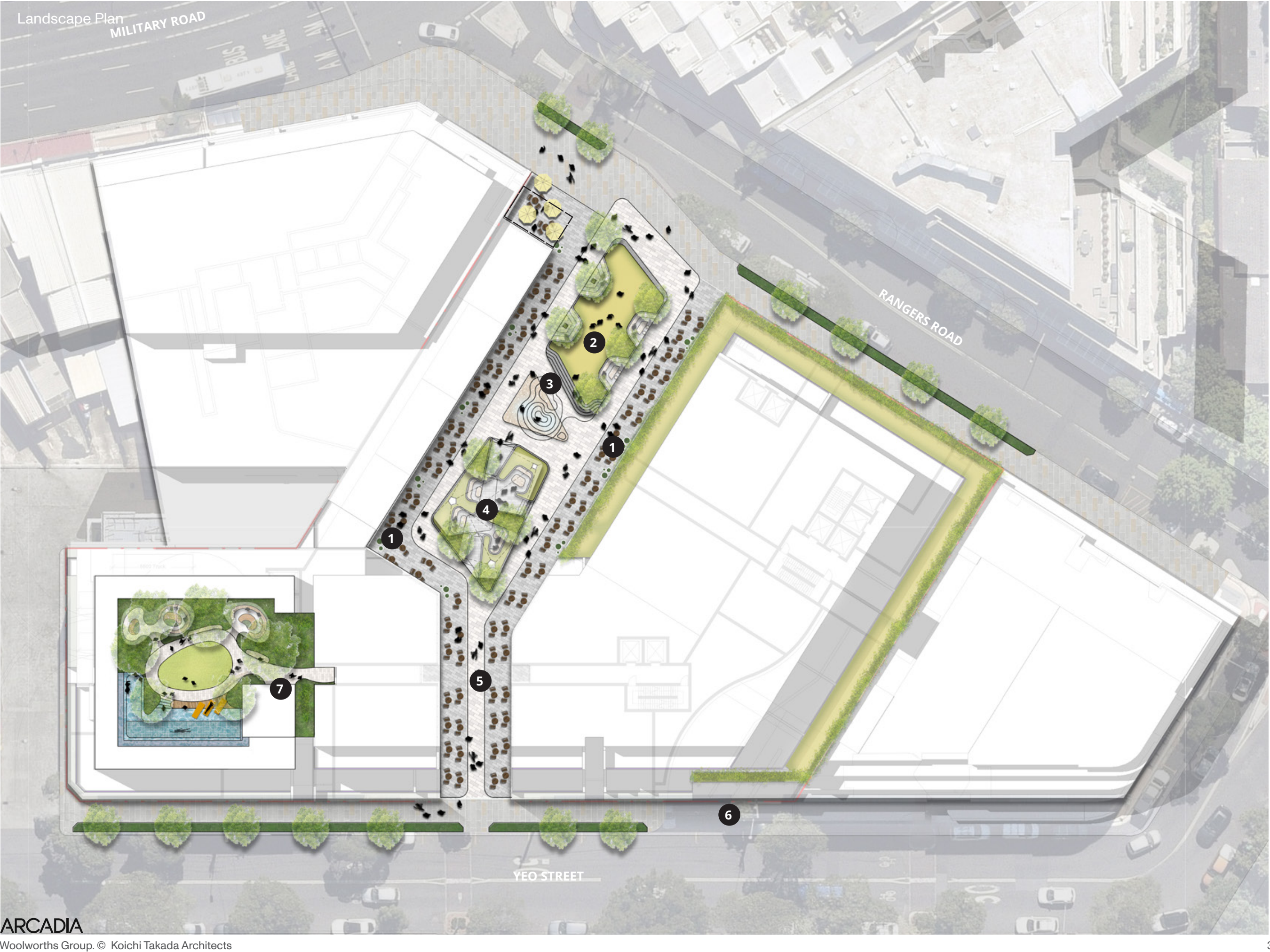
The core of the public domain will be the heart to the community. The central open space will be a place for community to gather and recreate. The space will accommodate an outdoor lawn, a civic heart and outdoor dining rooms as the spill over space for the retail offerings. The outdoor dining rooms will be integrated with fixed furniture, lighting and amenity to allow people to dine, rest and recreate.

The ground plane aims to maximise spatial uses by creating a series of destinations including the Arrival Plaza, Spice Lane, Outdoor Lawn and a Community Plaza at the heart of the precinct. These spaces are connected through two pedestrian thoroughfares activated with retail edges and 2.5m wide alfresco dining. This will ensure a good spatial layout for easy accessibility, alfresco dining and both physical and visual amenity.

01: Landscape Reference Image - Integrated Planters

02: Landscape Reference Image - Integrated Lighting

03: Landscape Reference Image - Water and Childrens Play



Community and Public Domain

7.0

7.1 Public Amenity
Community Integration

Public Plaza Design

The proposed development plays an integral role as part of the precinct and responds accordingly to the availability of infrastructure, transport, demand and environmental quality.

The sustainability of the proposed development is further supported by the proposal for a highly activated plaza and retail precinct, commercial office space and new residential apartments. New green spaces and community facilities will service the local community strengthening the pedestrian connections from Military Road to the surrounding residential areas.

The Neutral Bay residents will enjoy the new public open spaces for outdoor dining, high quality retail, and enhanced opportunity for community events. The increased density on the site will be supported by adequate servicing and parking, including an allocation of public parking.

01: Artists Impression, Central Plaza View - Ivolve Studios



7.1 Public Amenity
Public Plaza

The principle design approach was to create an intrinsic relationship between architecture and nature while promoting a variety of retail activation, integrated outdoor seating, and good pedestrian connectivity from Rangers Road to Yeo Street. The public plaza combines substantial planters to promote canopy trees growth as well as water fountains to promote children's play.

The guidelines emphasize the need to create alfresco dining spaces as an extension of the new retail and the plaza in order to activate the precinct, incorporating public art, landscaping and pavement, fixed street furniture and bicycle parking. All of these elements act to create a welcoming environment for the community and precinct for all ages.

The high quality retail with a focus on Food and Beverage offerings will activate the precinct at night, provide amenity for the community both during the day and of an evening.



01: Artist Impression, Proposed Plaza Design - Koichi Takada Architects

02: Reference Image - Water Fountain + Kids Play

03: Reference Image - Outdoor Seating with integrated lighting + landscape

04: Artist Impression, Proposed Plaza Retail - Koichi Takada Architects

05: Artist Impression, Central Plaza View - I-ville Studios



7.1 Public Amenity
Public Plaza

The flexible space can be used for seasonal events, markets, and outdoor performance. The architectural design incorporates façade planters to the setback and terrace floors,. The feature façade concept integrates modular planters on slabs to provide both the commercial and residential residents a connection to landscape. The biophilic design increased user comfort, wellbeing and amenity.



7.2 Through-Site Link
Fine Grain Detail

The design combines natural materials, with a fine-grain detail – the natural textures and organic lines distinguish a unique architectural language for Neutral Bay that aims to be more connected with the landscape than the built form.

