Analysis

Existing Context

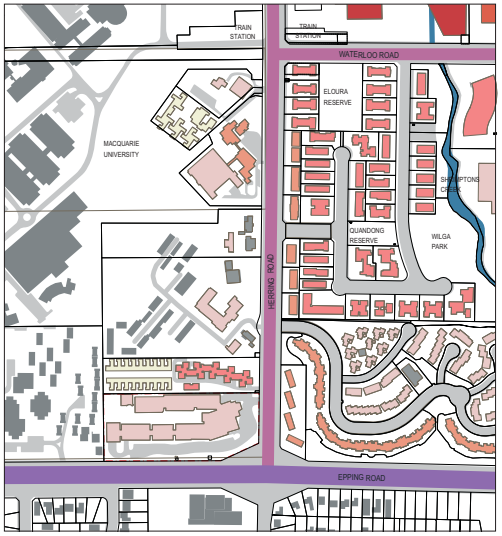


Figure B3.1: Built form - existing context diagram

- Buildings along the northern side of Epping Road and the western side of Herring Road do not help to spatially define these roads. Buildings are typically setback from the street and are 1-3 storeys in scale. The orientation of the existing buildings varies. Morling College and Dunmore Lang College are aligned with the Macquarie University grid that is rotated 45 degrees from the street.
- The spatial relationship of buildings to the street does not contribute to the identity or legibility of Macquarie Park Corridor.

Macquarie Park Corridor DCP

Figure B3.2: Built form - DCP diagram

- Herring Road is designated a Taller Development Spine with 8 storey buildings proposed for future developments.
- The secondary significant building is proposed to be orientated north-south along Herring Road.

KEY

- existing open space
- proposed open space/ stormwater management corridor
- plaza
- taller development spines
- significant buildings
- secondary significant buildings
- tall buildings relative to streetscape
- active frontages
- train station
- 1 storey
- 2 storeys
- 3 storeys
- 4 storeys
- 5 storeys
- 6 storeys

B3 BUILT FORM

Analysis

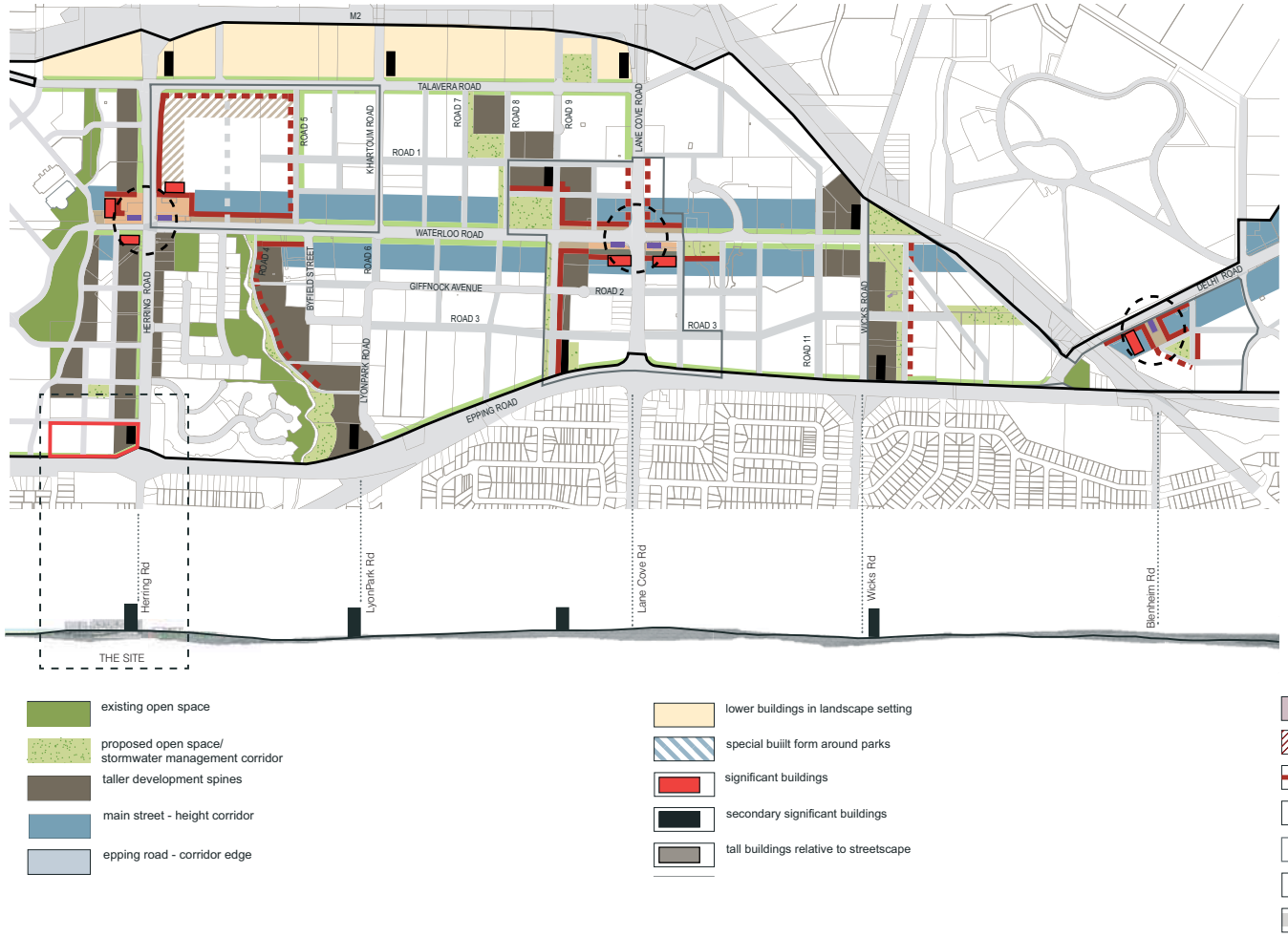


Figure B3.3: Built form structure and section along Epping Road

Built Form Structure along Epping Road

- A built form strategy in the Macquarie Park Corridor DCP seeks to enhance the urban hierarchy of Epping Road through the location of taller buildings at key intersections. These taller buildings act as landmarks signifying the entry to the Macquarie Park Corridor.
- The Concept Plan site located at the corner of Epping Road and Herring Road is one of the key sites identified to accommodate a taller building.
- The section below (Figure B3.3) shows the future character of taller buildings marking key intersections along Epping Road.
- The Concept Plan locates the taller building along Epping Road orientated east-west. This location and orientation reduces the visual impact of the taller building.

