

DESIGN PROPOSAL

124 - 142 BEAMISH STREET & 16 - 18 NINTH AVENUE,
CAMPSIE.

NOVEMBER 2021



URBAN LINK
ARCHITECTS



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An aerial photograph of a dense urban neighborhood, likely in a city like Chicago, showing a grid of streets, numerous houses, and some commercial buildings. The entire image is covered with a semi-transparent green overlay. In the bottom left corner, the number '01' is displayed in a large, white, sans-serif font. In the bottom right corner, the word 'INTRODUCTION' is displayed in a large, white, sans-serif font. A thin white horizontal line is positioned below the '01' and the 'INTRODUCTION' text.

01

INTRODUCTION

Executive Summary

This report outlines the urban design concept for the mixed-use development at 124 - 142 Beamish Street & 16 - 18 Ninth Avenue, Campsie, which includes the preferred sitting, orientation, form and height of two residential volumes which rest above a three-story retail & commercial podium, and associated parking and service areas.

The site and context analysis has been prepared as part of this study to provide a greater understanding of what scale, form and extent of development can be achieved on the site, taking into consideration the site's contribution to the wider urban context.

A number of design parameters have been identified that relate to the construction and operation of the mixed-use scheme, including consideration of the existing and future urban context, and the public benefits proposed across the site. These parameters have been reflected in the evolution of the design concept and include the location of cores, open space, orientation, height of buildings, parking access and interface with neighboring streets and properties.

As part of the design process a number of design options have been prepared that work within the current planning controls for the site. A number of alternative arrangements of building mass have been presented to test an appropriate approach to define FSR and height for the combined site area.

Preliminary residential layouts have been prepared to inform the design process and analysis of the options. These layouts are based on current best practice approaches to multi-unit residential, and satisfy SEPP65 design standards and Campsie's Town Centre planning policies for residential design. A preferred approach to the allocation of FSR and Height controls has been presented and supported by preliminary analysis of views and overshadowing, which take into account any potential impact on the surrounding context







02

THE VISION

Urban Landmark

The vision for the site at 124 - 142 Beamish Street is to create an outstanding mixed-use building that forms a clear and identifiable urban landmark for Campsie Town Centre, which, at street level, creates a sense of “entry” and “arrival”, which is connected to the fine grain of the surrounding urban fabric.

Connection:

The site presents a unique opportunity to revitalise and connect the surrounding streets and “kick-start” the regeneration of the area.

The proposed design is comprised of carefully proportioned and scaled elements, composed with consideration to the neighbouring developments, streets and open spaces. It has a cohesive urban response, which supports a new sense of community and identity within Campsie’s Town Centre, a *“new destination for the people”*.

Fine Grain:

A vibrant frontage of active retail-use opens to all the surrounding streets and supports a revitalised inner-urban lifestyle, which activates and reinvigorates the immediate neighborhood and enhances the public space usage.

A considered mix of apartment types and configurations accommodate a variety and diversity of lifestyles that will achieve the highest marketability and value.

The design carefully considers its relationship to the fine grain and fabric of its urban context. A human scale approach is adopted with an articulated street edge that relates to the existing and future podium heights on Beamish Street.

Human Scale:

The importance of the Beamish Street address and scale has been reinforced through an articulated podium form that matches the existing and future street-wall height, to create a cohesive retail and commercial inner-city street and community. A generous human scale to the building is created through a considered podium fenestration, proportioning, and materiality that reinforces its retail and commercial usage as a place for living.



A New Destination

Creating a legible and accessible structure of public areas on the site is central to the success of the proposal.

“The urban environment is focused on the public domain: streets and spaces that are publicly accessible and collectively belong to all of us. These are the shared places in which we recreate, play, socialise, commute, eat, watch, gather and celebrate.....The public domain is egalitarian - it is accessible to all and not controlled by private or commercial interests. Access is not paid and occupation is not reliant on buying drinks or shopping”
- Better Places 2017.

The proposed design aims to provide a vibrant and active destination within Campsie’s Town Centre with a balance of living and business activities including commercial spaces, employment opportunities, retail, recreation, and residential uses. The mixture of spaces and facilities cater for users across all ages and diverse cultures and will support a vibrant community.



A Public Offering



A New Park

A new park is proposed to act as an important recreation and community space for the people living in Campsie. It will have an area of 786m², which is more than 20% of the site area and when combined with the proposed 6m wide green pedestrian link from Campsie Street to the park, 25% of the site area will be dedicated as green open space to the community.

It will be a natural, safe, and easily accessible park, a destination for the community to gather and enjoy. It will be a comfortable place to enjoy in the summer, due the 15% tree canopy cover and aims to create opportunities for cultural identity, public gatherings, and social



A New Plaza

A new plaza on Beamish Street is aimed at enhancing the activation and experience along Beamish Street. The concept will include new landscaped areas for community use, (and provide more green to Beamish Street), space for outdoor dining and improved pedestrian access to Campsie's new Train Station.

It will have new public street lighting, public art and seating so that it is an enjoyable and well-designed place for the whole community to enjoy.

An aerial photograph of a dense urban neighborhood, likely a residential area with many small houses and streets. The image is overlaid with a semi-transparent green filter. In the bottom left corner, the number '03' is displayed in large white font. In the bottom right corner, the text 'DESIGN OBJECTIVES' is displayed in large white font. A thin white horizontal line is positioned below the '03' and the text.

03

DESIGN OBJECTIVES

A Destination that Aligns Growth with Public Benefit

“ The design strengthens the retail and commercial functions of the surrounding streets and offers open accessible areas, which will encourage social interaction and opportunities for cultural identity“



Jobs & Housing

With the expected growth in population to Campsie, the proposal aims to align with the local and affordable housing strategies and employment lands strategy.

Over two hundred new dwellings of various sizes will cater for a variety of lifestyles and with over 10,768m² of retail or commercial space, the creation of all day activated streets, the new vibrant destination will provide employment, activity, and choice for all user groups both day and night.



Community Facilities

A high-quality accessible plaza will be provided on Beamish Street along with a new pocket park and green pedestrian connection, next to Ninth Avenue and Campsie Street respectively, the design will encourage community activity, social interaction and create a central meeting point for people to meet and gather.

These areas and the new retail experience, will create a bustling, interesting and activated destination and create opportunities for outdoor dining, shopping, relaxing and networking with locals and visitors.



Culture/Creativity

The design proposal has a distinct identity, which is directly related back to Campsie's existing contextual fine grain, its historical past, and unique character.

The development will aim to underpin key principles which will set out cultural development and paint a picture of what is needed to be delivered. Opportunities to deliver key values will be focused around the plaza area to the front, the park and green pedestrian link along Ninth Avenue and Campsie Street respectively, and the retail and commercial experience.

A Destination for the People

“ The design creates a new connected green outdoor environment and a new indoor retail and commercial experience “



A Public Offering

The existing mature street trees set the foundation for the proposed pocket park, which will provide amenity, identity, and a new green setting for the proposed built form.

The new park will have an area of 797m², which is more than 20% of the site area and when combined with the proposed 6m wide green pedestrian link from Campsie Street to the park, 25% of the site area will be dedicated as green open space to the community.

Additional to the park and the green pedestrian link, the site will accommodate a large public plaza next to Beamish Street, which aims to welcome the heavy foot traffic to and from Campsie's new Train Station.



Facilities

A clear and connected podium design with retail and commercial uses of various sizes, maximises its street address. It will offer activation, articulation, passive surveillance, employment, and a new experience to the people of Campsie and the wider context. Long blank facades are avoided, making cohesive and interesting street frontages while maintaining a connection to the green outdoor environment.



Design

The proposed design aims to create an aesthetically pleasing destination, which is safe, accessible, and welcoming to all.

The textured brick material on the podium relates to the historical brick character of Campsie and is articulated to have a “Art-Deco” vibe in response to the heritage listed art-deco building at 155 Beamish Street.

Its vertical rhythmic language echo's the existing vertical rhythm created from the various retail units (on Beamish Street), yet maintains a human scale, which responds to the current and future context for the area.

A Destination that Promotes a Healthier Lifestyle

“ The design will deliver opportunities for new businesses and employment and will add to Campsie’s day and night-time economies.”



Employment

New retail and commercial area will not only create opportunities for new employment and start-up businesses, but also connect producers and consumers, workers and jobs, and local social and economic development.

Given the vital role retail plays in our economy and community, it will create a sense of place and enhance the local context.



Health Facilities

The new three-story podium delivers 6,128m² of retail or commercial space, which has the potential to accommodate a number of alternative health facilities, which will contribute to the community. These facilities could include, but is not limited to:

- Gym
- Dentist
- Optician
- Doctor
- Wellness retail stores



Economy

With the delivery and availability of new retail and commercial space, the proposed design will only have a positive impact on the local daytime and night-time economy.

A broad variety of products and services will be made available to the local community, which will create growth and consumer choice and directly contribute to the health of the community.

A Well-Designed Destination

“ The site is designed to prioritise people, celebrate the areas uniqueness and function both during the day & evening ”

Good Design Makes Better Places:

“New development has the potential to transform quality of life for people, stimulate the economy and enhance the environment. The design of the built environment shapes the places where we live, work and meet. The quality of design affects how spaces and places function, how they integrate, what they contribute to the broader environment, and the users, inhabitants and audiences they support or attract” - Better Placed, Government Architect New South Wales.



Street Setback

The urban design control to promote urban renewal in Campsie, yet maintain the existing character of Beamish Street, is applied, and a nil street setback is applied to the design as per objective 4.2 of the Campsie Masterplan.



Active Frontages

The proposed retail and commercial activity will be a destination with regular free programming and a diversity of functions both day and night as per objective 4.3 of the Campsie Masterplan.

Existing active street edge: 340m

Proposed active street edges 175m



Podium Height

The proposed retail and commercial activity will be located within the podium area along with a proposed “sky-bar” and “sky-restaurant” at the top of Tower A. A separate vertical entry for the latter is provided at ground floor level with its own separate lobby.

The scale and height of the new podium, which as per objective 4.3, respects the existing built form yet recognises councils vision for the area.



Building Height

Two 25 storey slender tower forms are proposed to create a clear and identifiable urban landmark for Campsie’s Town Centre with a 3-storey retail and commercial podium, which directly relates to the existing and future built form along Beamish Street.

