

A photograph of a suburban street scene. In the foreground, there's a grassy area with a concrete curb and a set of concrete steps leading up to a higher level. Several trees with green foliage are scattered throughout the scene, some casting shadows on the grass. In the background, a modern, two-story building with large windows is visible, along with a white delivery truck and several cars parked or driving on the road. The sky is clear and blue.

241 Pennant Hills Rd Carlingford

Urban Design Report

22 December 2015

Prepared for Triple Eight Pty Ltd

Contents

1.0	Introduction and Planning Context	3	5.0	Recommendations	47
1.1	Introduction and site location	4	5.1	Recommendations for key LEP controls	48
1.2	Planning strategies	5			
1.3	Key current LEP controls	7			
1.4	Proposed changes to SP2 land within site	10			
2.0	Site and Context Analysis	11			
2.1	Carlingford Centre	12			
2.2	Site Photos	17			
2.3	Local connections	20			
2.4	Opportunities	21			
2.5	Challenges	22			
3.0	Development options	23			
3.1	Introduction and plan form options	24			
3.2	Height and FSR scenarios	26			
3.3	Summary of Options Testing	33			
4.0	Proposed master plan	35			
4.1	Overview	36			
4.2	Built Form and Setbacks	39			
4.3	Illustrative Floor Plans	40			
4.4	Height transition to surrounding properties	42			
4.5	Solar Access Testing - Proposed Development	43			
4.6	Solar Access Testing - Surrounding Development	44			
4.7	Summary of key benefits	46			

Architectus Group Pty Ltd
ABN 90 131 245 684

Nominated Architect
Managing Director Sydney
Ray Brown
NSWARB 6359

Architectus Sydney
Level 3 341 George Street
Sydney NSW 2000
Australia
T +61 2 8252 8400
F +61 2 8252 8600
sydney@architectus.com.au

Architectus Melbourne
Level 7 250 Victoria Parade
East Melbourne VIC 3002
Australia
T +61 3 9429 5733
F +61 3 9429 8480
melbourne@architectus.com.au
Managing Director Melbourne
Mark Wilde

www.architectus.com.au

1.0 Introduction and Planning Context

1.1 Introduction and site location

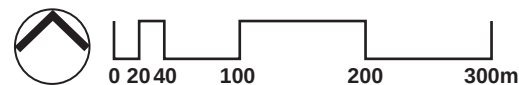
Purpose of this Report

Architectus has been engaged by Triple Eight Pty Ltd to provide an urban design investigation of the site at 241 Pennant Hills Road in light of the changing context of Carlingford including recent development proposals nearby.

This document includes planning context, site and context analysis, preliminary design options and a proposed master plan for the site towards the submission of a Planning Proposal for modification of the Hills Shire LEP.

Site Location

The site is located at 241 Pennant Hills Road. It is approximately 6,330sqm in area.



Site Location

1.2 Planning strategies

A Plan for growing Sydney

The Plan for Growing Sydney is NSW Governments strategy for providing a framework for Sydney’s growth and will guide land use for the next 20 years. The strategy was released by the NSW government in 2014. The key applicable Actions of this strategy are:

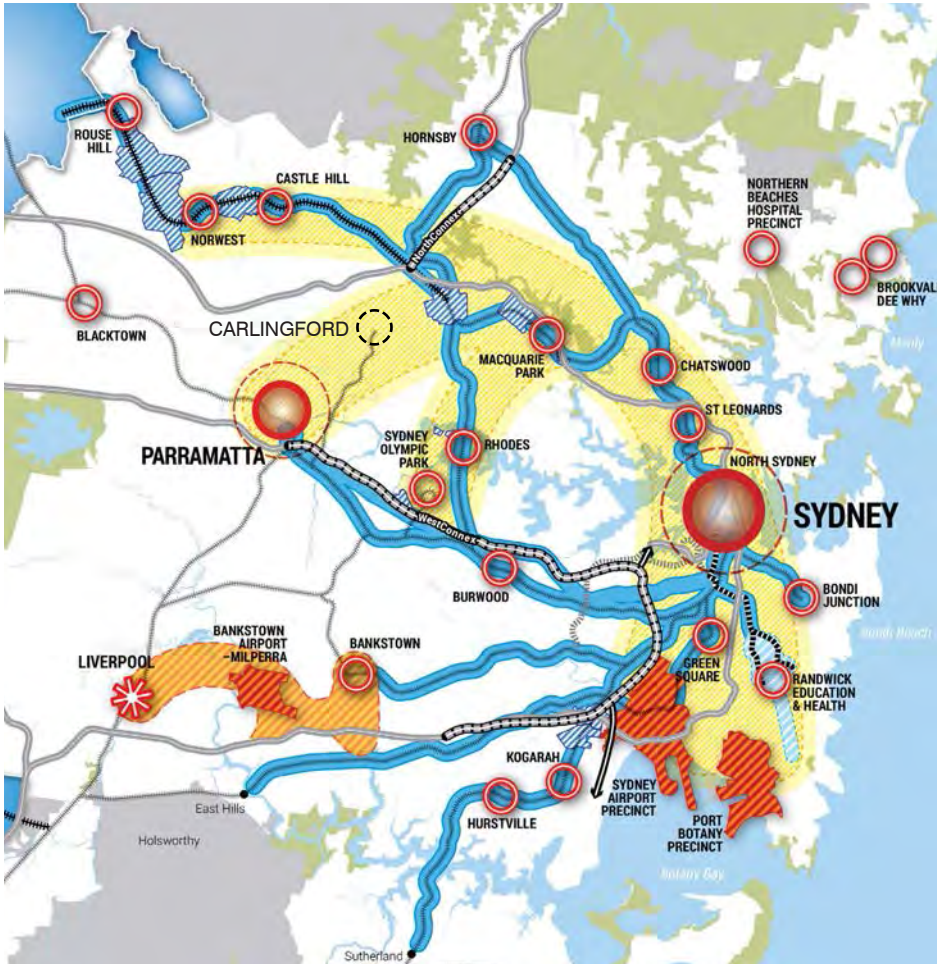
Goal 1: A competitive economy with world class services and transport

- Enhancing connectivity between Parramatta and Macquarie Park. This could be actioned through a light rail link via Carlingford (Action 1.2.2)
- Carlingford is located within the Global Economic Corridor, an area of intensive economic activity connecting the CBD’s of Parramatta and Central Sydney.

Goal 2: A city of housing choice

- The plan will look into making public transport more viable between Parramatta and Macquarie Park by targeting housing within the corridor. (Action 2.2.2)
- A priority for the West Central Subregion is to identify suitable locations for housing and employment, accelerate housing supply choice and affordability along he Carlingford Rail Line (pp114)

The subject site, located in close proximity to Carlingford Railway Station, and being a large single land holding, provides an ideal opportunity to support the growth of Carlingford in accordance with the Plan for Growing Sydney objectives.



Carlingford (location added) within the Plan for Sydney

Carlingford lies on the Global Economic Corridor between the key locations of Parramatta and the Epping Priority Precinct



Parramatta Light Rail

- At the present time The Carlingford Precinct is the only part of the Hills Shire LGA which is serviced by heavy rail.
- A Parramatta to Carlingford Light Rail link has been shortlisted as a potential link between Priority Precincts of Macquarie Park and Parramatta.
- The most recent plans available for the Parramatta Light Rail show that the line will pass through Carlingford along the alignment of the existing heavy rail line, before continuing on to Epping.

Adopted Draft Local Strategy 2008

- The adopted Draft Local Strategy lists Carlingford as a potential Town Centre. The strategy notes the development of high density residential development around Carlingford Station and the necessity to plan around future potential upgrades or expansion of Carlingford Station.

Hills Shire Residential Direction 2008

- The Carlingford Precinct is ideally positioned for urban renewal due to its central location within the Sydney Metropolitan area, access to public transport, age of dwelling stock and significant land holdings by developers. With higher densities the precinct is expected to yield up to 3,000 more dwellings.

Hills Shire Centres Direction 2009

- Carlingford has been identified as a Town/Neighbourhood Centre with medium to high density housing. The Direction sets out that height and FSR controls should reflect an appropriate level of density for the centre.

Hornsby Shire Council Amended Housing Strategy: Carlingford Precinct

- The strategy envisages the development of five (5) storey residential flat building development in the Hornsby portion of Carlingford. This development will be concentrated around the Carlingford Court.

Parramatta 2038 Community strategic Plan

- The Plan recognise that housing will be concentrated around transport and services centres, including Carlingford, which are best placed to support local population growth.

1.3 Key current LEP controls

The site is within The Hills Local Government Area. The Parramatta Local Government Area is immediately to the south of the site across Pennant Hills Road.

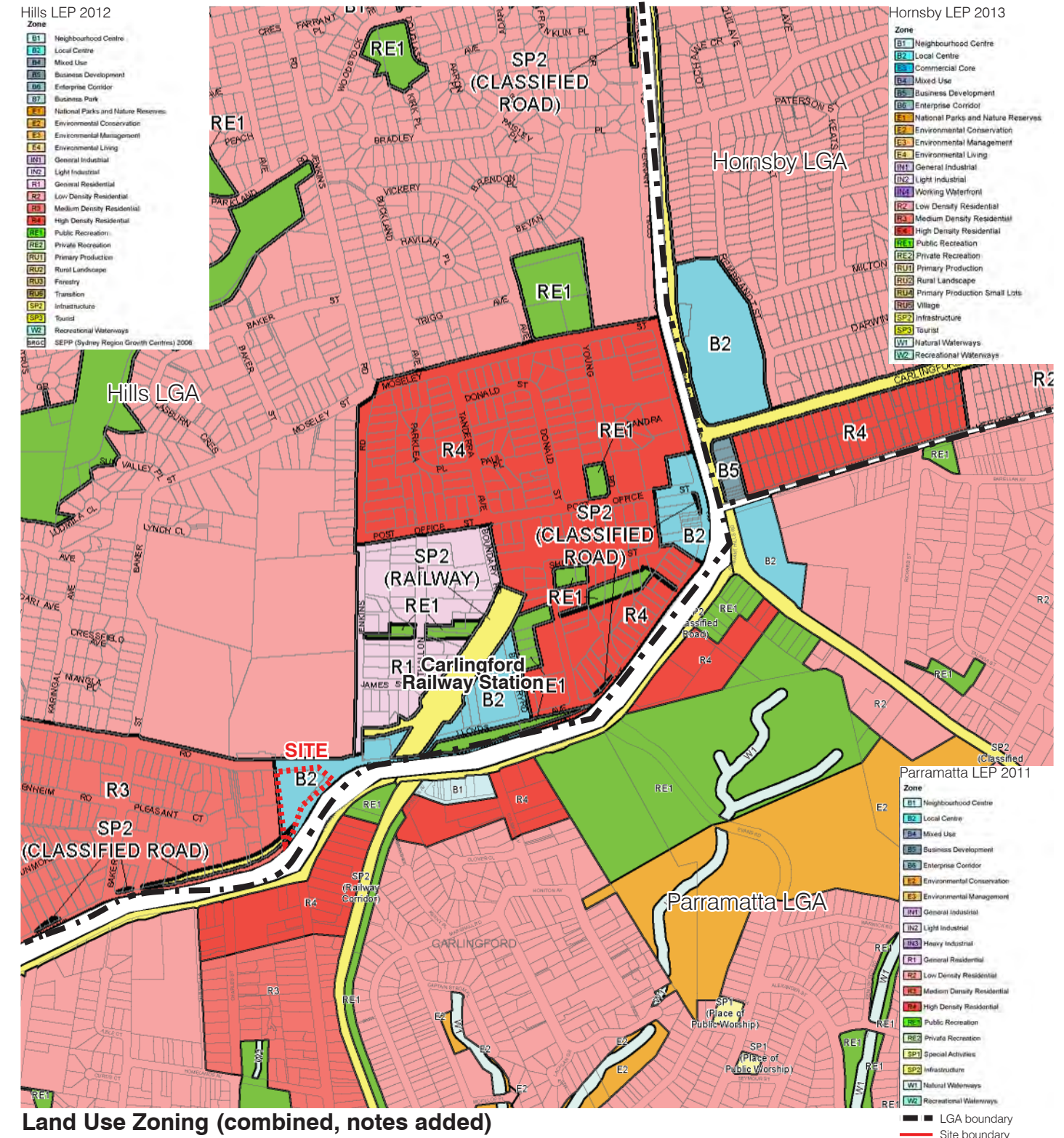
The site is currently subject to the following key LEP controls:

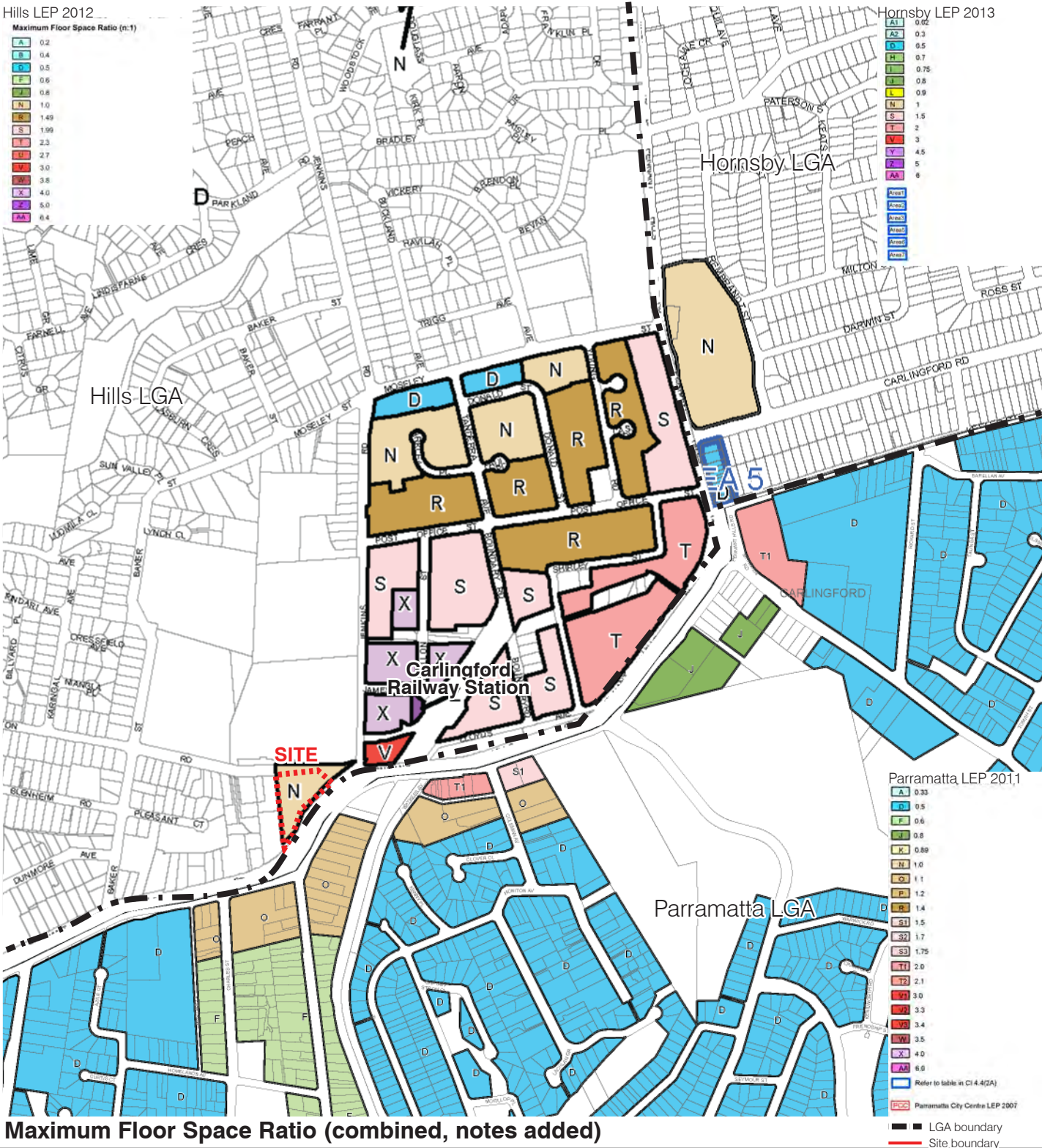
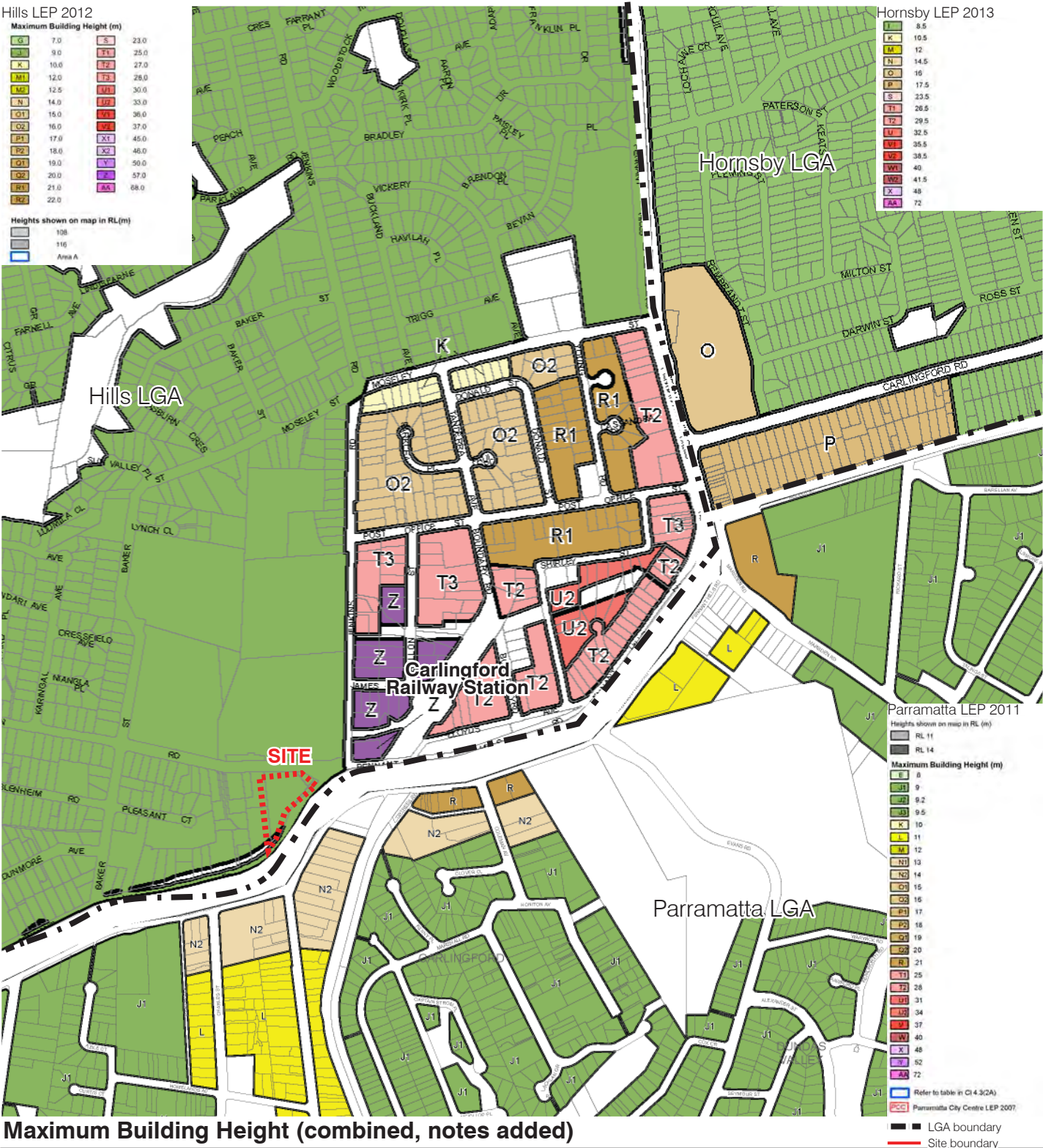
- B2 'Local Centre' zone (with a small area of SP2 zone for road widening)
- 9 metres maximum building height
- 1.0:1 maximum floor space ratio

