

Aland Leppington Civic Centre Master Plan Report





Prepared for:

In collaboration with:



Image above:
View of Leppington Civic Centre from north
Cover image:
Leppington Civic Centre Site Master Plan

We acknowledges the Traditional Owners of the land, sky and waters. We pay our respects to Elders past, present, and to the future leaders of our community.

We acknowledge the ongoing deep spiritual connection that the Traditional Owners have with this country. With respect, we tread gently to help reconcile and pave the way for a united and harmonious future for all people.

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01.01 Project Introduction

The report is to amend the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (Parkland City SEPP), and DCP for the Leppington Civic Centre. This comprehensive report has been meticulously prepared on behalf of Aland, the proponent.

The purpose of this proposal is to pave the way for a thoughtfully crafted mixed-use precinct, strategically leveraging the Leppington Station and the future Western Sydney International Airport and adjacent Aerotropolis. The primary objective of this Planning proposal is to make a constructive contribution to the Leppington Strategic Centre and build upon the work executed by the adjoining and collaborating Camden and Liverpool Councils.

The proposal is centred around the pivotal public transportation hub and endeavours to fuel the expansion of the strategic centre by incorporating a blend of residential and commercial uses. By diversifying employment opportunities and attracting fresh residents to the locale, this proposal endeavours to address the region's residential shortage.

This is achieved through the introduction of premium accommodation and an array of housing prototypes, thereby fostering an appealing environment for a wide spectrum of individuals while ensuring easier access to services and employment opportunist

At the centre of the proposal lies enhancements to the proposed public domain and streetscapes, that in-turn encourage walkability, create moments for contemplation, and provide convenient access. Building upon the work by the collaborating councils, the delivery of a centralised and consolidated open space is envisaged and is seamlessly interwoven into an improved pedestrian network, thereby enriching community interaction.

Within the overarching vision set forth by Aland, this Planning Proposal stands as a



01.02 Aland Developments

The team at ALAND work tirelessly to maintain the highest quality standards for our community of clients, customers, co-worker and peers. Everyone who decided to purchase a gorgeous Sydney apartment from us, knows they are able to trust us to bring them the best quality home and buying process possible.

Through our experienced team of in-house architects, designers and project managers, we draw on our extensive knowledge, financial strengths and high standards to ensure success for each and every project we undertake.

Our expert team have constructed numerous acclaimed residential projects across Sydney, all to the highest quality standards. From the efforts our talented in-house architects, designers and project managers along with our wider team, we are proud to have won awards for our work on various projects.

150+ ALAND employees

30+ Developments

In the Sydney region

5500 Apartments in Planning

20+ Years

Established in 2002

3800+ Apartments built

and counting

1200+ Apartments under construction



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Strategic Context

| | |
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| 01 | Regional Context |
| 02 | Strategic Context |
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02.01 Regional Context

A Metropolis of Three Cities – the Greater Sydney Region Plan

The Greater Cities Commission, supported by NSW Department of Planning have proposed *The Greater City Regional Plan*. The vision seeks to meet the needs of an evolving and growing population of Greater Sydney.

The plan envisions Greater Sydney as a metropolis of three cities; the Western Parkland City, the Central River City and the Eastern Harbour City, where residents live within 30 minutes of their jobs, health facilities, education, services and great places.

The plan proposes new transport patterns and land use, with the aim to enhance the liveability, sustainability and productivity of Greater Sydney, through distributing the benefits of growth.

The plan will be realised through government collaboration with key stakeholders, community groups, businesses, organisations and industry groups.



02.01 Regional Context

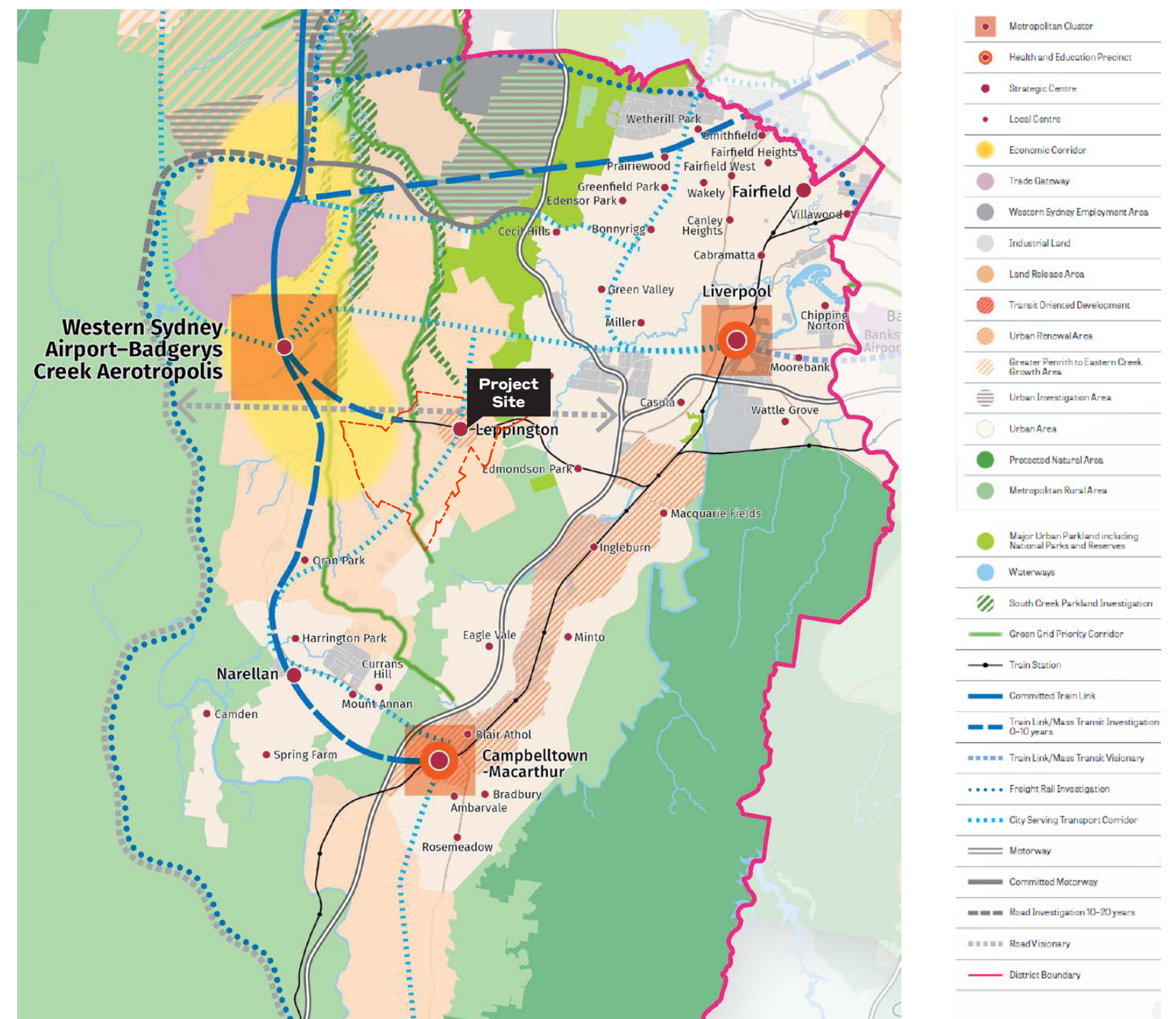
Our Greater Sydney 2056 - Western City District Plan

Supporting *The Greater City Regional Plan*, the *Central City District Plan* focuses in on the Central City District, striving to better the lifestyle and environmental assets.

The plan proposes investment in city-scale infrastructure, the implementation of a new social framework including cultural and community facilities and the establishment of transport connections to optimise Parramatta's centrality in Greater Sydney.

The Westmead Health and Education Precinct will be transformed into an innovation district with a greater variety of knowledge-intensive jobs and urban and industrial services land will be retained.

Parks, bush land, playgrounds and waterways will be connected and improved to enable access to safe walking and cycling paths and natural amenities.



02.01 Regional Context

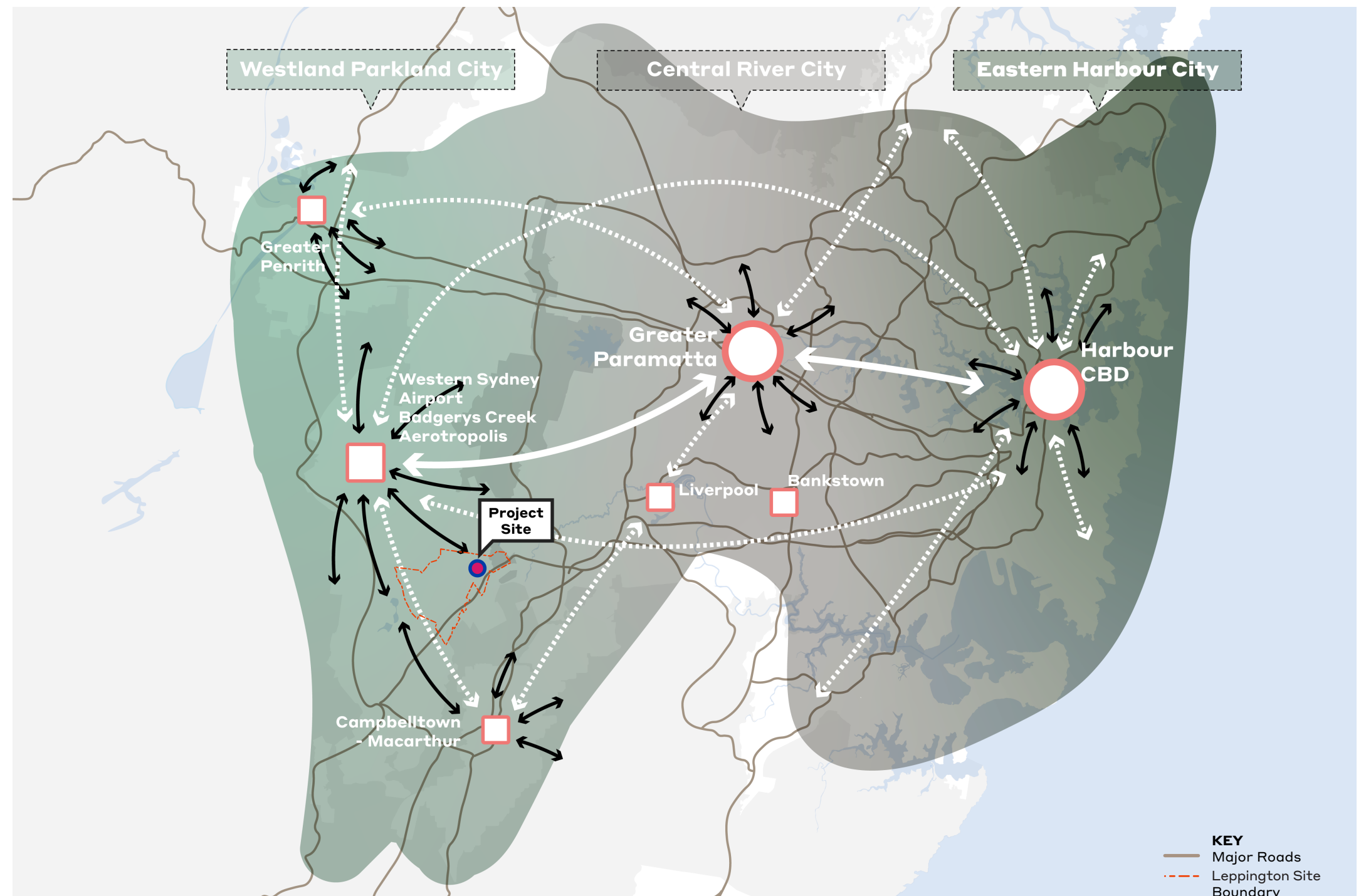
Metropolis of Three Cities

A Metropolis of Three Cities

The Greater Sydney Region Plan, a Metropolis of Three Cities is built on a vision of three cities where most residents live within 30 minutes of their jobs, education and health facilities, services and great places.

Key Directions:

1. A city supported by infrastructure
2. A collaborative city
3. A city for people
4. Housing the city
5. A city of great places
6. A well connected city
7. Jobs and skills for the city
8. A city in its landscape
9. An efficient city
10. A resilient city

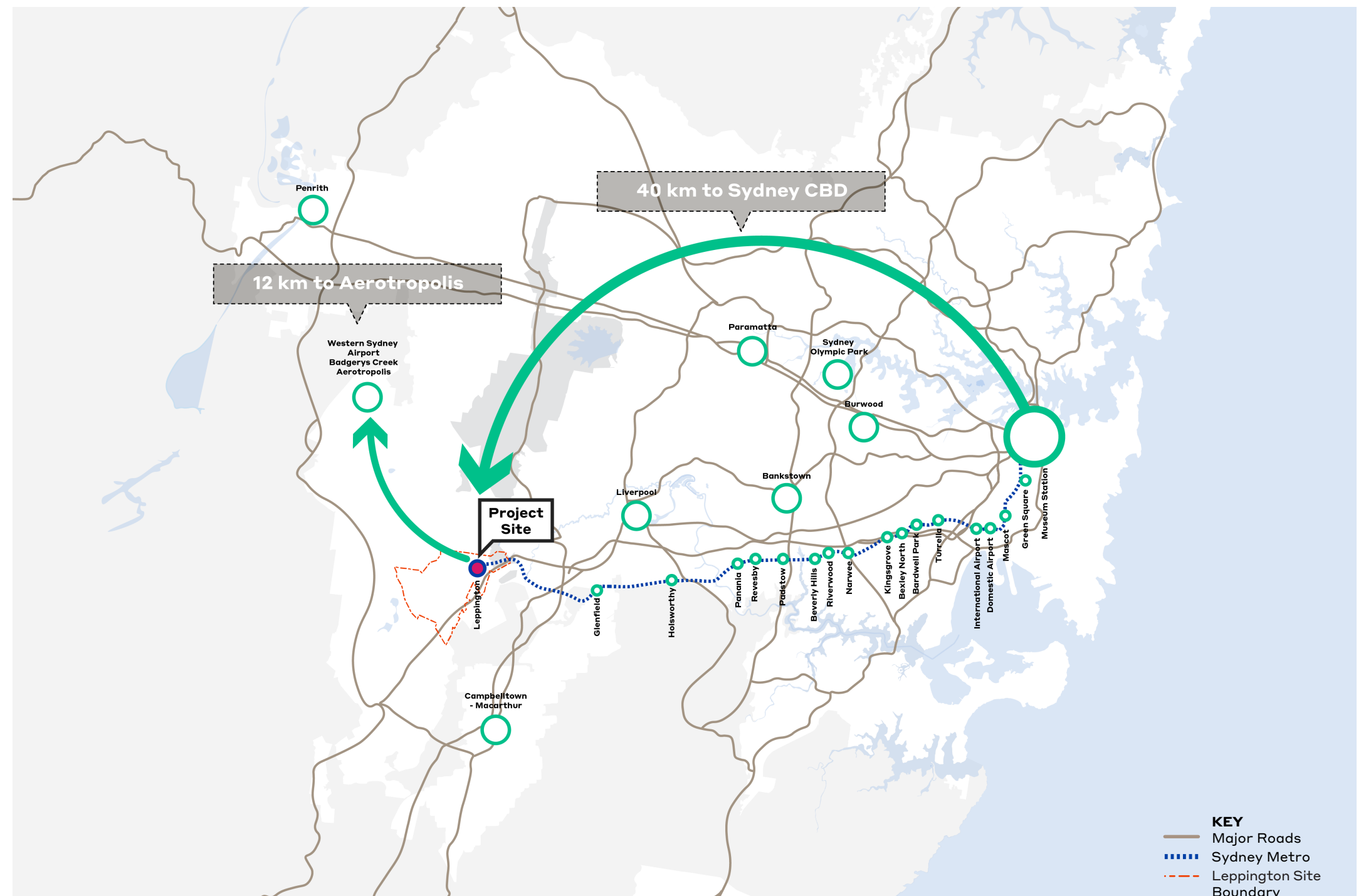


02.01 Regional Context

City of Camden

Forming part of the City of Camden, Leppington is a New South Wales suburb situated approximately 40 km south-west of the Sydney CBD. This developing suburb has several newly opened, state-of-the-art facilities, and has proven especially popular with young families and retirees seeking a relaxed style of living.

Leppington is just south of Western Sydney Airport, approximately 12 km and about a 20-minute drive. The future prospects for Leppington as a transport hub include a link south to Macarthur, and a Southwest Rail Link connecting Leppington to the Airport. A future rail connection will provide rapid service between the Airport, Aerotropolis and Parramatta CBD.



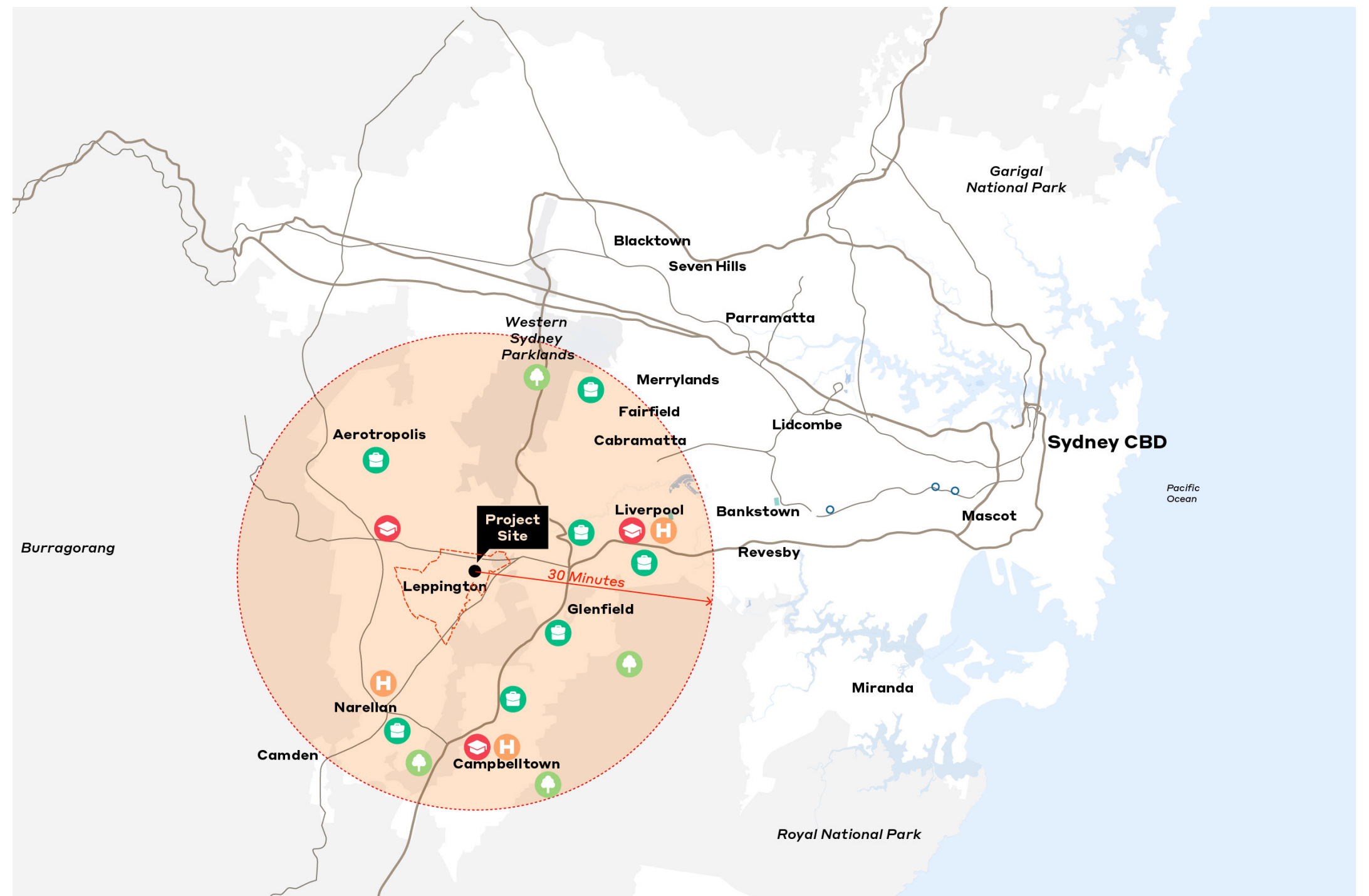
02.01 Regional Context

30 Minute City

Essential Services within 30 minutes

Leppington is part of Western Parkland City where most residents live within 30 minutes of their jobs, education and health facilities, services and great places.

The project site has a privileged proximity with the Aerotropolis and other major developments in the Greater Sydney.



02.01 Regional Context

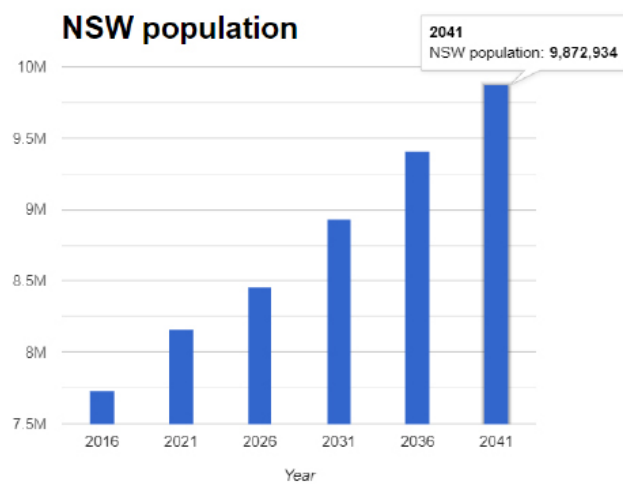
Future Growth

The next two decades will see a population increase from 5.3 million to 6.1 million in Greater Sydney.

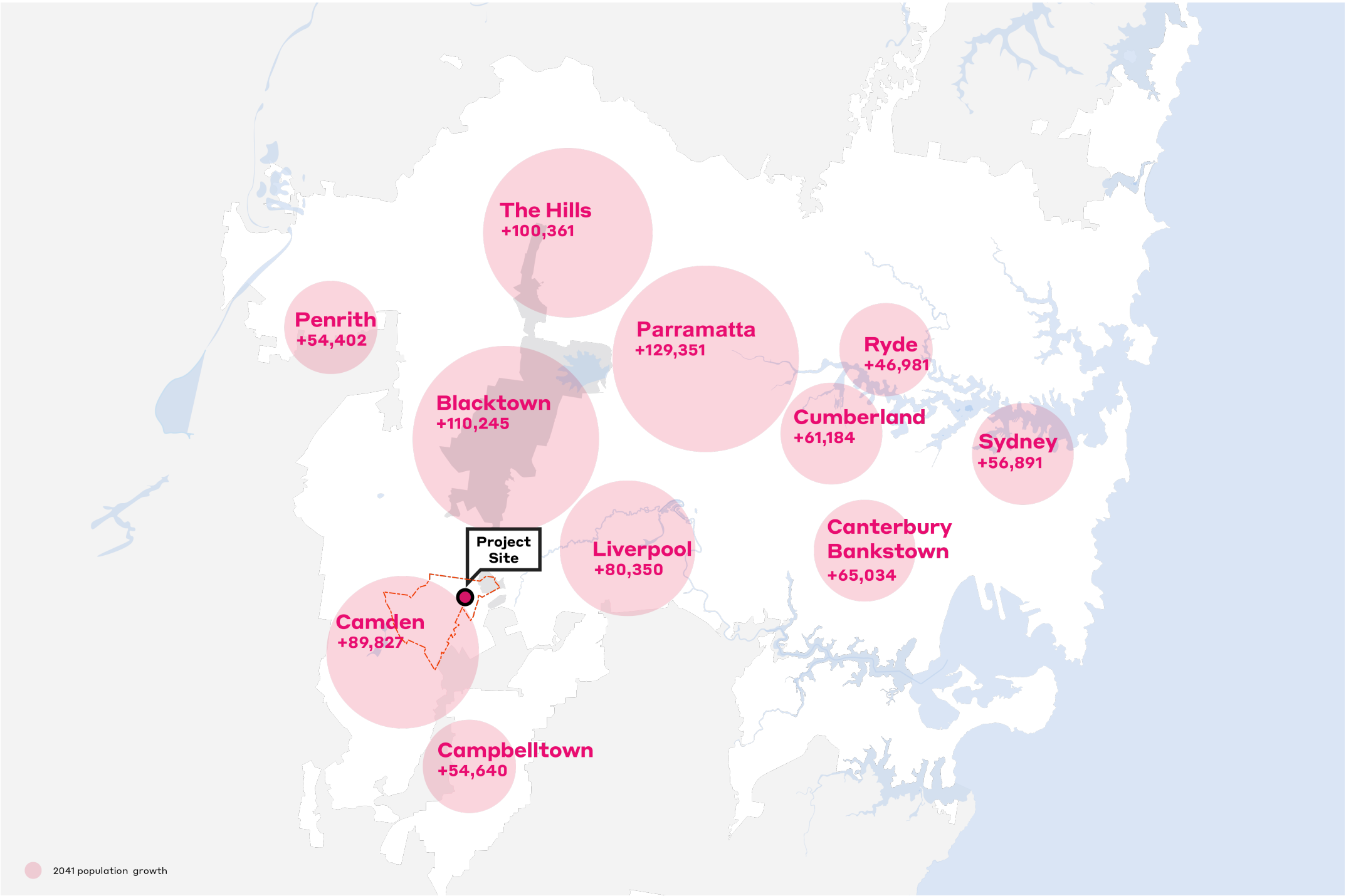
New satellite CBD's and new employment hubs will be planned in Camden where our project sites are located, Blacktown, the Hills Shire, Liverpool and Paramatta.

Camden and Blacktown will highly benefit from improved transport networks and the proximity of the planned Aerotropolis.

Camden will host around 90,000 new residents.



*Source: www.planning.nsw.gov.au

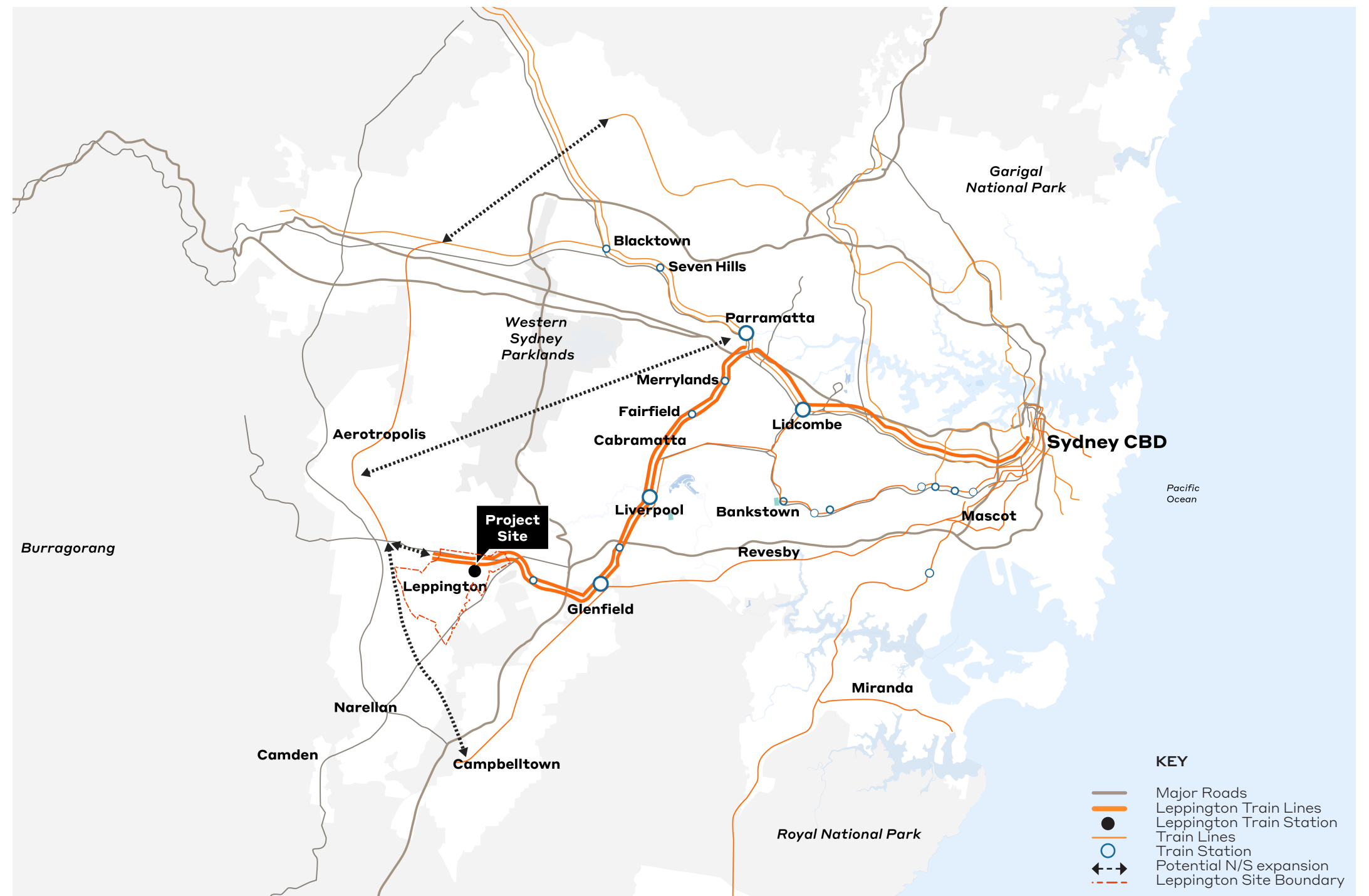


02.01 Regional Context

Transport Corridors

The area is largely serviced by Camden Valley Way and Bringelly Road, both of which connect the suburb to the Sydney CBD via the Western Motorway. While travel via car to the city is an approximate 60-min journey, transport via Sydney Metro takes a slightly longer 75-mins.

Leppington and Edmondson Park Railway Stations are both closely located to the main areas of the suburb, with access to several different bus routes also available from there.

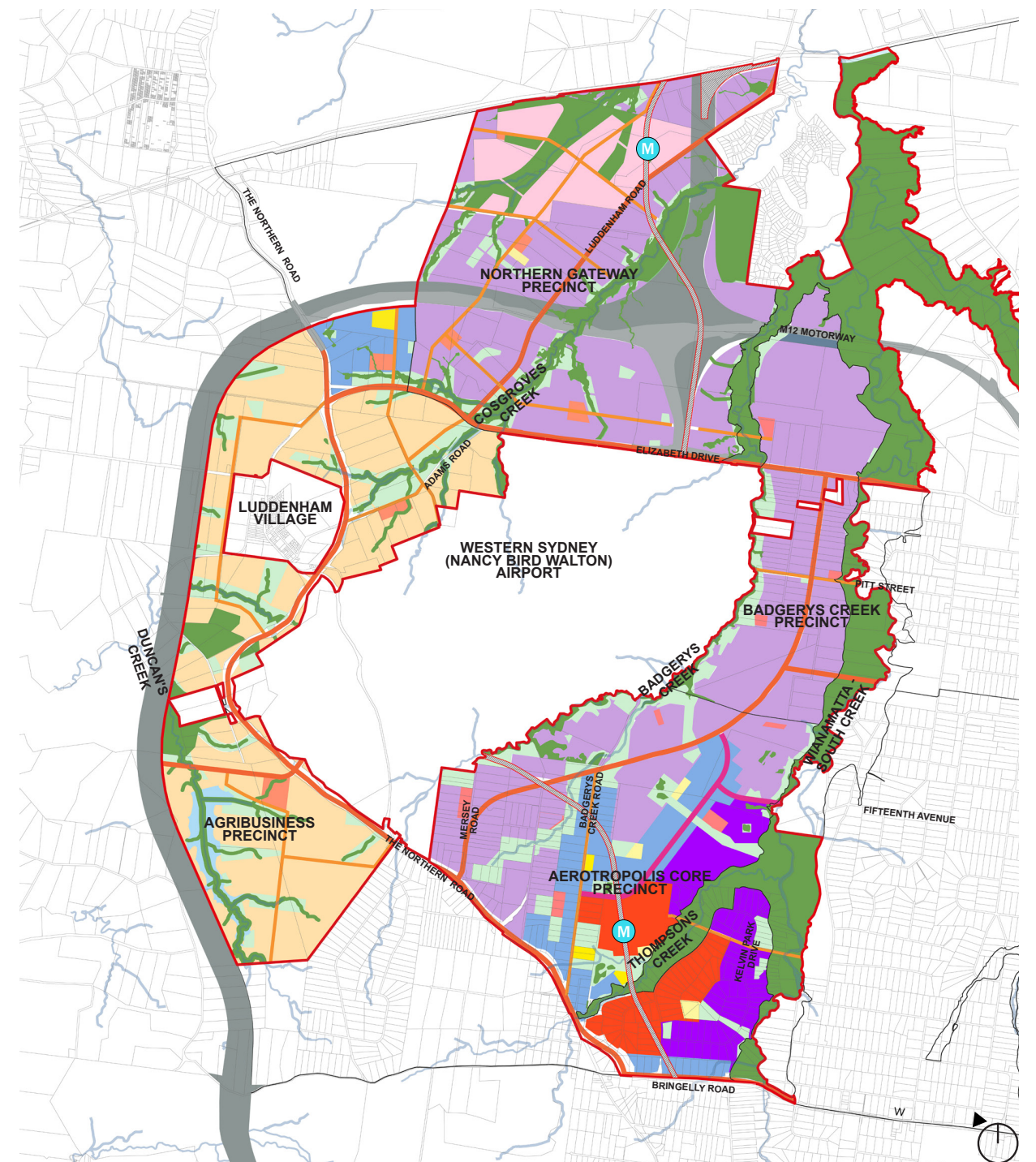
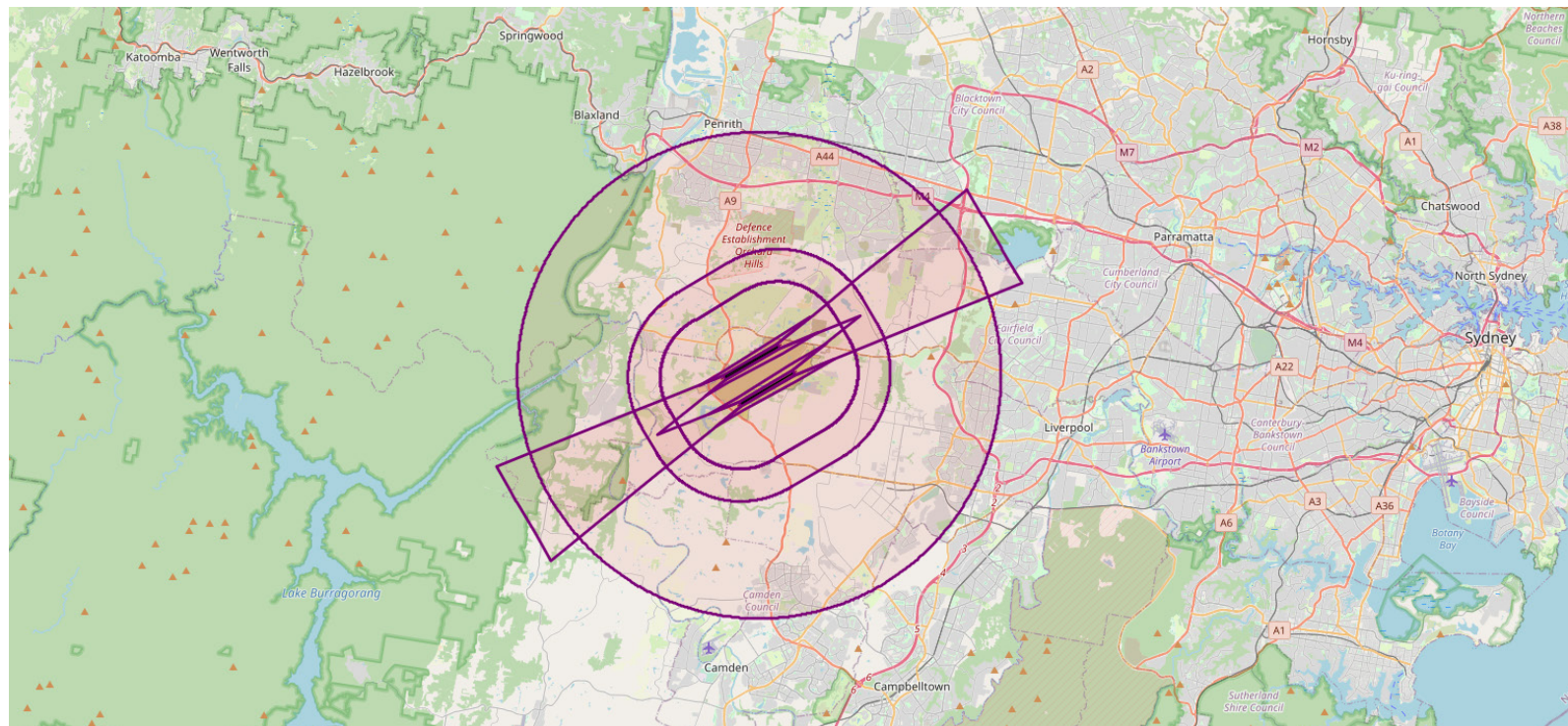


02.01 Regional Context

Western Sydney International Airport and Aerotropolis

The Western Sydney International Airport and Aerotropolis will create an industry/innovation precinct and a home for technology, science and creative industries, ensuring the city has world class jobs that will sustain prosperity within the region, creating more than 100,000 new job opportunities - the biggest jobs boom in NSW history.