Rangers Road and Yeo Street are activated with outdoor dining which enhances the public domain, and allows not only outdoor seating, but also community events such as weekend markets, outdoor performance, and spill over from the community facilities with the plaza. The through-site link and plaza incorporates high quality paving, new landscape and canopy trees, and prioritizes the pedestrian movement.

01: Barrack Place, Retail Arcade - Architectus

02: Steam Mill Lane - Aspect

03: Arc by Crown Group, Through Site Link - Koichi Takada Architects

04: Arc by Crown Group, Clarence Street - Koichi Takada Architects

05: Artsist Impression, Yeo Street Facade - Ivolve Studios

Woolworths Group. © Koichi Takada Architects



7.3 Streetscape Activation
Retail Frontage

The perimeter retail to the Plaza expresses a double height volume to enhance the layers of activation both at the ground floor and level 1.

The through site link visually connects the plaza to Yeo Street, activating the side streets and inviting public into the development from all directions.

01: Artists Impression, Proposed Through Site Link - Koichi Takada Architects

02: Scotch Row, Barangaroo

03: Kensington Lane, Chippendale

04: Artists Impression, Proposal for Yeo Street - Koichi Takada Architects



7.4 Placemaking
Outdoor Dining

The outdoor dining is covered and protected by the feature awning, allowing the spill out of retail/cafe tenants to engage with the public domain, while providing a protected path of travel for pedestrians. The feature awning is supported with organic columns reminiscent of the branches of a tree, greenery spills over the awning effectively continuing the landscape character from the public domain up onto the building façade.

The highly legible entrances combined with active frontages promotes place making. The feature columns and framed shopfronts create a human scale at the ground plane inviting a pedestrian appreciation of the design. The active ground plane promotes a place for gathering, a bespoke and interesting facade will become a new meeting place, providing the much needed public and community amenity that is explored in the Military Road Corridor Planning Study.

01: Artists Impression, Proposed Retail Plaza - Koichi Takada Architects

02: Artists Impression, Yeo Street Through Site Link - Ivolve Studios



Amenity

8.0

8.1 Apartment Design Guide

Design Quality Principles

Principle 1 - Context and Neighbourhood Character

Located within the Military Road Corridor, the site is identified in a future/masterplan vision for a new mixed-use precinct that promotes increased employment generating floorspace and high-quality public domain offerings. An increased building height supports the site identified in the Military Road Corridor strategy to support the developers in delivering on significant community amenities. The site is well positioned on the corner of Military Road and Rangers Road, well serviced by bus routes and near both the CBD and North Sydney centers. The proposed massing and design align to the masterplan objectives, building on the proposed public domain activation, delivering a generous public plaza, and providing new through-site link to enhance the pedestrian permeability around Neutral Bay.

Principle 2 - Built Form and Scale

The height, bulk and scale is generally consistent with the precincts' masterplan connecting into the wider context and relating to the height of the 70's apartment buildings that exist on Military Road. The proposal transitions in height – being the highest towards Military Road and stepping down to Yeo street to respect the lower scale nature of the residential properties. Setbacks in the building form, create a strong podium reading, carrying the shopfront typology along Rangers Road and the new Plaza, creating a pedestrian scale and highly activated ground plane. The gradual stepping reduces the perceived bulk and scale from Yeo Street

The building form has been broken into distinct forms to break down the mass and create articulation between the podium, and upper floors. Vertical slots provide a break in the Yeo Street frontage, used to provide

natural light and ventilation to the corridors.

An 8m wide, double height Through-Site Link creates a visual and physical connection through the site, allowing increased retail frontage, pedestrian links from Rangers Road to Yeo Street, and a visual connection throughout the plaza.

Principle 3 - Density

The site is located within the B4 – Mixed Use zone, and is a corridor zone along Military Road. The site is bordered by an R4 – High Density Residential to the south of the site, with Medium and Low Residential further south of the site. The Military Road Corridor Planning Study projects a decrease of jobs by 2036 if there are no changes to the current planning controls. The planning proposal seeks to provide an increased amount of non-residential floorspace to provide increased employment generating floorspace. The increased commercial space, as well as the creation of a new pubic plaza, through site link and improved public domain requires an increase to the residential FSR, delivering a density that supports the anticipated job growth and housing demand.

As such, the proposed development plays an integral role as part of the precinct and responds accordingly to the availability of infrastructure, transport, demand and environmental quality. The sustainability of the proposed development is further supported by the proposal for a highly activated plaza and retail precinct, commercial office space and new residential apartments. New green spaces and community facilities will service the local community strengthening the pedestrian connections from Military Road to the surrounding residential areas. The Neutral Bay residents will enjoy the new public open spaces for outdoor dining, high quality retail, and enhanced opportunity for community events. The increased density on the site will be supported by adequate servicing and parking, including an allocation of public parking.

Principle 4 - Sustainability

The proposed building is designed to satisfy energy and efficiency performance standards designed to achieve verification for water conservation, thermal comfort and energy efficiency. Natural light is provided to all residential lift lobby and corridors, with more than 70% apartments achieving solar access, and more than 60% achieving cross ventilation.

The design has a genuine focus on ESD, proposed to be fossil-fuel free, encouraging less reliance on mechanical systems with good cross flow ventilation and shading, as well as integrating power generation by way of adding PV's on the roof. The detailed design application will indicate additional measures above the minimum requirements, a move toward contributing to our sustainable future, aligning to the corporate vision for all Woolworths supermarkets to achieve a 5-Star Green Star rating.

Principle 5 - Landscape

The principle design approach was to create an intrinsic relationship between architecture and nature while promoting a variety of retail activation, integrated outdoor seating, and good pedestrian connectivity from Rangers Road to Yeo Street. The public plaza combines substantial planters to promote canopy trees growth as well as water fountains to promote children's play. The flexible space can be used for seasonal events, markets, and outdoor performance. The architectural design incorporates façade planters to the setback and terrace floors, with a residential communal open space allocated on the rooftop with a plunge pool, seating, and BBQ amenities. The feature façade concept integrates modular planters on slabs to provide both the commercial and residential residents a connection to landscape. The biophilic design increased user comfort, wellbeing and amenity.

8.1 Apartment Design Guide

Design Quality Principles

Principle 6 - Amenity

The new building optimise's residential amenity and incorporates a range of 1 Bed, 2-Bed and 3-Bedroom apartments providing a varied residential mix. Corner units and through units, are maximised in order to provide the opportunity for access to district views while maintaining good solar amenity.

Living rooms are positioned in order to maximise on solar access into both the internal living room and private open space. A façade overhang allows perimeter planting, essentially creating a garden to the terraced apartment proving huge benefit to the health and well-being of the residents. A retail awning creates shelter to the outdoor dining, with the overhang and planting also providing visual privacy to the residential levels above.

