

Crows Nest State-Led Rezoning

Urban Design Report

Prepared for
DPHI

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SJB acknowledges the Traditional Custodians of the lands, waters, and skies, and their perpetual care and connection to Country where we live and work. We support the Uluru Statement from the Heart and accept its invitation to walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people towards a better future.

We believe that inequity enshrined in our society continues to significantly disadvantage our First Nations colleagues, friends, and community. Following the referendum, we are personally and professionally recommitting our support of Aboriginal and Torres Strait Islander people. We will continue to strive for (re)conciliation by acting with integrity and passion, in an effort to address this imbalance in our country and create lasting generational change.



Certified Management Systems

ISO 9001:2015 Quality Management System
ISO 45001:2018 Occupational Health & Safety Management System
ISO 14001:2015 Environmental Management System

Version: 01

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Executive Summary

Report Overview & Key Findings

About St Leonards and Crows Nest

Located 5km north-west of the Sydney CBD, St Leonards and Crows Nest covers a region that includes three local government areas; Lane Cove, North Sydney, and Willoughby City.

The area spans approximately 268 hectares. It provides a unique urban condition, comprising a variety of land uses, including low, medium, and high density residential, commercial, retail, light industry, education, major health, and sport and recreation facilities. All of this is provided across undulating topography and a movement network that features a range of transport options; train, bus, cycle, walking and the soon to be completed Metro.

St Leonards and Crows Nest plays a significant role in achieving the NSW Government's vision for Transport-Oriented Development and the strategy laid out in the St Leonards and Crows Nest 2036 Plan. The area has seen major change in recent years and it's continued development will support new jobs and dwellings in close proximity to public transport and high amenity areas, whilst being connected to nearby centres at Chatswood, North Sydney, Macquarie Park, and the Sydney CBD.

The under construction Crows Nest Sydney Metro Station is a key catalyst for bringing new life into the area, strengthening the characteristics that make it a great place, whilst also delivering new experience and services for existing and future residents.

St Leonards and Crows Nest has a strategic role within the Sydney metropolitan area. It provides a unique opportunity to strengthen and develop many of the existing qualities that attract people to live, work and relax here. Future development will be responsive to place with a clear identity and purpose, which is inspiring, enjoyable, and rewarding.

Purpose of This Report

The purpose of this report is to review and analyse the urban form of the existing St Leonards and Crows Nest 2036 Plan (the Plan) and prepare an Urban Design Framework, LEP maps, and contribute to a Design Guide to support a State-Led Rezoning. The overarching project drivers include:

- The NSW Government Transport Oriented Development (TOD) Program which seeks to promote development around centres such as Crows Nest which are receiving significant investment in transport infrastructure such as the new Metro.
- The need to verify and implement the 2036 Plan through a state-led rezoning process.

The project aims are to:

- Identify the case for change.
- Review the 2036 Plan and recommend changes to align with the above project drivers.
- Identify sites for change in terms of mixture of residential and non-residential floor space, height, and built form outcomes.
- Develop a revised masterplan.
- Synthesise the findings and results of this study in an Urban Design Framework, Design Guide, and LEP Maps.

Objectives

The key objectives for St Leonards and Crows Nest are to;

1. Preserve, strengthen, and enhance the existing diverse character areas through careful consideration of place.
2. Leverage world-class health and education uses to provide opportunities for future employment growth.
3. Protect and strengthen the area's commercial role supported by complementary uses to capitalise on renewed confidence in the commercial market.
4. Create a network of new and existing useable, public, and diverse open spaces which prioritise walking, cycling, and access to transport to promote a healthier urban environment and encourage social interaction.
5. Increase opportunities for transport-oriented development including commercial and mixed-use development that takes advantage of existing and future transport.
6. Create future employment opportunities leveraging off the increased transport capacity of the new Sydney Metro Station.
7. Strengthen and enhance opportunities in the Artarmon employment area to fulfil the important urban service needs of the wider North District.
8. Develop high quality and diverse residential areas that create sustainable and liveable communities.

Case for Change

The 2036 Plan was finalised in 2020. Since that time, many of the sites identified for change have been subject to pending, approved (rezoned) and constructed proponent-led developments. Willoughby have also rezoned several sites in a recent review of their LEP and DCP. There have also been changes in State Government Drivers for NSW and this precinct in particular. These drivers, and therefore the Case for Change are:

- **2036 Plan**
Ensuring the controls prescribed in the Plan are meeting the future needs and aligning with the latest in policy and strategic objectives for the precinct.

- **Transport-Oriented Development Program**

Providing jobs and homes in close proximity to public transport, in particular the new Crows Nest Metro Station and the existing St Leonards Train Station.

- **Housing and Affordability**

Increasing housing supply and ensuring a diverse range of housing typologies including affordable options are deliverable within the precinct.

- **Collaboration and Jobs**

Maintaining the precinct's status as a Health and Education Innovation cluster that ensures a substantial increase in jobs is available to support the cluster.

Precinct Development

The development of the precinct is to be guided by the results of this report, in particular the Vision and Principles, and the Urban Design Framework, that will be embedded in a Design Guide for the State-Led Rezoning. To arrive at this point, the following stages have ensured consistency and confidence in the decision making process.

