

O'CONNELL ST CADDENS

URBAN DESIGN REPORT DA SUBMISSION

MARCH 2024





ACKNOWLEDGMENT OF COUNTRY

TURNER acknowledges the Aboriginal and Torres Strait Islander peoples of Australia as the traditional Custodians of the lands on which we live, work and that our projects take place on.
We pay our respect to Elders Past, Present and Emerging.
TURNER are committed to continuing our journey in honouring the unique cultural and spiritual relationships to Country of Aboriginal and Torres Strait Islander peoples.

CONTENTS

PART 1 ANALYSIS

1.0	Introduction
1.01	Turner Team
1.02	Project Team
1.03	Executive Summary
1.1	Contextual Analysis
1.10	Local Context
1.11	Existing Site
1.12	Site Photos 1-6
1.13	Site History
1.14	LEP Controls
1.15	Caddens DCP 1-2
1.16	Native Vegetation

PART 2 PROPOSAL

2.0	Site Strategy
2.01	Road Network : Existing
2.02	Road Network : DCP
2.03	Road Network : Natural Features
2.04	Road Network : Ecology
2.05	Road Network : Proposed
2.05	Pedestrian Connectivity
2.05	Open Spaces
2.05	Views
3.0	Place Making
3.01	Vision
3.02	Placemaking
3.03	Design Approach
3.04	Design Evolution
3.05	Topography
3.06	Natural Elements
3.07	Open Vistas
4.0	Density
4.01	DCP Test Fit
4.02	Key Moves
4.03	Preferred Design
4.04	Variation in Scale
4.05	Height Plane Constraints
4.06	Height Plane Analysis

PART 3 COMPLIANCE

5.0	Streetscape
5.01	Streetscape
5.02	Street Character Village Green 1-2
5.03	Street Character Park View St 1-2
5.04	Street Character Bow St 1-2
5.05	Street O’Connell St 1-2
5.06	Elevational Concept
6.0	Residential Offering
6.01	Housing Objectives
6.02	Housing Typologies 1-2
6.03	Diverse Character
6.04	Living in Caddens
7.0	Landscape
3.21	Stage 1
3.22	Stage 2
3.23	Stages 1 and 2 Concept Masterplan
8.0	ADG Principles

1.01 TURNER TEAM

A diverse team
to enrich the project and make
living better



Nicole Hua
Designer



Brian Fong
Associate Director



Maddie McCarthy
Designer



Christian Harrup
Project Designer



Sue Wong
Senior Project Architect



Andrew Kim
Project Designer



Ivan Yim
Designer



Stephen Cox
Director



Zachary Triantafilis
Designerr



Jenna Grant
Designer



Natalie Ma
Project Architect



Annraoi Morris
Associate Director

1.02 PROJECT TEAM

A collaboration from concept
to DA submission

Working closely with the project team, we have prepared a comprehensive proposal that has been developed through an evidence based approach, with option testing, technical input and coordination to create a place making development.

HOLDMARK
Client

THINK PLANNERS
Town Planner

SITE IMAGE
Landscape Architect

NORTHROP
Civil & Stormwater Engineer

SLR
BASIX Consultant
Section J Consultant

VENTURA
BCA Consultant

TTPA
Traffic Consultant

ABE
DDA

E-Lab
Fire Engineer

Elephants Foot
Waste Management
Consultant

Ecological
Australia
Ecologist
Bushfire Consultant

STANTEC
Acoustic

BRS
CPTED

Birds Tree
Arborist

Construction
Consultants
QS/CIVR

EI AUSTRALIA
Geotech and Environmental

ATLAS
EIA

1.03 EXECUTIVE SUMMARY



Site Description

This Design Report has been prepared in support of the Concept Development Application on behalf of Holdmark. The application seeks consent for the mixed-use development of 80 O’Connell St Caddens, from herein referred to as the Site.

The site is described in the Penrith Development Control Plan 2014 being located in the suburb of Caddens is located within the Werrington Enterprise Living and Learning (WELL) Precinct. The site consists of two lots - lot 1 DP1268507 (4.805ha) and Lot 2 DP1268507 (3.323 ha) The site is mostly regular shape. The existing site includes an established shopping centre on its western side (Caddens Corner) and associated surface parking and retail loading areas.

Situated approximately 5km from downtown Penrith, the site is bounded by O’Connell St on the west and South, residential buildings on the south, a school on the north and an ecological reserve on the east.

The proposed development fits within the future vision for the WELL Precinct as a vibrant mixed-use and high density residential precinct.

Proposal

The site will be a new mixed-use and high-density residential precinct in Caddens. The proposal accommodates a new road network, a mix of retail (including food and beverage tenancies), commercial, residential, and community uses will be delivered .

The design provide a coherent urban design that connects with the existing street network. The design upgrades the existing retail experience , removing surface parking and providing an outdoor public square (The Village Green) lined with food and beverage premises. The apartment buildings create a coherent yet varied street scape with a strong sense of identity.

The development proposal builds upon the vision and objectives of the Caddens DCP by creating a vibrant and diverse mixed-use development that responds to local needs by supporting the future culture of the local community.

The development envisions a fine grain experience supported by a range of building typologies and public spaces that will help to distinguish the character and identity for the development within the local urban framework.

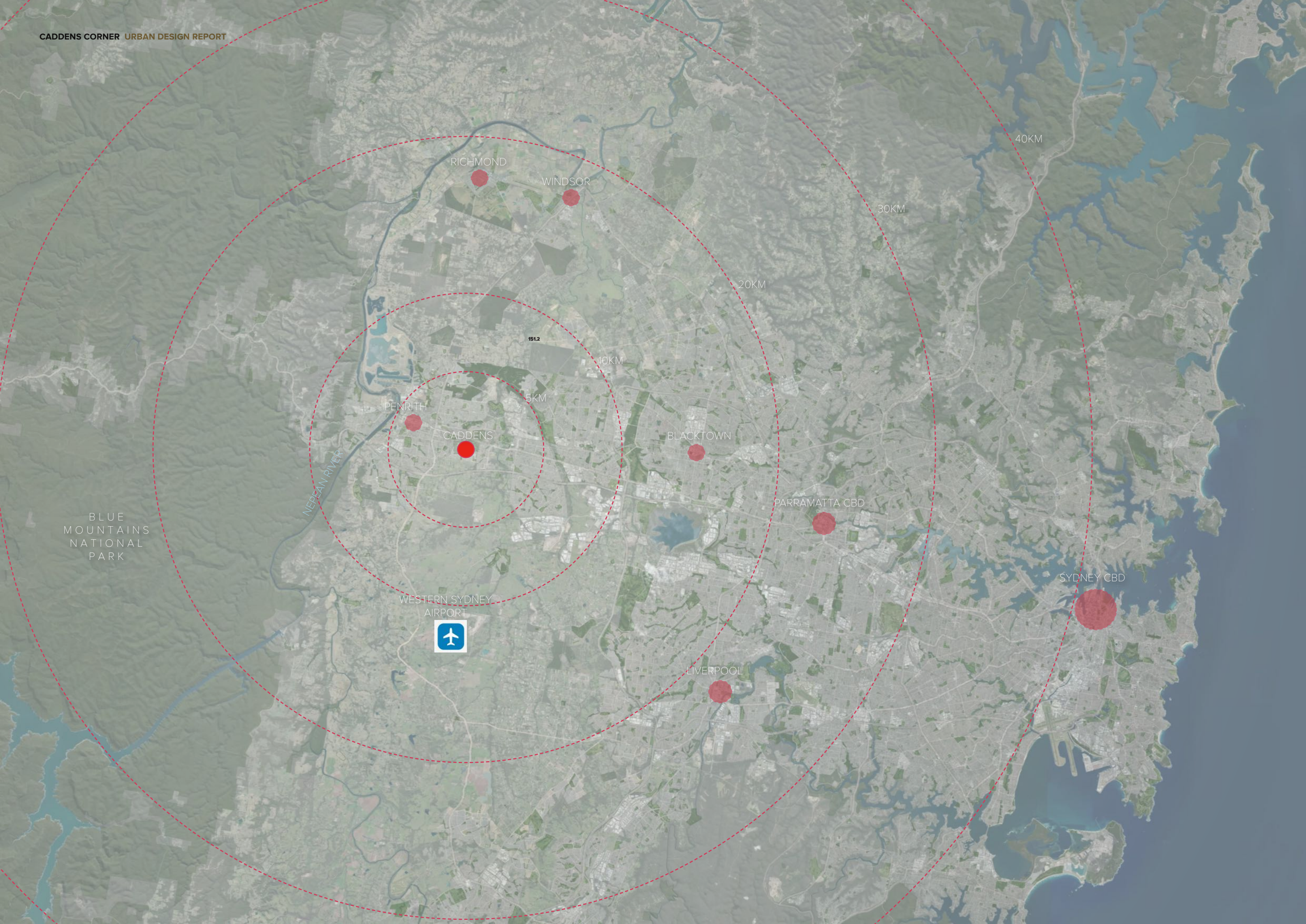
The diversity of housing types proposed will suit different family structures, age groups and individuals to add to the existing community in Caddens.

This report should be read in conjunction with the accompanying architectural design package prepared by Turner, landscape report prepared by Site Image and the Statement of Environmental Effects with appendices prepared by Think Planners.

01

CONTEXTUAL ANALYSIS

The strategic context reviews the planning context of the site, specifically the relationship between the site and the changing urban context.



1.10 LOCAL CONTEXT



PENRITH 5.7 KM

10 MIN CAR

1 HOUR WALK



1.11 THE EXISTING SITE

The existing site contains an established retail shopping centre with associated parking and retail loading areas.

Key Observations

- The Site is located within a community with various building uses, with various schools, residential neighbourhoods, parks and educational buildings within the local context.
- The site is predominately surrounded by residential and university land.
- The West of the Site is occupied by a recently built busy shopping centre with on-grade parking on its eastern side.
- The north of the site is to be developed into single dwelling houses. This development retains a portion of a Threatened Ecological Community in the form of remnant shale planes woodland. This TEC connects to the TEC land on the subject site.
- The site to the south of the site known as 'Caddens Hill Quarter' is currently under construction.
- Further to the west on the Southern side there is a neighbourhood of recently built single-dwelling houses
- There is a significant level change of approximately 20m from the south eastern corner to the north-west corner of the site
- The site contained the Kingswood Drive-in Cinema. Evidence of extensive excavation is in evidence, with a high bank to O'Connell St South
- Places of worship, schools and childcare centres are located in the surrounding suburbs adjacent to the development.
- The site is served by the 770 bus Route connecting Penrith and St Marys.



Context Plan

1.12 SITE PHOTOS - 1

CADDENS CORNER SHOPPING CENTRE

CADDENS CORNER



EXISTING SITE WITH CADDENS CORNER SHOPPING CENTRE AND
CAR PARK IN THE FOREGROUND

1.12 SITE PHOTOS - 2

TEC

CADDENS CORNER



PROTECTED (TEC) THREATENED ECOLOGICAL SITE WITH CREEK.

1.12 SITE PHOTOS - 3

CAR PARK SOUTH

CADDENS CORNER



VIEW OF THE CURRENT CAR PARK SHOWING THE STEEP
INCLINATION OF THE SITE ALONG O'CONNEL STREET (SOUTH)

1.12 SITE PHOTOS - 4

SOUTH EAST OF SITE

CADDENS CORNER



VIEW FROM THE SOUTH EAST OF THE SITE WITH THE
BLUE MOUNTAINS IN THE DISTANCE

1.12 SITE PHOTOS - 5

EAST OF SITE LOOKING WEST

CADDENS CORNER



VIEW FROM THE EAST OF THE SITE
INDICATING THE STEEP TOPOGRAPHY OF THE SITE

1.12 SITE PHOTOS - 6

EXISTING CADDENS CORNER CAR PARK

CADDENS CORNER



CAR PARK SHOWING THE DISTINCT LEVEL CHANGES IN THIS AREA.

1.13 SITE HISTORY

HISTORICAL USES-KINGSWOOD DRIVE IN CADDENS CORNER



VIEW LOOKING NORTH-WEST

The previous use of the site was as a drive-in cinema. The distinctive and artificial topography required for the drive-in is still evident on the site



VIEW LOOKING EAST

1.14 LEP CONTROLS

PENRITH LEP PLANNING CONTROLS 2010

PENRITH CITY COUNCIL



ZONING

The western portion of the site is zoned B2, this portion contains the Caddens Corner Shopping Centre and permits shop top housing

The eastern portion is zoned R4 - High density residential



HEIGHT CONTROLS

The LEP height of building maps show a limit of 15m for the site

1.15 CADDENS DCP - 1

DCP PLANNING CONTROLS

PENRITH CITY COUNCIL



STRUCTURE PLAN

- The DCP does not account for the thicket of Cumberland Plains woodland critically endangered
- The DCP outlines a structure plan for the site and surrounds. The structure plan has begun to be applied through the construction of the Caddens Corner shopping centre and low-density residential to the south of the site. The DCP does not seem to account for the steep topography of the site nor the critically endangered ecological community on site.



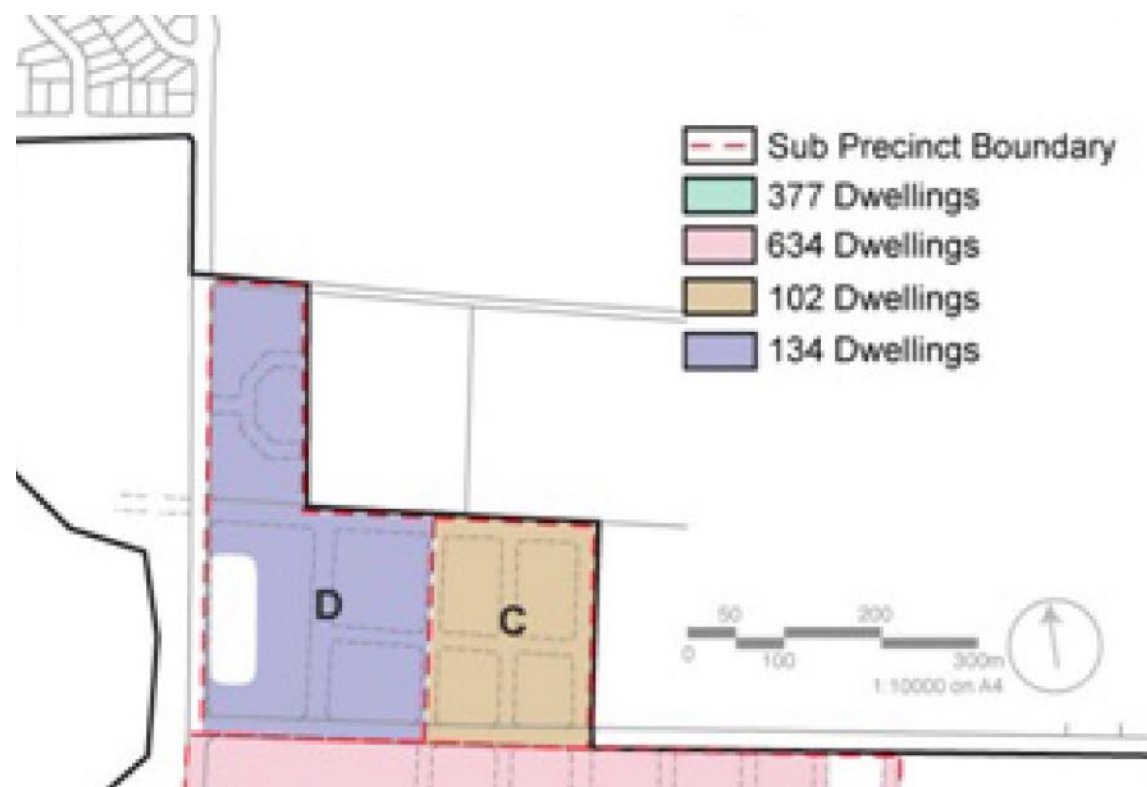
DCP ROAD NETWORK

- Collector Road running North-South within the site serves as access to the supermarket with a ramp connecting to O'Connell St (West)
- The Avenue portion of road on the northern edge of the site is affected by the thicket of Cumberland Plains woodland.
- There is a steep incline where the local road entries points connect to O'Connell St (West)

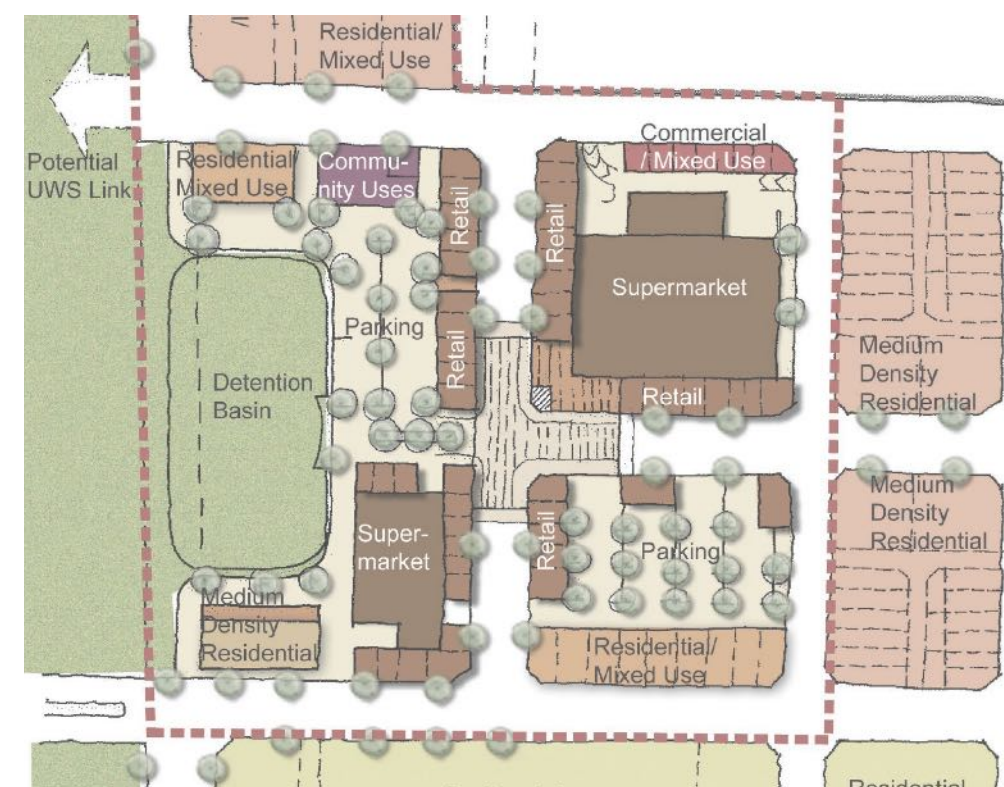
1.15 CADDENS DCP - 1

DCP PLANNING CONTROLS

PENRITH CITY COUNCIL



DWELLING YIELD TARGETS



RETAIL PRECINCT CENTRE CONCEPT PLAN

The as-built design of Caddens Corner Shopping Centre is considerably different from the DCP concept plan. The proposed design acknowledges the intention to create a pedestrian-friendly village centre in the DCP Concept Plan.

1.16 NATIVE VEGETATION

PLANNING CONTROLS VEGETATION

PENRITH CITY COUNCIL

NATIVE VEGETATION OF CUMBERLAND PLAIN - SEED NSW

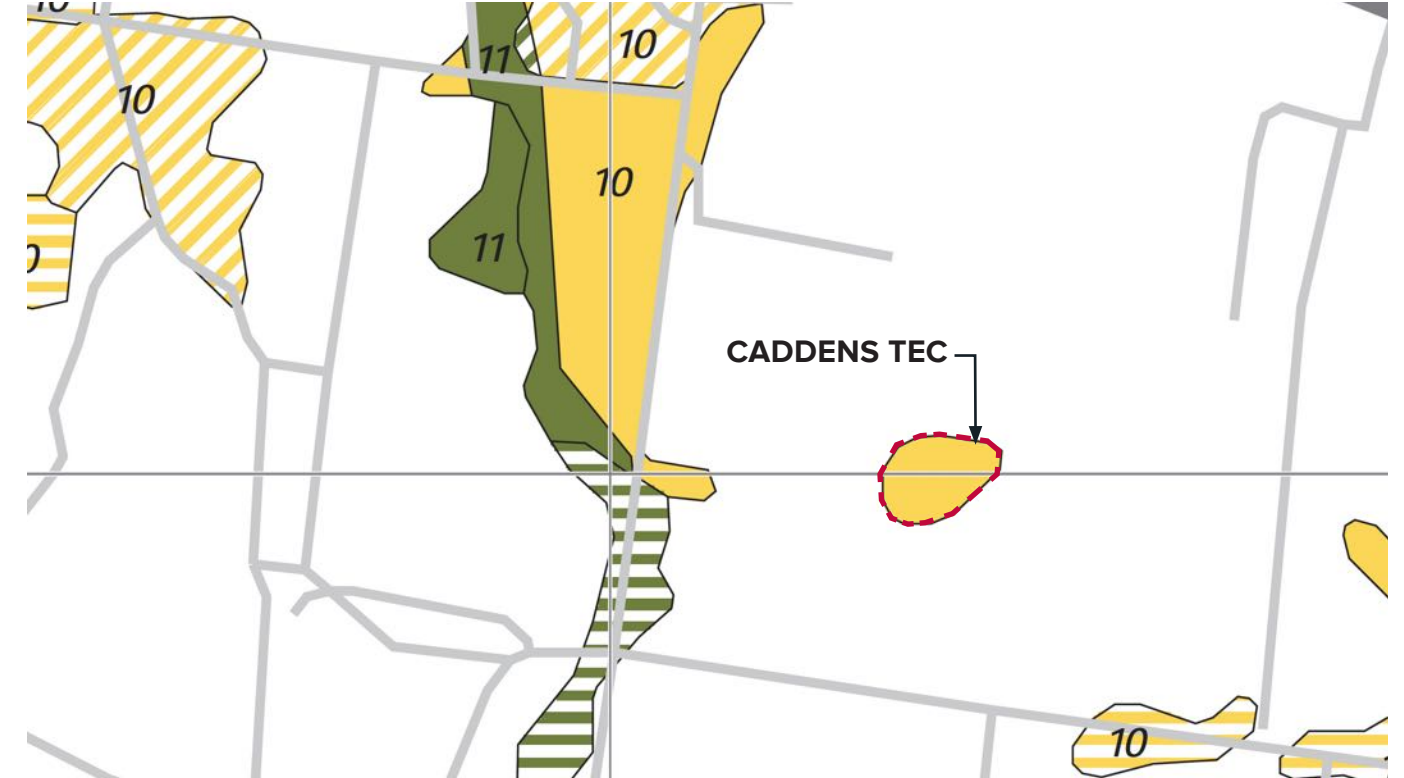


THREATENED ECOLOGICAL COMMUNITIES

GREATER SYDNEY

The DCP does not account for the thicket of Cumberland Plains woodland located on the northern perimeter of the site. This is listed on the Threatened Ecological Communities Greater Sydney map. It is noted that the Caddens Corner shopping centre did affect the native vegetation to the eastern portion of the site

NATIVE VEGETATION OF CUMBERLAND PLAIN - SOURCE : NATIONAL PARKS AND WILDLIFE SERVICE



9 - Shale Hills Woodland	37 - Elderslie Banksia Scrub Forest
10 - Shale Plains Woodland	Shale Gravel Transition Forest
Sydney Coastal River-flat Forest	103 - Shale Gravel Transition Forest
11 - Alluvial Woodland	Blue Gum High Forest
	152 - Blue Gum High Forest

02


SITE STRATEGY

The strategic context reviews the planning context of the site, specifically the relationship between the site and the changing urban context.