A Green Destination

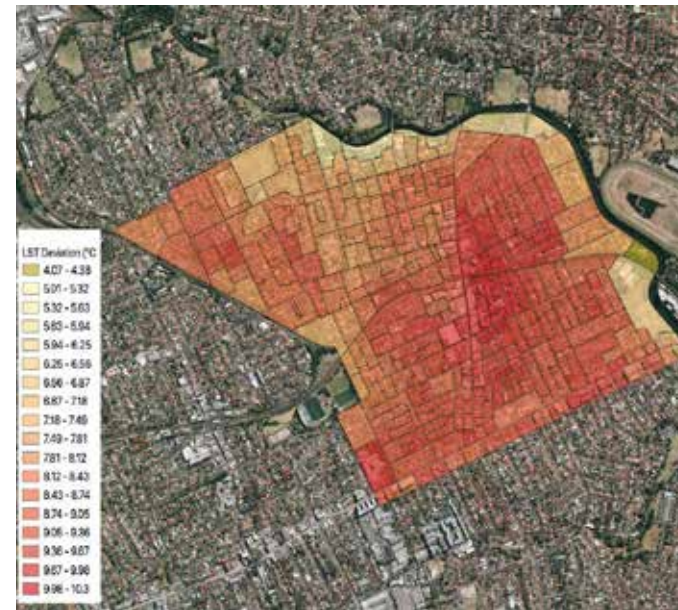
“ The design creates a connected green network to support outdoor activity and social interaction “



Open Space

A high quality green public space is proposed as part of the design. Including the new green pedestrian link from Campsie Street to the new park and Ninth Avenue, over 25% of the site will be dedicated to green open public space, which will not only support the new residents but also the wider community.

The final landscaped design will be a key feature to the success of the proposal and will be used to soften the hard infrastructure. The proposed park and pedestrian link are additional open areas to the public plaza located on Beamish Street.



Urban Heat Island

Mitigation of the urban heat island effect is accomplished through the use of lighter-colored surfaces on the tower design, which reflect more sunlight and absorb less heat, and the proposed 15% site area canopy cover, which will shade the ground floor area,

Existing tree canopy cover: 22m²

Proposed tree canopy cover 580m²



Environmental

The proposal will boast new technologies in sustainable design, to impress more sustainably minded residents and reduce energy use.

Daylighting, energy efficient lightbulbs, low-flow showerheads and toilets, recycling facilities along with several biophilic design patterns will be proposed throughout the design.



Transport

With the current construction under way to upgrade Campsie's public transport facilities and with the site's proximity to the station, public transport will act as a key contributor to providing a green environment for the site and community.

A Connected Destination

“ The proposal aims to integrate a compact yet amenable network of green , safe and accessible public spaces that connect to the surrounding and wider town centre movement ”



The scheme will deliver:

- A green urban canopy, which will provide comfortable movement for pedestrians from the sun.
- 14.5% of the site area will be deep soil, 7.5% above the minimum ADG deep soil requirements, to promote the growth of larger trees.
- A green connection between Campsie Street, the new pocket park and Ninth Avenue.
- A new green connection from Beamish Street to the new pocket park.
- Safe, accessible and legible pedestrian access to local transport facilities.
- Singular vehicle entry and exit system into the site, reducing impacts on pedestrian movement at street level.
- Off-road waste collections.
- Off-road loading and unloading facilities.
- Unbundled car parking in the basement levels.
- Good access to the future expanded North-South connected roadway.
- Provision of electric car facilities.
- Provision of car-share facilities.

A Resilient Destination

“ The scheme aims to integrate the urban and natural environments and provide a comfortable and economic destination for all residents and visitors “



Building Technology

- Electric energy to be used throughout the scheme.
- Energy efficient fittings.
- Dual reticulation installed.
- High levels of insulation to the walls.
- 40% roof coverage for solar panels.
- Rainwater storage areas.



Built Form

The shape and orientation of the building exceeds solar, cross ventilation and south facing requirements as noted in the ADG.

Solar performance= 78%

Cross Ventilation = 83%

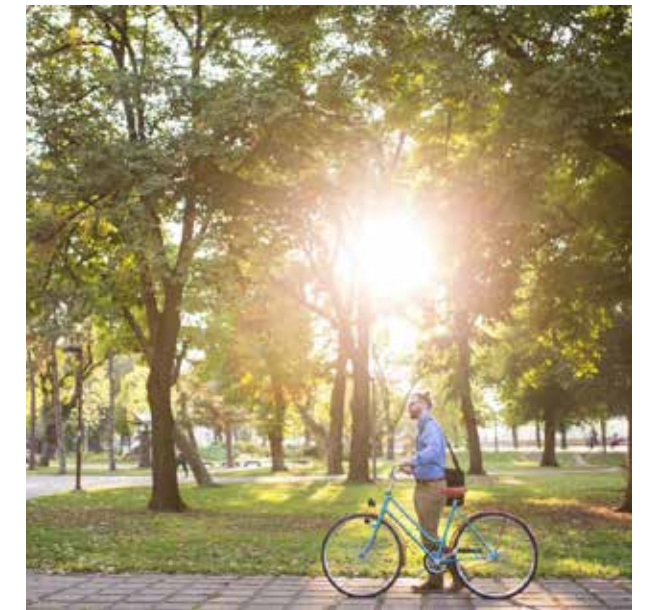
South Facing = 0%

The slender tower forms also create the opportunity to introduce a new green pocket park and a green pedestrian link from Campsie Street, which is 25% of the site area, and has 580m² of tree canopy cover which is 15% of the site area.



Travel

- Electric car-charging facilities.
- Walking distance to local transport facilities.
- Provision of cycle bays which encourage cycling on the new proposed cycle ways.



Nature

- Recycling facilities for both the residential, retail, and commercial uses.
- Visual connections to green areas to promote mental health.
- Oversize communal outdoor area on level 3.
- Minimum 15% tree canopy cover for cooling at street level.
- Exceeding the deep soil requirements to support the growth of large trees.

A Cultural Destination

“ The new park and retail experience presents numerous opportunities for social, cultural, and creative gatherings ”



Place

The vision is to create a new destination in Campsie, a destination which can be enjoyed by the community and visitors during the day and evening time.

With the introduction of the new pocket park and new shopping experience, there could be new community based events, providing a positive offering to the area.



Heritage & Character

The scale and proportion of the proposed street wall/podium, respects the existing and future scale and language along Beamish Street.

The use of the textured brick material at street level, is a direct reference to the numerous heritage listed brick buildings in the area and will have a positive contribution to Campsie's identity and sense of place.



Public Artwork

Public artwork is encouraged to be added to the design, particularly along the western boundary, next to 17 - 21 Campsie Street and within the new pocket park area. Various other forms of public artwork could be installed, based on social engagements with the community.

A Residential Destination

“ The scheme aims to meet the needs and expectations of the community and offer new opportunities to first-time buyers, families and downsizers of all ages and backgrounds.”



The proposed scheme will:

- Apartments with indoor and outdoor areas that meet the minimum, or exceed the recommended sizes noted in the ADG.
- Provide a varied unit mix of 1 bedroom, 2 bedroom and 3 bedroom units to cater for people's different lifestyles.
- Provide a minimum 10% disabled and 20% livable unit mix.
- Provide apartments with sustainable principles - electric energy, energy efficient fittings etc.
- Provide a residential mix that will meet market demands.
- Deliver council's vision for the increase in residential capacity in Campsie's Town Centre.
- Walking distance to local retail and transport facilities.
- An over-sized communal open area - to promote social interaction.
- Deliver on the requirements noted in the South District Plan.
- Deliver Campsie's "Intensification Strategy".
- Provide affordable housing.

A New Destination with Collaborative Governance

“ We aim to work with council and the various government agencies to deliver the right scheme for the site, the area, for the community.”



The proposed scheme will:

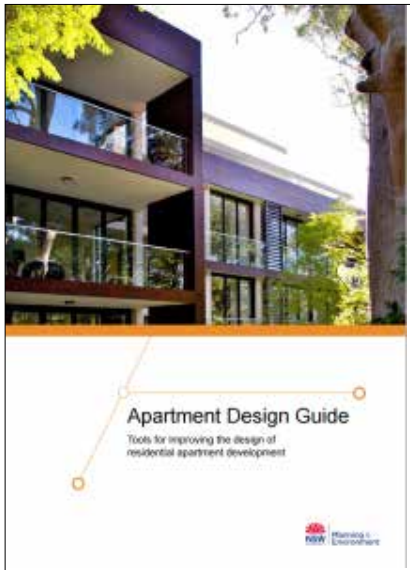
- Provide various sized retail and commercial outlets, which will provide opportunities for new start-up businesses and familiar brands to open in Campsie.
- Meet the needs of the local community.
- Align with council's waste management strategy.
- Deliver council's vision for the area.
- Align with council's vision for vehicle movement and parking requirements.
- Provide outdoor areas which serve the community.
- Comply with all government agencies and comply with their requirements.



04

MASSING

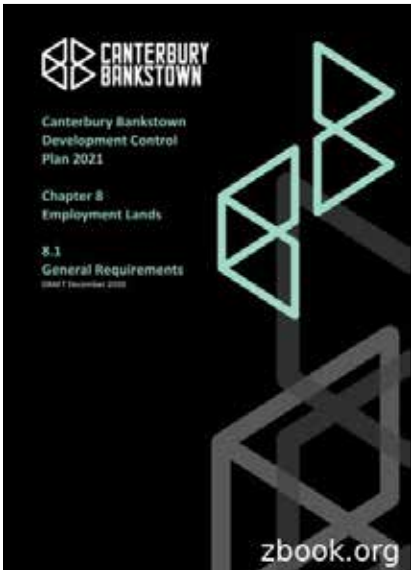
Controls



ADG Controls
(Apartment Design Guide, Section 2F Building Separation, Table 2.)

Minimum separation distances are:

- Up to four storeys
 - 12m (Habitable - Habitable)
 - 9m (Habitable - Non-Habitable)
 - 6m (Non-Habitable - Non-Habitable)
- Five to Eight storeys
 - 18m (Habitable - Habitable)
 - 12m (Habitable - Non-Habitable)
 - 9m (Non-Habitable - Non-Habitable)
- Nine storeys and above
 - 24m (Habitable - Habitable)
 - 18m (Habitable - Non-Habitable)
 - 12m (Non-Habitable - Non-Habitable)

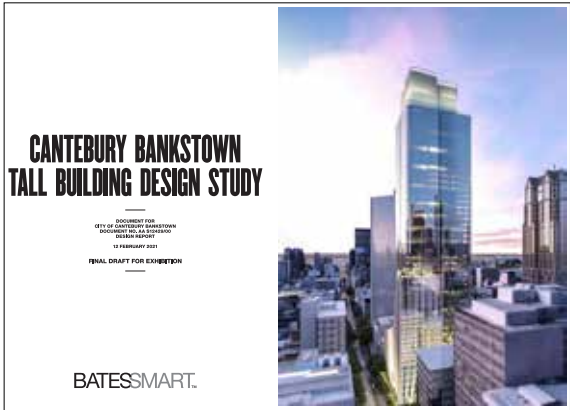


DCP Controls
(Canterbury Bankstown DCP, Section C4.2 Residential Flat Buildings - SEPP 65 Applications Section C4.2.2.3 - Setbacks)

Minimum separation distances are:

- (a) A minimum setback of 6m from the front and rear boundary.
- (b) A minimum setback of 4m from the side boundaries.
- (c) All buildings shall provide a building form comprising a podium base element and an upper element which provides an additional setback in accordance with the table below:

Total Number of Storeys	Podium Base Element	Upper Storey Elements
4	3	1
5	3	2
6	4	2



Built Form
(Section 3.2.1 - Achieving Design Quality in Tall Buildings)

Provide setbacks to built form above streetwall height:
/ 6m to primary and secondary streets generally
/ 8m to streets identified by Council as having important low-scale character or to priority areas for tree planting on podia.