Façade screening and landscaping buffer zones are used to address visual privacy between the apartments and the public plaza. Visual and acoustic privacy is achieved for the residential apartments by adhering to the ADG building separation guidelines to all boundaries accommodating any future development potential under the Military Road Corridor Planning Study.

Principle 7 - Safety

Main pedestrian entries to the development are accessed from both Rangers Road and Yeo Street, and from the Through-Site link, to allow a continuous visual and physical link through the development. The creation of the public plaza and continuous retail activation, as well as the alignment of the through site link allows clear sight lines for casual surveillance throughout the development.

The retail will provide both day and night time activation and dining opportunities, with the anchor tenant, Woolworths supermarket ensuring constant foot traffic and activation at both the ground level/public domain and basement carparking.

The ground level has been designed to make visible and attractive entries to the building. The entries are well lit, naturally during the day and will have security surveillance and intercoms to identify visitors to the building complex. Separate lifts are provided for access to the commercial and residential levels to maintain privacy and security. Access to the basement residential car parking will be secured.

The typical apartments above have balconies along the entire perimeter that allow a level of casual surveillance of the surrounding public walkways. Direct access to the lift and stair from the carpark allows residents to drive and enter through a completely secured means.

Principle 8 - Housing Diversity and Social Interaction

The proposed building is designed to respond to future vision for the Neutral Bay precinct to achieve a range of housing choice to suit a diverse demographic and needs of its future residents. The new residential proposal will contribute positively to the surrounding area, complimenting the increased employment generating floorspace to provide 24hours activation to this key town center site.

The proposal consists of one, two and three-bedroom apartment types of varying sizes to support a range of socioeconomic groups. The typical apartments aim to attract a variety of owner/occupiers and tenants. Communal amenities, generous private open space and large apartment areas will provide an offering for families, which is currently difficult to find in the Neutral Bay area.

The design promotes social interaction between residents through its variety of communal outdoor spaces including the rooftop terraces and public plaza and through-site link. These dynamic spaces are visually appealing but also encourage a place of social interaction through a range of activities and uses including outdoor kitchens, outdoor dining, sheltered areas, seating and recreational uses such as the pool and yoga lawn.

Principle 9 - Aesthetics

The design will deliver an engaging first impression, that not only stands alone as a modern development but that also enhances the existing urban fabric of this transitional site in Neutral Bay.

The highly legible entrances combined with active frontages promotes place making. The feature columns and framed shopfronts create a human scale at the ground plane inviting a pedestrian appreciation of the design. The active ground plane promotes a place for gathering, a bespoke and interesting facade will become a new meeting place, providing the much needed public and community amenity that is explored in the Military Road Corridor Planning Study.

The integration of landscape is key in creating a welcoming and unique facade experience from the public domain. The incorporation of planters at multiple levels enhance occupant comfort and experience. Greenery at the colonnade level humanises the scale of building, and softens the streetscape. The horizontal bands of greenery break down the perceived bulk and scale of the overall building.

8.2 Compliance Schedule
Summary

Compliance with NSW Apartment Design Guide

Summary of Compliance with the NSW Apartment Design Guide

Objectives and Design Criteria	Consistent
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Part 2 Developing the controls

2E Building Depth	MAX building depth is 20.9m on the residential levels from glass to glass, with most through apartment depths ranging from 15.8m – 19.2m.
2F Building Separation	✓ 18.5m Plaza Width – GF and level 1 33.8m Plaza to 183-185 Military Road 9m Eastern Boundary setback above podium to 9-11 Rangers Road

Part 3 Siting the Development

3D Communal and Public Open Space

Objective An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.	✓
Design Criteria Communal open space has a minimum area equal to 25% of the site.	✓ 1,020m2 Public Plaza at Ground Floor 268m2 Communal Open Space (Roof Level 7) TOTAL = 1,288m2 / 30.6% (4,207m2 Site Area)

Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter).	✓ As demonstrated by the plaza shadow diagrams, the communal spaces achieve a minimum of 2 hours of direct sunlight.
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3E Deep Soil Zones

Objective Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.	x No Deep Soil proposed, above slab planting is provided in the Plaza. Per the Military Road Corridor Planning Study (refer 'detailed design consideration, Figure 77 – underground parking), the supermarket is below ground to allow for the creation of the new Public Plaza.
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Design Criteria			x
Deep soil zones are to meet the following minimum requirements:			No Deep Soil proposed to allow basement supermarket and basement carpark.
Site Area	Minimum Dimensions	Deep Soil Zone (% of site area)	
Less than 650m ²	-	7%	
650m ² – 1,500m ²	3m		
Greater than 1,500m ²	6m		
Greater than 1,500m ² with significant existing tree cover	6m		

Compliance with NSW Apartment Design Guide

3F Visual Privacy			
Objective Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.			✓
Design Criteria Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:			✓
Building Height	Habitable rooms and balconies	Non-habitable rooms	The scheme is consistent with ADG minimum separation distances for visual privacy.
Up to 12m (4 storeys)	6m	3m	
Up to 25m (5-8 storeys)	9m	4.5m	
Over 25m (9+ storeys)	12m	6m	

3J Bicycle and Car Parking

Objective Car Parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.	✓
Design Criteria For development in the following locations: <ul style="list-style-type: none">on sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; oron land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre	✓ Car parking spaces are provided in accordance with the DCP, with additional Retail and Pubic parking provided for community benefit and use.
The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street.	

Part 4 Designing the Buildings

4A Solar and Daylight access

Objective To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.	✓
Design Criteria 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.	✓ A total of 71 of 91units (being 78% of total units) receive direct sunlight for a minimum of 2 hours.
A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter.	✓ A total of 14 of 91units receive no solar (being 15% of total units)

4B Natural Ventilation

Objective The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.	✓
Design Criteria At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.	✓ 64%, which is 58 of 91 units can be cross-ventilated.
Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	Non habitable spaces in the centre of the floorplate reduces the depth of habitable rooms to MAX 8m. Ranges 15.8m – 19.2m.

8.2 Compliance Schedule
Summary

Compliance with NSW Apartment Design Guide

4C Ceiling Height	✓
Objective Ceiling height achieves sufficient natural ventilation and daylight access.	✓
Design Criteria Measured from finished floor level to finished ceiling level, minimum ceiling heights are:	✓ Ceiling heights for residential units on all levels achieve 2.7m minimum for habitable rooms (based on Floor to Floor Heights: Residential Levels : 3.1m Level 1-3 Commercial + Resi : 4.4m
Minimum ceiling height	
Habitable rooms	2.7m
Non-habitable	2.4m
For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area
Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use
These minimums do not preclude higher ceilings if desired.	

4D Apartment Size and Layout

Objective The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	✓
Design Criteria Apartments are required to have the following minimum internal areas:	✓ The proposal provides a mix of one, two and three bed units. Each unit type is designed to comply with the minimum internal area requirements under this part.
Apartment Type	Minimum internal area
Studio	35m ²
1 bedroom	50m ²
2 bedroom	70m ²
3 bedroom	90m ²
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each.	1BEDS – 65m2 to 88m2 2BEDS – 88m2 to 145m2 3BEDS+ - 104m2 to 398m2
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m ² each.	
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.	✓ All habitable rooms are provided with a window opening for natural daylight and air.