2.01 ROAD NETWORK - EXISTING

EXISTING


- 1. Existing Retail Vehicular Entry Egress ramp.
- 2. Existing Retail Vehicular Entry Egress road.
- 3. Existing BOH vehicular access.
- 4. Existing Access road for retail surface car park.




UNVIABLE ROAD CONNECTIONS
REFER POINTS 2&3
VEHICLE ACCESS




COLLECTOR ROAD 1




COLLECTOR ROAD 2



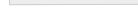
COLLECTOR ROAD 3




AVENUE




LOCAL ROAD




PEDESTRIAN PATH



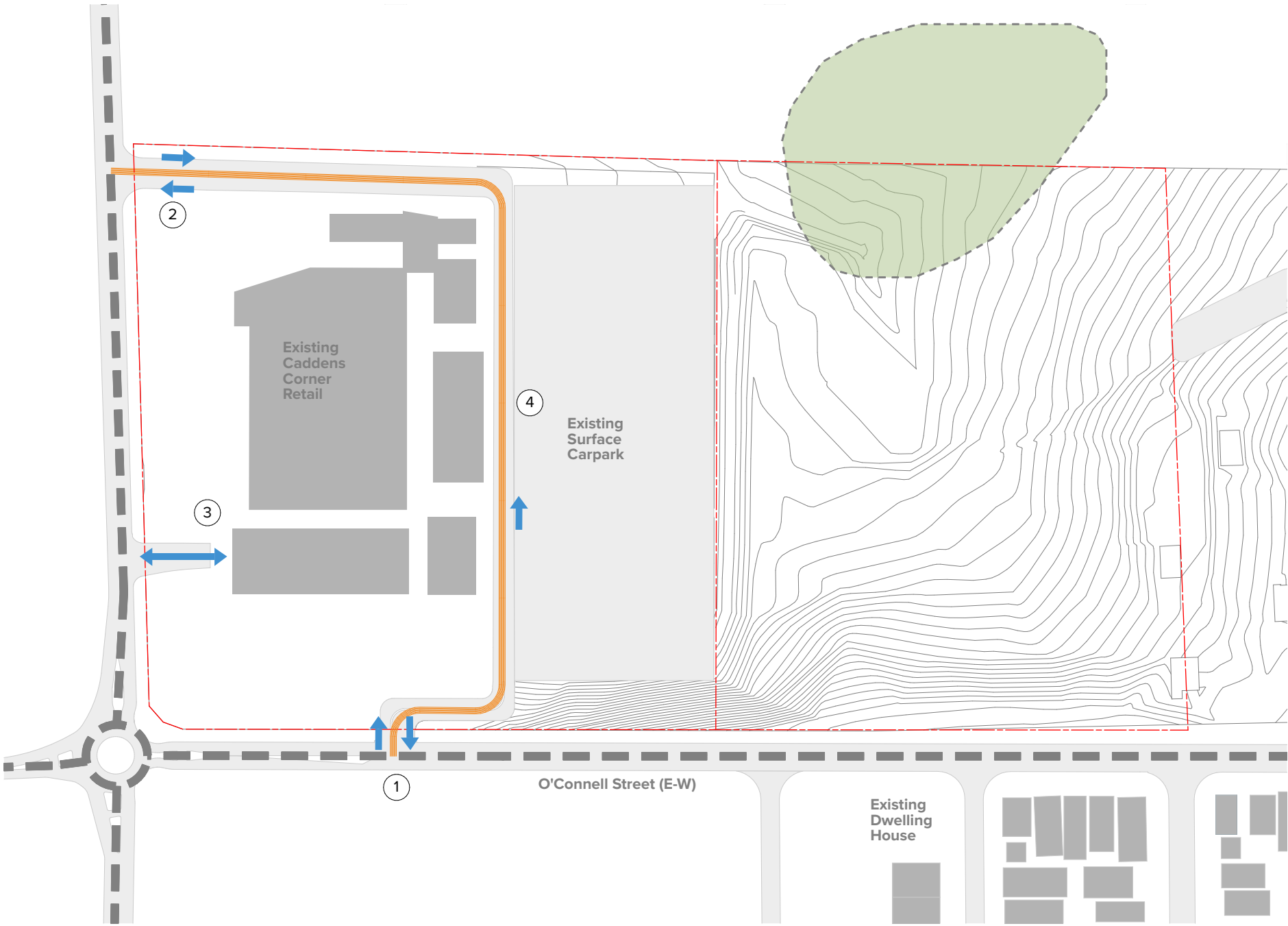
OPEN SPACE/ PLAZA



ANGLED REALIGNMENT



ROAD REALIGNMENT




2.02 ROAD NETWORK - DCP


DCP ROAD NETWORK

- 1. Collector Road 1 as shown in the DCP with connection to O'Connell Street (E-W) does not acknowledge the level difference and steep gradient of over 8m at the junction. As built connection to O'Connell St south is a driveway.
- 2. Avenue and Local Road as shown in the DCP do not consider impact to TEC.
- 3. Local Roads as shown in the DCP with connection to O'Connell Street (E-W) do not acknowledge level difference and steep gradient at the junction.
- 4. Avenue as shown in the DCP connecting to O'Connell Street (E-W) has the most gradual transition in level for the entire site at the south east corner.


The DCP lacks a hierarchy through the site. The street grid suggests a regular density to the eastern part of the site rather than a graduation responding to the adjoining conditions Park/low density residential / TEC etc.




UNVIABLE ROAD CONNECTIONS
REFER POINTS 2&3
VEHICLE ACCESS




COLLECTOR ROAD 1




COLLECTOR ROAD 2



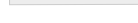
COLLECTOR ROAD 3




AVENUE




LOCAL ROAD




PEDESTRIAN PATH



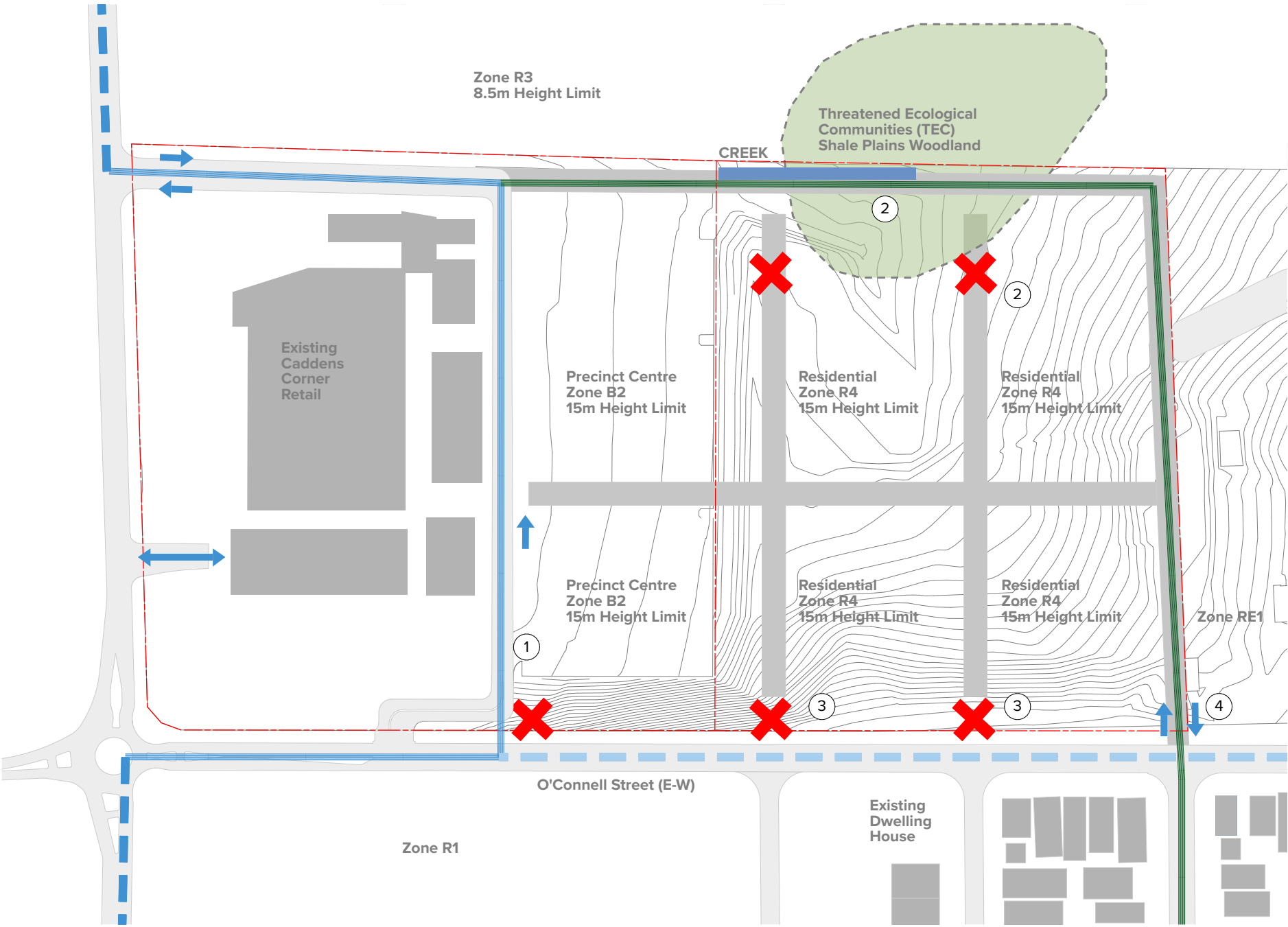
OPEN SPACE/ PLAZA



ANGLED REALIGNMENT



ROAD REALIGNMENT



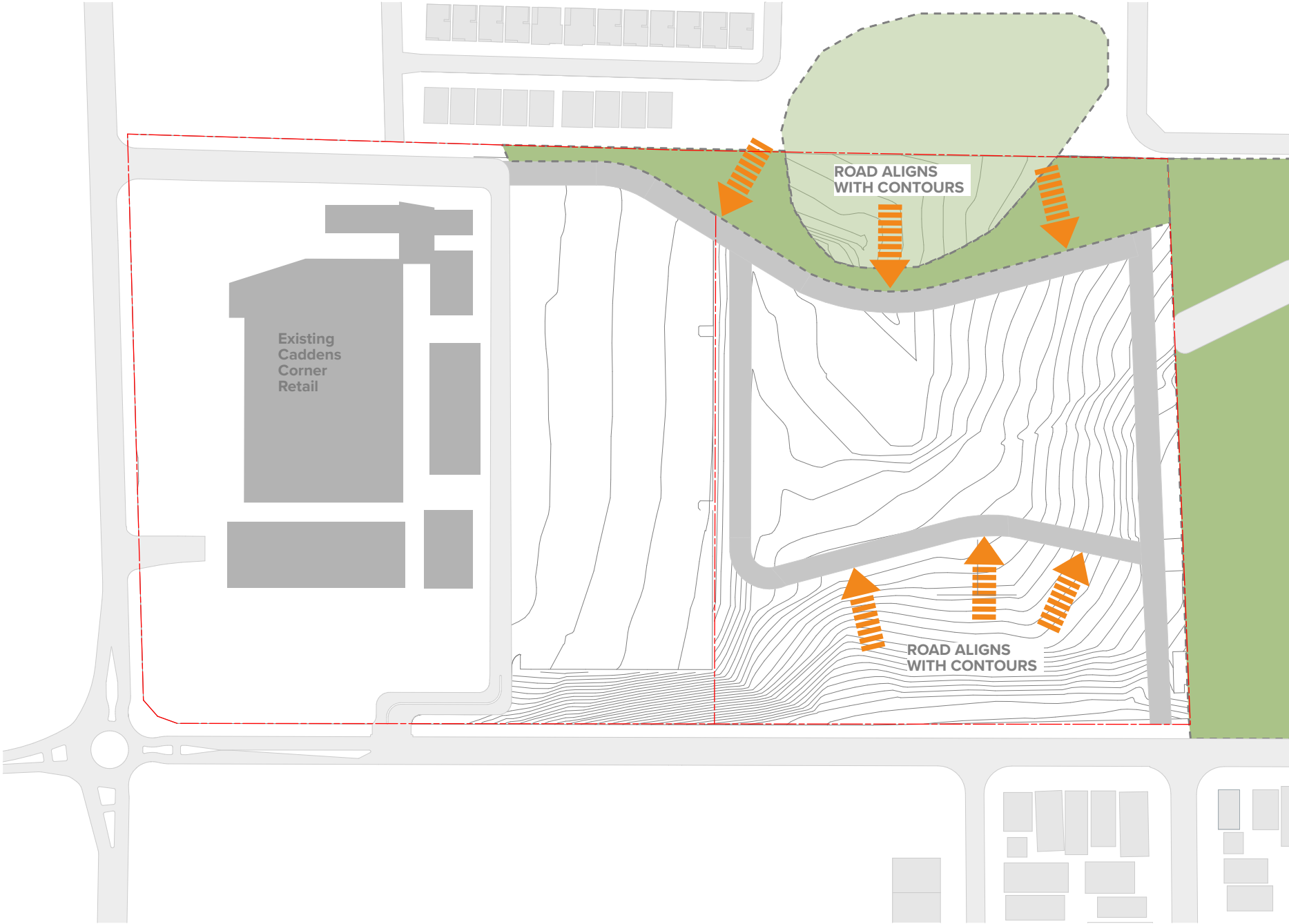
2.03 ROAD NETWORK - NATURAL FEATURES

PROPOSED ROAD LAYOUT

Road network aligns roads to site contours. Provides a more interesting village identity and reduced gradients. The northern road is positioned to provide a natural buffer to the protected Shale Plain woodland. An alternate layout with curving avenue streets is preferred as it aligns with the TEC and the site contours.

- ✖

UNVIALE ROAD CONNECTIONS
REFER POINTS 2&3
VEHICLE ACCESS
- COLLECTOR ROAD 1
- COLLECTOR ROAD 2
- COLLECTOR ROAD 3
- AVENUE
- LOCAL ROAD
- PEDESTRIAN PATH
- OPEN SPACE/ PLAZA
- ANGLED REALIGNMENT
- ROAD REALIGNMENT



2.04 ROAD NETWORK - ECOLOGY

ECOLOGY

CADDENS CORNER

ECOLOGY

- 1. TEC area as indicated needs to be retained
- 2. As this area do not form part of the TEC, arborist input will be required to justify whether these trees can be removed or relocated.
- 3. Low lying flood prone area can be used as bio-retention basin, the is subject to further review by arborist and landscape architect.
- 4. Approximate Line of Bushfire Attack Level (BAL) 12.5 based on proximity to the TEC, Section 100b regarding Bushfire Safety may be required.

SYDNEY COASTAL RIVER
FLAT FOREST

SHALE PLAINS
WOODLAND

CANOPY COVER 10%

BUSH FIRE ZONE

FLOOD PRONE ZONE



TREES TO BE REMOVED




2.05 ROAD NETWORK - PROPOSED

ROAD ACCESS


- 1. Dedicated Retail Vehicular Access Road to provide street level connectivity to existing and proposed retail precinct.
- 2. Connection to O'Connell (E-W) to be retained.
- 3. Schematic of Local Roads dedicated to residential Precinct to provide access to individual buildings.
- 5. Avenue re-routed around the preserved TEC, providing connectivity to adjacent site to the North and O'Connell St (E-W) to the South. This road also provides a buffer and protection to the TEC




UNVIALE ROAD CONNECTIONS
REFER POINTS 2&3
VEHICLE ACCESS




COLLECTOR ROAD 1




COLLECTOR ROAD 2



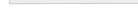
COLLECTOR ROAD 3




AVENUE




LOCAL ROAD




PEDESTRIAN PATH



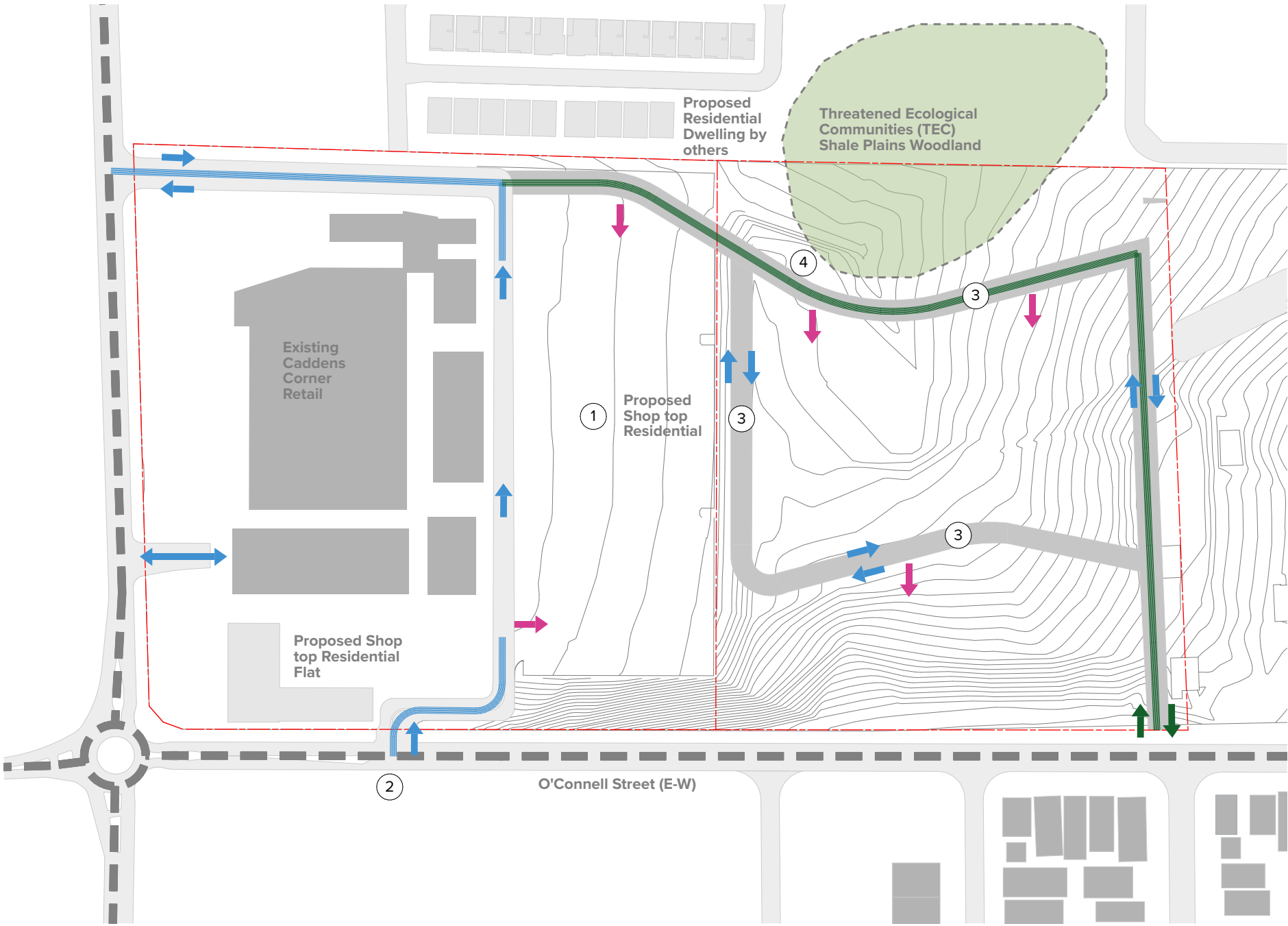
OPEN SPACE/ PLAZA



ANGLED REALIGNMENT



ROAD REALIGNMENT

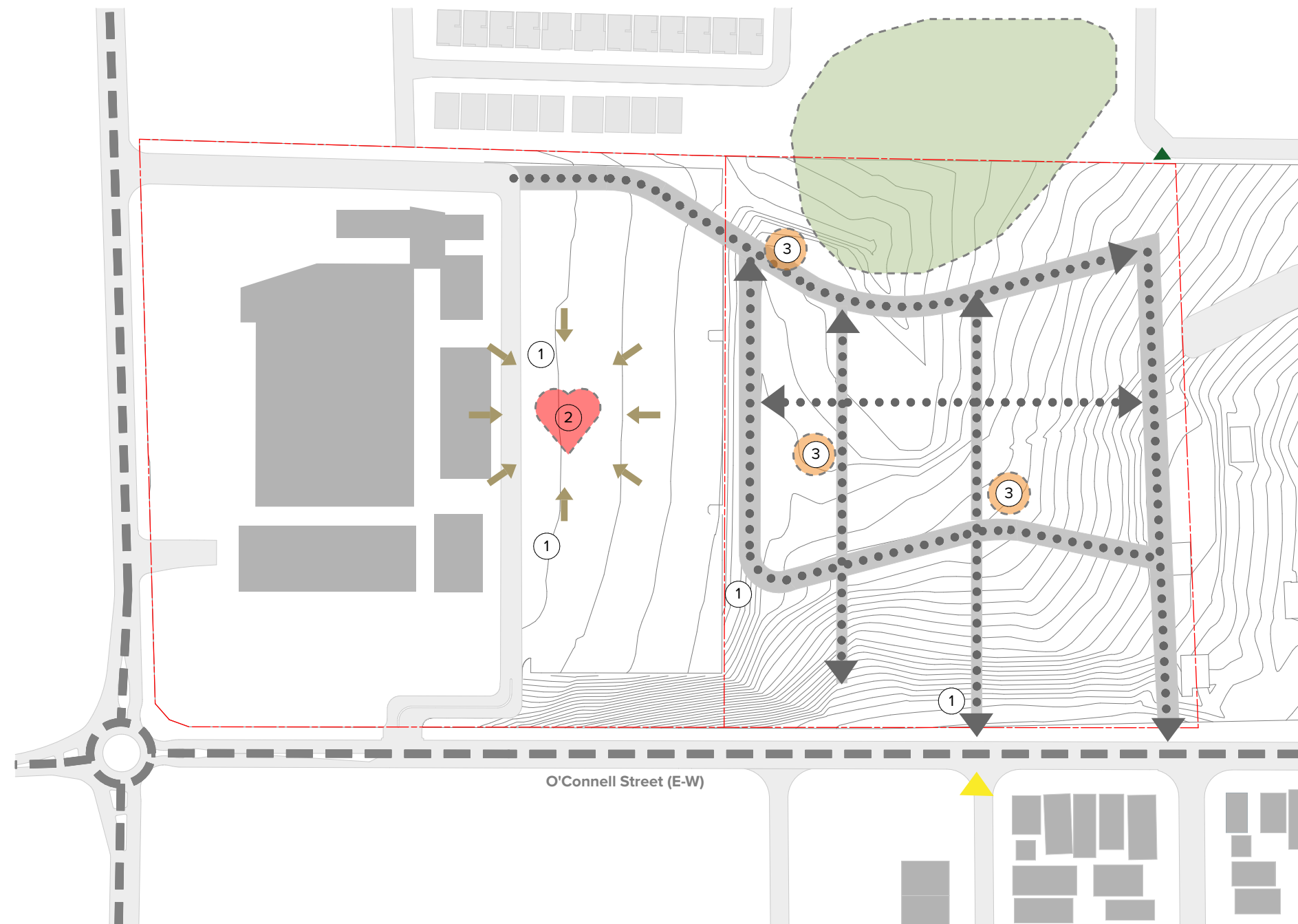
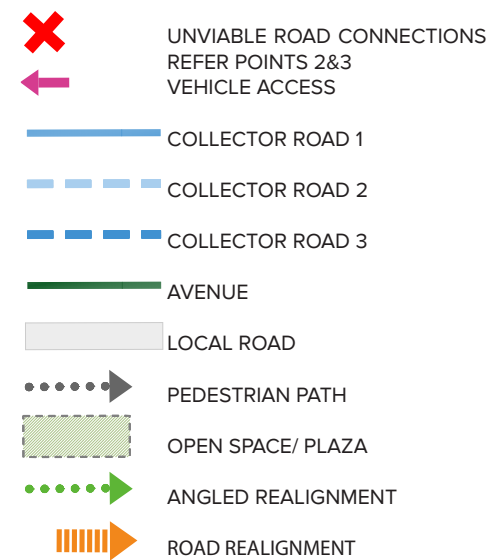


2.06 PEDESTRIAN CONNECTIVITY

PROPOSED PEDESTRIAN CONNECTIVITY AND MOMENTS OF DELIGHT

1. Network of pedestrian connectivity links the residential precinct with O'Connell Street (E-W) to the south and Cadden's Corner to the West.
2. Public Square at the heart of the Retail Precinct, surrounded by existing Cadden's Corner to the west and proposed shop top residential apartments to the east.
3. Moments of Delight within the residential precinct can be created with further understanding on the ecology of the site.