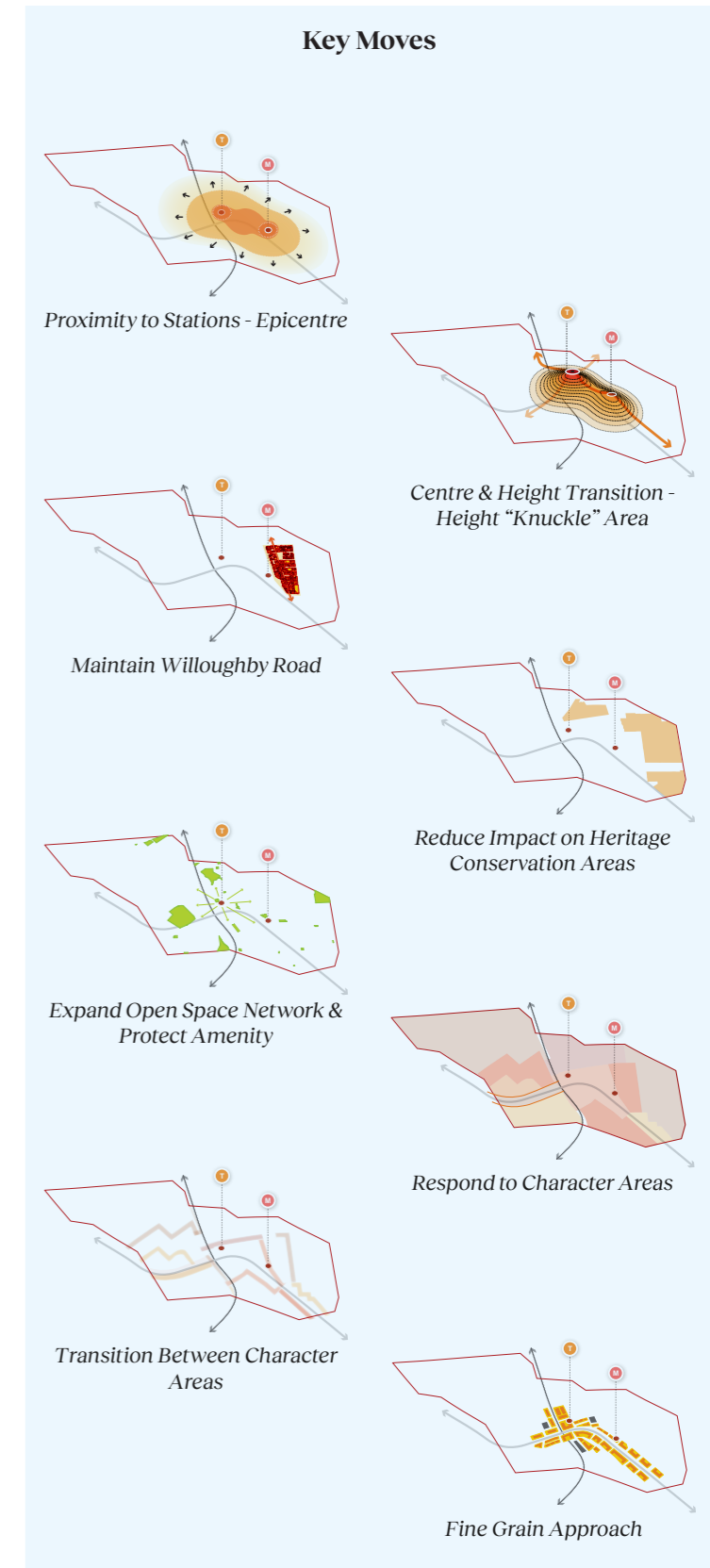
Analysis of the existing context provides the background for a series of opportunities and constraints across the precinct. Constrained sites are mapped out to identify sites that could potentially change as part of the testing of the masterplan. The Masterplan Testing details the response to the Case for Change and the Precinct Understanding, presenting an evolution of the controls in the 2036 Plan to ensure that the precinct is aligned to the various drivers.

The Vision and Principles have been developed to guide the overarching narrative for the study area. Much of the work of the 2036 Plan is still relevant today and many of the objectives, principles and approaches to various elements are embedded in this report. The key moves that drive the primary synthesis of the Vision and Principles have not changed. The Vision and Principles are complimentary to previous visions for the area and represent the natural evolution of the precinct to meet it's current needs and State-Government Drivers.

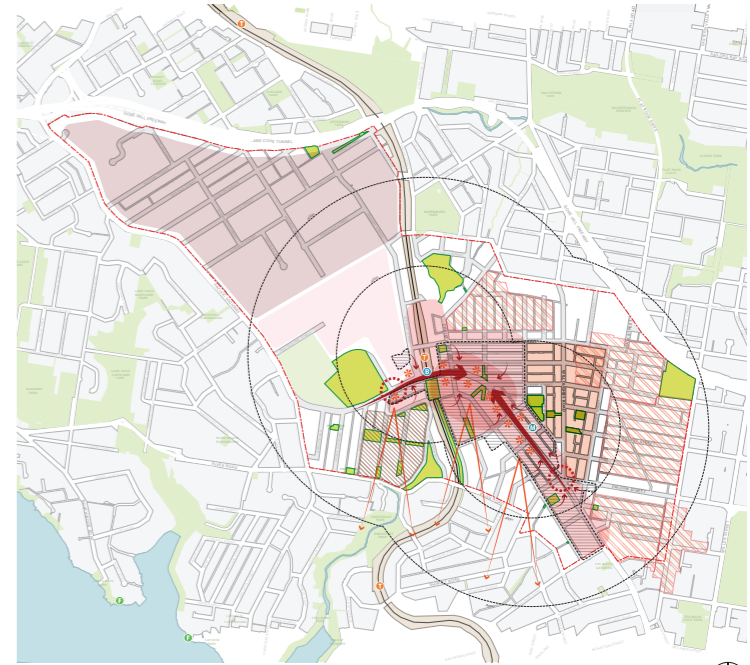
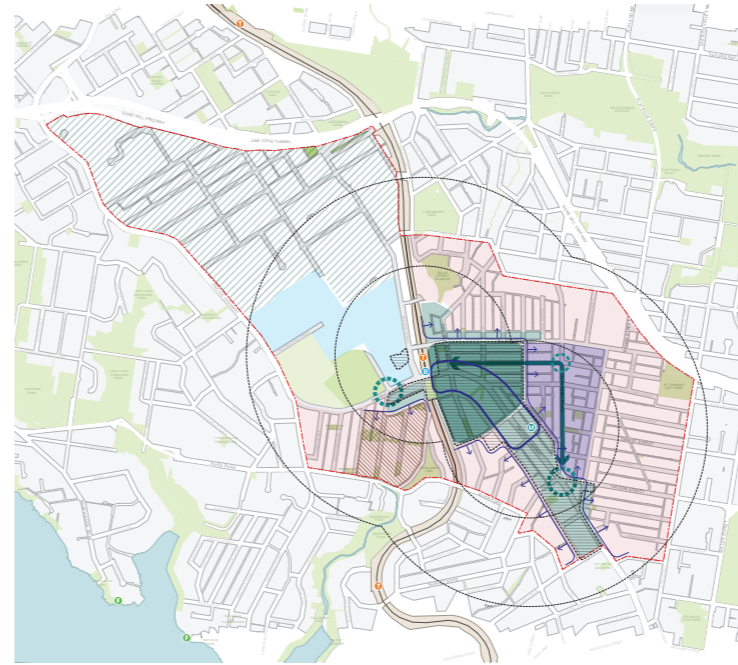
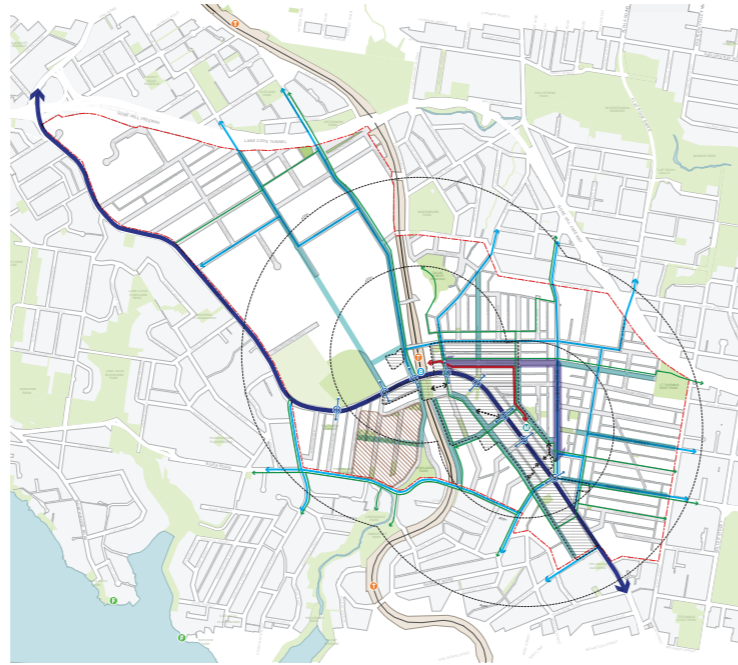
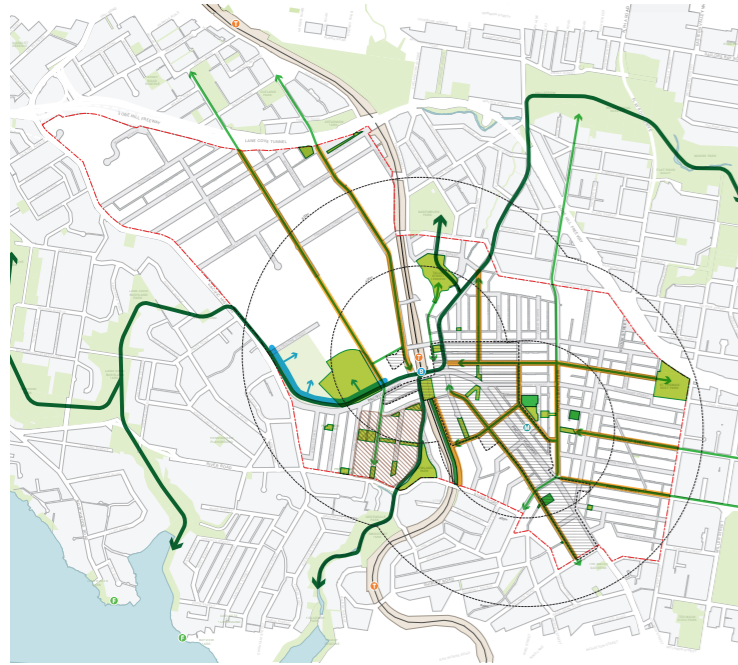
Building on the Urban Design Framework prepared for the 2036 Plan, a series of plans, diagrams and objectives resolve to identify the core strategy to delivering housing and jobs whilst ensuring the resultant built form and land uses are aligned with the diverse local character areas. The Framework is structured under the following key themes:

- Environment,
- Movement,
- Land Use, and
- Built Form.

The following page expands on the contents and approach to each theme.



Urban Design Framework Overview



NTS ↻

Environment

- Connect into the district and regional open space network that extends beyond the precinct through pedestrian and cycling links.
- Create a secondary network of green links that connect across the precinct from the regional links to surrounding residential areas.
- Maintain, enhance, and create new green streets that have significant tree canopy cover to create safe and enjoyable active links between spaces.
- Preserve and improve existing and planned open spaces so that they can serve the growing population and community needs.
- Investigate potential for additional open space in select locations such as along the railway line, in the south-west precinct, and around Hume Street Park.
- Retain green edge along Gore Hill Park and Cemetery, preserving views across the park and emphasizing its significant value to the local community.

Movement

- Pacific Highway is a major connector through the precinct and also forms the topographic highpoint along the ridgeline. Focus activity along this corridor and ensure appropriate approaches to development that aim to mitigate impact without compromising its role in the network.
- Preserve the secondary network for local movement and connection between the core of the precinct and surrounding areas.
- Establish a tertiary movement network for pedestrians and cyclists that encourages active transport movement in a safe and accessible way. Locate these streets away from high traffic roads to offer a protected pedestrian experience.
- Connect Willoughby Road and Chandos Street to create a connected pedestrian avenue that supports commercial and retail uses in a high activity area spanning between the stations.
- Establish and upgrade crossing points to improve pedestrian amenity and safety, particularly around the proposed Crows Nest Sydney Metro and along Pacific Highway. Focus should be given to key intersections that would facilitate greater active transport movement, improving connectivity both north-south and east-west.

Land Use

- Concentrate density along Pacific Highway between the stations to maximise the benefit of high capacity transport infrastructure for jobs and dwellings.
- Centre the commercial core around St Leonards Station to cultivate a synergistic employment hub in close proximity to public transport and facilitating a high-level of activation.
- Distribute commercial and retail activity along Atchison Street and Willoughby Road to create a connected activity corridor in a high quality character area, supporting local business growth and opportunities.
- Preserve the character of Crows Nest Village and its role within the precinct as a local centre. Future development in the area to be sensitive to its high quality local character and impacts on the public domain and economic prosperity.
- Enhance the amenity of the Health and Education Precinct to attract greater employment and innovation opportunities. Work with ongoing masterplans to ensure successful delivery that is in alignment with the broader characteristics of the precinct.
- Preserve the role and character of the Atarmon Industrial Area in providing jobs and business premises, promoting diversity for the local and regional economy.

Built Form

- Concentrate tall buildings around St Leonards Station, emphasizing its character as the commercial core for the precinct. Tall buildings here are also well positioned to avoid impacting solar amenity of public open spaces.
- Ensure a sensitive transition in height stepping down from the ridge-line along Pacific Highway to lower density areas. Ensure buildings in these areas respond sensitively to the adjacent character areas.
- Stagger tall buildings along Pacific Highway with appropriate separation between towers and height variation where possible. Avoid a 'canyon' effect with long walls of buildings and ensure view sharing between sites towards regional views such as Sydney CBD.
- Preserve the existing low-scale fine grain built form of Crows Nest Village to maintain its local shopping street character. Ensure this area retains appropriate amenity by limiting overshadowing and view impacts.
- Preserve and improve the quality of open spaces by limiting overshadowing, ensuring adequate servicing of future community needs.
- Ensure limited impact of heritage conservation areas and high quality character areas with appropriate interfaces and sensitive development.
- Emphasize the entrance to the precinct with developments that increase in height at key junctions to create a clearly defined gateway.