Objective Environmental performance of the apartment is maximised.	✓
Design Criteria Habitable room depths are limited to a maximum of 2.5 x the ceiling height.	Subject to detailed design layouts, all room depths will be limited to 8m.
In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.	Habitable room depths will be limited to 8m.

Objective Apartment layouts are designed to accommodate a variety of household activities and needs.	✓
Design Criteria Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space).	✓
Bedrooms have a minimum dimension of 3m (excluding wardrobe space).	✓
Living rooms or combined living/dining rooms have a minimum width of: <ul style="list-style-type: none">3.6m for studio and 1 bedroom apartments4m for 2 and 3 bedroom apartments.	✓ All apartment party walls have been designed to meet minimum apartment widths
The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.	✓ Minimum 4.4m wide for 2BEDS

Compliance with NSW Apartment Design Guide

4E Private Open Space and Balconies			
Objectives			✓
Apartments provide appropriately sized private open space and balconies to enhance residential amenity.			
Design Criteria			✓
All apartments are required to have primary balconies as follows:			Balconies are designed in accordance with this requirement.
Dwelling Type	Minimum Area	Minimum depth	
Studio apartment	4m²	-	
1 bedroom apartment	8m²	2m	
2 bedroom apartment	10m²	2m	
3+ bedroom apartment	12m²	2.4m	
The minimum balcony depth to be counted as contributing to the balcony area is 1m.			

4F Common Circulation and Spaces

Objective Common circulation spaces achieve good amenity and properly service the number of apartments.	✓ 3 Residential Cores provided
Design Criteria The maximum number of apartments off a circulation core on a single level is eight.	✓ MAX 8units for single core
	✓ Breaks within the building form are provided to ensure natural daylight to all residential lobbies.

For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	✓ 6 lifts serve 91 units
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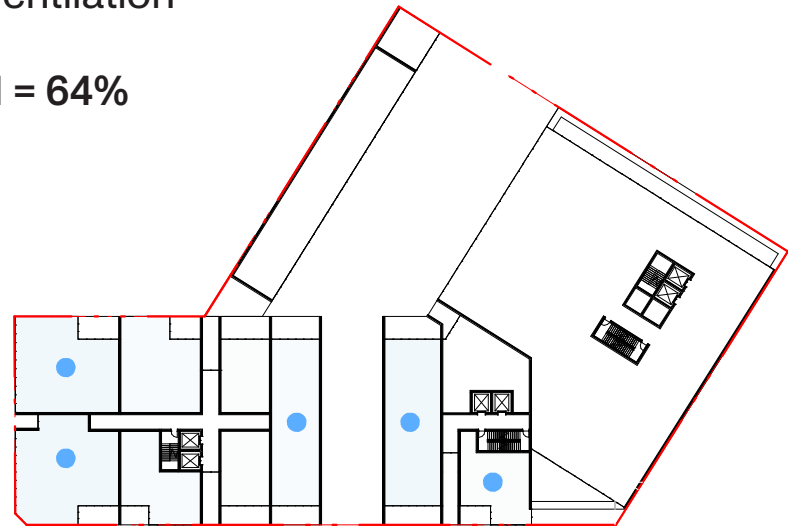
4G Storage

Objective Adequate, well designed storage is provided in each apartment.	✓
Design Criteria In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	✓
Dwelling Type	Minimum Volume
Studio apartment	4m ³
1 bedroom apartment	6m ³
2 bedroom apartment	8m ³
3+ bedroom apartment	10m ³
At least 50% of the required storage is to be located within the apartment.	

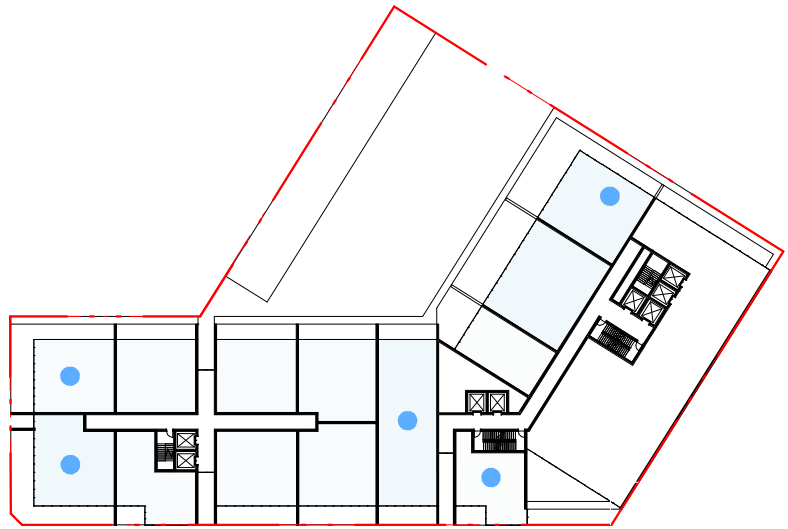
8.3 Key Compliance Diagrams

Cross Ventilation

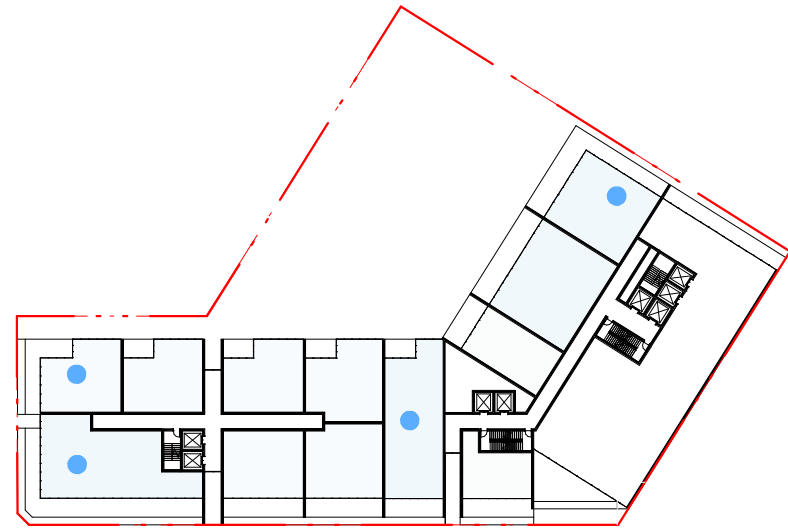
58 of 91 = 64%



CROSS VENTILATION - LEVEL 01 (5/9)



CROSS VENTILATION - LEVEL 02 (5/13)