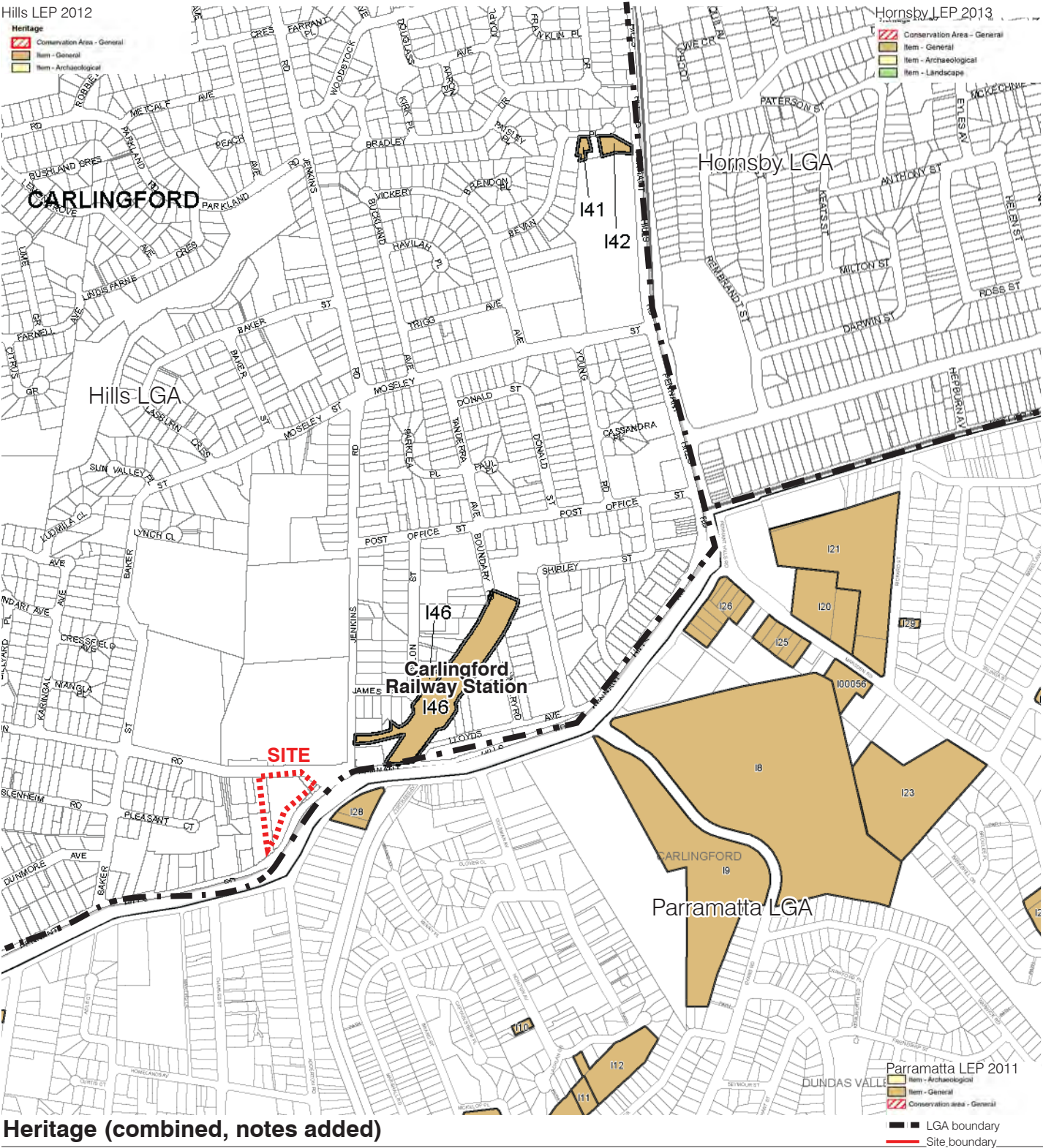
Within the context of the site:

- To the northeast is a large area of land zoned for significant development (57 metres in height, with floor space ratios of between 3:1 and 5:1).
- To the southeast is land within the Parramatta LGA zoned for 14 metres in height with floor space ratios of 1.1:1
- To the west of the site is a medium density residential zone (permitting multi-dwelling housing such as townhouses) with a maximum permitted building height of 9 metres.

The nearest heritage item to the site is the K13 submarine memorial park opposite the site to the east of Pennant Hills Road (Parramatta LGA). The Carlingford Railway Station further to the northeast is also a listed heritage item.







1.4 Proposed changes to SP2 land within site

The site includes an area of SP2 'classified road'.

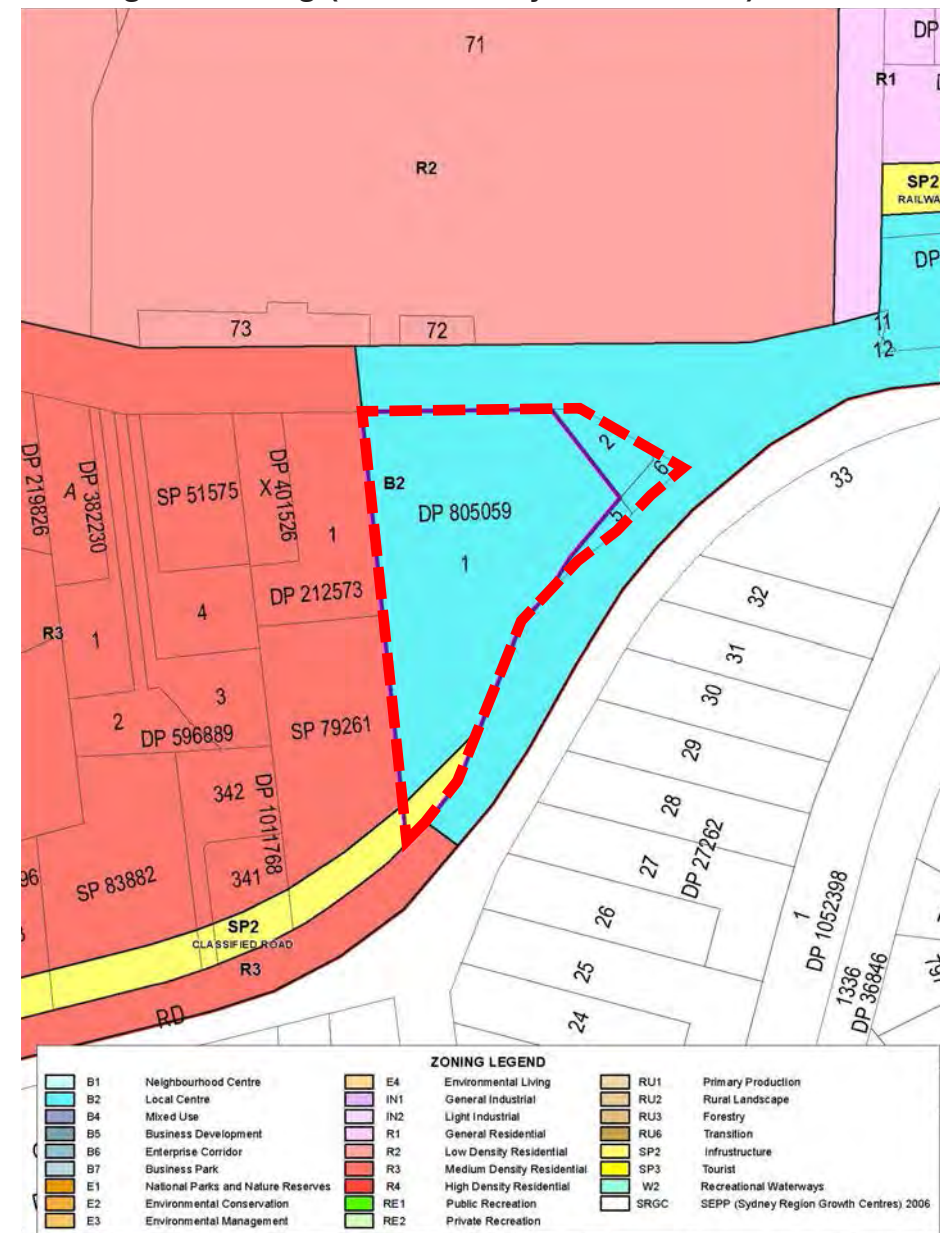
A planning proposal is currently seeking to modify the areas of SP2 zoning. This planning proposal (PP_2014_THILL_004_00 "The Hills LEP 2012 - Second Housekeeping Amendment - Review of Classified Road Widening for Roads and Maritime Services") has been approved at Gateway (26/08/2014) and is with the RPA for implementation.

The current zoning includes an area to the south of the site as SP2, while the proposed zoning reduces this slightly however adds a further SP2 area to the northeast of the site.

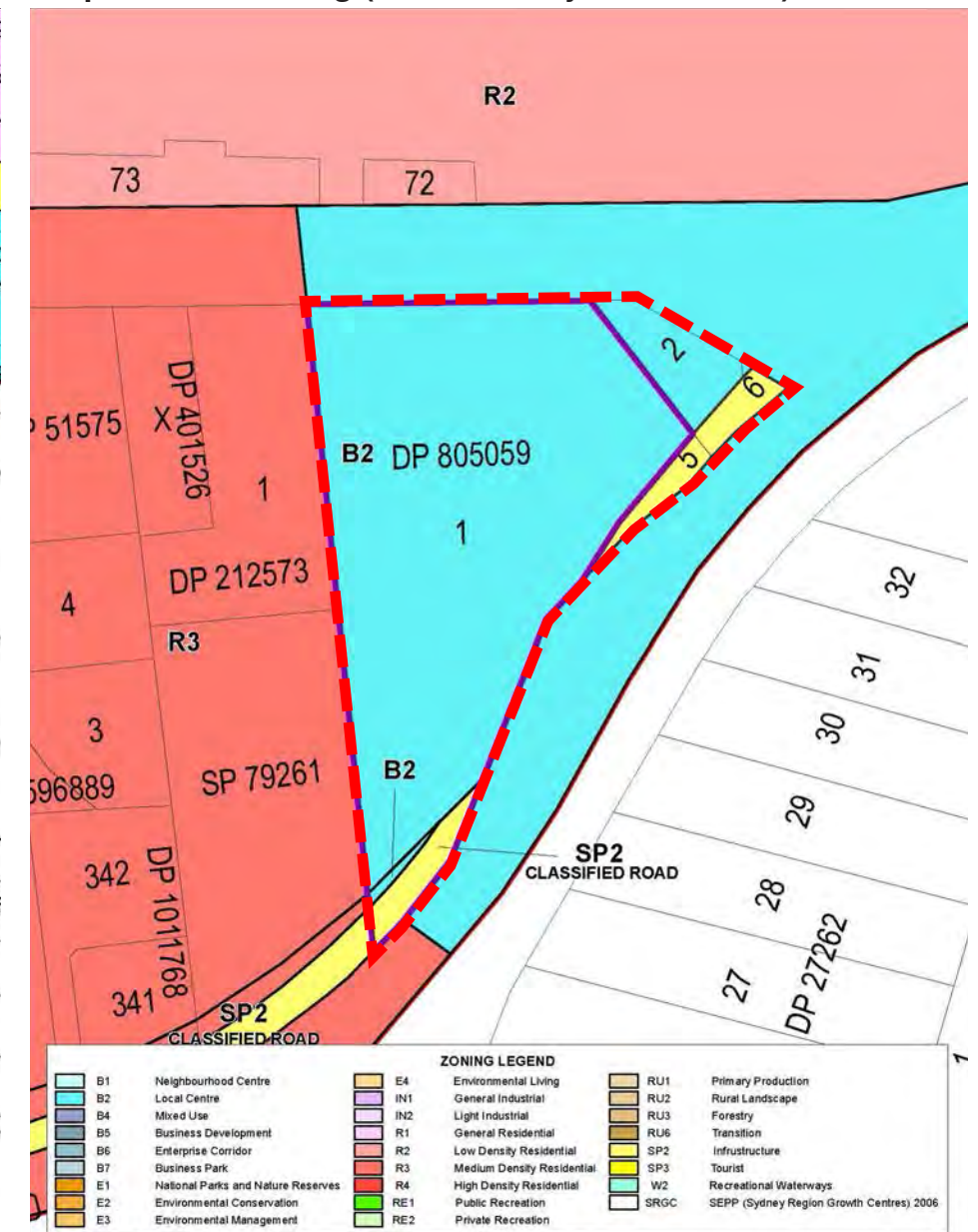
This provides three site areas for the site:

- Site Area (including SP2 land): 6330 m²
- Site Area (excluding SP2 land) - current zoning: 6097m²
- Site Area (excluding SP2 land) - proposed zoning: 5846 m²

Existing site zoning (site boundary added in red)



Proposed site zoning (site boundary added in red)