Design-Led
Response to Place

The Plan for St Leonards and Crows Nest

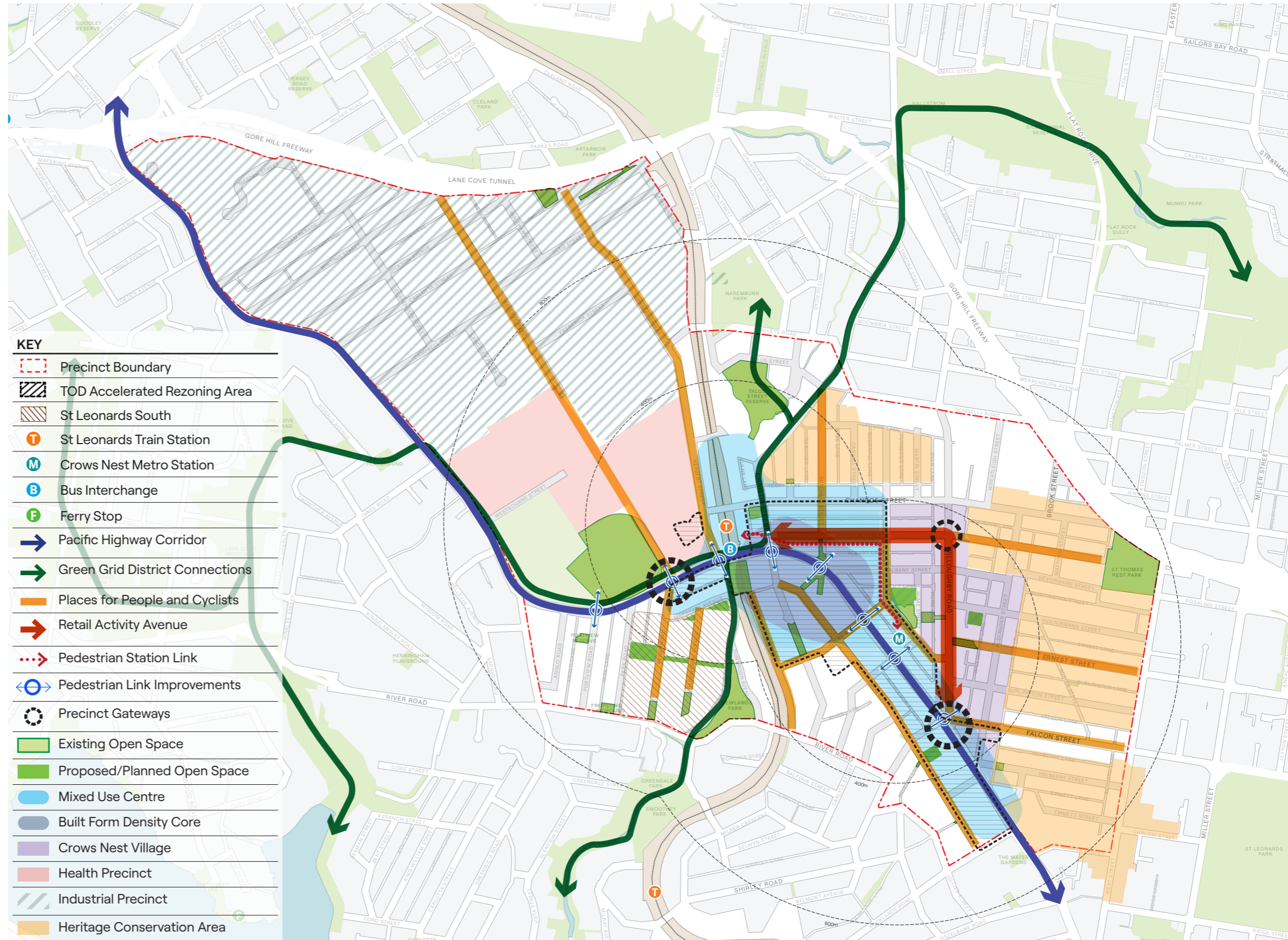
The Plan for St Leonards and Crows Nest illustrates a unified and over-arching approach for the study area. It combines and distils the actions and directions identified in a series of Framework Plans, which cover a number of key themes. The Plan focuses on improving connectivity across and between the identified character areas through a network of green streets, active edges, and public spaces.

The greatest focus of development has been and will continue to be within the St Leonards Centre and along Pacific Highway to the Crows Nest Sydney Metro Station. Sites in these locations embrace the close proximity to public transport and existing density to provide additional commercial and residential floor space, enhance the quality of the streetscape, and support activation of the centre.

Existing residential neighbourhoods and conservation areas of Naremburn and Crows Nest will be protected, undergoing no change as a result of the rezoning. The Artarmon Industrial Area in the north-west will be preserved for employment opportunities, continuing to provide essential urban services in line with the current zoning controls. The ongoing design development of the Hospital and Herbert Street precincts will support further jobs growth in the area, further exemplifying it as a key Health and Education Innovation cluster in the NSW ecosystem.

Public domain improvements will be focused on enhancing the functionality and accessibility of the areas immediately surrounding the two stations, and the integration with existing open spaces. Efforts should also be made to provide active transport and pedestrian safety throughout the precinct to ensure safe and accessible journeys for the increased residential and commercial populations.

The Central Precinct is defined by Chandos Street to the north, Oxley Street and the Crows Nest Sydney Metro sites to the east and Oxley Street south of the Pacific Highway to the south, anchored by St Leonards Station in the north-western corner. This Central Precinct will continue to grow as the new heart for the area, connecting to the surrounding character areas to key amenity and infrastructure. This precinct encapsulates the areas of greatest development uplift, activation, and public domain improvements.



KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	St Leonards Train Station
	Crows Nest Metro Station
	Bus Interchange
	Ferry Stop
	Pacific Highway Corridor
	Green Grid District Connections
	Places for People and Cyclists
	Retail Activity Avenue
	Pedestrian Station Link
	Pedestrian Link Improvements
	Precinct Gateways
	Existing Open Space
	Proposed/Planned Open Space
	Mixed Use Centre
	Built Form Density Core
	Crows Nest Village
	Health Precinct
	Industrial Precinct
	Heritage Conservation Area

TOD Accelerated Rezoning Area

The adjacent plan represents the TOD Accelerated Rezoning Area in comparison with the 2036 Plan Area of Change. While the 2036 Plan assessed sites within the Area of Change for rezoning, this investigation has identified sites within the TOD Accelerated Rezoning Area as most appropriate for housing uplift. Some of these sites are as a result of this testing, whilst others are the same as those in the 2036 Plan and did not require further testing.

Overall Development Yield

The below numbers represent the total change in dwellings and non-residential floor space across the precinct. Sites subject to rezoning include those within the TOD Accelerated Rezoning Area. Approved proposals that have not yet been delivered, and under construction sites (labelled collectively as 'Already Rezoned' in the tables). Sites delivering affordable housing under the proposed incentive controls are included within the total.