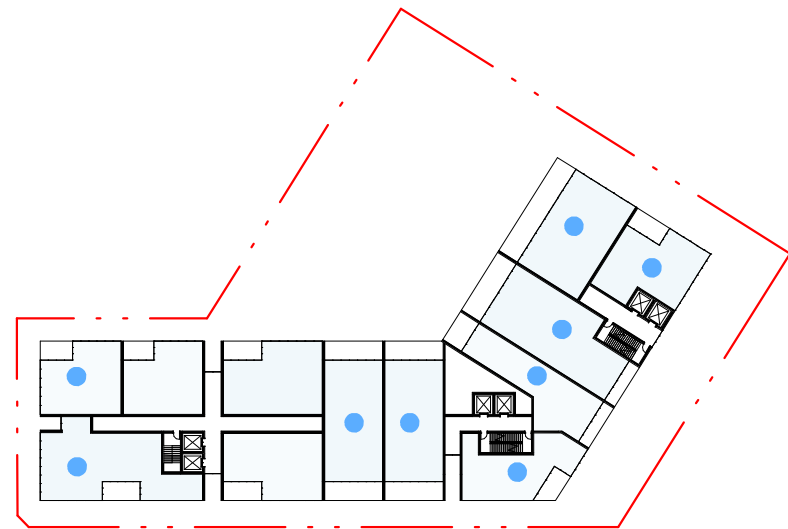
CROSS VENTILATION - LEVEL 03 (4/12)



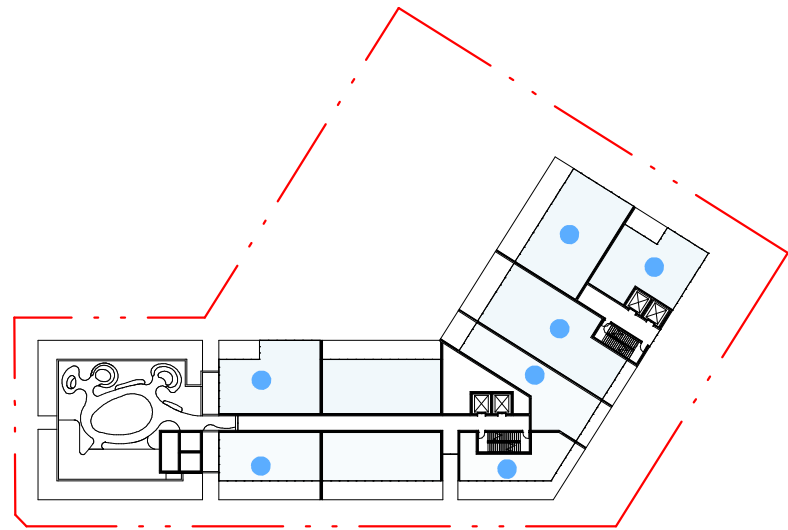
CROSS VENTILATION - LEVEL 04 (8/13)



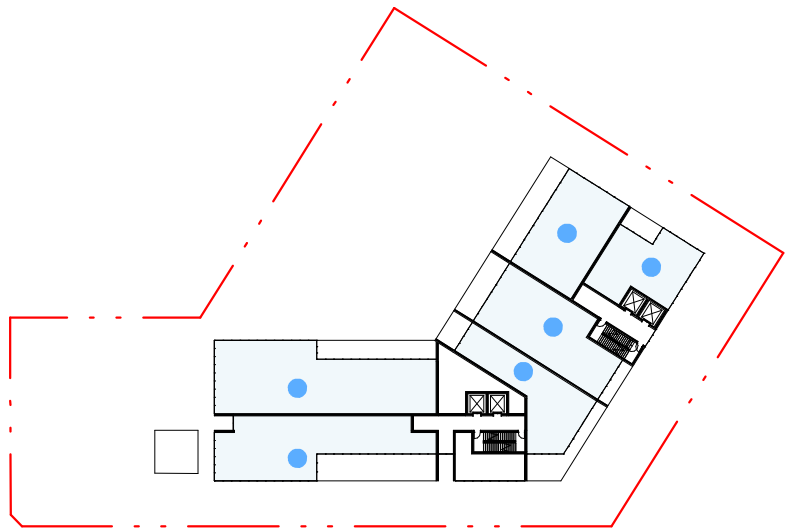
CROSS VENTILATION - LEVEL 05 (9/12)



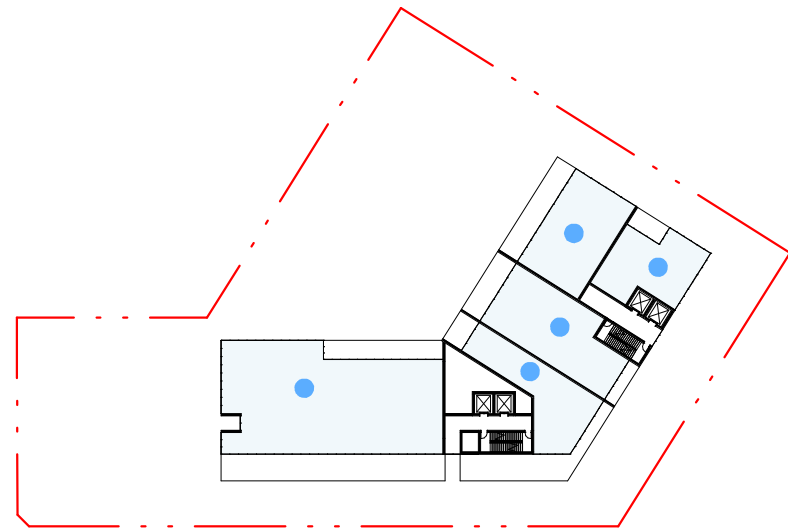
CROSS VENTILATION - LEVEL 06 (9/12)



CROSS VENTILATION - LEVEL 07 (7/9)



CROSS VENTILATION - LEVEL 08 (6/6)

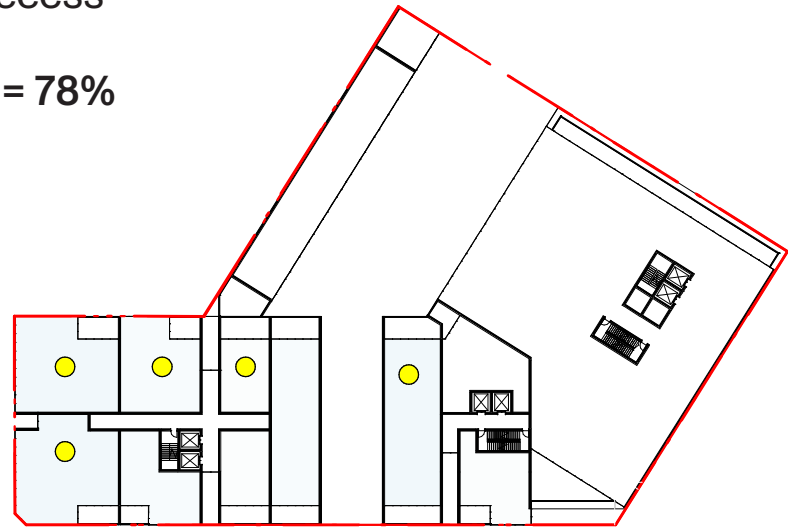


CROSS VENTILATION - LEVEL 09 (5/5)