Podium setbacks:
/ Streets with a retail focus should generally adhere to Nil setback
/ Residential streets - provide 3-6m landscaped setback

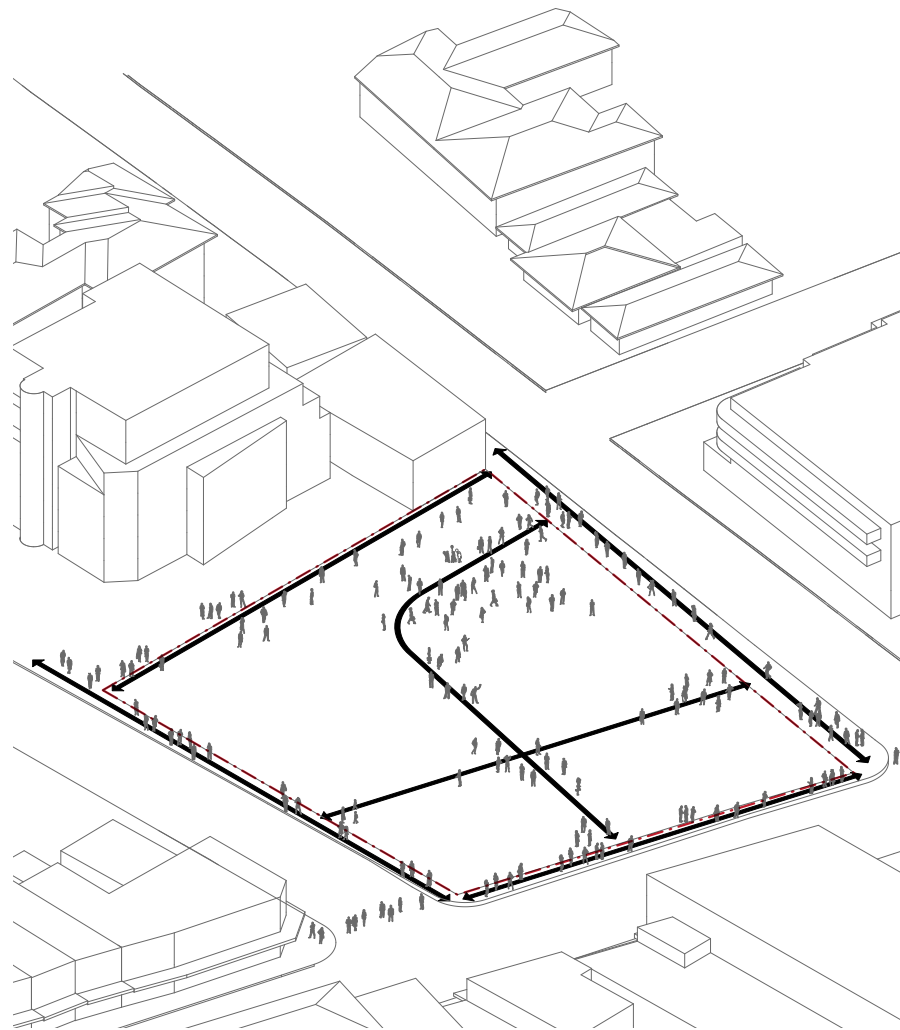
To ensure adequate air movement between buildings, provide separation between tower forms, including:

- / 12m between multiple towers on a single site;
- / 6m setback from side or rear boundaries;
- / 6m setback from centre of any street or lane;

Limit tower floorplates for any levels above 25m effective height to:

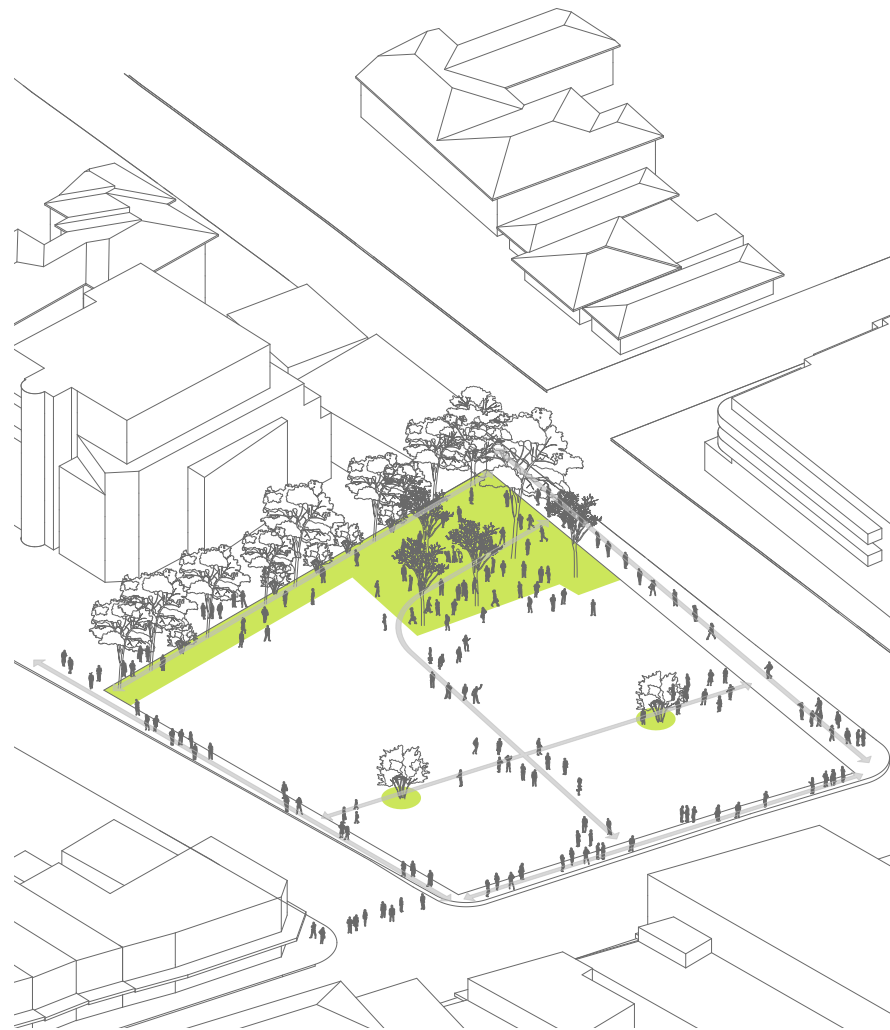
- 800m2 GFA for residential, student accommodation, hotel;
- 1500m2 GFA for commercial

Approach to Massing



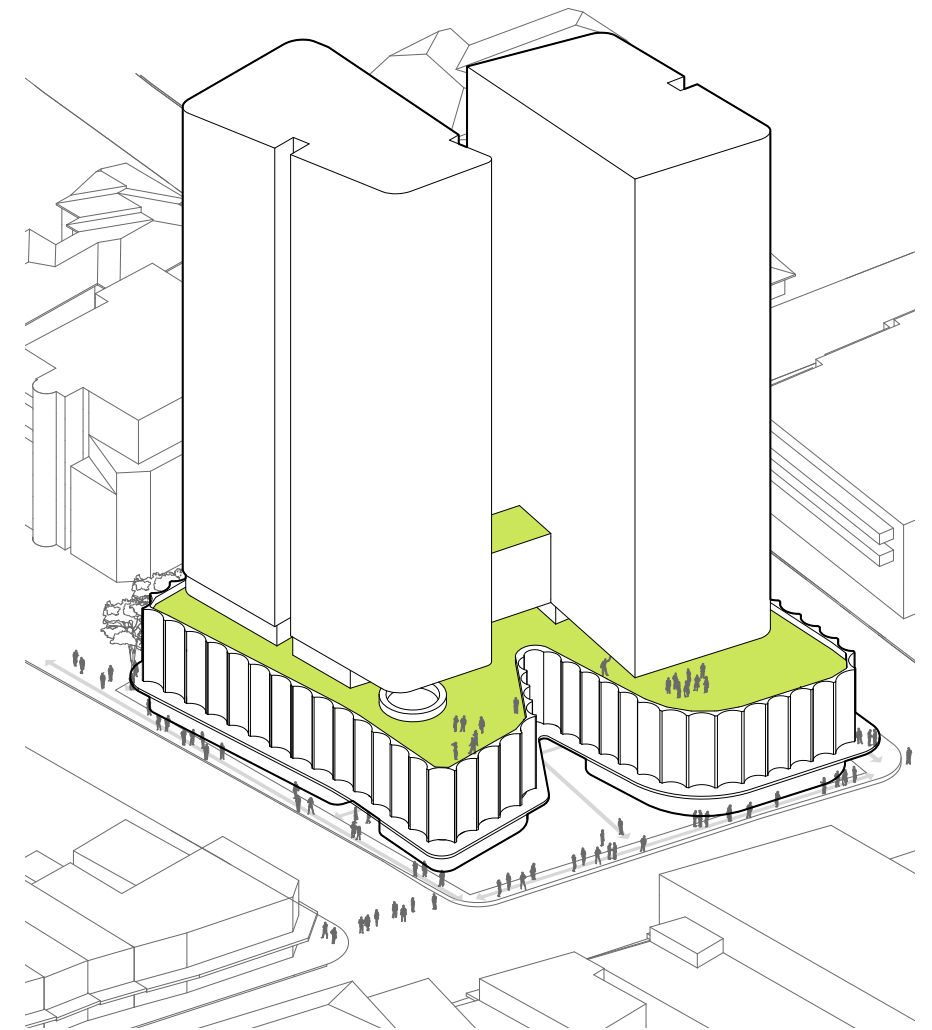
PEOPLE

- Public Life Zones
- Open Space Hierarchy
- Community



SPACE

- Pocket Park
- Green Pedestrian Link
- Shopping Experience



BUILDING

- Facade Activation
- Building Heights
- Strong Identity

Approach to Massing

Option 1:

“ What if we created a single tower with a 800m² GFA floor plate but increased the setback distance from Beamish to 15m? “



Option 1: 800m² GFA Floorplate & 1,140m² BEA.