	ALREADY REZONED	SUBJECT TO REZONING*
DWELLINGS	3,182	3,255
NON-RESI GFA	81,607	89,706

Calculations do not include developments completed since the 2036 Plan was adopted.

*Figures assume complete take up of affordable housing incentive sites.



KEY

	Precinct Boundary
	St Leonards South
	TOD Accelerated Rezoning Area
	2036 Plan Area of Change













Metropolitan Context

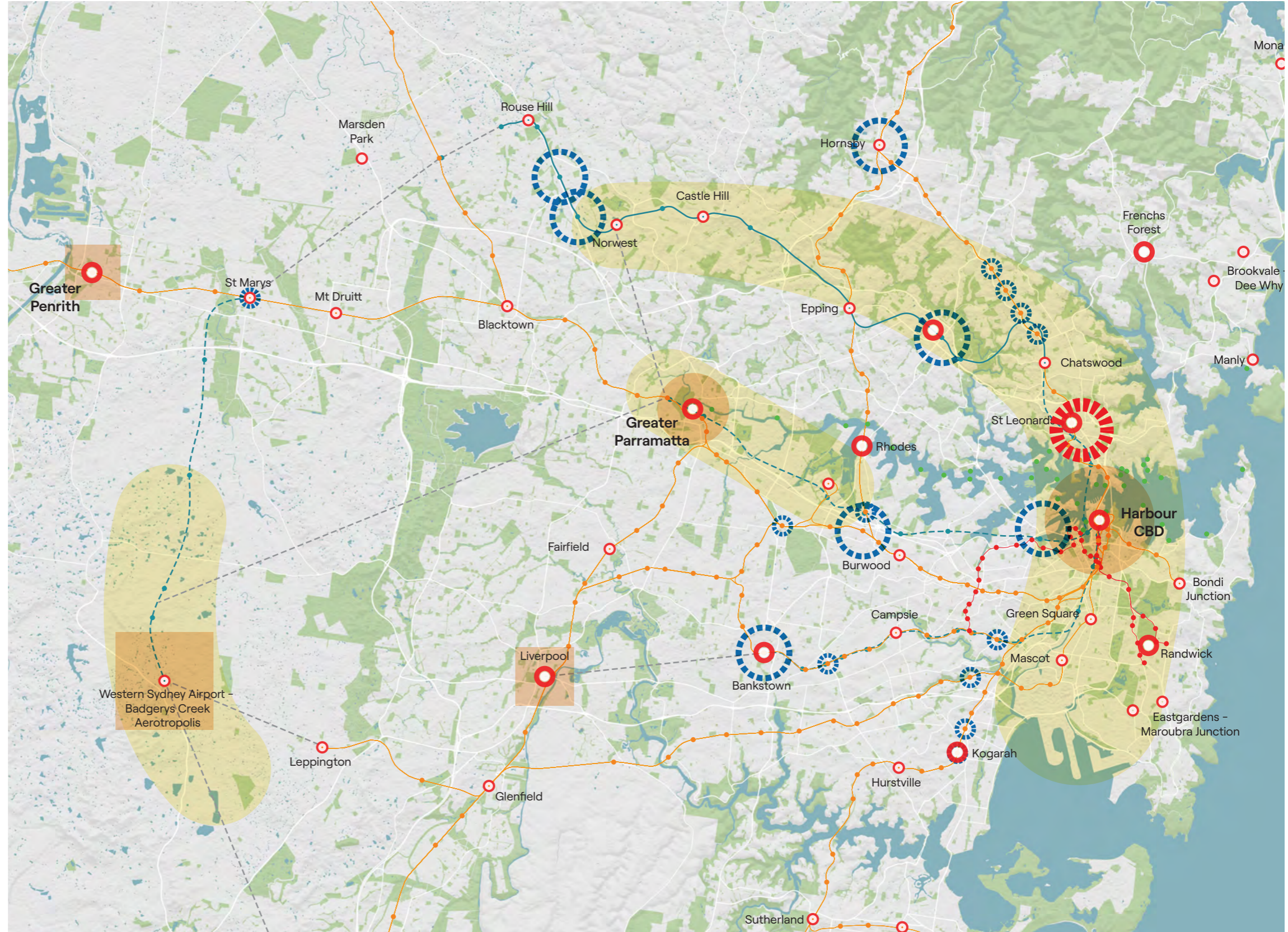
The NSW Government Transport Oriented Development (TOD) program and associated SEPP aims to focus housing rezoning and delivery around eight 'accelerated precincts' and thirty seven other transport hubs in NSW. Crows Nest is one of the eight 'accelerated precincts' in Sydney which will experience significant growth within close proximity of the train and metro station.

To accommodate this growth, the St Leonards and Crows Nest area will have to significantly increase its current housing stock as well as enhance its public open spaces, community infrastructure facilities and movement network. It is crucial that this process maintains the precinct's sense of place, while ensuring that higher density living is delivered in a successful manner.

The Greater Sydney Region Plan also identifies St Leonards as a Strategic Centre, that is envisioned to become a regionally significant destination for employment, health, and education opportunities. St Leonards and Crows Nest is set to benefit from major public investment into the Metro City & South West that will provide high quality, high frequency public transport service through both heavy and metro rail services to connect the precinct to the Sydney CBD and north-west.

St Leonards is also positioned along an economic corridor that connects the airport to the northern harbour district. Redevelopment in St Leonards and Crows Nest is expected to contribute to this valuable corridor, ensuring that Sydney's economy is sustainable well into the future.

KEY	
	Study Area
	Accelerated TOD Precincts
	SEPP (Housing) 2021 TOD Station
	Metropolitan Centre
	Metropolitan Cluster
	Strategic Centre
	Health and Education Precinct
	Light Rail
	Sydney Trains
	Sydney Metro
	Planned Sydney Metro
	Future Sydney Metro
	Economic Corridor



1:200,000 @ A3

Study Area

The Precinct is located 5 km north-west of the Sydney Central Business District (CBD) and straddles three local government areas; Lane Cove Council, North Sydney Council and Willoughby Council. It is undergoing rapid urban renewal and consolidation, with high-rise mixed-use buildings replacing blocks of variable densities.

The Precinct is comprised of several distinct character areas with a variety of uses. Industrial uses occupy the north-west area of the Precinct, while the commercial core is concentrated along the Pacific Highway corridor and a local centre along Willoughby Road.

Royal North Shore Public and Private Hospitals are within the area, co-located with a number of health related industries. Other hospitals such as Mater Hospital and Greenwich are close to the Precinct boundary. The study area is also well serviced by schools and educational institutes.