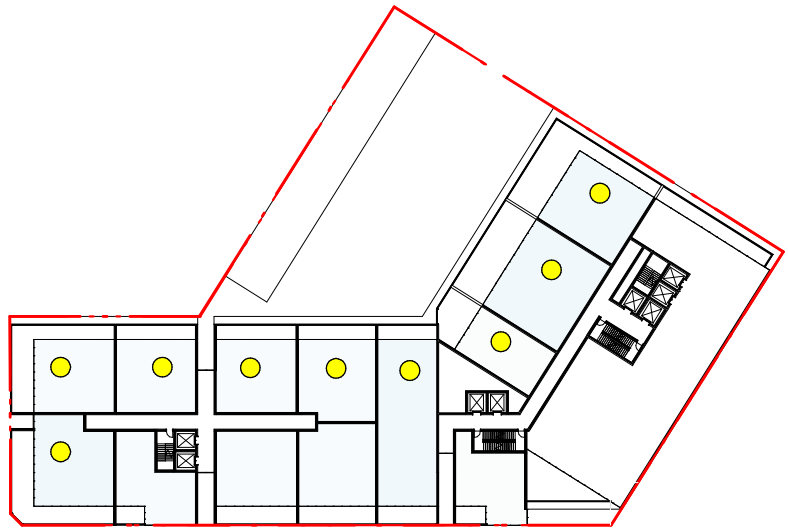
8.3 Key Compliance Diagrams

Solar Access

71 of 91 = 78%



SOLAR ACCESS - LEVEL 01 (5/9)



SOLAR ACCESS - LEVEL 02 (9/13)



SOLAR ACCESS - LEVEL 03 (9/12)



SOLAR ACCESS - LEVEL 04 (10/13)



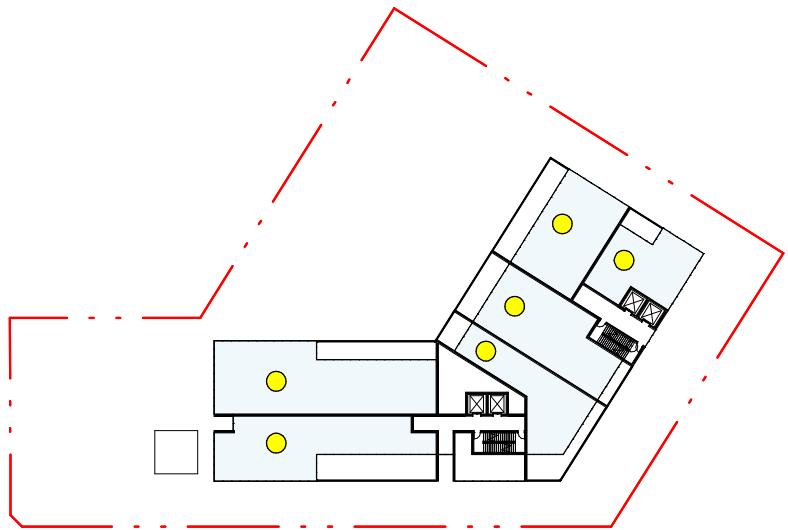
SOLAR ACCESS - LEVEL 05 (10/12)



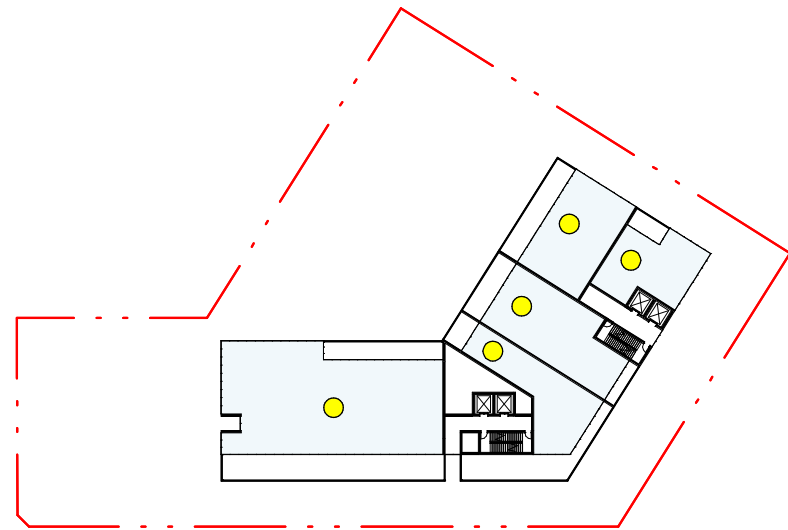
SOLAR ACCESS - LEVEL 06 (10/12)



SOLAR ACCESS - LEVEL 07 (7/9)



SOLAR ACCESS - LEVEL 08 (6/6)



SOLAR ACCESS - LEVEL 09 (5/5)

Sustainability

9.0

9.1 Sustainability Principles
Introduction

Buildings are responsible for around 40% of greenhouse gas emissions in the world. Our aim is to first stop negatively impacting the environment and depleting the planet's resources. Secondly, we must look at ways of reversing the picture. This could be achieved by regenerative architecture, carbon positive buildings, reusing materials, and harnessing the latest technology. These are just a few points of our strategies for positive impact.

Our strategy for positive impact is to address the project from 3 aspects: **Planet – People – Profit**

Planet: Being kinder to the environment by reducing greenhouse gas emissions resulting from 'Making' the building and 'Using' the building. The emissions associated with 'Making' the building are the embodied carbon in the construction materials. While the emissions associated with 'Using' the building are the result of the amount of energy consumed and the source of energy to the building.

People: Our ultimate measure of success is to create healthy spaces where people work, live and play. The health and wellbeing of users is now our priority more than ever. On average, people spend 90 percent of their time indoors during their lifetime. The design of the project and how we use it has wide-ranging health effects, from influencing our levels of physical activity, to how much natural light we receive and the quality of our air.

Profit: Healthy and responsible buildings are profitable to the owner, developer and the end users. This is achieved by using renewable energy source, robust materials and reducing the reliance on mechanical means.



Carbon Neutral Ready

PLANET



Biophilic Design

PEOPLE



Carbon Neutral Ready

PROFIT



9.2 Sustainability Diagram

ESD Initiatives



Water Collection from roof for recycling and re-use on gardens

Corner Apartments maximise Cross Ventilation and access to Daylight

Solar Panels on Green Roofs- Mitigate heat island effect

Public amenities - Create a community and maximise the residents' and visitors' experience.