Design Principles

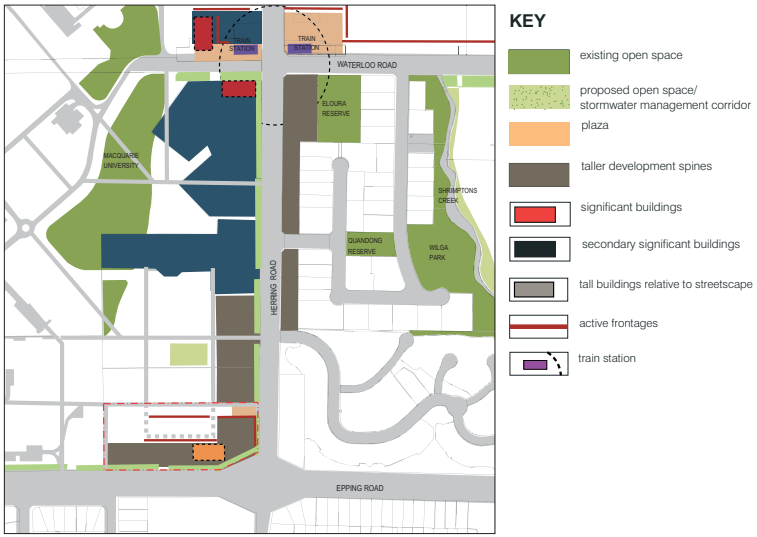


Figure B3.4: Built form structure along Herring Road

Built Form Structure along Herring Road

- The Macquarie Park DCP height plane of 8 storeys is shown in red.
- 128 Herring Road development proposeal (shown in green) is seeking approval for 12-15 storey buildings. Macquarie University (shown in blue) Concept Plans are permitted a building height of 108m. Both developments are exceeding the 8 storey height proposed in the Macquarie Park DCP.
- It is envisaged that the land owned by Housing NSW opposite The Site will also redevelop in the future.
- In the diagram below, the Concept Plan site is outlined in yellow and shows how the proposed building heights are compatible with the future context of Herring Road.

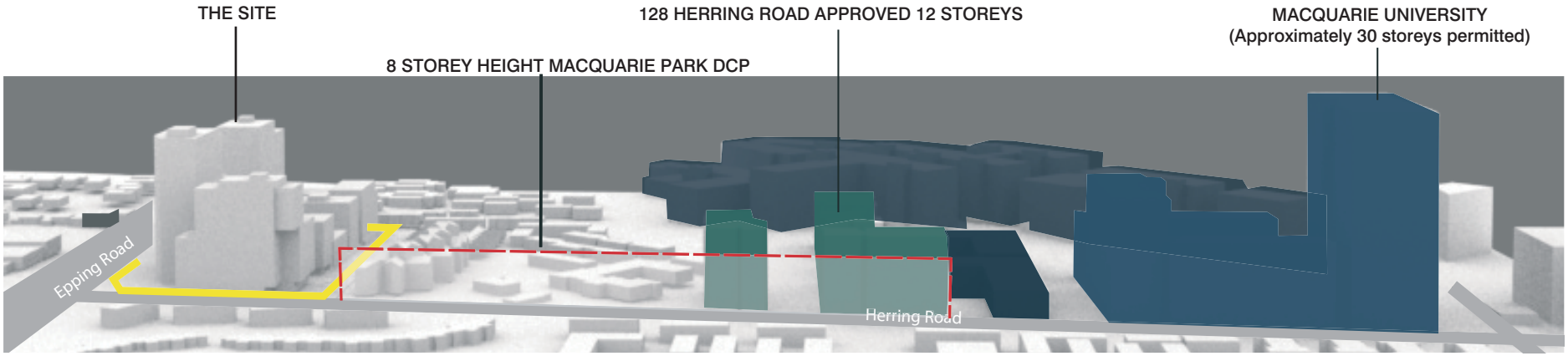


Figure B3.5: Future height context along Herring Road

B3 BUILT FORM

Design Principles

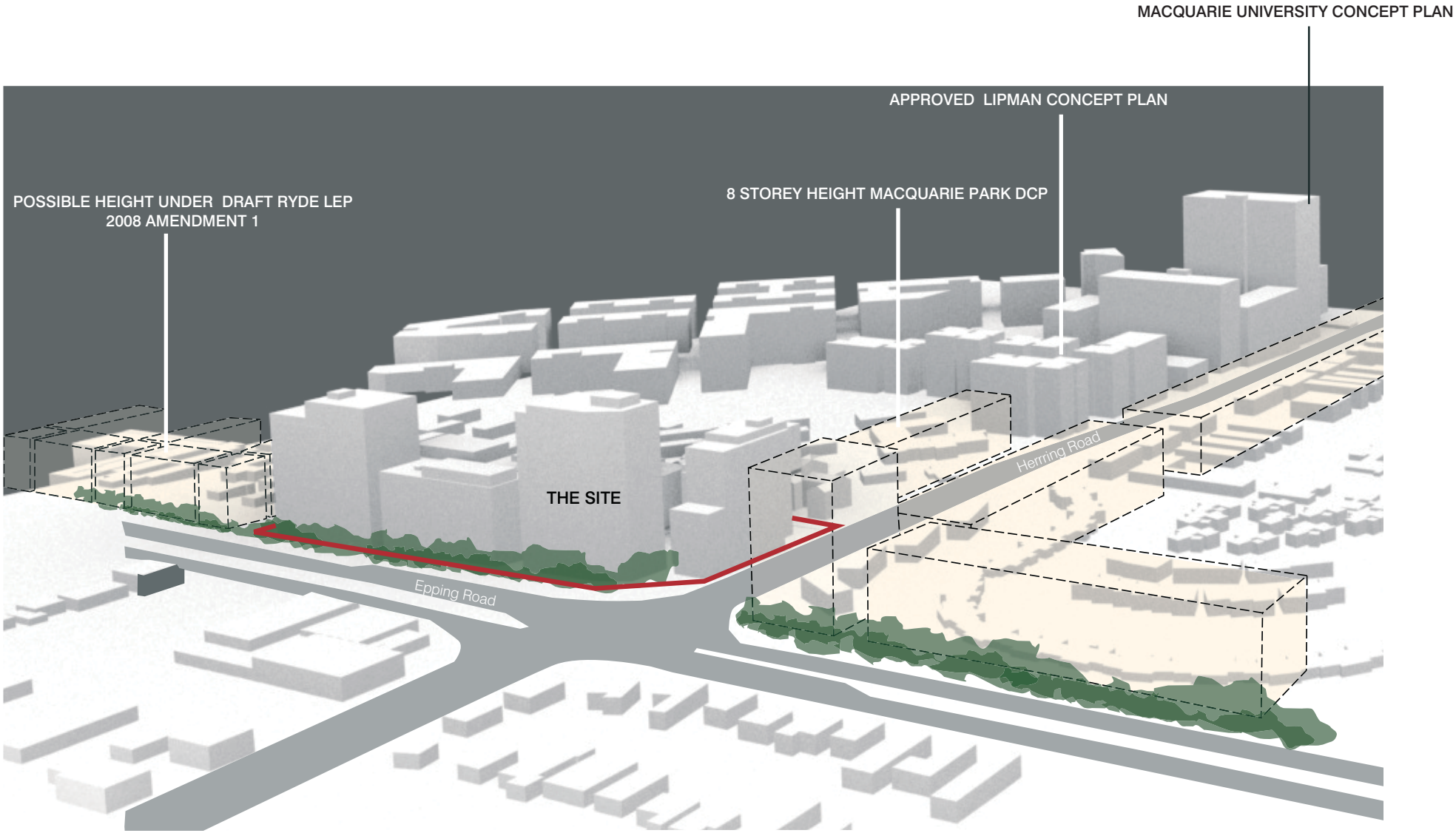


Figure B3.6: Future height context surrounding the site

Design Principles

Landmark

Figure B3.7: View approach from Epping Road west

- Orientate the landmark building east-west along Epping Road to create a slender landmark building on approach from Epping Road.
- Modulate building heights to reduce the overall mass and bulk of the development along Epping Road.
- Use facade composition to articulate the building forms providing visual interest.