Several civic projects have recently been delivered to enhance the public domain, including Friedlander Place Pedestrian Plaza, Hume Street Park, and Wadangarri Park. These projects have supported the mixed use character that is gradually developing within the Precinct but further improvements to the public domain and open space will need to be facilitated to accommodate for the increased commercial and residential population that is to be expected here.

For the purpose of this study, the area known as St Leonards South, is not to be changed. It is subject to existing controls under the Lane Cove LEP/DCP and is already undergoing change and development. This document presents structure plans and controls that align with those of the LEP/DCP.



KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	St Leonards Train Station
	Crows Nest Metro Station
	Bus Interchange
	Ferry Stop

Existing Character

The precinct has a number of existing character areas that are important to recognise in ensuring their character is retained and enhanced through the delivery of new developments in the area. These character areas are:

Artarmon Employment Area

This area is characterised by industrial uses including specialised urban services such as concrete batching plants. It also supports low-rise bulky goods and large item retail warehouses. The streets are wide and do have ample street trees to provide some amenity to the area.

Health and Education

The large, modern and institutional-style architecture of these campuses allows these areas to read as an area unto itself. The public domain differentiates from the surrounding areas, and the area is very much an enclave to itself.

Residential Precincts (St Leonards South, Wollstonecraft, Naremburn and Crows Nest)

These areas have wide sleepy streets, with little activity, and predominantly free standing, single storey dwellings, many of which are original bungalows and workers cottages and largely fall within heritage conservation areas.

St Leonards Centre and Crows Nest Station

This area has the most dense built form, however tend to lack street activity and amenity with C and B grade commercial stock. These areas are more overshadowed and feature less human-scale architectures. This area has seen the largest amount of change since the finalisation of the 2036 Plan.

Crows Nest Village

Located around Willoughby Road, the area is very pedestrian friendly with a safe, active and inviting public domain, predominantly two-storey retail and food and beverage offerings. It maintains a consistent quality and character in all aspects and is a well-maintained and loved area for the local community.



History



Pre-colonial era



1948



2001



2017

1820's

1986

2009

2012

2024

Aboriginal Heritage

“St Leonards and Crows Nest are located on the Traditional Land of the Gammarigal/Gai-mariagal/Cammeraygal people who have responsibilities to Country in the Lower North Shore of Sydney, New South Wales, Australia.

The Gammarigal people are known to have a strong connection to Country. Historical records indicate that the Gammarigal people have lived in the northern parts of Sydney for approximately 5,800 years. Over time the population of the Gammarigal people has declined due to the Sydney area being one of the earliest points of colonial arrival and destruction due to diseases such as smallpox. While Gammarigal people may not live on Country today, they continue to fulfil their custodial obligations to care for Country through more contemporary methods such as advocating for improved built environment outcomes that respect and respond to Country. Over time Gammarigal people have reclaimed their cultural heritage and connection to their ancestral lands.”

Extracted from:
Country Cultural Assessment Report
GHD 2024

Settlement and Establishment

The earliest known settlements on the Cammeraygal land was made in the 1790's. Around the mid 1820's, much of the foreshore between Waverton and Cremorne had been acquired by individual land grants.

The planning for the St Leonards township was gazetted in 1838 and formed the basis for future development.

Population in the inner north shore increased significantly from the 1860's with the introduction of ferry services across the Harbour. St Leonards Station was opened in 1890 and serviced the nearby northern boundary of the North Sydney area up to Hornsby.

With the opening of Sydney Harbour Bridge in 1932, St Leonards emerged as a transport centre focused around the former Lane Cove Road (Pacific Highway).

St Leonards Yesterday

In 1948, the County of Cumberland Planning Scheme identified St Leonards as a sensible area for industrial growth. As a result, commercial and light industrial buildings began emerging in the area.

Around 1975-76 apartments and townhouses began to dominate the residential market, which increased the demand for new commercial space.

By the mid 1980's, St Leonards was gradually transforming into a leading employment centre, supported by key health institutions including the Royal North Shore Hospital.

In line with development pressures, a few local heritage items remain within the centre including 1 Chandos Street and the 1927 Power Station at 23 Albany Street.

There are a number of residential buildings dating from the 20th century remaining within the centre, mainly located on Chandos, Albany and Atchison Streets.

There are a number of conservation areas around the centre, reflecting the historic subdivision, architecture and planning for the area. These include Naremburn Conservation Area and Holtermann Estate Conservation Area.

St Leonards Today

Over recent years the traditional commercial function of the Precinct has changed with the emergence of high density residential into the precinct. This has been facilitated by excellent public transport and accessibility to jobs. The Precinct largely consists of B and C grade commercial stock, with many businesses opting for more high-end office stock in North Sydney and Macquarie Park over the last 30 years. .

The Precinct remains one of Sydney's health and education super precincts, benefiting from multiple state of the art hospital and the TAFE and hospital-based teaching.

Currently, there is a diversification and transformation of commercial centres across Sydney into mixed use precincts, seeking to provide residential development in close proximity to public transport, employment, public open space and retail. This process is transforming commercial centres into vibrant and dynamic places to live, work and leisure.


In November 2015 the NSW Government announced Crows Nest metro station. The proposed metro line will extend under the Precinct from the north west and to the city, through a second harbour crossing into Sydney CBD.

With the announcement of the metro, Crows Nest and St Leonards will also mutually benefit from having new opportunities for office and health based commercial uses with an increased population available to the area.

Demographics


Various demographics related to the study area have been captured here. These have been extracted from the most recent ABS Census 2021 data.

The method of extraction uses a prorata calculation to estimate for the study area, rather than being tied to census tracts that do not fit the area. Therefore, these numbers should be considered as a guide only and not relied upon for exact representation of the community.