The preferred layout provides the opportunity for a civic heart to the precinct and hierarchy to other components.



2.07 OPEN SPACE

OPEN SPACE CONNECTIVITY

- 1. Opportunities for a series of public open space.
- 2. Road network in response to site contour, existing road and public realm.
- 3. Opportunities for connectivity with adjacent recreational space.

✗

UNVIALE ROAD CONNECTIONS
REFER POINTS 2&3
VEHICLE ACCESS

—

COLLECTOR ROAD 1

- - -

COLLECTOR ROAD 2

- - -

COLLECTOR ROAD 3

—

AVENUE

—

LOCAL ROAD

•••••➡

PEDESTRIAN PATH

▤

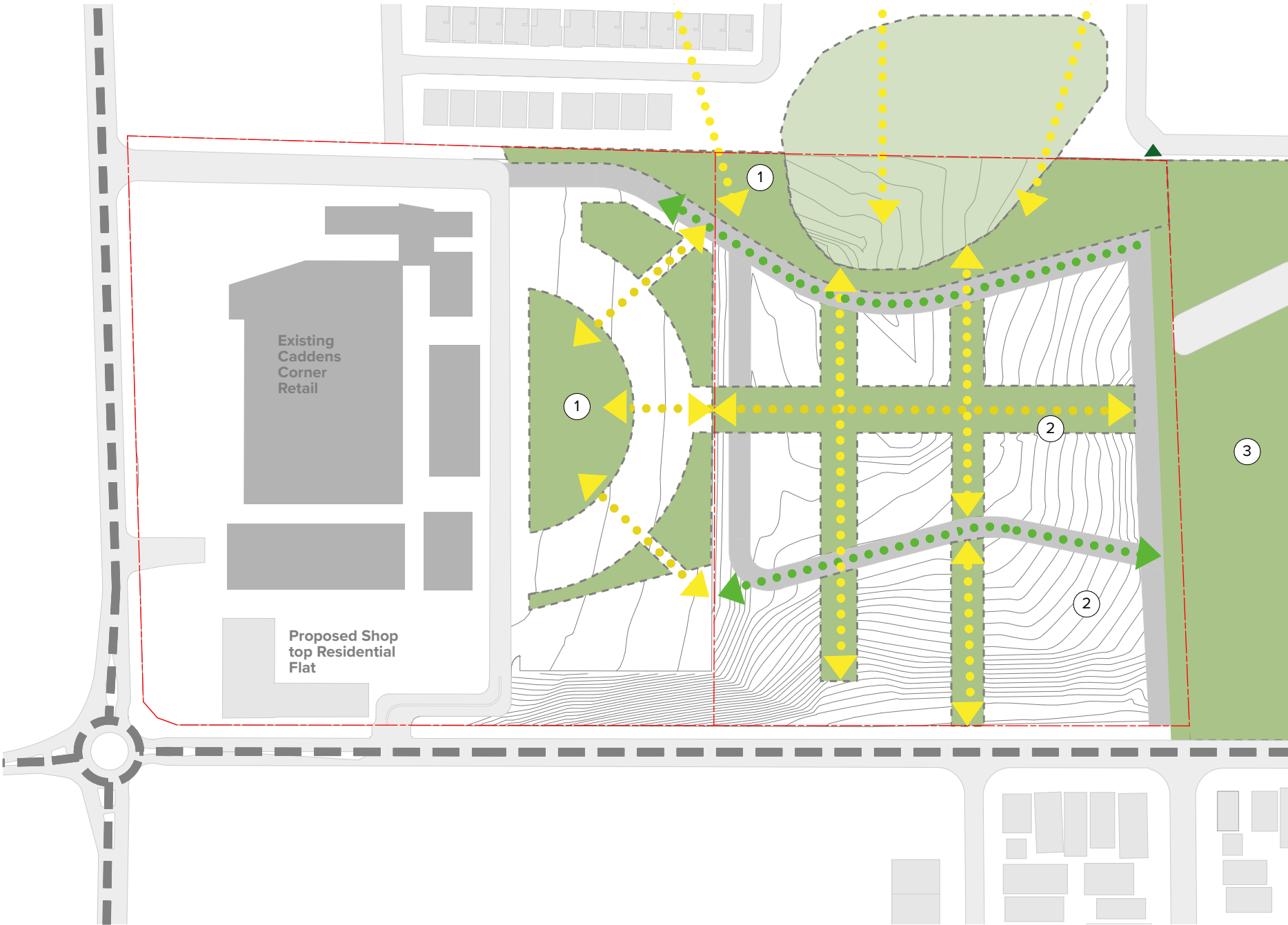
OPEN SPACE/ PLAZA

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ANGLED REALIGNMENT

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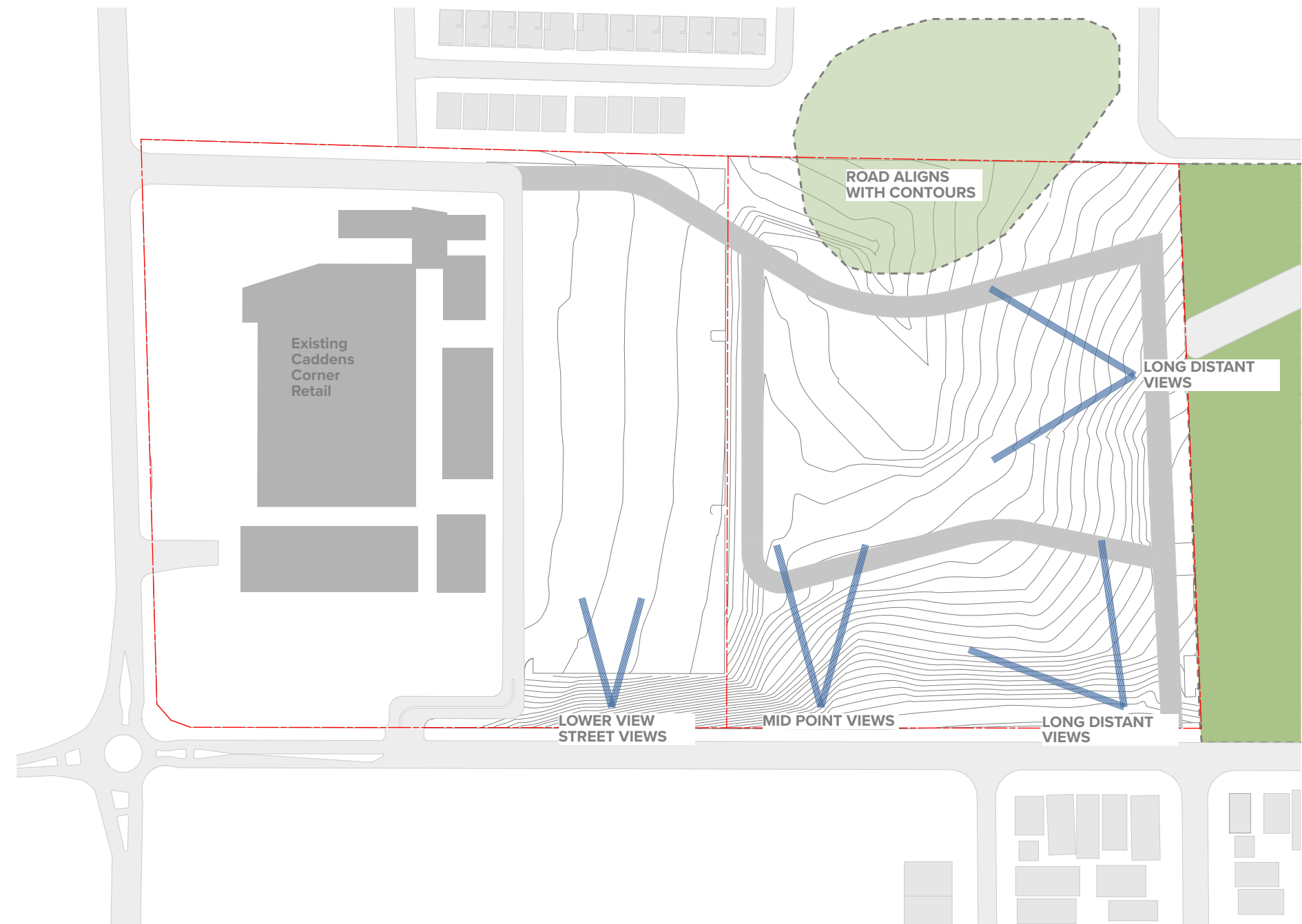
ROAD REALIGNMENT



2.08 VIEWS

POTENTIAL VIEWS FROM THE SITE

Potential views from within and around the site.



03

PLACE MAKING

Streets and public spaces

3.01

VISION

The proposal will cater for a vibrant and diverse community immersed in landscape with a new civic heart for the emerging mixed-use precinct.



3.02 PLACEMAKING

OBJECTIVES

- **CREATE A SENSE OF PLACE**
- **BUILD UP ON THE NATURAL HERITAGE**
- **A WELL-CONNECTED SITE**
- **HUMAN SCALE**
- **USE NATURAL ASSETS OF SITE**

STRATEGY

- **A NEW RESIDENTIAL COMMUNITY FOCUSED ON A CONTEMPORARY VILLAGE SQUARE**
- **A SERIES OF NATURAL SPACES, GENEROUS NATURAL TREE CANOPY TO PREVENT URBAN HEAT ISLAND**
- **PATHWAYS AND ACCESS ROUTES**
- **AN ARCHITECTURE WITH IDENTITY, SCALE AND ARTICULATION OF FORM**



3.03 DESIGN APPROACH - 1

A place specific response to the future character of Caddens Corner



EXISTING RETAIL CENTRE

The site is currently a single-storey shopping centre with surface car parking but limited pedestrian and community activity. The proposed design will incorporate this generic suburban shopping centre into a pedestrian friendly village centre.



MIXED USE PRECINCT

The proposal to enhance the quality of the site by transforming it into a mixed-use precinct will bring vibrancy and interconnectedness to the existing retail centre and the emerging locality.



LANEWAYS, LANDSCAPE, PLAZA, PARK

The public spaces drive the overall design of the precinct, with a series of public spaces in the form of tree-lined streets courtyards, a retail plaza, a public park that are connected by streets and laneways with unique characters.

3.03 DESIGN APPROACH - 2

A place-specific response to the future character of Caddens Corner



HOUSING DIVERSITY

The proposal was conceived with the intention of providing a wide range of housing typologies. There is a range of typologies from town-houses, standard apartments and penthouses with large terraces.



A CONNECTION TO NATURE

The design takes its cue from the natural heritage of the TEC. The design is set within tree lines streets. In addition to the two main outdoor spaces of the Community Park and Village Green there are a number of landscape courtyards an building links that provide an outlook to nature. Planters provide additional greenery to the facades in many areas .

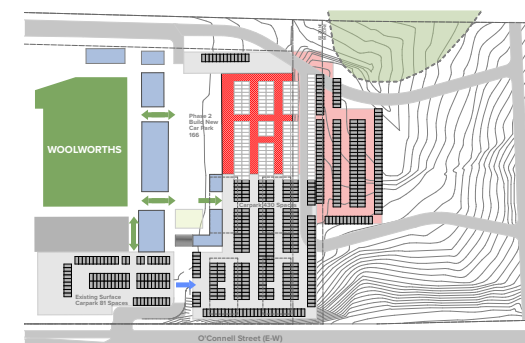
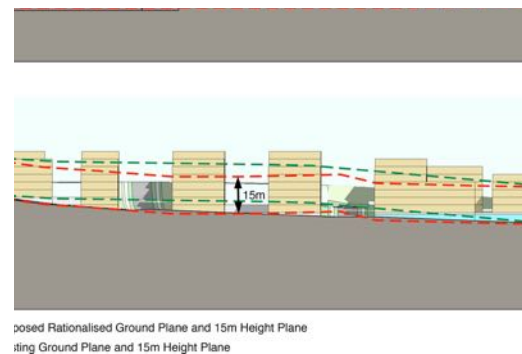
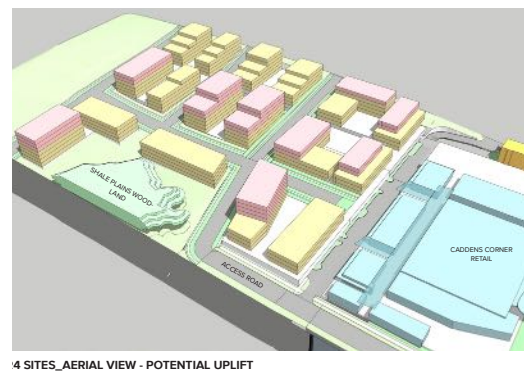


CONSIDERED SERVICING

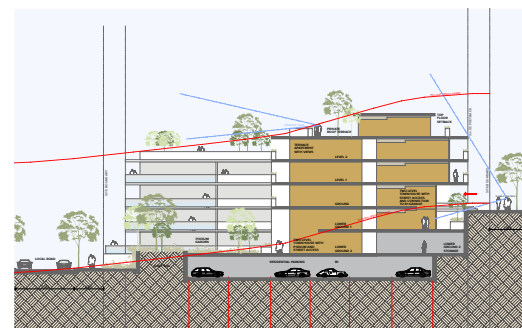
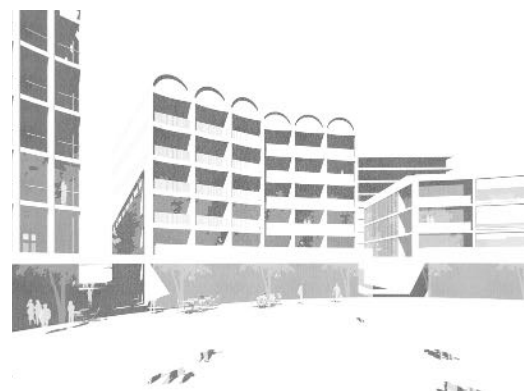
To create a safe and pleasant mixed-use precinct that encourages pedestrian movement and public gathering, the existing service vehicle access has been restricted to the northern and eastern parts of the site. This allows for a separation of pedestrian and service vehicle use.

3.04 DESIGN EVOLUTION

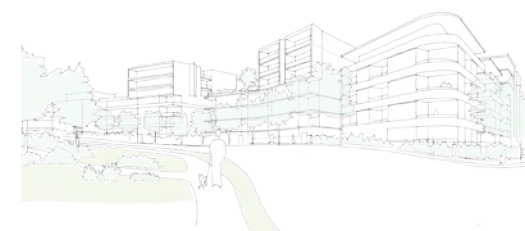
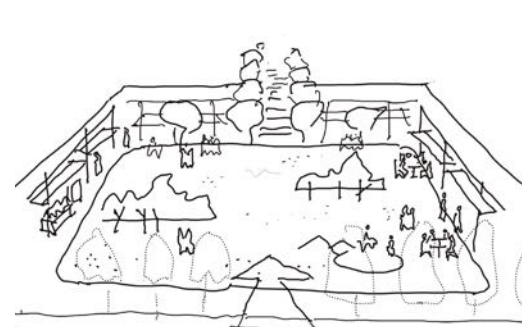
At Turner we strive to make living better. The design process went through a process of design reviews with the team and as well as the wider office to allow the development to have the best outcome.



OPTION 1



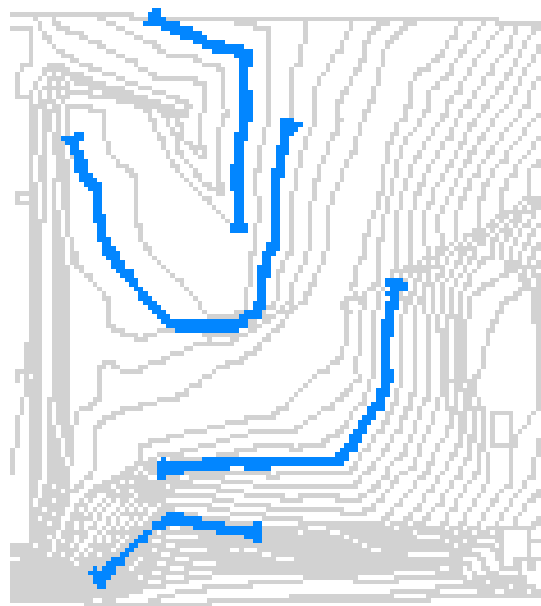
SQUARE



3.05 TOPOGRAPHY

ORGANIC LAYOUT

- CURVILINEAR ROAD LAYOUT DERIVED FROM A RESPONSE TO TOPOGRAPHY AND NATURAL ELEMENTS. A LOOP CIRCUIT PROVIDES THE OPTIMUM ACCESS AND ADDRESS TO THE APARTMENT BUILDINGS.



CONTOURS



BUILDING FORM CRESCENTS



ROADS WORKING WITH
CONTOURS

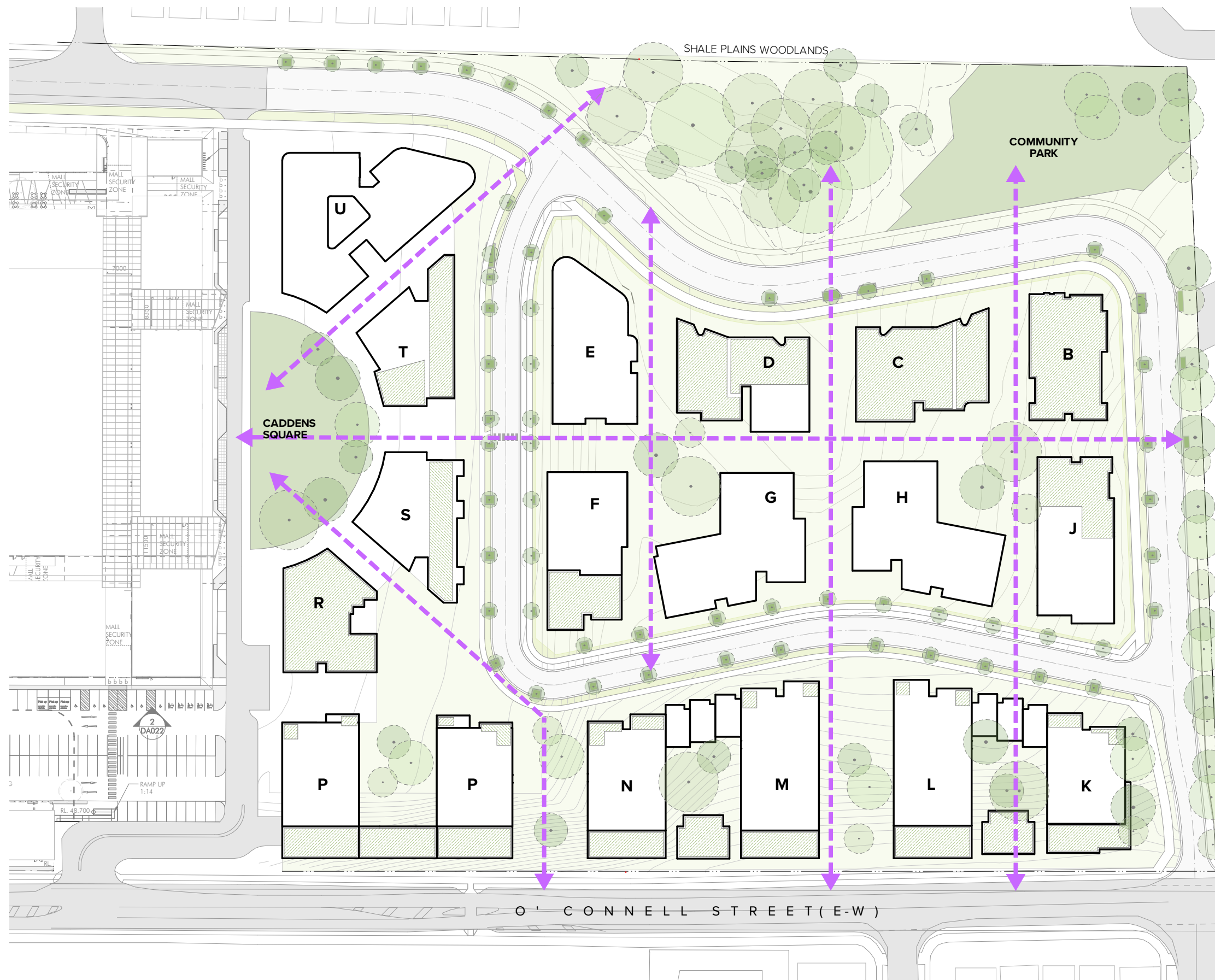
3.06 NATURAL ELEMENTS



SUPPLEMENTING THE EXISTING NATURAL HERITAGE

- PROTECTING THE EXISTING TEC WITH NEW BUFFER LANDSCAPE.
- PROVIDING NEW SATELLITE OF NATIVE VEGETATION TO SUPPORT THE TEC