Built Form Strategy

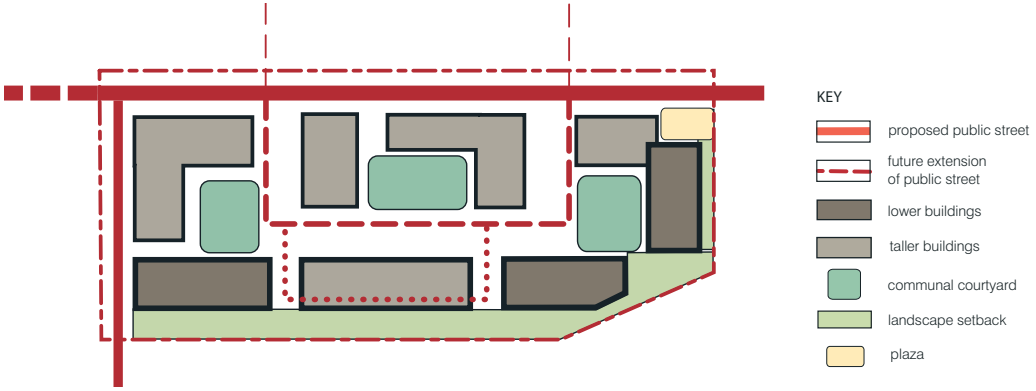


Figure B3.8: Built form strategy diagram

- Locate lower buildings in the northern part of the site to optimise solar access to open space and taller buildings to the south.
- Modulate building heights to reduce the appearance of a wall of buildings.
- Shape the profile of the buildings this will form a skyline and increase visual access to the sky creating a perception of space.

B3 BUILT FORM

Design Principles

Uses + Mix of Apartments-

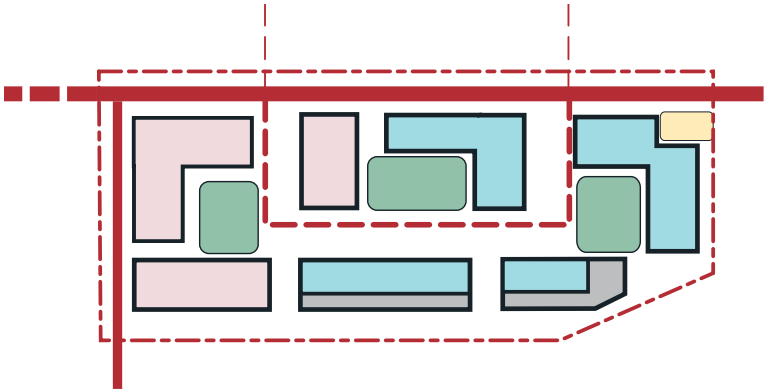


Figure B3.9: Uses and mix of apartments

- Contribute to the mix use zoning by providing:
  - Convenience store
  - Soho's
  - Residential
- Locate commercial and retail uses along Herring Road and the new local road to activate streets.
- Ensure a housing choice by providing a mix of apartments:
  - 50% - 1B maximum
  - 40% - 2B minimum
  - 10% - 3B minimum

Address + Frontage

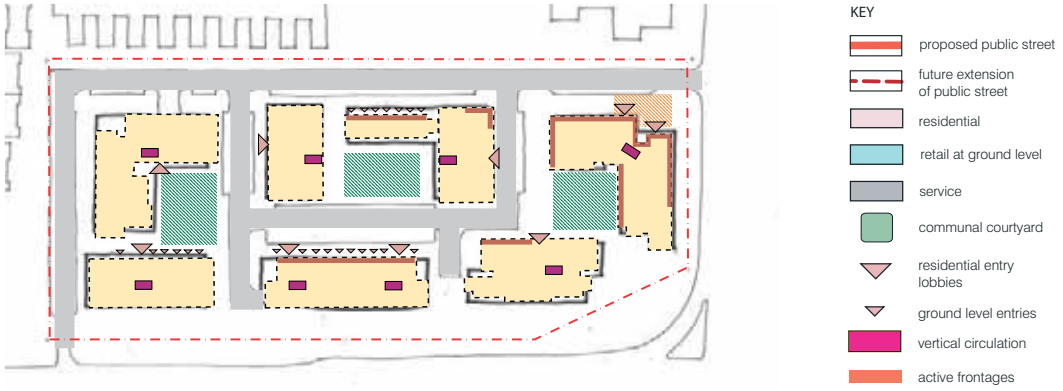


Figure B3.10: Address and frontage

- Activate streets with ground level entry lobbies, retail and commercial uses.
- Ensure all buildings have a street address.
- Provide individual entries to ground level SoHo's.

Parking + Servicing

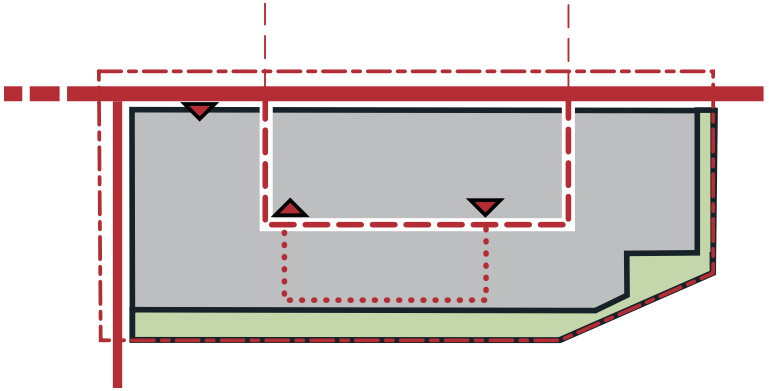


Figure B3.11: Parking and servicing diagram

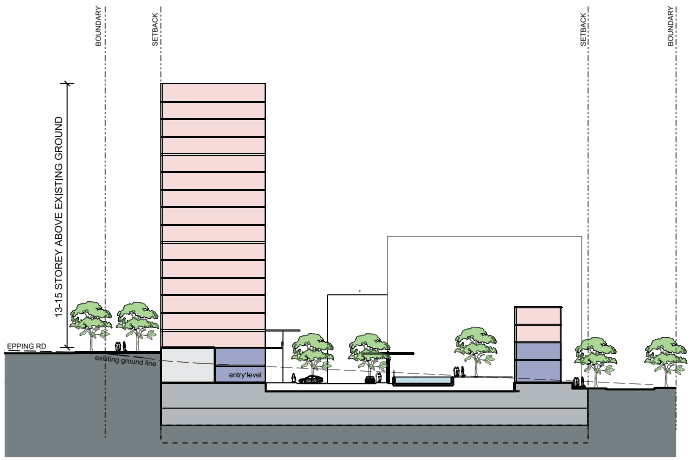
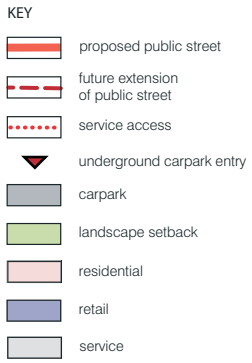