People

- Total - 15,301
- Indigenous - 0.3%
- Median Age - 35.9




Ancestry (top 4)

- English - 24.7%
- Chinese - 19.5%
- Other - 19.2%
- Australian - 18.7%




Country of Birth (top 3)

- Australia - 47%
- China - 6.4%
- England - 4.6%




Language

- English Only - 59.1%
- Non-English - 36.7%




Median Weekly Income

- Personal - \$1,617
- Family - \$3,658
- Household - \$2,705




Method of Travel to Work

- Car - 46.3%
- Walk - 26%
- Train - 12.9%
- Bus - 6.3%




Family Composition

- Couple w/o Children - 55.3%
- Couple w/ Children - 33.6%
- Single/Lone Parent - 9.6%




Dwellings

- Total - 16,500
- Occupied - 88%
- Unoccupied - 12%




Dwelling Type

- House - 9%
- Semi, row or terrace - 10.7%
- Apartment - 79.6%




Bedrooms

- None (incl. studio) - 3.9%
- 1 bed - 30%
- 2 bed - 41.1%
- 3 bed - 19.4%
- 4+ bed - 3.5%




No. of Motor Vehicles per Household

- None - 24.9%
- 1 veh. - 57.4%
- 2 veh. - 14.6%
- 3+ veh. - 2.1%




Household Composition

- Avg. ppl. per Dwell. - 2
- Family - 55.8%
- Single - 37.8%
- Group - 5.9%



Tenure Type

- Owned Outright - 17.6%
- Owned w/ Mortgage - 20.8%
- Rental - 59.6%



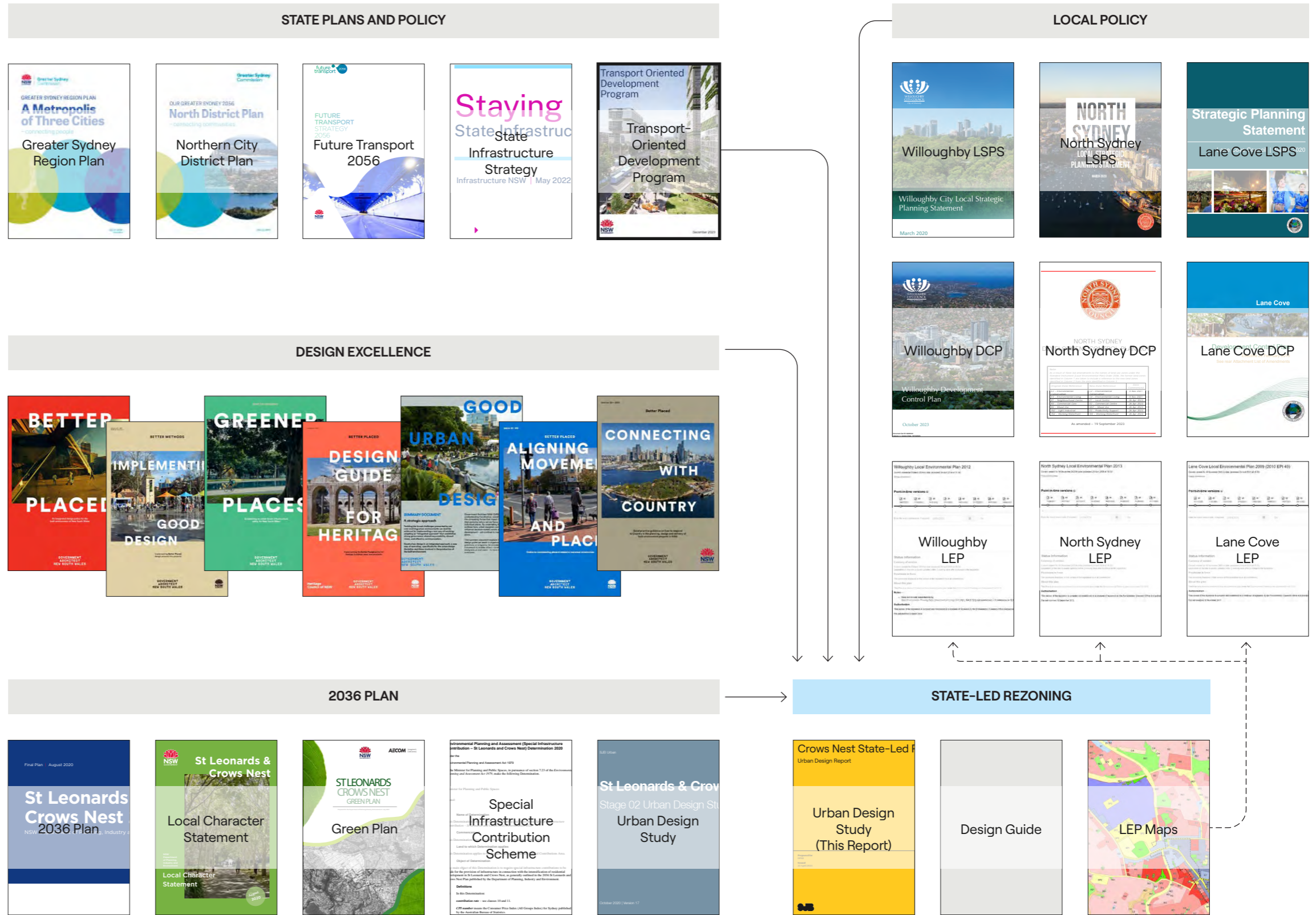
Rental Type

- State or CHP - 2.3%
- Agent or Person - 96%
- Median Weekly Rent - \$588.5

Key Government Policies

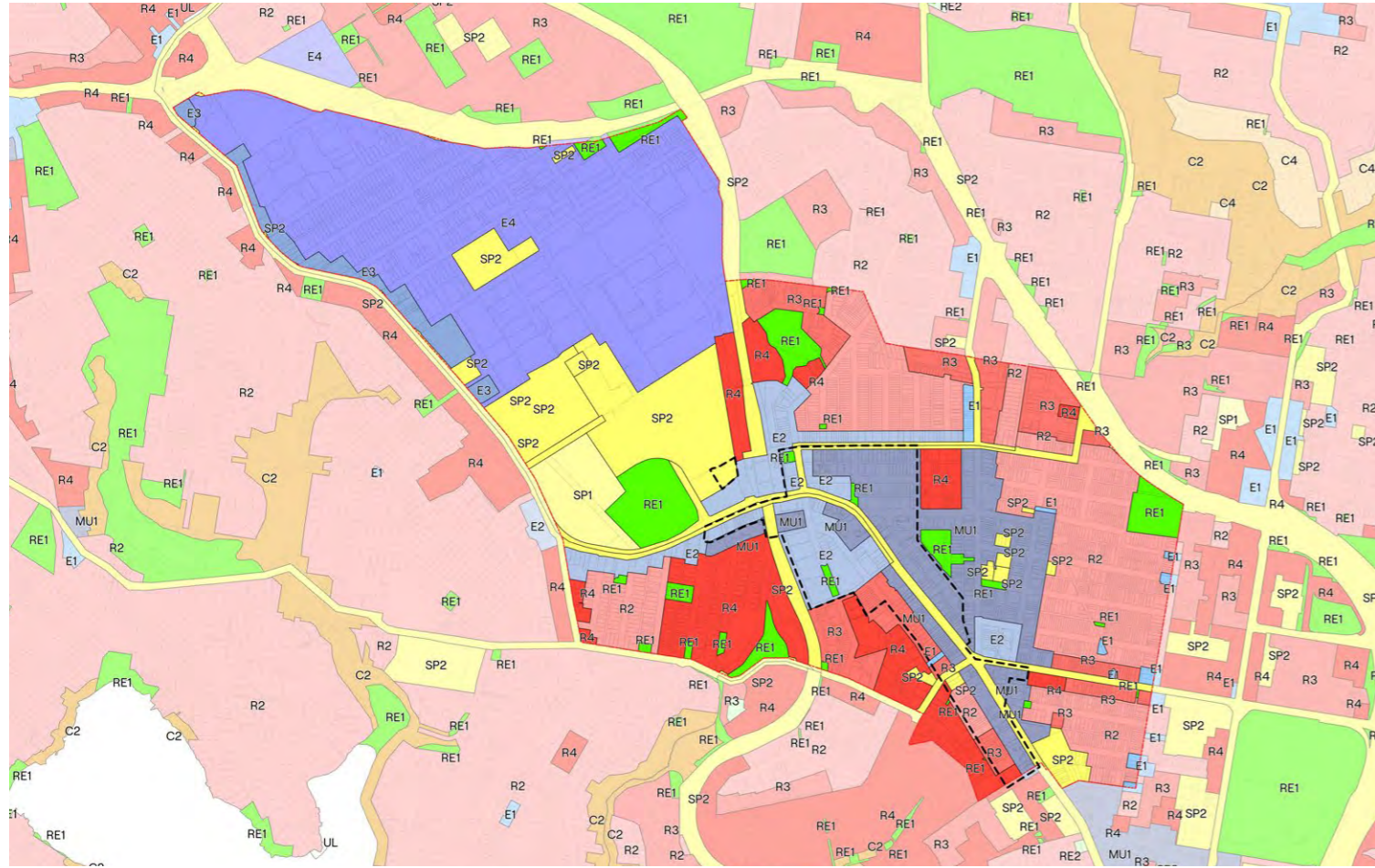
This diagram provides an overview of the key government policies that underpin the rezoning of St Leonards. They form an important baseline for this report as they guide decision making to ensure the precinct fulfils its strategic and local responsibilities.