Facade Slots allow natural light and ventilation to Lift Lobbies and Corridors

Green Facade - Natural air purifiers and overall cooling effect for the site

Biophilic Design

Retail Awning for shade and protection for year round use

Modular structure - Efficient material use, waste reduction during construction

Sustainable Materials reduce embodied carbon emissions

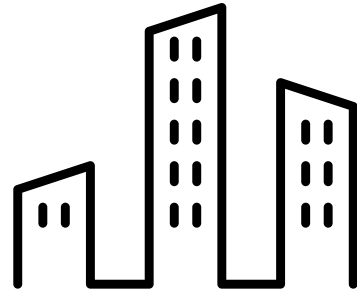
The Public Plaza provides a through-site link for pedestrians, with access to Bicycle Parking

Water Collection

9.3 Sustainability Principles

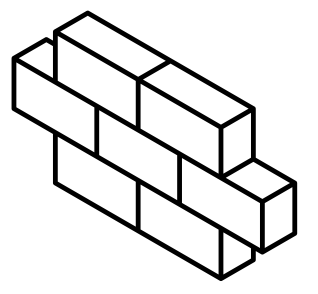
Environmental Sustainability

Environmental Sustainability - With a goal of marrying efficiency and experience while creating an iconic project, the proposed design situates the building to provide ample natural light and ocean views while managing heat gain in a sub-tropical climate. The building geometry and recessive glazing lines reduce direct solar gain. The sun hood projection across floors shades outdoor areas from full strength sun and encourages year round use of these spaces.



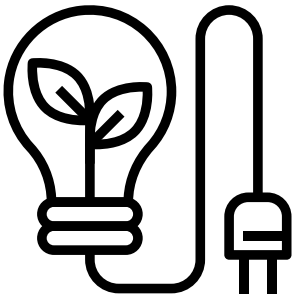
FORM

- Proportion
- Orientation
- Glazing
- Shading



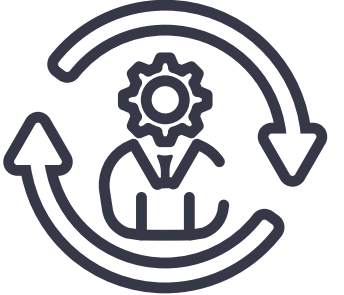
MATERIALS

- Low embodied carbon
- Reused/recycled
- Recyclable
- Life Cycle Assessment



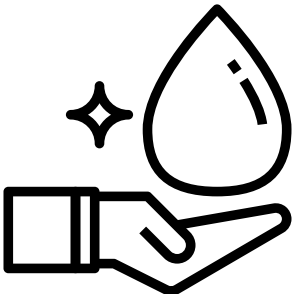
ENERGY

- Reduce - Generate - Store - Offset
- Fossil fuel free building



ADAPTATION

The ability to gracefully re-adapt the building for future uses and increase its resilience to the climate shift in its lifetime



WATER

- Low flow fittings
- Rainwater harvesting



TECHNOLOGY

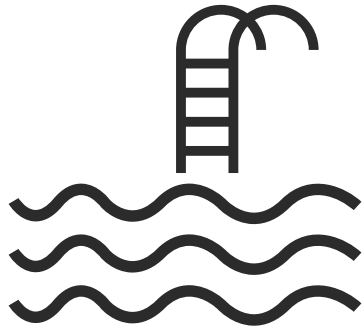
Operational Performance - to increase efficiency, responsiveness and user control
Human Experience - to enhance wellbeing, productivity and comfort

9.3 Sustainability Principles
Social Sustainability

Social Sustainability - People spend more than 90 percent of their time indoors. The building design has wide ranging health effects, from influencing the users' level of physical activity, to how much natural light we receive and the quality of our air. Shared amenities like wellness facilities rooftop pool, lounges and gym provide opportunities to build a community.



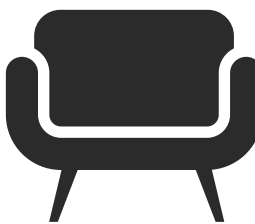
WELLNESS FACILITIES



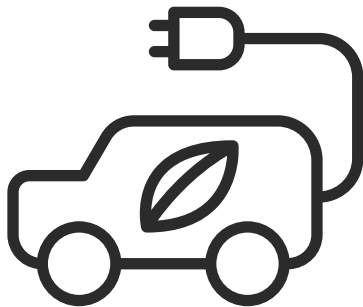
POOL



GYM



RESIDENTIAL LOUNGE



GREEN TRANSPORT



BIOPHILIC DESIGN

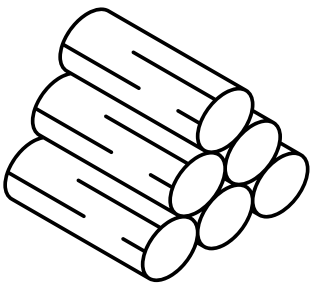


CREATING A COMMUNITY

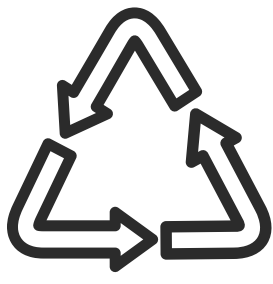


9.3 Sustainability Principles
Economic Sustainability

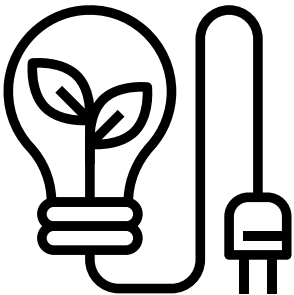
Economic Sustainability - The economic value of green buildings include cost savings on utility bills for tenants or households - through energy and water efficiency, lower construction costs and higher property value for building developers; increased occupancy rates or operating costs for building owners; and job creation. Some local councils offer 50% rebate on the infrastructure Charges for green buildings and future buyers can benefit from discounted interest rate on home financing through green home loans.



ROBUST MATERIALS
Low maintenance construction materials to minimise life cycle cost



MATERIALS
Reused/recycled materials

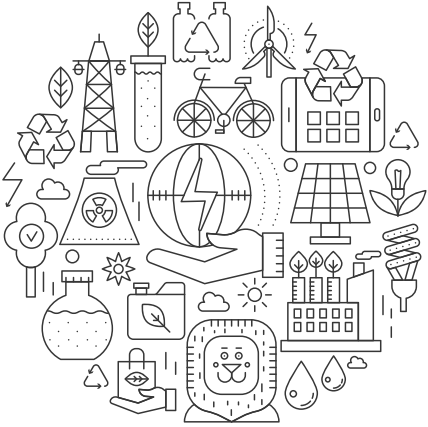


LOW ENERGY BUILDING
Minimises running cost on operations



INCENTIVES

- Government Green Building Incentives - Clean Energy Fund
- Green home loans



RESILIENCE
Future proofing the asset



Healthy, Resilient, Green

Woolworths Supermarket - 5-Star Green Star

**Responsible**
Recognises activities that ensure the building is designed, procured, built and handed over in a responsible manner.