3.07 OPEN VISTAS



OPEN VISTAS

- OPEN VISTA'S WITH SPECIFIC VIEWS TO NATURE THROUGHOUT THE SITE



04

DENSITY

DCP VERSUS PREFERRED DESIGN

4.01 DCP TEST FIT

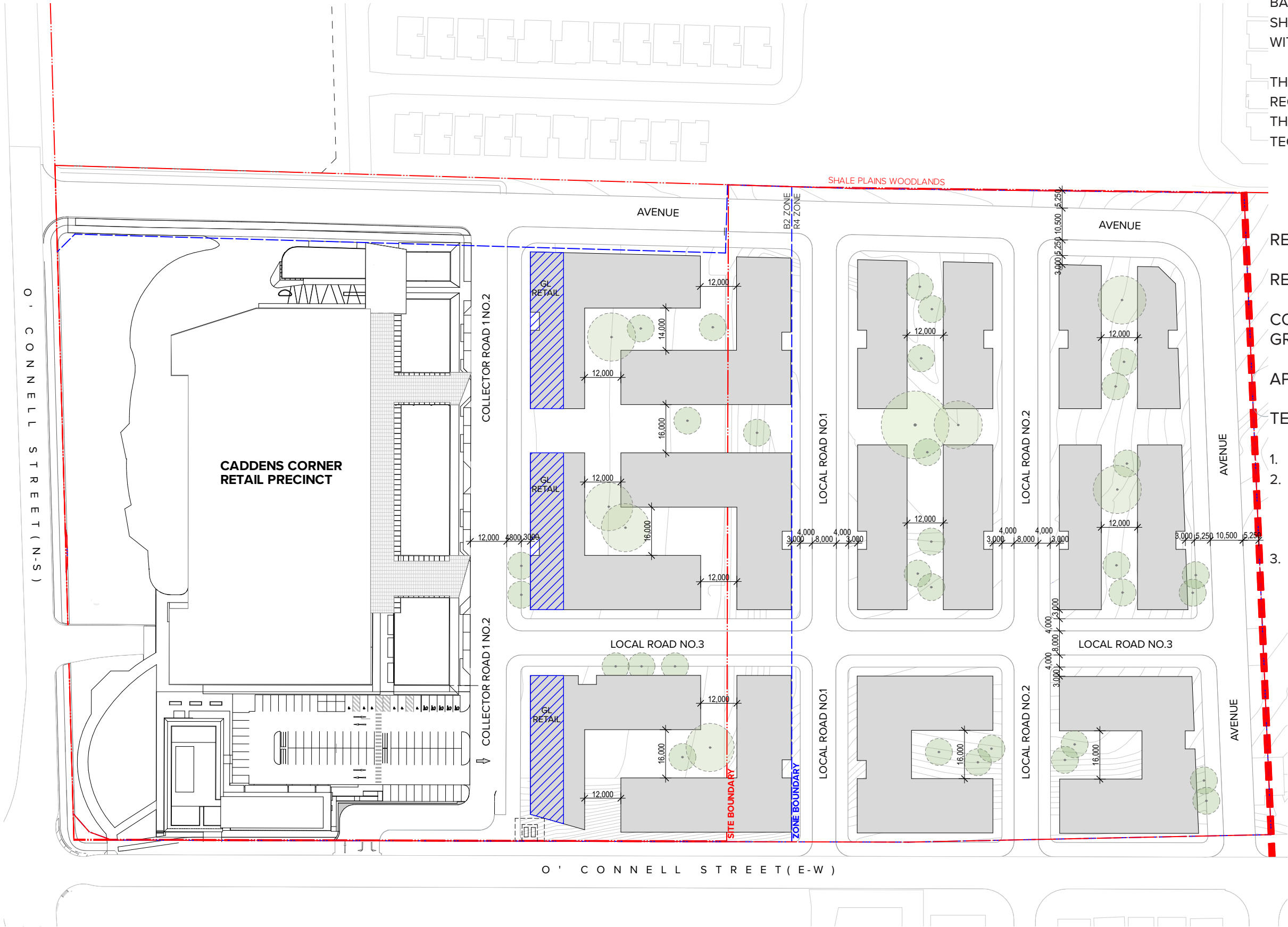
DCP

THE DESIGN REPRESENTED HERE IS BASED ON THE DCP LAYOUT . IT SHOWS FOUR STOREY BUILDINGS WITH COMPLIANT ADG SEPARATION.

THE DCP DESIGN DOES NOT RECOGNIZE THE STEEP INCLINES OF THE SITE OR THE EXISTENCE OF THE TEC WOODLAND.

RESIDENTIAL	55,183 SQM GFA
RETAIL	1,666 SQM GFA
COMMUNAL GREEN SPACE	0 SQM
APARTMENTS	566
TEC	0SQM

1. COMPLIANCE CHALLENGES
2. ROAD NETWORK DO NOT TAKE INTO ACCOUNT OF THE SITE CONTOUR AND CONNECTIVITY TO O'CONNELL E-W
3. LOCAL ROADS 1 & 2 DO NOT TAKE INTO ACCOUNT OF THE SITE



4.02 KEY MOVES



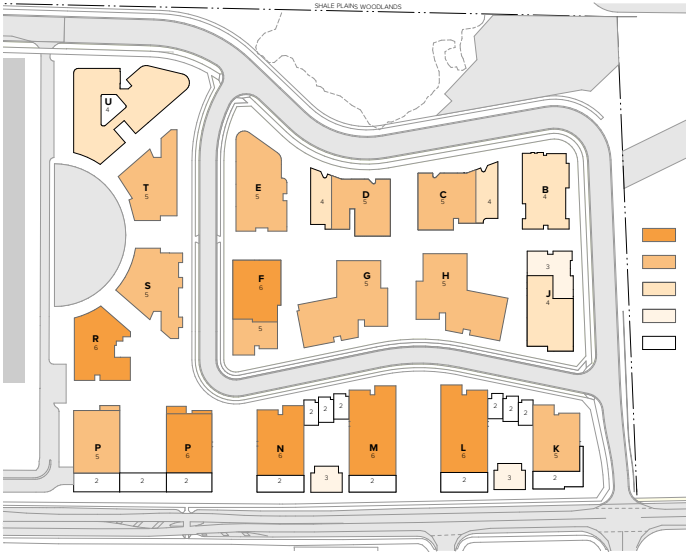
1_PUBLIC OPEN SPACE/GREEN SPACE

COMMUNAL OPEN SPACE COMPRISES 29.5% OF THE SITES AREA.



2_REDUCE BUILDING HEIGHT

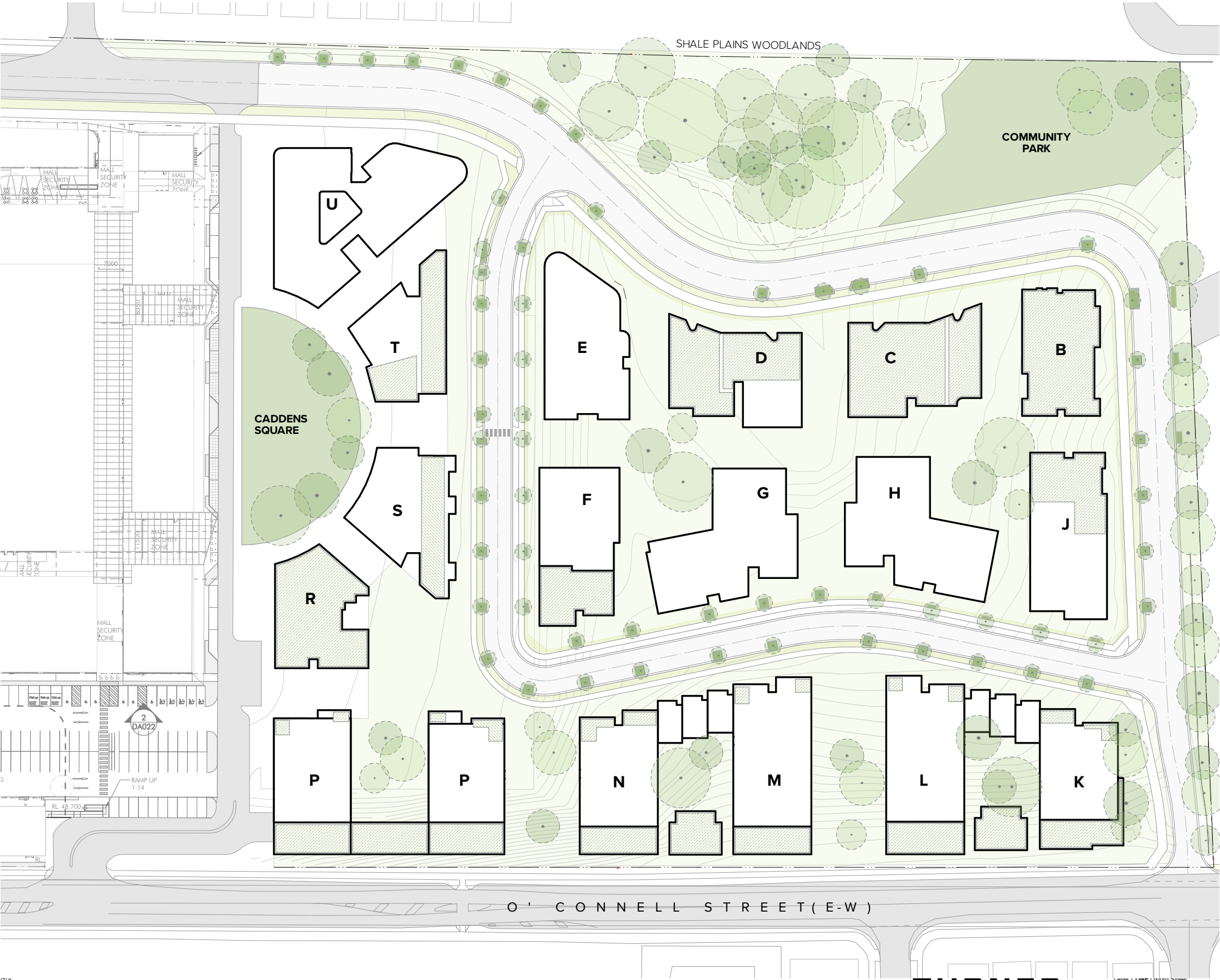
LOWER BUILDING HEIGHT ALONG THE PERIMETER.



STEP 3

ADDITIONAL BUILDING HEIGHT IS SUITABLY LOCATED TO MINIMIZE OVERSHADOWING, PROVIDE DIVERSITY IN FORM, AND INTRODUCE ADDITIONAL VISTAS

3.03 PREFERRED DESIGN

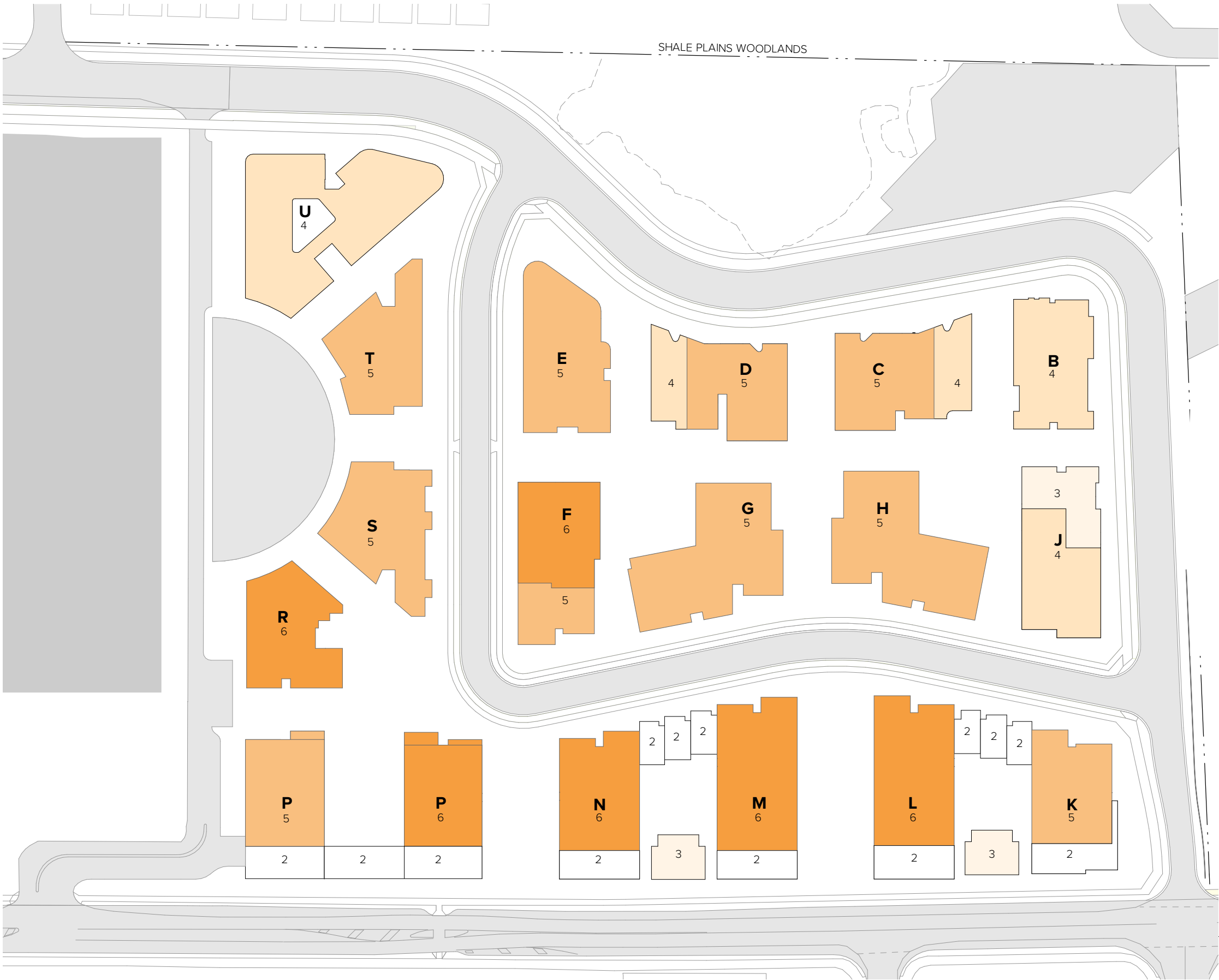


PREFERRED DESIGN

RESIDENTIAL	53724 SQM GFA
RETAIL	1,415 SQM GFA
APARTMENTS	469

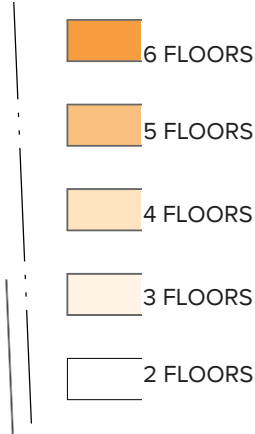
1. PROPOSAL PROVIDES 2 SIGNIFICANT PUBLIC SPACES AND PRESERVES THE TEC WOODLAND
2. THE PROPOSAL TAKES INTO ACCOUNT OF TEC AND BUSH FIRE ZONE TO THE NORTH
3. PROPOSAL TAKES INTO ACCOUNT SITE CONTOURS FOR THE DESIGN OF THE LOCAL ROAD.
4. A SERIES OF LANDSCAPE SPACES, OPEN VISTAS AND PEDESTRIAN CONNECTIVITY ESTABLISHES A WELL-CONNECTED NEIGHBOURHOOD.

4.04 VARIATION IN SCALE



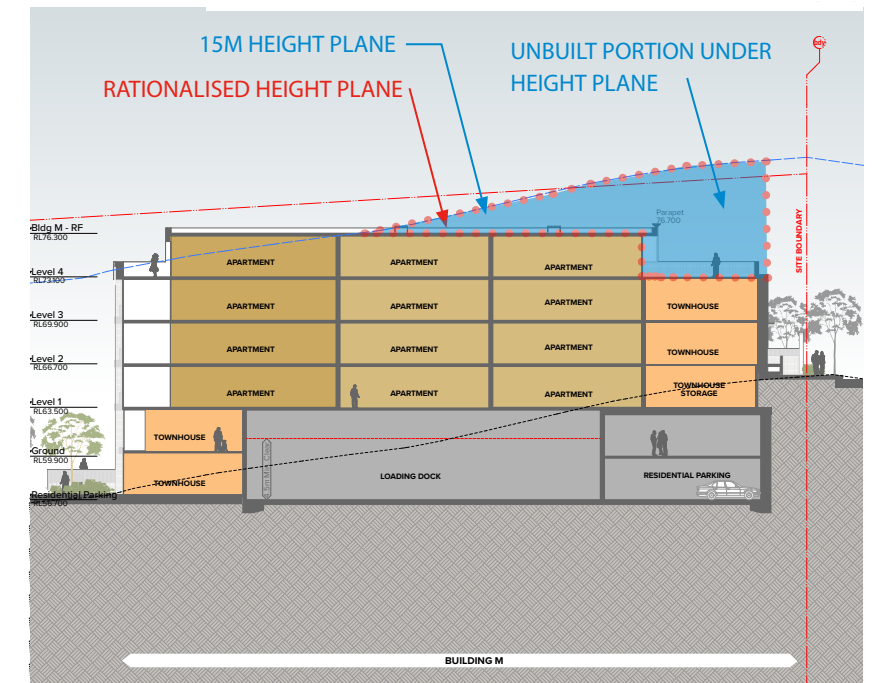
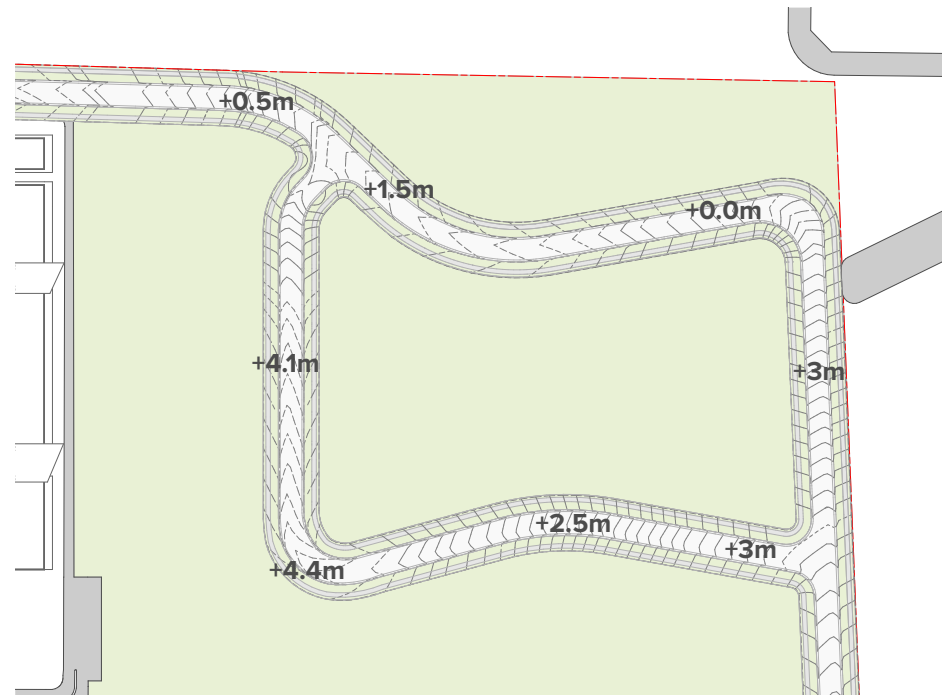
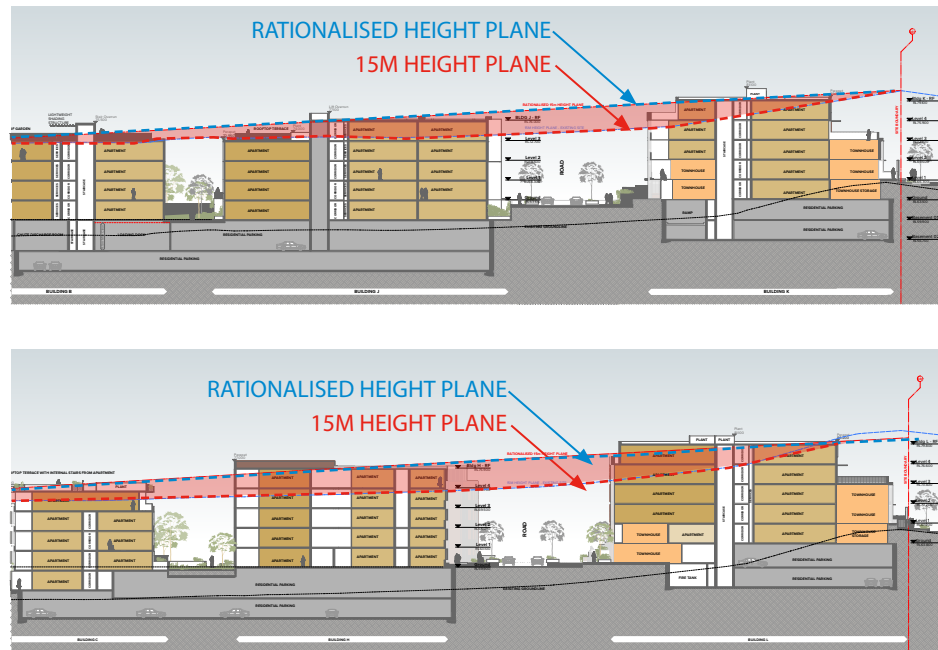
VARIATION OF SCALE

- ELEMENTS THAT ARE DARKER INDICATE HEIGHT DIFFERENTIATION ADDITIONAL HEIGHT OFFSETS PUBLIC BENEFIT OF TOWN SQUARE/GREEN SPACE
- ADDITIONAL HEIGHT ALLOWS VIEWS/ RESPONSE TO VIEWS/SITE ASSETS
- ADDITIONAL HEIGHT RESPONDS TO IMPORTANT COMPONENTS/AREAS OF THE MASTERPLAN.
- NATURAL TOPOGRAPHY FAVOURABLE FOR HEIGHT
- OFFSET FROM TEC JUSTIFIES OFFSET IN YIELD
- DIAGRAM INDICATES FLOORS NOT BUILDING HEIGHT ON VARYING TOPOGRAPHY



4.05 HEIGHT PLANE CONSTRAINTS

A Number of site constraints reduce the available height



EXCAVATED SITE

The existing site was extensively excavated for the Kingswood Drive-in Cinema . The section has a “bowl” profile in section - with a very steep profile at O’Connell St South. The main portion of the site is considerably lower than the main road, from which the site is visible - O’Connell St South