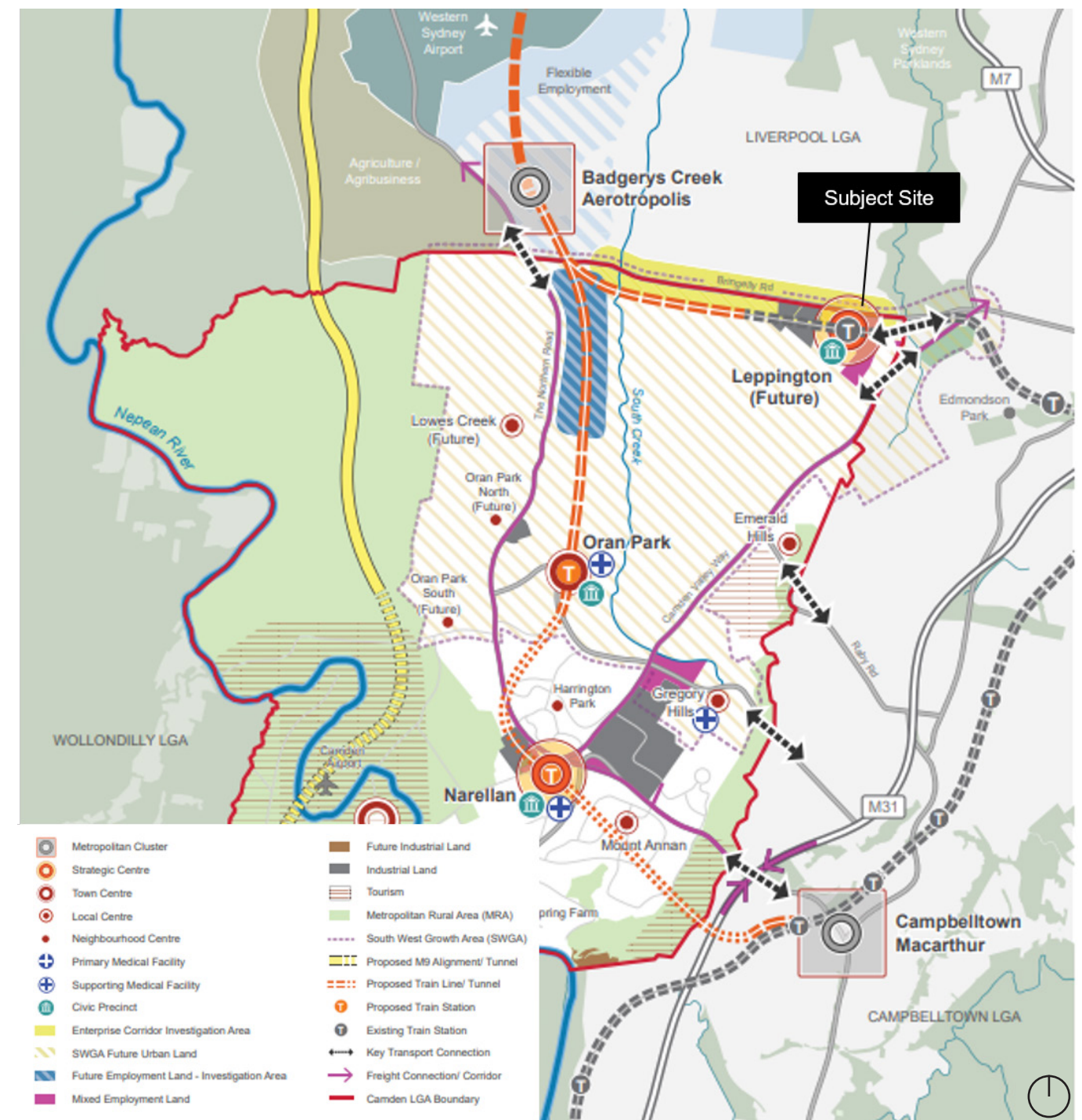
The Aerotropolis Core Precinct has the potential to deliver 50,000 – 60,000 jobs, with 19,000 – 21,000 jobs for the Northern Gateway Precinct and 9,000 – 11,000 jobs for the Badgerys Creek Precinct.



02.01 Regional Context

Camden LSPS

- The LSPS identifies an Enterprise Corridor Investigation Area which connects Leppington to Bradfield City Centre.
- The LSPS identifies potential key transport corridor which will connect the town centre to the M7 Motorway
- Leppington will become a vibrant and connected town centre which reflects Camden's evolving character (Local Priority L4).
- The LSPS highlights the importance to achieve a suitable balance between commercial and residential floor space within Leppington Town Centre, as we strengthen the centre (Local Priority P3).
- There is a significant amount of employment floor space planned for the Aerotropolis, which will be staged over time.
- The site can help increase the residential catchment for not only Leppington Town Centre itself, but also to provide dwellings to support the growth of the Aerotropolis.



02.02 Strategic Context

Better Placed policy for NSW

Better Fit



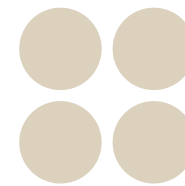
Contextual, local and of its place

Better Performance



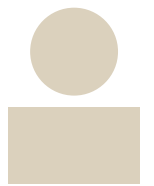
Sustainable, adaptable and durable

Better for Community



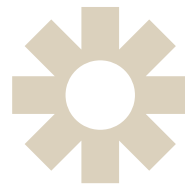
Inclusive, connected and diverse

Better for People



Safe, comfortable and liveable

Better Working



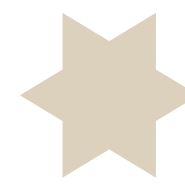
Functional, efficient and fit for purpose

Better Value



Creating and adding value

Better Look & Feel



Engaging, inviting and attractive

"good design makes better places"

Better Placed, Government Architect New South Wales, 2016.

The Better Placed policy, written by Government Architect NSW, collates aspirations, expectations and requirements for the design of the built environment of NSW. The guide sees the potential that new development holds in impacting quality of life, stimulating the economy and improving the environment. It is envisioned that all aspects of our urban environment should be enhanced to create better places, spaces and buildings to achieve better cities, towns and suburbs. The plan states that good design needs to be at the centre of all development processes to achieve this and address the complexity of our rapidly changing social and economic environment. Better Placed asks industry to challenge their design thinking, problem solving and analysis to enhance the design quality of our built environment to ultimately create better environments that will define the future heritage of NSW.

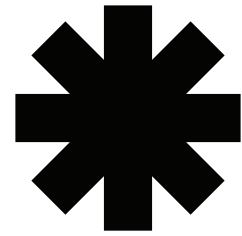
The seven distinct objectives above define the key considerations in the design of the built environment. Better Placed, depicts that achieving these objectives will ensure cities and towns, our public realm, landscapes, buildings and public domain will be responsive, healthy, integrated, resilient and equitable.

integrated design policy for the built environment of New South Wales by:

G A N S W

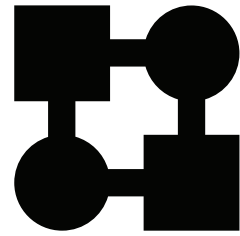
02.02 Strategic Context

Greener Places Design Guide Principles for NSW



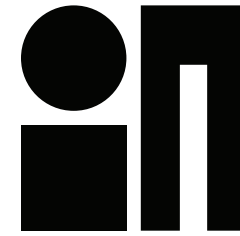
Integration

Combine green infrastructure with urban development and grey infrastructure



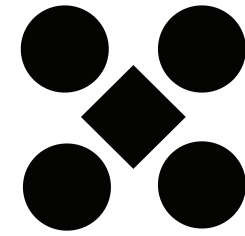
Connectivity

Create an interconnected network of open space



Multifunctionality

Deliver multiple ecosystem services simultaneously



Participation

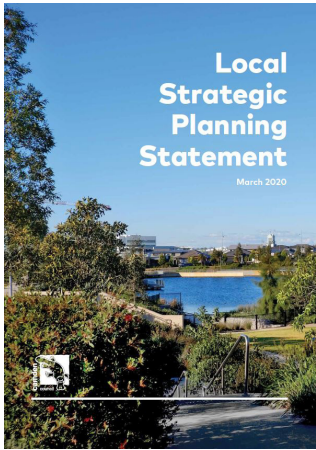
Involve stakeholders in development and implementation

The Draft Greener Places Design Guide, written by Government Architect NSW, provides information on how to design, plan and implement green infrastructure in urban areas throughout NSW. The guide provides a methodology to help local and State government, as well as industry to create a system of green infrastructure. The guide explains green infrastructure and the benefits of implementing it. The major components fall into three categories: open space for recreation - green infrastructure for people, urban tree canopy - green infrastructure for climate adaption and resilience and bushland and waterways - green infrastructure for habitat and ecological health. The plan envisions improved public open spaces that are accessible, high quality and evolve with the growing population; increased urban canopies and improved connectivity between people and the natural environment. It is intended that the four principles above will help deliver green infrastructure in NSW.

From the Draft Greener Places Design Guide by:

G A N S W

02.03 Key Strategic Documents



Key Strategic Document

Local Strategic Planning Statement, March 2020, Camden Council



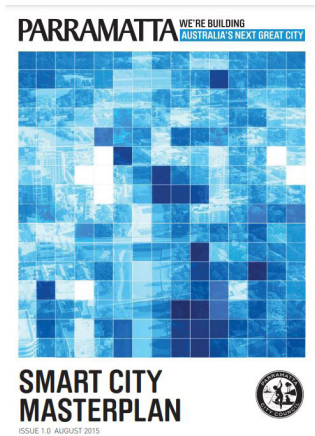
Key Strategic Document

Leppington Major Centre Public Domain Strategy, October 2012, AECOM



Surrounding Developments as Precedent

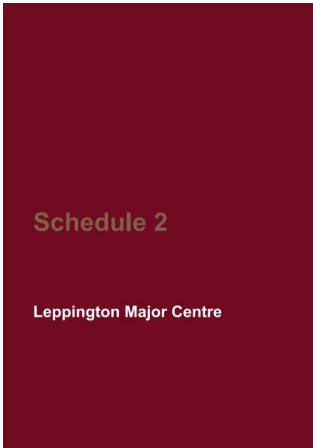
Liverpool City Centre Public Domain Master Plan, 2020, Liverpool City Council



Surrounding Developments as Precedent

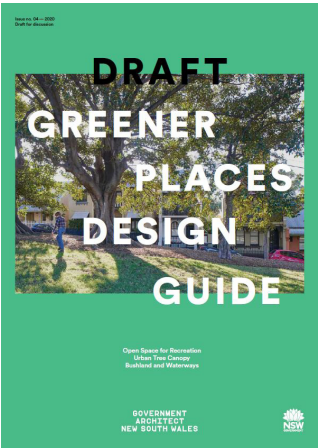
Bankstown City Centre Master Plan, 2021, Canterbury Bankstown

02.03 Key Strategic Documents



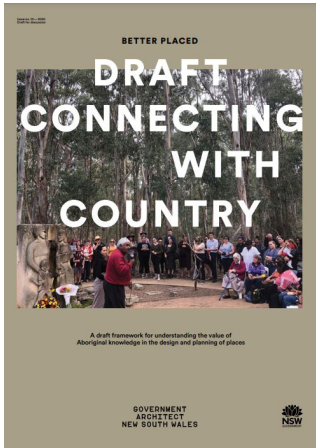
Key Strategic Document

Camden Growth Centre Precincts Development Control Plan, 2011, referred to as the DCP



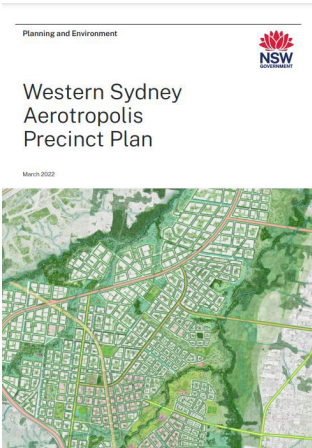
Key Strategic Document

Draft Greener Places Design Guide, 2020, NSW Government



Key Strategic Document

Draft Connecting with Country framework, 2020, NSW Government



Key Strategic Document

Western Sydney Aerotropolis Precinct Plan, 2022, NSW Government



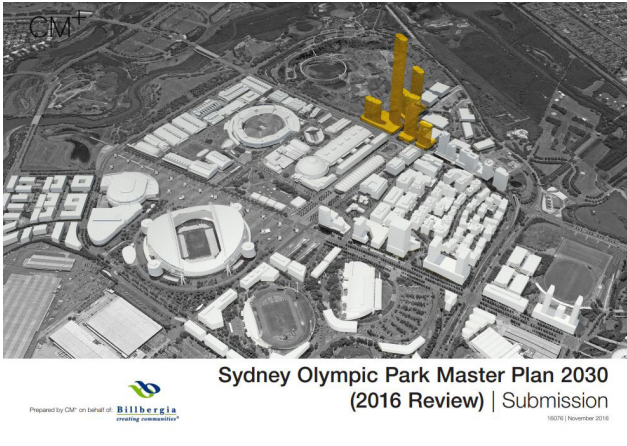
Surrounding Developments as Precedent

Parramatta Smart City Master Plan, 2015, Parramatta City Council



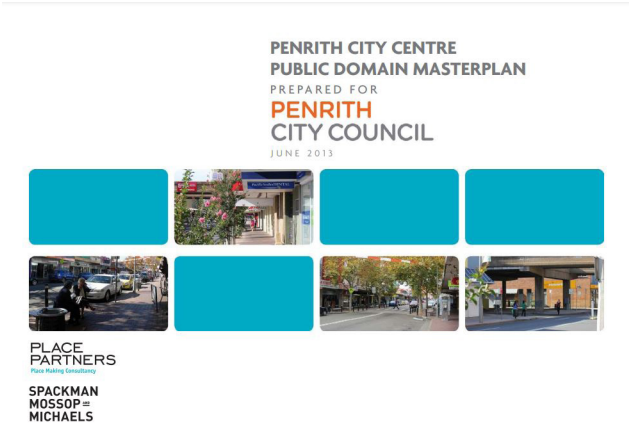
Surrounding Developments as Precedent

Re-imagining Campbelltown Master Plan, 2020, Campbelltown City Council



Surrounding Developments as Precedent

Sydney Olympic Park Master Plan 2030, 2016, CM+

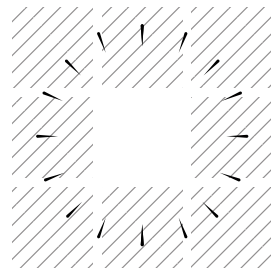


Surrounding Developments as Precedent

Penrith City Centre Public Domain Master Plan, 2013, Place Partners, Spackman Mossop Michaels, Brecknock Consulting

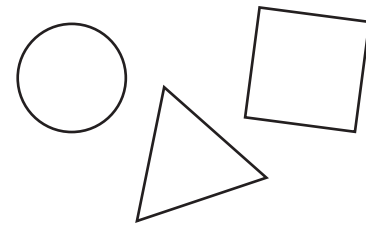
02.04 Camden Strategic Planning Guidelines

Camden Urban Design Values



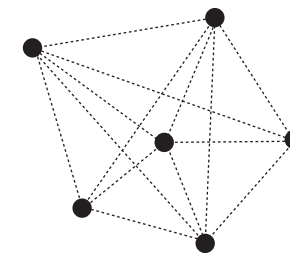
Character

sense of place and its history



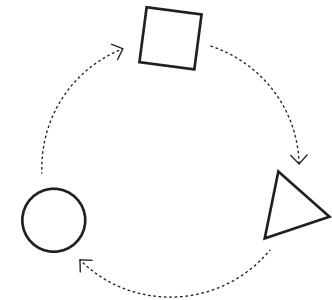
Diversity

an inclusive place with variety of uses and users



Connectivity

pedestrian oriented and easy to get to and move through



Adaptability

adaptable buildings and places to variety of uses and changes for future use

Key Considerations

Built Environment

_Urban layout – structure and grain

Relationship between the development and the nature and extent of the subdivision area, pattern, street scale, and building frontage

_Urban scale – building type, height, and massing

Building size and its relationship to its context and impact to the views and skyline

_Public domain interface

streetscape, façade, and landscape relationship between the building and the street

Open Spaces

As more and more people live in densifying urban areas, the need and importance of open spaces and encountering natural environment increases. The everyday experience of connecting with nature is a key factor in health and well being of urban citizens.

A good open space will encourage and enable healthy and sustainable travel choices and promote biodiversity. Also spending time outdoors provides opportunities to meet other people and have shared experiences to build stronger communities.

Public open spaces are one of our priorities in growth areas and creating a sustainable Camden.

Sustainable Building

Good urban design can reduce the impacts of extreme weather conditions and climate change through sustainable planning and practices to optimise energy and water efficiency and minimise waste and carbon emissions.

At Camden, sustainability is about creating urban environments that protect our rural heritage, protect and enhance our natural environment, while ensuring we are a resilient, healthy and connected community.

Urban Heat Island

Changes in land-use (i.e. rural to urban) has the potential to double the temperature increases caused by climate change. As cities expand and land is redeveloped, urban microclimates change.

Urban areas tend to be significantly warmer than its surrounding rural areas, when there is less green cover and more hard surfaces which absorb, store, and radiate heat. The urban heat island (UHI) effect defines urban areas become significantly warmer than surrounding vegetated areas, creating 'islands' of urban heat.

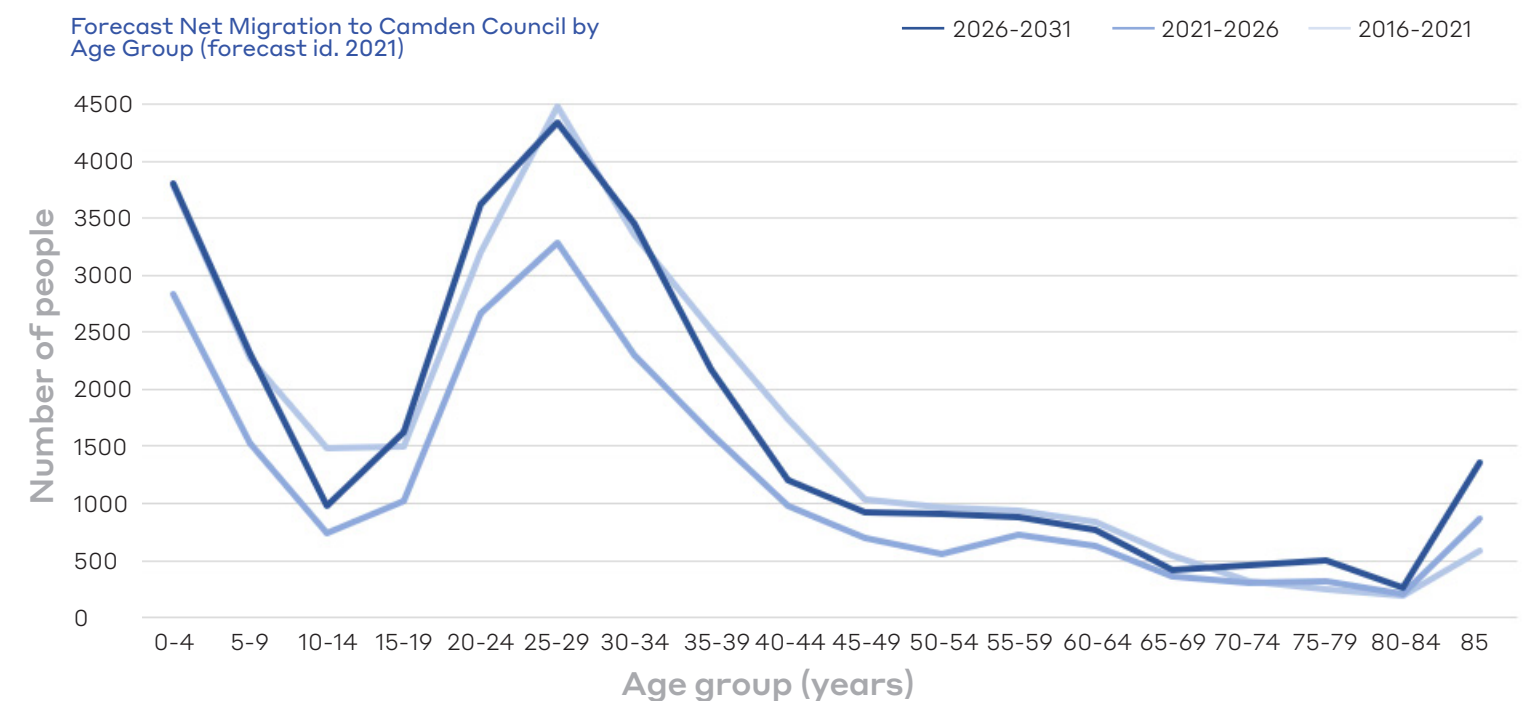
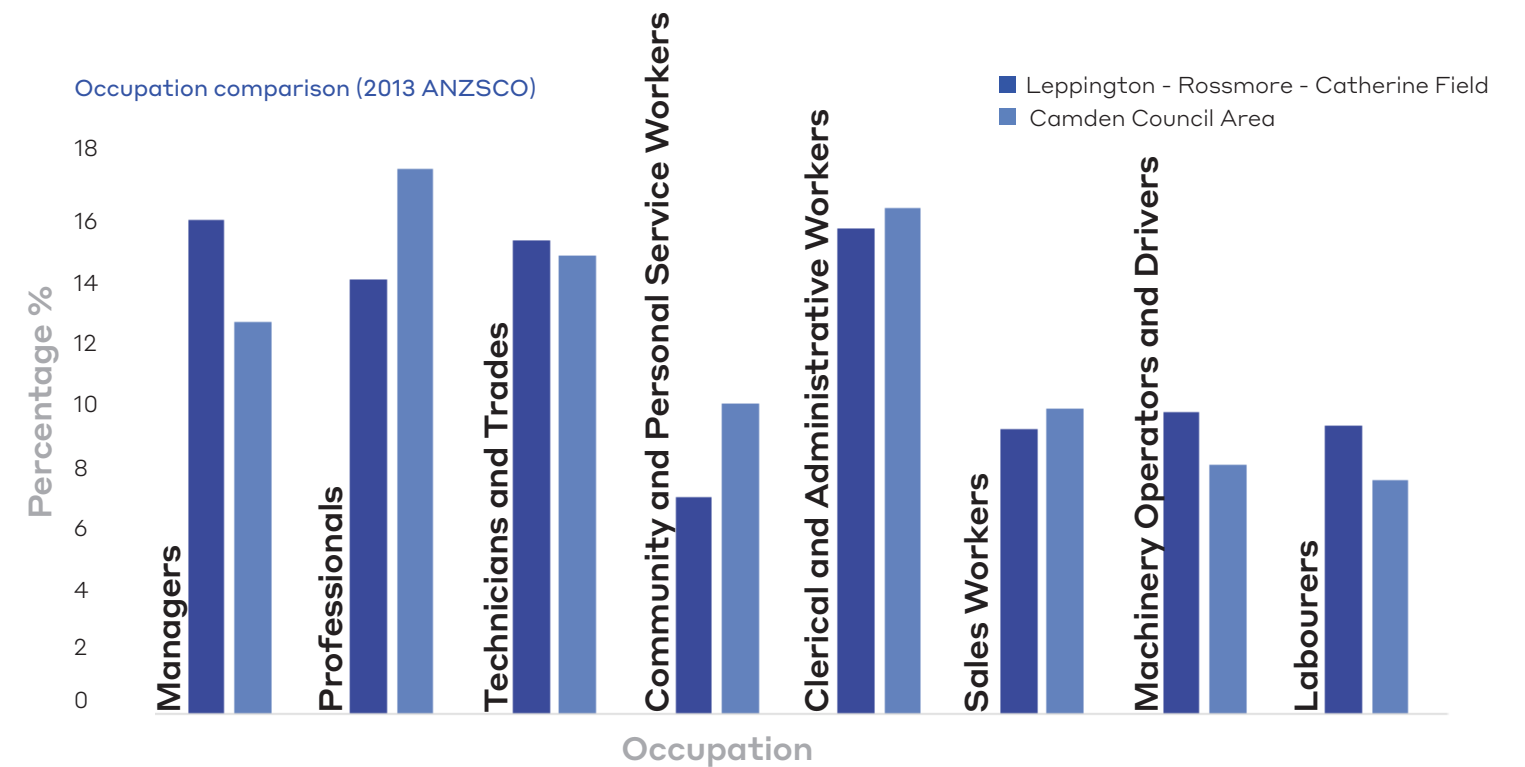
UHI is a significant and growing issue for urban areas in particular Western Sydney. Trees, green roofs, cool materials (i.e. high albedo materials for paving, cladding, etc.), and vegetation can mitigate the UHI effect.

02.05 Community Profile

A Vibrant Community and Prosperous Economy

Strengths and Opportunities

- Camden's rapidly growing population presents many opportunities. New centres to be delivered within the SWGA can promote sustainability and liveability from the very early stages, adopting best-practice planning and design principles.
- The population growth will also bring new skills and diversity to Camden, which will help to diversify the local employment opportunities and further strengthen the local economy.
- The same elements which create an attractive place to live and work, also have the potential to attract visitors in increasing numbers. As Sydney continues to urbanise, Camden's natural landscapes will be highly valued and sought after, introducing a visitors economy.
- The Western Sydney Airport and surrounding Aerotropolis, as well as the Western City Deal, will provide numerous opportunities for Camden. Investment in key transport infrastructure and a renewed focus from government to align infrastructure with growth will lead to a better connected Camden.




02.05 Community Profile

Today's Demographics

Community Profile



110,600 people
Camden Population 2021




Young Couples
(Young couple, no kids - Aged 25-34)

- Currently renting, new to the area
- Both working full time in Sydney's CBD
- Saving to buy a home together
- Enjoy entertaining but also love eating out
- Frequent users of the local gym and yoga studio



Active Singles
(Young Student - Aged 18-24)

- Currently living with housemates in a Build-to-Rent building
- Works casually at a local cafe whilst being a full-time student
- Looking for low-cost activities and places to socialise with friends
- Does not own a car, cycles frequently and relies on public transport



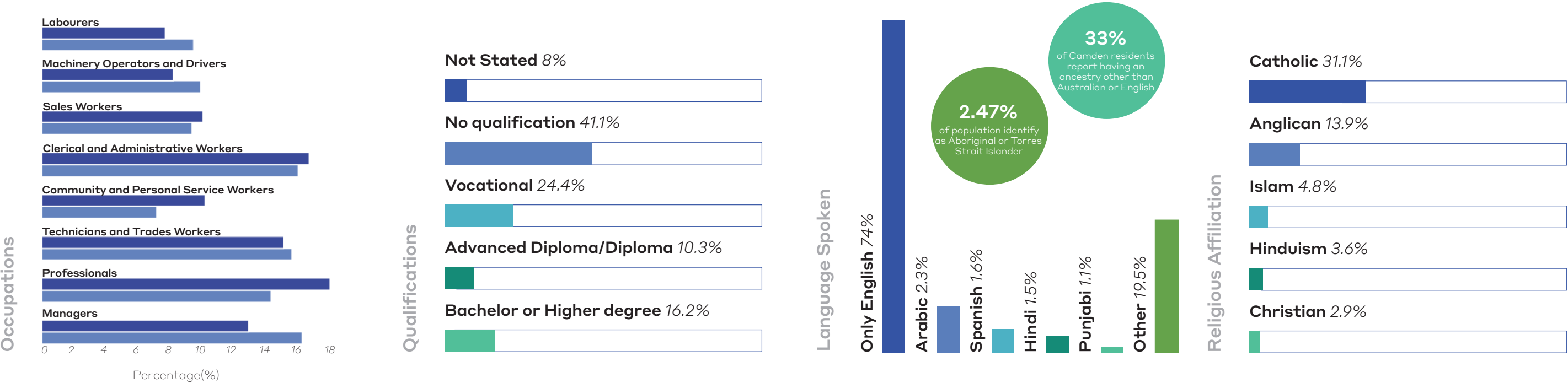
Families
(Young Family - Aged 35-44)

- Have children aged 0-10 years old
- Owners of their home
- Value community and child-friendly amenities such as the library and playgrounds
- Have two cars and will look to up-size their home as their family grows



Retirees
(Lone Living - Over 65)

- A well-known community member who frequents the local library and community centre
- Likes to shop locally
- Has a dog
- Walks to local shops, cafes, medical centre and amenities



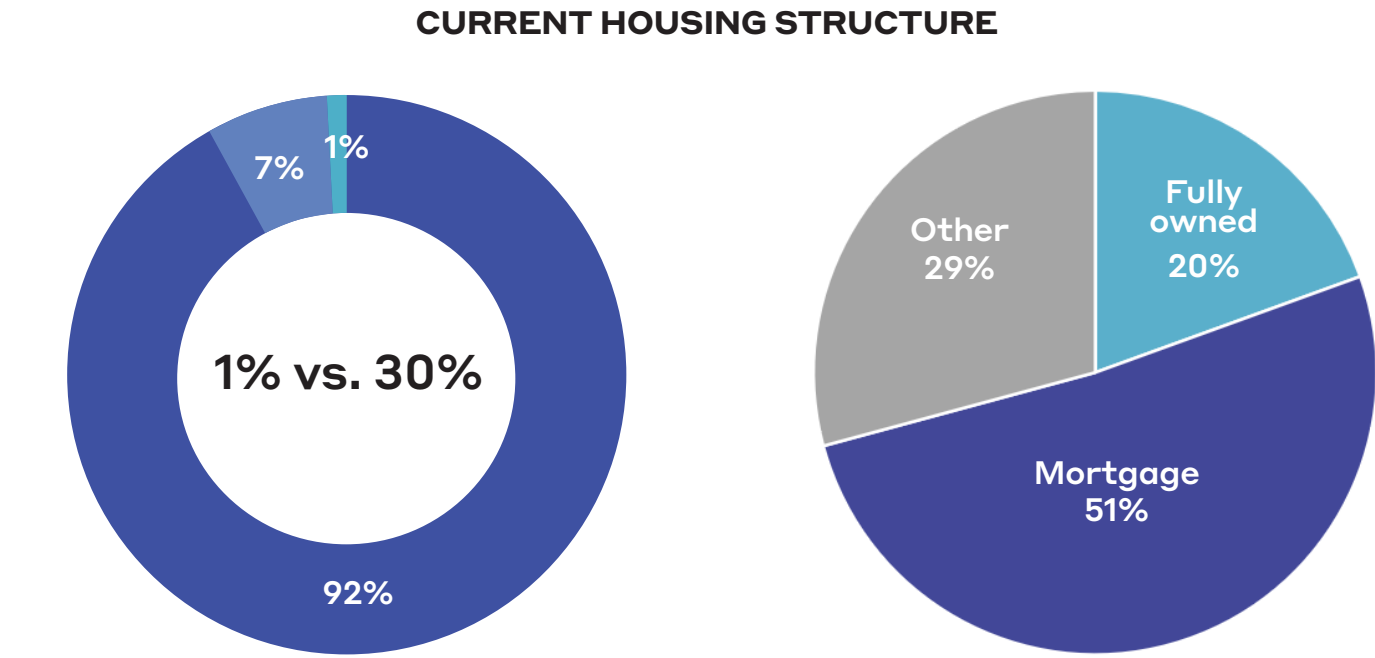
02.05 Community Profile

Tomorrow's Demographics

Meeting Demands...

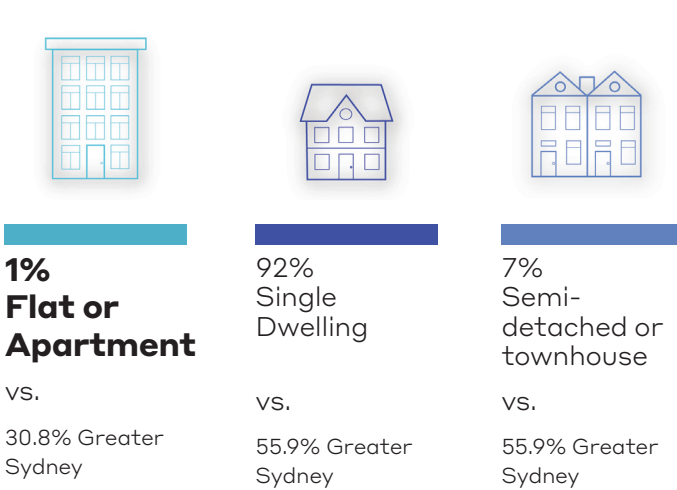


How do we provide new dwellings for the growing population as well as retain those seeking to live near transport, work and lifestyle?