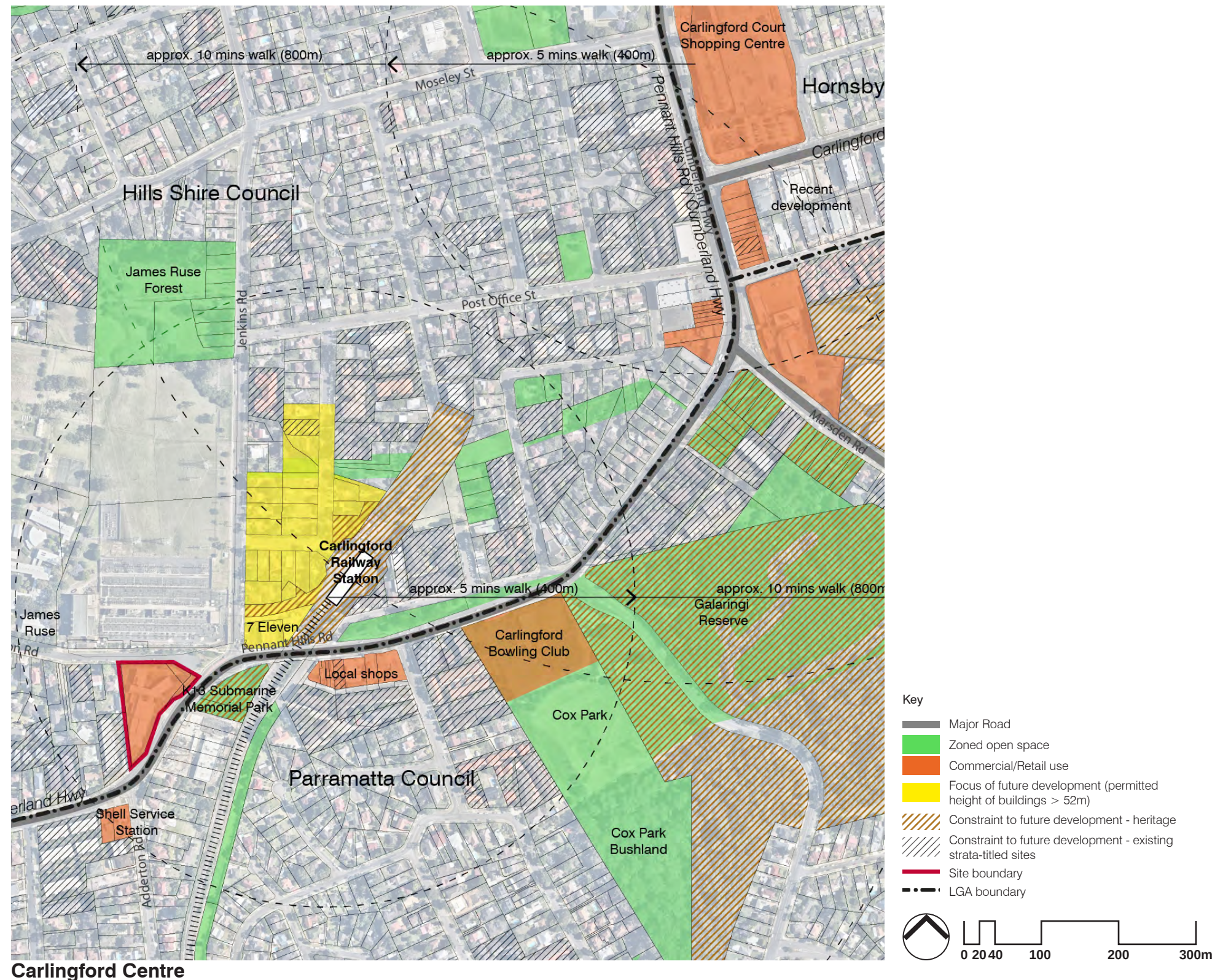


2.0 Site and Context Analysis

2.1 Carlingford Centre

Structure of the Centre

- Carlingford as a centre is split between three Local Government Areas - the Hills, Parramatta and Hornsby.
- Carlingford is spread out and broadly has two focal points:
 - One focal point is close to the site, which includes the Carlingford Railway Station, local shops and facilities as well as the focus of future planned development
 - The other focal point is approximately 800m/10 minutes walk to the northeast and includes Carlingford Court (the largest shopping centre in Carlingford) as well as other shops and facilities.
- Much of the existing centre is constrained in its future development potential by heritage and existing strata buildings. The site is one of the largest sites not affected by strata and heritage constraints and should be considered for its potential to contribute to the future Carlingford.
- The site is located in the southwest of the Carlingford Town Centre, within walking distance of the station, local shops and parks.



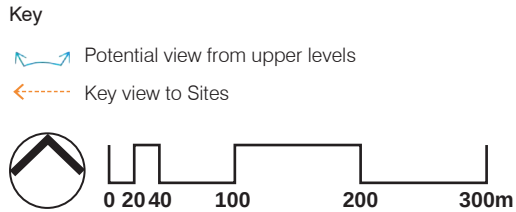
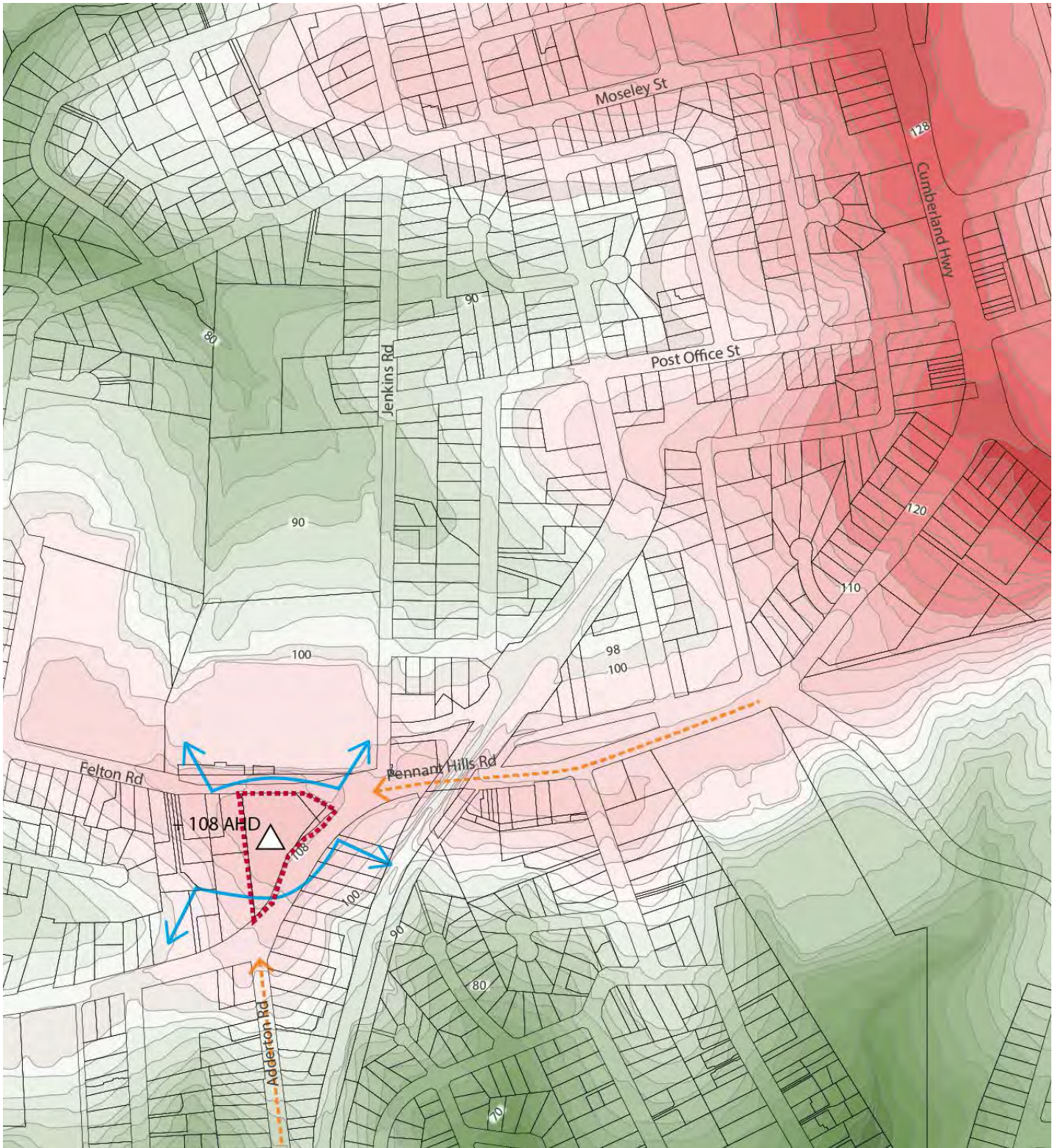
Carlingford Centre

Topography and Views

- The site is located at a high point on a topographic spur.
- From above a height of around 3-4 storeys, there is the potential to enjoy panoramic metropolitan views from the Sydney CBD to Parramatta and the Blue Mountains in a southern direction and district views in a northerly direction.

Key views of the site with the local context include:

- A view of the site from eastern vantage points along Pennant Hills Road.
- The southern tip of the site will be prominent in views along Adderton road from the south.



Topography and views

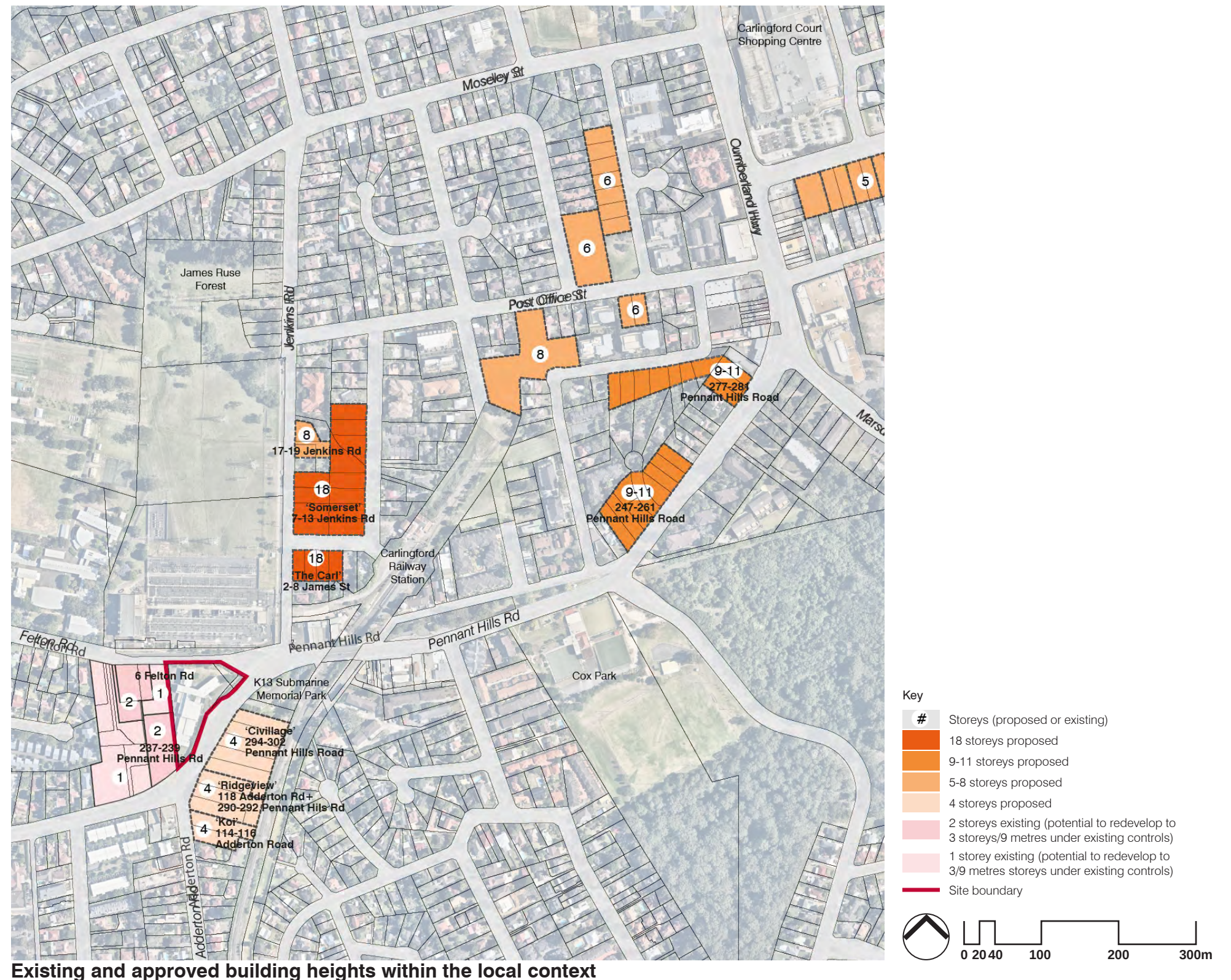
Building Heights

There are currently many sites coming forward for development within Carlingford, ranging from lodged development applications through to buildings under construction. These include:

- 18 storey proposed developments to the north west of the site and west of Carlingford railway station
- 9-11 storey proposed developments along Pennant Hills Road and east to Carlingford railway station
- 6-8 storey proposed developments along Post Office St

Existing building heights to the south and west of the site are significantly lower. These include:

- A 4-storey development under construction opposite the study site on Pennant Hills Road and Adderton Road
- Existing 1-2 storey houses and terraced townhouses west of the study site. Note that these have the potential to redevelop to 9 metres (effectively 3-storeys) under the existing controls.



Surrounding development activity (see plan opposite for location)

‘Civillage’
294-302 Pennant Hills Road (opposite site)



Marketing image (developer website)



Site photo - under construction

‘Somerset’
7-13 Jenkins Road



Marketing image (developer website)



Marketing image (developer website)

‘The Carl’
2-8 James Street



Marketing image (developer website)

‘Ridgeview’
118 Adderton Road & 290-292 Pennant Hills Road Carlingford
(proposed)



Marketing image (developer website)

‘KOI’
114-116 Adderton Road



Marketing image (developer website)

Existing buildings adjacent
237-239 Pennant Hills Road (left) and site (right)



6 Felton Road (right) and site (left)



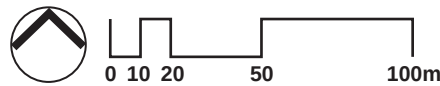
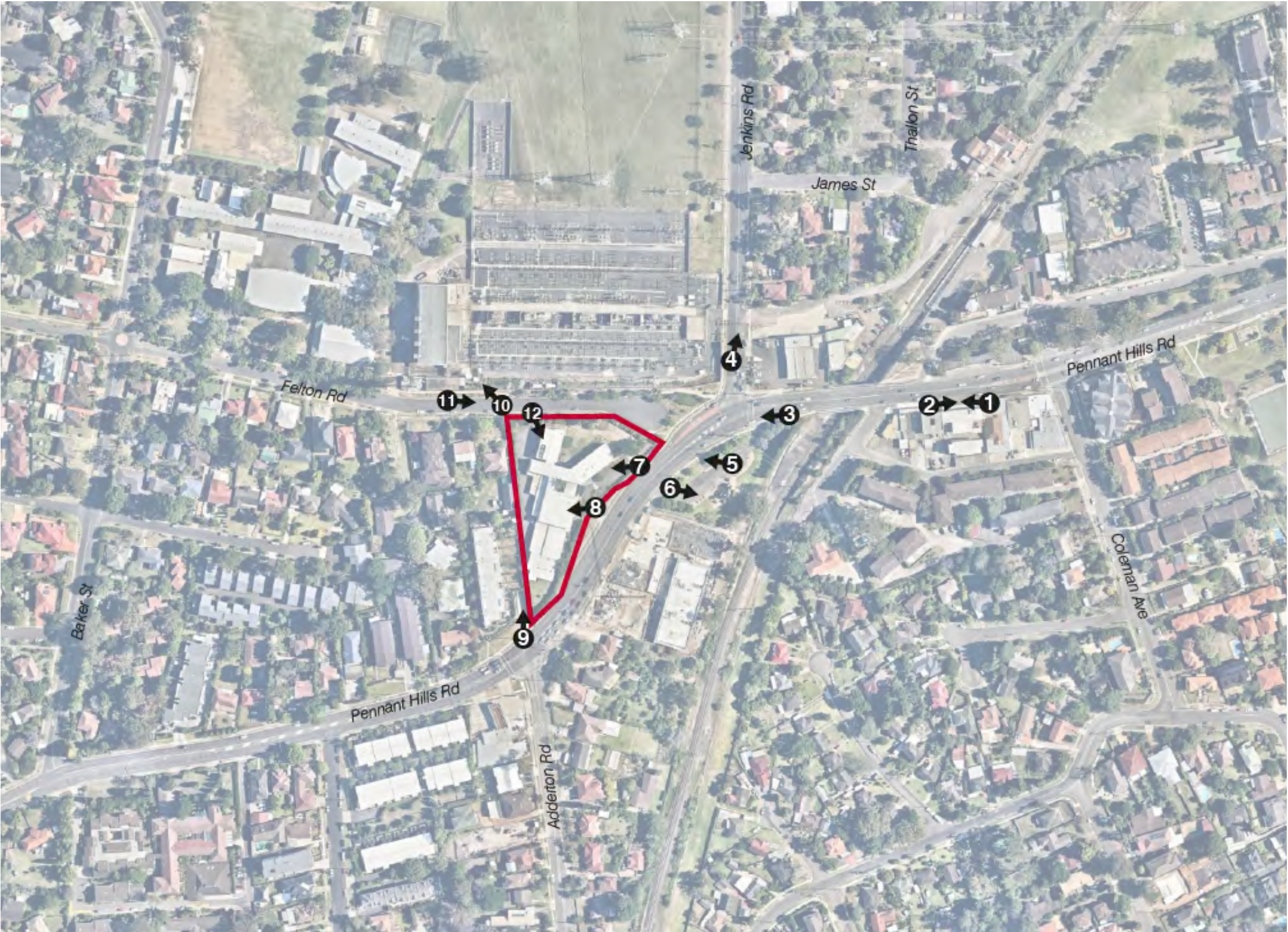
2.2 Site Photos

Photographic analysis

The following site photos show the site and its context.

Key features of the site's local context include:

- Development sites currently under construction.
- Railway station, bus stops and local shops are in walking distance to the site
- The site is prominent in views along Pennant Hills Road.
- Traffic along Pennant Hills Road can be busy. It is a consideration for building design.



Location of site photos



1 Looking west from local shops on Pennant Hills Rd



2 Looking east from local shops on Pennant Hills Rd



3 Looking west to the site on Pennant Hills Rd



4 Looking north on Jenkins Rd



5 Looking to the site from K13 Submarine Memorial Park



6 Looking to K13 Submarine Memorial Park



7 Looking to the site on Pennant Hills Rd



8 Looking to the existing building on site on Pennant Hills Rd



9 Looking to 237-239 Pennant Hills Road



10 Looking to communications tower/substation



11 Looking to east on Felton Rd



12 Looking to the site on Felton Rd

2.3 Local connections

The site is well connected to local shops and facilities. The diagram adjacent describes walking routes from the site to local facilities (including pedestrian crossings of Pennant Hills Road). The majority of these do not require extensive walks along Pennant Hills Road.