When we did an analysis to this approach we discovered:

- No views from Beamish Street - View is only of the building form.
- Street facade creates the perception of a bulky and overly-long facade.
- Blocks afternoon sun from getting to Beamish Street.
- Does not create a varied skyline
- Is a poor building form for a gateway site.
- Is a poor building form when trying to achieve cross-ventilation compliance.

Option 2:

“ What if we separated the building form into two to create two slender towers, which align in a North - South direction? “



Option 2: 462m² GFA Floorplate & 612m² BEA for each tower.

When we did an analysis to this approach we discovered:

- No views from Beamish Street - View is only of the building forms.
- Difficult to achieve a street address for each tower.
- Fails from a solar perspective.
- Poor outlook from the south tower from levels 1-8.
- Poor connectivity between Campsie Street and Ninth Avenue.
- No activation to the base of the south tower on the southern facade.
- Poor ground floor interface with the south tower on the southern facade.

Approach to Massing | Option 3

“ What if we separated the building form into two to create two slender towers, which align in a East - West direction? “

When we did an analysis to this approach we discovered:

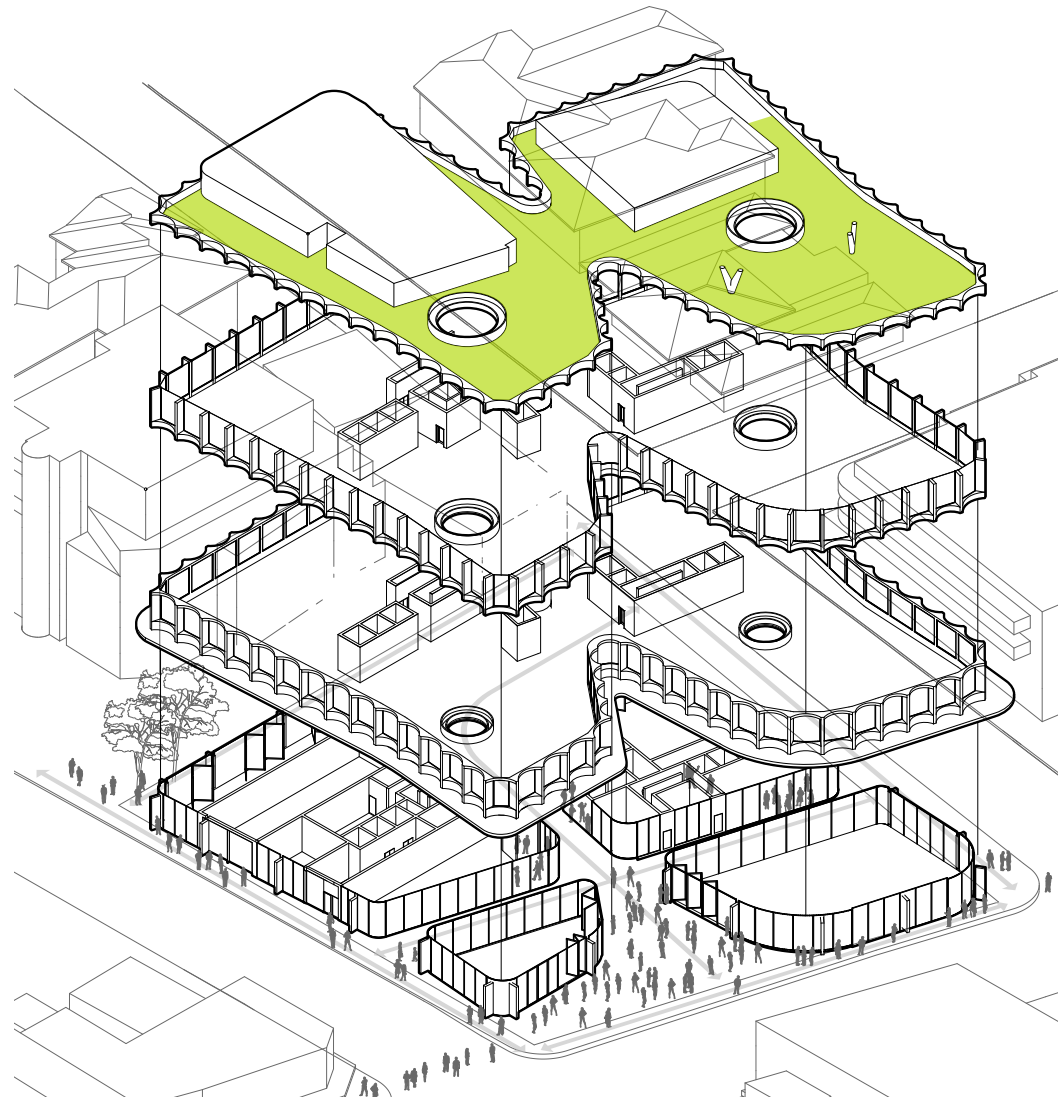
- Views from Beamish Street are available between the towers.
- Sunlight is able to penetrate between the buildings and offer more street level sunlight.
- There is no over shadowing on the existing local parks.
- Gives good cross ventilation calculations.
- Gives good solar calculations.
- The proposed location for the plaza / park is not interfered with.
- A street address for each tower can be achieved.
- The outlook for both towers is not compromised.
- Good activation for all the existing and new streets
- Good interface with the street level.
- Good connectivity between Campsie Street, the pocket park and Ninth Avenue.
- Complies with all of the ADG and DCP setback controls.
- The proposed setback distances from Beamish Street is 9m for tower A and 19m for tower B.
- 18m Building Depth



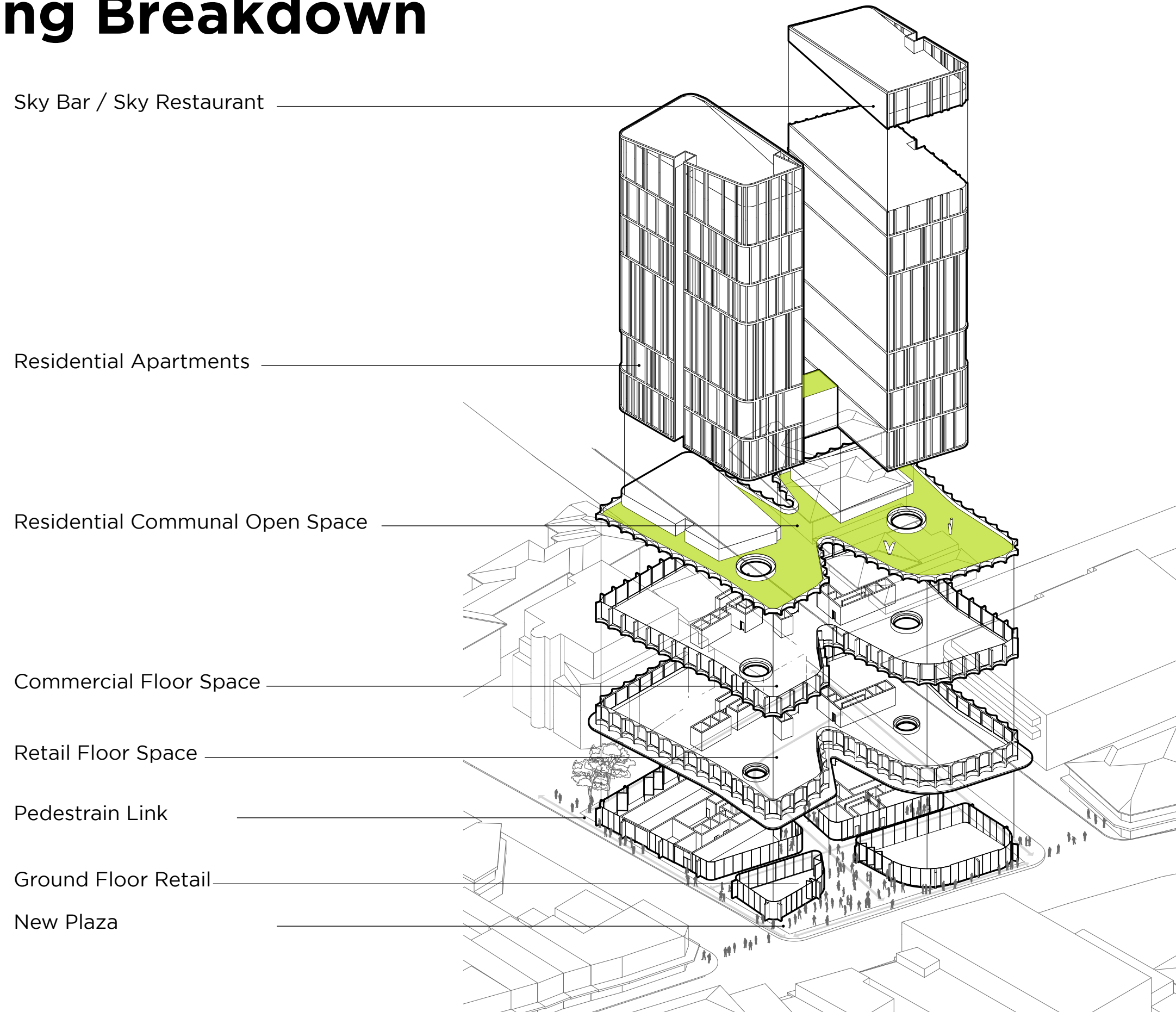
Street Wall / Podium

Objectives:

- Provide a built form that maximises its street address and its ability to provide activation and passive surveillance.
- Provide a textured finish and a built form which has a human scale.
- Align with the fine-grain vertical language on Beamish Street.
- Respond with a scale that relates to the existing and future context on Beamish Street.
- Provide a design which aligns with councils vision for the area and site.
- Provide a welcoming entrance and sense of arrival.
- Adhere to a nil setback control at street level.
- Create a new destination in Campsie.