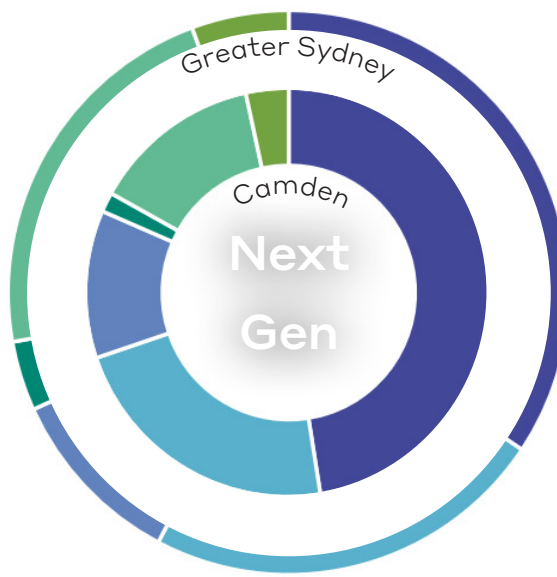
The expected number of single dwellings and townhouses will not accommodate all new family households

71% of households in Camden are owned outright or through mortgage

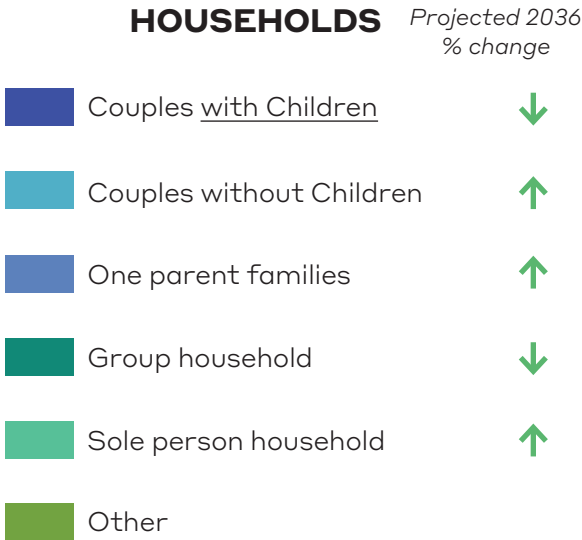


- By 2036, there will be 77,350 projected households, the largest housing growth of any Metropolitan Sydney Council.
- The largest group of people looking to reside in the area are families followed by mature adults.
- Housing typologies and supporting infrastructure will need to support the huge growth.
- Housing will need to be diverse and accessible to all, responding to the changing needs of the community while still reflecting the characteristics that make Camden so special.

FUTURE HOUSING STRUCTURE



There are a variety of needs and preferences of different groups that needs a diverse range of housing



Source: Population and household forecasts, 2016 to 2041, prepared by .id (informed decisions), October 2021.

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Local Context

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| 01 | Understanding of Place |
| 02 | Key Strategy Documents |
| 03 | Proposed ALAND Master Plan |
| 04 | Proposed SEPP Mapping |
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03.01 Understanding of Place

Historical Context



Hunting Kangaroos with fire - Joseph Lycett ~1817



Leppington Park House - National Trust NSW collection



Leppington Farm



Indigenous Origins

The Bicentennial project by Liston (1988) documents interactions between Europeans and the Tharawal people from the early 18th century.

Traditionally, this area was thought to be close to the intersection of a number of language group (tribal) boundaries. Language groups include the Dharug who inhabited much of the Cumberland Plain between the Blue Mountains and the coast, the Tharawal who ranged from the coast westwards towards Camden, and the Gandangara who inhabited areas westward and southwest of the Tharawal and into the Blue Mountains.

The Tharawal people and other Aboriginal groups continue to be active in the Campbelltown area.

European Settlement

The name Leppington comes from the property granted to William Cordeaux in 1821. Leppington Park House was a huge two storey home with its own private ballroom built by convict labour. It was destroyed by fire in the 1940s. The bricks at the base of the outdoor stage at Leppington School came from this building.

Subdivision

In 1914 an area of Leppington was subdivided as the Raby Estate, named after the property Raby some 3269 acres granted to Alexander Riley in 1810. The 1914. The subdivision was developed by Arthur Rickard & Co. People interested in buying a lot would be met by a Sulky either at Ingleburn or at the Coach crossing at the Water Canal Bringelly Road. Rickard Road in the estate was named after the developer.

The Post office, also on the Raby Estate was established in 1930 and remained on its original site until 1981. The Riley estate south of the Raby Estate was subdivided in 1956. The area has supported small farms and vegetable and flower market gardens.

New Community

The area is subject to planned development as part of South West Sydney Growth Area. A corridor of land is being resumed by NSW State Government for an extension to the Liverpool rail line with a station in the north-eastern part of Leppington due to open by 2014.

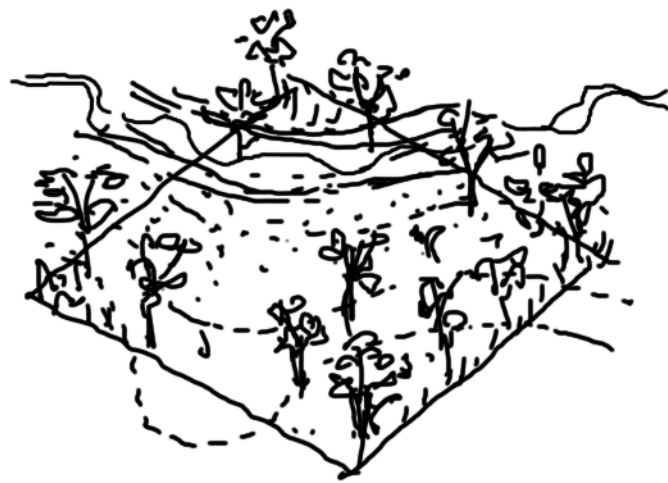
Future

A new page to be written to accommodate growth and liveability. Leppington will benefit from nearby major employment hubs.

03.01 Understanding of Place

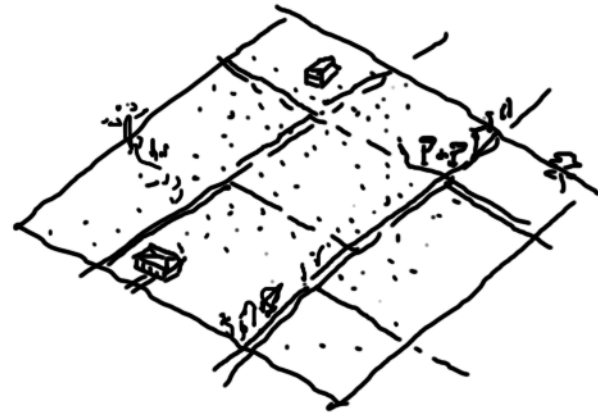
Local Morphology

Natural State



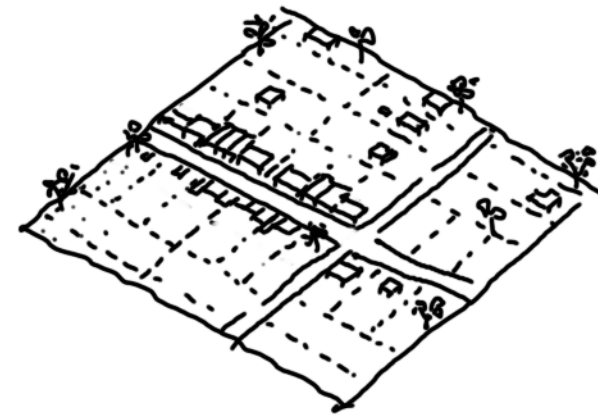
Darug People
The Cumberland Plain
Grassy Woodlands
Riverflat Eucalypt Forest

European Settlement/
Clearing



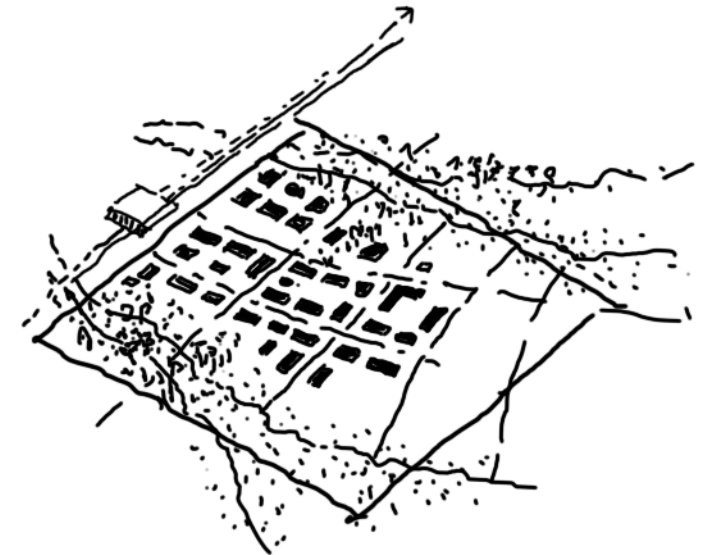
1812 Gov. Macquarie Land Grants
1821 William Cordeaux Granted estate
Land clearing
Timber felling
Cattle Farming
Grazing
Fenced Paddocks

Subdivision



Parcelisation
Greenfield development
Low Density (1/4 acre block)
Historic town centres

Regeneration/Adaptation



Parkland City - Supporting Aerotropolis
Landscape Led Development
Connection to Country
Sustainability as BAU

03.01 Understanding of Place

Leppington Character

The history of the Camden district is as old as Australia itself and its unique heritage can be used as a foundation for this growing urban area surrounded by nature.



Heritage Foundations

Leppington and the Camden District generally have rich historic foundations, from the First Australians to the foundation of the town of Camden.

Camden sits at the intersection of three tribal boundaries. The people of the Camden town location, the western Cowpastures and the adjoining mountainous areas were Gundungurra. The eastern Cowpastures were Tharawal, and the people to the northeast of the Nepean River were Dharug.

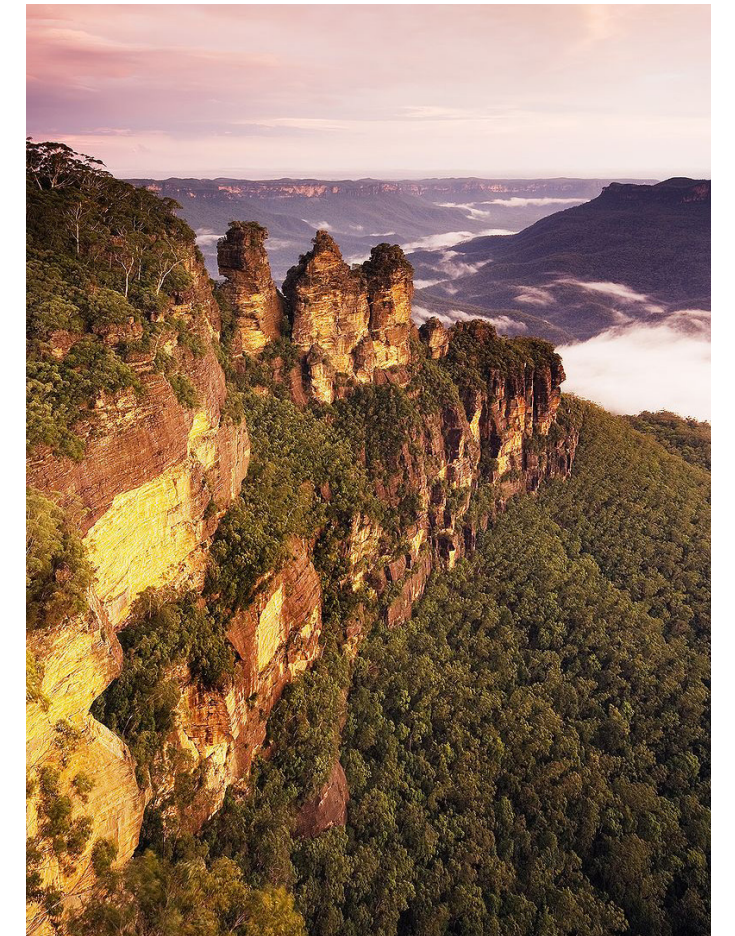
European settlements and agriculture deeply transformed the area.



Connection to Flora and Fauna

The Australian Botanic Garden is a world class garden located in Mount Annan, approximately 20 minutes drive from the Leppington Station.

It showcases Australian flora amongst 416 hectares of rolling hills, lakes, lawns and gardens.



Blanket of Native Woodlands

Leppington was covered by Cumberlands Plain Woodlands until late 19th Century and agricultural land management severely altered this native ecosystem.

The project sites are bordered by a reminiscent and damaged sample of these woodlands.

The Cumberland Plain restoration program aims to reverse the decline. Saving our Species is working with NSW National Parks, local councils, Landcare and other community groups on this 7-year conservation project.

03.01 Understanding of Place

Leppington Character

Leppington can build upon its lush green backdrop and become a strategic residential and retail centre of the Camden area.

The Western Suburbs have a strong connection with nature, being surrounded by outstanding National Parks.



Connected Infrastructure

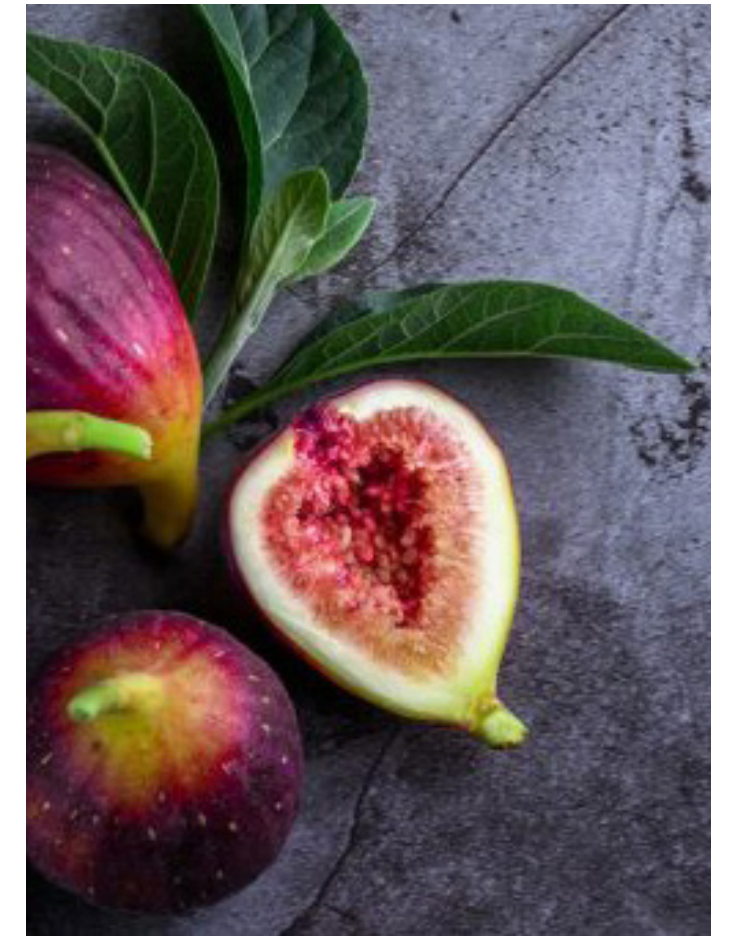
Leppington station has connected the area to the rest of Greater Sydney with the aim to boost the region's accessibility and economy.

Leppington Station is a strategic centre for surrounding business, residential, and retail industries, thus the station is a major transport hub and public transport interchange.



Lush Landscape Setting

The rural areas and scenic green backdrops provide a contrasting experience to the urban environment of the surrounding Greater Sydney and CBD areas. Sight-lines extend to Sydney CBD and Basin as well as the Blue Mountains.



Fresh from the Source

Fresh Figs, Prickly Pears, local fruit and vegetables, Gourmet Fig Delicacies, Coffee bar and Cellar Doors!

Leppington has multiple farms where you have the opportunity to buy direct.

03.01 Understanding of Place

Site Visit - Photography

Public Infrastructure and Amenities



Leppington Train Station



Railway Corridor



Commuter Parking

03.01 Understanding of Place

Site Visit - Photography

Surrounding Amenities



Leppington Public School



Rickard Road Connection



Surrounding Nature

03.01 Understanding of Place

Site Visit - Photography

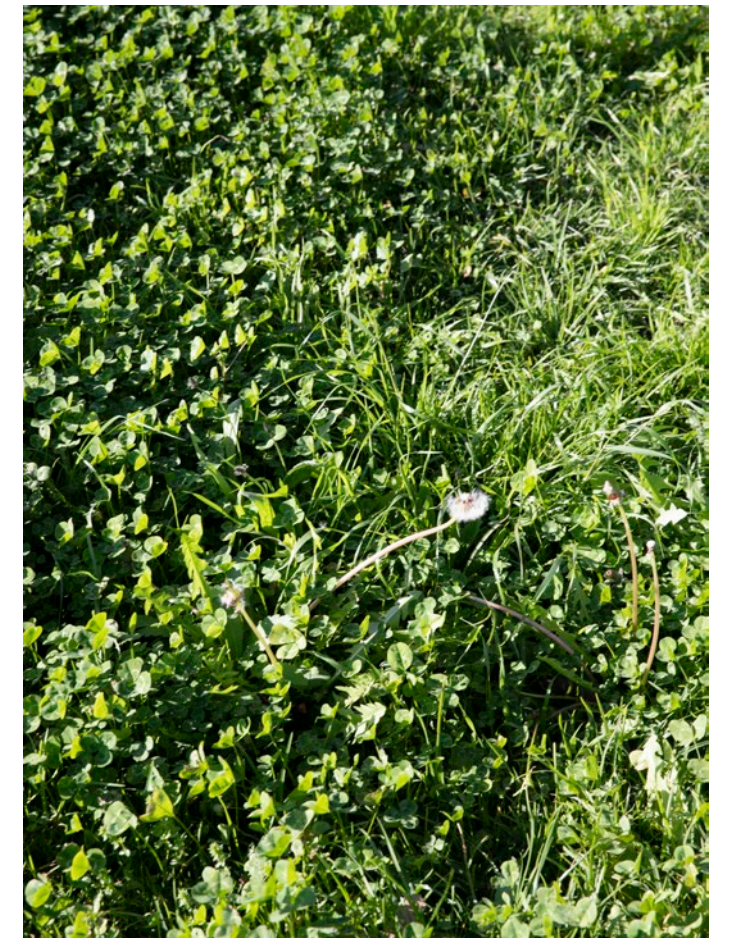
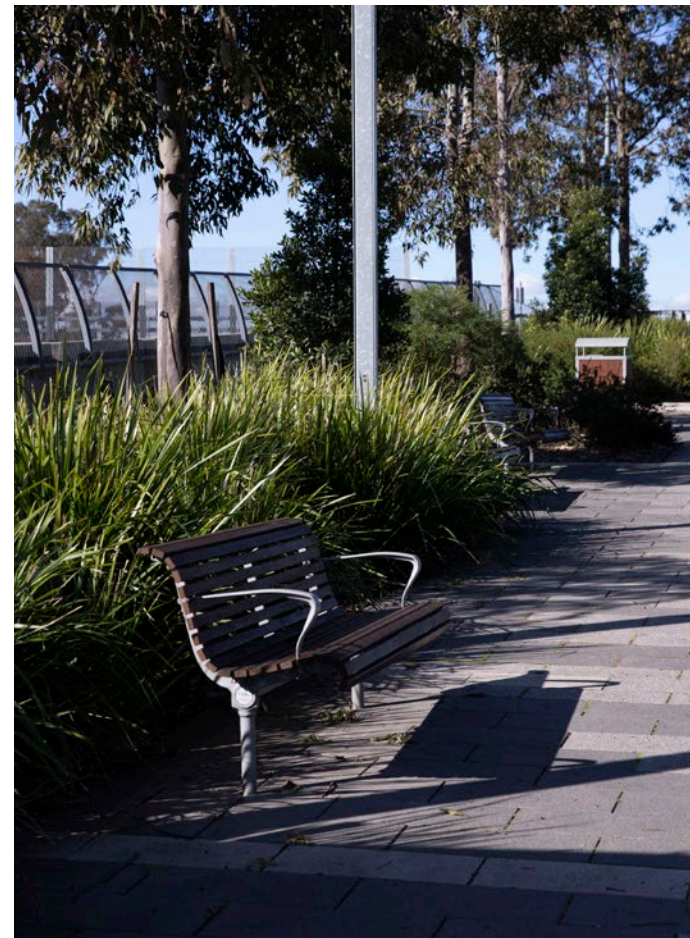
The Site



03.01 Understanding of Place

Site Visit - Photo Essay

Biodiversity

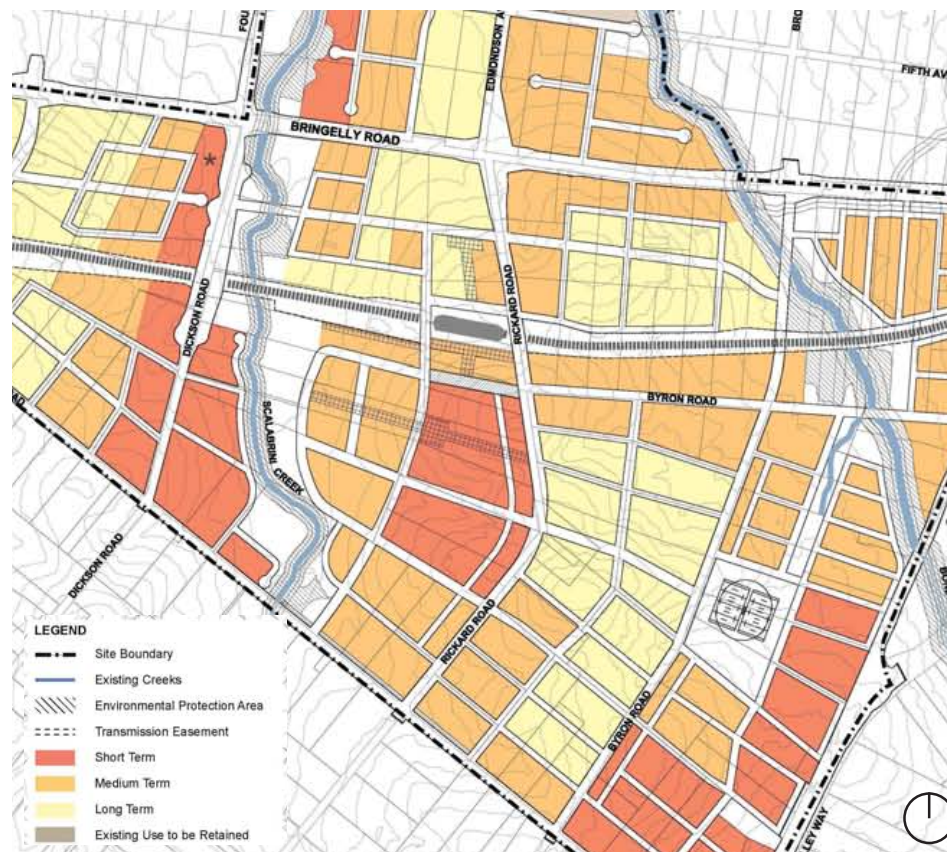


03.02 Key Strategic Documents

Existing Planning Controls

Planning History

The existing planning controls provide a clear picture of the evolving development patterns in the vicinity of Leppington Station. They commence with a concentration of higher-density development along Rickard Road and subsequently shift their focus to the southern region of the station. These developments are situated within a broad Business Park zone, with Riparian corridors serving as organizational elements. However, these controls do not effectively showcase the seamless integration of station activities and easy access to them.



Leppington Master plan [2012]



Infrastructure plan [2012]



Future Growth [2012]

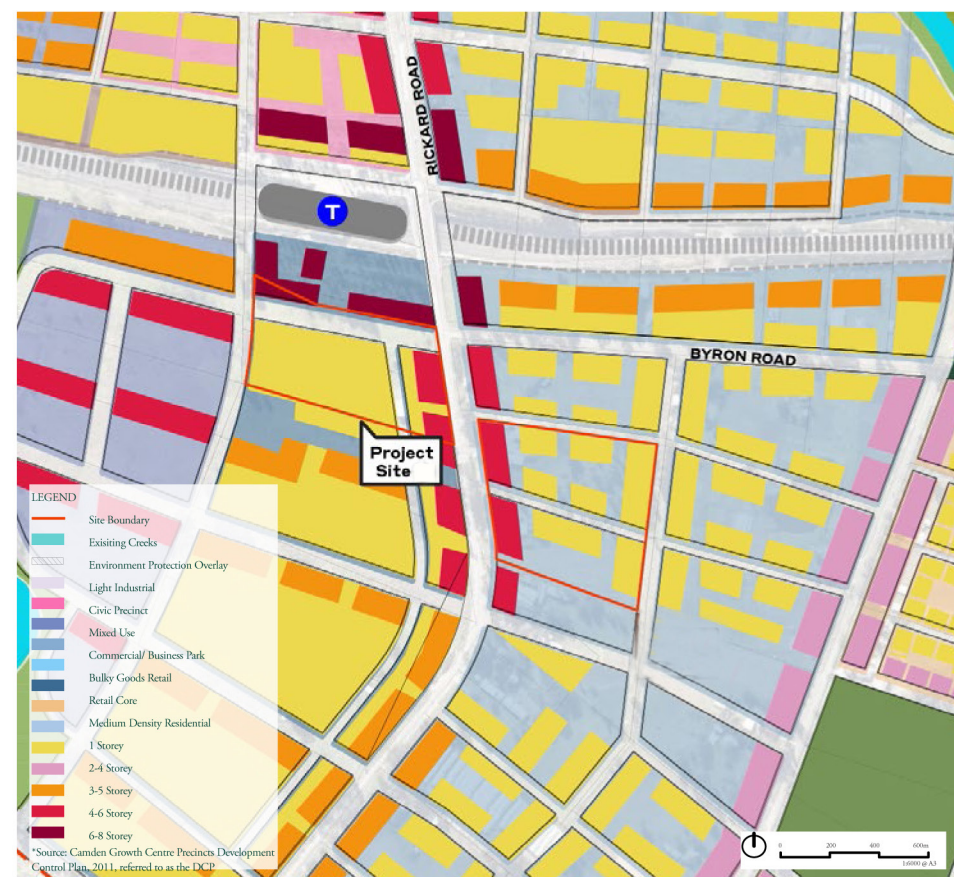
03.02 Key Strategic Documents

Existing Planning Controls

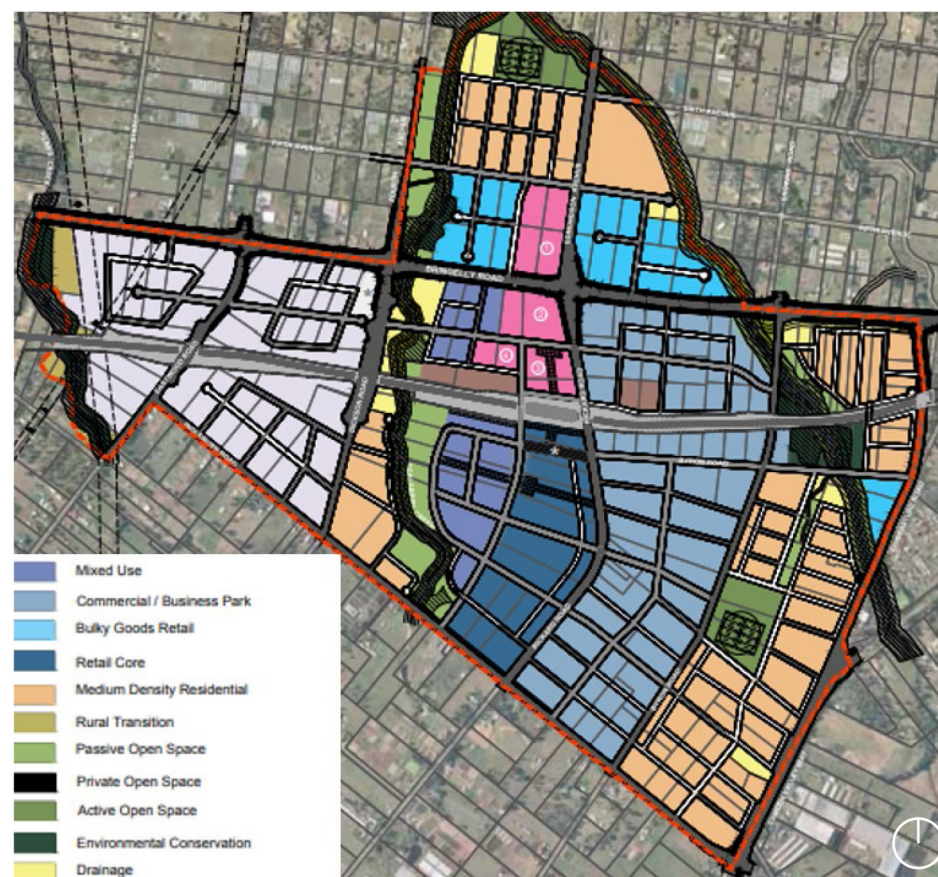
Planning History

The current maps haven't facilitated any development occurring. The Council Planning Proposal Report Nov 2022 stated there was a "lack of significant uptake

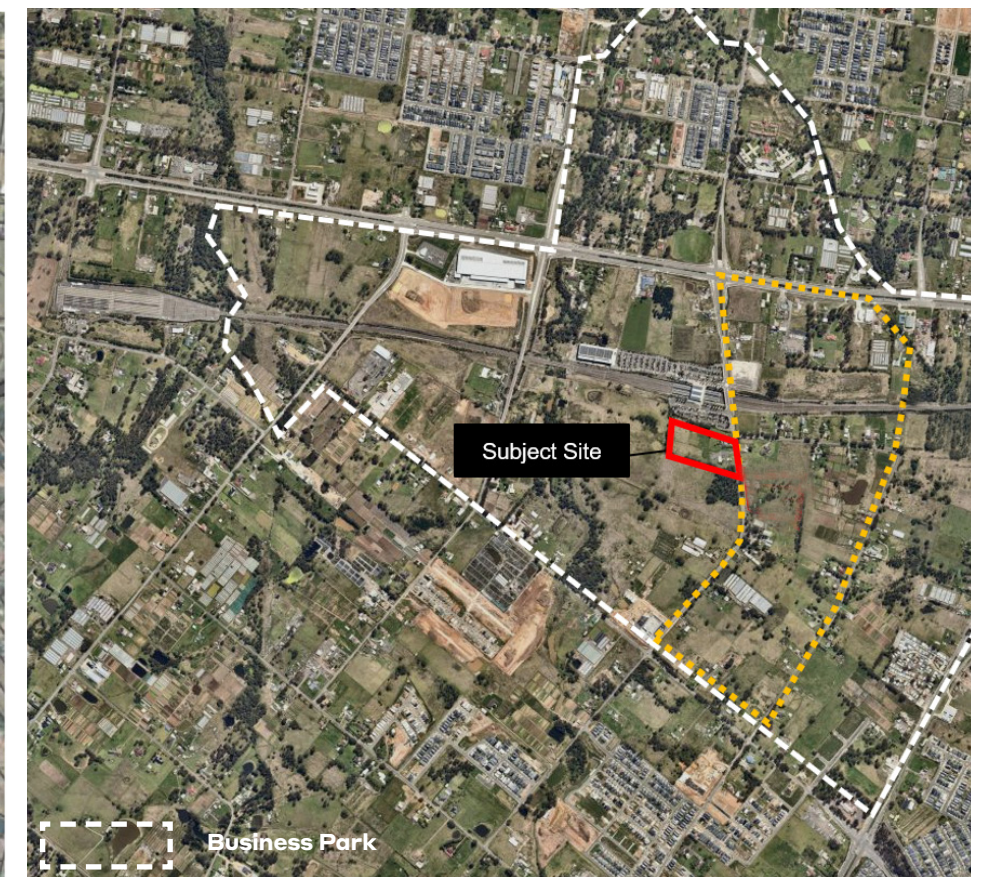
The Council Planning Proposal states that there is a "lack of a lead developer to establish a town centre with a range of retail services and amenity" (Camden Council - Leppington Planning Proposal -Local Panel Report August 2022) and thus was a reason for the failure of the 2013 rezoning.



Land Use and Heights



2012 DCP Zoning



Leppington Town Centre - Business Park Zoning

03.02 Key Strategic Documents

Proposed Future Planning Controls

Council, in collaboration with the NSW State Government, decided to undertake a rezoning in 2017 due to the current controls not facilitating development, and Council has recently submitted a planning proposal (2022). It aims to facilitate development, and was conducted on a larger macro scale.



Indicative Layout Plan

Management and activation – the quantum of public space must enable the sustainable management of public spaces and the potential for a 'critical mass' of population that can successfully activate the quantum of open space being proposed. This ensures activation both at night and day, and limit 'dead spaces' which disengage the community from public life.



Road Hierarchy and Circulation

The roads proposed do not follow lot cadastral boundaries. The proposed railway square, civic park and east-west town centre street should correspond with lot ownerships to promote viable configurations and densities to promote a vibrant town centre and support the 30-minute city.



Key Pedestrian Desire Lines

Configuration – the proposed linear park should support north-south pedestrian desire lines to support active movement from the south of the town centre to and from Leppington Station.

03.02 Key Strategic Documents

Road Hierarchy

All streets have footpaths on both sides.

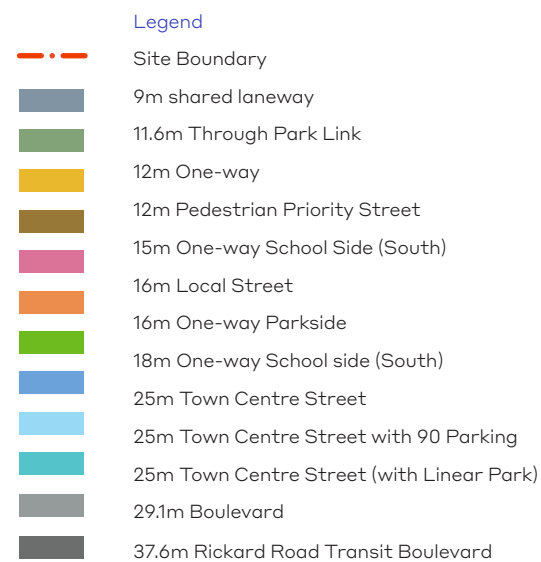
Through site links are provided for large blocks on key desire lines and to create finer grained pedestrian networks in core areas of the town centre.

Green links provide off-road cycle access along the southern side of the rail corridor linking the Scalabrini Creek Corridor to the Rail Station.