Within 5 minutes walk of the site (400m approx.) are the following::

- Key transport links including
 - Carlingford Railway Station (to Clyde and Central)
 - Local Bus Stops (546 Epping to Parramatta, 625 Pennant Hills to Parramatta, M54 Macquarie Park to Parramatta)
- Local shops and facilities including:
 - Local shops east of the railway
 - 7 Eleven (service station)
 - Coles Express (Shell service station)
 - Carlingford Bowling Club
- Parks, open spaces and community facilities including:
 - K13 Submarine Memorial Park
 - Cox Park
 - Carlingford Library and Kindergarten
 - James Ruse Agricultural High School

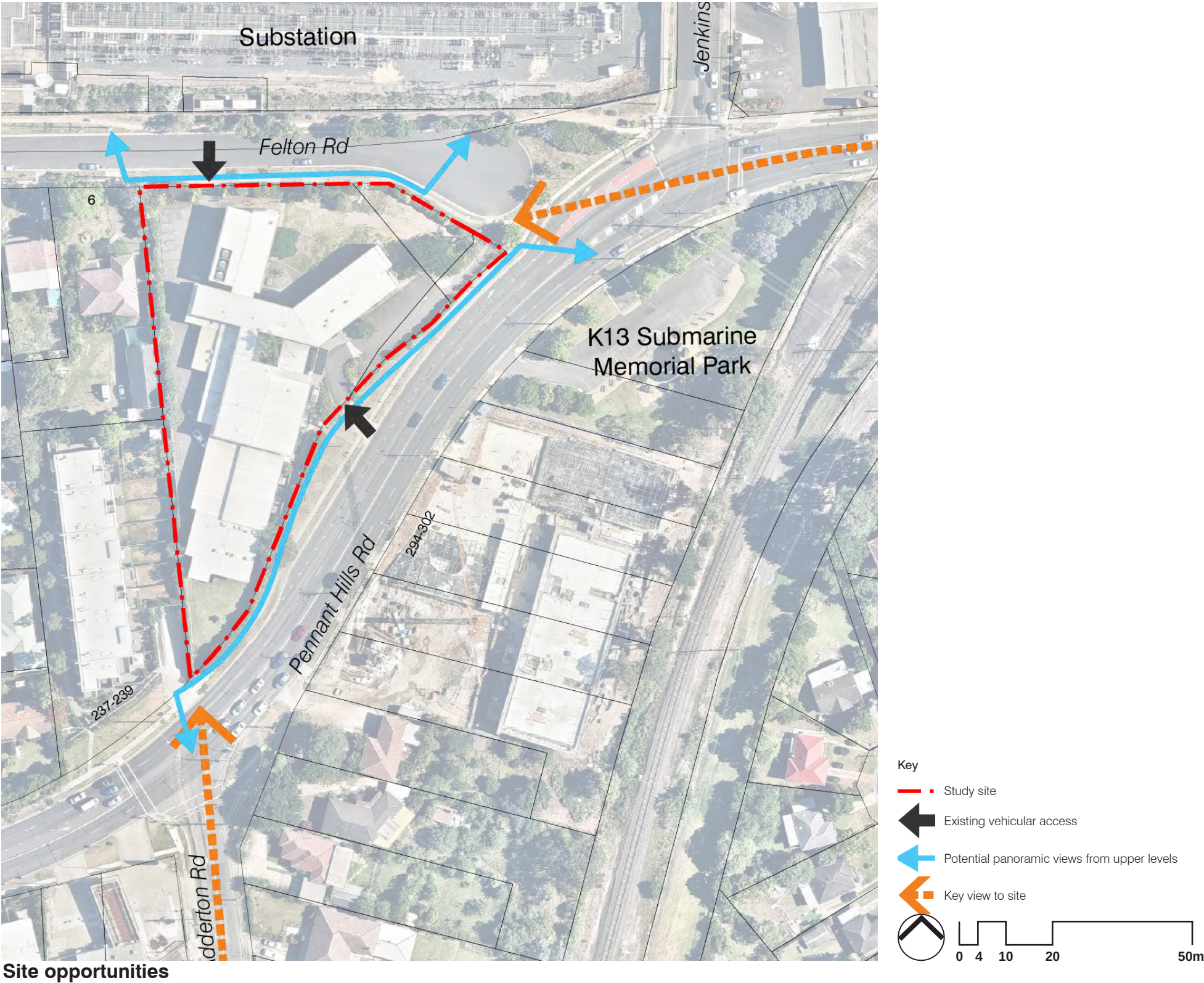


Local connections

2.4 Opportunities

Key opportunities for the site include the following:

- This is one of the last sites within Carlingford Centre which has the potential to increase its density (as a single, large site within the centre which is not affected by strata and heritage constraints).
- It is on a prominent corner location along the important Pennant Hills Road which will be visible in key views along Pennant Hills Road and Adderton Road.
- From above a height of around 3-4 storeys, the site has the potential to enjoy panoramic metropolitan views from the Sydney CBD to Parramatta and the Blue Mountains in a southern direction and district views in a northerly direction
- The site benefits from two street frontages. There are two existing vehicular accesses to the site, on Felton Road and Pennant Hills Road (however, future vehicular access is likely to be preferred by RMS to be via Felton Road).

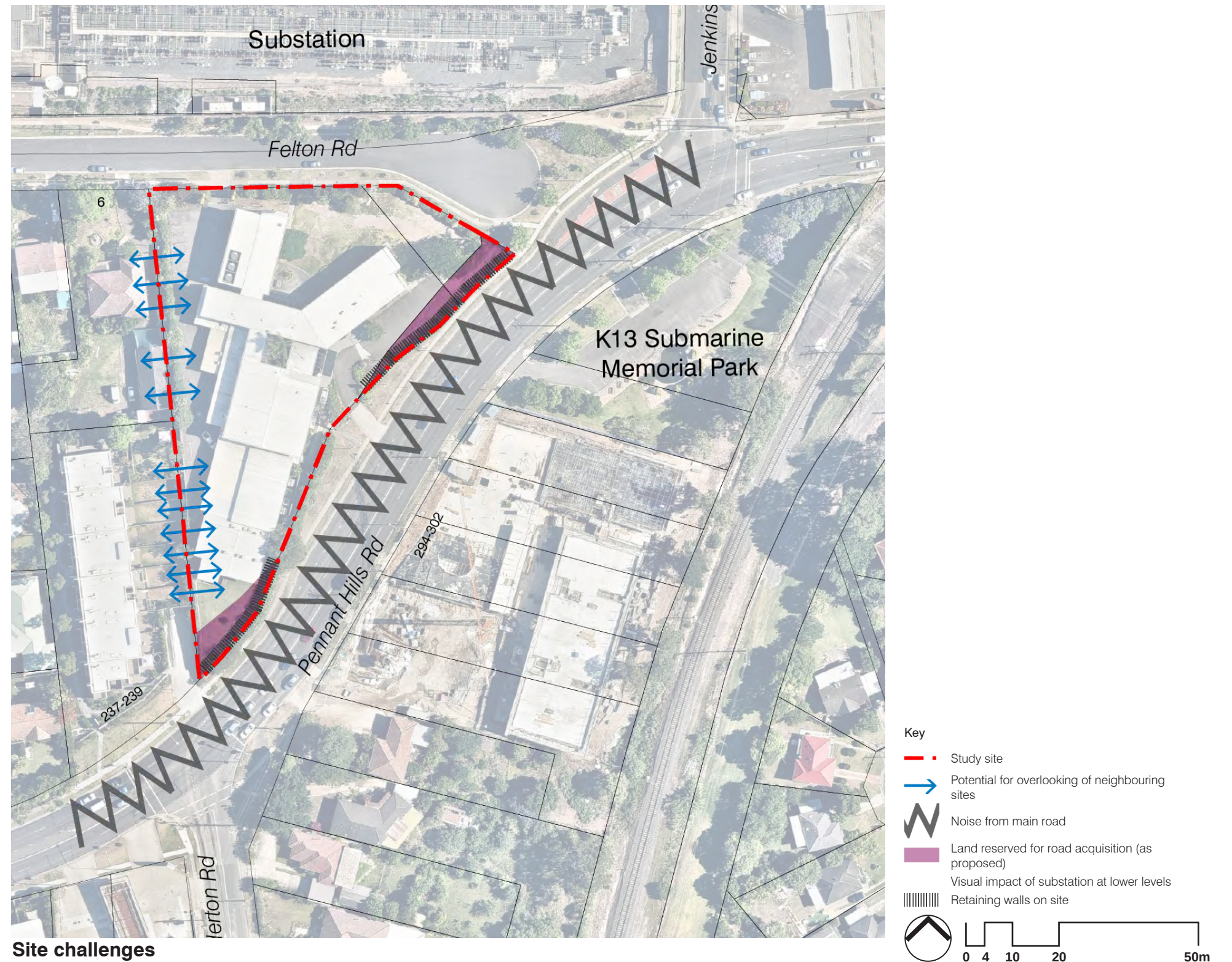


Site opportunities

2.5 Challenges

Key challenges for the site include the following:

- Current planning controls and significant existing built form and infrastructure mean that it is current unlikely to be redeveloped.
- The site's irregular triangular shape creates some complexity in design.
- The site's location adjacent to low-rise residential uses to the west creates the potential for overlooking and creates the need for a scale transition. Although it should be noted the current zoning of these sites allows for their redevelopment as 3-storey townhouses.
- Part of the site along Pennant Hills Road is reserved for road acquisition
- The site will be impacted by traffic noise from Pennant Hills Road.
- There are level changes across the site including existing retaining walls along the boundary to Pennant Hills Road.
- Outlook to the substation at lower levels.



3.0 Development options

3.1 Introduction and plan form options

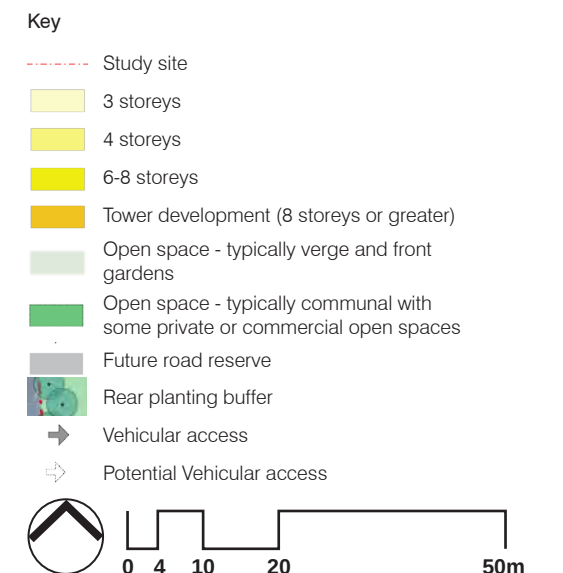
Two plan form options for the site have been considered. These are described in the plans opposite.

Key features of both plan form options include:

- To reduce the impact of the development on existing low-rise residential lots on west to the development, building heights within the site step down to the west and are a maximum of 3-storeys on this edge.
- Taller apartment buildings will be located to the northeast corner to create transition between taller development to the northeast and provide a marker for significant key views along Pennant Hills Road.
- A planted buffer is provided along the western boundary of the development site to reduce overlooking impact on existing residential.
- Vehicular access is provided from Felton Road rather than Pennant Hills Road

Plan Option 2 includes a development form to the northeast which continues along Felton Road where plan Option 1 provides a separate tower to the northeast corner.

Plan Option 1 has been considered the preferred option for its greater potential for the taller element be seen 'in the round' where this will be a prominent element in views from a number of directions.





Indicative plan - Option 01



Indicative plan - Option 02

3.2 Height and FSR scenarios

Based on the preferred plan form for the site, three height and FSR scenarios have been considered in order to determine the appropriate height and density for the site within its visual context.

These scenarios are:

- Scenario A - 2.1:1 FSR 12 storeys
- Scenario B - 2.5:1 FSR 15 storeys
- Scenario C - 2.8:1 FSR 18 storeys

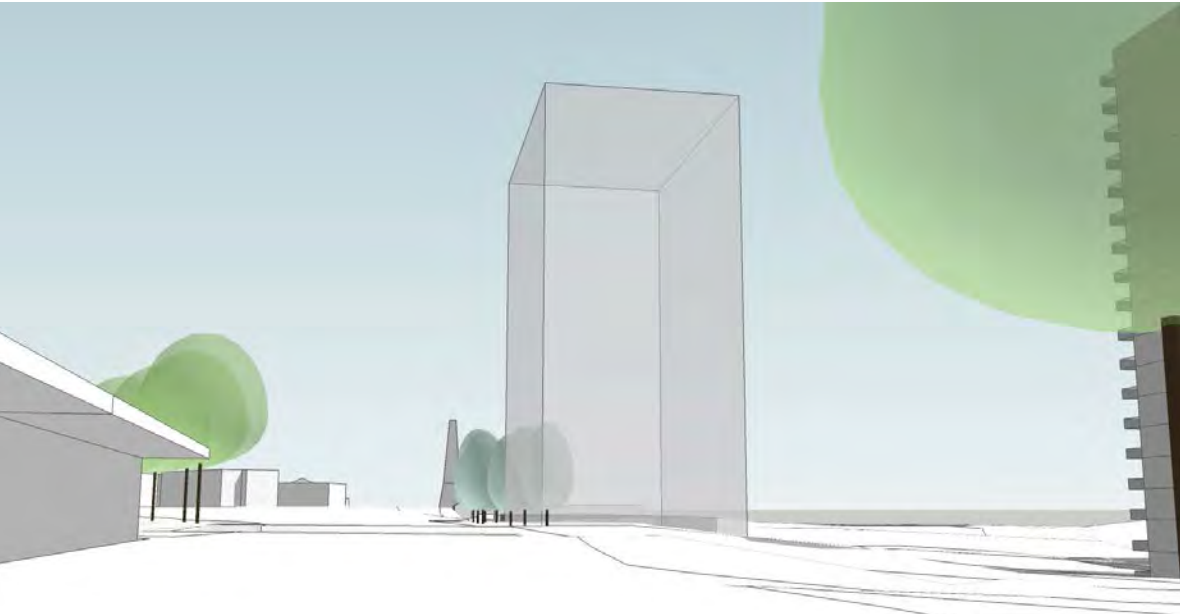
Assumptions for the calculation of floor space ratio within the proposals include:

- The gross floor area (from which the FSR is derived) is calculated as 75% efficiency of the building envelopes shown.
- The FSR is based on the proposed future site zoning (excluding future SP2 land). If the whole site area is used the numbers are lower (1.9:1, 2.3:1, 2.6:1 respectively) and if the current zoning is used (excluding future SP2 land) the numbers are also lower (2.0, 2.4, 2.7:1 respectively).