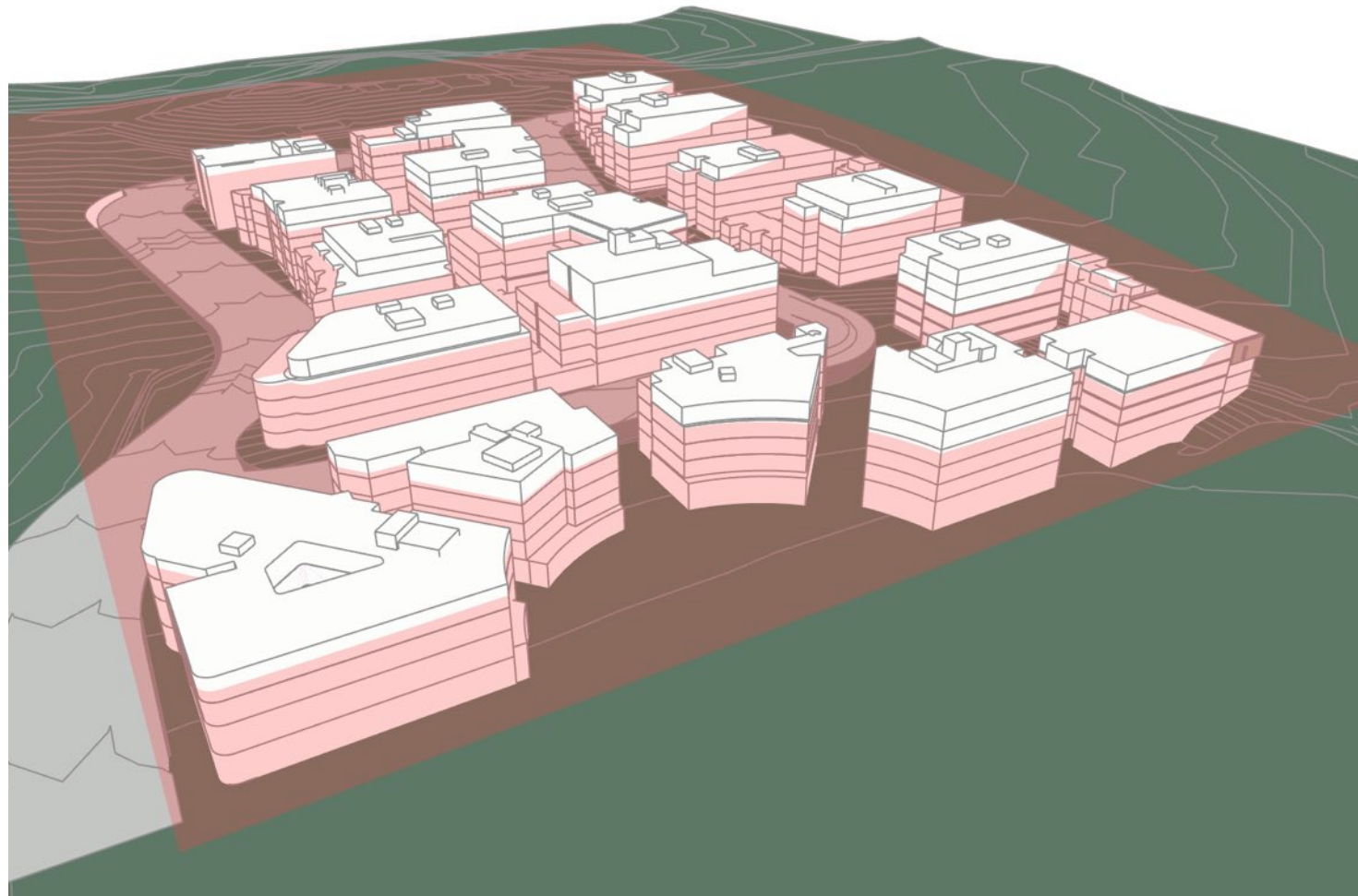
RAISED ROAD

The Civil road design requires that the road is built up 2-4m on average in order to achieve an even gradient. Ground floor units are ideally about 500mm above street level. The factors further reduce the available DCP height

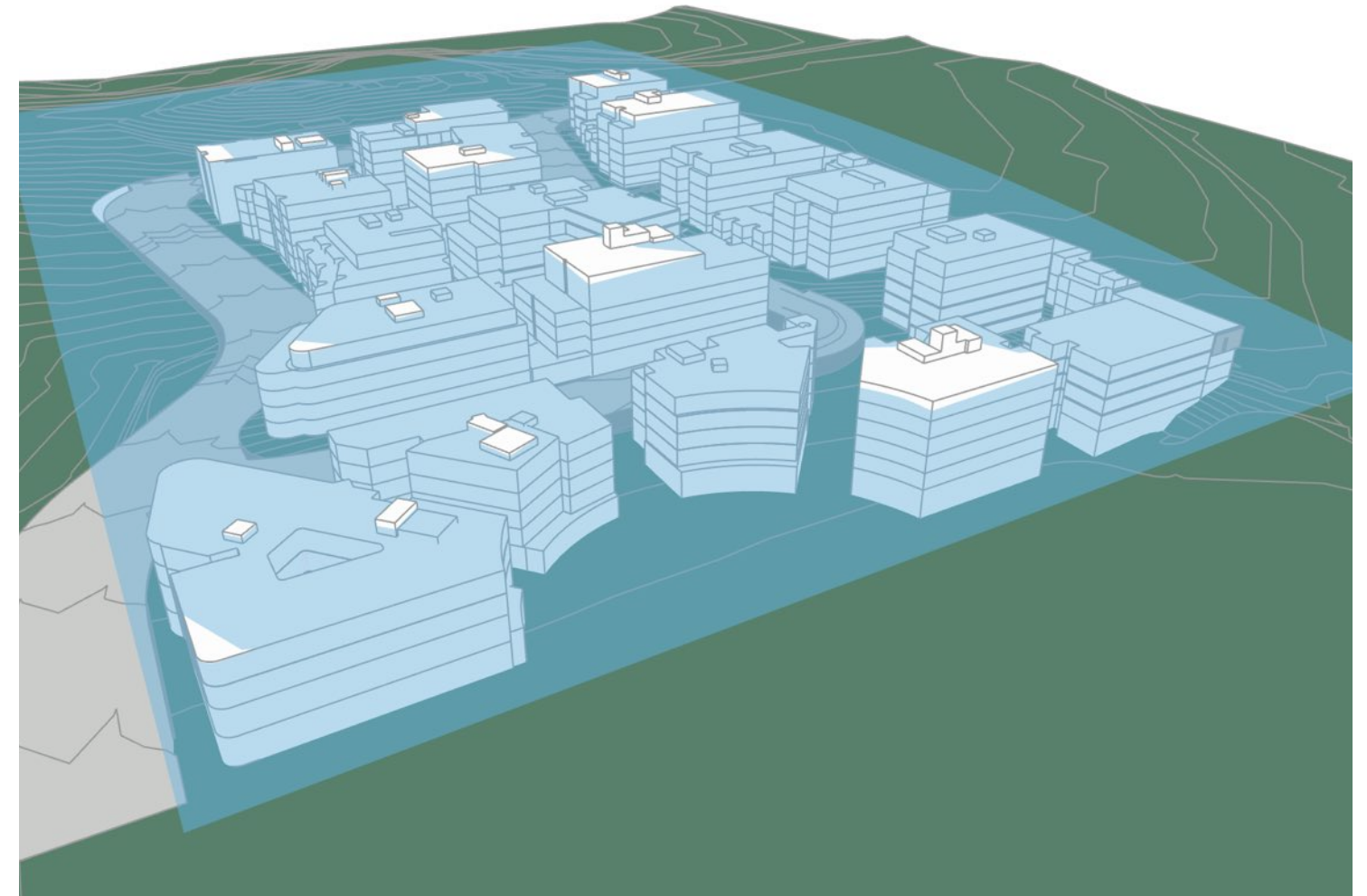
STEEP INCLINES

The steep inclines of some areas of the site reduces the capacity of the 15m zone as the building floors are required to step to fit

4.06 HEIGHT PLANE ANALYSIS



15M HEIGHT PLANE - EXISTING SITE
BUILDING ABOVE 15M BASED ON EXISTING GROUND LEVEL

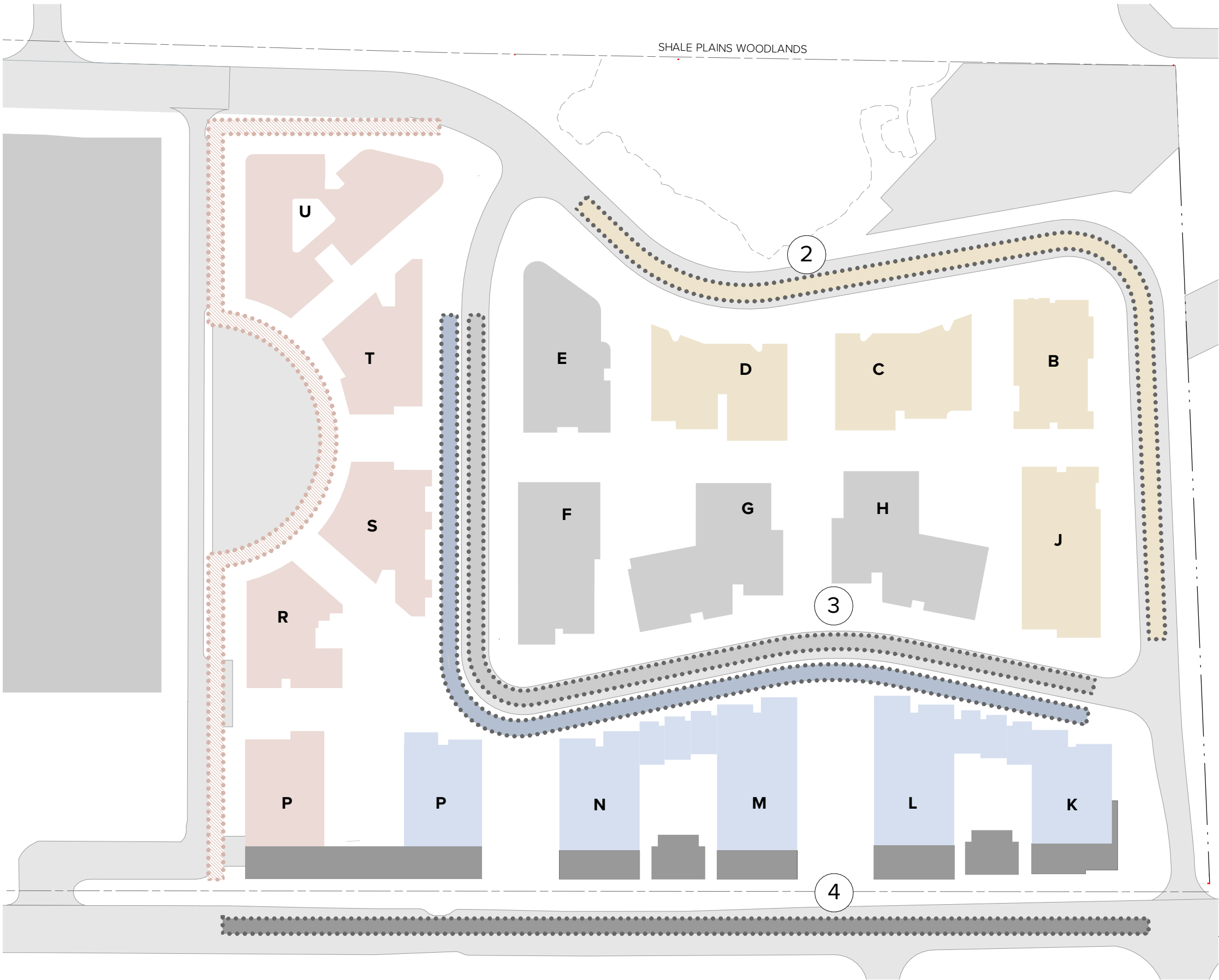


RATIONALISED 15M HEIGHT PLANE
THE ABOVE IMAGE SHOWS THE HEIGHT PLANE RATIONALIZED TO WHAT WAS LIKELY THE ORIGINAL HEIGHT PLANE BEFORE THE DRIVE-IN CINEMA.
IT IS A MESH CREATED FROM THE SITE BOUNDARIES.
MOST BUILDINGS SIT BELOW THIS HEIGHT PLANE

05

STREETSCAPE

5.01 STREET SCAPE

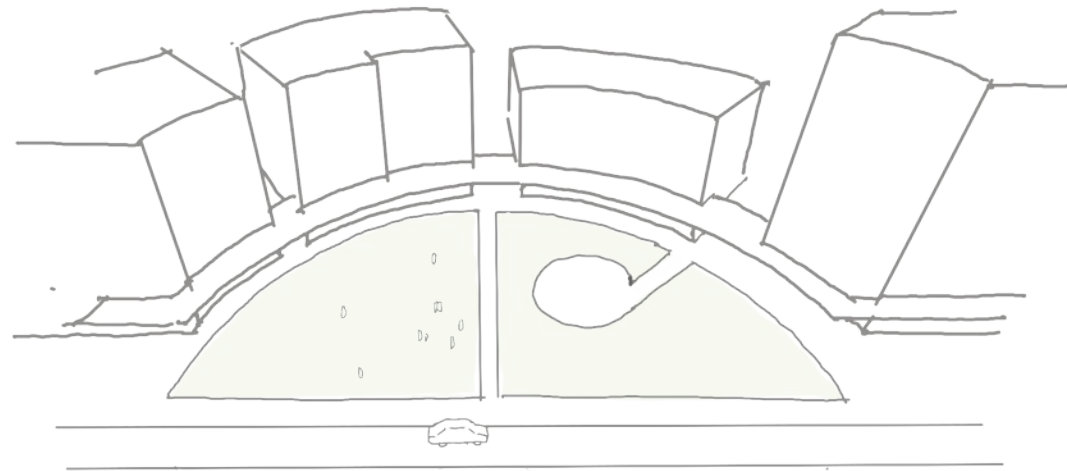


STREETSCAPE

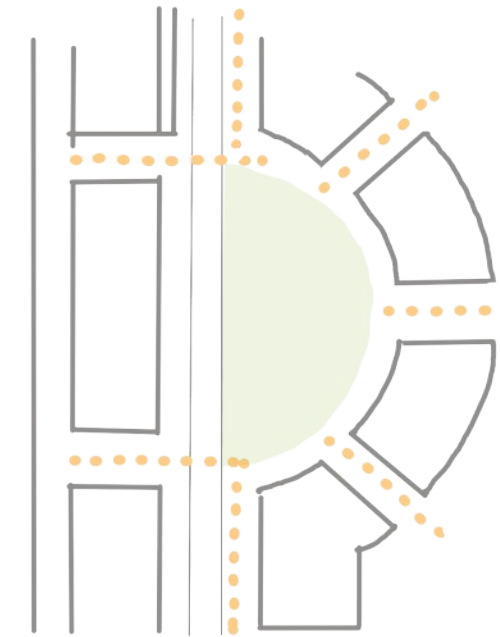
- CREATION OF A SERIES OF DISTINCT STREETSCAPES DEVELOPED FROM TOPOGRAPHY AND POSITIONAL HIERACHY

1. VILLAGE GREEN
2. PARK VIEW STREET
3. BOW STREET
4. O'CONNELL STREET

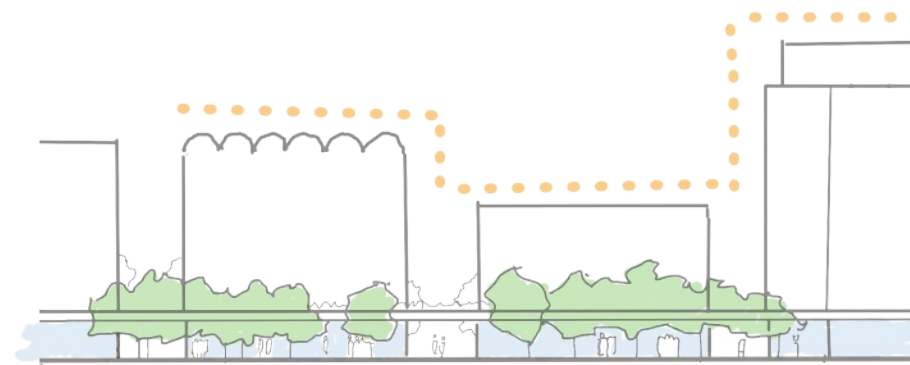
5.02 STREET CHARACTER - VILLAGE GREEN - 1



FRAMING PUBLIC SPACE



DEFINED GEOMETRY



URBAN SCALE

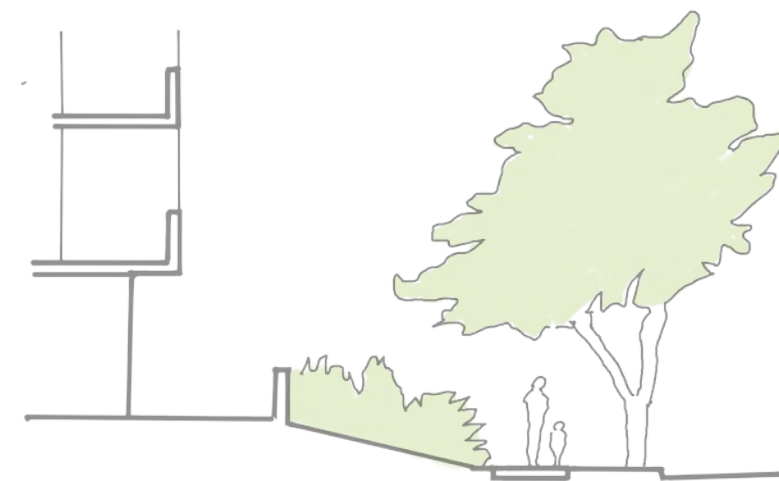
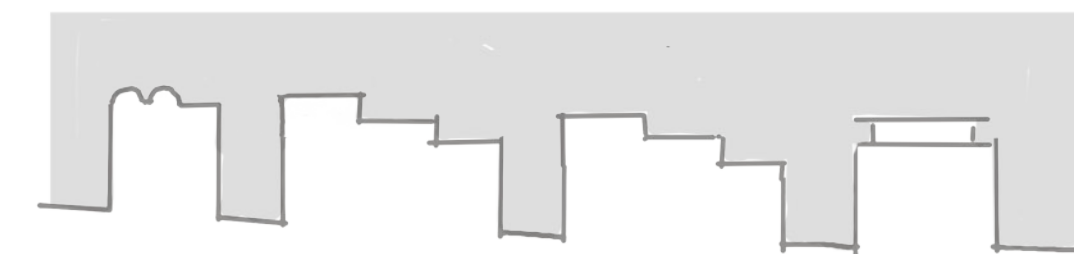


ACTIVE GROUND PLANE

5.02 STREET CHARACTER - VILLAGE GREEN - 2



5.03 STREET CHARACTER - PARK VIEW ST- 1



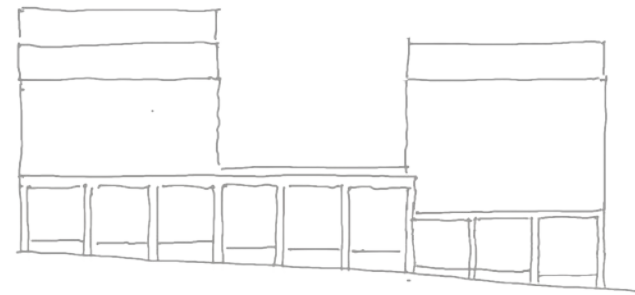
5.03 STREET CHARACTER - PARK VIEW ST - 2