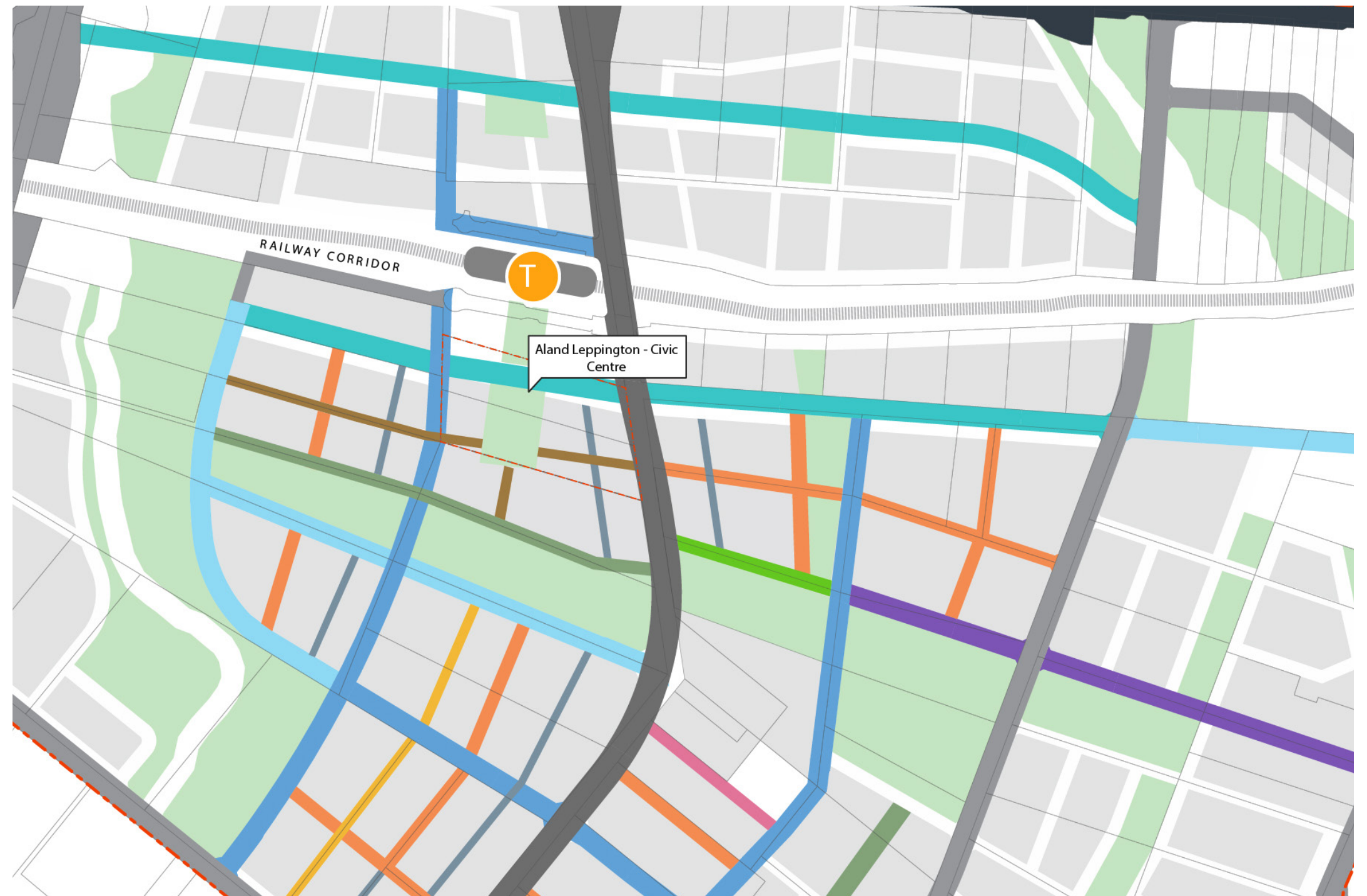
Open Space areas provide important cross links (connecting east and west) and much longer north-south links that provide districtlevel connections.

Rickard Road is a transit-boulevard, connecting the suburb to the centre via the main arterial Bringelly Road, and to Austral to the north and Leppington to the south.

The Main Street connects the main attractors within the Major Centre - the retail core, mixed use areas, civic centre, commuter car parks, the bus interchange and rail station. It is a 'collector' road with public transport.



*Source: Camden Growth Centre Precincts Development Control Plan, 2011, referred to as the DCP



Reference: Leppington Town Centre Development Control Plan 2022

03.03 Proposed Aland Master Plan

Our planning proposal and master plan examine the micro scale and our site in more detail, and arrived at a master plan vision that supports and compliments council's vision for Camden, with some minor site specific changes that integrate our proposed site design with the Council proposal.



03.03 Proposed Aland Master Plan

Indicative Zoning

The Aland vision proposes a revision to the town centre zoning by creating a hierarchy of uses and spaces that enables the immediate context south of the station to accommodate a higher density and massing of mixed-uses that identify Leppington as a place of gathering, employment and living. Most importantly, the zones align with actual land holdings within the context.



- Legend
- Site Boundary
 - Mixed-Use
 - High Density Residential
 - Education
 - Community
 - Employment and Commercial
 - Leppington Train Station

03.03 Proposed Aland Master Plan

Site Location with PP Road Overlay

As indicated on this plan, the current DCP road overlay does not align with actual land holdings yet does illustrate the opportunity to create flexible open spaces south of the station. The Aland master plan embraces this opportunity as a driving principle of the revised master plan.



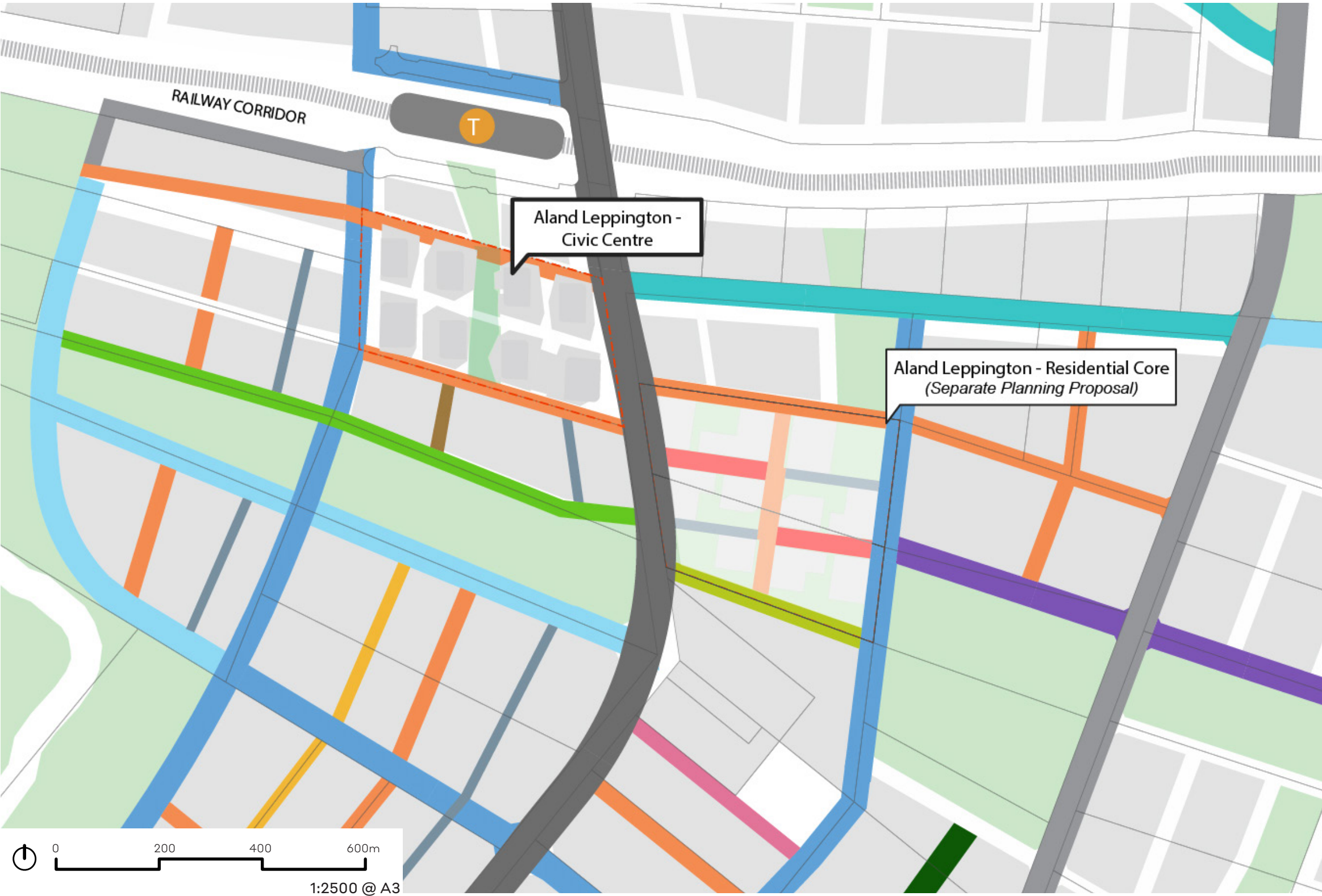
Reference: Leppington Town Centre Development Control Plan 2022

03.03 Proposed Aland Master Plan Road Hierarchy and Circulation

The Aland master plan ensures the road network that serves the town centre enables direct access to employment and living yet allows for spaces between built form to not be completely vehicular focused. The primary roads at the east and west of the site facilitate regional flows and transition to secondary and pedestrian routes in an ordered manner.

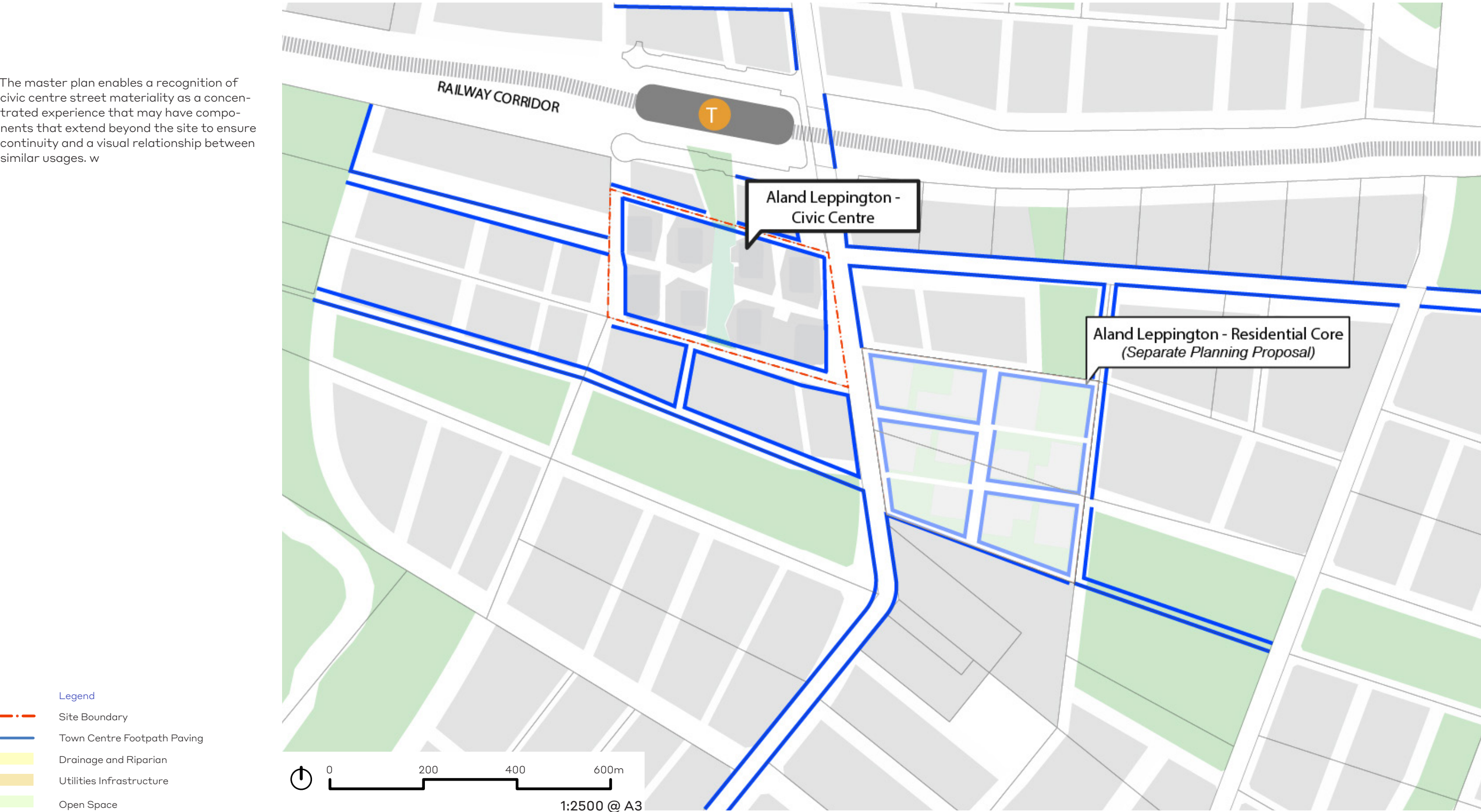
Legend

- Site Boundary
- 6m One-way
- 9m Shared laneway
- 11.6m Through Park Link
- 12m One-way
- 12m Pedestrian Priority Street
- 15m One-way School Side (South)
- 16m Local Street
- 16m One-way Parkside
- 18m One-way School side (North)
- 19m Pedestrian Priority Street with WSUD
- 25m Town Centre Street
- 25m Town Centre Street with 90 Parking
- 25m Town Centre Street (with Linear Park)
- 29.1m Boulevard
- 23.5m Rickard Road



03.03 Proposed Aland Master Plan Street Material Treatments

The master plan enables a recognition of civic centre street materiality as a concentrated experience that may have components that extend beyond the site to ensure continuity and a visual relationship between similar usages. w



03.03 Proposed Aland Master Plan Parks, Plazas, and Open Space

A hallmark of the proposed master plan is the integration of varied scales and proportions of open spaces across the site. Thes spaces include broad highly programmed spaces leading to the station, linear connector spaces across the site, and intimate fine grained spaces that identify uses and addresses.



03.03 Proposed Aland Master Plan

Active Frontages

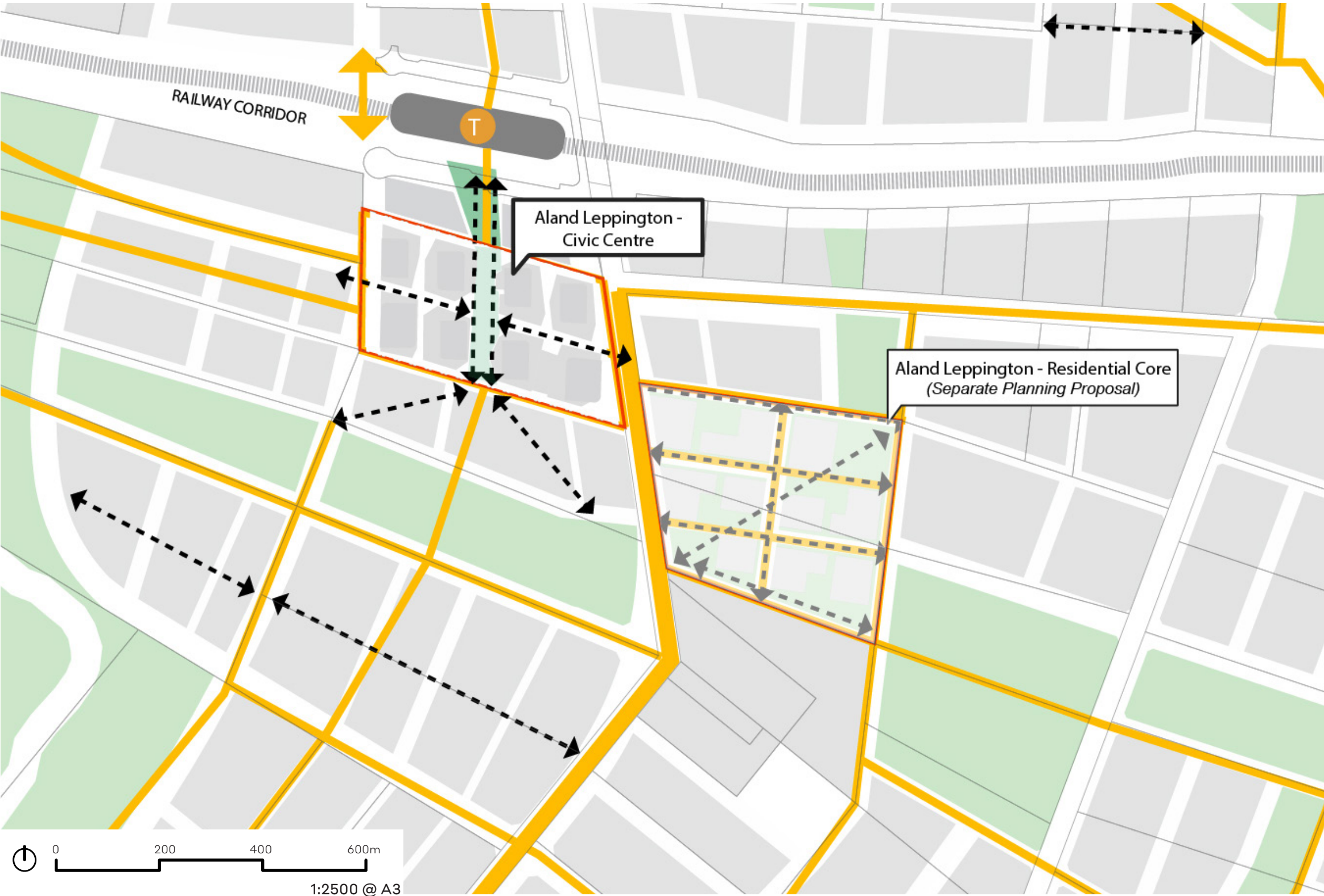
Given the nature of the variety of usages within mixed use precincts, the proposed master plan enables various opportunities to expressive streetscapes and active frontages that provide legibility to activity within each building and unique identity to occupants and operators. Fine grain detail will be accommodated for spaces fronting all streets and walkways, while loading and service zones will be integrated or screened to ensure design consistency



03.03 Proposed Aland Master Plan

Pedestrian Desire Lines

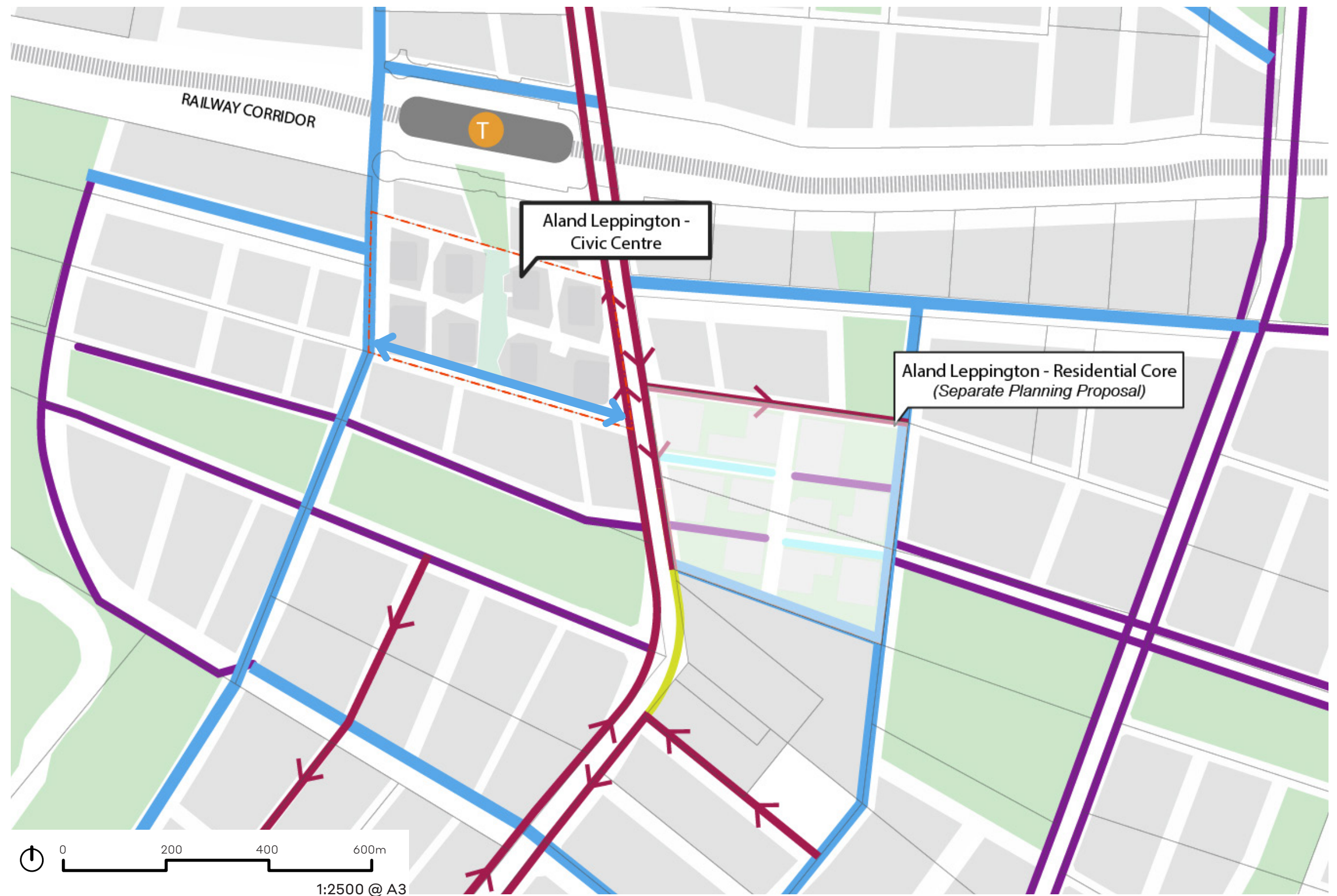
The master plan is based on ensuring legible usages and spaces anchor vistas and sight-lines. These vistas and sightlines are also aligned with pedestrian routes of travel, therefore allowing users to always be aware of the experiences and activities that are encountered along these routes and desire lines.



03.03 Proposed Aland Master Plan

Active Transport Strategy

The master plan is designed in a manner that places pedestrian activity and casual active passage at its core, hence all active transport is at the perimeter of the site which in turn connect to established or proposed active transport links.



03.03 Proposed Aland Master Plan

Public Transport Strategy

Similar to the active transport diagrams, the public transport routes are accessed at the perimeter of the site, with pedestrian connection and flow leading to the station and the adjacent bus interchange.



03.03 Proposed Aland Master Plan Height Strategy

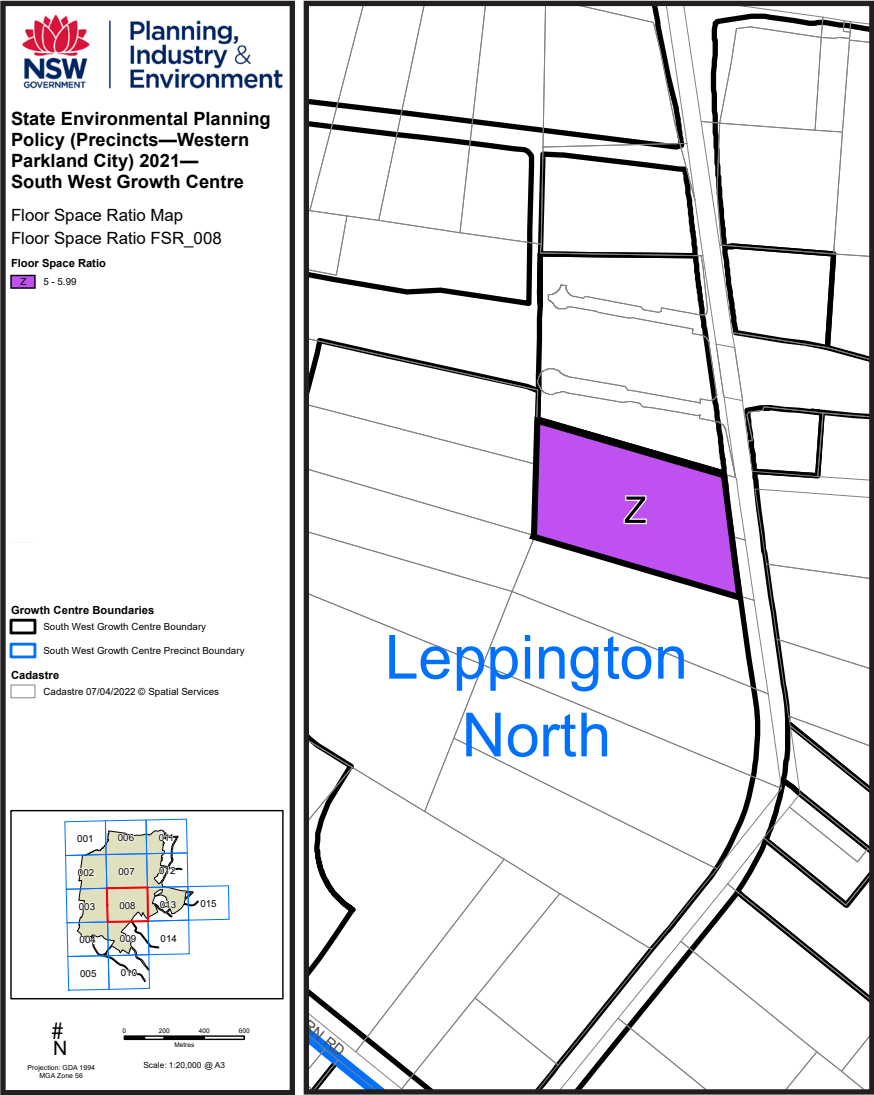


03.04

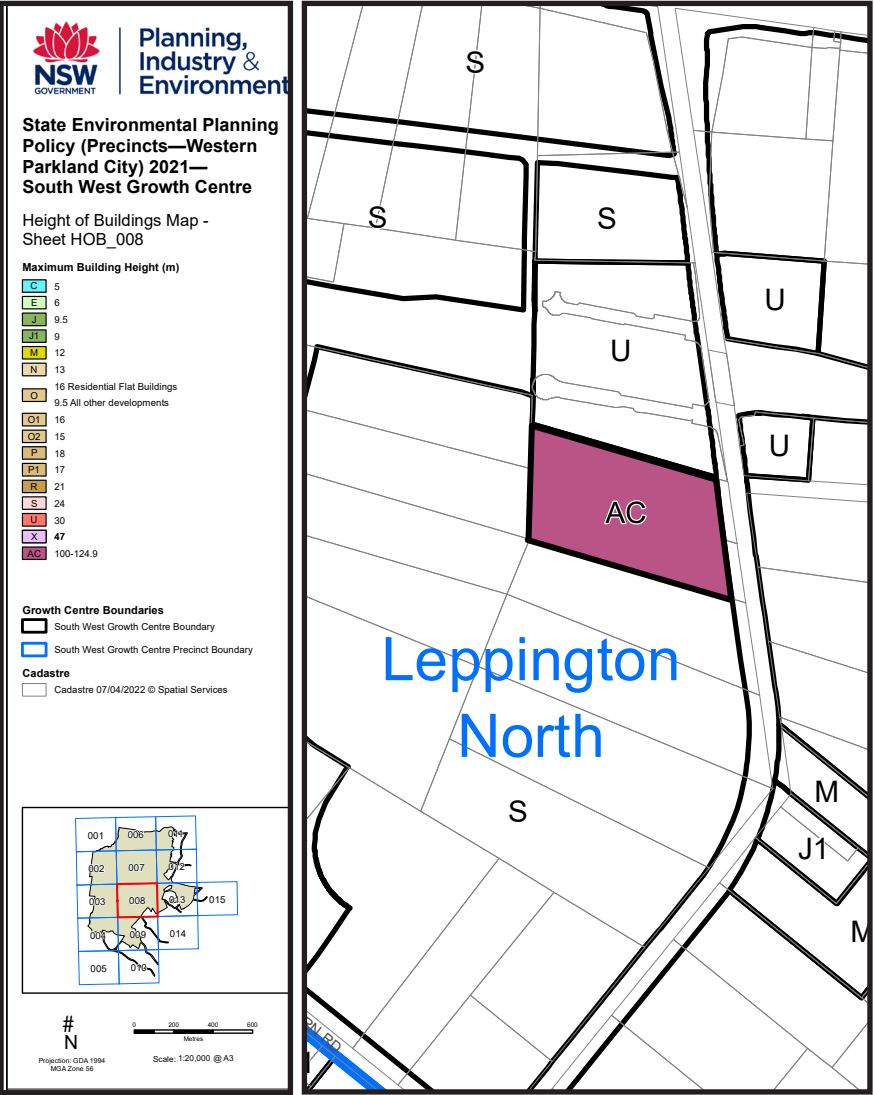
Proposed SEPP Mapping

Proposed Floor Space Ratio, Height of Building and Land Zoning

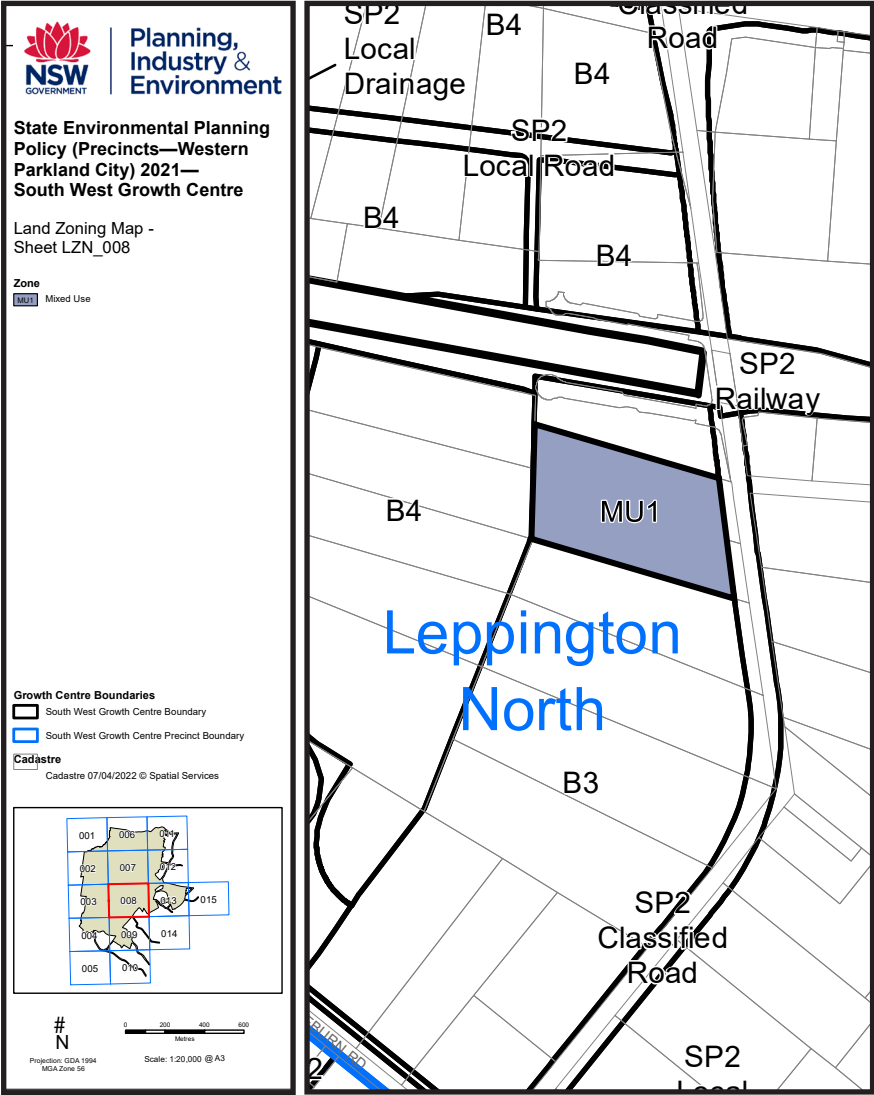
Floor Space Ratio



Height of Building



Land Zoning



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Site Analysis

04.01 Features

04.02 Site Analysis

04.03 Challenges

04.04 Opportunities

04.05 Interfaces

04.01 Features

Scale Comparison

Civic Centre

Area : 3.2 Ha

The site is rural land, with surrounding sites having agricultural usages. Located to the north of the site are a public car park and train station. The area is yet to have a business district.