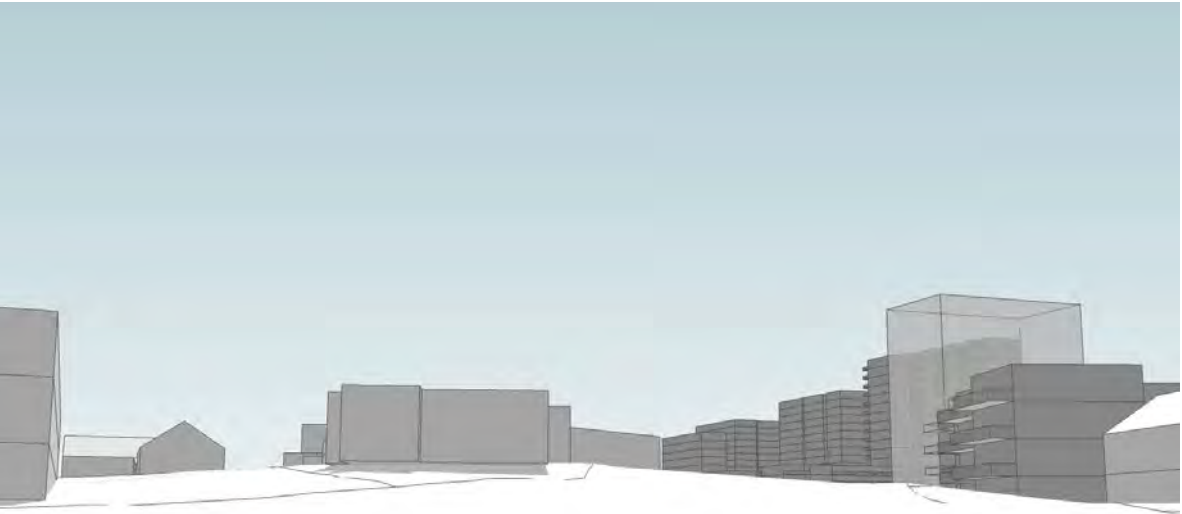
Existing building (no change to controls)



Aerial View from South



① View from east along Pennant Hills Rd



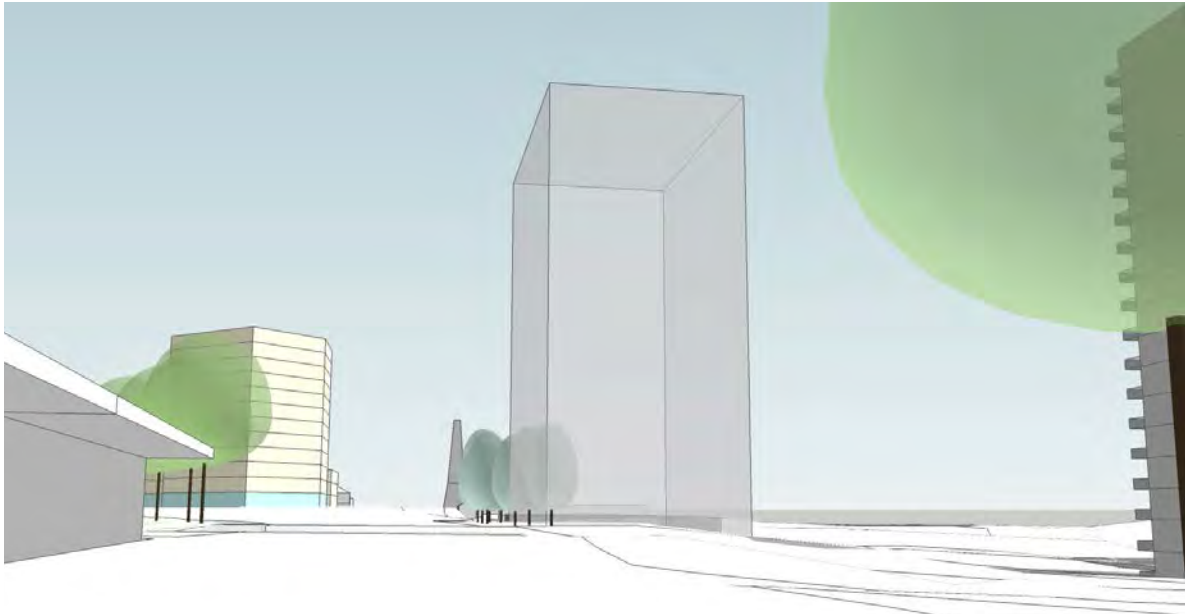
② View from south (Adderton Road)

Scenario A - 2.1:1 FSR 12 storeys

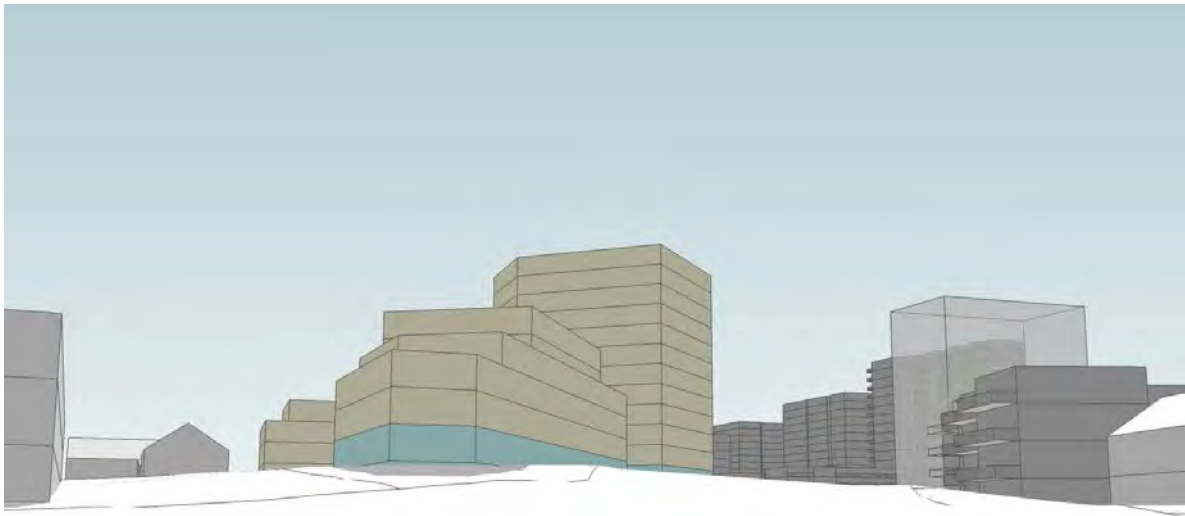


Aerial View from South

- Key
- Indicative residential development
 - Indicative commercial development
 - Existing residential buildings
 - Proposed development
 - Potential future high-rise development



① View from east along Pennant Hills Rd



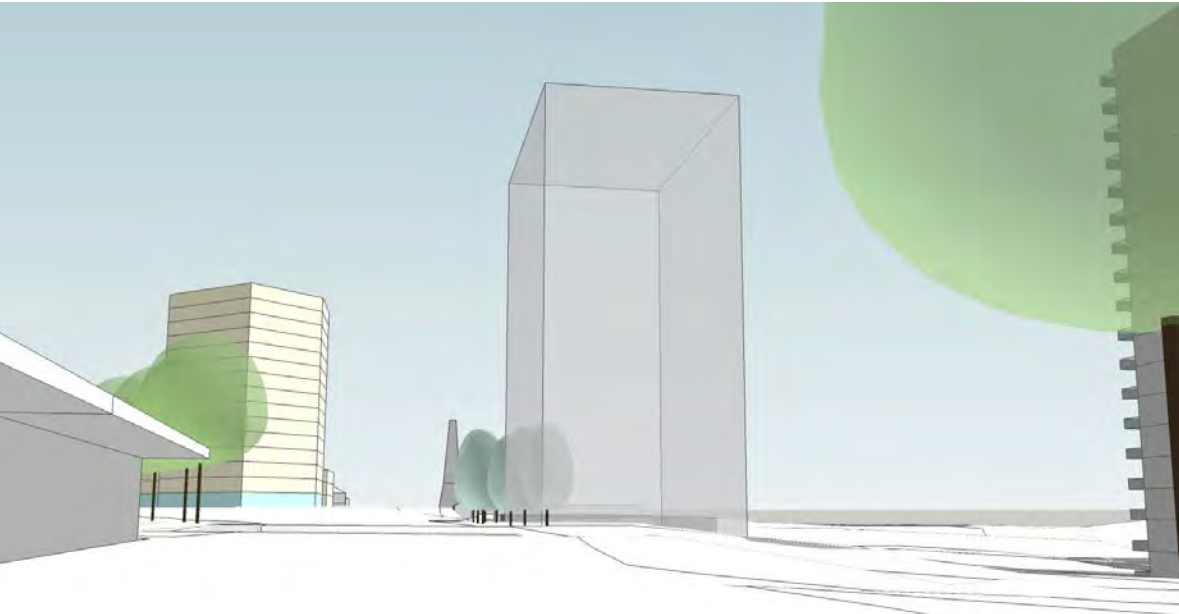
② View from south (Adderton Road)

Scenario B - 2.5:1 FSR 15 storeys

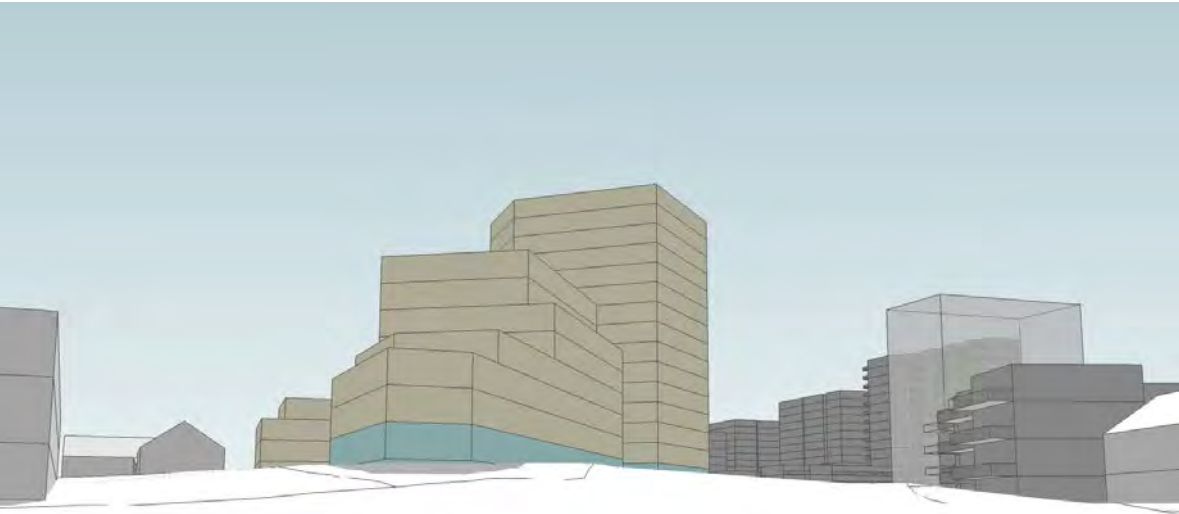


Aerial View from South

- Key
- Indicative residential development
 - Indicative commercial development
 - Existing residential buildings
 - Proposed development
 - Potential future high-rise development



① View from east along Pennant Hills Rd



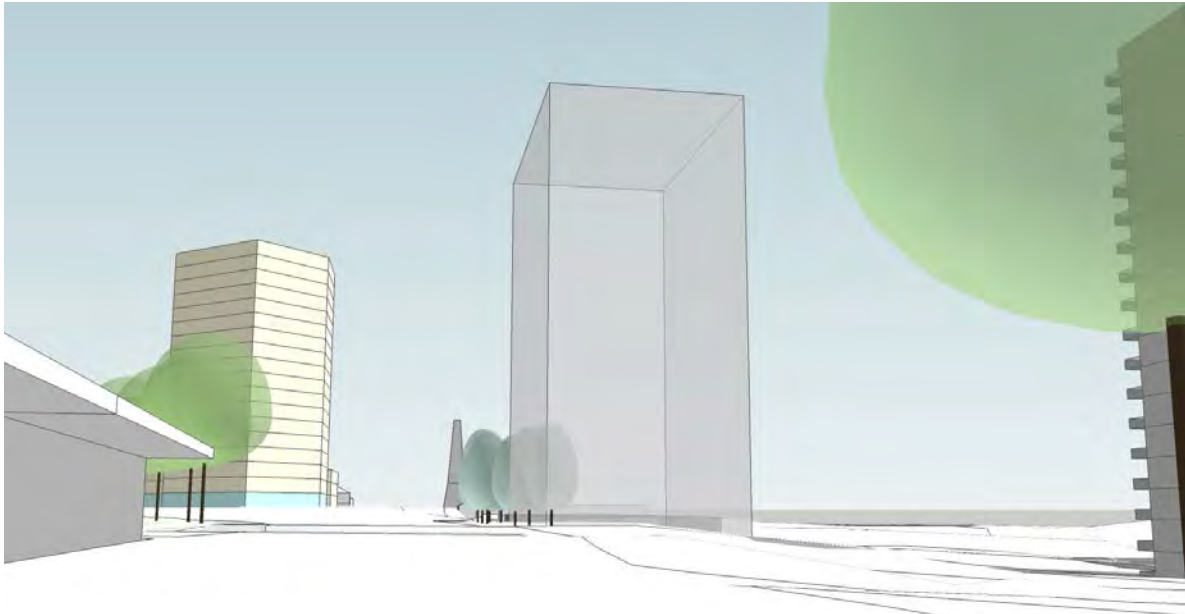
② View from south (Adderton Road)

Scenario C - 2.8:1 FSR 18 storeys

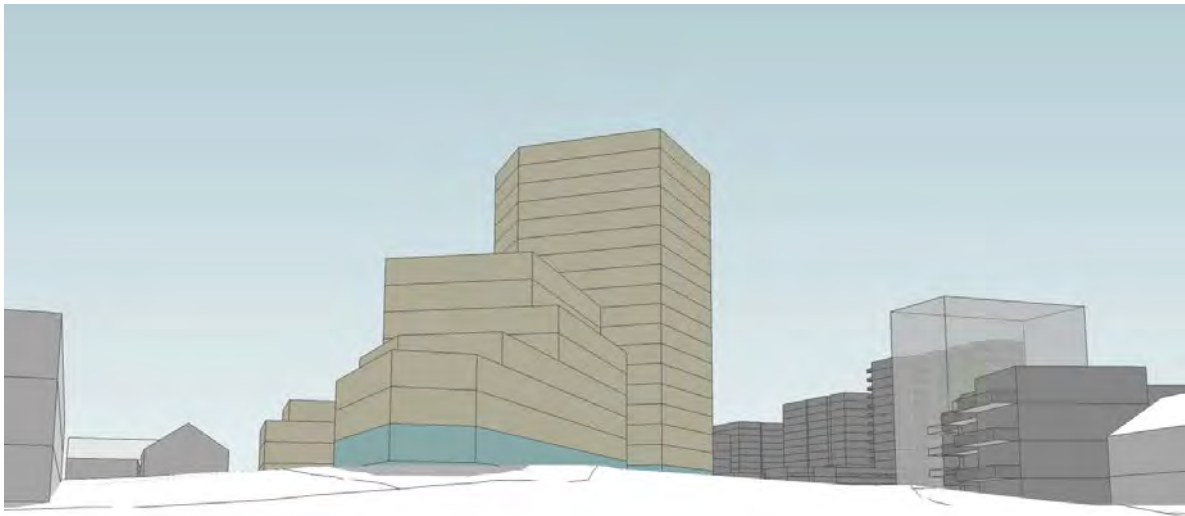


Aerial View from South

- Key
- Indicative residential development
 - Indicative commercial development
 - Existing residential buildings
 - Proposed development
 - Potential future high-rise development



① View from east along Pennant Hills Rd



② View from south (Adderton Road)

Solar access & overshadowing analysis

The diagrams below and overleaf demonstrate the solar access outcomes in midwinter across the three scenarios.

Generally the solar impact of the proposal on neighbouring buildings in midwinter is limited to:

- early morning impacts to some of the neighbouring to the buildings immediately to the west including townhouses (237-239 Pennant Hills Road) and a house (6 Felton Road)
- afternoon overshadowing of the buildings under construction to the east (294-302 Pennant Hills Road).

Generally the morning impacts to buildings to the west are for very short periods only and will not prevent these properties from obtaining 2 hours midwinter solar access to windows or open spaces.

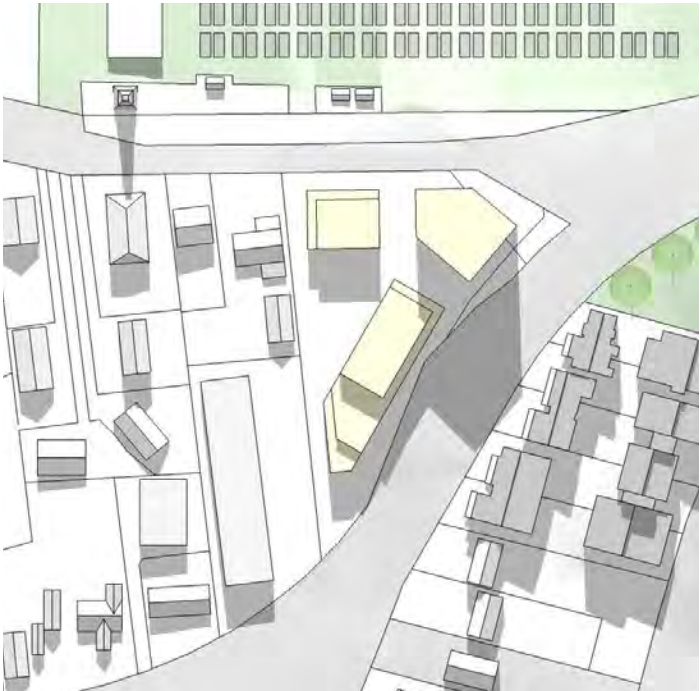
The proposal will have greater impacts on sites to the southeast with the potential to reduce some single-aspect units which currently achieve more than 2 hours solar access in midwinter to less than 2 hours.

The main impact will be caused by the podium form within the southern portion of the site which will reduce solar access for some units between 2pm and 3pm. This form is necessary in providing a built form transition to the north .

A further impact is created by the tower form, which as a taller element further from the locations it impacts will cast shadows over a wider range of units however will pass more quickly across them.