Massing Breakdown

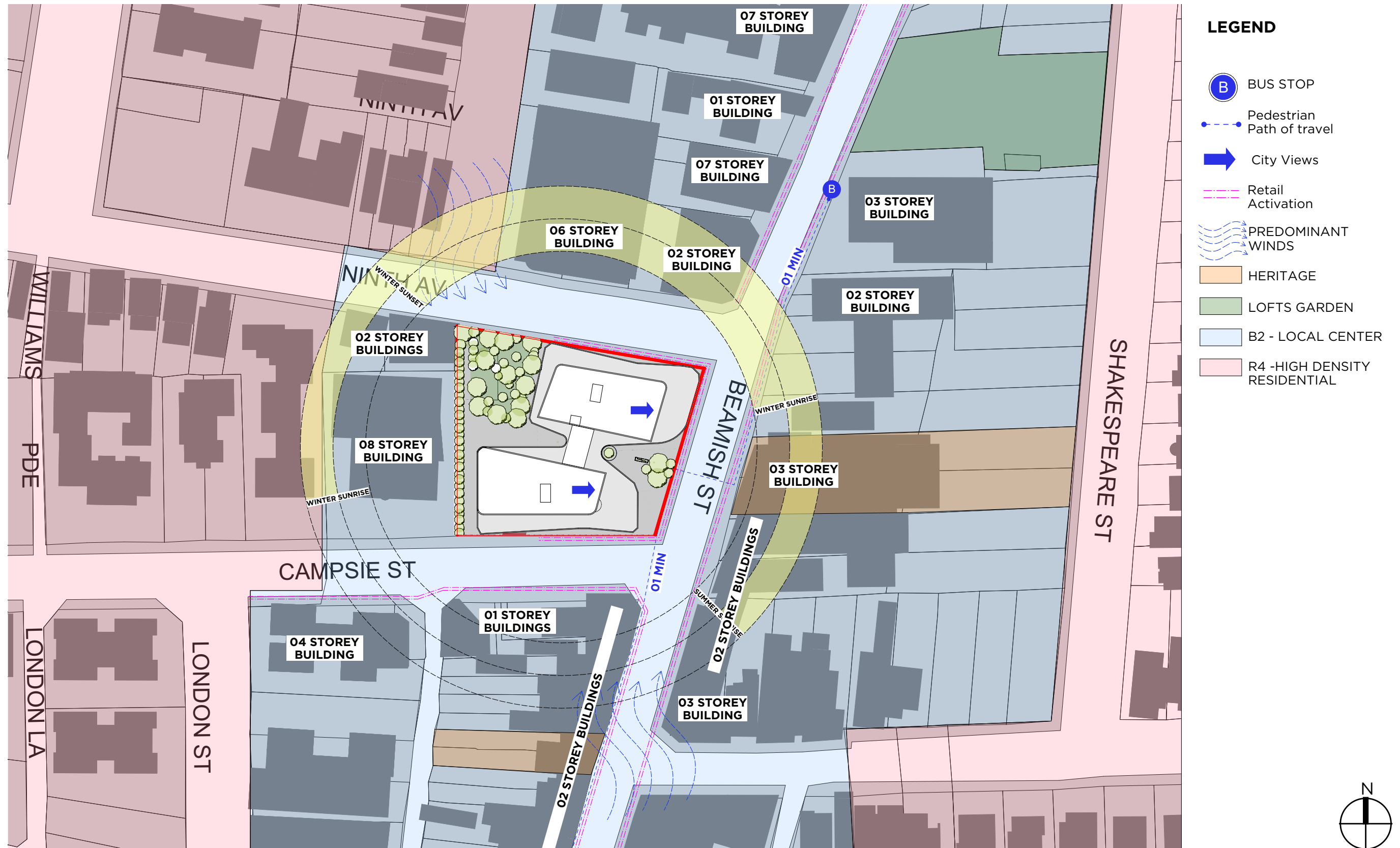




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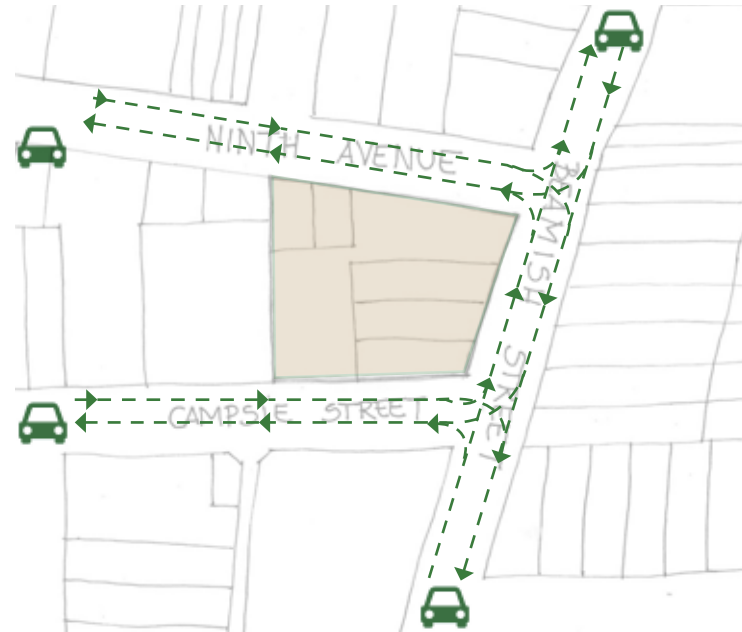
THE SITE

Site Analysis



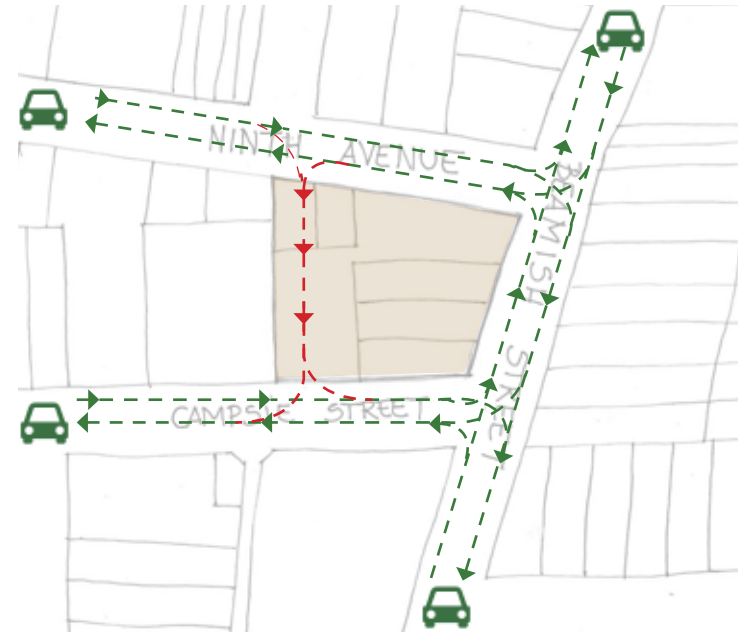
Traffic Analysis

Existing Traffic Movement



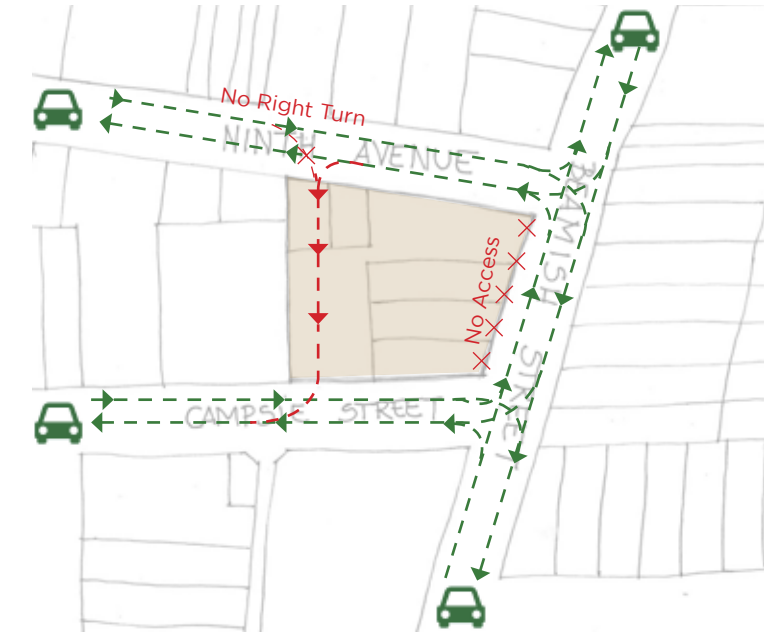
- Two-way traffic movement along Beamish Street, Campsie Street and Ninth Avenue

Councils Proposed Masterplan



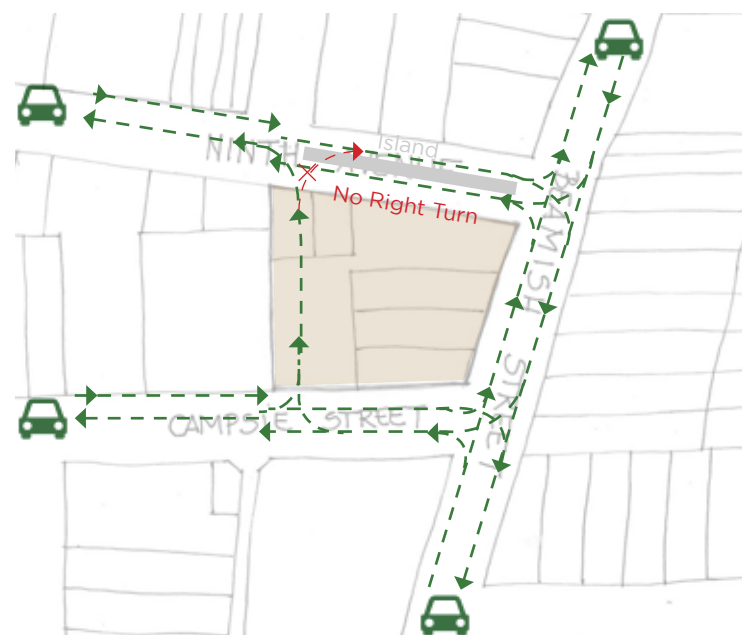
- As per Objective 5.1 of the Campsie Town Centre Masterplan, a through site link connecting Campsie Street to Ninth Avenue is proposed

Traffic Entering the Site



- Due to the activation requirements, vehicle access to the site from Beamish Street is not possible.
- Access from Ninth Avenue is also not recommended due to there been no right turn into the site.
- Ninth Avenue is considered a busy junction due to its connection to the wider context

Traffic Entering the Site



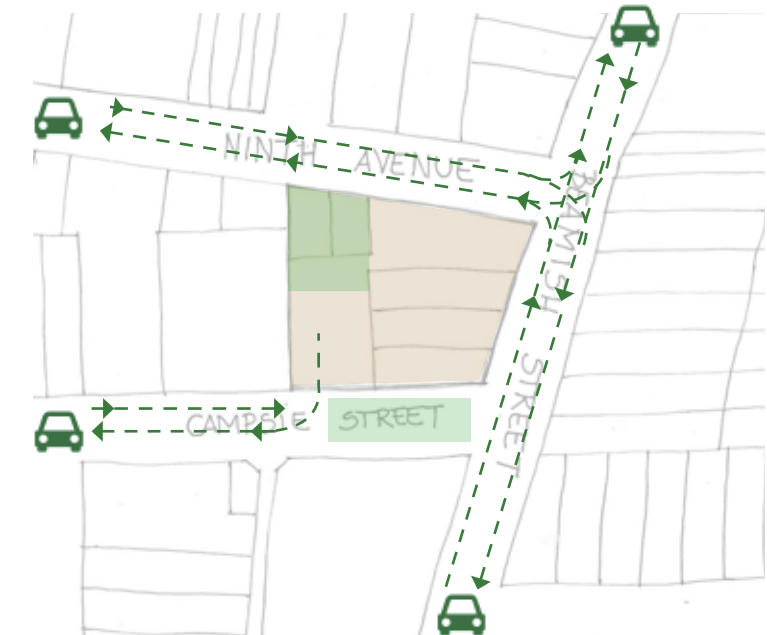
- We propose that vehicle access into the site is taken from Campsie Street