Figure B3.12: Parking and servicing section

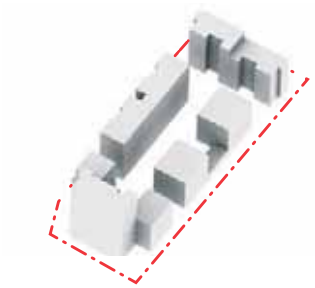


- Use the level change across the site to conceal servicing and to provide height clearance for service vehicles such as garbage trucks.
- Ensure that the proposed publicly dedicated road and deep soil areas are free from any underground parking structures.
- Where possible located entries to basements on the side facades.
- Ensure that vehicular entry points have a high degree of finish as it is the 'front door' for residents returning home by car.

B3 BUILT FORM

Design Process

Form + Mass: Building heights along Epping Road 'stepping down' away from the landmark building.



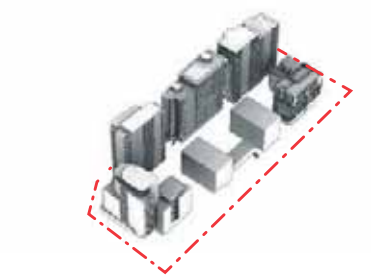
Pros

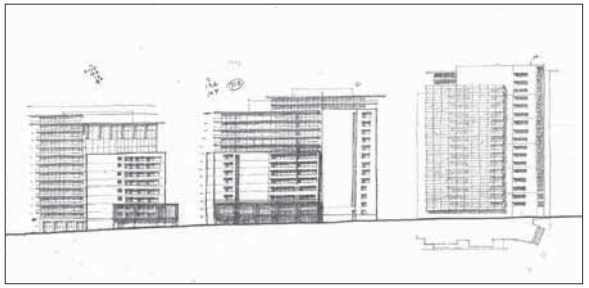
- Tallest building is the landmark building of 21 storeys.
- Building height step down to adjacent site to the west.

Cons

- 21 storeys was considered unacceptable by City of Ryde

Form + Mass: Taller buildings to the south, lower buildings to the north





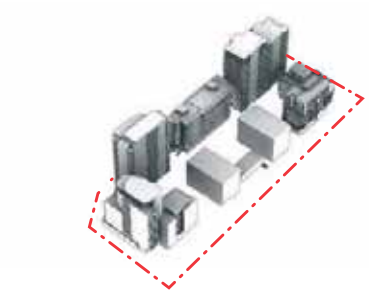
Pros

- Optimised solar access to open space and apartments

Cons

- Appearance of a 'wall' of buildings along Epping Road.

Form + Mass: Modulated skyline



Pros

- Better solar access and cross ventilation to apartments
- Reduced bulk and mass of buildings along Epping Road

Cons

- Taller building located adjacent to neighbouring site to the west.

Figure B3.13: Design process

Facade Development

Locating the taller buildings on Epping Road achieves several outcomes:

- It reinforces the strong edge condition of Epping Road as the southern edge of Macquarie Park Corridor
- It protects sun access to sites south of the development
- It allows the lower buildings on the proposed public road to visually mitigate the scale of the Epping Road buildings.

The aesthetics of the development derive from the desire to 'deformalise' the usual rigid and repetitive arrangement in multi-residential development. That is the same apartment type or plan is stacked one above the other to maximise efficiencies in the services and structure. This however, can create a repetitive vertical 'zipper' like effect in the facade. To counter this, and to 'individualise' each of the buildings a series of frames and valences are ulitlised to create buildings within buildings. Further, these elements deflect at slight angles from the orthogonal base building to shift the visual geometry from the formal and rigid to the relaxed and less formal.

To the Epping Road elevation, these frames and valence elements are designed to work as a counter to the building mass. The upper parts of the buildings have been further 'eroded' by the use of panellised or modular facade element, these appear lighter, less weighty because of their texture, broken colour palette and modular construction. Further in some cases these elements are curvilinear to form a strong contrast to the orthogonal base building and enhance the informal geometry of the facades. Colours for the buildings will be drawn from a eucalypt/bushland palette appropriate for the location.