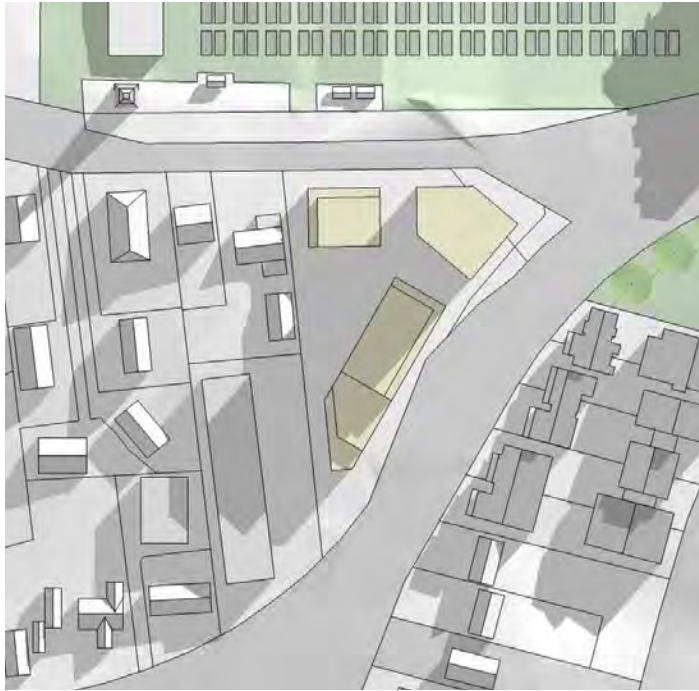
9am
Sun Access - Midwinter (June 21) - Scenario A



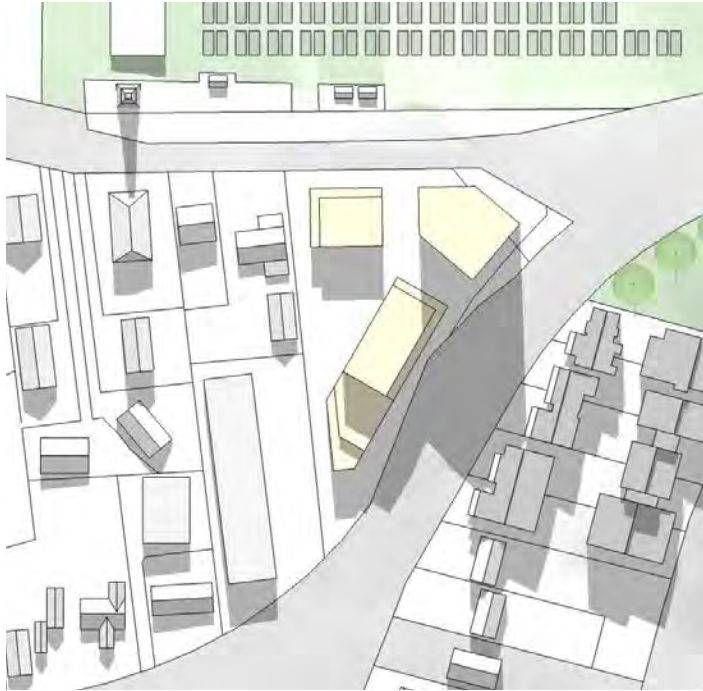
12pm



3pm



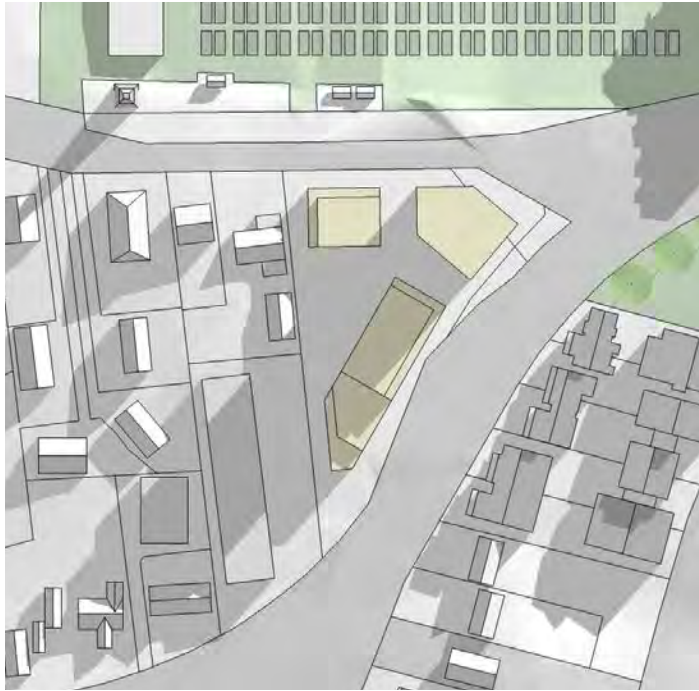
9am
Sun Access - Midwinter (June 21) - Scenario B



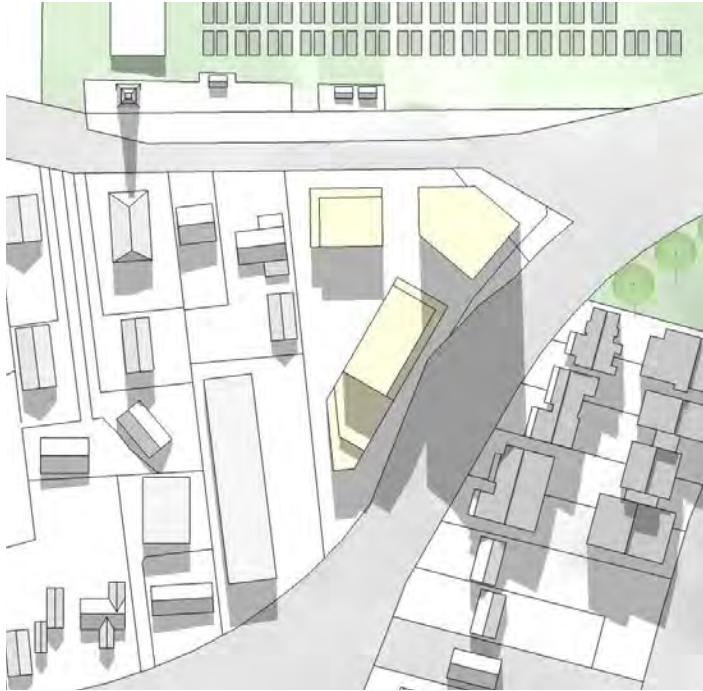
12pm



3pm



9am
Sun Access - Midwinter (June 21) - Scenario C



12pm



3pm

3.3 Summary of Options Testing

Summary of development options

Based on a preferred plan form which has been identified in the previous section of this report, three separate scenarios have been considered within this report for the height and FSR of future development as follows:

	FSR (excluding future SP2 land)	FSR (excluding existing SP2 land)	FSR (whole site area)
Scenario A	2.1	2.0	1.9
Scenario B	2.5	2.4	2.3
Scenario C	2.8	2.7	2.6

Key Selection Criteria

Consideration of the appropriate development form for the site will need to address the following issues:

- utilising this as one of the key sites in Carlingford to contribute to its role as a centre;
- creating the right transition from taller uses to the northeast to lower density to the west and south;
- utilising the visual prominence of the site to create a key marker, at the edge of Carlingford Centre;
- ensuring the balance of solar access and overshadowing is struck;
- encouraging high-amenity apartments, particularly where upper-level apartments will have attractive regional views and not be subject to the same noise and amenity issues related to Pennant Hills Road as those on lower-levels will.

The development should provide commercial uses where possible, particularly those which are appropriate along Pennant Hills Road to reduce the number of apartments which face this busy road.

Conclusion

Based initial assessment undertaken Scenario C was selected as the preferred scheme to develop and test further.



2.1:1 FSR



2.5:1 FSR



2.8:1 FSR

4.0 Proposed master plan

4.1 Overview

This chapter describes the proposed masterplan. It has been developed based on the outcomes of the scenarios testing described in the previous chapter.

It details the proposed built form that has been further tested as the basis for future controls for the site described later.”

Key design features include:

- An enhanced public domain with active street frontages to Pennant Hills Road and Felton Road
- A variety of heights from 3 to 18 storeys which provide a transition between Carlingford Centre and neighbouring residential areas to the west.
- Allowance for future road dedication to RMS as proposed.

The following table sets out the key development metrics of the proposal.

Development Summary	
Site area (incl. SP2 land)	6,330 sqm
Building height	18 storeys
Approximate gross floor areas by use:	
Residential	14,502 sqm
Commercial	1,659 sqm
Total gross floor area	16,161 sqm
Site coverage	2,564sqm (40.5%)

The images on the following page show the proposed development in the context of the local area



Illustrative Site Plan

Key

- Site outline
- Road dedication to RMS (proposed)



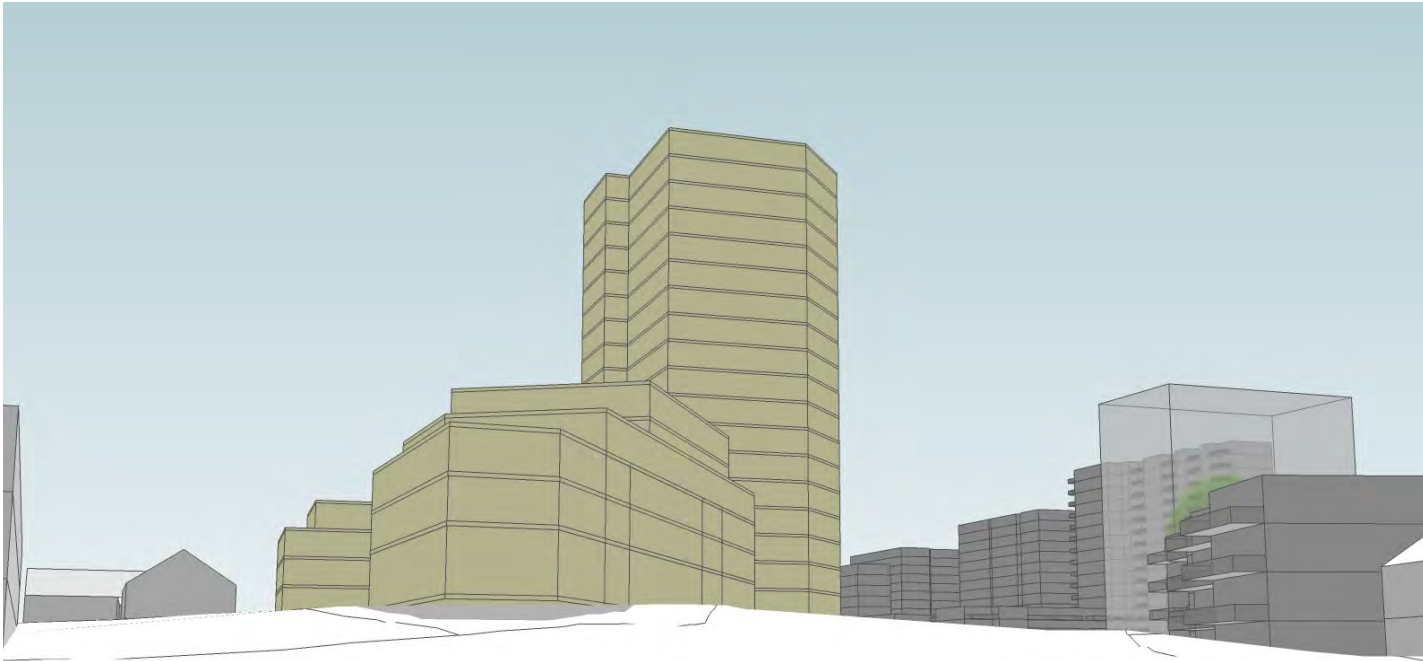
Aerial View from South



① View from east along Pennant Hills Rd



③ View from north along Jenkins Road



② View from south (Adderton Road)

Key

- Indicative residential development
- Indicative commercial development
- Existing residential buildings
- Proposed development
- Potential future high-rise development

4.2 Built Form and Setbacks

The adjacent diagrams show the proposed building heights and proposed buildings separations and setbacks.

Features of the proposed built form:

- An 18 storey tower at the intersection of Pennant Hills Road and Felton Road
- Lower rise buildings that form a well scaled interface with adjoining development, typically with a 3-4 storey street wall with taller building forms set back from this.
- An active ground floor along Pennant Hills Road
- Street address points on Pennant Hills Road and Felton Road.

Key - Setbacks

Commercial ground floor

Landmark tower

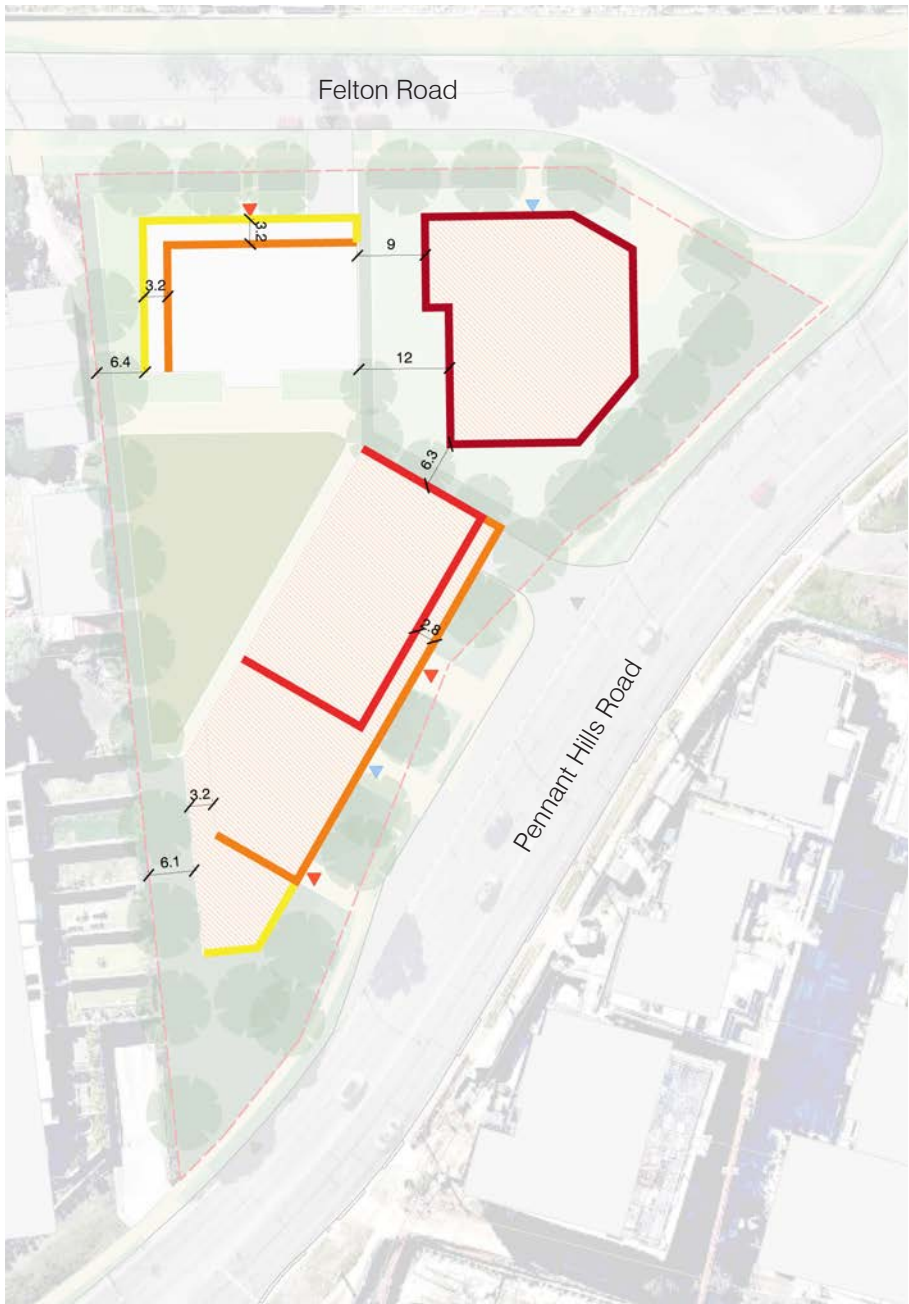
Six storey street wall

Four storey street wall

Three storey street wall

Residential address

Commercial address



Setbacks

4.3 Illustrative Floor Plans

Provided adjacent are illustrative floorplans of the proposed masterplan at typical ground floor and tower levels.

Typical upper floor plan

The typical upper floor plan demonstrates SEPP65 compliance with visual privacy issues, as well as how the proposal can be designed to minimise overlooking of adjacent properties. It is also used within the solar access testing for the site (in the following section of this document) to demonstrate the SEPP65 compliant solar access.