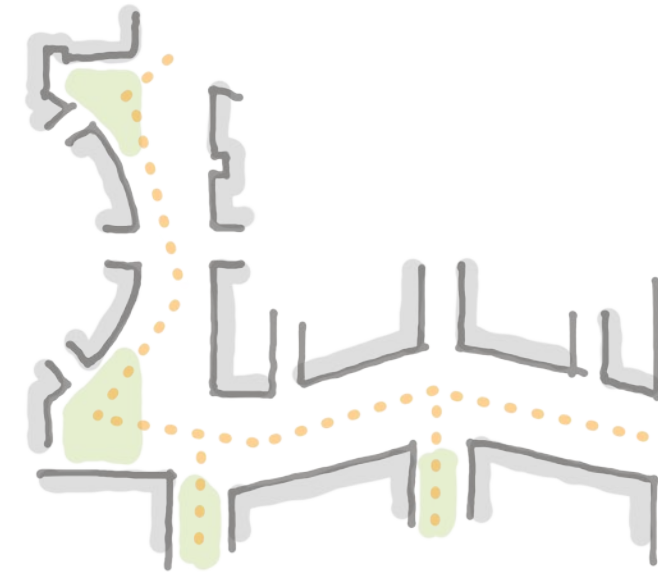
5.04 STREET CHARACTER - BOW ST - 1



STEPPED SECTION



TOWN HOUSES TO STREET LEVEL



WINDING ROUTE / GREEN POCKETS

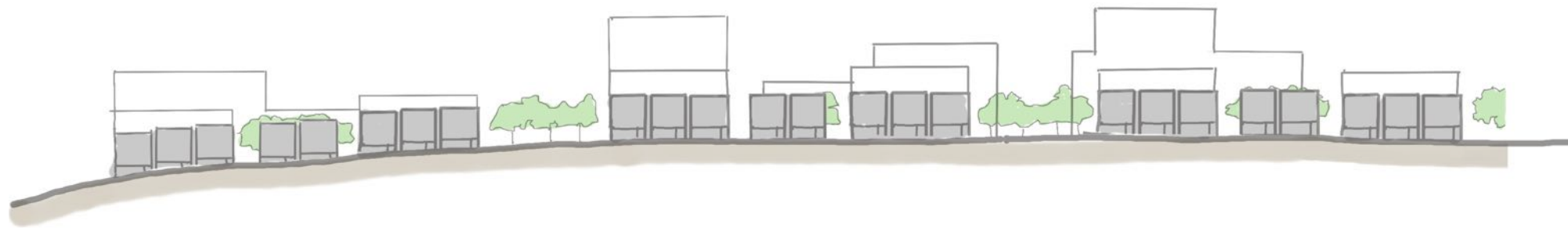


TERRACE WALLS STEPPING

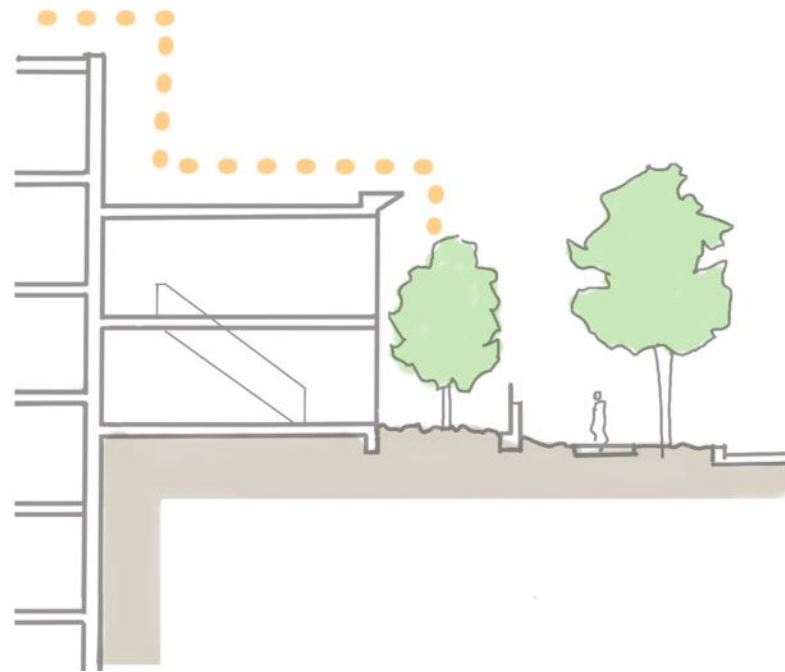
5.04 STREET CHARACTER - BOW ST - 2



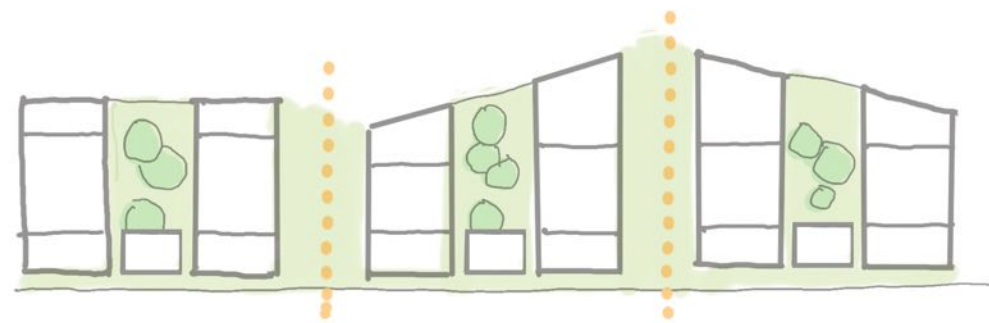
5.05 STREET CHARACTER - OCONNELL ST - 1



STEPPING WITH TOPOGRAPHY



TRANSITION IN SCALE

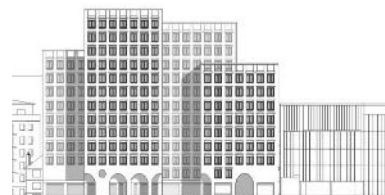
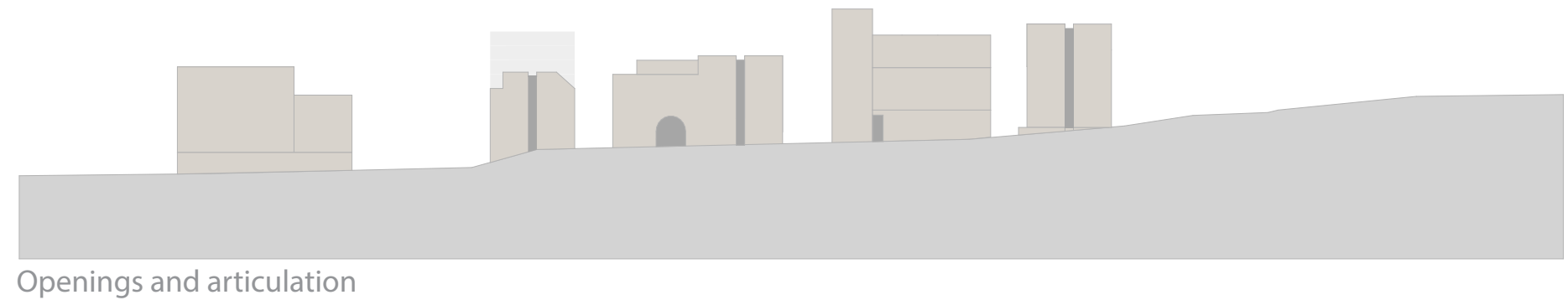
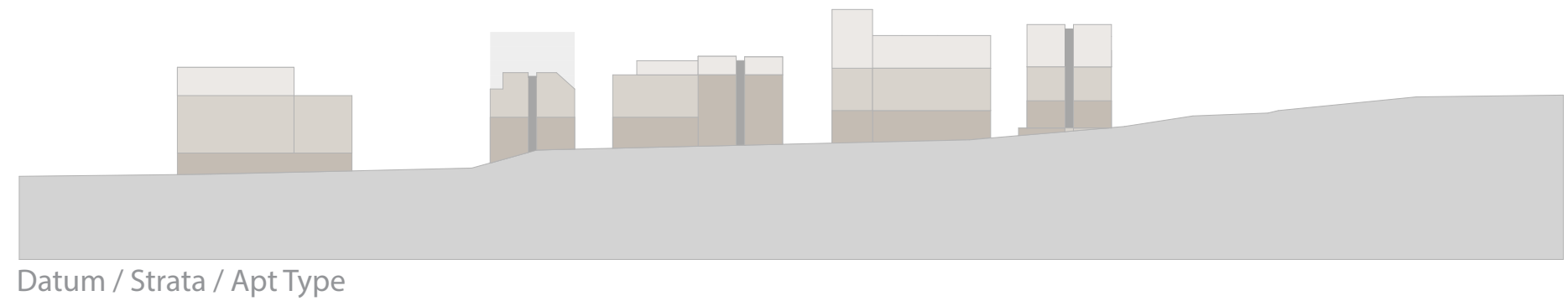
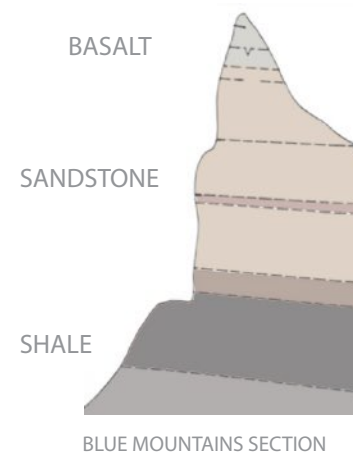


GREEN WALLS AND THROUGH SITE LINKS

5.05 STREET CHARACTER - OCONNELL ST - 1



5.06 ELEVATIONAL CONCEPT



ELEVATIONAL CONCEPT

CADDENS CORNER



06

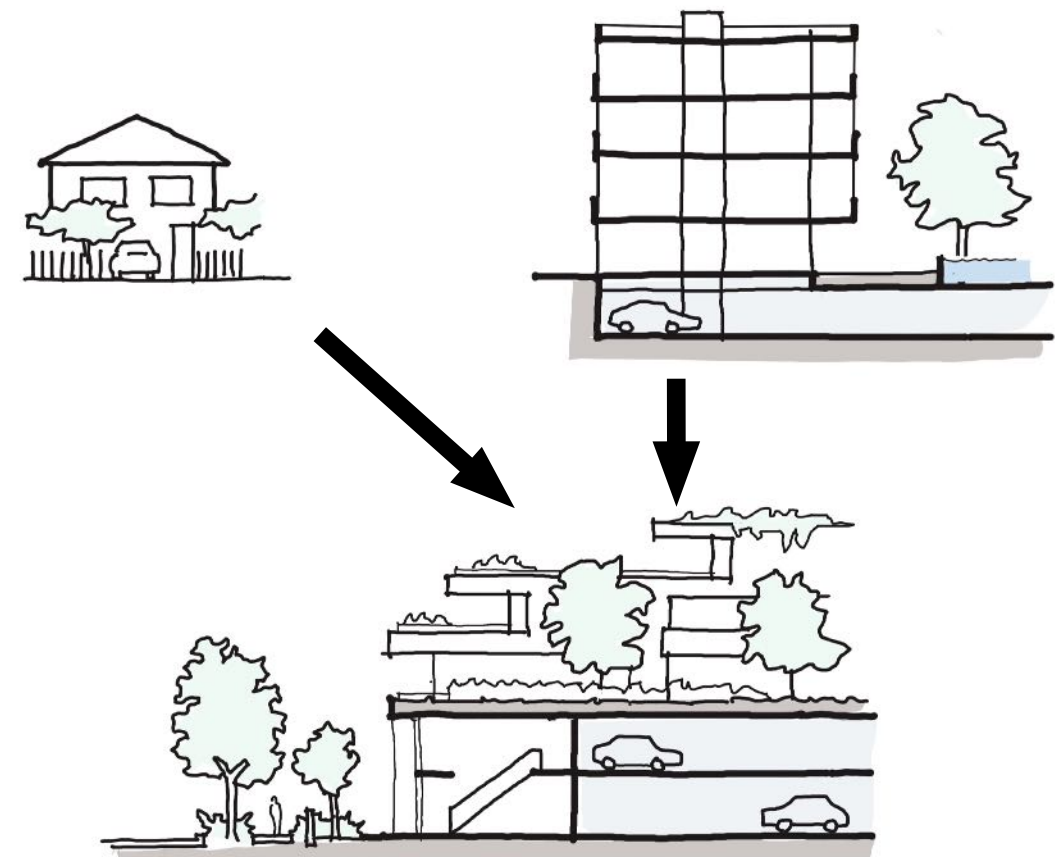
RESIDENTIAL OFFERING

Diversity of building types

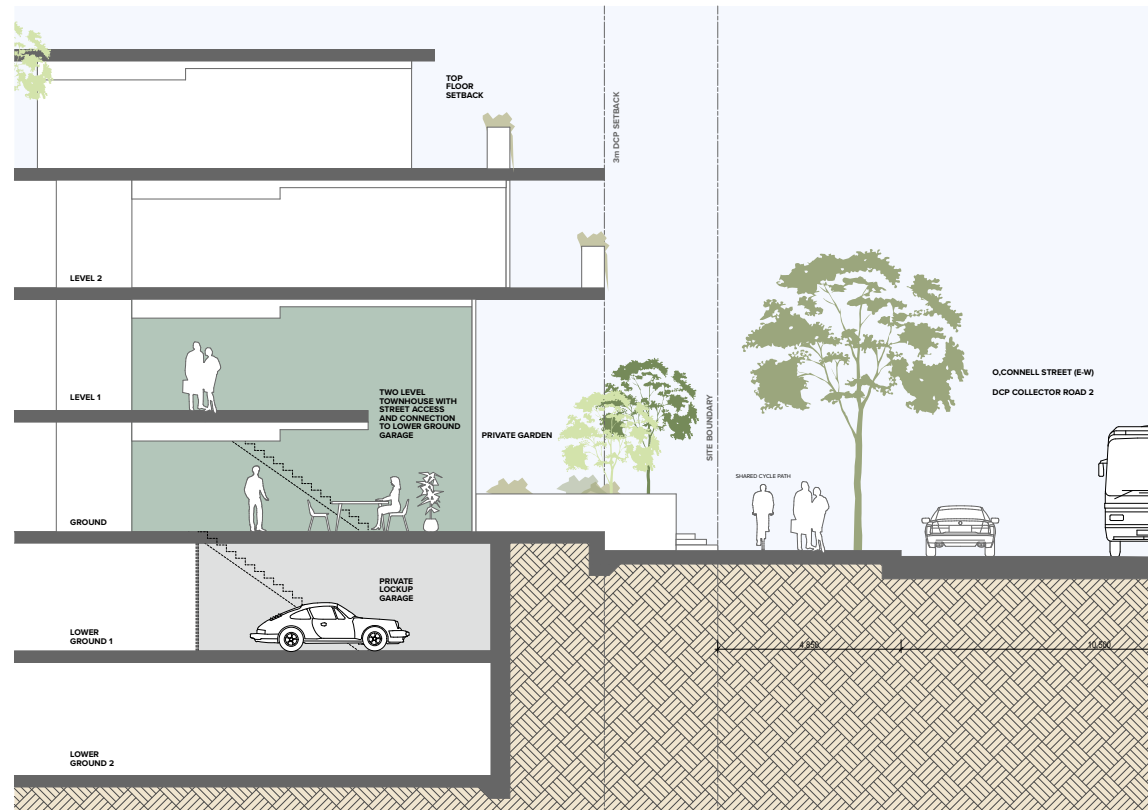
6.01 HOUSING OBJECTIVES

LIVING IN CADDENS CORNER

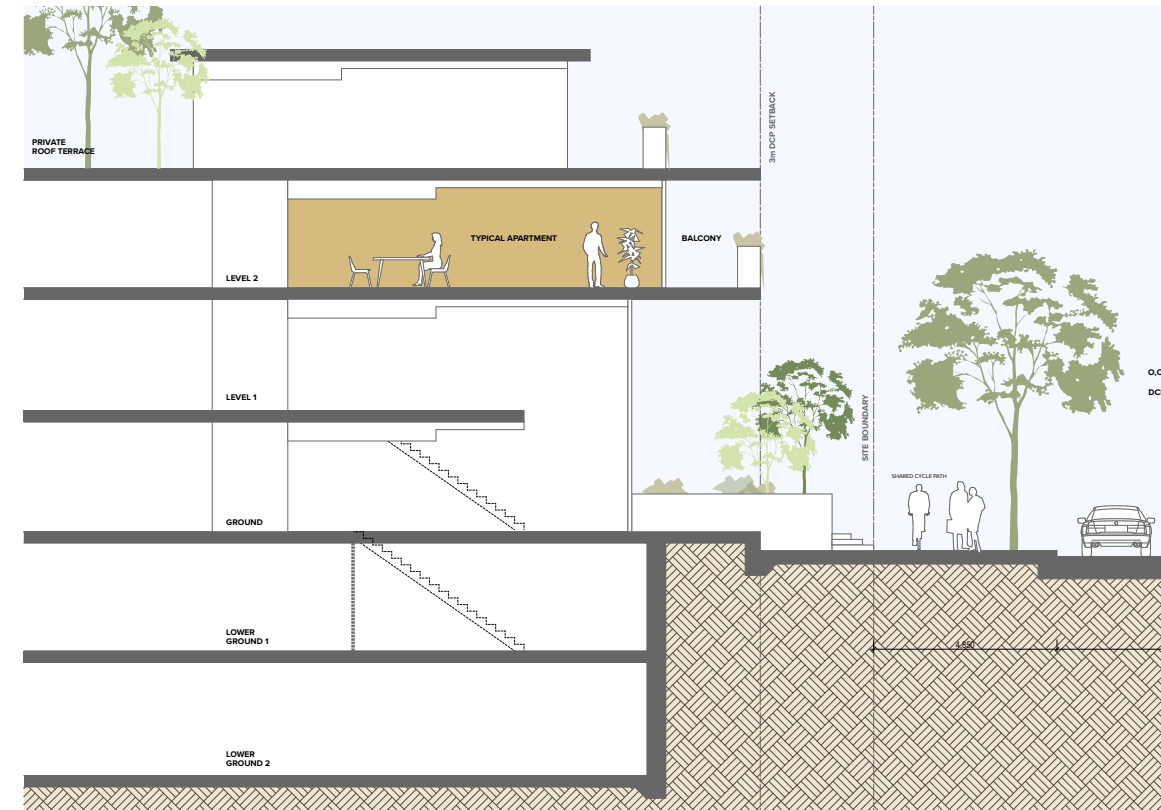
- **BEST OF BOTH WORLDS, THE ADVANTAGES OF COMBINED SUBURBAN AND HIGH DENSITY'S**
- **CONVENIENT FACILITIES AND LOTS OF ACCESSIBLE OPEN SPACE**
- **MIX OF APARTMENT TYPOLOGIES**



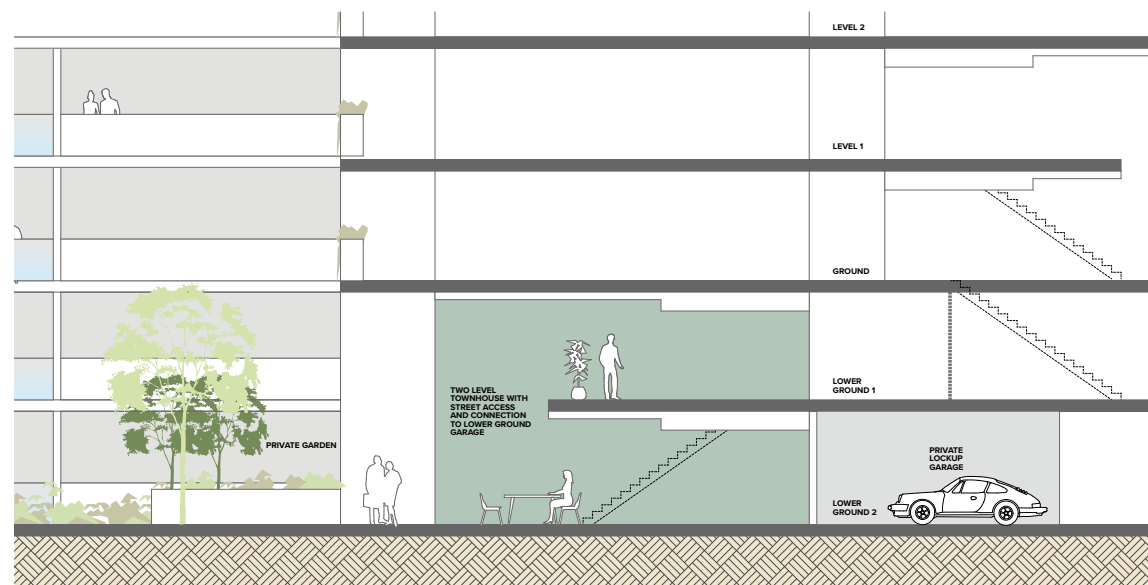
6.02 HOUSING TYPOLOGIES - 1



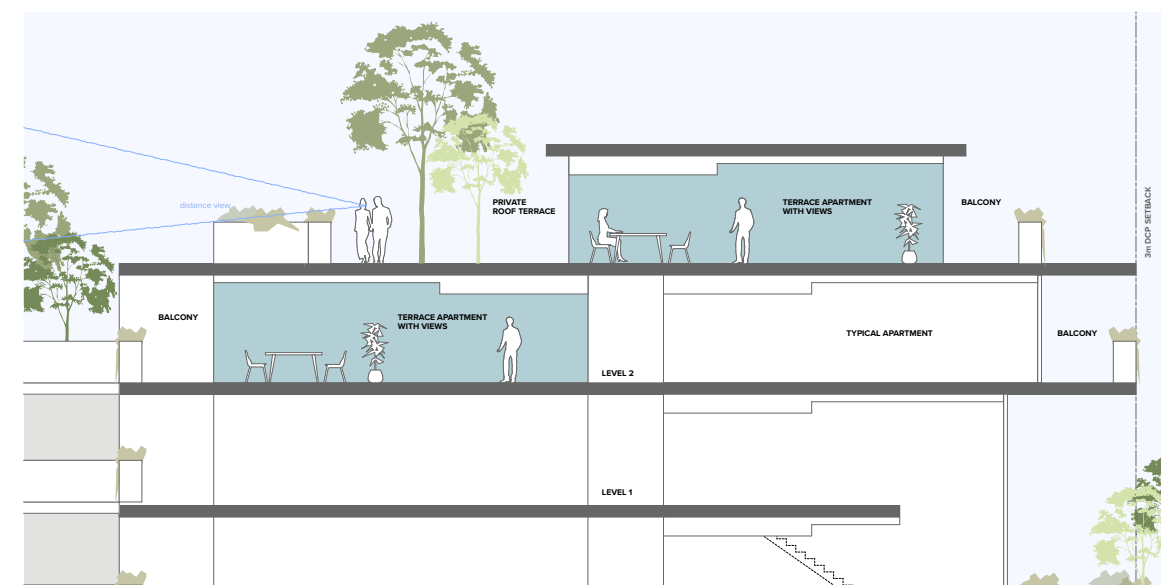
TOWNHOUSE TYPOLOGY



TYPICAL APARTMENT

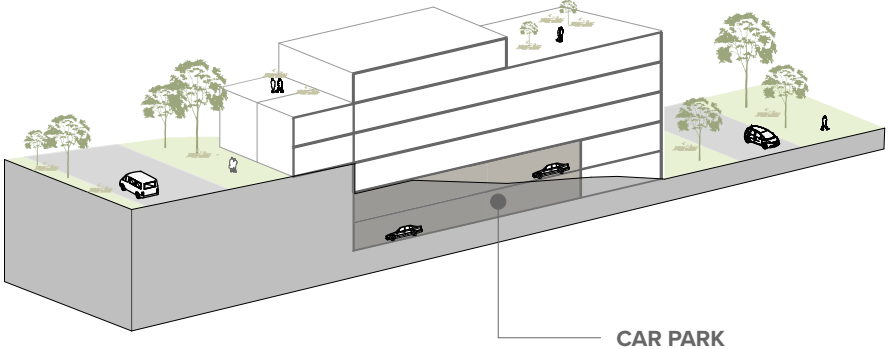
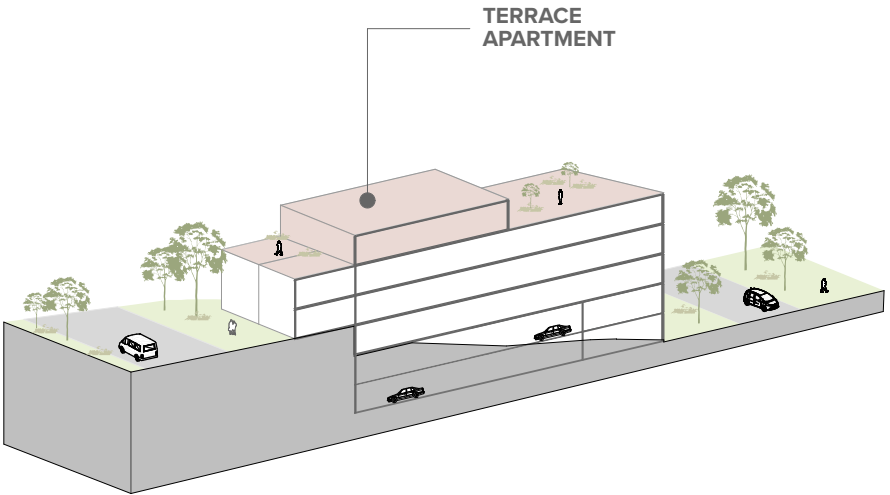
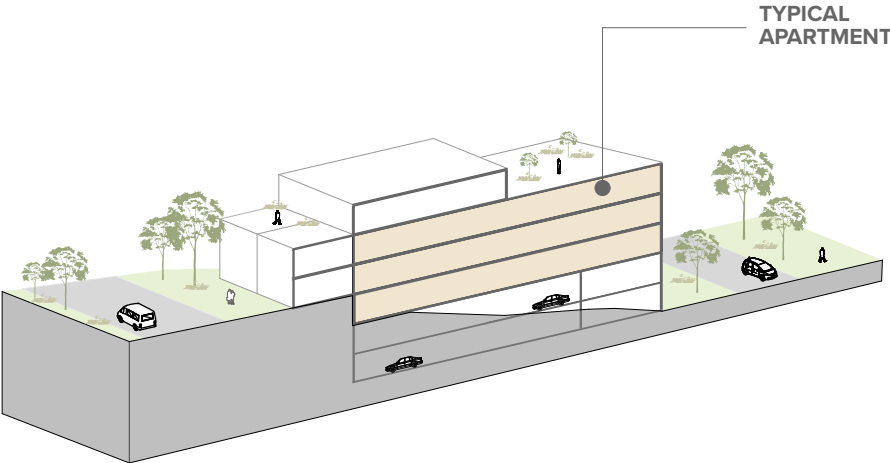
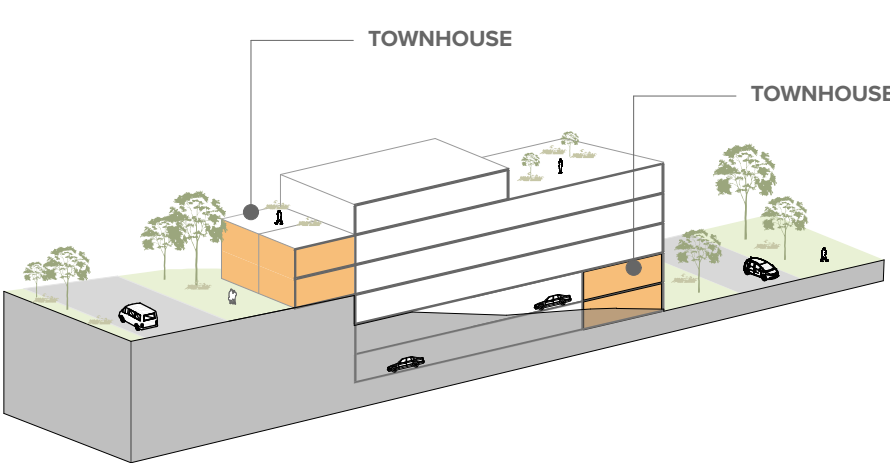


GARDEN APARTMENT



TERRACE APARTMENT

6.02 HOUSING TYPOLOGIES - 2



- TOWNHOUSE
- APARTMENT
- ROOF TOP TERRACE
- PARKING

6.03 DIVERSE CHARACTER

Each building has a distinct appearance giving a sense of identity to the residents

- Each building has a distinct design to give a sense of identity
- The chosen facade materials are drawn from a limited palette of robust materials, typically self-finished materials such as brick or concrete. The limited palette is enriched by the uses of textures
- The facades use a number of architectural devices to articulate the building form such as recesses, rhythm repetition, datum levels, setbacks to articulate and modulate the building form.