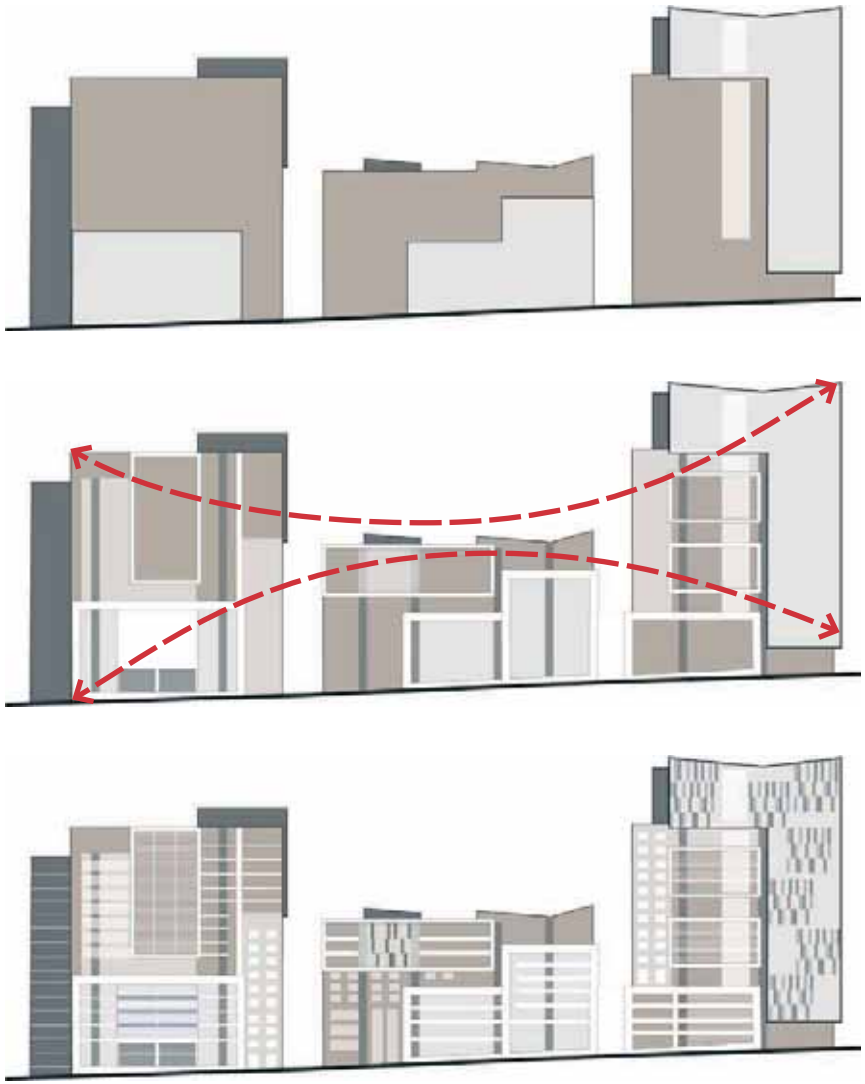


Figure B3.14: Facade development - Epping Road

Figure B3.15: Facade development - Herring Road

B3 BUILT FORM

Facade Development

Figure B3.16: Precedents for facade treatments

Built Form Controls

Development Footprint + Deep Soil Area

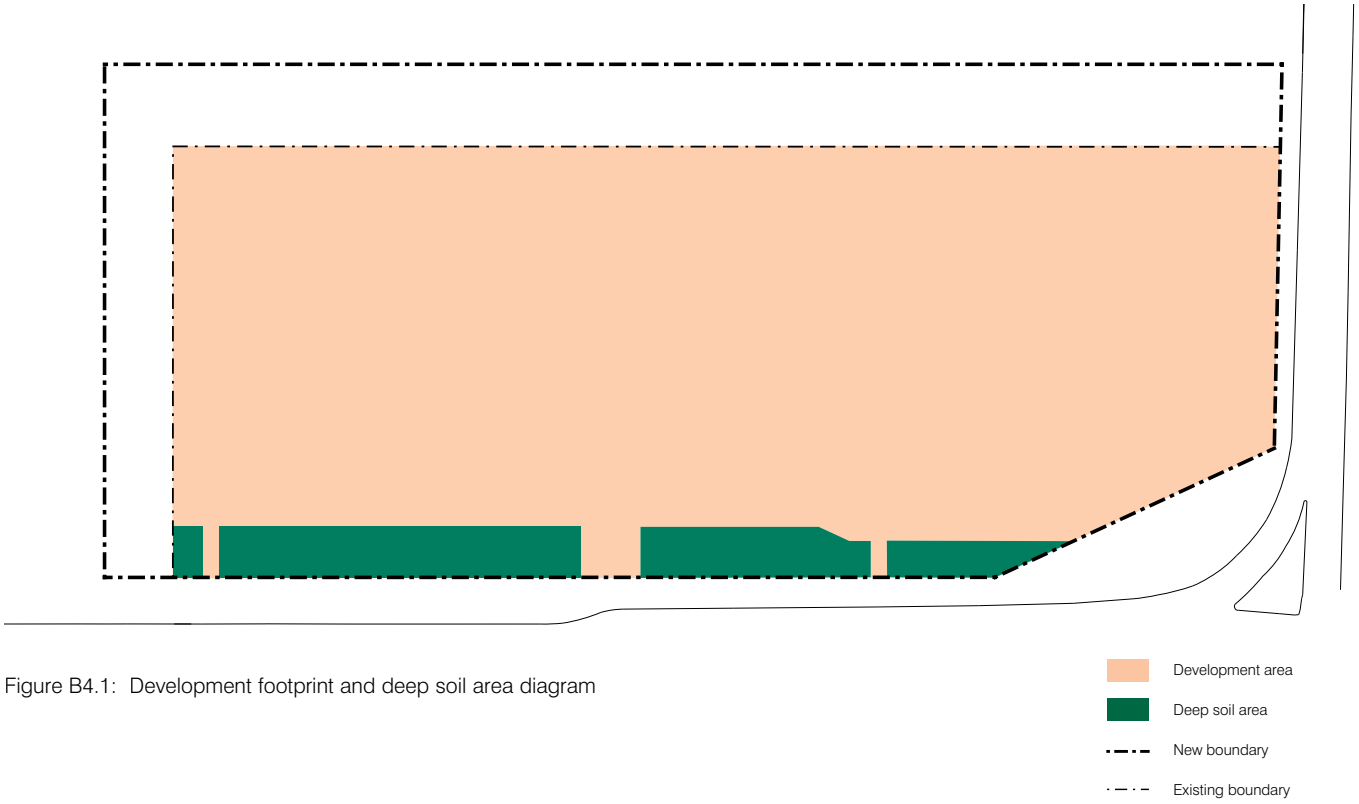


Figure B4.1: Development footprint and deep soil area diagram

Objectives

- To retain existing mature trees along Epping Road.
- To contribute to stormwater management and reduce runoff.
- To provide deep soil zones consistent with Macquarie Park Corridor DCP.

Controls

Deep soil areas are to:

- Have minimum dimension of 10m.
- Be a minimum of 25% of the landscape area.
- Be free of any above or below ground structures.

For detailed areas refer to Appendix 2.