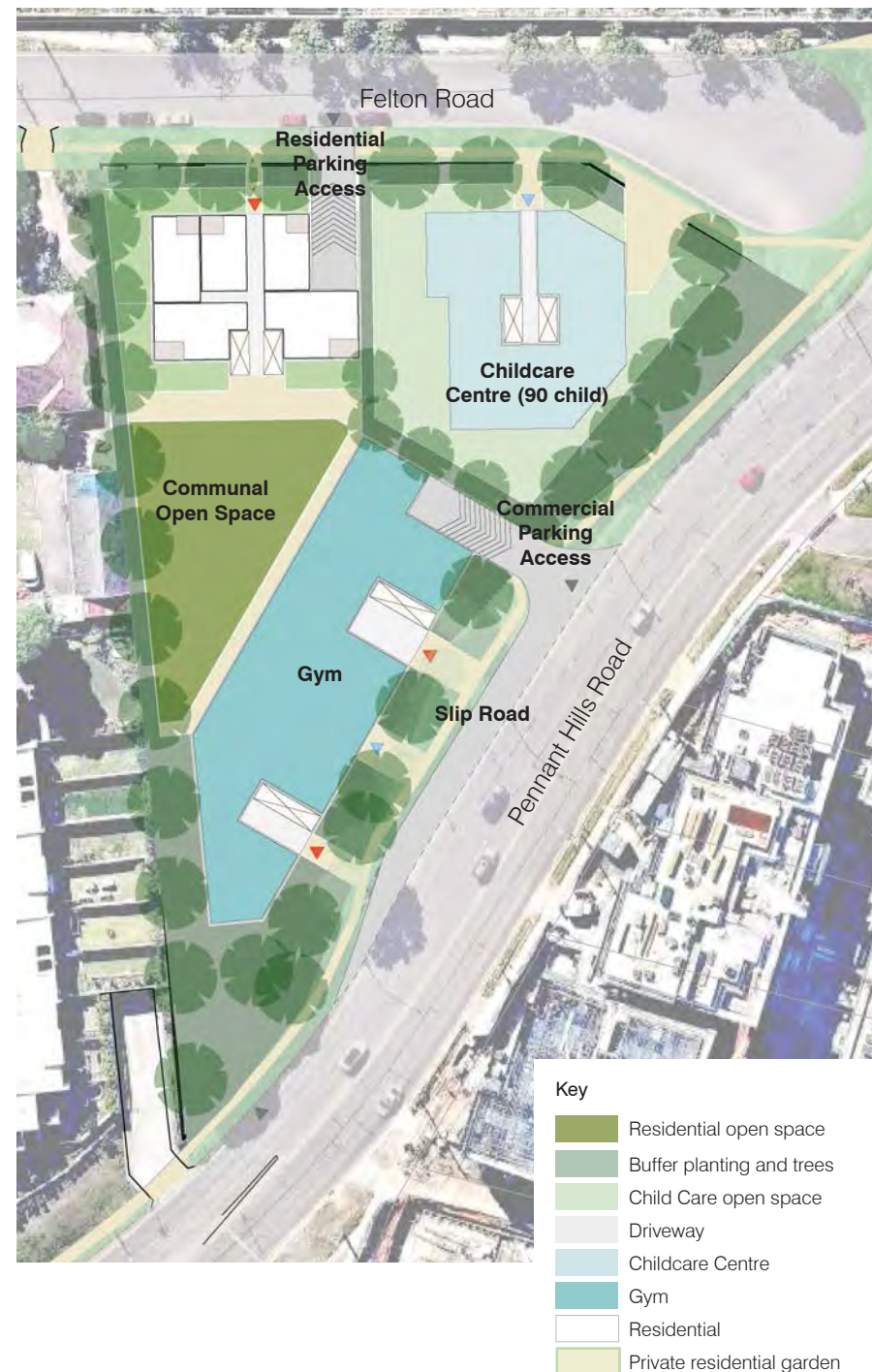
Ground floor plan

The ground floor plan describes a potential mix of ground floor uses. It includes a childcare facility and gym. Although at this stage the mix of uses for the site will not be set, it demonstrates the potential to comfortably arrange these to keep residential uses at least 1 storey away from Pennant Hills Road as well as demonstrating its appropriate design with communal open space for residences and appropriate access locations.

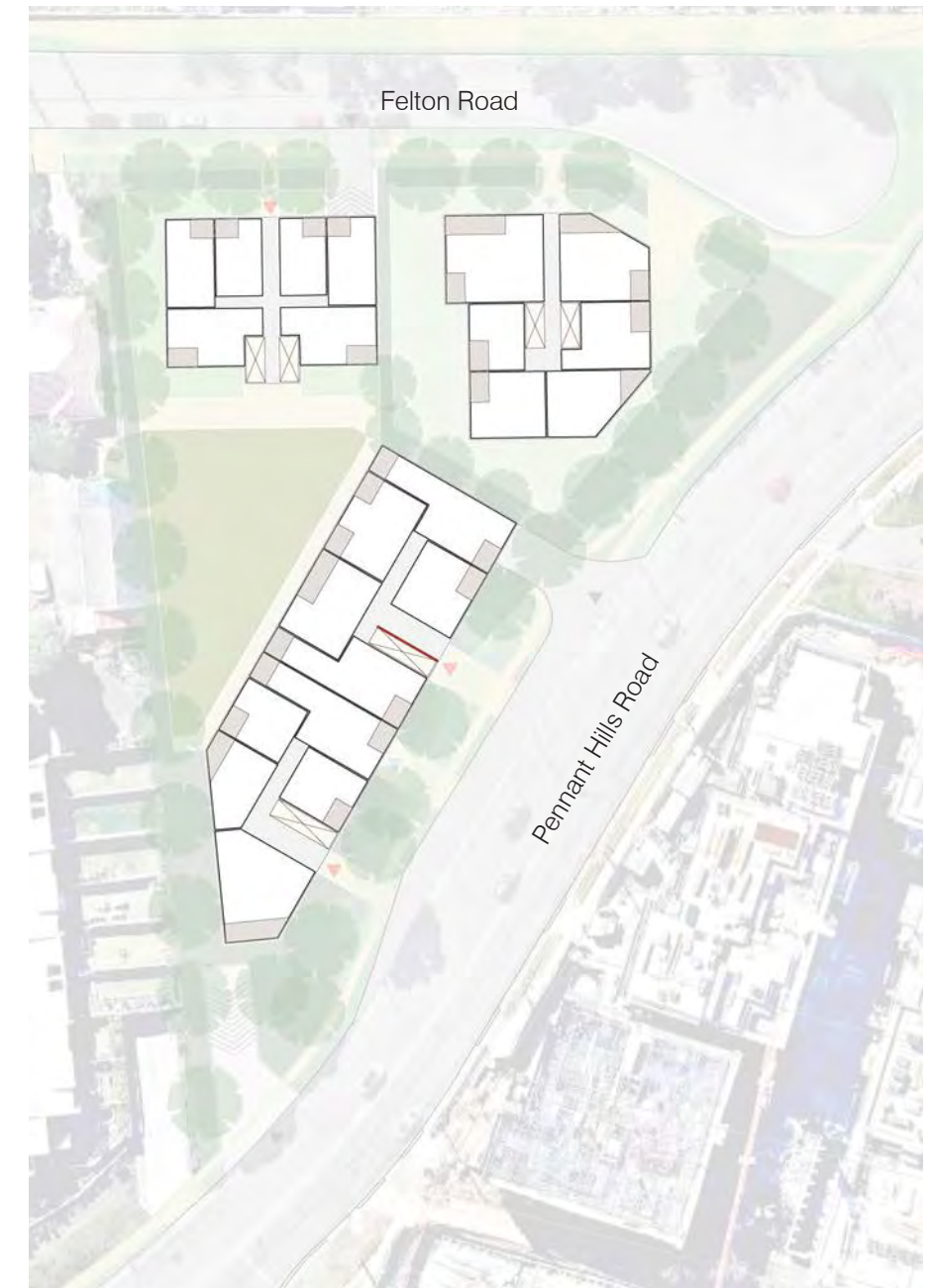
The gym use would be appropriate along Pennant Hills Road, reducing the number of residences facing this busy link.

An indicative 90-child childcare centre including open space requirements for approximately 650 is proposed with access from Felton Road.

Commercial uses will rely on underground parking accessed from Pennant Hills Road. Residential parking access will be from Felton Road.



Ground Floor Plan including potential commercial uses



Typical upper floor plan

The diagrams adjacent demonstrate that the indicative floor plans provide an appropriate mix of one, two and three bedroom units and appropriate cross ventilation.



- Key - Typical Unit Types
- One bedroom
 - Two bedroom
 - Three bedroom

Indicative unit types for typical floor



- Key - Potential Cross Ventilation Strategy
- Through unit
 - Corner unit
 - Single frontage unit

Potential cross ventilation strategy

4.4 Height transition to surrounding properties

The proposal provides a height transition from Carlingford Centre (as zoned this includes the site and extends to the east) to the surrounding residential properties to the west. This is provided through stepped heights throughout the development as shown in the diagram adjacent.:



Stepped heights through development providing transition

4.5 Solar Access Testing - Proposed Development



Proposed built form - solar access for indicative apartment layout



Proposed built form - solar access for indicative apartment layout



Ensuring good solar access for new apartments is an important design outcome.

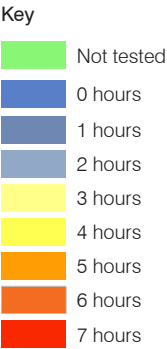
SEPP 65 and the 2002 Residential Flat Design Code and 2015 Apartment Design Guide both identify access to natural daylight as design drivers for the siting and orientation of buildings and definition of scale and bulk.

The indicative apartment layout preferred design achieves the following natural daylight potential:

Building	2 Hrs	3 Hrs
1	100%	100%
2	83%	67%
3	81%	81%

The modelling is based on the number of hours natural daylight received by external walls of apartments. Further detailed design will determine room layouts and window locations.

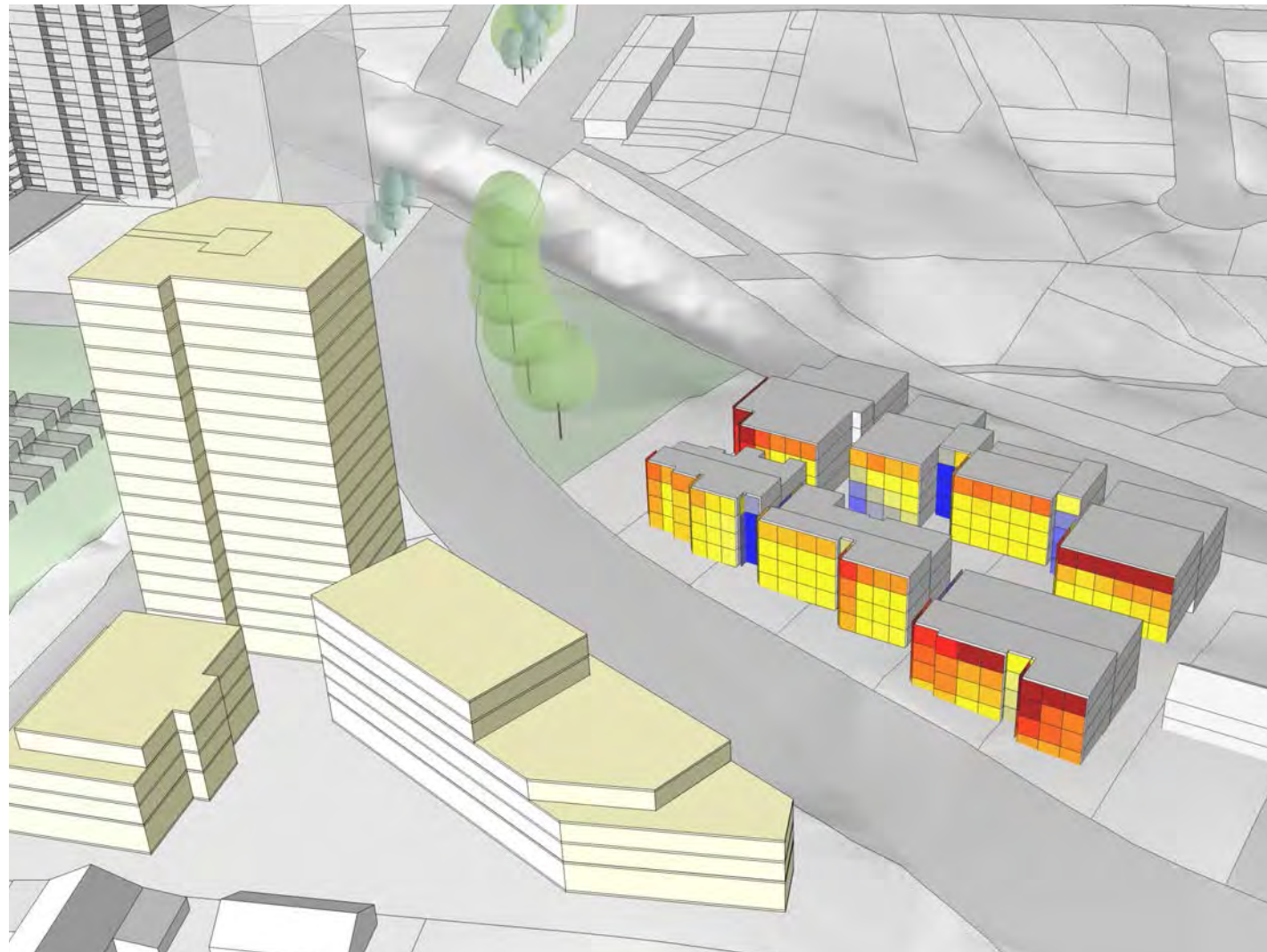
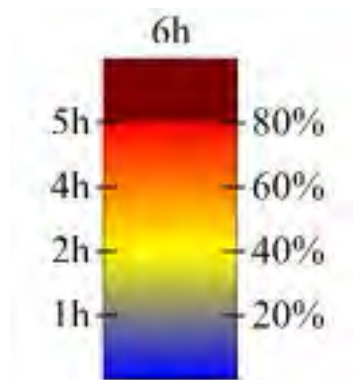
Total hours of direct solar exposure on 21 June between 9am and 3pm



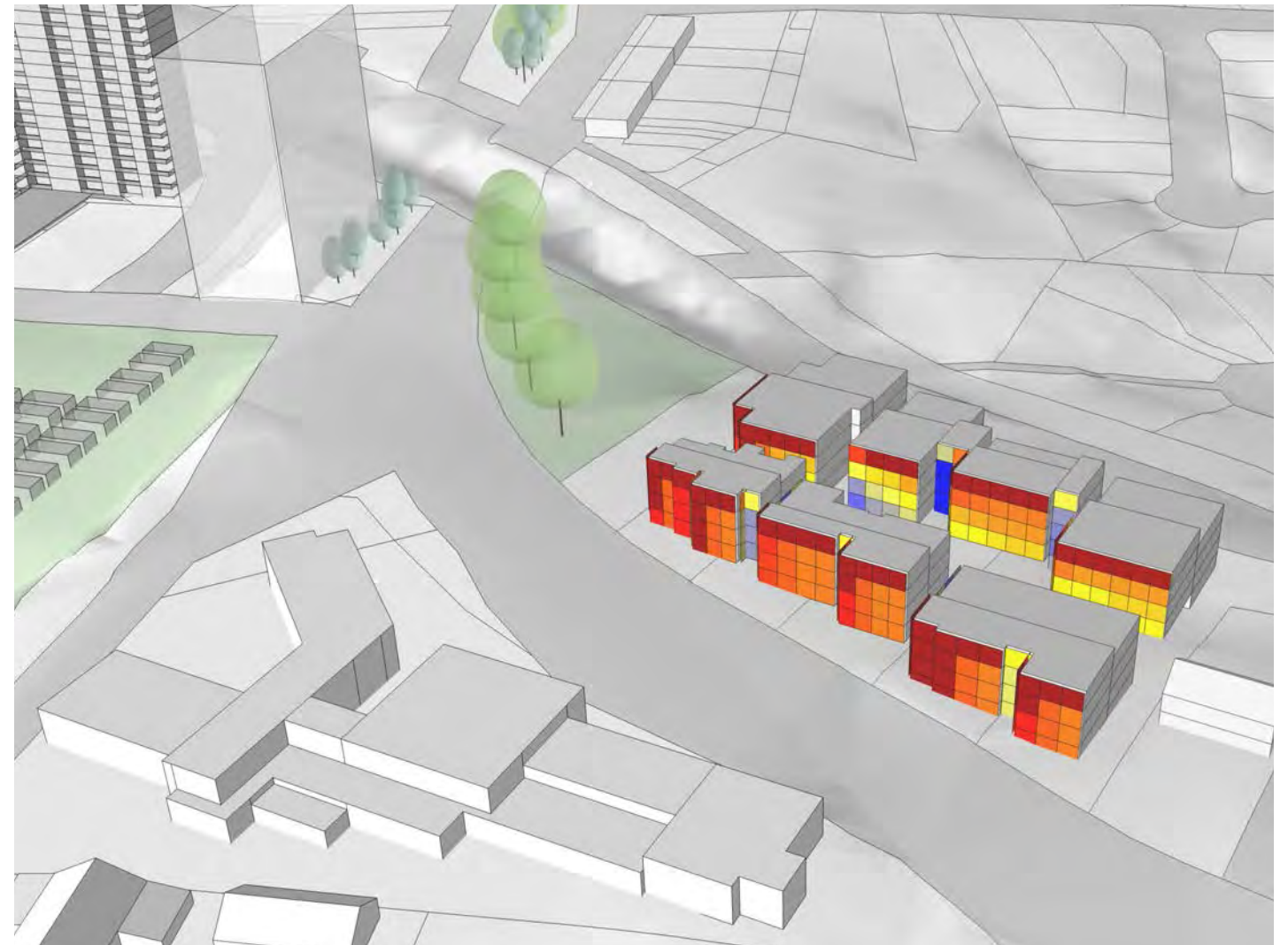
4.6 Solar Access Testing - Surrounding Development

As the options testing highlighted the recent development to the south of the site as potentially having its solar access impacted by the proposal, further testing has been undertaken on this site.

The diagrams below demonstrate sunlight access in midwinter based on the SEPP65 Apartment Design Guide. They demonstrate that despite some reduction in available sun hours, the proposal does not reduce any wall's available sunlight to less than 2 hours where this is currently achieved. A detailed design should therefore be capable of ensuring SEPP65 compliance is retained for this development.