Traffic Leaving the Site



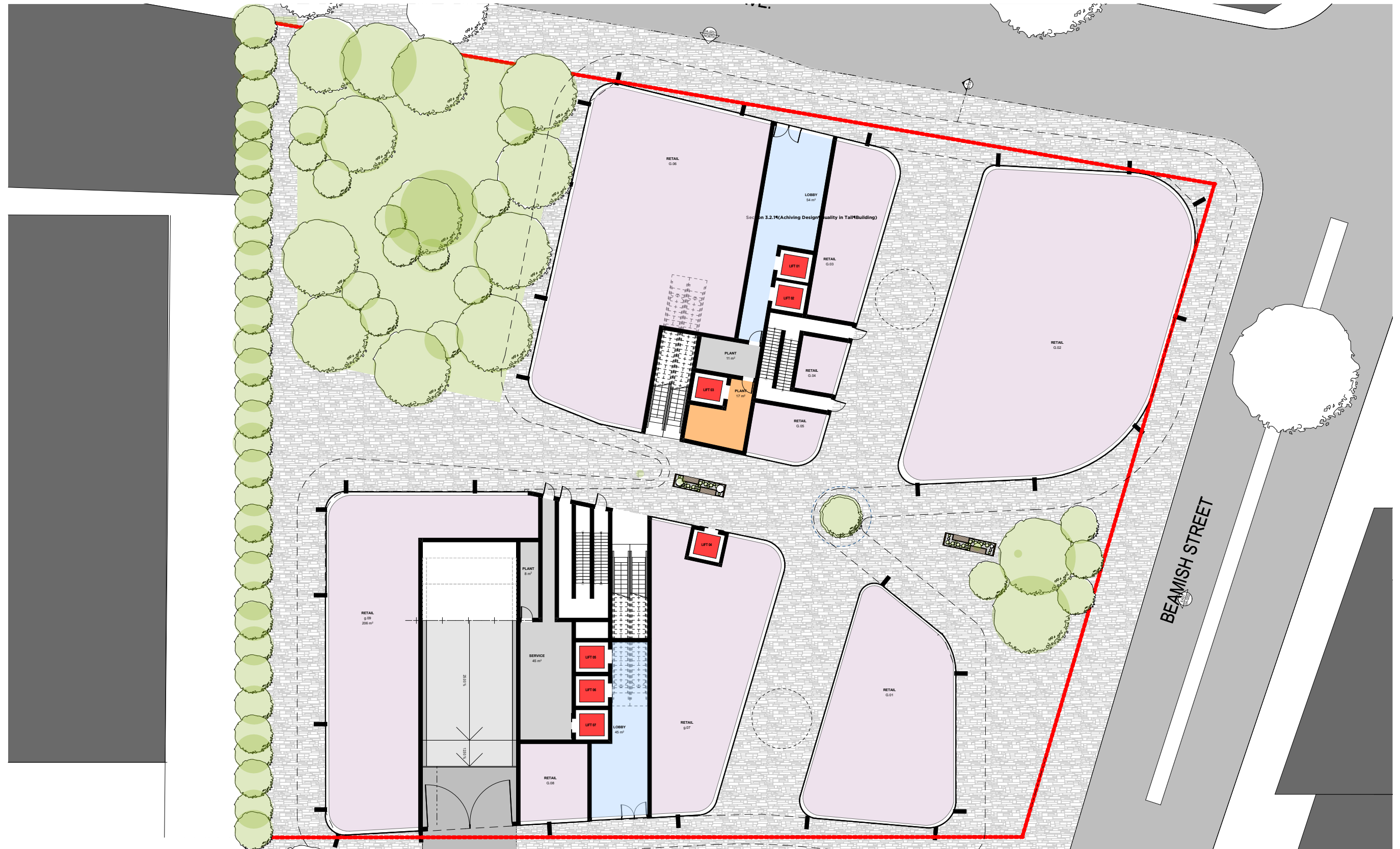
- We propose that vehicles also leave the site via Campsie Street. If vehicles were to exit the site via Ninth Avenue, they would directly impact the proposed plaza / pocket park and the person's experience of the area. The proposal is making people the priority and not vehicles.

New Pedestrian Space?



- As a suggestion, there maybe scope to explore closing off traffic access to Campsie Street from Beamish Street and create a new pedestrian focused area.