B4 CONTROLS

Built Form Controls

Building Height

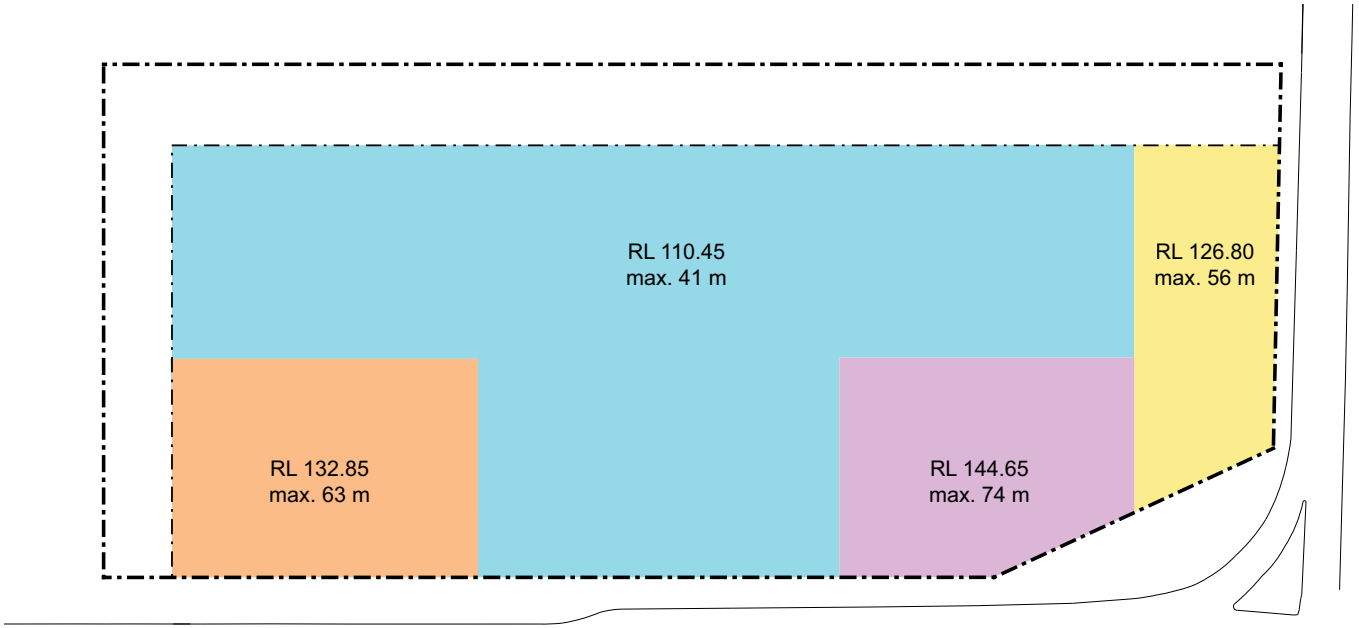


Figure B4.2: Building height control diagram

RL 110.45, max 41m above ground

RL 126.80, max. 56m above

RL 132.85, max 63m above ground

RL 144.65, max 74m above ground

New boundary

Existing boundary

Objectives

- To create a 'gateway' to Herring Road from Epping Road.
- To contribute to the spatial hierarchy of Macquarie Park Corridor.
- To locate taller buildings where they have minimal overshadowing impact on surrounding residential neighbourhoods.
- To relate to the future context of Macquarie Park Corridor including Macquarie University and new buildings surrounding the train station.
- To ensure appropriate floor to floor heights for the uses in the development.
- To allow sufficient height to accommodate sloping topography across the site, parapets and access to roofs, roof gardens and terraces, plant rooms and service area.

Controls

- Maximum building heights in metres above existing ground level are as indicated in Figure B4.2: Building height control. Building heights assume:
  - 3.1 -5m floor to floor height for roof plant room
- Optimum floor to floor heights are as follow:
  - 3.6m for retail and facilities other than residential uses
  - 3.1m for residential uses