One Central Park, Sydney

Total Site Area: 4.31 Ha

FSR: 6.39:1

Open Space Ratio: 12%

Distance to Sydney CBD: 1.5 Km



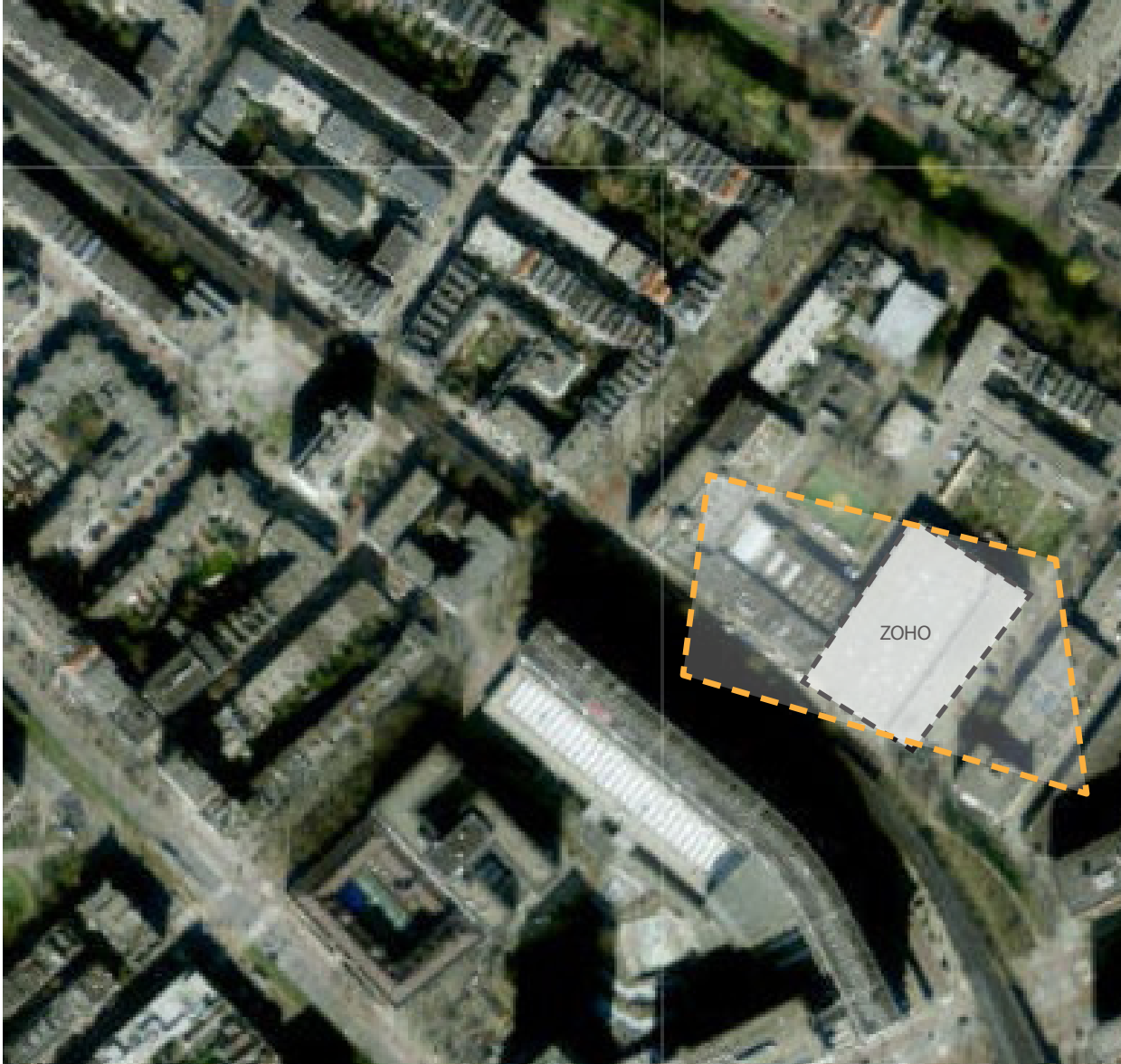
Green Square, Sydney

Total Site Area: 5.6 Ha
FSR: 6:1
Open Space Ratio: 19%
Distance to Sydney CBD: 3.7 Km



Zoho, Rotterdam

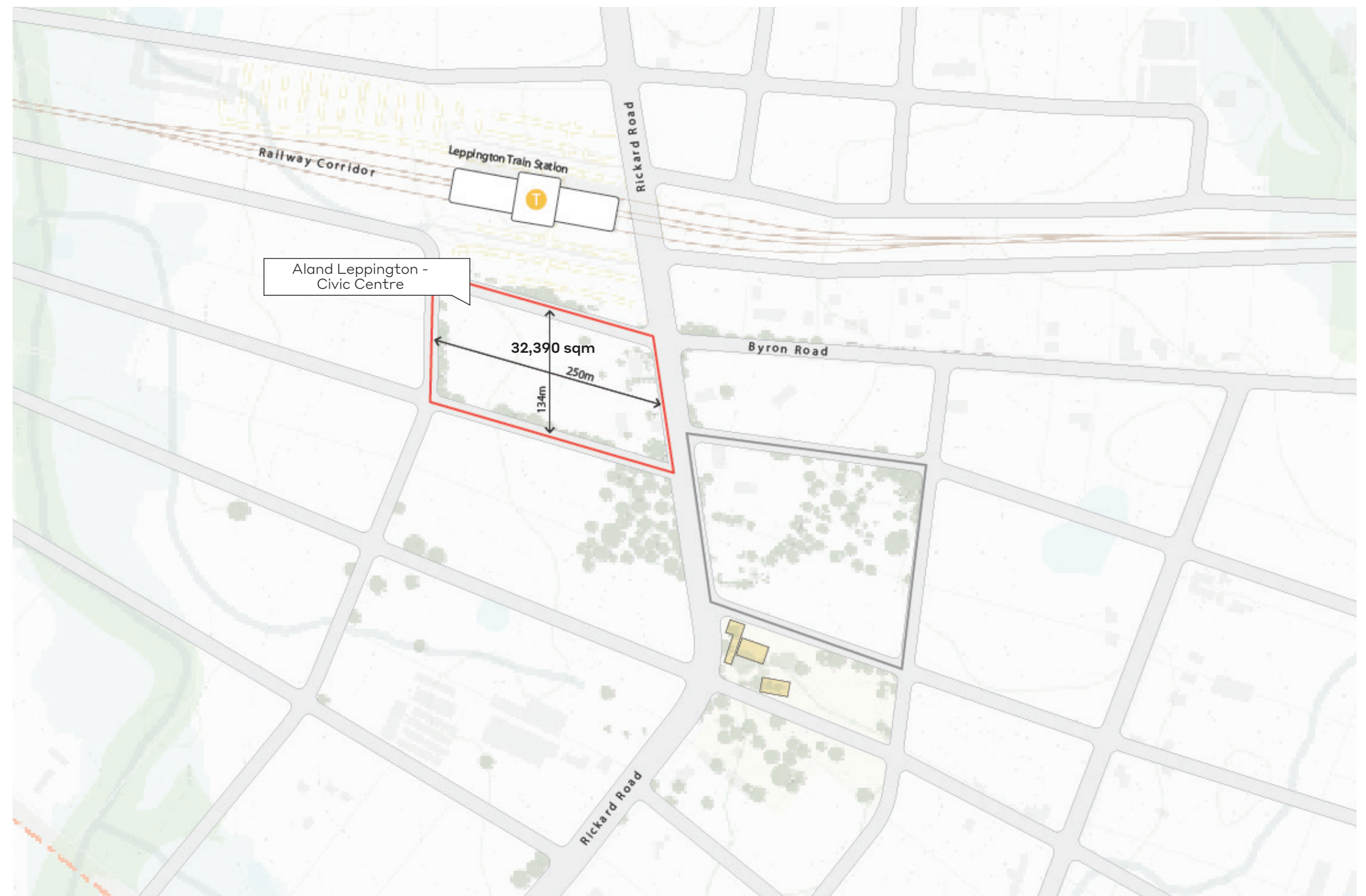
Total Site Area: 2.3 Ha
FSR: 3.4:1
Open Space Ratio: 15%



04.02 Site Analysis

Area & Scale

The site is unique given its relatively even terrain and slope, which enables a civic centre experience to emerge without limiting physical factors that prohibit efficient access and layout. The current DCP introduces a CBD inspired street grid layout which has been modified to suit land holdings. The existing Leppington Station establishes itself as a primary destination, hence the civic centre becomes a walkable adjacent destination recognized on the landscape.



04.02 Site Analysis

Natural Systems

- Understanding the natural dynamics and topography will inform a better design outcome
- The site is bordered with different vegetation systems and let the water flow downstream to Kemps Creek
- The site has a high point culminating at +96m on its South-Eastern corner, whereas culminates at +90.2m on its North-Western corner
- The newly opened Leppington Train station is a major asset that aims to connect the future neighbourhood with both the Aerotropolis and the Sydney CBD using public transport



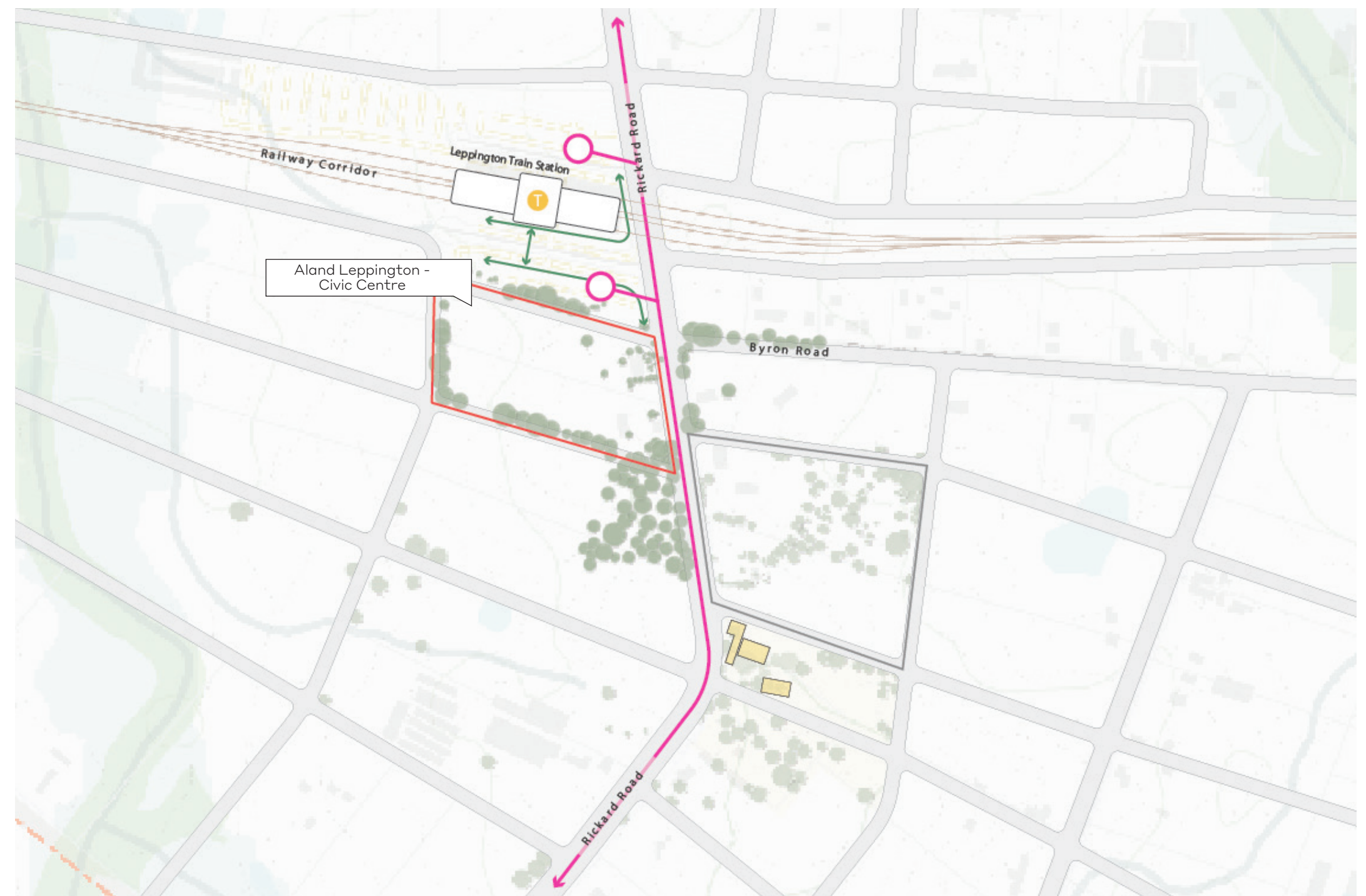
Legend

- Subject Sites
- Amenity

04.02 Site Analysis

Movement & Access

- Leppington is subject to major growth to accommodate a new population. The current Camden Growth Centre Precincts Development Control Plan, DCP 2011, introduces a new road network planned to support such changes.
- Currently, there is limited pedestrian access on footpaths. The only footpaths near the site are at the train station and in front of the public school.
- Vehicle access dominate through the main roads.
- Currently, the train network ends at Leppington Station. The train line extension will eventually move beyond Leppington to be able to support employment in the Liverpool area as well as the Aerotropolis



Legend

- Subject Sites
- Planned Roads (DCP 2012)
- Train Line
- Vehicle Movement
- Pedestrian Movement

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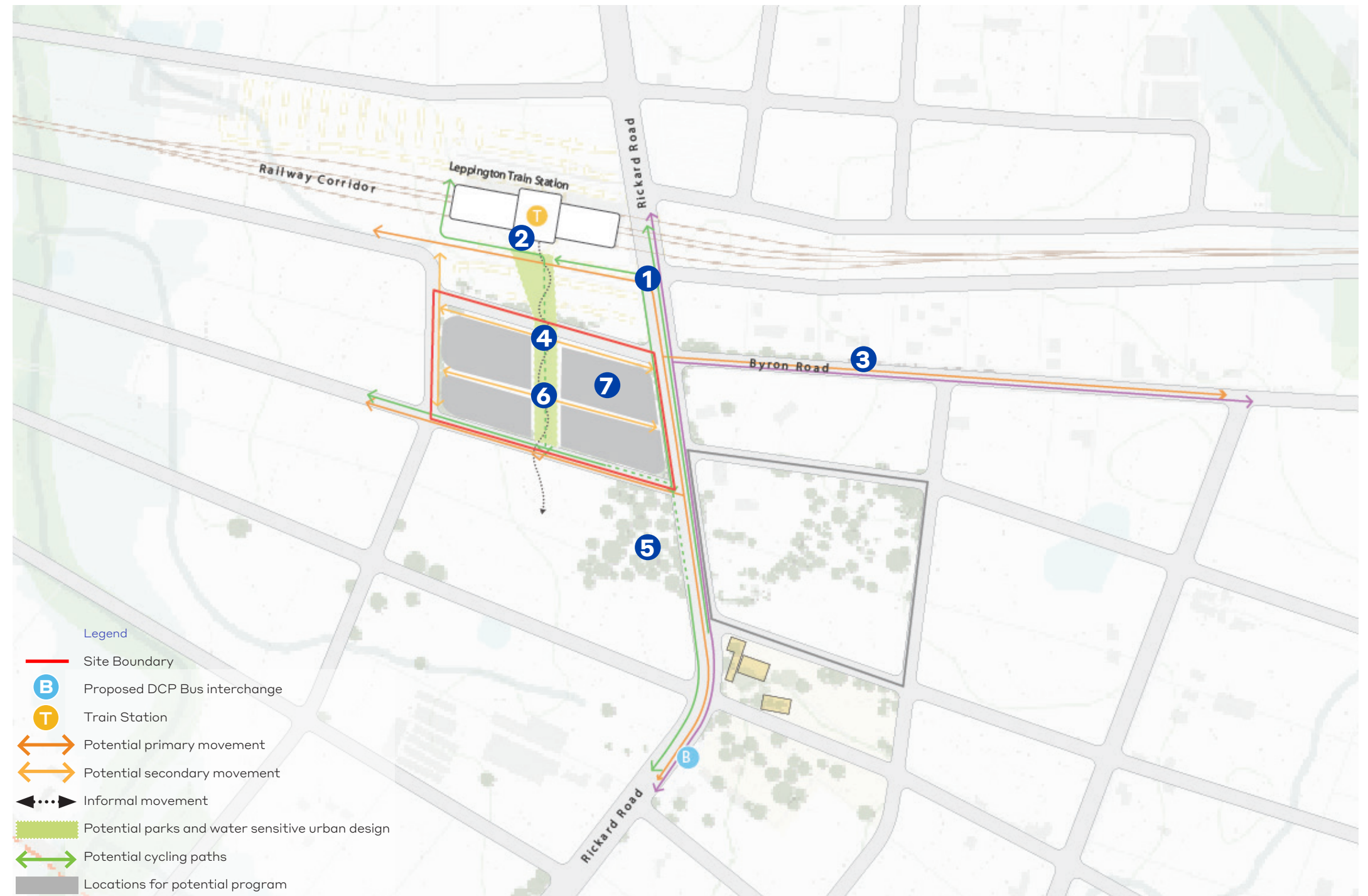
04.03 Leppington Challenges

- 1 Low density residential and rural function
- 2 The only established amenity is the train station, lacking public open space and public amenity
- 3 Bus services are very minimal
- 4 Slope of Civic Centre site, southeast to northwest
- 5 Predominately serviced by cars.
- 6 There is poor pedestrian connectivity with minimum footpaths to anywhere around the train station
- 7 There are no bike lanes
- 8 Roads are yet to be developed
- 9 The public school to the south is too small to service any future housing developments
- 10 Woodlands have been extensively cleared across eastern Australia with less than five percent of the original extent remaining.



04.04 Leppington Opportunities

- 1 Increase bicycle paths. By creating a safe network of bike lanes, separated from roads, helps people gravitate towards bike-riding and reduces traffic.
- 2 Increase public transport accessibility encourages active movement. If bus routes were better considered, it would put less strain of vehicular usage.
- 3 Road and traffic design should be highly considered. Finding the right balance for vehicular access and pedestrian accessibility with the main arterial roads to capture vehicular movement. By moving pedestrians off the travel lanes, motorist operations are improved and capacity increased.
- 4 The opportunity to integrate parks and plazas to the site to increase quality of life for those living in the area. They provide places of respite, where people may stop and take a few minutes to refresh themselves. They attract people to the neighbourhood and create a sense of place for the community.
- 5 Tree canopy cover is another opportunity to improve local character of Leppington. Green canopy enhances the amenity of local parks and streets and is crucial in providing vital shade that reduces ambient temperatures and mitigates the urban heat island effect.
- 6 Increasing pedestrian connectivity through and around the train station by adding additional paths. Paths should be comfortable; flat and widened. These paths can increase the transportation options for individuals who may not be able to drive a car. By providing alternative paths can increase safety, mobility and create healthier communities.
- 7 Creating fine grain retail spaces and increasing mixed use will provide closer alternatives for the community that is convenient and accessible.



04.04 Leppington Opportunities

Leppington has a great potential for growth as a vibrant new major center in Western Sydney.



Local Character

Located at the fringe of active urban life and nature, Leppington has the potential to become a unique developed area grounded with its landscape.



An Emerging Precinct

The social economic and demographic changes in the Camden area are supported by new retail precincts and employment hubs, paving the way for Leppington to develop a new community.



New Connectivity

Leppington is ideally located near the Aerotropolis and multiple transport hubs allowing connections with the Sydney CBD and major employment hubs.

04.04 Leppington Opportunities

Connecting to Country and acknowledging original owners

The area now known as Camden was originally at the northern edge of land belonging to the Gandangara people of the Southern Highlands, who called it Benkennie, meaning 'dry land'. North of the Nepean River were the Muringong, the southernmost of the Darug people, while to the east were the Tharawal people.

With the introduction of new developments, it is important to value and respect Aboriginal cultural knowledge, include Aboriginal people in the design development and ensure that Country is cared for appropriately, by protecting sensitive sites and ensuring that Aboriginal people have access to their homelands to continue cultural practices.

Connecting with Country includes reducing impacts of natural events such as drought, fire and flooding. Sustainable land and water practices should be implemented in developments through the selection of structural frameworks and material choices where continual change can happen before its eventual deconstruction and returning to the earth for reuse.

Image Source: GML Heritage, Archaeology at Leppington



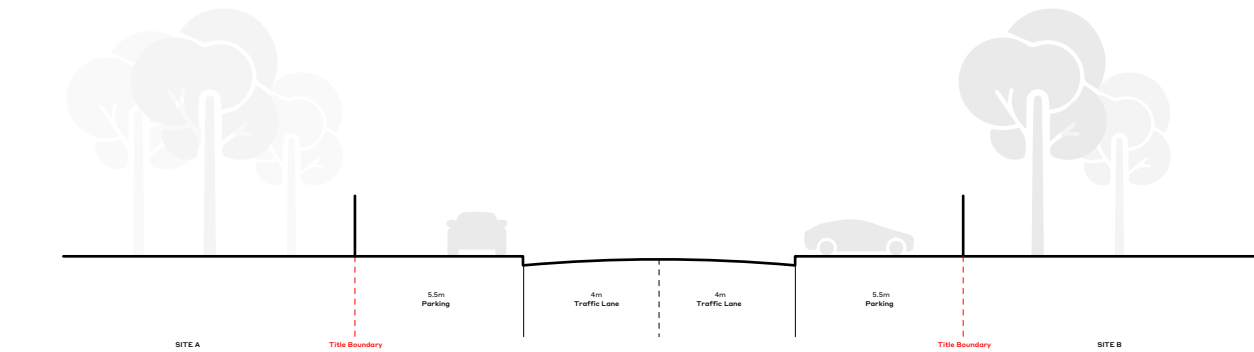
04.05 Interfaces

Rickard Road

Rickard Road is the main north-south connecting spine to the Town Centre, and is set to be considerably widened with the growth of Leppington.

It currently has semi-legal car parking on its Eastern and Western sides, with high traffic due to the school drop off at peak hours.

The new design allows for ample parking and safer pedestrian / bicycle connections.



Existing



DCP

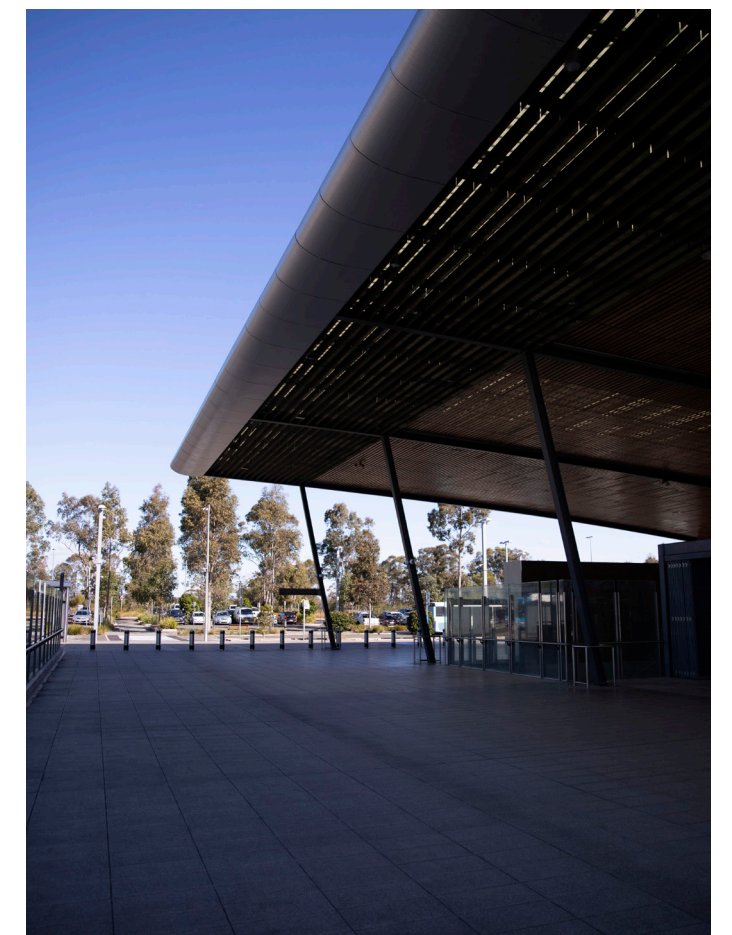
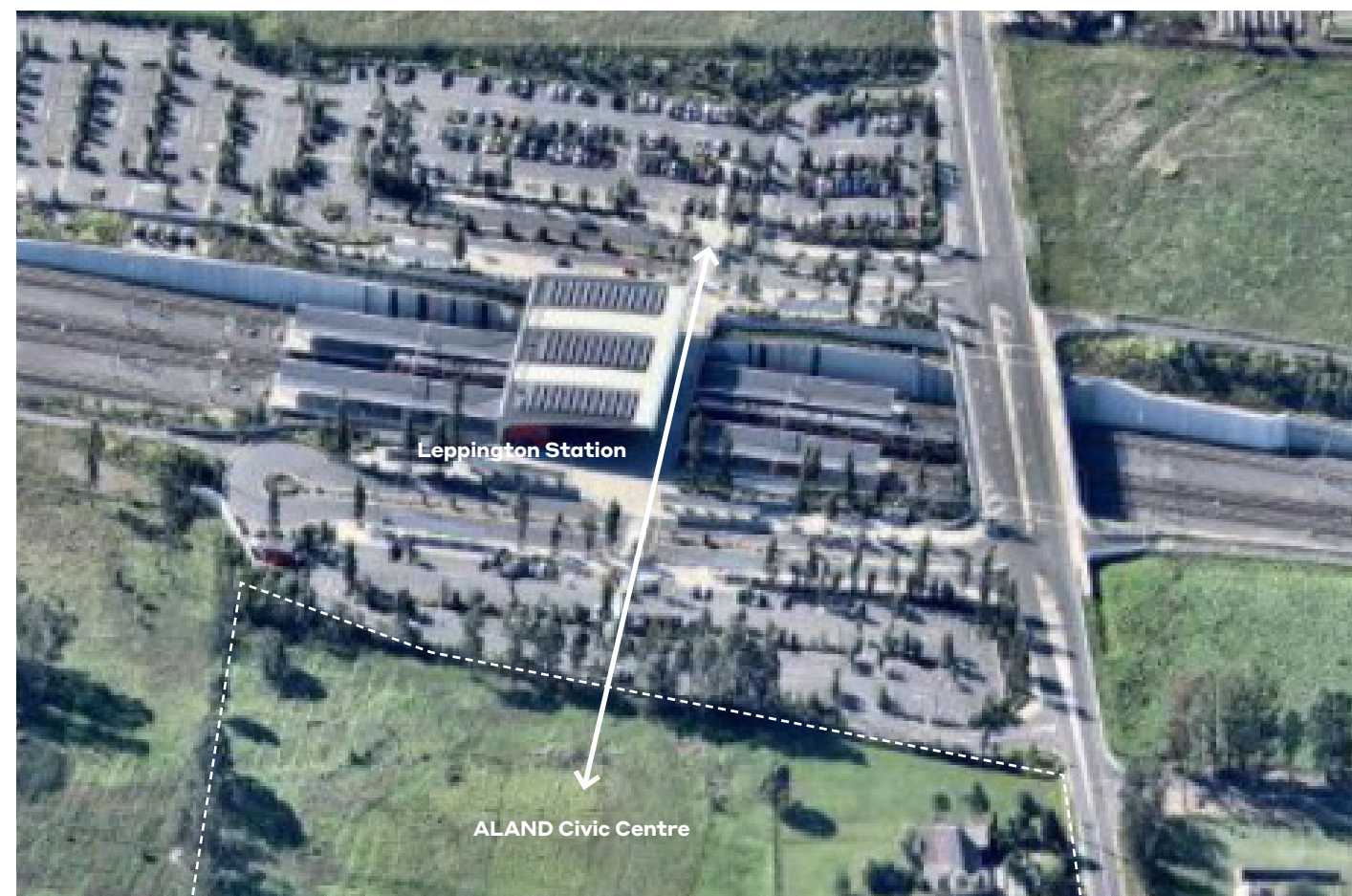


04.05 Interfaces

Leppington Station

The site is bordering the South side of Leppington Station, creating unique opportunities for a North facing public realm and pedestrian connections to public transport.

The site has the potential to be used as a main pedestrian spine for soft transportation (bicycles and pedestrians) through the new neighbourhood.



04.05 Interfaces

Cumberland Plains Woodlands

The project area contains zones with high biodiversity value, in particular, patches of remnant Cumberland Plain Woodland, a listed TEC. It borders and encroaches the South-Eastern portion of the site on Rickard Road.

Future development could seek to retain native vegetation in open space areas, where feasible. This will also ensure consistency with the strategic plans by:

- _Delivering Green Grid connections
- _Increasing urban tree canopy cover
- _Protecting and enhancing bushland and biodiversity
- _Enhancing landscape connectivity

The site offers a streamlined biodiversity assessment process given these various measures to offset the impacts of development.



04.05 Interfaces

Leppington Public School

The site is within walking distance to the Leppington Public School precinct. We see it as a potential to develop a new public connection to be used by the local community before and after school and potentially recreate a legible and safer entry for the school.



Project Benchmarks

05.01 Global Precincts

05.01 Project Benchmarks

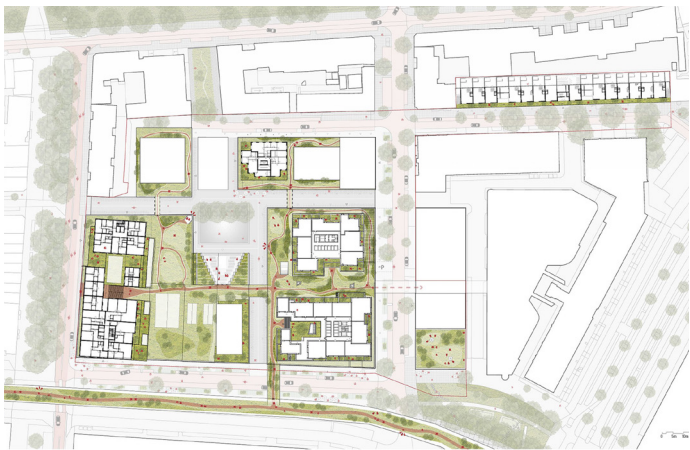
Global Precinct

Zoho Rotterdam - Echo

A stacked and intertwined city with flexible components designed to be a strong socially inclusive neighbourhood.

The master plan transforms a low-rise business area with a strong creative identity into a mixed neighbourhood to meet densification challenges, whilst finding space to accommodate multiple ambitions and stand the test of long term development.

The proposal managed to stack all ambitions and preserve the ZoHo identity in a mixed use, inclusive city neighbourhood that is livable, while being dense.



Transferable Principles

- Brief and ambitions are stacked successfully while maintaining a livable neighbourhood that is relatively dense.
- A mix of varied flexible uses intertwined with the city
- Collective spaces for social cohesion and inclusion.

Westerpark West - MVRDV

A grey isolated office location in Amsterdam-West is transformed into a green, lively neighbourhood of around 750 homes including 12 buildings.

The combination of park and urbanity is unique to Amsterdam. The master plan has an emphasis on green space, architectural diversity where the proposal is a sustainable response to the ever-growing housing demand in Amsterdam.

By varying the building typologies and the character of the public space, a striking neighbourhood arises in the middle of the city.



Transferable Principles

- Generous lush and green open space combined with urbanity
- Diverse building typologies

05.01 Project Benchmarks

Local Precinct

Green Square, Sydney

The City of Sydney is responsible for delivering streets and primary public spaces. The City opened the new Green Square plaza and library ahead of the majority of development ensuring that new residents arrive to public amenity and infrastructure. Green Square is an exemplar of quality public domain and landscape design.

It employs quality materials, and carefully selected street furniture and fittings with pedestrian access given primacy. The Green Square Town Centre DCP defines maximum shadow extents over the plaza, constraining development, particularly to the north, but allowing for innovation in built form.



Transferable Principles

- Early delivery of public domain and community facilities
- Quality public domain
- Share vehicle/pedestrian way integrated with public space
- Solar access to public space

Central Park, Sydney

Central Park delivers a significant quantum of mixed use floor space in buildings up to 30 storeys high. The use mix achieves a highly successful integration with the UTS campus and serves the needs of residents, students and visitors. Public domain and open space are central to the renewal philosophy. Central park visibly extends the green character of its public spaces vertically and has a strong sustainability agenda focused around local power generation and water reuse.



Transferable Principles

- Density done well
- Quality public domain and open space
- Successful mix of uses
- Vertical landscape and sustainability

Urban Framework

01 Leppington Town Centre Precinct

02 Key Project Themes

03 Sustainability Approach

04 Key Features

05 Design Strategy

06.01 Urban Framework

Leppington Town Centre Precinct

As a future growth area, Leppington is a suburb set to undergo significant change, in character, form, and function.

Leppington Town Centre is located within the South West Growth Area and offers the opportunity to provide more new homes close to great public transport links.

Leppington Town Centre is on the T2 Airport, Inner West and South train lines. It takes approximately 45 minutes to reach the Domestic Airport terminal, and approximately 15 minutes to reach the Liverpool CBD by train from this precinct, making it highly suitable for the location of new homes, jobs and community services.

The proposed development will form one of the areas early developments and will foster transformation of the northern part of the Leppington Town Centre.

The concept development is seeking to establish road layouts, building envelopes, heights, gross floor area and uses on the site that will guide future detailed staged development applications for the individual mixed-use buildings.

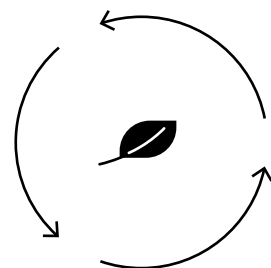
Currently characterised by a low density residential and rural function, Leppington will transform into a major town centre in Sydney's south-west and become a pedestrian friendly centre with retail hubs, dining, commercial and entertainment facilities that connect to the broader Sydney context with public transport links, current and future roadways.



Image above:
Aerial view of Leppington Civic Centre from north

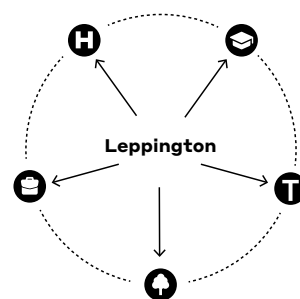
06.02 Urban Framework

Key Project Themes



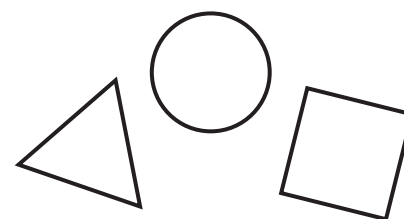
Resilience and Responsive

Future proofing the site by working with existing natural systems to foster resilient places for people



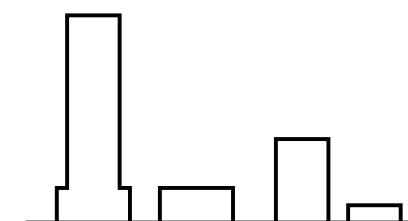
Networked Connectivity

Designing for a 15 minute centre with a legible network of connected places



A Set of Diverse Precincts

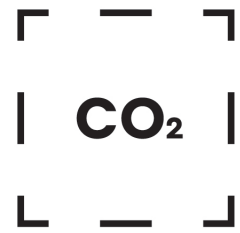
Developing key character zones that respond to context and local amenity



Flexible Urban Structure

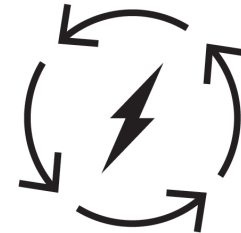
Creating an flexible framework that allows for multiple typologies and staging scenarios

06.03 Urban Framework Sustainability Approach



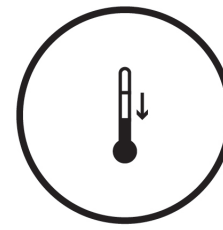
Reducing embodied carbon

The Leppington Civic Centre development will be focusing on procuring materials locally. Carbon emissions and energy consumption are naturally diminished through minimised shipping and storage requirements.



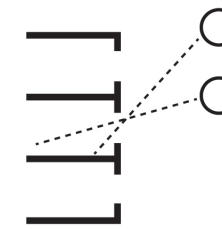
Favouring renewable energy

All residential and commercial towers in the Civic Centre are providing solar farms on roof tops. The implementation of renewable energies will bolster energy supply security and reduces the reliance on fossil fuels.



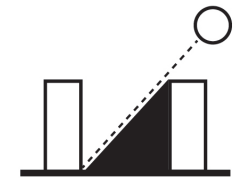
Reducing the heat island effect

By designing with country, we will reduce Heat island effects and reduce the reliance on mechanical means to cool the site and buildings. Leppington civic centre introduces multi-levels of sky gardens and vertical landscape to reduce the impact of heat.



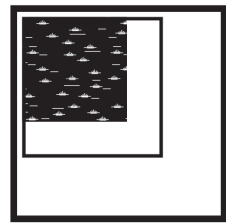
Solar responsive facades

These facades will help control the interior environment within the building, and minimise the energy consumption of building services. Our architecture focuses on introducing character such as recessed balconies and integrated shading devices.



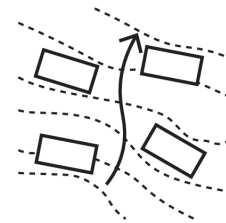
Shadow envelope

Our design principle focuses on thinner, taller towers to the centre of the site that reduces over-shadowing to neighbours and to the public open spaces.



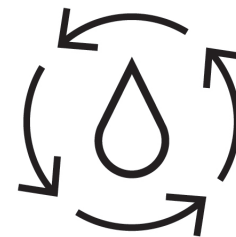
Green ratio (Development vs Parks)

The Leppington Civic Centre provides 8000 Sqm of landscape which is over 25% of the site foot print.