6.04 LIVING IN CADDENS



ACCESS TO NATURE

Apartment have good access to nature and open space. The TEC park and RE1 area to the east of the site . Private communal courtyards and landscaped links provide natural outlook amenity



OWN FRONT DOOR

Wherever possible ground floor units have direct access to the street. Townhouse unit types are used in a number of building.

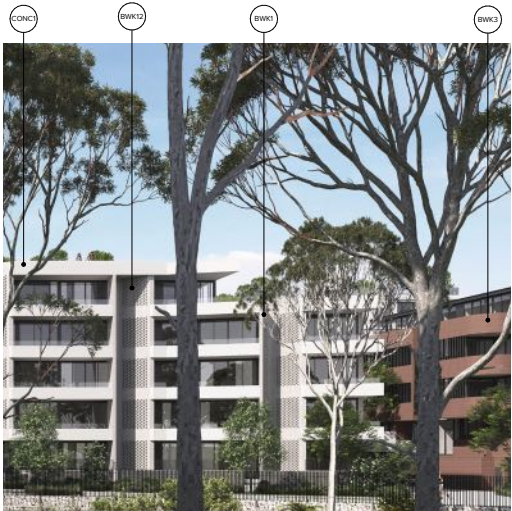
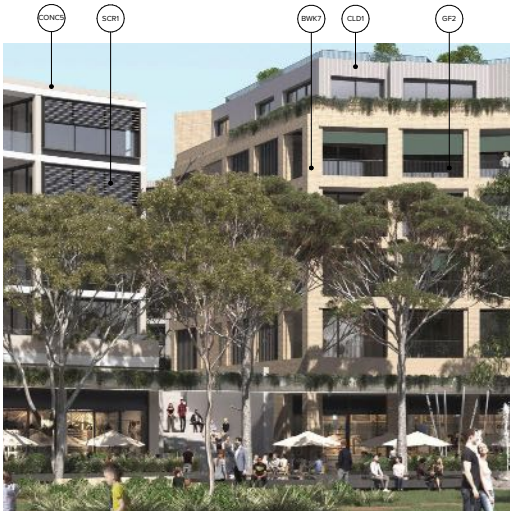
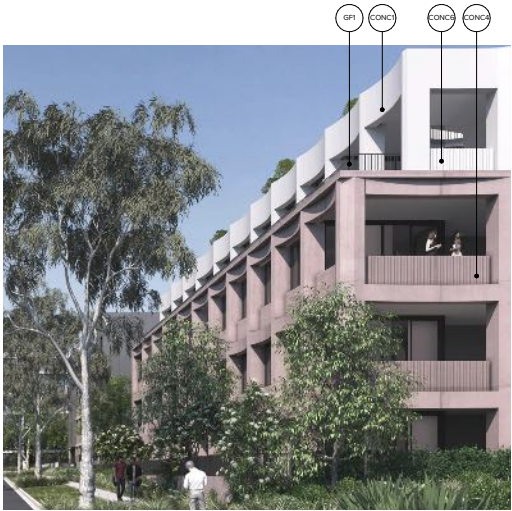
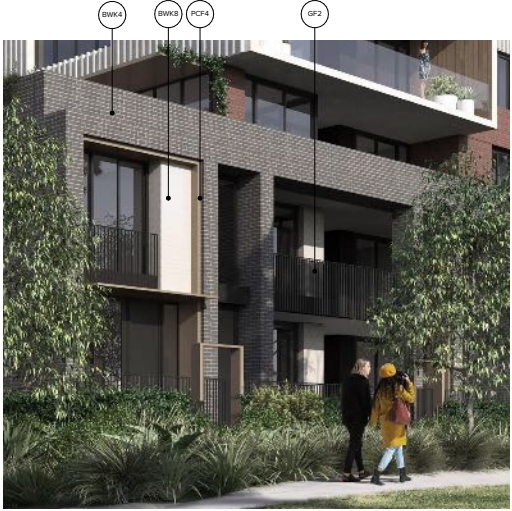


OUTDOOR LIVING

In addition to varied unit types there is also a variety of outdoor private outdoor spaces ranging from generous balconies, large roof terraces and ground floor terrace

6.05 ROBUST MATERIALS

BWK 1	AB Bricks Bowral Chillingham White	BWK10	English Bond Protruding Bricks	CONC8	Corbel Concrete	CONC9	GRC Chevron Vertical Profile Concrete
BWK2	AB-Brick WildernessDesign Blue Gum	BWK11	English Bond Angled Bricks	CLD1	Standing Seam Cladding Light Grey	PCF1	Powder Coat finish Woodland Grey Satin or similar
BWK3	AB-Bricks-Bowral Capital Red	BWK12	English Bond Hit and Miss	SCR1	Vental External Blinds	PCF2	Powder Coat finish Streetwise Silver Dulux or similar
BWK4	AB-Bricks Brahman Granite	CONC1	Grey Concrete	SCR2	Fabric External Blinds	PCF3	Powder Coat finish Territory Red Dulux or similar to match BWK3
BWK5	AB-Bricks Burlesque Deepening Green	CONC2	Pale Pink Pigmented Concrete	BAL1	Glass Balustrade	PCF4	Powder Coat finish Duratec Copper Metallic or similar
BWK6	AB Bricks Bowral Blends Wilton	CONC3	Dark Grey Pigmented Concrete	BAL2	Vertical Baton Balustrade White		
BWK7	AB Bricks Bowral Limousin Gold	CONC4	Darker Pink Pigmented Concrete	GF1	Fence Type 1		
BWK8	AB-Bricks Burlesque Majestic Grey	CONC5	Sand Concrete	GF2	Fence Type 2		
BWK9	English Bond Corbel Pattern	CONC6	Concave Profile Concrete	PF1	Paint Finish White		
		CONC7	Rib Profile Concrete	PF2	Paint Finish Dark Raku Dulux or similar		



07

LANDSCAPE

7.01 LANDSCAPE

The Landscape design is fundamental to the overall concept closely aligned with architectural concept. The design builds off the existing elements on the site both natural and man-made.

The preservation of the TEC was a key move in shaping the road layout. The access road from the west is continued but arcs to avoid the TEC resulting in curved road with the surrounding buildings set out in a crescent. Whilst the TEC is inaccessible it forms a wonderful natural outlook to the northern edge of the site. A Community Park has been provided to the East of the TEC. This park has barbecue facilities with extensive seating areas. In addition there is a covered playground and outdoor gym equipment. The apartments along the Eastern perimeter of the site look out onto RE1 zoned land

in a similar fashion to those facing the TEC to the North.

The Village Green has been conceived as a village square. It transforms the eastern side of the shopping centre into a public square (approximately 2000sqm) that accommodates the existing shopping centre in a practical and considered manner - without any demolition of the existing buildings. The central space is a lawn area fringed with food and beverage retail units and containing seating areas, public art and a water feature. Deep soil planting will allow for the growth of large trees. The semi circular design of the space and the radial motif was inspired by the amphitheatre form of the drive-in cinema.

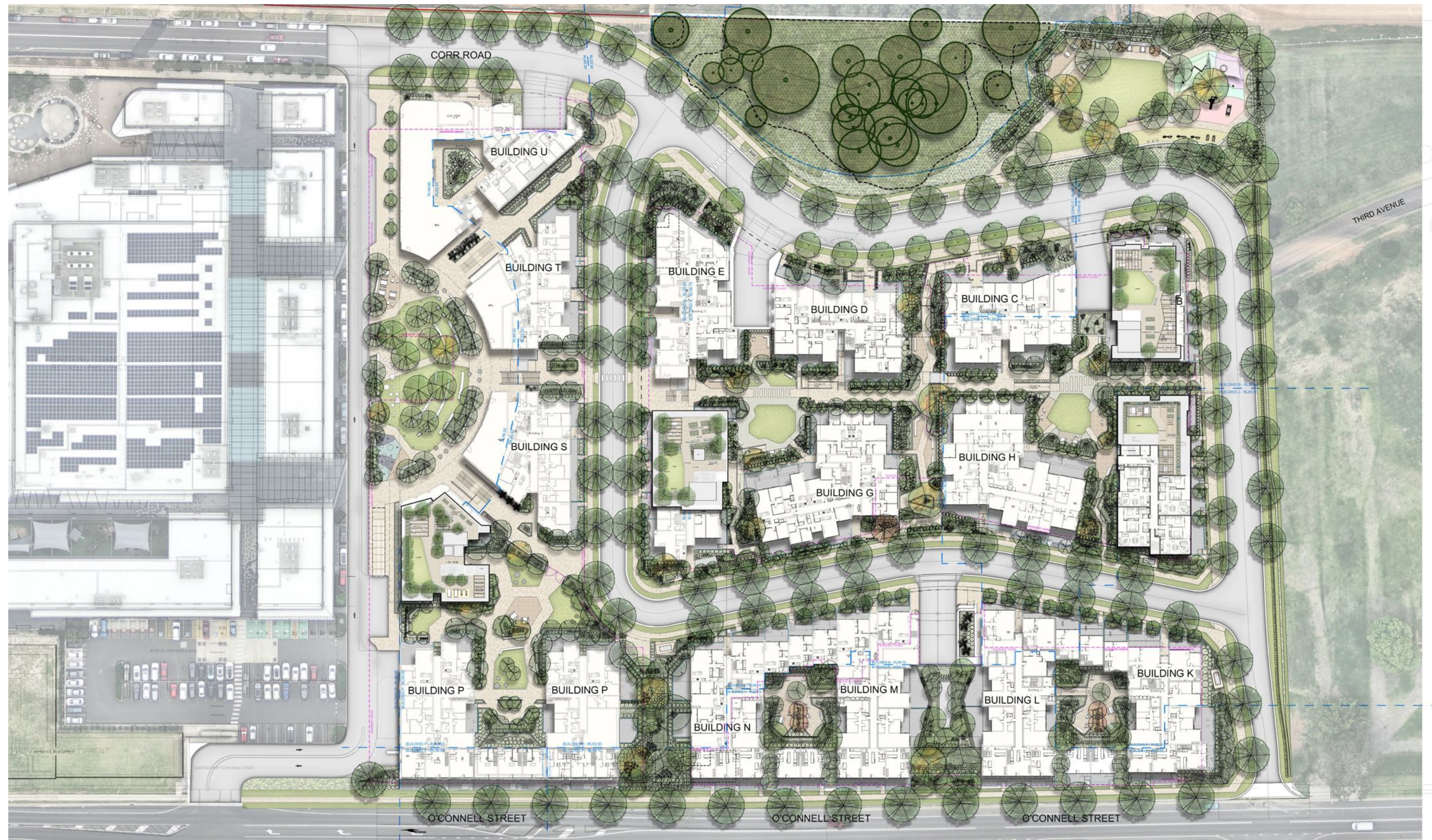
The streets are generously planted with nature strips and numerous smaller pockets of landscape and setback areas exceeding DCP guidelines.

Due to the extensive public spaces on offer the Communal open spaces are more passive in character with seating decks and barbecue areas set in lush landscaping that will provide a natural outlook for apartments.

Please refer to drawing and Report by Landscape Architects Site Image for detailed landscape information.



7.01 LANDSCAPE



08

ADG PRINCIPLES

8.01 CONTEXT & NEIGHBOURHOOD CHARACTER

DESIGN QUALITY PRINCIPLE 1

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, street scape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

PROPOSAL

The design has been informed by the distinctive site context. The site is located to the west of the existing Caddens Corner shopping centre – a single-storey building with open-air malls. The subject site's topography is quite steeply inclined with the land falling from a high point in the South-East corner to a low point in the North-West corner.

The TEC (Threatened Ecological Community) is thicket of remnant shale plains woodland that spans the subject site and the site to the North.

The proposal builds on these observations by creating a mixed-use precinct, activating the site outside of retail hours and providing high quality connections to the surrounding street network.

The key moves of the design are a direct response to the

- The creation of a significant public space (The Village green). The position and location of the Village Green is related to the mall alignment of the Shopping Centre. The Village Green will be the focal point of social activity.
- The formal /semi-circular geometry of the Village Green indicates the significance of this space. The architecture framing the Village Green is varied in form contrasting with the formal plan layout.
- The curvilinear/organic form of the site road layout is a response to the topography of the site and a desire to introduce an organic feel to the streetscape.
- The proposal preserves the remnant shale plains woodlands (TEC) and incorporates it as a key element of the design.
- The provision of a Community Park provides an alternative public space to the Village Green. In addition there are a number of pocket parks that further add to the diversity of public spaces.
- The design responds to the detached/semi-detached housing to the south of the site by adjusting the scale of the development with two-storey townhouses lining O'Connell St South
- The proposal is compatible with the existing and desired context and neighbourhood character of the precinct and in-line with Penrith Council's vision for the area.



Plan showing The Village Green and its integration with the existing Shopping Centre.

8.02 BUILT FORM & SCALE

DESIGN QUALITY PRINCIPLE 2

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

PROPOSAL

The subject proposal is clearly a change in scale Caddens Corner. The site is B2 zoned mixed use and B4 high-density residential. As is demonstrated elsewhere in this report a number of design moves result in portions of the site being dedicated to the public domain such as the Village Green, the Community Park and the preserved TEC woodland. Despite the generous provision of these open spaces the proposal largely stays within the 15m height limit

- The design has been considered in terms of streetscape and place making ahead of the character of the individual buildings
- Scale is considered at both the large and intimate scale so that the development appears ordered and harmonious and includes fine-grain detail and human-scaled elements at the street interface.
- The buildings align with the road layout, which is organic in form but the design has a number of clear sign lines corresponding with pedestrian links
- Building heights are varied providing a diversity of scales .
- The building forms and heights respond to the changing levels of the site. The taller buildings are mainly in the central, lower portion of the of the site providing a transition in scale to the lower buildings on the perimeter. The buildings along O'Connell St south are 2-storey town-houses, that mediate the scale of the proposal with the 2-storey houses to the South.
- Many of the buildings have 2-storey townhouse-type units at street level. These units are expressed in the facade giving a 2 storey datum creating an active frontage and fine-grain texture at street level.
- Breaks in the building form are used to define landscape spaces and courtyards, which interact with retail and residential lobbies creating places for people to dwell, gather and meet.
- All buildings comply with minimum ADG building separation distances.



Town house typology.

8.03 DENSITY

DESIGN QUALITY PRINCIPLE 3

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

PROPOSAL

The proposal is to provide a well connected high-density residential neighbourhood with a village feel and access to nature

- The project is a multi-stage development creating a series of precincts across the site, each of which has associated open space, connections and uses to prompt a vibrant, interesting, and diverse mixed-use/high density residential precinct.
- The proposal includes careful management of transitions to adjacent low-density sites to prevent overlooking, overshadowing, and noise impacts. The proposal is designed to activate and improve the function of the wider context as a hub for retail and gathering.
- The proposal is designed to be generally consistent with the LEP and DCP and provide amenity for all residents to meet the objectives of the ADG.
- Apartments are designed to meet ADG minimum outdoor areas
- The site does not have an FSR. A test-fit of the DCP layout was done to establish a base density (see page 40)
- The arrangement of the apartment buildings is designed to maximise apartment amenity through the connection to landscape, providing views, and avoiding conflicts between apartments and different uses.
- The form of the proposal is responsive to the context and adopts a massing strategy to provide a sensitive transition to adjoining single dwelling housing.



Site plan showing landscaped streets, courtyards, Village Green, and the preserved TEC woodland

8.04 SUSTAINABILITY

DESIGN QUALITY PRINCIPLE 4

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and lowering operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

PROPOSAL

Sustainability is an important driver for the proposal and the arrangement of building forms is designed to maximise natural cross-ventilation and solar access.

- The proposal is designed to incorporate a traditional car-based shopping centre with large expanses of on-grade parking into a vibrant mixed-use and high-density residential precinct. An important part of the proposal is the continued use of the retail centre. The proposal will provide covered parking for the existing retail and transform the eastern side of the centre into a pedestrian friendly shared zone adjacent to the new Village Green.
- The design upgrades the retail experience of the existing Shopping Centre without any demolition of buildings.
- The proposed residences are within walking distance of the Shopping Centre
- The proposal includes Council's recommendations regarding waste streams and is designed for ease of use so that the residential areas are kept tidy and hygienic.
- The landscape design maximises the use of native plants to reduce water usage and to respond to the local micro-climate and promote biodiversity.
- The main allocation of deep soil to the site is in the TEC and adjacent Community Park. There are also key pockets of deep soil provided in The Village Green and in many of the links between buildings. In addition to the deep soul there is extensive deep planting throughout the site - in the landscaped courtyards, building links, road reserve and building setbacks.



View showing integration of landscaping in the built form.

8.05 LANDSCAPE

DESIGN QUALITY PRINCIPLE 5

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development’s environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours amenity, provides for practical establishment and long term management.

PROPOSAL

The landscape strategy is based on the idea of multiple spaces, including a new park and plaza, courtyards, gardens and landscape zones. The landscape concept includes streets, laneways/links, paths and nature trails so that pedestrians can access all areas of the site whilst interacting with nature.

- The proposal aims to exceed the key landscape criteria such as deep soil zones, communal open space, public open space, and canopy cover.
- The design provided a diverse offering of Public spaces - providing a wide range of leisure activities.
- Landscape is integrated into the architecture to soften the building forms.
- Elevated and rooftop landscape planters are used to green facades and are readily accessible from the building to allow for simple maintenance.
- Four landscaped communal rooftop spaces are provided for use by residents.
- Various parks and communal spaces provide a range of uses to encourage pedestrian activation.
- A comprehensive landscape plan and report by Site Image is included as part of the DA documents
- Landscape is integrated into the architectural form and is an important consideration for outlook, communal open space, and green views.



Walkway through the preserved woodland of the TEC

8.06 AMENITY

DESIGN QUALITY PRINCIPLE 6

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, and ease of access for all age groups and degree of mobility.

PROPOSAL

Apartment amenity is a primary driver of the development of massing and form. The design carefully considers the activities of future residents, maximising outlook, cross-ventilation, solar access, and uses simple and elegant apartment planning to improve quality of life.

- Planning of the different buildings has considered the amenity of the individual apartments, communal open spaces and relationship to the open space. All public parts of the site are wheelchair accessible, with public lifts provided where there are steep level transitions.
- The site provides a variety of amenity such as play areas, outdoor Gym, barbecue facilities, rooftop terraces and areas for seating.
- Apartments sizes and private outdoor space is generally larger, exceeding the ADG minimums.
- Livable and accessible housing is provided in excess of ADG and DCP minimums. Where possible, apartments meet Livable Housing Design Silver Standards.
- Most apartments achieve the ADG storage requirements within the apartments. Where necessary, storage is provided in basement areas in secured storage zones.
- Many apartments include studies or places to work from home.
- The achievement of natural cross-ventilation is an important design consideration. Where possible additional cross-ventilation paths are provided using common areas and careful location of screens and voids



Elevation of Building T showing the relationship of residential, retail and Village Green

3.07 SAFETY

DESIGN QUALITY PRINCIPLE 7



Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.

PROPOSAL

The development is designed to transform a retail centre into a vibrant lively mixed-use community, creating active place and diverse community where people feel welcomed, safe and comfortable.

- The proposal includes a series of streets, links and laneways that are safe, include passive surveillance and are well lit.
- Security is increased through the activation of the site at different times of day and week with a variety of uses and spaces.
- Wayfinding will be provided as part of the public art strategy to create clear pedestrian links around the site.
- The residential mailrooms are located in secured lobby areas.
- Secured entries are provided to residential carparks and lobbies
- Retail and residential carparks are separated on different levels, with no residential lift access available on retail levels..
- The location of the retail loading dock and heavy vehicle access routes prevents conflicts with retail parking and the new residences.



Townhouse type housing facing O’Connell St South providing a fine grain activation to the ground plane,

8.08 HOUSING DIVERSITY & SOCIAL INTERACTION

DESIGN QUALITY PRINCIPLE 8

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

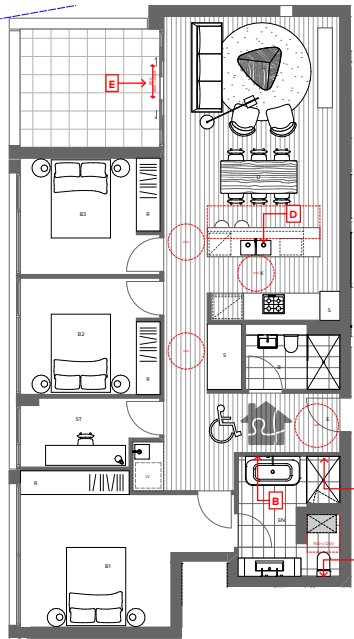
Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

PROPOSAL

The Caddens community is vibrant, diverse and well established. The proposal seeks to build on this base, enhancing a traditional retail centre by extending the community into the site.

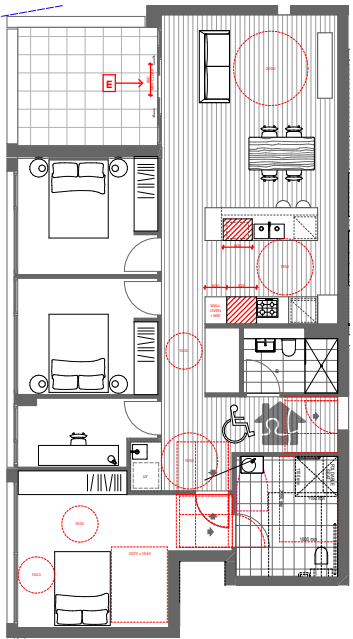
- Residential lobbies are always accessed from the public domain allowing simple drop-off or pick-up from taxis, etc.
- The proposal includes multiple landscaped spaces and courtyards to promote interaction and includes adjacent retail tenancies suitable for outdoor dining and special events. Play spaces are included to create a family friendly environment.
- The residences are supported by a wide range of spaces and proximity to amenities including schools, the shopping centre and sporting fields.
- A mix of 1-4 bedroom residences, including livable and adaptable apartments, are proposed to allow for a diverse demographic
- Livable and accessible housing is provided in excess of ADG and DCP minimums. Where possible, apartments meet Livable Housing Design Silver Standards.
- Most apartments achieve the ADG storage requirements within the apartments. Where necessary, storage is provided in basement areas in secured storage zones.
- Many apartments include studies or places to work from home
- Lobbies are designed to bring residents together including the provision of mail rooms accessed from lobbies, seating areas, and integrated landscape
- The foot-traffic generated will be significant and will contribute to the future vision for the Village Green, supporting local business and commerce.