**Places**
Supports the creation of safe, enjoyable, integrated and comfortable places.

**Healthy**
Promotes actions and solutions that improve the physical and mental health of occupants.

**People**
Encourages solutions that address the social health of the community.

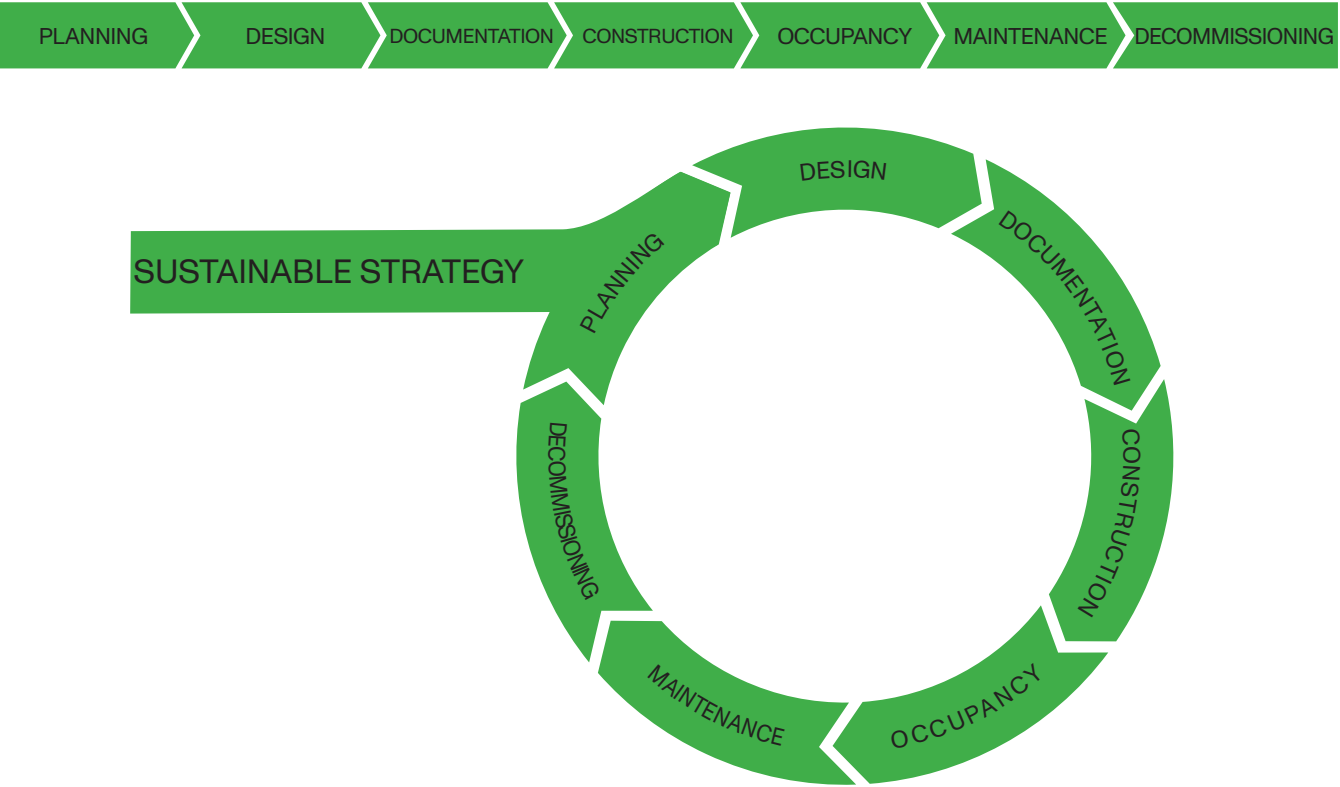
**Resilient**
Encourages solutions that address the capacity of the building to bounce back from short-term shocks and long-term stresses

**Nature**
Encourages active connections between people and nature and rewards creating biodiverse green spaces in cities.

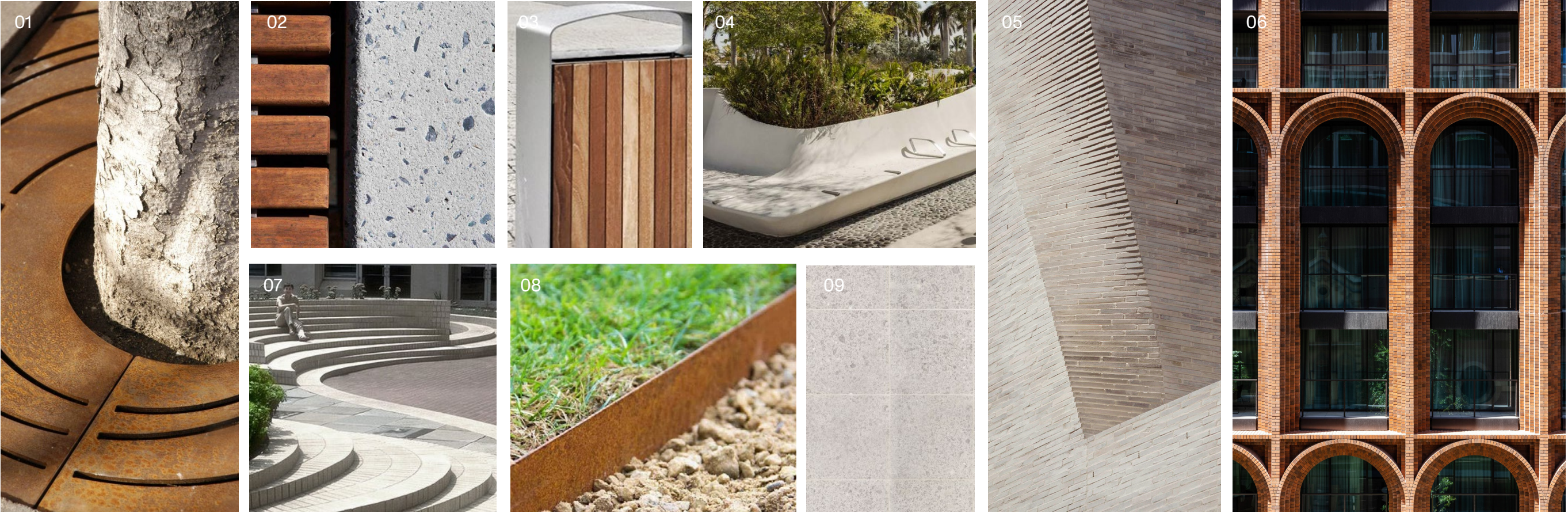
**Positive**
Encourages a positive contribution to key environmental issues of carbon, water and the impact of materials.

**Leadership**
Recognises projects that set a strategic direction, build a vision for industry or enhance the industry's capacity to innovate.

Every phase of a project is an opportunity to make a difference



9.5 Material Palette
Reference Materials



01: Reference Image - Landscape details to tree base

02: Reference Image - Timber and Concrete

03: Reference Image - Integrated street furniture

04: Reference Image - Integrated Planting

05: Reference Image - Light Coloured Brickwork

06: Reference Image - Arc by Crown Brick Facade details

07: Reference Image - Curved steps and seating

08: Reference Image - Landscape edge detail

09: Reference Image - Light coloured concrete