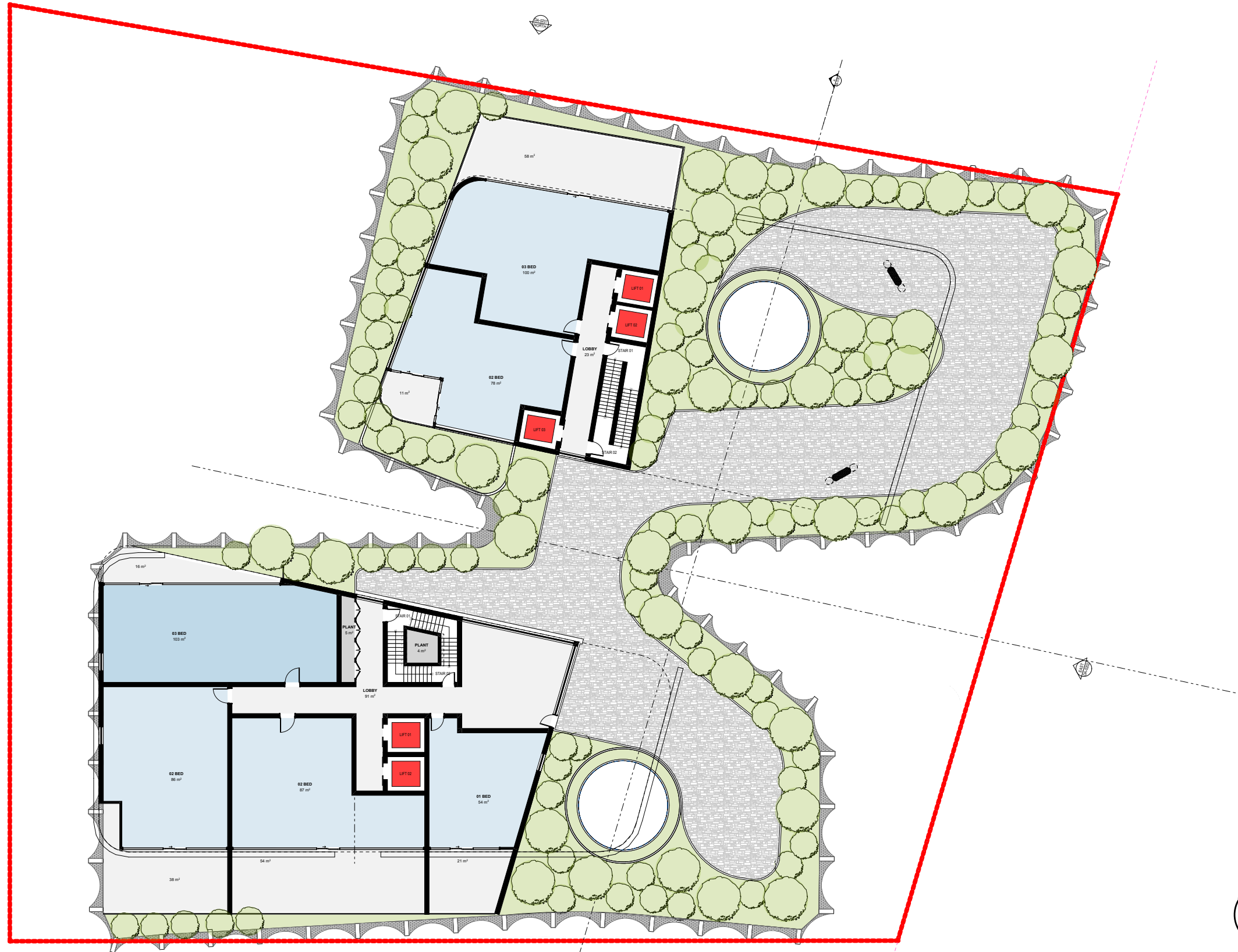
Street Retail | Ground Floor Plan



Retail & Commercial | Levels 01 & 02



Communal Open Space | Level 03



Residential | Typical Layout





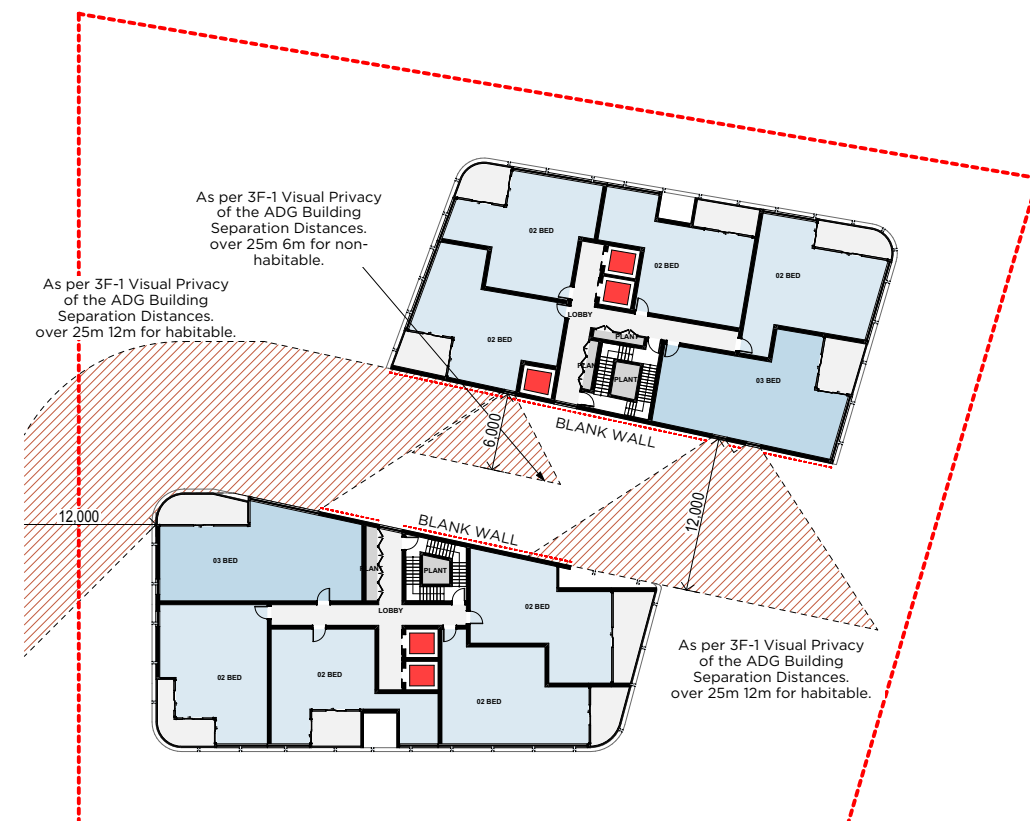
06

COMPLIANCE

Setbacks & Visual Privacy

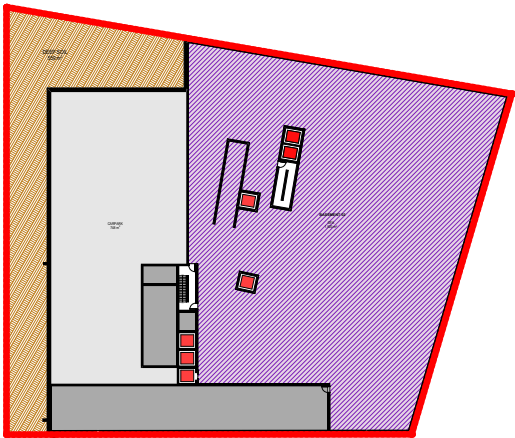


Setbacks:

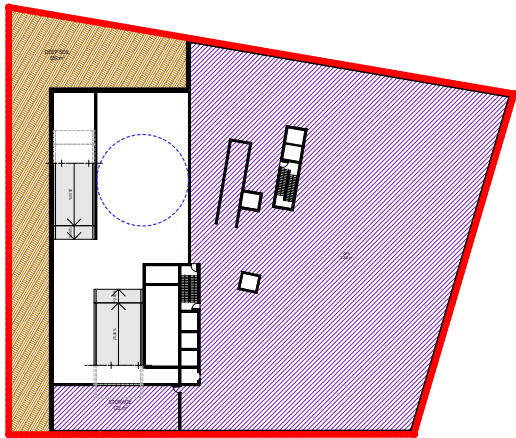


Visual Privacy:

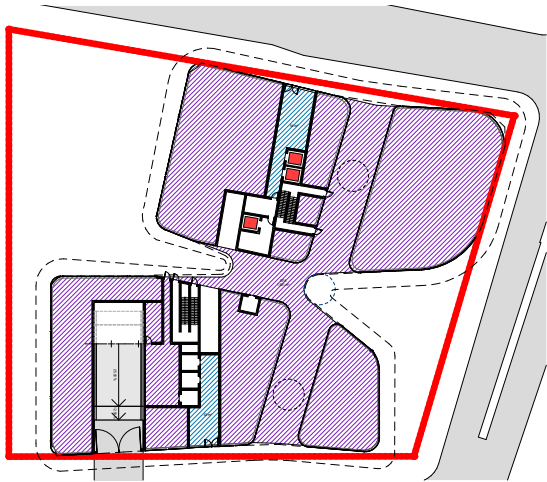
GFA Calculations



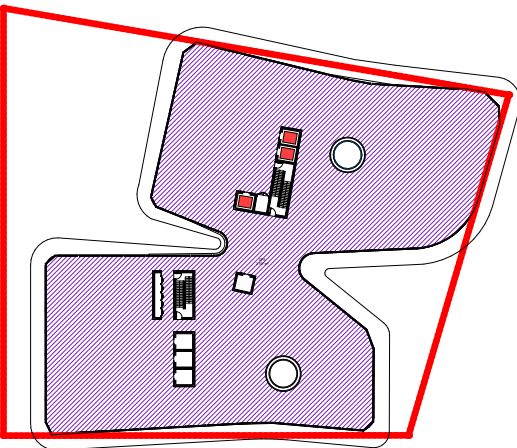
BASEMENT 02
Scale 1:500



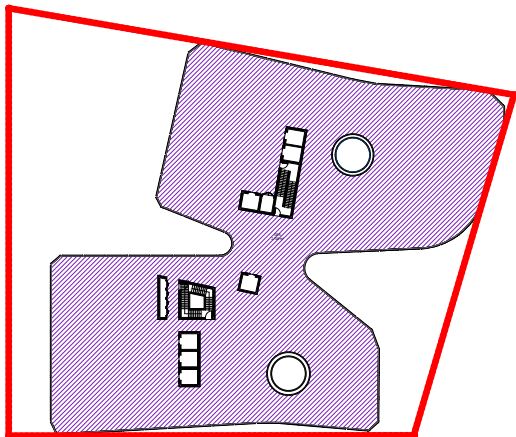
BASEMENT 01
Scale 1:500



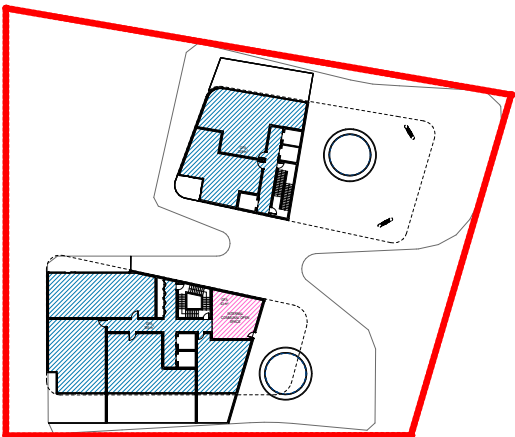
GROUND
Scale 1:500



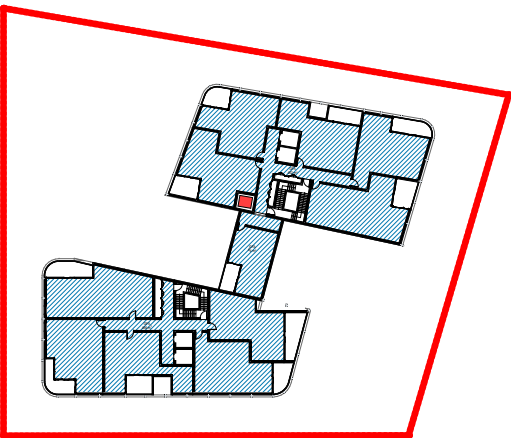
LEVEL 01
Scale 1:500



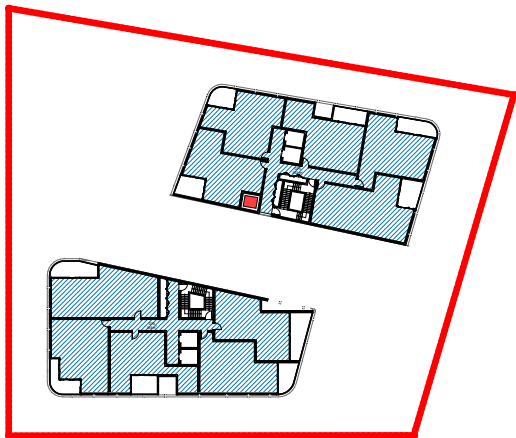
LEVEL 02
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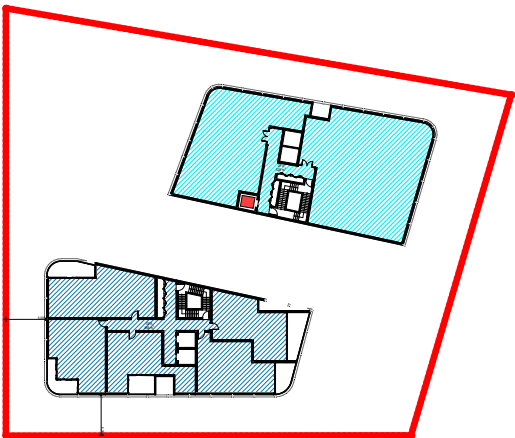
LEVEL 03
Scale 1:500



LEVEL 04-06
Scale 1:500



LEVEL 7 - 23
Scale 1:500



LEVEL 24
Scale 1:500

Summary: GFA

Non-residential GFA

Usage	Level	Area
Retail	G / L01 / L02	6128m ²
Retail Basement	B01 / B02	4120m ²
Sky bar / Restaurant	Level 24	520m ²

Total Non-residential GFA 10768 m²

Residential GFA

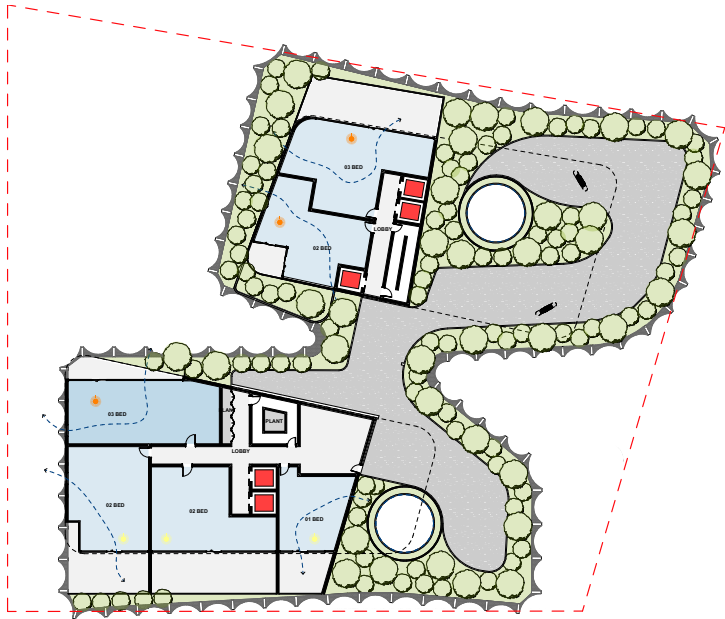
Usage	Level	Area
Residential	Ground	99
	Level 03	609
	Level 04	992
	Level 05	992
	Level 06	992
	Level 07	928
	Level 08	928
	Level 09	928
	Level 10	928
	Level 11	928
	Level 12	928
	Level 13	928
	Level 14	928
	Level 15	928
	Level 16	928
	Level 17	928
	Level 18	928
	Level 19	928
	Level 20	928
	Level 21	928
	Level 22	928
	Level 23	928
	Level 24	466