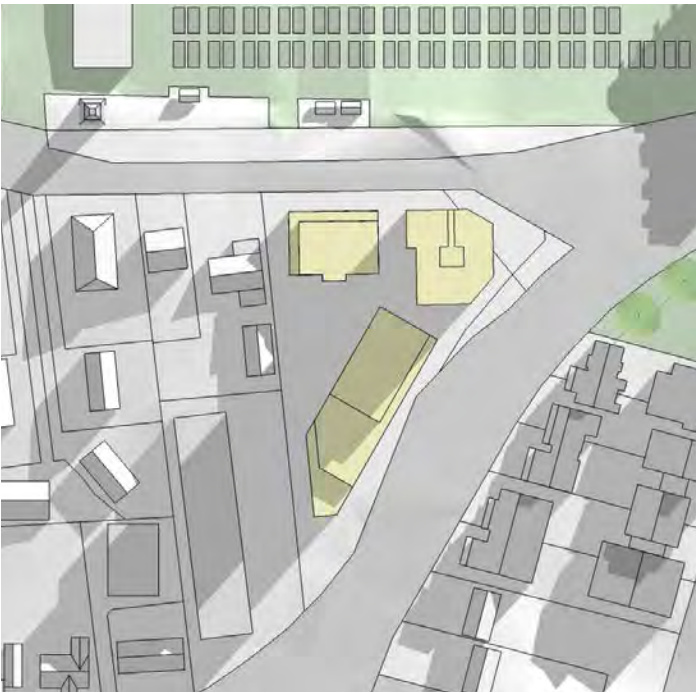


Proposed sun hours



Existing sun hours

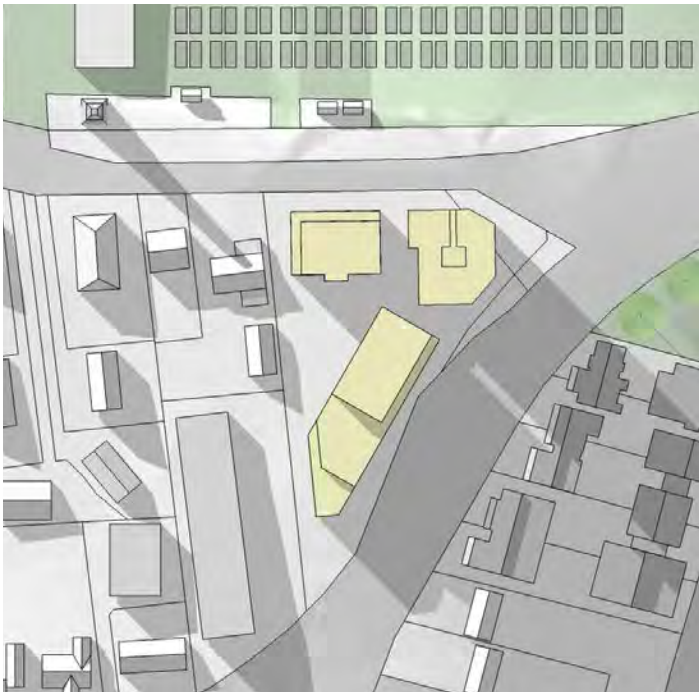
Provided below are solar access diagrams for midwinter which further demonstrate the impact of the proposal on further surrounding properties. The proposal will not prevent other properties from achieving 2 hours sun access in midwinter.



9am
Sun Access - Midwinter (June 21)



12pm

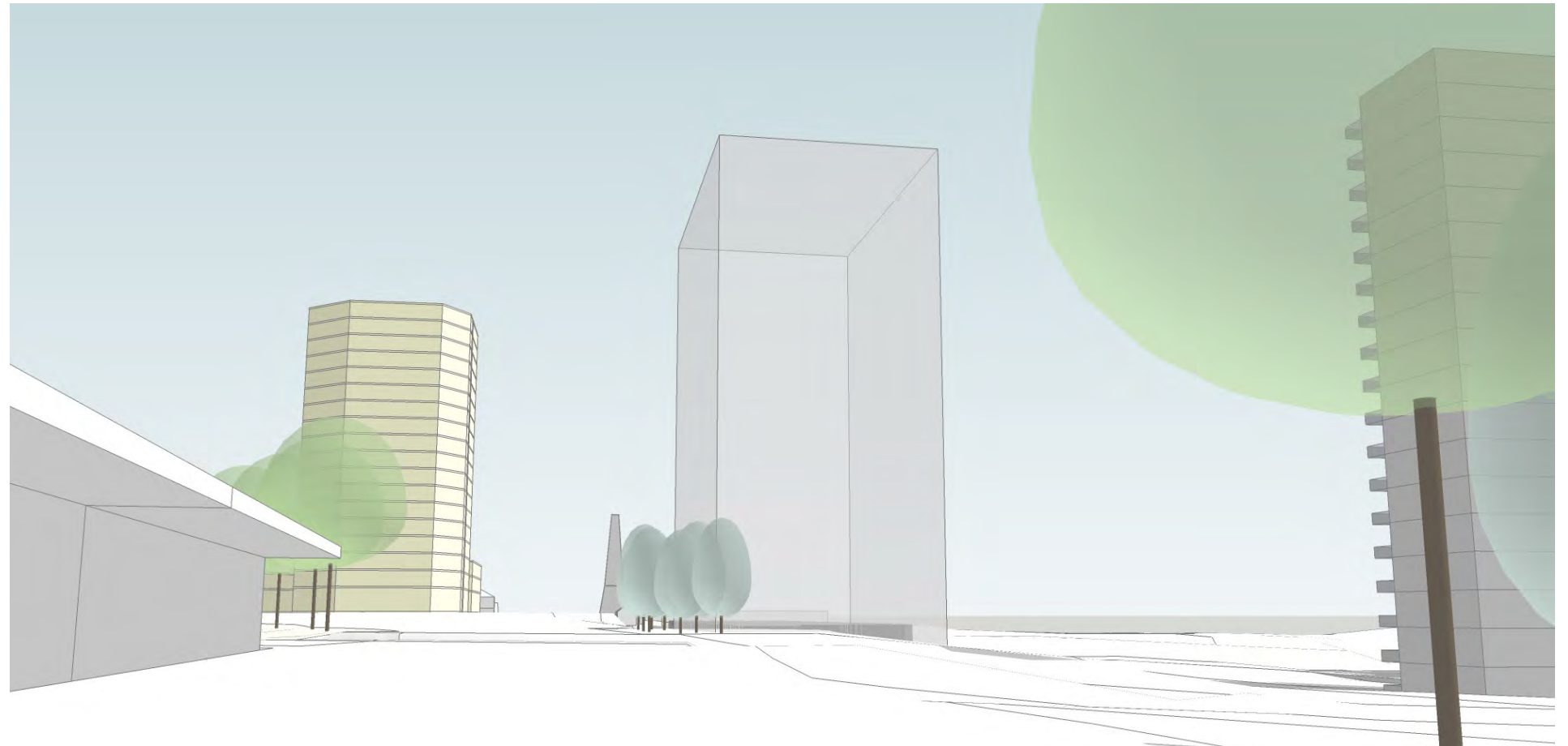


3pm

4.7 Summary of key benefits

The proposed development provides the following public benefits.

- Consistency with state planning strategies for metropolitan Sydney in supporting growth near railway stations.
- Improved building on the site which is compatible with the emerging future character of the locality.
- Creation of a transition to the town centre from the west that fits within its visual context in all directions.
- New shops and local services.
- Retention of on-site employment while also providing new housing.



5.0 Recommendations

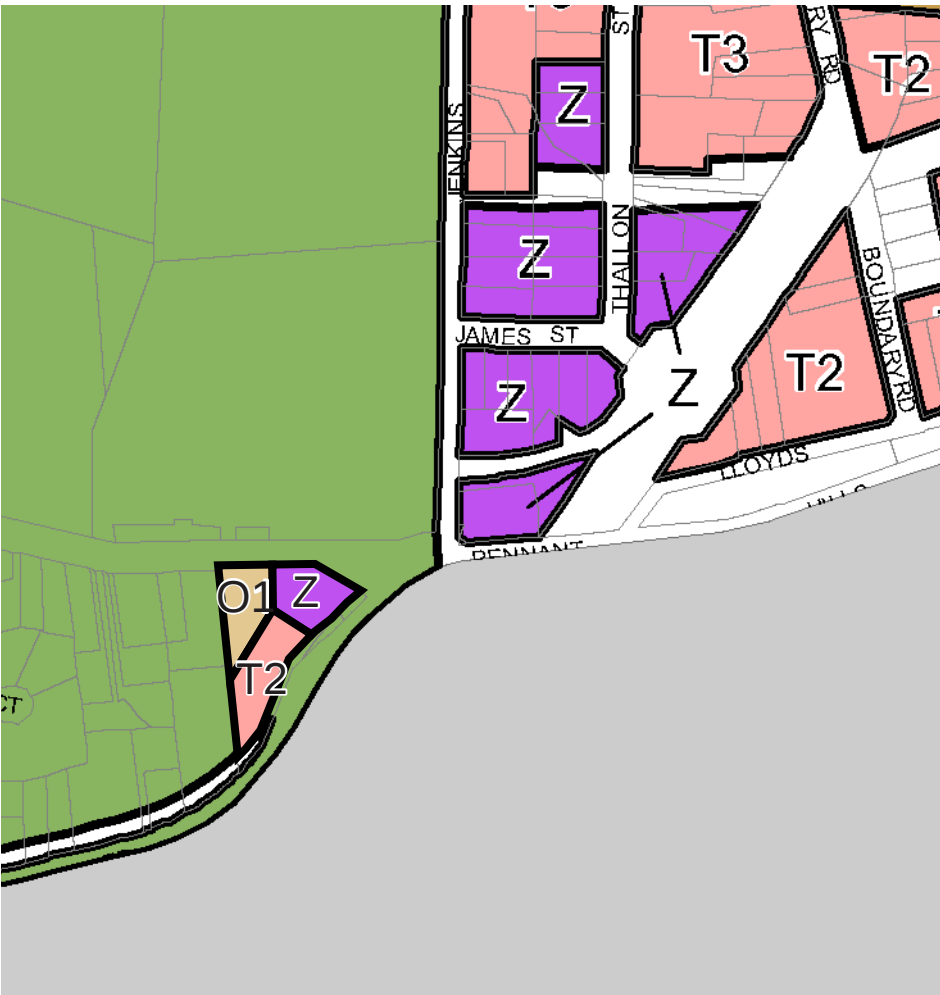
5.1 Recommendations for key LEP controls

The diagrams adjacent describe the key amendments required in order to achieve the proposed masterplan described in the previous section of this document, which will be achieved with the inclusion of design excellence provisions described below. The required amendments to The Hills Local Environmental Plan 2012 plans are:

- A maximum building height across the site of up to 57.0m (as shown this is split into 3 zones of 57.0m, 15.0m and 27.0m)
- A floor space ratio of 2.7:1 (measured across the site excluding the existing SP2 zone) or 2.8:1 (measured across the site excluding the proposed future SP2 zone).

The zoning of the site remains unchanged as B2 local centre.

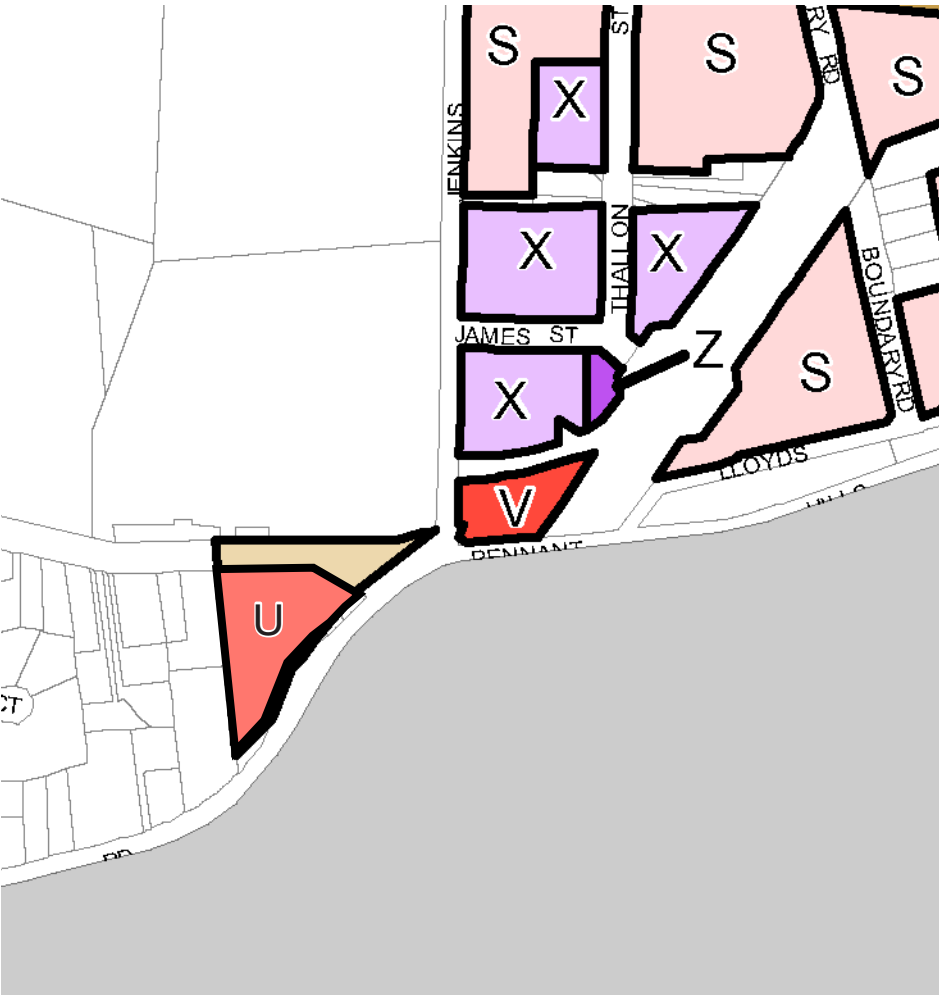
Maximum Height of Building Map



Maximum Building Height (m)

G	7.0	S	23.0
J	9.0	T1	25.0
K	10.0	T2	27.0
M1	12.0	T3	28.0
M2	12.5	U1	30.0
N	14.0	U2	33.0
O1	15.0	V1	36.0
O2	16.0	V2	37.0
P1	17.0	X1	45.0
P2	18.0	X2	46.0
Q1	19.0	Y	50.0
Q2	20.0	Z	57.0
R1	21.0	AA	68.0
R2	22.0		

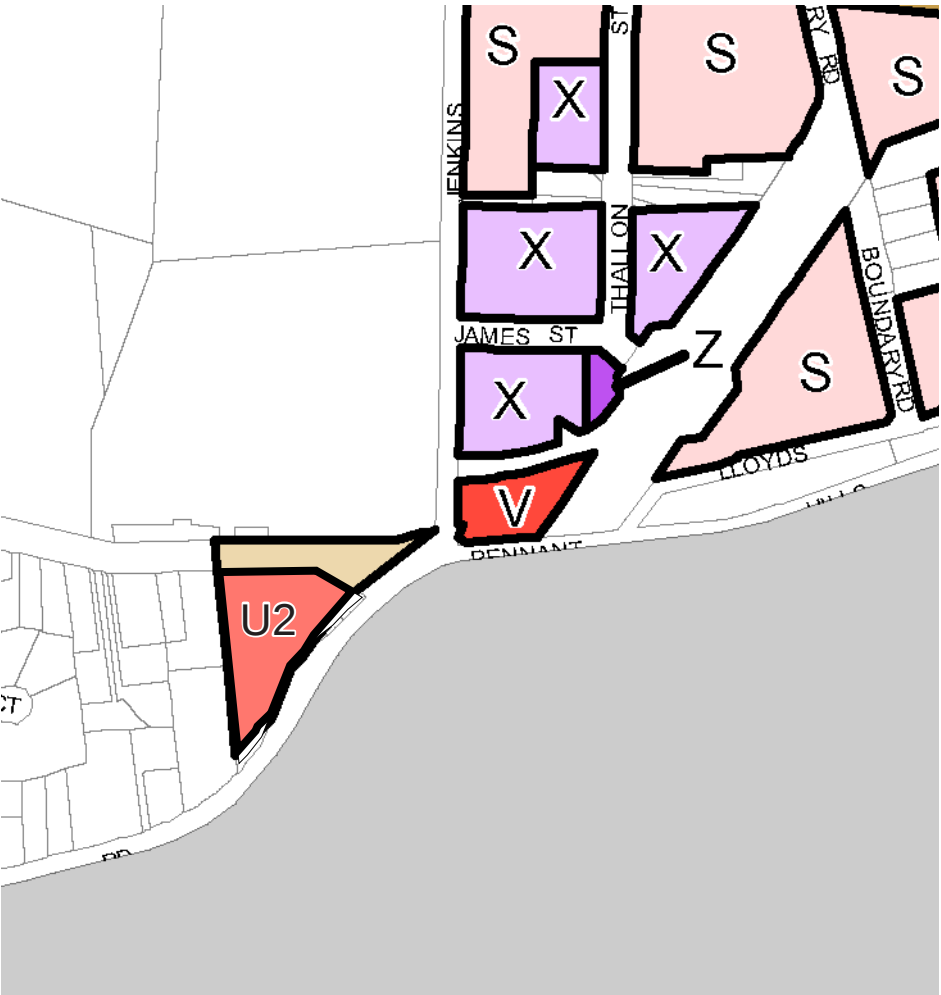
Floor Space Ratio Map (based on existing SP2 zone)



Maximum Floor Space Ratio (n:1)

A	0.2
B	0.4
D	0.5
F	0.6
J	0.8
N	1.0
R	1.49
S	1.99
T	2.3
U	2.7
V	3.0
W	3.8
X	4.0
Z	5.0
AA	6.4

Floor Space Ratio Map (based on proposed SP2 zone)



Maximum Floor Space Ratio (n:1)

A	0.2
B	0.4
D	0.5
F	0.6
J	0.8
N	1.0
R	1.49
S	1.99
T	2.3
U1	2.7
V	3.0
W	3.8
X	4.0
Z	5.0
AA	6.4

U2 2.8