Designing with the topography

The Leppington Civic Centre focuses on integrating podium designs with the natural topography of the land to reduce cutting and filling of soil.



Water management

The Leppington Civic Centre will focus on rain water harvesting by collecting water that falls on roof, hard surfaces etc that are otherwise wasted and will help in replacing reticulated water used in a wide range of applications – both indoor and outdoor.



Designing with Country

We will design places that promote reflection on deep-time memory of events - where we can celebrate our achievements and aim to repair damaged relationships. The design also responds to open spaces and landscape settings to which the development is located.



Energy Efficiency

We focus on building Smart buildings that will constantly monitor energy usage per building which will have great impact on urban energy usages and performances. Building compactness and orientation, are other factors considered.

06.04 Urban Framework

Key Features



06.05 Urban Framework Design Strategy



Celebrate Natural Systems

Amidst charming avenues, there are expansive outdoor areas that bring life to the heart of the Leppington Civic Centre, forming a lush, varied expanse of green. Growing the tree canopy will counteract heat, foster biodiversity, and provide better sun protection. This is an opportunity to rediscover the lush surroundings of the Camden district and create community-oriented, vibrant outdoor spaces for recreation and revitalisation.



Foster a Networked Precinct

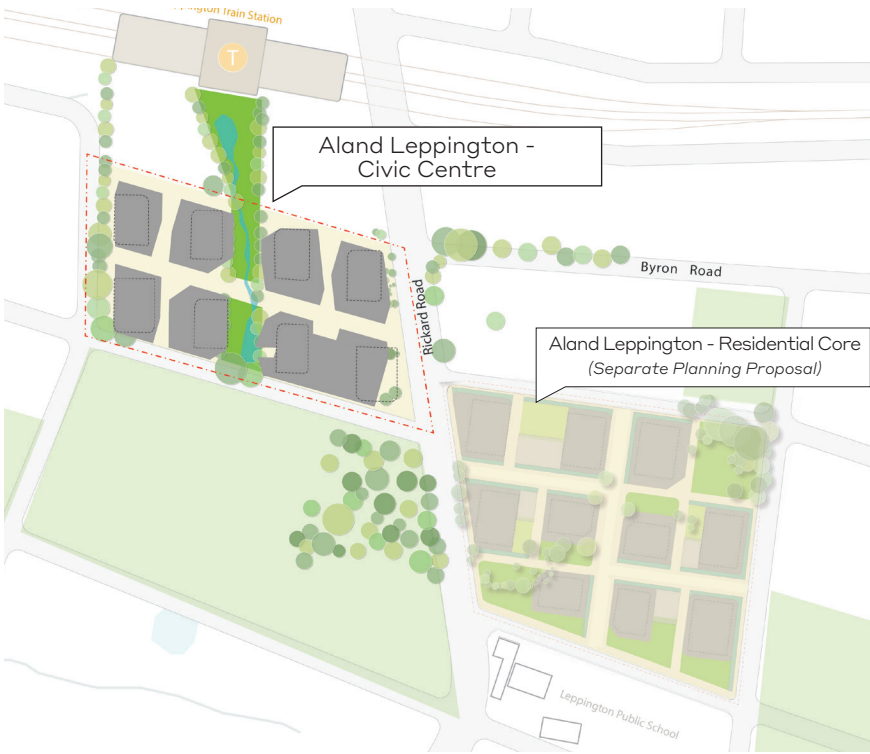
The site's adjacency to Leppington Station enables a transit-oriented development to emerge that places an emphasis on connector networks to facilitate ease of access to and from transit nodes. These networks respect the placement of open spaces and



A Connected Urban Structure

The Urban Structure provides an efficient grid of networks as well as informal passages through connecting open spaces. This forms a green spine through the site interacting with retail frontages forming a friendly neighbourhood environment between residents and the wider community. The park at the south of the site forms an activated frontage for all the retail interfaces and a lure to local community.

06.05 Urban Framework Design Strategy



Activate Precinct Character

The proposal for the Leppington Civic Centre presents a unique opportunity to establish an active and vibrant urban precinct by strategically integrating a diverse mix of land uses. This approach aims to create a dynamic hub of activity that spans day and night, emphasizing a blend of residential, commercial, and retail spaces designed in a walkable and accessible layout to encourage continuous pedestrian engagement.

Diversity of Open Space

The Leppington Civic Centre is anchored by a diverse and abundant array of public open spaces that contribute to the overall well-being and vitality of the community. Through a meticulous design approach, the development will offer a variety of thoughtfully planned and accessible public areas designed to cater to different needs, preferences, and activities.

These public open spaces will vary in scale and character, encompassing lush parks, vibrant plazas, tranquil courtyards, and tree-lined promenades. The design will prioritize inclusivity, ensuring that people of all ages and backgrounds can enjoy these spaces. Active recreational zones, such as playgrounds, sports courts, and fitness areas, will provide opportunities for physical activity and social interaction, fostering a sense of community engagement.

Future Propagation

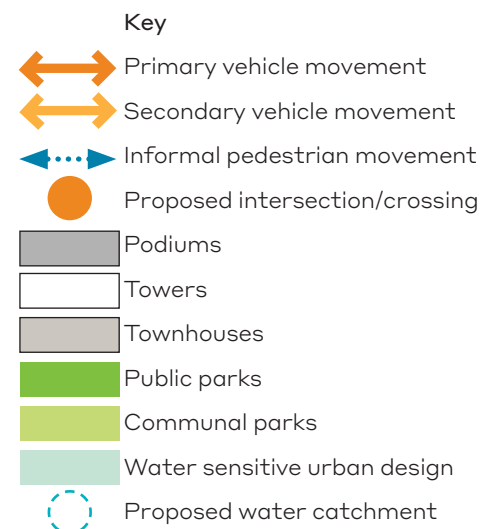
The Leppington Civic Centre has been designed with future proofing in mind. The proposal anticipates the evolving needs and aspirations of future generations. This forward-thinking strategy involves flexible land use allocation, adaptable infrastructure systems, and sustainable design principles. By integrating smart city technologies, green infrastructure, and multi-modal transportation solutions, the masterplan ensures resilience to changing urban dynamics while preserving a high quality of life for future residents and visitors. This holistic approach to future-proofing guarantees the lasting relevance, sustainability, and enduring value of the Leppington Civic Centre as a dynamic and thriving urban hub for generations to come.

06.05 Urban Framework Design Strategy

This proposal represents one of the initial developments set to trigger a positive transformation in the northern sector of Leppington Town Centre. The envisioned project envisions multi-story mixed-use buildings atop basement-level parking, combining ground-level retail and commercial spaces with residential units above.

The fundamental aim of this conceptual undertaking is to lay the foundation for forthcoming staged development applications for each individual mixed-use building. By defining aspects like road layouts, building dimensions, heights, overall floor space, and designated uses, this proposal will provide essential guidance for the future evolution of the development.

Furthermore, the plan embraces broader community needs by harnessing the area's existing natural and built attributes, while introducing new high-quality urban areas that enhance connectivity across the larger East-West precinct. This transformation of the site's rural character is poised to create a dynamic, versatile community space conducive to urban living.



SCALE: 1: 2,500@A3



Image:
Aerial View of Leppington Master Plan from North

Precinct Master Plan

01 Urban Morphology

02 Master Plan

03 Precinct Plan

04 Site A - Sub Precincts

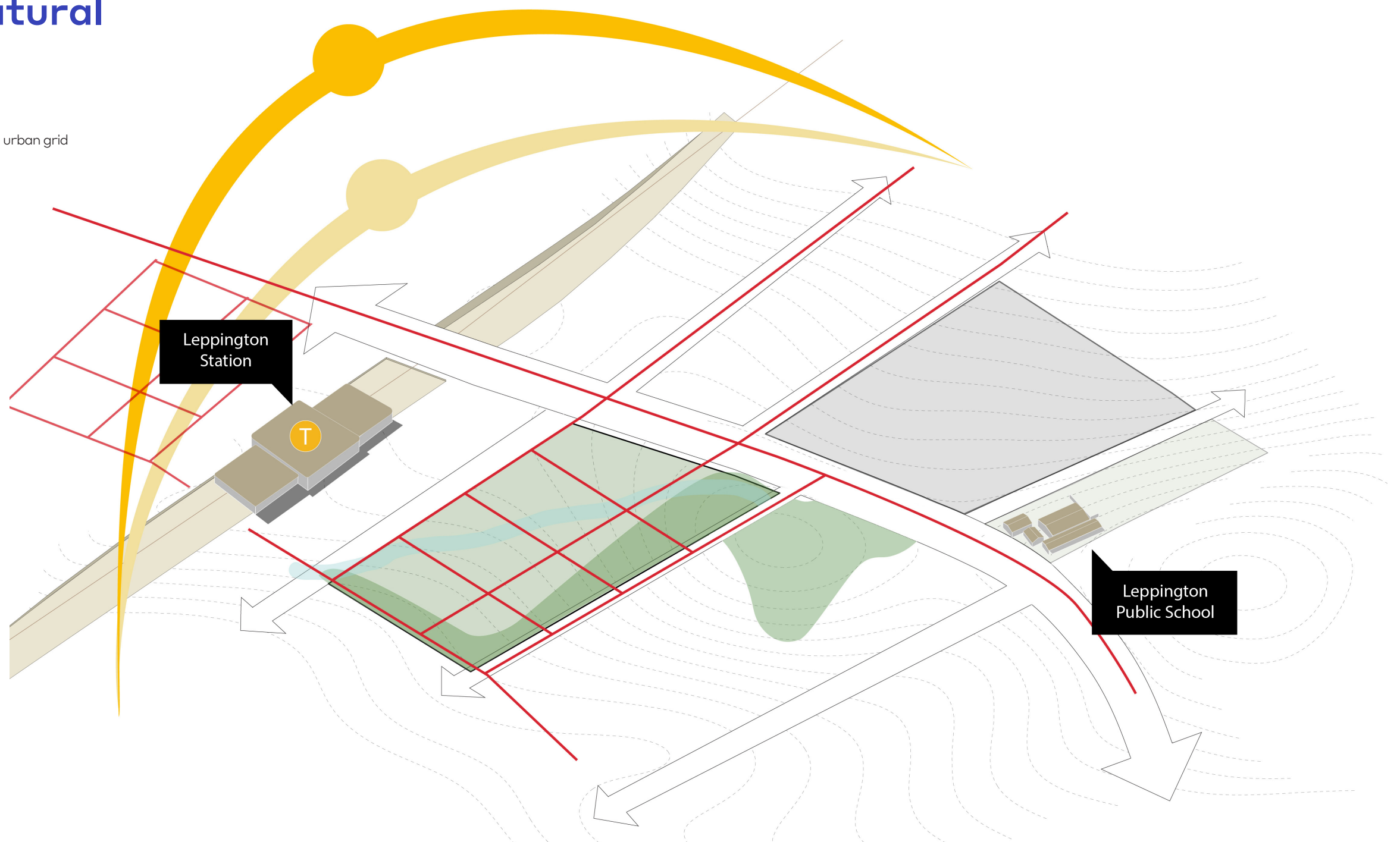
05 Development Summary

06 Appendix - Envelope Drawings

07.01 Urban Morphology

Urban Grid & Natural Systems

The master plan is setting new street networks and urban grid whilst respecting the site's natural systems, .

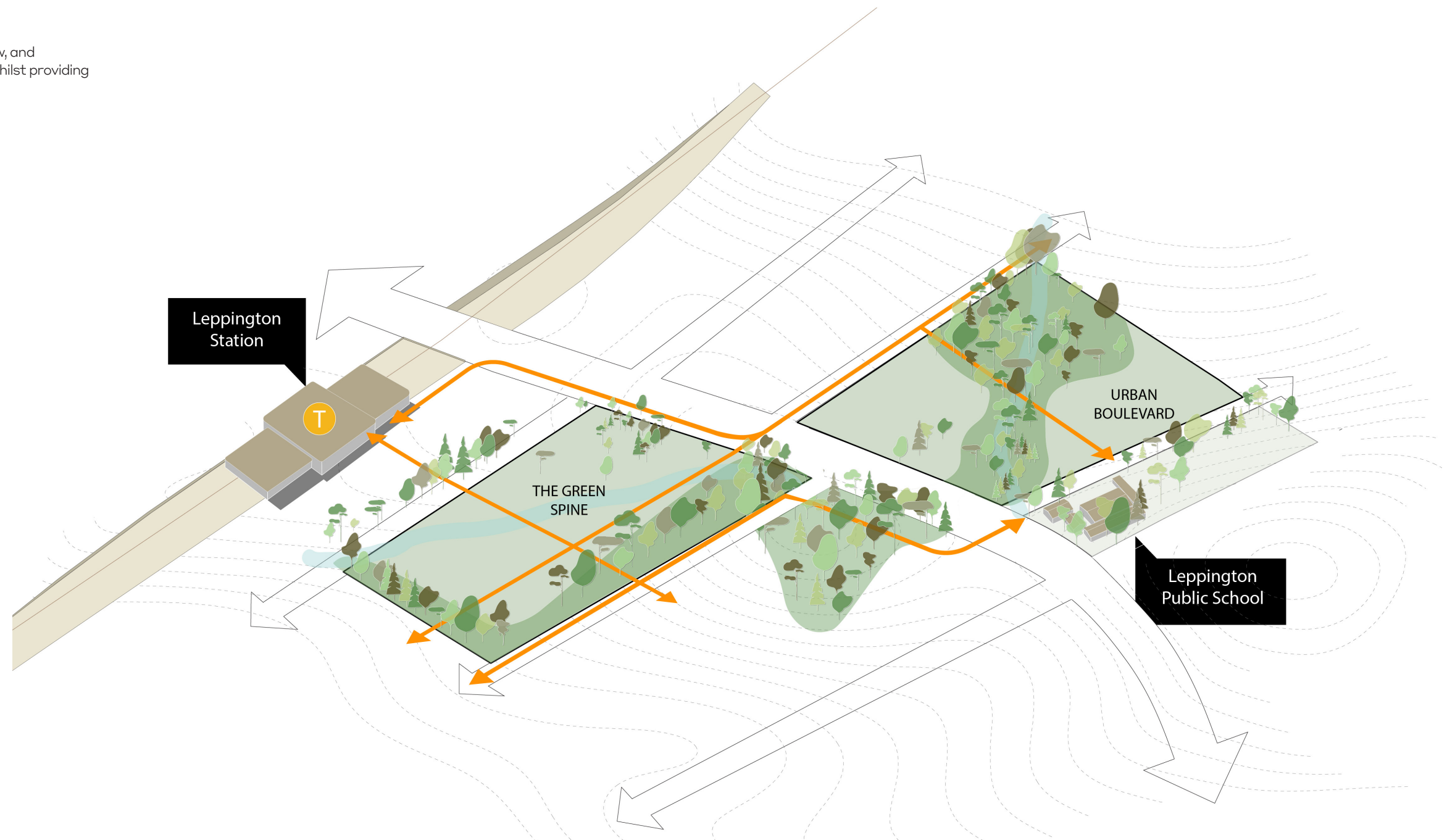


— Indicated urban grid

07.01 Urban Morphology

Key Connections

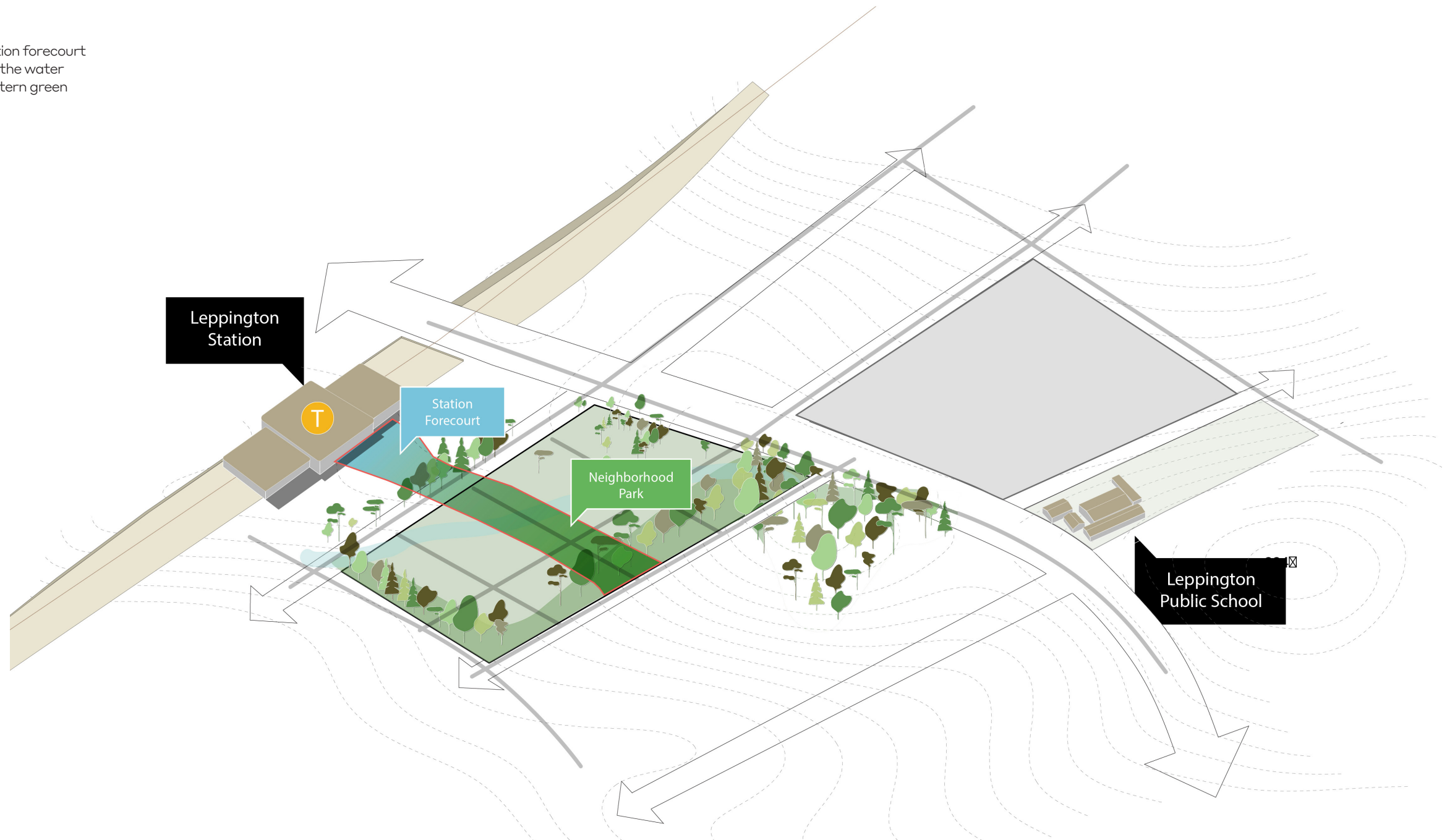
The master plan aims to maintaining the water flow, and designing with existing trees as much as possible, whilst providing safe and accessible pathways for all residents.



07.01 Urban Morphology

Open Spaces

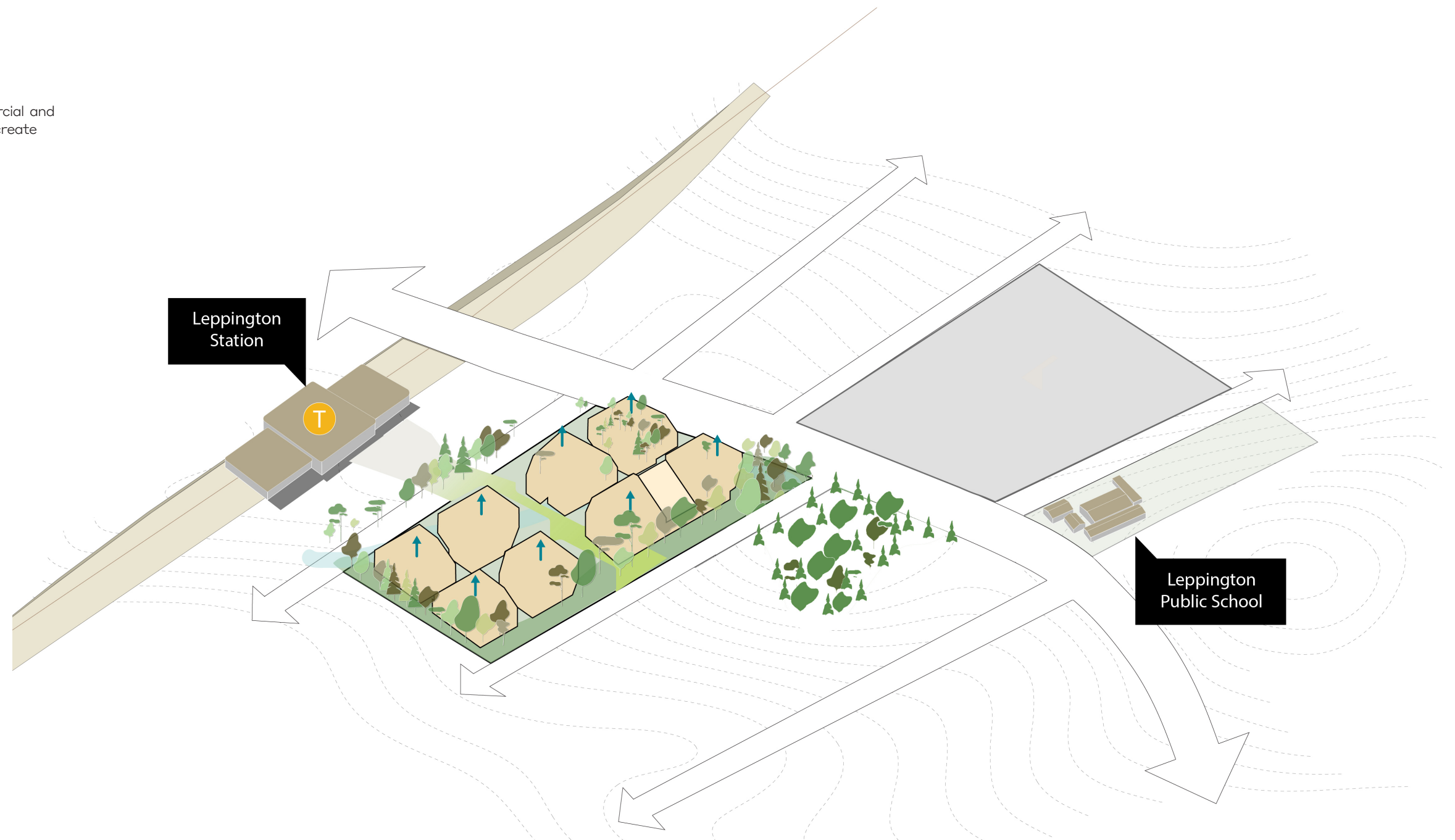
A new network of open spaces is built along the station forecourt and a sequence of community pocket greens follow the water flow and the sloping ground towards the south-western green spaces.



07.01 Urban Morphology

Urban Structure & Street Walls

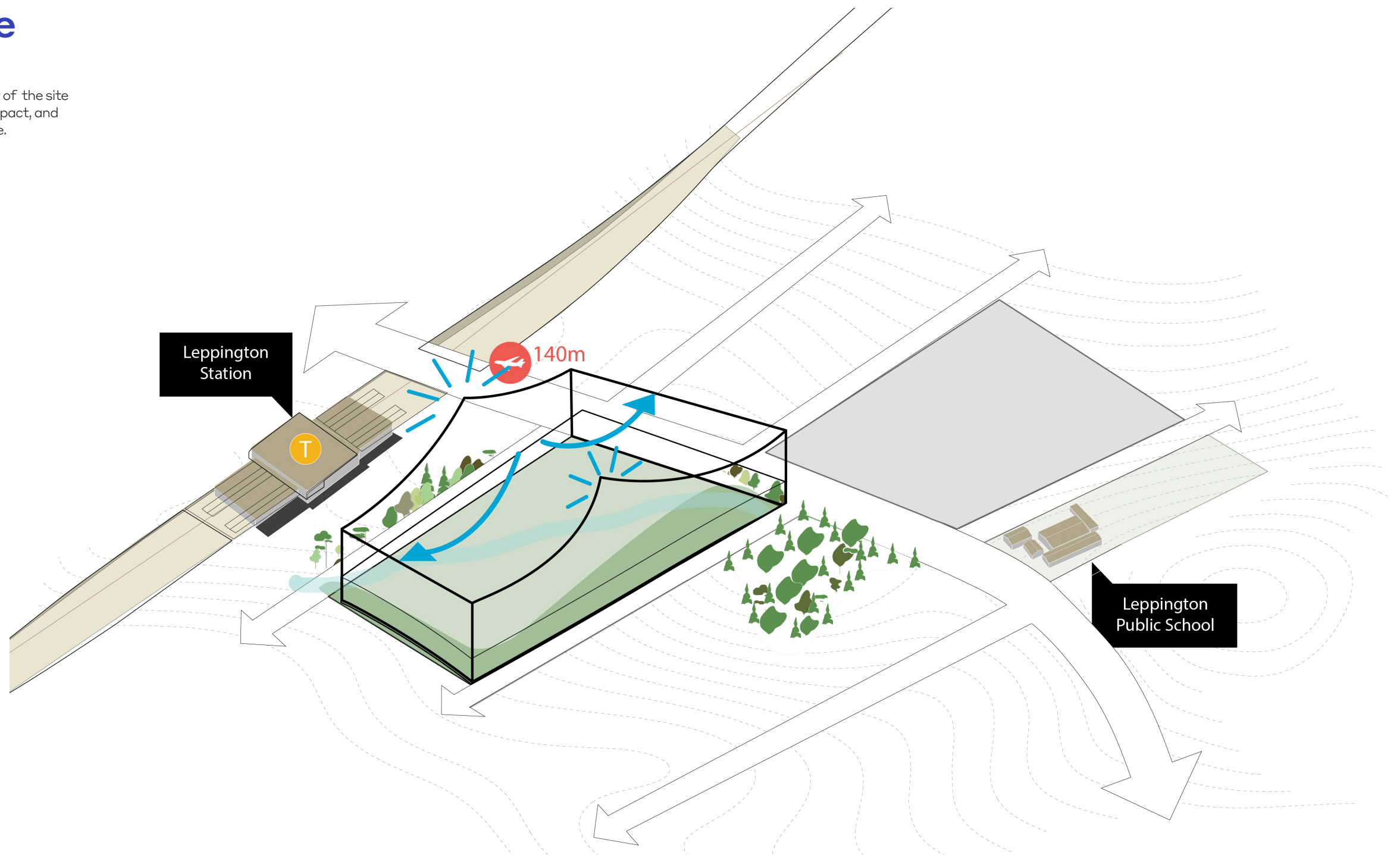
Modulated podium levels to accommodate commercial and retail creating a diverse streetscape are utilised to create character and identity.



07.01 Urban Morphology

Height Response

At 140m, the built form steps down from the center of the site to allow for maximum solar access amenity, view impact, and creating a diverse scale and bulk throughout the site.



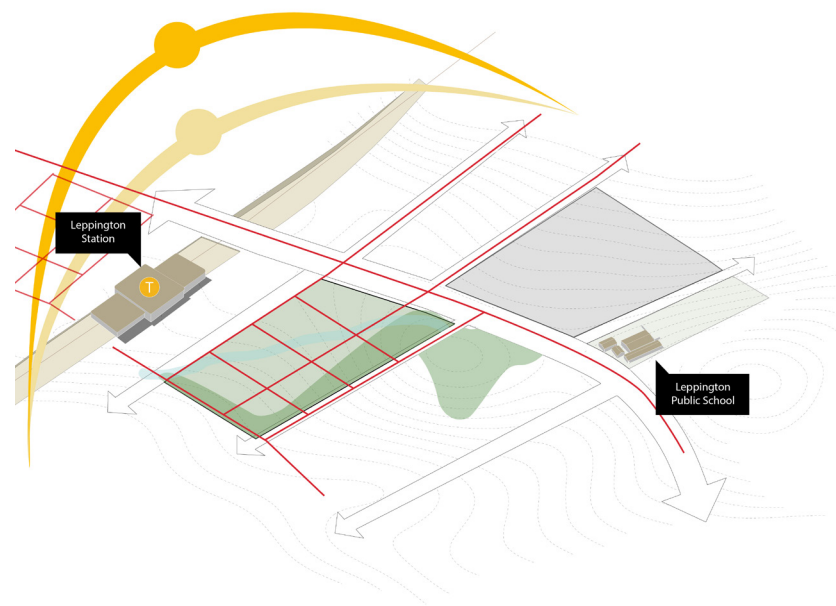
07.01 Urban Morphology

Building Typologies Max Tower / Push Pull

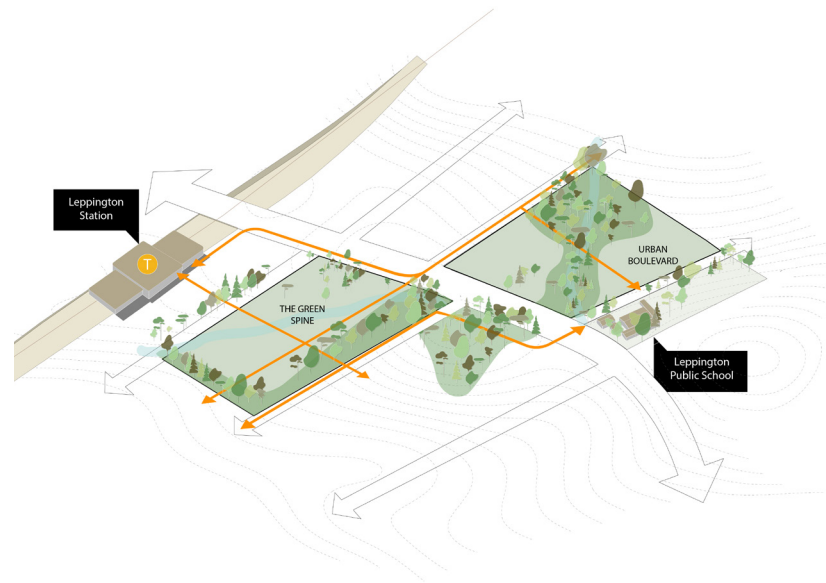
Diversity of heights, intensities along Rickard Road, lower mass around the parks are utilised to support a better human scale.