E.301



5 PRE Adaptable & Livable Plan - 3 Bed Type 02

B.G01
B.101
B.201
R 301



6 POST Adaptable Plan - 3 Bed Type 02

3-bedroom adaptable layout. The adaptable layouts are designed to minimise the need for construction for adaptation while providing excellent amenity in pre-adaptation configuration.

8.09 AESTHETICS

DESIGN QUALITY PRINCIPLE 9

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

PROPOSAL

As a part mixed-use precinct, the proposal brings together different building types to create a new community. The character of the proposal is designed to integrate these different building forms into a village like environment.

- The design has at its core the desire to create the feeling of a contemporary village. The organic layout of the streets, variations in scale and diverse building expression are intended to give a sense of identity and uniqueness for the residents of each building.
- The design focuses on streetscape with buildings that are familial in design forming one side of a street. The buildings' geometry follows the form of the road clearly defining a street 'edge'.
- Facade materials are robust and self-finished such as brick, concrete. Face brick is used widely in the proposal, offering a robust and familiar material which is detailed to create fine-grain and human-scale streetscapes. Brick colours are varied in the proposal to highlight articulation and different building elements.
- Retail and apartment lobbies are clearly distinguishable from the street and include places to sit, collect mail and interact with other residents. Retail and residential uses are in close proximity but are carefully managed to avoid conflicts.
- The street character was informed through the review of case studies that exhibited a high-quality village atmosphere and combined retail and residential uses, such as Surry Hills and Paddington.



The architectural palette including face brickwork, concrete and prefabricated planters. This image shows the preference for materials that do not require applied finishes. Brick detailing adds fine-grain to the elevations and provides connections to the history terracotta manufactured on site.

09

RESPONSE ADG OBJECTIVES

9.1 RESPONSE TO ADG OBJECTIVES

3A SITE ANALYSIS [P.47]	COMPLIES	Objective 3C-2 Amenity of the public domain is retained and enhanced	Complies <ul style="list-style-type: none">The proposals seek to provide active uses to the proposed Village Green with quality materials, planting, play elements and lighting to support a vibrant and interesting destination.Site lines and movement routes have been considered to enable enjoyment of place, with opportunities for vagrancy and hidden spaces minimised.Service entries and facilities have been strategically located in line with relevant regulations whilst holistically integrating within the public realm strategy.Please refer to architectural drawing DA-110-009 Ground Plan, and the Landscape package by Site Image for further information.
Objective 3A-1 Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.	Complies <ul style="list-style-type: none">See site analysis in Report.Further investigation and analysis of the built form, heritage and environmental conditions have been undertaken in this and accompanying consultant reports.		
3B ORIENTATION [P.49]		3D COMMUNAL AND PUBLIC OPEN SPACE [P.55]	
Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development.	Complies <ul style="list-style-type: none">Site conditions along with existing and emerging urban contexts have informed the massing and site layout.Building uses have been arranged to provide mutual benefit in terms solar access.The primary form of the taller portions of buildings has been strongly influenced by solar access and cross ventilation.	Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.	Complies <ul style="list-style-type: none">The proposal has 2 main publicly accessible spaces common to all buildings , the Village Green at the West of the site facing the existing Shopping Centre and the Community Park in the North-East cornerA variety of private communal open spaces has been provided at courtyard and roof level. These spaces are suitable for active uses such as yoga/exercise or dining and entertaining with barbecue and dining tables provided.The external combined spaces exceed the ADG recommend areas and solar access requirements.
Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter	Complies <ul style="list-style-type: none">There is no overshadowing of neighbouring properties. The southernmost portions of the buildings facing onto O'Connell St South are all two-storey townhouse type units.	Design Criteria <ul style="list-style-type: none">Communal open space has a minimum area equal to 25% of the site.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).	
3C PUBLIC DOMAIN INTERFACE [P.51]		Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.	Complies <ul style="list-style-type: none">The external communal spaces have been designed to support both social and private, reflective activities.Spaces are provided with landscaping, seating, shading and access to the adjacent internal facilities.
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security	Complies <ul style="list-style-type: none">The site setbacks improve the pedestrian experience.The site has a network of pedestrian links connecting to Village Green and Community Park.Consideration has been given to site lines, lighting, activation, materials, safety and security.Opportunities for passive surveillance and mutually beneficial uses have been incorporated.The residential building lobbies are provided with clear site lines of, and through the entry to points of vertical circulation.Active uses are provided at ground level to the Community Green and the shared thoroughfare in front of the Shopping Centre.		

Objective 3D-3 Communal open space is designed to maximise safety.	Complies <ul style="list-style-type: none">The publicly accessible communal spaces are well activated, with apartments providing passive surveillanceThe private communal areas are accessible only to residents through a secure gates, lobbies and lift entry.	
Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	Complies <ul style="list-style-type: none">The ground plane has been configured to support Council public realm objectives, providing active frontages, planting and visibility to internal spaces.The Village Green provides a civic public space with seating, barbecue and dining facilities and a water play areaThe Community park has outdoor gym facilities and a shaded playground and barbecue/dining facilities	
3F VISUAL PRIVACY [P.62]		
Objective 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	Complies <ul style="list-style-type: none">Building elements have been located to respect required setbacks and separation distances to ensure adequate privacy and daylighting are achieved.Refer to architectural package for further information.	
Objective 3F-2 Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space	Complies <ul style="list-style-type: none">Designs have ensured outlook, solar access and privacy needs are met as required. Screening and angled views assist in providing privacy	
3G PEDESTRIAN ACCESS AND ENTRIES [P.66]		
Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain	Complies <ul style="list-style-type: none">All residential lobbies have direct access from the street	
Objective 3G-2 Access, entries and pathways are accessible and easy to identify	Complies <ul style="list-style-type: none">The lobby has clear site lines from the street to the lift, There is direct access to the parking garage from the lobby	
Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations	Complies <ul style="list-style-type: none">There is an extensive network of pedestrian links	
3H VEHICLE ACCESS [P.68]		

Objective 3H-1 – Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	Complies <ul style="list-style-type: none">Vehicular parking and service entries are typically recessed back from the street lineThe vehicle entries are provided with quality materials and clear site lines from the public street.
3J BICYCLE AND CAR PARKING [P.71]	
Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	Complies <ul style="list-style-type: none">Refer to drawings DA-110-001, DA-110-002, DA-110-003 DA-110-004, DA-110-005 for parking provisions.
Objective 3J-2 Parking and facilities are provided for other modes of transport	Complies <ul style="list-style-type: none">Parking spaces are provided for private cars for each user group (residential, retail and commercial) including visitors, electric vehicles and motorbikes. Dedicated bicycle parking spaces are also provided for commercial occupants at ground level, and for residents within storage cages through out the basement levels.
Objective 3J-3 Car park design and access is safe and secure	Complies <ul style="list-style-type: none">Basement entry will be by secure gate entry, with user groups separated within the basement by secure gates.
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised	Complies <ul style="list-style-type: none">Basement levels do not rise above ground level ensuring there is no visible impact.
Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised	N/A
Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised	Complies <ul style="list-style-type: none">The extent of blank wall is not extensive and planters are located in front of blank walls permitting climbing plants to soften the masonry walls.

4A SOLAR AND DAYLIGHT ACCESS [P.79]

<p>Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</p> <p>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 midwinter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas – A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at midwinter</p>	<p>Complies</p> <ul style="list-style-type: none">A minimum of 70% of apartments receive solar access to living rooms and private open spaces for 2hrs between 9am and 3pm in mid-winter. Refer to Architectural drawings DA-720-010, DA-720-020 for details. <p>Complies</p> <ul style="list-style-type: none">Less than 15% of apartments receive no-direct sunlight between 9am-3pm in mid-winter. Refer to Architectural drawings DA-720-010, DA-720-020 for details
<p>Objective 4A-2 Daylight access is maximised where sunlight is limited</p>	<p>Complies</p> <ul style="list-style-type: none">Daylight has been maximized to all units while balancing an efficient glazing to wall ratio.
<p>Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months.</p>	<p>Complies</p> <ul style="list-style-type: none">Glazing types will be specified appropriate to each orientation with low-e coatings and SHGC factors incorporated.

4B NATURAL VENTILATION [P.83]

<p>Objective 4B-1 All habitable rooms are naturally ventilated</p>	<p>Complies</p> <ul style="list-style-type: none">All habitable rooms are provided with operable windows to 5% of the floor area for natural ventilation.
<p>Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation</p>	<p>Complies</p> <ul style="list-style-type: none">Apartment depths and layouts are designed to maximise natural ventilation.

<p>Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</p> <p>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 – Overall depth of a cross-over or cross through apartment does not exceed 18m, measured glass line to glass line</p>	<p>Complies</p> <ul style="list-style-type: none">A minimum of 60% of apartments achieve natural cross-ventilation. Refer to Architectural drawings DA-720-010, DA-720-020 for detailsUnit depths are in line with ADG requirements.
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4C CEILING HEIGHTS [P.87]

<p>Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access</p> <p>Design criteria – Measured from finished floor level to finished ceiling level, minimum ceiling heights are: – 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 the area does not exceed 50% of the apartment area – If located in mixed use area: 3.3m for ground and first floor to promote flexibility</p>	<p>Complies</p> <ul style="list-style-type: none">2.7m ceiling height will be provided to all habitable areas, apart from some localised mechanical and hydraulics services requirements at the kitchen area. Any associated 2.4m ceiling zones will be minimised.
<p>Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms</p>	<p>Complies</p> <ul style="list-style-type: none">A number of units at top floor levels have increased ceiling heights to living areas.
<p>Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building</p>	<p>Complies</p> <ul style="list-style-type: none">The retail units facing onto the Village Green have a floor to floor height of 6.3m

4D APARTMENT SIZE AND LAYOUT [P.89]

<p>Objective 4D-1</p> <p>The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</p> <p>Design criteria</p> <p>1. Apartments are required to have the following minimum internal areas:</p> <ul style="list-style-type: none">– Studio: 35sqm– 1 bedroom: 50sqm– 2 bedrooms: 70sqm– 3 bedrooms: 90sqm <p>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m each</p> <p>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12sqm each</p> <p>2. 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</p>	<p>Complies</p> <ul style="list-style-type: none">• Apartment sizes meet and where possible, exceed ADG requirements.
<p>Objective 4D-2</p> <p>Environmental performance of the apartment is maximised</p> <p>Design criteria –</p> <p>Habitable room depths are limited to a maximum of 2.5 x the ceiling height</p> <p>– In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</p>	<p>Complies</p> <ul style="list-style-type: none">• Apartment depths to the primary living area generally satisfy ADG requirements.

<p>Objective 4D-3</p> <p>Apartment layouts are designed to accommodate a variety of household activities and needs</p> <p>Design criteria</p> <ul style="list-style-type: none">– Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (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 3.6m for studio and 1 bedroom apartments and 4m for 2 and 3 bedroom apartments– The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	<p>Complies</p> <ul style="list-style-type: none">• Habitable and non-habitable rooms satisfy and where possible, exceed ADG requirements.
<p>4E PRIVATE OPEN SPACE AND BALCONIES [P.92]</p> <p>Objective 4E-1</p> <p>Apartments provide appropriately sized private open space and balconies to enhance residential amenity</p> <p>Design criteria</p> <p>1. All apartments are required to have primary balconies as follows:</p> <ul style="list-style-type: none">– Studio: 4sqm– 1 bedroom: 8sqm, 2m deep– 2 bedrooms: 10sqm, 2m deep– 3 bedrooms: 12sqm, 2.4m deep– The minimum balcony depth to be counted as contributing to the balcony area is 1m <p>2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15sqm and a minimum depth of 3m</p>	<p>Complies</p> <ul style="list-style-type: none">• Private open spaces satisfy and where possible exceed ADG requirements.• Apartments at Ground Level level 1 satisfies the additional spaces requirements of a minimum 15sqm,.
<p>Objective 4E-2</p> <p>Primary private open space and balconies are appropriately located to enhance liveability for residents</p>	<p>Complies</p> <ul style="list-style-type: none">• Balcony orientations are orientated to emphasise outlook and solar access.• All balconies open directly from living areas, and where possible, also from bedrooms.

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Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	Complies <ul style="list-style-type: none">Balcony forms are integral to the architectural language of the facade.
Objective 4E-4 Private open space and balcony design maximises safety	Complies <ul style="list-style-type: none">All relevant regulatory requirements have been satisfied in balcony design.
4F COMMON CIRCULATION AND SPACES [P.97]	
Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments	Complies <ul style="list-style-type: none">Common circulation spaces are provided with natural light, and are naturally ventilated.The circulation space layout minimises the number of units operable of each section.
Design criteria <ul style="list-style-type: none">The maximum number of apartments off a circulation core on a single level is eightFor buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	
Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents	Complies <ul style="list-style-type: none">Common circulation spaces provide a safe, secure and legible area.
4G STORAGE [P.101]	
Objective 4G-1 Adequate, well-designed storage is provided in each apartment	Complies <ul style="list-style-type: none">Apartments are provided with adequate storage with a min. 50% achieved within units, and the remaining allocation located in secure, dedicated storage cages within the basement.
Design criteria <ul style="list-style-type: none">In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:studio: 4m31 bed: 6m32 beds: 8m33 beds: 10m3 At least 50% of the required storage is to be located within the apartment	
Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments	Complies <ul style="list-style-type: none">Additional storage within the basement is dedicated within residential parking areas in secure cages.

4H ACOUSTIC PRIVACY [P.103]	
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout	Complies <ul style="list-style-type: none">Apartment types typically stack vertically to ensure complimentary rooms are above one another, minimising opposing uses and noise transmission.Floor plans have been laid out to further provide complimentary room uses adjacent to each other where possible.
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments	Complies <ul style="list-style-type: none">Storage and circulation spaces are located where possible to further aid acoustic separation.Dividing walls will be provided with appropriate treatments to meet acoustic separation standards.Refer to Acoustic report as prepared by Stantec for further information
4J NOISE AND POLLUTION [P.105]	
Objective 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	Complies <ul style="list-style-type: none">The surrounding road area of the site have low to moderate traffic. Most of the Eastern portion (R2 Zoning) is residential-only with unit blocks well-spaced. The apartment in the B2 zoned area facing onto the shopping centre/Village Green are raised above ground level and shielded by an awning.
Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	Complies <ul style="list-style-type: none">The units are generally well spaced and in many instances face open space. In the areas where there is shop-top housing near the Village Green a large awning is provided.
4K APARTMENT MIX [P.107]	
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future	Complies <ul style="list-style-type: none">A range of unit types and sizes are provided including from 1 ,2,3,4 Bedroom units in a rage of sizes and configurations. In addition to standard single-storey units a variety of typologies are provided eg. 2-storey townhouses and penthouse units with large terraces. Adaptable and living apartments are provided in support of DCP requirements.

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<p>Objective 4K-2 The apartment mix is distributed to suitable locations within the building</p>	<p>Complies</p> <ul style="list-style-type: none">• Apartment types are distributed across the buildings.	<p>Objective 4N-3 Roof design incorporates sustainability features</p>	<p>Complies.</p> <ul style="list-style-type: none">• Roof levels and terraces are to be provided with drought resistant planting, rainwater capture for irrigation.
4L GROUND FLOOR APARTMENTS [P.109]		4O LANDSCAPE DESIGN [P.115]	
<p>Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located</p>	<p>Complies</p> <ul style="list-style-type: none">• Ground floor units are typically directly accessible from the street	<p>Objective 4O-1 Landscape design is viable and sustainable</p>	<p>Complies</p> <ul style="list-style-type: none">• Landscaping has been specified for the current and changing climate of the Penrith region with a range of species supporting biodiversity.• Rainwater capture systems have been incorporated to reduce potable water use, and supply irrigation.
<p>Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents</p>	<p>Complies</p> <ul style="list-style-type: none">• Ground floor apartments are typically a minimum of 500mm above street level	<p>Objective 4O-2 Landscape design contributes to the streetscape and amenity</p>	<p>Complies</p> <ul style="list-style-type: none">• Landscaping is integral to the design with a rich variety of landscaped open spaces• Refer to the Landscape package as prepared by Site Image Landscape for further information.
4M FACADES [P.111]		4P PLANTING ON STRUCTURES [P.116]	
<p>Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area</p>	<p>Complies</p> <ul style="list-style-type: none">• The building facades are varied in character and have a fine grain at street level.• Frontages are articulated with quality materials to encourage activity and integrated with the existing and emerging public realm.	<p>Objective 4P-1 Appropriate soil profiles are provided</p>	<p>Complies</p> <ul style="list-style-type: none">• Soil profiles have been specified as designed by Site Image Landscape Architects in line with ADG requirements.
<p>Objective 4M-2 Building functions are expressed by the façade</p>	<p>Complies</p> <ul style="list-style-type: none">• The architectural language has been designed to provide legibility of the user group within the development• The residential lobbies are clearly legible in the facade language,often marked by breaks in massing.	<p>Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance</p>	<p>Complies</p> <ul style="list-style-type: none">• Refer to the Landscape package as prepared Site Image Landscape for planting selections.
4N ROOF DESIGN [P.113]			
<p>Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street</p>	<p>Complies</p> <ul style="list-style-type: none">• The roof scape is varied giving the buildings a variety of silhouettes. Datums are established at key heights in the proposals and provide scale and legibility.		
<p>Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised</p>	<p>Complies</p> <ul style="list-style-type: none">• A number of the building have landscaped communal roof spaces. In addition a number of upper level units have private roof terraces.		

Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	Complies <ul style="list-style-type: none">The communal open space planting is typically above basement podium. These spaces are a key component of creating a welcoming and comfortable space. Scale and species type have been located to provide a connection to nature, shading, soften the environment and provide privacy and separation where necessary.
4Q UNIVERSAL DESIGN [P.118]	
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members	Complies <ul style="list-style-type: none">20% of apartments are designed to meet Silver level universal design standards.
Objective 4Q-2 A variety of apartments with adaptable designs are provided Adaptable housing should be provided in accordance with the relevant council policy	Complies <ul style="list-style-type: none">10% of apartments have been provided for future adaptation.
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	Complies <ul style="list-style-type: none">Layouts are designed to provide simple, regular room forms for ease of use and adaption.
4R ADAPTIVE REUSE [P.120]	
Objective 4R-1 New additions to existing buildings are contemporary and complementary and enhance an area’s identity and sense of place	N/A
Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse	N/A

4S MIXED USE [P.122]	
Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	Complies <ul style="list-style-type: none">The B2 portion of the site is Subject proposal is located opposite the existing Shopping Centre. Active street frontages are provided to the ground level units facing the Shopping CentreAll DA setback requirements have been supported, expanding the public realm into the site.
Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	Complies <ul style="list-style-type: none">Residential access is provided by a dedicated, safe and clearly legible entries from the public road with clear site lines.Each unit is provided with a private secure entry.Car park access is via a secure and clearly legible entry point .
4T AWNINGS AND SIGNAGE [P.125]	
Objective 4T-1 Awnings are well located and complement and integrate with the building design	Complies <ul style="list-style-type: none">A generous awning with landscaped/planted portions is provided to the retail units in the B2 section
Objective 4T-2 Signage responds to the context and desired streetscape character	Complies <ul style="list-style-type: none">Signage positions and extents will be incorporated into the ground level articulation.Specific signage designs will be submitted as a separate DA application.
4U ENERGY EFFICIENCY [P.127]	
Objective 4U-1 Development incorporates passive environmental design	Complies <ul style="list-style-type: none">Building orientation, articulation and massing have been formed to support passive solar access, natural cross ventilation and outlook.

Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer		Complies <ul style="list-style-type: none">• Facade projections, eaves and balcony positions work to support passive shading during mid-day in summer, minimising heat gain.	4X BUILDING MAINTENANCE [P.133]	
Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation		Complies <ul style="list-style-type: none">• All habitable rooms are provided with operable windows for natural ventilation.• Cross ventilation strategies required at lower levels are extended through to upper levels.	Objective 4X-1 Building design detail provides protection from weathering	Complies <ul style="list-style-type: none">• Building materials and components have been designed appropriate for the current and changing climate of Penrith
4V WATER MANAGEMENT AND CONSERVATION [P.129]			Objective 4X-2 Systems and access enable ease of maintenance	Complies <ul style="list-style-type: none">• Suitable access for cleaning and maintenance has been designed for all appropriate areas.
Objective 4V-1 Potable water use is minimised		Complies <ul style="list-style-type: none">• Rainwater capture systems are provided for landscape irrigation, reducing potable water use.• Efficient fixtures and fittings are provided throughout commercial and residential uses to further reduce potable water use.	Objective 4X-3 Material selection reduces ongoing maintenance costs	Complies <ul style="list-style-type: none">• Applied finishes have been minimised where possible to reduce maintenance.• Materials and finishes will be specified for their longevity and minimal maintenance requirements.
Objective 4V-2 Urban storm water is treated on site before being discharged to receiving waters		Complies <ul style="list-style-type: none">• Storm water treatment is provided as described in the Storm Water Management Report prepared by Northrop		
Objective 4V-3 Flood management systems are integrated into site design		Complies <ul style="list-style-type: none">• Please refer to stormwater management design by Northrop.		
4W WASTE MANAGEMENT [P.131]				
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents		Complies <ul style="list-style-type: none">• Waste storage areas are located in dedicated rooms within the basement and ground level.• Waste collection is to occur within the loading docks.• Waste chutes are provided at each residential level, along with separate glass collection bins.		
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling		Complies <ul style="list-style-type: none">• Each apartment is to be provided with under-counter separate bins for landfill and recycling, with glass further separated in communal recycling bins accessed at each level from the common hallway.		

10

DESIGN STATEMENT

TURNER

Date 29 February 2024,
Author Brian Fong

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DESIGN VERIFICATION

SEPP 65

DA APPROVAL
80 O’CONNELL ST
CADDENS NSW 2747

PROJECT DESCRIPTION

80 O’Connell St mixed-use and high-density residential development

- A total of 469 apartments (39 x 1 bed 263 x 2 beds, 156 x 3 beds, 11 x 4 beds)
- Ground-floor commercial units facing the existing shopping centre with a covered outdoor dining/plaza area.
- Public outdoor space – The Village Green and Community Park.
- Communal areas, including accessible landscaped podiums and roof terraces.
- Basement parking for residential and all the new and existing retail with the required motorcycle, bicycle and unit storage areas.
- Associated public domain landscaping in setbacks.

We confirm that Brian Fong has directed the design of the mixed-use development at 80 O’Connell St described above and that the documentation submitted for this development application has been prepared in accordance with the design quality principles set out in Schedule 1 of State Environmental Planning Policy No.65-Design Quality of Residential Apartment Development.

Further information about the development in relation to the Design Quality Principles and Apartment Design Guide Objectives can be found in the design report submitted with the DA.

Brian Fong is a registered architect under the NSW Architects Act 2003, registration number 11624.

Please note that we accept no liability to any third party who may rely on the above certification.

Yours sincerely,



Brian Fong
Associate Director
NSW Registered Architect 11624