Built Form Controls

Building Height

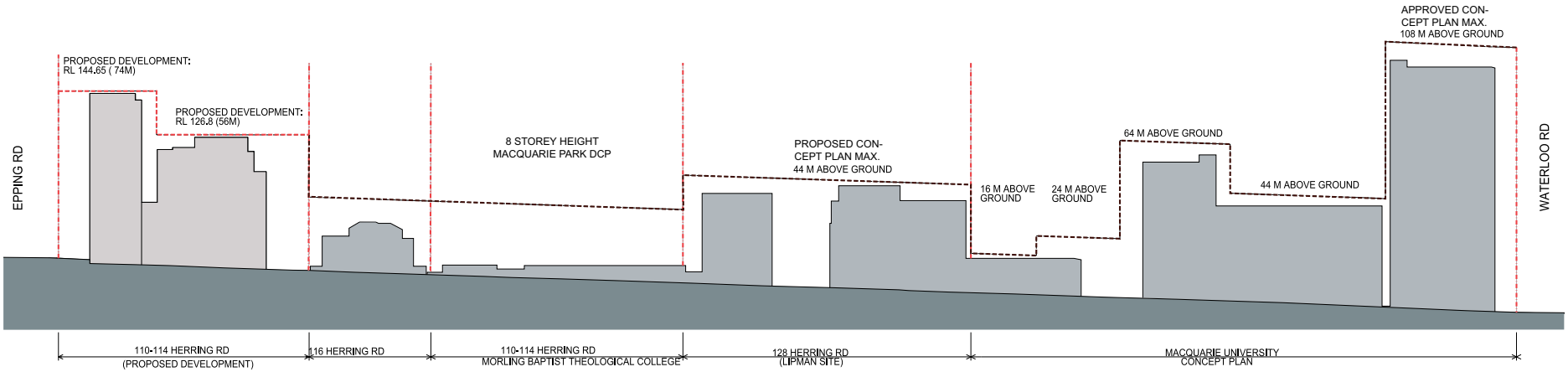


Figure B4.3: Height control along Herring Road

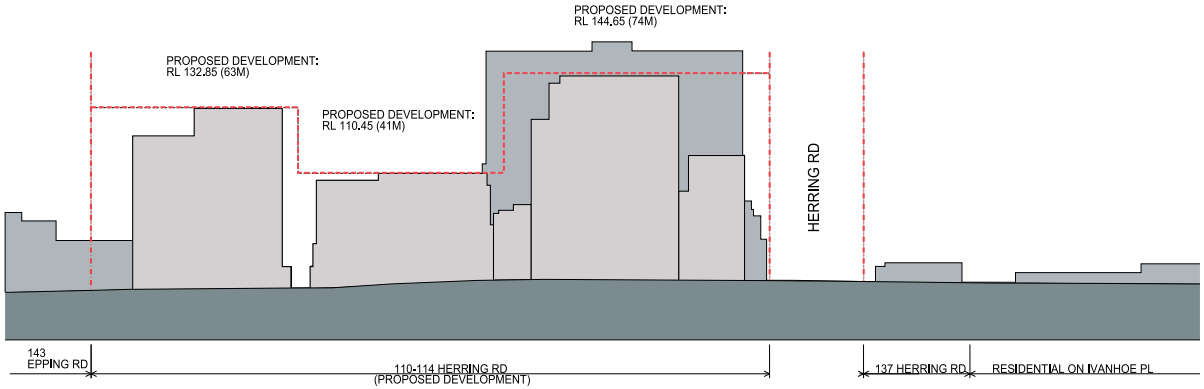


Figure B4.4: Height control along Epping Road

B4 CONTROLS

Built Form Controls

Building Setback

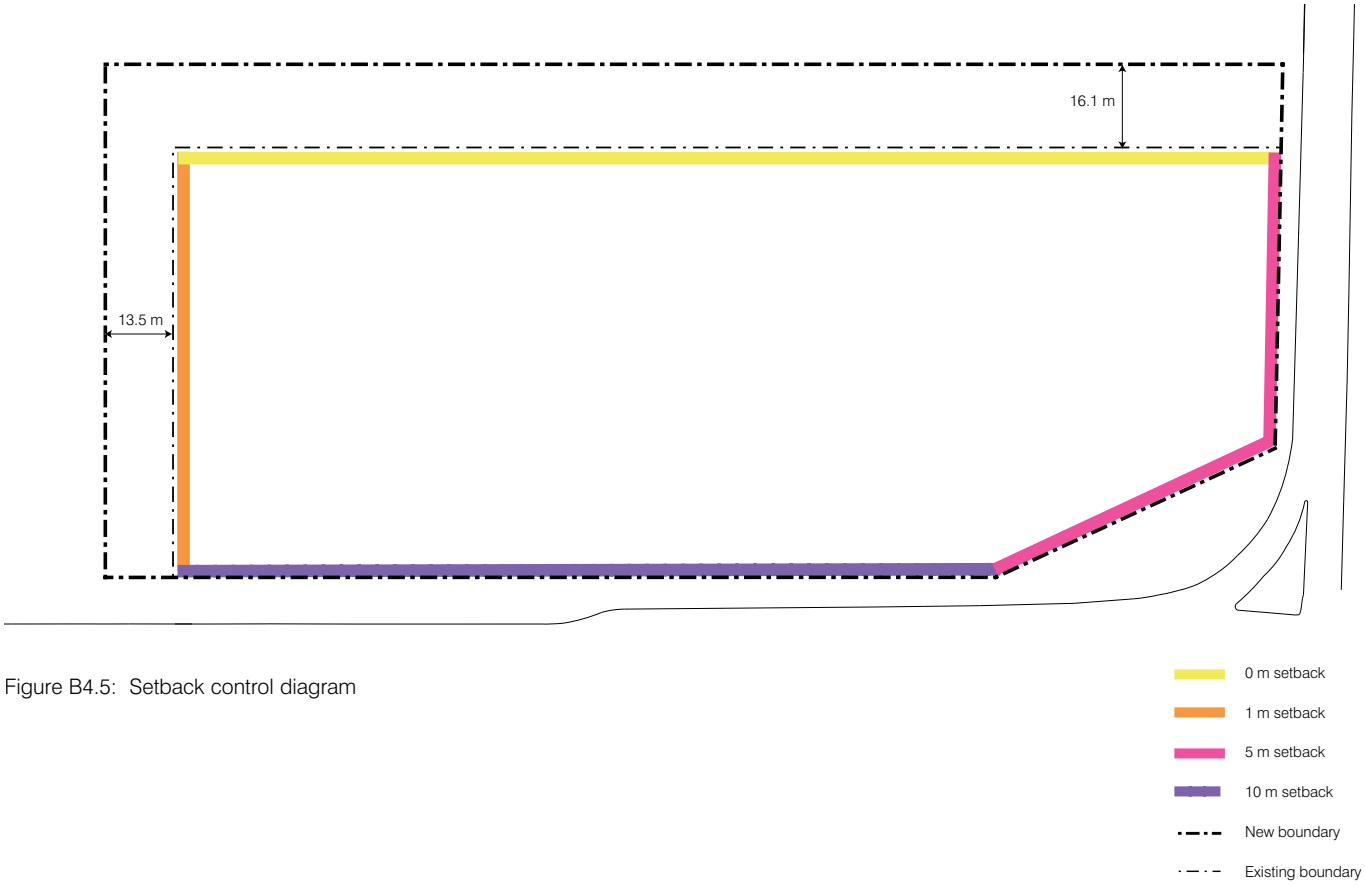


Figure B4.5: Setback control diagram

Objectives

- To manage change as redevelopment occurs
- To retain existing trees and maintain the landscaped character of Epping Road.
- To relate street setbacks to the proposed uses.
- To relate street setbacks to the street hierarchy and scale.
- To create active frontages and improve casual safety and surveillance of the public domain
-

General Controls

- Minimum street setbacks are as indicated in Figure B4.5: Setback control diagram

Built Form Controls

Building Separation

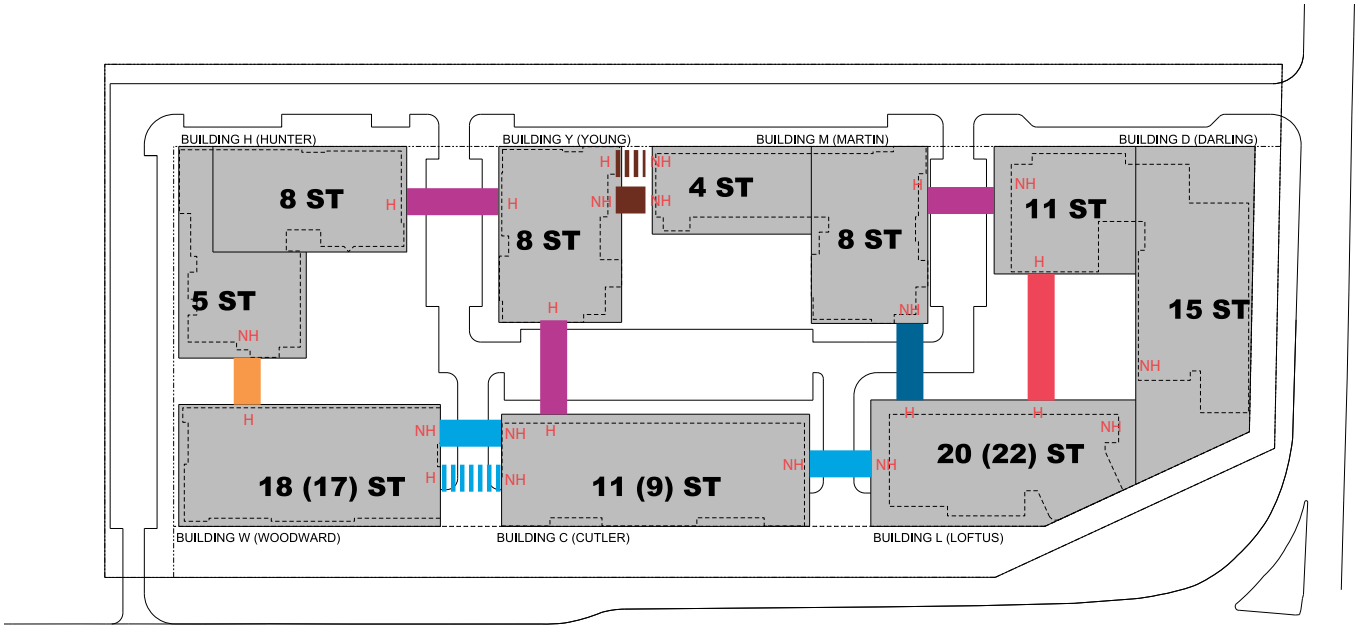


Figure B4.6: Building separation diagram

Objectives

- To ensure high quality residential amenity within the development.
- To optimise solar access to apartments and communal open space.
- To create views to the sky from the communal and public domain.
- To enhance the spatial legibility of the development

Controls

- Minimum building separations are as shown in Figure B4.6 Building separation diagram
- Sunlight access, visual and acoustic privacy will be achieved through the use of privacy screens, orientation and location of openings and architectural solutions where building separations depart from the recommended separations between buildings in the Residential Flat Design Code.