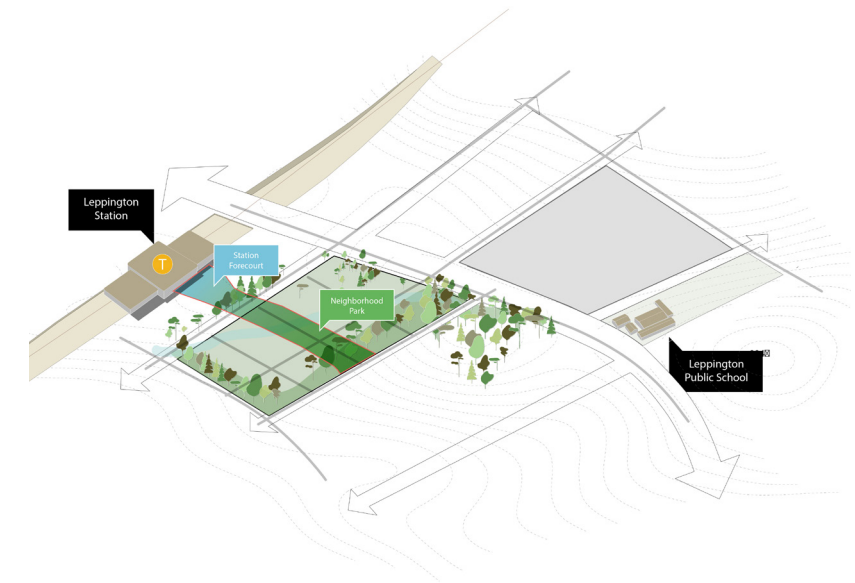
07.01 Urban Morphology Summary



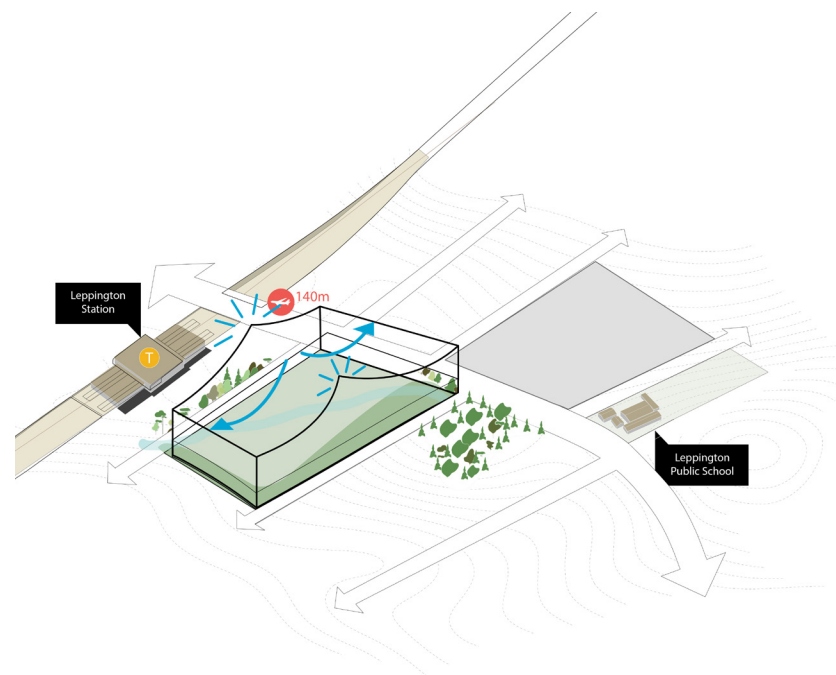
Urban Grid and Natural Systems



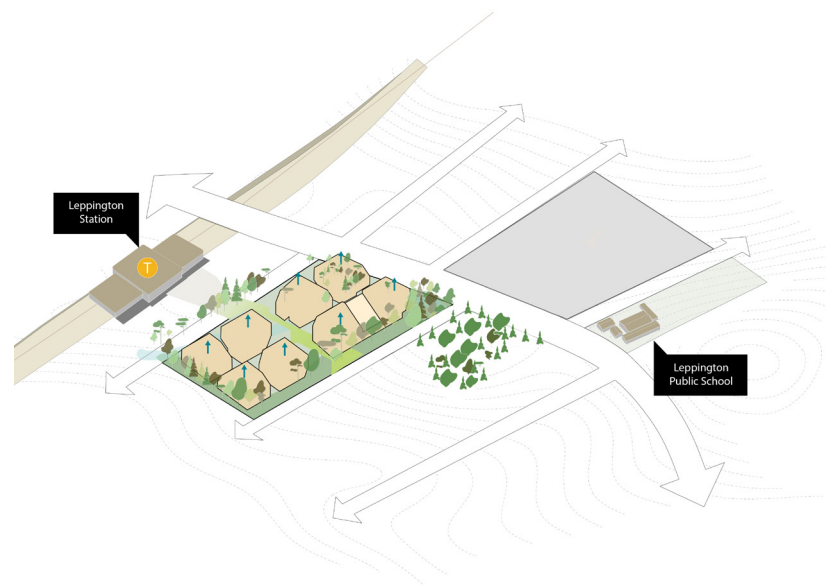
Key Connections



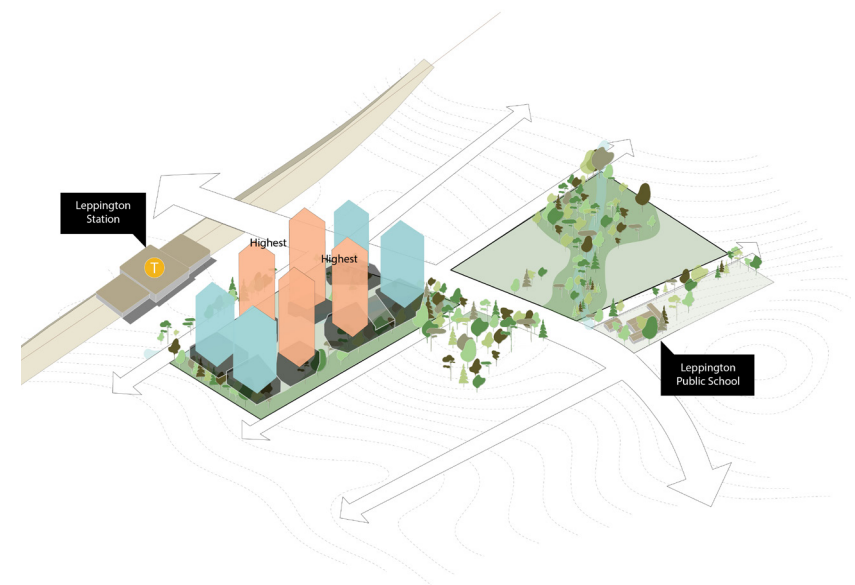
Open Spaces



Height Response



Urban Structure and Street Walls



Building Typology

07.02 Illustrated Master Plan



07.03 Master Plan Key Moves



07.03 Master Plan

Key Moves

Built Form



Program & Use



Residential
Mixed-use
Public School

07.04

A1 - Sub Precinct

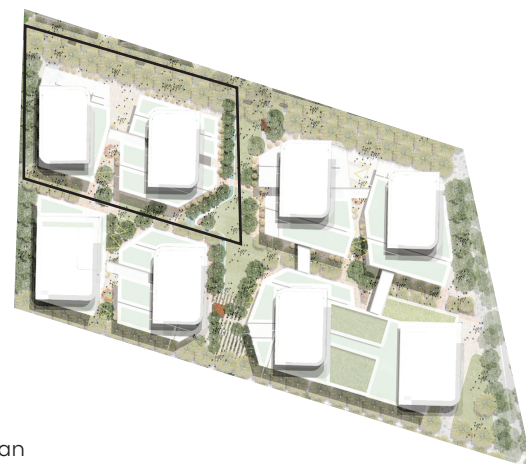
Retail, Commercial and Residential Tower

Precinct Character

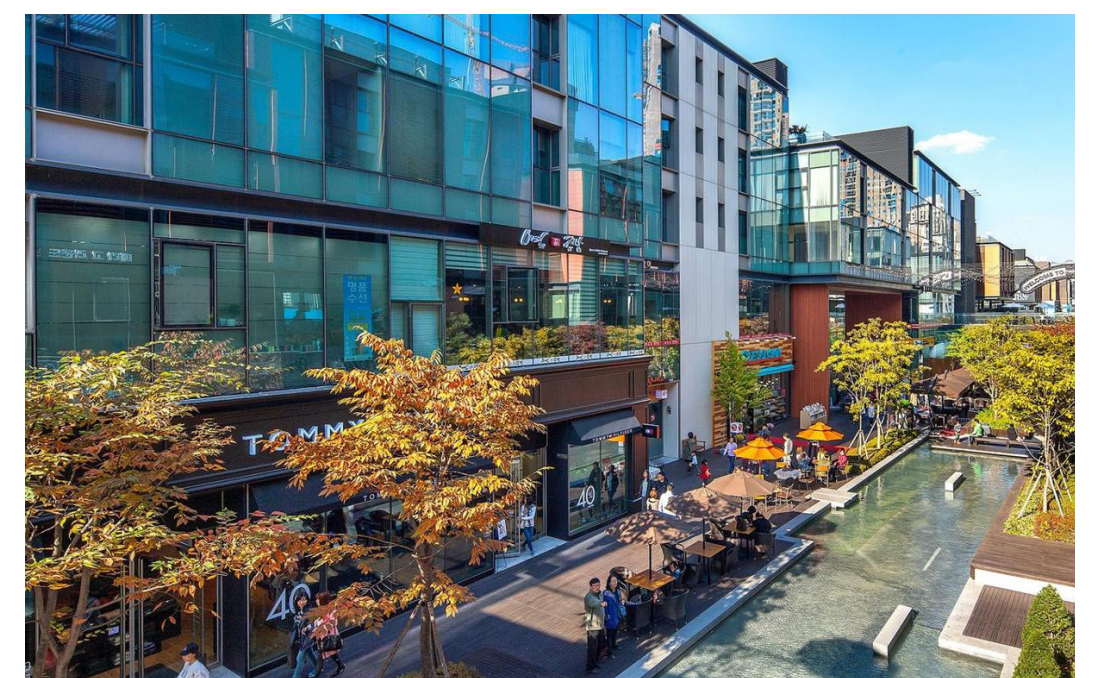
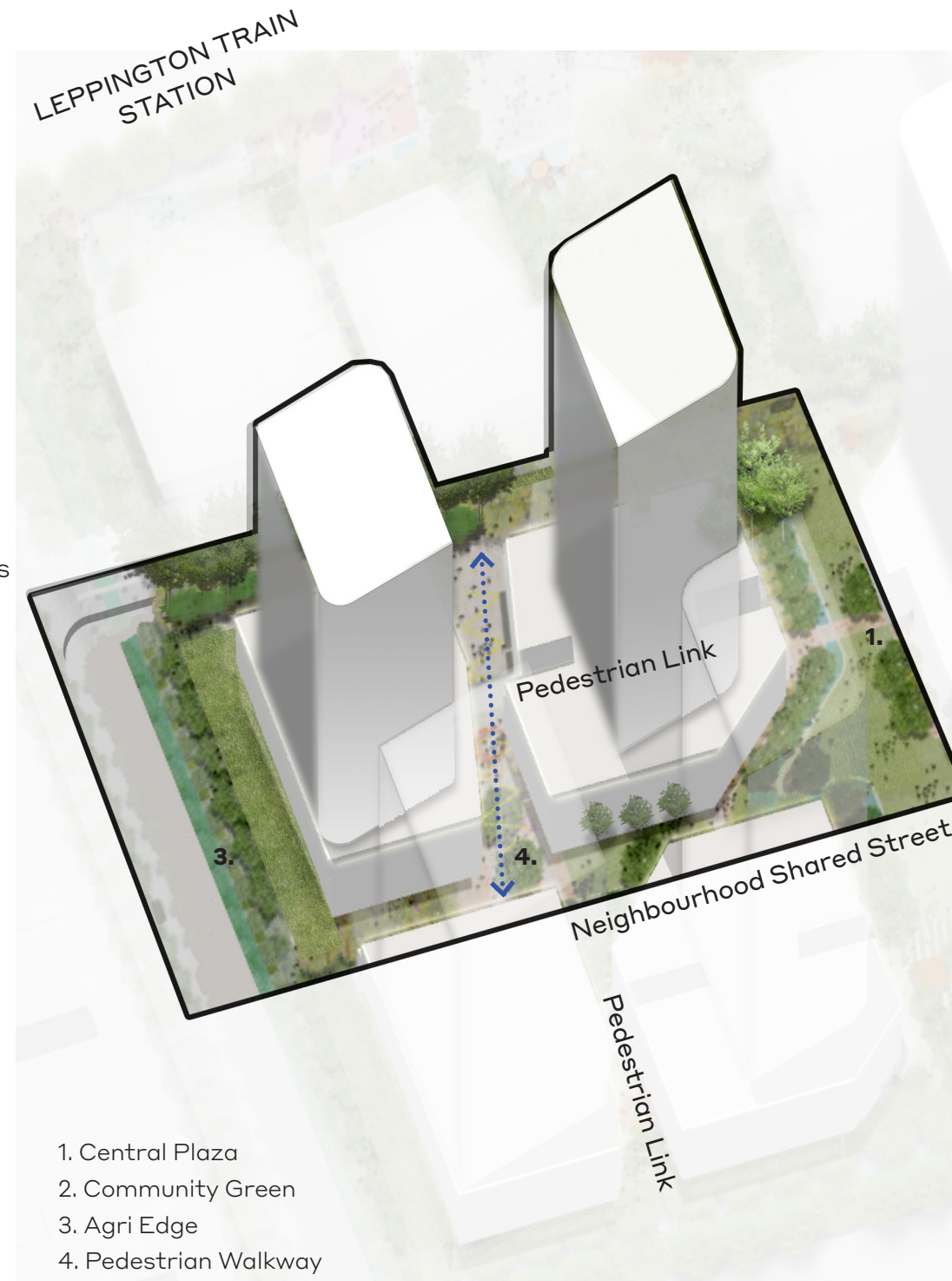
Located at the northwest of the site, there is sufficient solar access to the precinct providing an attractive healthy lifestyle to residents and visitors.

A varied height to boutique apartments and high rise apartments with different view vantages creates a diverse offering to prospective residents.

At ground level, retail spaces fronting the central green will encourage more pedestrian activation through the site and offer residents and visitors a place to relax and unwind fronting the central green spine.



Key PLa



07.04

A2 - Sub Precinct

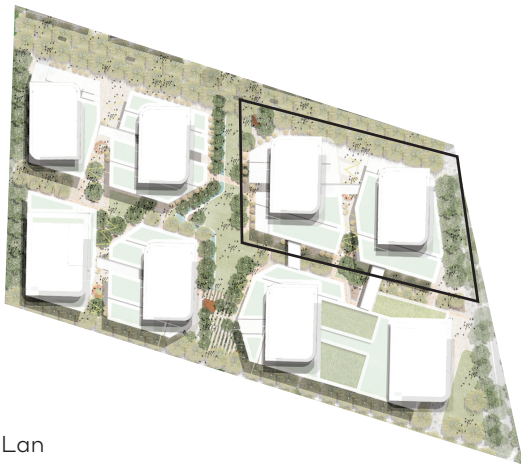
Retail, Commercial and Residential Tower

Precinct Character

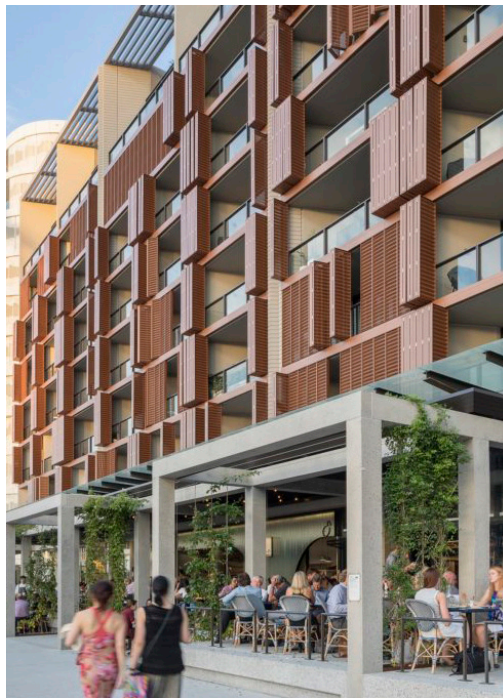
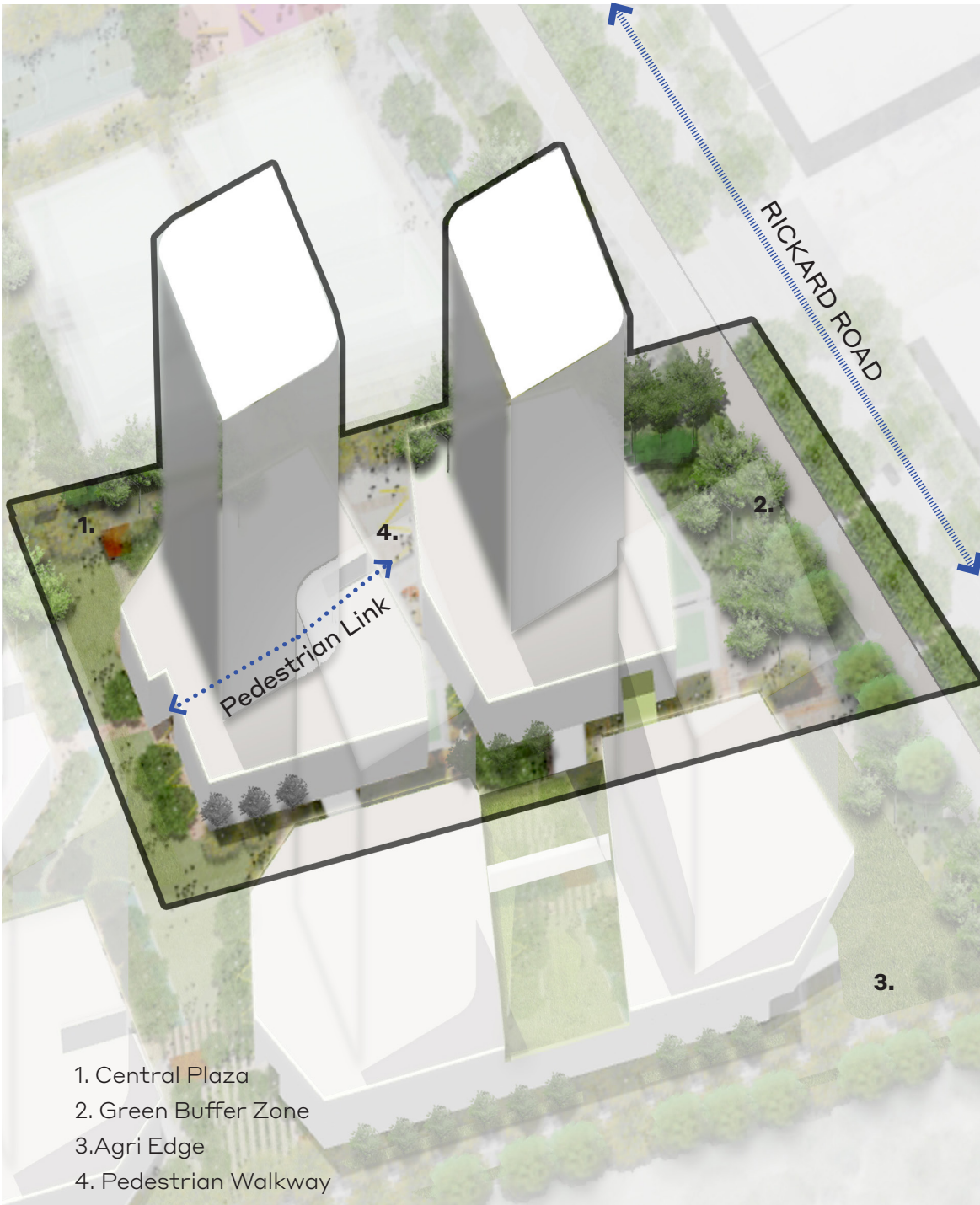
Situated at the northeast of the site, this sub-precinct benefits from convenient access via the through site walkway and Rickard Road to the east, ensuring easy accessibility to public transportation. Furthermore, an 8-meter green buffer zone offers a substantial setback from Rickard Road, enhancing the overall appeal and aesthetic of the area.

Retail spaces that face the central plaza can indeed enhance pedestrian activation and engagement within the site.

The north-south pedestrian through-site links invite pedestrian connections from the station to the southern neighbourhood, further enhancing the accessibility and connectivity of the site, and provide amenities to the residents of all ages to enjoy, making it suitable for multi-generational families.



Key PLa



07.04

A3 - Sub Precinct

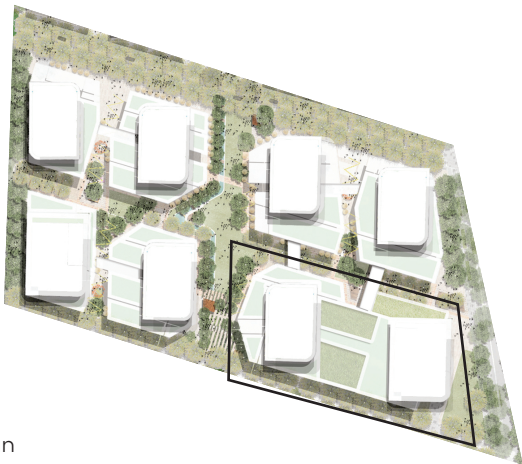
Retail, Commercial and Residential Tower

Precinct Character

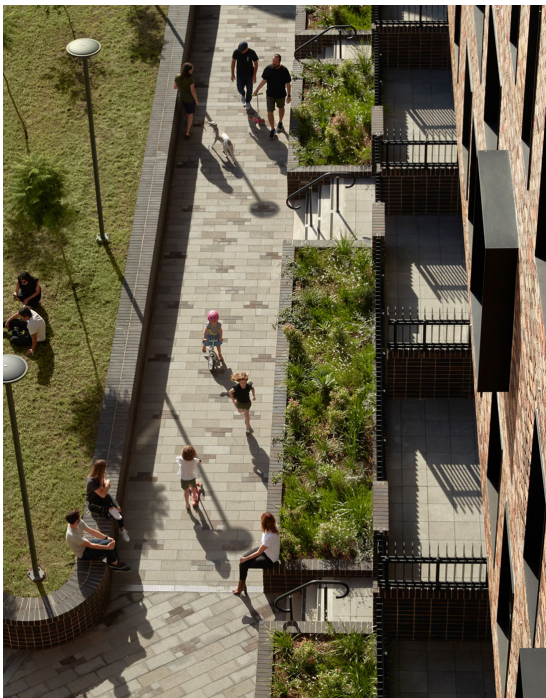
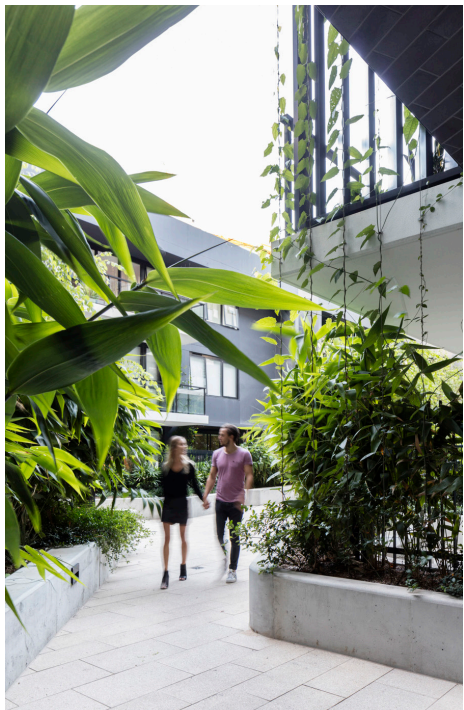
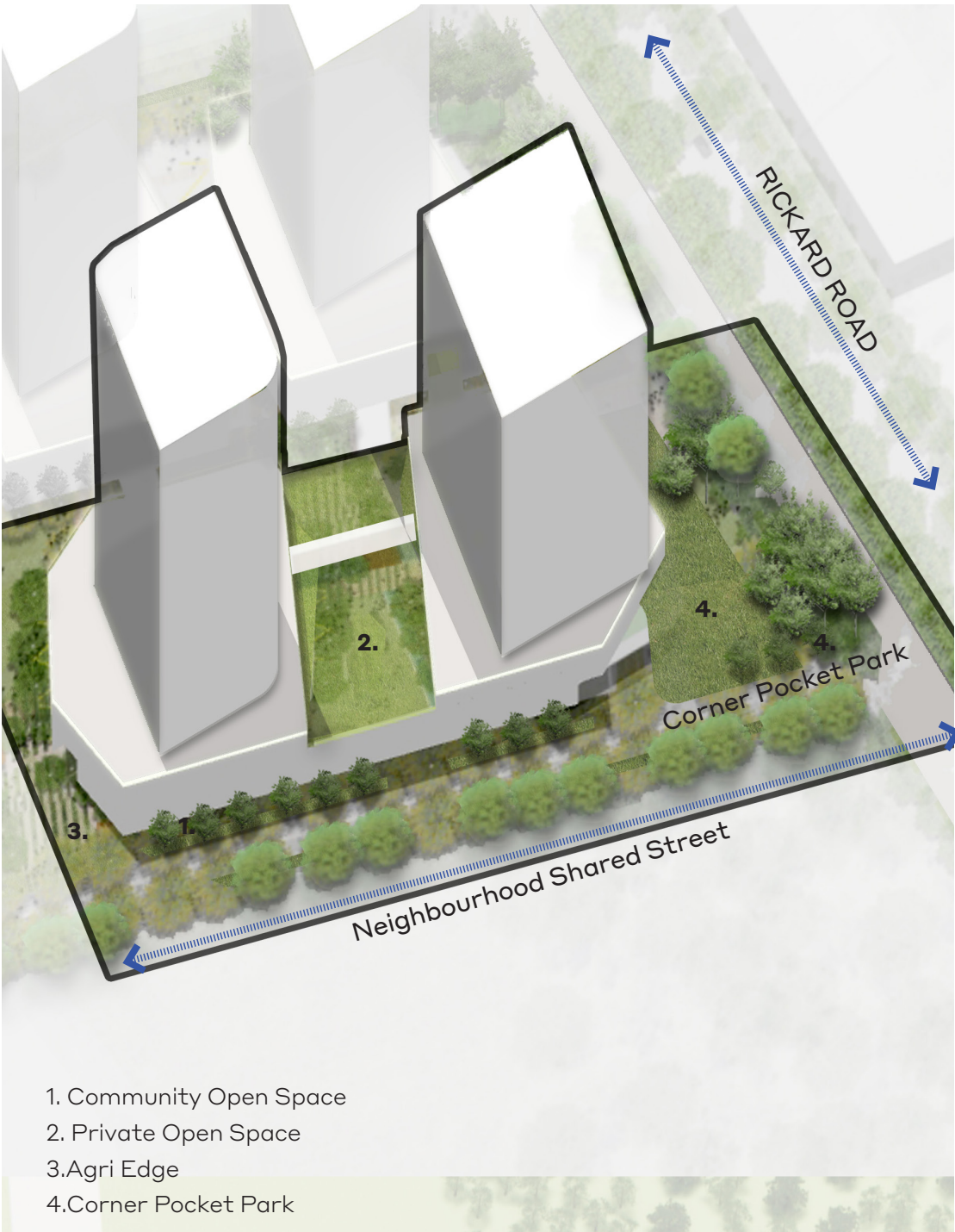
Located at the southeast of the site, the sub precinct is accessed by the precinct connector Rickard Road to the east providing accessible public transport and pedestrian movement from the station to the site.

At street level, the site expresses a sense of community and civic presence through the incorporation of an active pocket park and retail spaces. This pocket park not only encourages a healthy lifestyle but also provides more trees and greenery, which helps cool down the urban environment by offering additional canopy cover that mitigates urban heat.

The community garden on the western ground level is designed to cater to residents of all age groups, offering enjoyable amenity that is particularly suitable for family connection.



Key PLan



07.04

A4 - Sub Precinct

Retail, Commercial and Residential Tower

Precinct Character

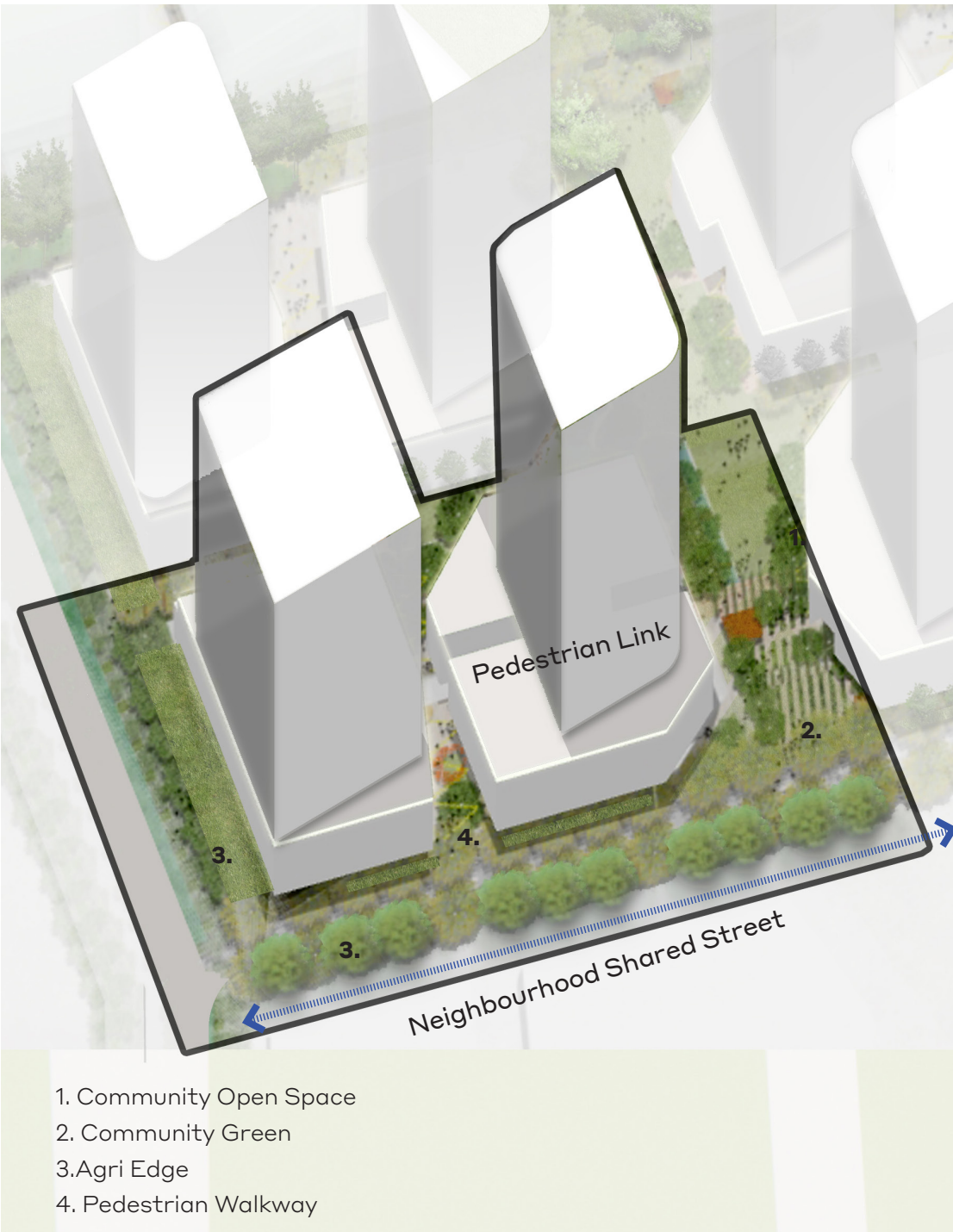
Located in the southwest of the site, this sub precinct is accessible by shared neighbourhood street providing more privacy to residents.

At ground level, retail spaces fronting the community park will invite pedestrian connections from surrounding neighbourhood street, providing a leafy community streetscape.

The pedestrian through site links will provide amenities to the residents of all ages to enjoy interaction via daily needs shopping and convenience.

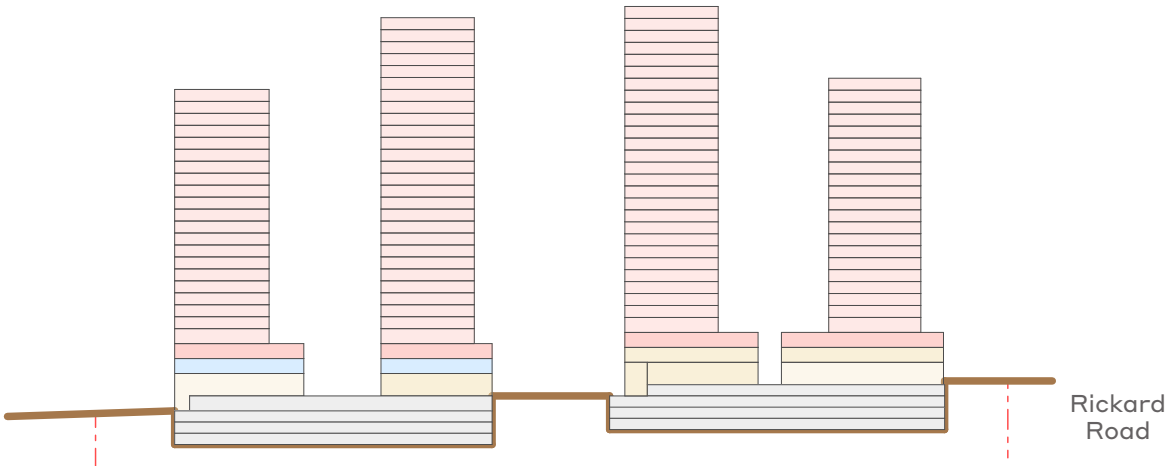


Key P L an

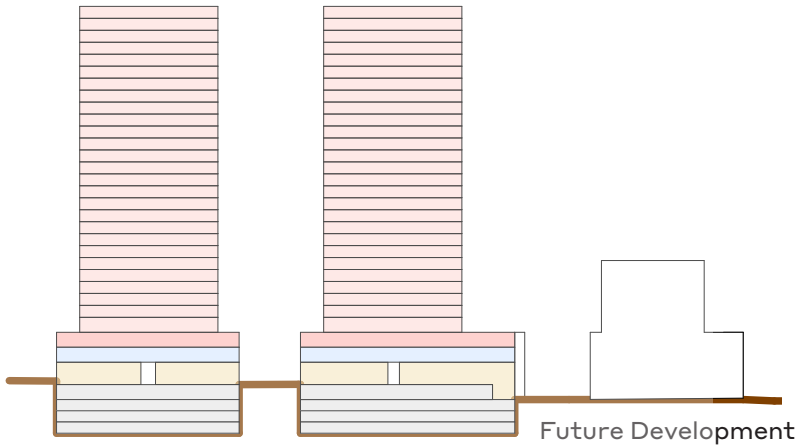


07.05 Masterplan

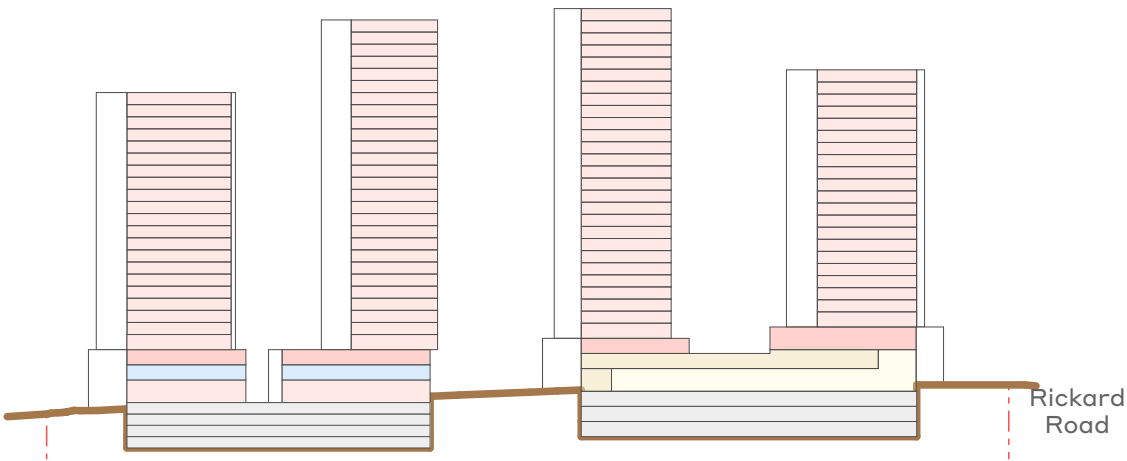
Sections (sc. 1:2000 @ A1)



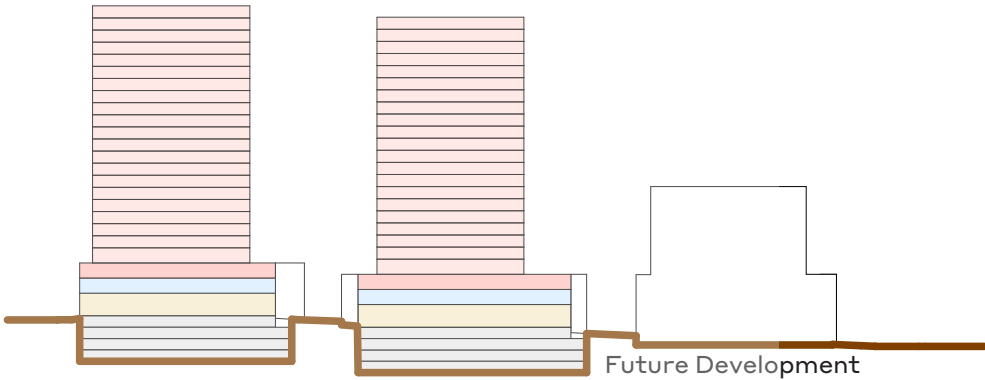
Civic Centre - Section A



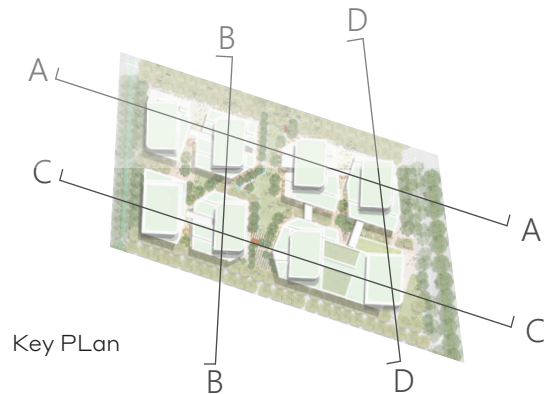
Civic Centre - Section B



Civic Centre - Section C



Civic Centre - Section D



Key Plan



07.06 Development Summary

| Summary | | Area (m2) | |
|------------|---------|---------------|---------|
| Site Area | | <u>32,390</u> | |
| | | | |
| Total GBA | 283,714 | Retail | 20,424 |
| Total GFA | 183,872 | Residential | 157,727 |
| Total NSA | 160,803 | Commercial | 5,721 |
| Total FSR | 5.7 | | |
| Total Apts | 1,554 | | |



Image:
Aerial view of Leppington Civic Centre from North

| | # floors | GBA per floor | Total GBA | GFA input | Total GFA | NSA input | TOTAL NLA | Total # units *NSA/80 | Total # cars required |
|--------------------------|----------|---------------|-----------|-----------|-----------|-----------|-----------|-----------------------|-----------------------|
| Building A | | | | | | | | | |
| Lower Ground | 1 | 83 | 83 | 80% | 66 | 85% | 56 | 1 | 1 |
| Upper Ground | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 (Amenity) | 1 | 1,547 | 1,547 | 80% | 1,238 | 85% | 1,052 | | |
| Tower | 21 | 905 | 19,005 | 80% | 15,204 | 85% | 12,923 | 159 | 159 |
| Building B | | | | | | | | | |
| Lower Ground | 1 | 89 | 89 | 80% | 71 | 85% | 61 | 1 | 1 |
| Upper Ground | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 (Amenity) | 1 | 1,667 | 1,667 | 80% | 1,334 | 85% | 1,134 | | |
| Tower | 27 | 905 | 24,435 | 80% | 19,548 | 85% | 16,616 | 205 | 205 |
| Building C | | | | | | | | | |
| Lower Ground | 1 | 81 | 81 | 80% | 65 | 85% | 55 | 1 | 1 |
| Upper Ground | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 (Amenity) | 1 | 1,493 | 1,493 | 80% | 1,194 | 85% | 1,015 | | |
| Tower | 27 | 905 | 24,435 | 80% | 19,548 | 85% | 16,616 | 205 | 205 |
| Building D | | | | | | | | | |
| Lower Ground | | | | | | | | 0 | 0 |
| Upper Ground | 1 | 49 | 49 | 80% | 39 | 85% | 33 | 0 | 0 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 | 1 | 1,537 | 1,537 | 80% | 1,230 | 85% | 1,045 | | |
| Tower | 21 | 905 | 19,005 | 80% | 15,204 | 85% | 12,923 | 159 | 159 |
| Building E | | | | | | | | | |
| Ground | 1 | 56 | 56 | 80% | 45 | 85% | 38 | 0 | 0 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 (Amenity) | 1 | 1,551 | 1,551 | 80% | 1,241 | 85% | 1,055 | | |
| Tower | 21 | 1,150 | 24,150 | 80% | 19,320 | 85% | 16,422 | 208 | 208 |
| Building F | | | | | | | | | |
| Ground | 1 | 97 | 97 | 80% | 78 | 85% | 66 | 1 | 1 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 (Amenity) | 1 | 1,407 | 1,407 | 80% | 1,126 | 85% | 957 | | |
| Tower | 27 | 905 | 24,435 | 80% | 19,548 | 85% | 16,616 | 205 | 205 |
| Building G | | | | | | | | | |
| Ground | 1 | 81 | 81 | 80% | 65 | 85% | 55 | 1 | 1 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 (Amenity) | 1 | 1,652 | 1,652 | 80% | 1,322 | 85% | 1,123 | | |
| Tower | 27 | 905 | 24,435 | 80% | 19,548 | 85% | 16,616 | 205 | 205 |
| Building H | | | | | | | | | |
| Lower Ground | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Ground | 1 | 115 | 115 | 80% | 92 | 85% | 78 | 1 | 1 |
| Podium Level 1 | 0 | 0 | 0 | 80% | 0 | 85% | 0 | 0 | 0 |
| Podium Level 2 (Amenity) | 1 | 1,604 | 1,604 | 80% | 1,283 | 85% | 1,091 | | |
| Tower | 21 | 1,150 | 24,150 | 80% | 19,320 | 85% | 16,422 | 202 | 202 |
| TOTALS | | | | | | | | | |
| | | GBA | 197,159 | GFA | 157,727 | NSA | 134,068 | 1,554 | 1,554 |
| Competition FSR | | | 171,136 | | 137,124 | | 116,555 | 1,555 | |

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Image:
Rickard Road Street View Looking South

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A

Appendix

Architectural Layouts



Image:
Rickard Road Street View Looking North

Public Domain

Central to the development proposal is the continuum of a community green spine from the Station south through the site. Four north-south oriented pedestrian walkways run through the site aligned the existing topography and trees; with east-west undercover building laneways creating a retail network between.