Residential Internal COS Level 03 43

Total Residential GFA 19,969 m²

Total GFA 30,737 m²
Site Area 3843 m²
FSR 8 : 1

Solar & Cross Ventilation Calculations



LEVEL 3
Scale 1:350



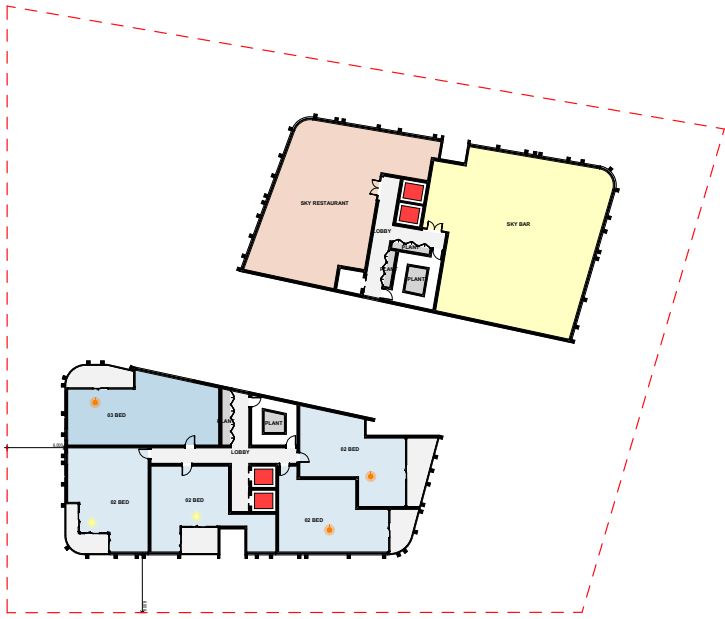
LEVELS 04 - 06
Scale 1:350



LEVELS 07 - 08
Scale 1:350



LEVELS 09 - 23
Scale 1:350



LEVEL 24
Scale 1:350

Solar Access Calculations

Legend:
Unit gets min 2 hours solar
Unit gets min 15 mins solar

Level:	No. Of Unit	Solar	No Day Light
Ground Level	-	-	-
Level 01	-	-	-
Level 02	-	-	-
Level 03	6	3	-
Level 04	11	8	-
Level 05	11	8	-
Level 06	11	8	-
Level 07	10	8	-
Level 08	10	8	-
Level 09	10	8	-
Level 10	10	8	-
Level 11	10	8	-
Level 12	10	8	-
Level 13	10	8	-
Level 14	10	8	-
Level 15	10	8	-
Level 16	10	8	-
Level 17	10	8	-
Level 18	10	8	-
Level 19	10	8	-
Level 20	10	8	-
Level 21	10	8	-
Level 22	10	8	-
Level 23	10	8	-
Level 24	5	3	-
Total	214	166 (78%)	00 (0%)

Cross Flow Ventilation Calculations

Legend:
Cross Ventilated Unit

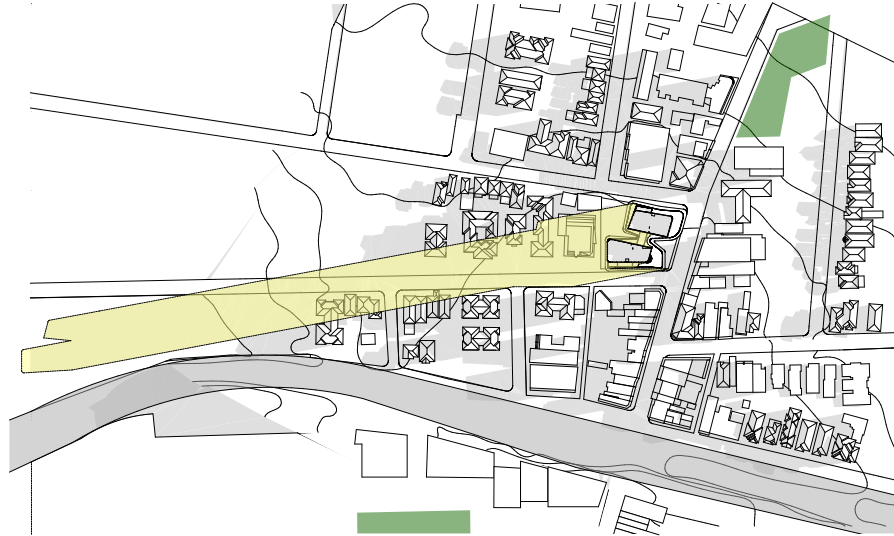
Level:	No. Of Units	Cross Ventilated
Ground Level	-	-
Level 01	-	-
Level 02	-	-
Level 03	6	5
Level 04	11	9
Level 05	11	9
Level 06	11	9
Level 07	10	8
Level 08	10	8
Total	58	48 (83%)



Shadow Studies



21st June 08.00am



21st June 09.00am



21st June 10.00am



21st June 11.00am



21st June 12.00pm



21st June 01.00pm



21st June 02.00pm

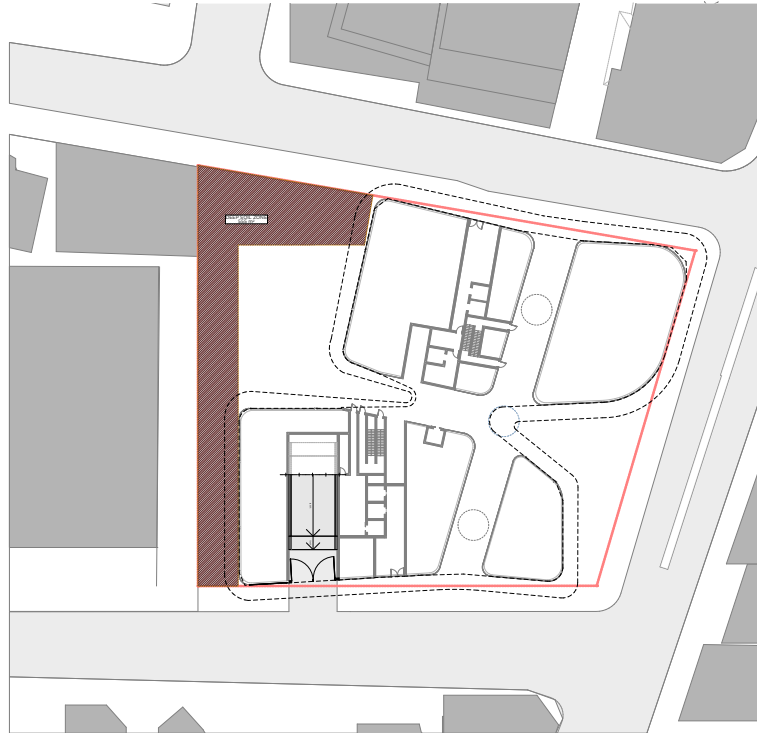


21st June 03.00pm



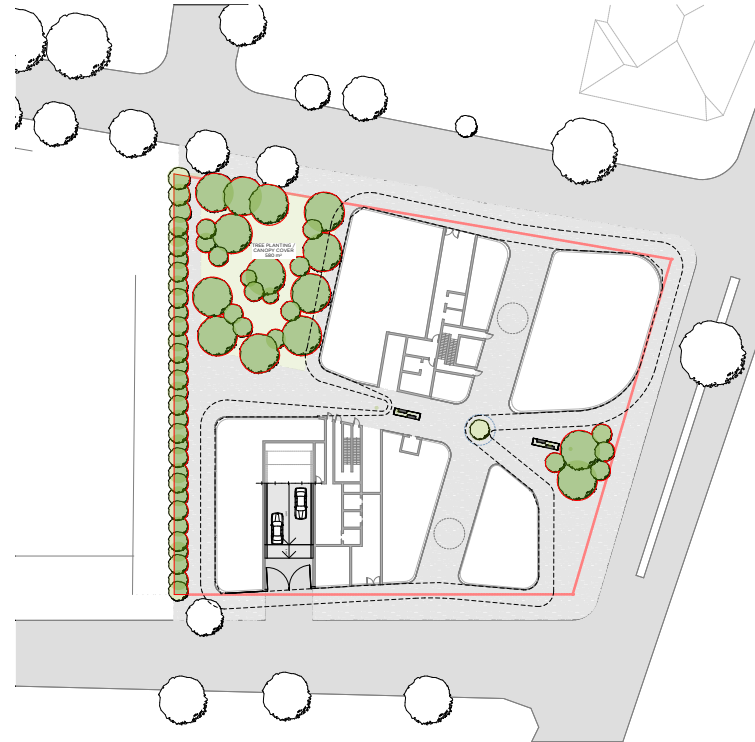
21st June 04.00pm

Landscape



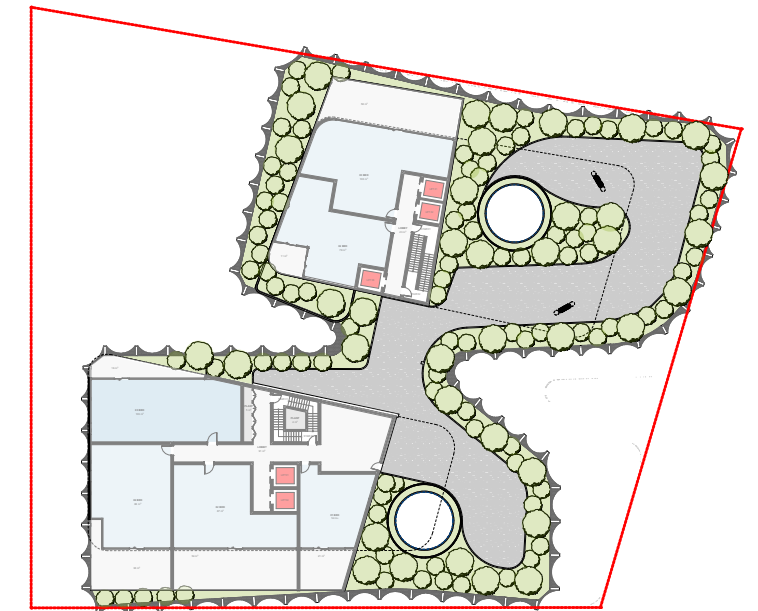
Deep Soil

The proposed design will provide 555m² of deep soil, which is 14.4% of the site area - 7.4% above the ADG Deep Soil requirements.



Tree Canopy Cover

The proposed design will provide 580m² of tree canopy cover, which is more than 15% of the site area, as per the Bankstown and Campsie Landscape Controls. All landscape area will be subject to on-going landscape design.



Communal Open Space

The proposed design will provide 1,167m² of residential outdoor communal open space, which is 30% of the site area - 5% above the ADG requirements and 43m² of indoor communal space.



URBAN LINK
ARCHITECTS