The following complies with recommended RFDC:

- min. 6 m bldg separation complies habitable to non-habitable
- min. 9 m bldg separation complies habitable to habitable
- min. 12 m bldg separation complies non-habitable to nonhabitable
- min. 13 m bldg separation complies habitable to non-habitable
- min. 18 m bldg separation complies habitable to habitable
- min. 24 m bldg separation complies habitable to habitable

Less than recommended in RFDC, but will demonstrate daylight access, urban form, visual and acoustic privacy has been satisfactoryily achieved:

- less than 9m bldg separation for habitable to non-habitable
- (1-8ST) less than 13m bldg separation for habitable to non-habitable
  (>9ST) less than 18m bldg separation for habitable to non-habitable
- H / NH habitable / non-habitable area
- indicative line of external wall
- building envelope

B5 STAGING

Stage 1

Stage 1 includes the following:

- Publicly dedicated road and internal roads and associated landscape and Water Sensitive Urban Design measures.
- Communal open space and swimming pool.
- 310 apartments in four residential buildings: Buildings W, H, Y and C.
- Parking:
  - Residents parking for 669 cars
  - Visitor parking for 105 cars
  - Retail parking for 8 cars

STAGE 1

Development Summary			
	1 BR	:	161 units
	2 BR	:	119 units
	3 BR	:	30 units
			310 units
Proposed Parking Provided in Stage 1	On-street parking	:	67 carparks
	Basement 1	:	262 carparks
	Basement 2	:	312 carparks
	Basement 3	:	141 carparks
			782 carparks

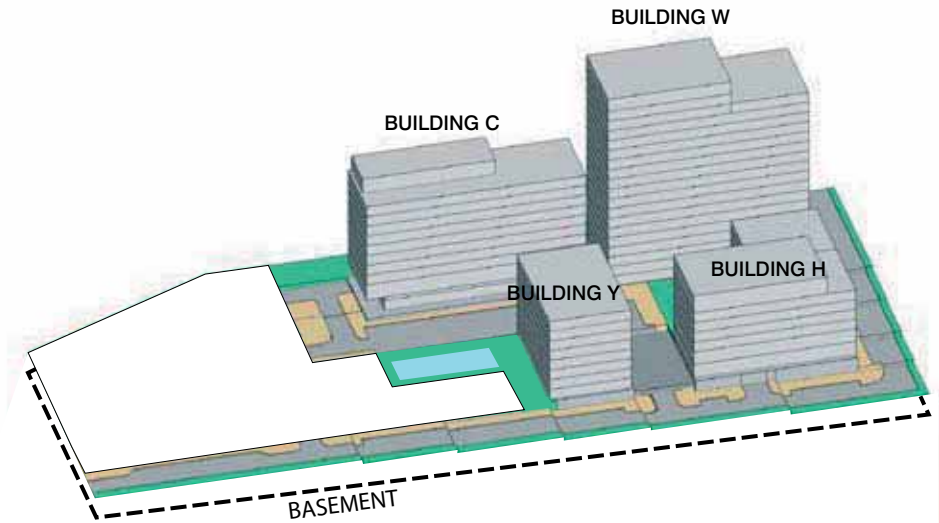


Figure B5.1: Stage 1

Stage 2

Stage 2 includes the following:

- Communal open space
- 316 apartments in three residential and mixed use buildings: Buildings L, M and D
- 752 m^2 of commercial/retail space
- Parking:
  - Retail parking for 8 cars

STAGE 2

Development Summary			
	1 BR	:	181 units
	2 BR	:	122 units
	3 BR	:	13 units
			316 units
Proposed Parking Provided in Stage 2	On-street parking	:	8 carparks
	all basement car parking will be provided in stage 1		
Total proposed parking provided for Stage 1 & Stage 2	*Total Proposed Carparking*		
	782 (stage 1) + 8 (stage 2)	:	790 carparks

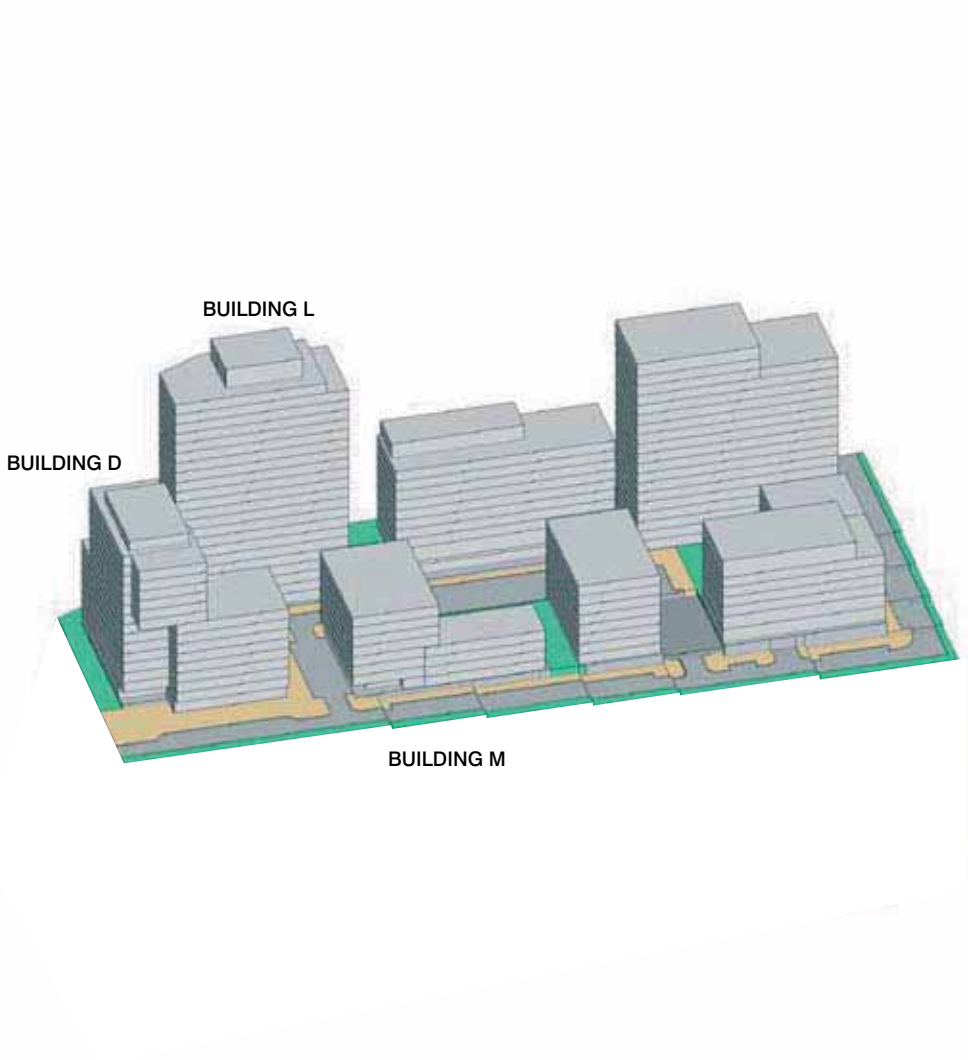


Figure B5.2: Stage 2

B6 VISUAL IMPACT

View Key Points

Figure B6.1: Key Views

Key Views

Figure B6.2: Key View A - View from Macquarie University

Figure B6.3: Key View B - View from Herring Road

Figure B6.4: Key View C - View from Macquarie University sports ground

Figure B6.5: Key View D - View from University Avenue, Macquarie University

B6 VISUAL IMPACT

Key Views

Figure B6.6: Key View E - View from Epping Road

Figure B6.7: Key View F - View from corner of Epping Road and Balaclava Road

Figure B6.8: Key View G - View from Herring Road South

Figure B6.9: Key View H - View from Liberty Park