Each residential block is also centred around podium rooftop communal open spaces for use by residents and outlook from surrounding apartments.

Further detail on each of the public spaces and the proposed streetscapes can be found in the landscape architect's statement.

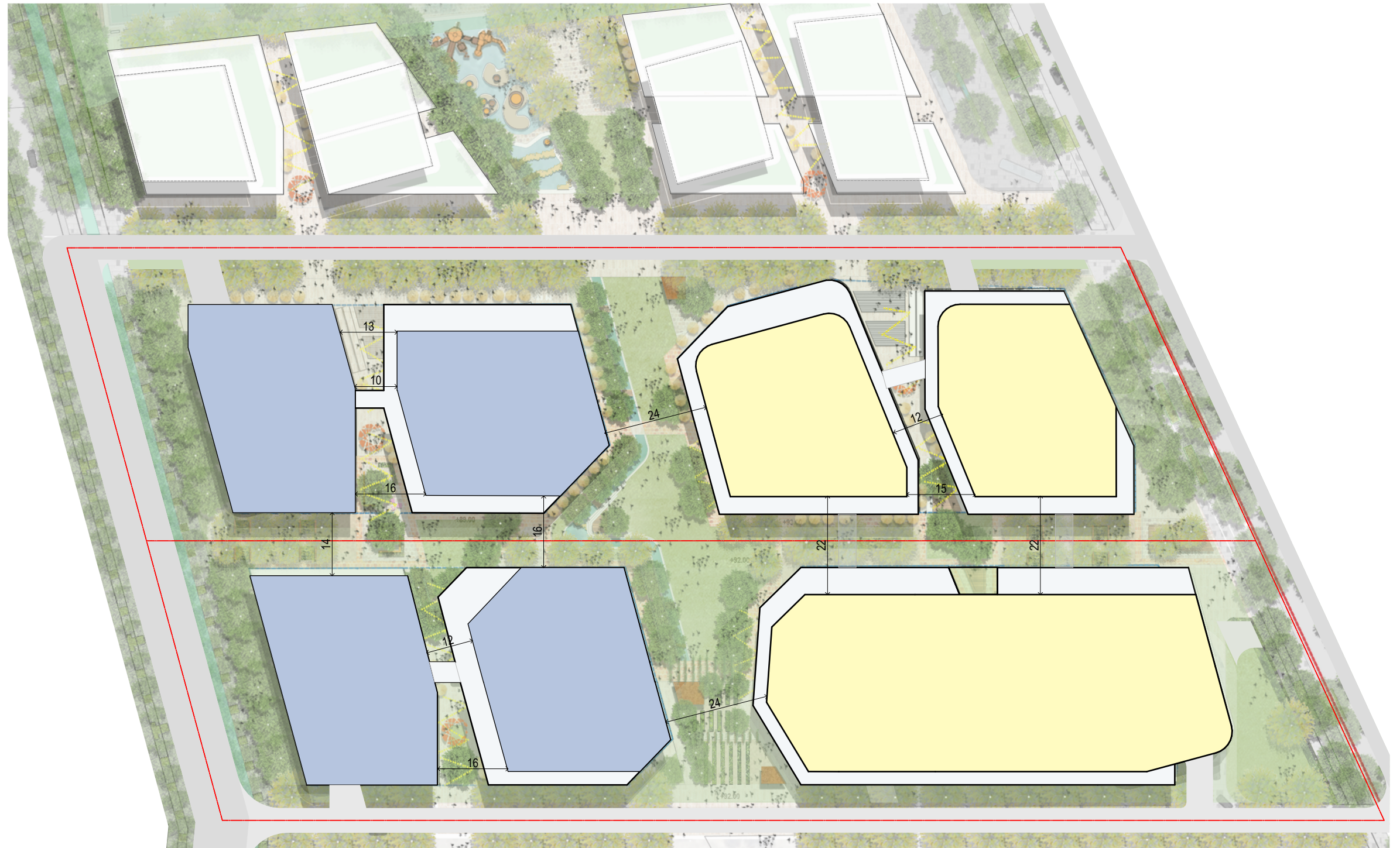
| | |
|---------------------------------------|----------|
| Collective public open space area | 6,697 m2 |
| Collective private open space area | 1,589 m2 |
| Percentage of public open space area | 21% |
| Percentage of private open space area | 5% |



Envelope Podium Separation

landscape to be updated

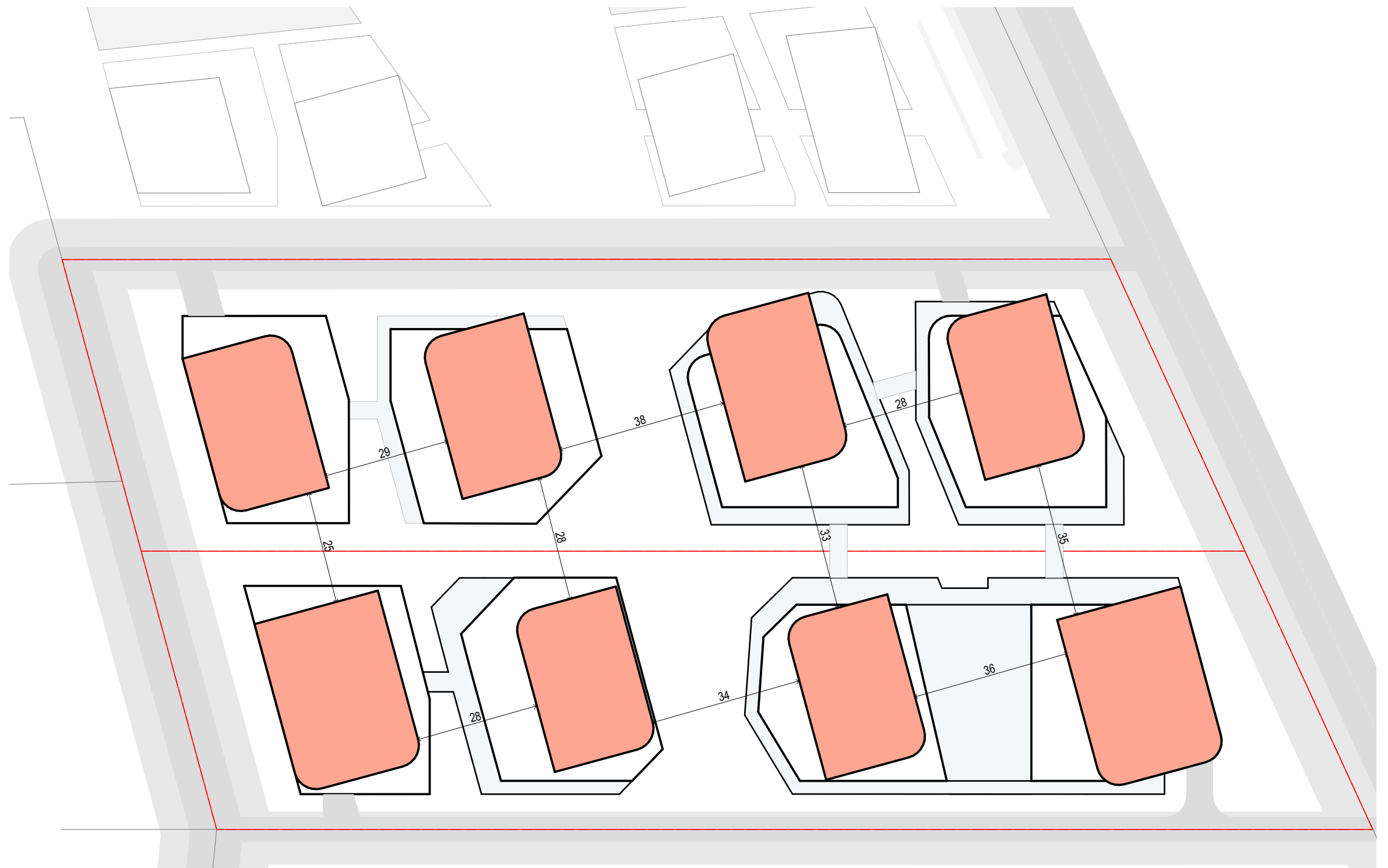
The retail/commercial envelope plans propose building separation at a minimum of 12m between lower level podiums, whilst the upper podium residential maintains a minimum of 25m.



Envelope Tower Separation

The building envelope plan propose tower separation at a minimum of 25m whilst the towers around the central green spine maintain a minimum of 34m.

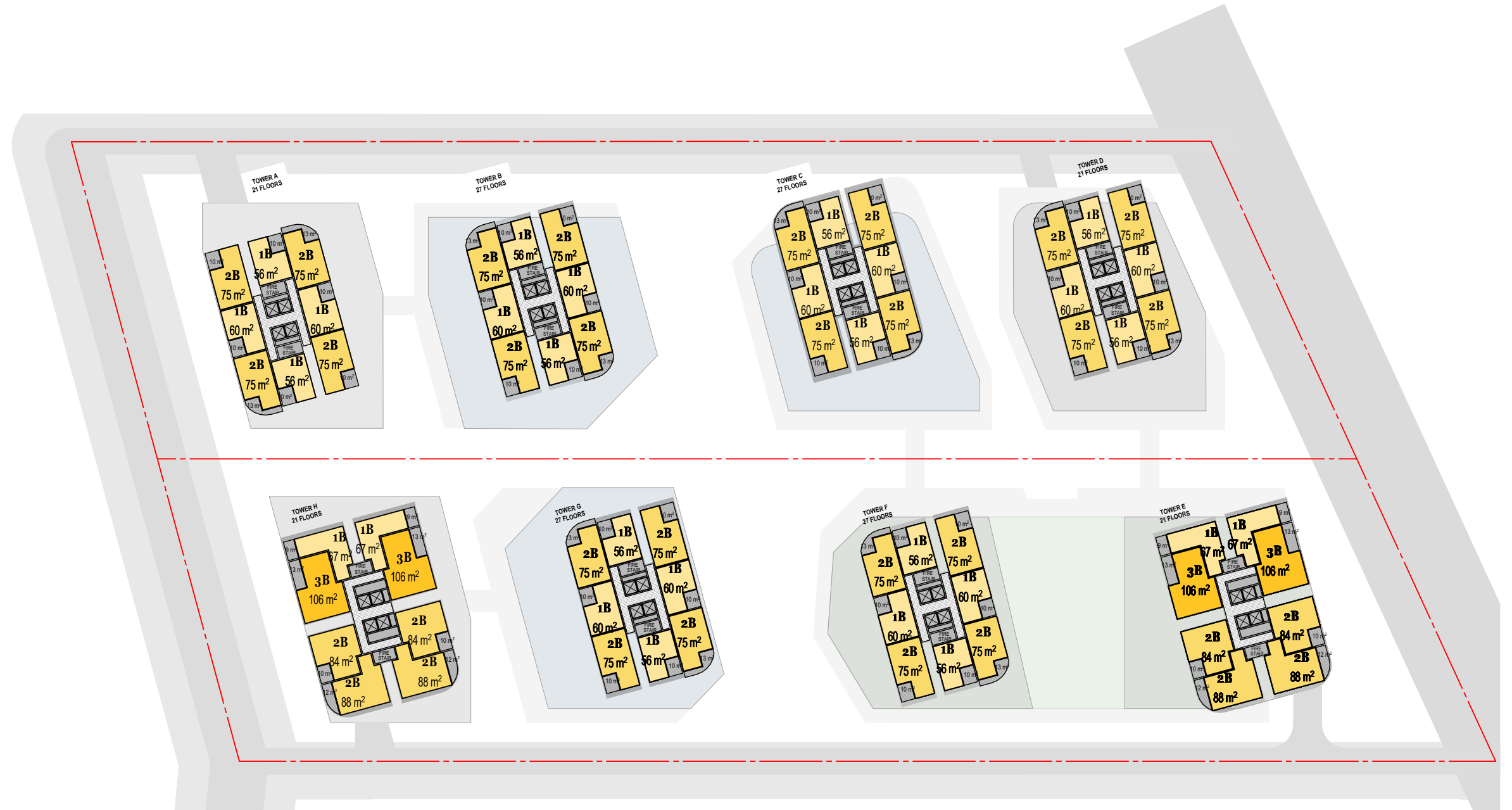
Tower masses have also been stepped back from the majority of the site. This allows for clear articulation from the lower levels to reduce the visual impact of the towers.



Overall Plan - Upper Levels

The height of the towers have been modulated to respond to conditions on site. Height reduces downward toward east and west street frontages.

For additional variety of residential types, 2 different floor plate sizes have been included.



Development Schedule

| | | | |
|------------|---------|-------------|---------|
| Total GBA | 283,714 | Retail | 20,424 |
| Total GFA | 183,872 | Residential | 157,727 |
| Total NSA | 160,803 | Commercial | 5,721 |
| Total FSR | 5.7 | | |
| Total Apts | 1,554 | | |

[illegible]

Solar and Cross Ventilation Compliance

Solar Summary

| | |
|------------|-----|
| Building A | 88% |
| Building B | 88% |
| Building C | 88% |
| Building D | 88% |
| Building E | 77% |
| Building F | 72% |
| Building G | 50% |
| Building H | 67% |
| TOTAL | 77% |

Cross Ventilation Summary

| | |
|------------|-------|
| Building A | 75% |
| Building B | 75% |
| Building C | 75% |
| Building D | 75% |
| Building E | 100% |
| Building F | 75% |
| Building G | 75% |
| Building H | 100% |
| TOTAL | 81.3% |

| | Building A | | | | | | Building B | | | | | | Building C | | | | | | Building D | | | | | | Building E | | | | | | Building F | | | | | | Building G | | | | | | Building H | | | | | | |
|----------|------------|-----|----|-------|-------|-----|------------|-----|----|-------|-------|-----|------------|-----|----|-------|-------|-----|------------|-----|----|-------|-------|-----|------------|-----|-----|-------|-------|------|------------|-----|----|-------|-------|-----|------------|-----|----|-------|-------|-----|------------|-----|-----|------|-----|------|--|
| | 1B | 2B | 3B | Units | Solar | CV | 1B | 2B | 3B | Units | Solar | CV | 1B | 2B | 3B | Units | Solar | CV | 1B | 2B | 3B | Units | Solar | CV | 1B | 2B | 3B | Units | Solar | CV | 1B | 2B | 3B | Units | Solar | CV | 1B | 2B | 3B | Units | Solar | CV | | | | | | | |
| Ground | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 4 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | 4 | 4 | 0 | 8 | 2 | 6 | 4 | 4 | 0 | 8 | 2 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | |
| Level 5 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | 4 | 4 | 0 | 8 | 2 | 6 | 4 | 4 | 0 | 8 | 2 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | |
| Level 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | 4 | 4 | 0 | 8 | 2 | 6 | 4 | 4 | 0 | 8 | 2 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | |
| Level 7 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | 4 | 4 | 0 | 8 | 2 | 6 | 4 | 4 | 0 | 8 | 2 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | |
| Level 8 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 4 | 4 | 0 | 8 | 7 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | 4 | 4 | 0 | 8 | 2 | 6 | 4 | 4 | 0 | 8 | 2 | 6 | 2 | 4 | 2 | 8 | 5 | 8 | |
| Level 9 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 5 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 10 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 5 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 11 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 5 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 12 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 5 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 13 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 5 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 14 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 6 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 15 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 6 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 16 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 6 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 5 | | |
| Level 17 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 7 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 18 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 7 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 19 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 7 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 20 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 8 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 21 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 8 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 22 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 8 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 23 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 8 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 24 | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 2 | 4 | 2 | 8 | 8 | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | 2 | 4 | 2 | 8 | 6 | | |
| Level 25 | | | | | | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | | | | | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | | | | | | | | |
| Level 26 | | | | | | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | | | | | | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | | | | | | | |
| Level 27 | | | | | | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | | | | | | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | | | | | | | |
| Level 28 | | | | | | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | | | | | | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | | | | | | | |
| Level 29 | | | | | | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | | | | | | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | | | | | | | |
| Level 30 | | | | | | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | 4 | 4 | 0 | 8 | 7 | | | | | | | | 4 | 4 | 0 | 8 | 2 | | 4 | 4 | 0 | 8 | 2 | | | | | | | | |
| Roof | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | 84 | 84 | 0 | 168 | 147 | 30 | 108 | 108 | 0 | 216 | 189 | 30 | 108 | 108 | 0 | 216 | 189 | 30 | 84 | 84 | 0 | 168 | 147 | 30 | 42 | 84 | 42 | 168 | 129 | 40 | 108 | 108 | 0 | 216 | 155 | 30 | 108 | 108 | 0 | 216 | 108 | 30 | 42 | 84 | 42 | 168 | 113 | 40 | |
| Mix | 50% | 50% | 0% | 100% | 88% | 75% | 50% | 50% | 0% | 100% | 88% | 75% | 50% | 50% | 0% | 100% | 88% | 75% | 50% | 50% | 0% | 100% | 88% | 75% | 25% | 50% | 25% | 100% | 77% | 100% | 50% | 50% | 0% | 100% | 72% | 75% | 50% | 50% | 0% | 100% | 50% | 75% | 25% | 50% | 25% | 100% | 67% | 100% | |

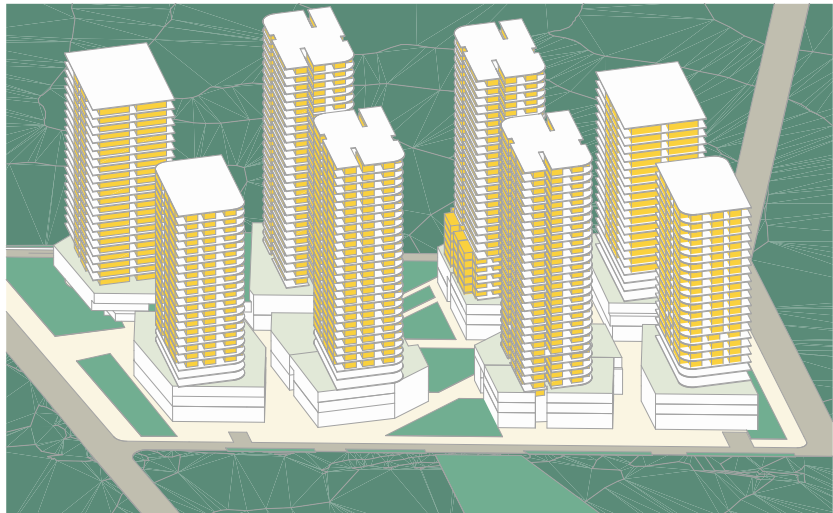
Sun angle views



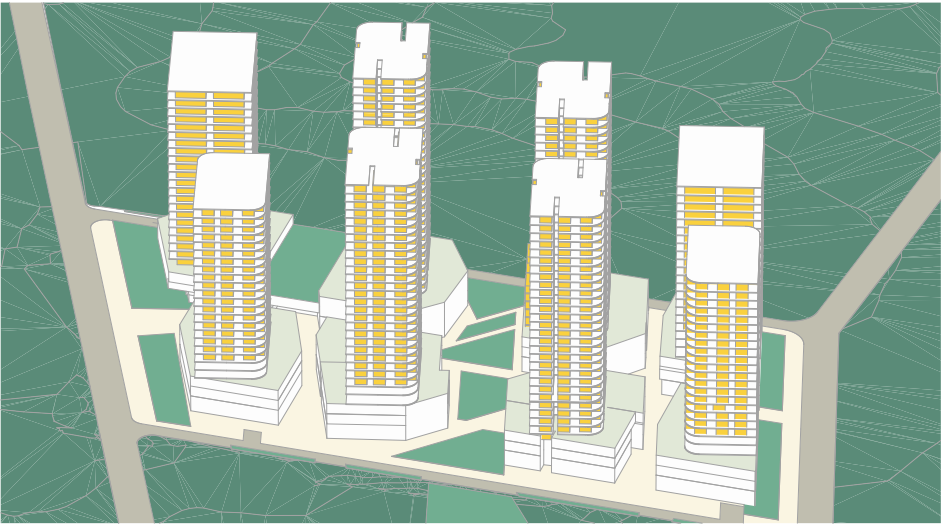
9am



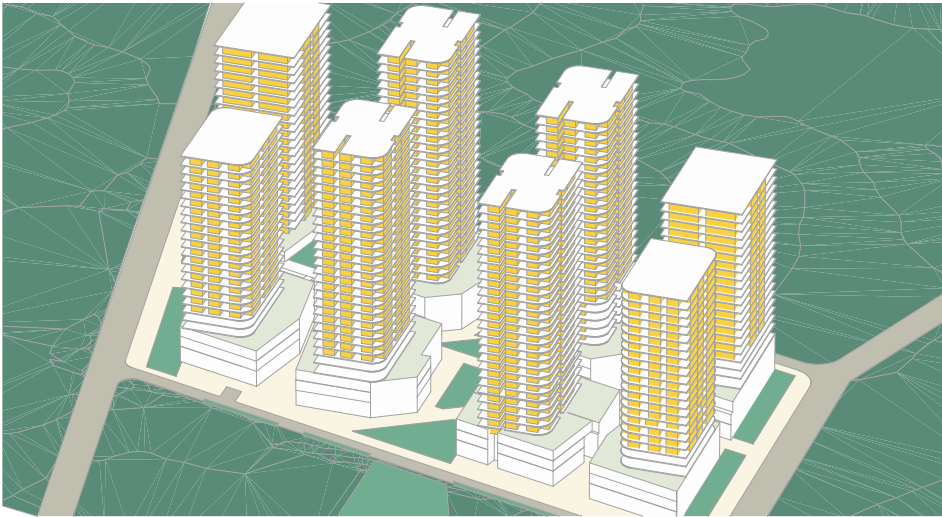
10am



11am



12pm



1pm



2pm



3pm

Envelope Shadow Diagrams

The shadow diagrams depict the resulting shadow impact of the proposed development during winter solstice between 9am and 3pm.

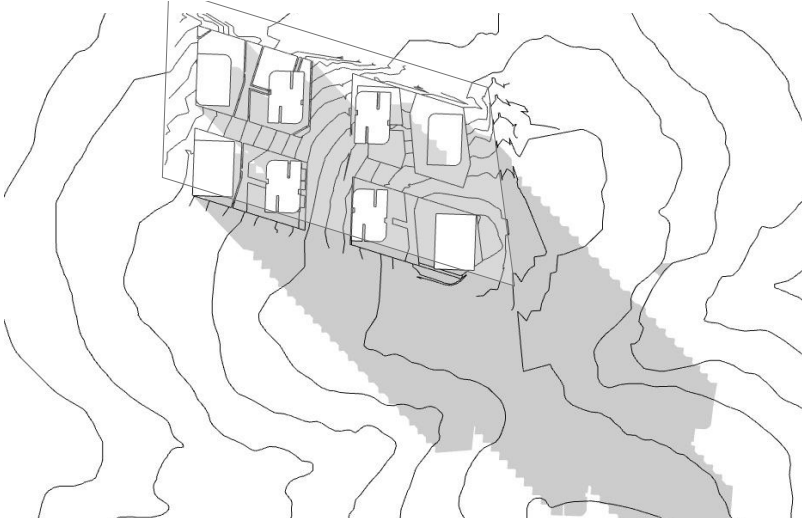
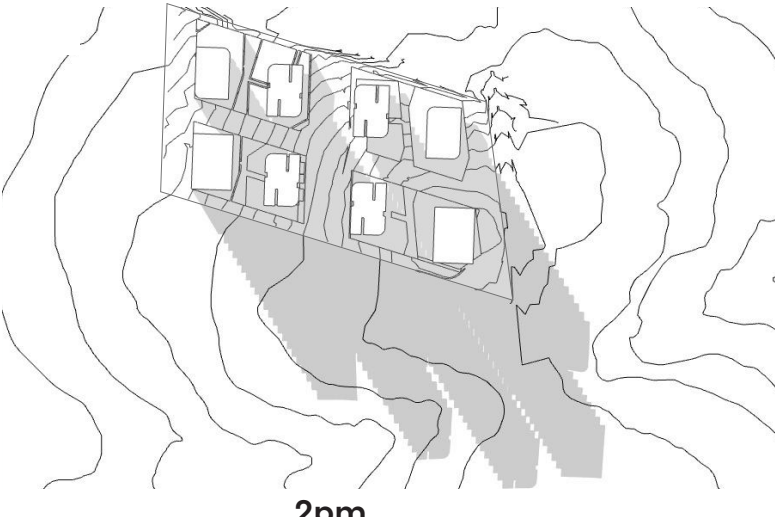
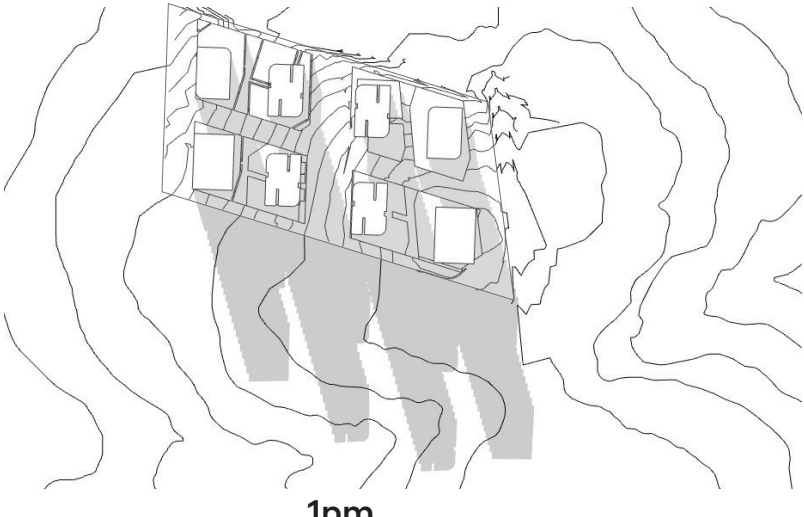
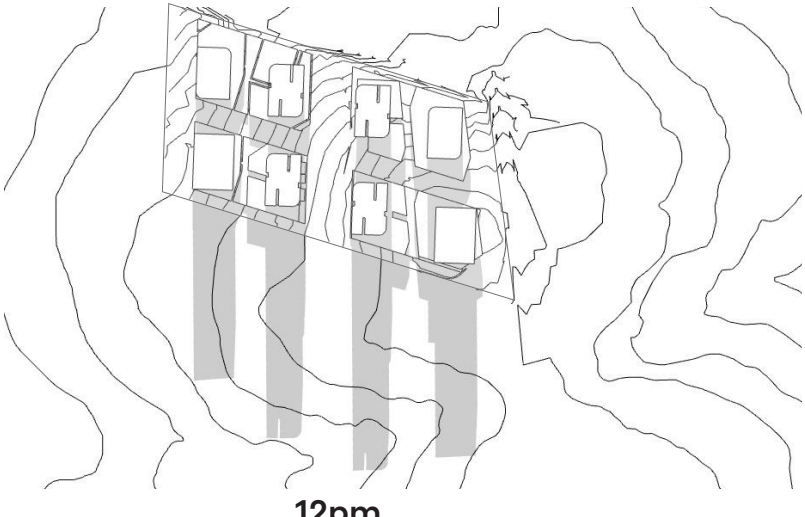
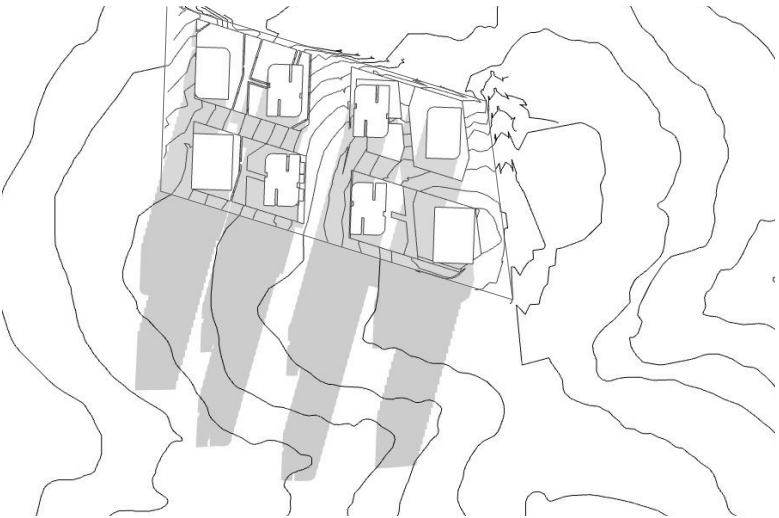
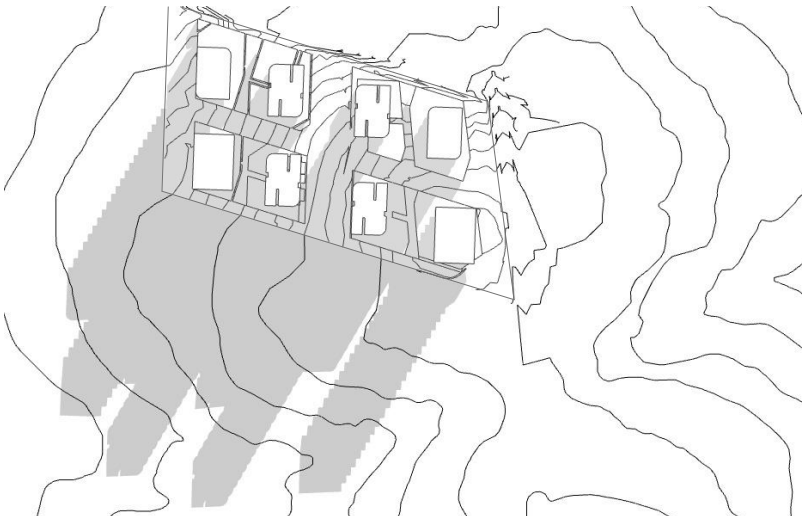
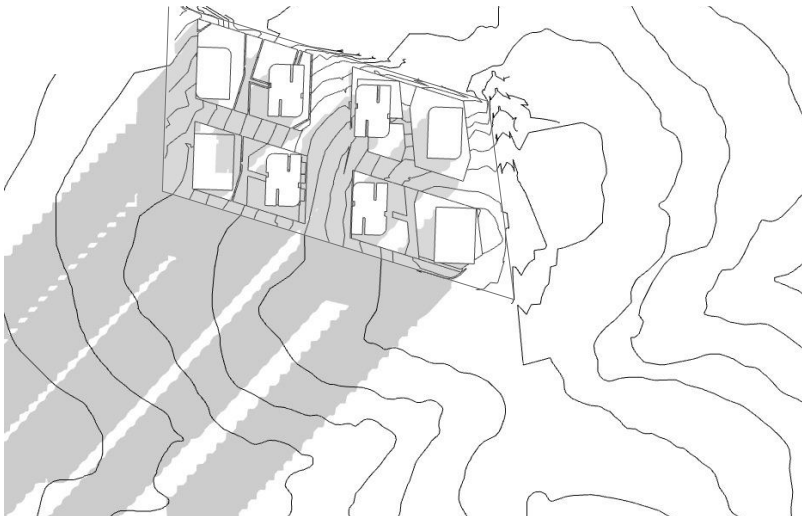




Image above:
View of Leppington Civic Centre from north

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