The outcome of this study is this report that includes the vision and principles and Urban Design Framework. This information will also formulate part of the Design Guide, and will also be the background of the LEP Maps for the purpose of rezoning.



Current Planning Controls

Land Zoning

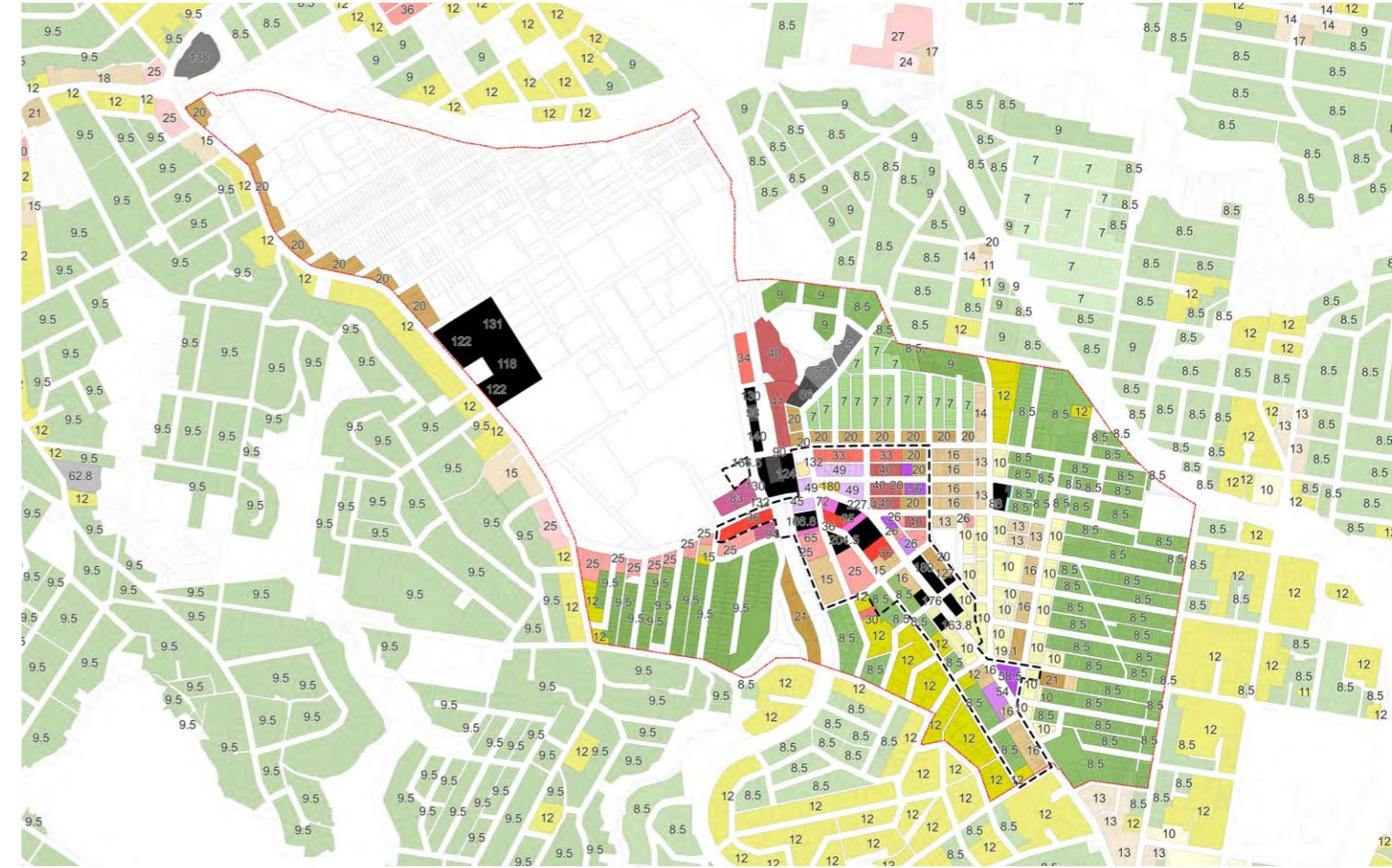


20,000 @ A3

KEY

	Precinct Boundary		SP2 - Infrastructure
	TOD Accelerated Rezoning Area		C2 - Environmental Conservation
	MU1 - Mixed Use		C4 - Environmental Living
	E1 - Local Centre		UL - Unzoned Land
	E2 - Commercial Centre		
	E3 - Productivity Support		
	E4 - General Industrial		
	R2 - Low Density Residential		
	R3 - Medium Density Residential		
	R4 - High Density Residential		
	RE1 - Public Recreation		
	RE2 - Private Recreation		
	SP1 - Special Activities		

Height of Buildings



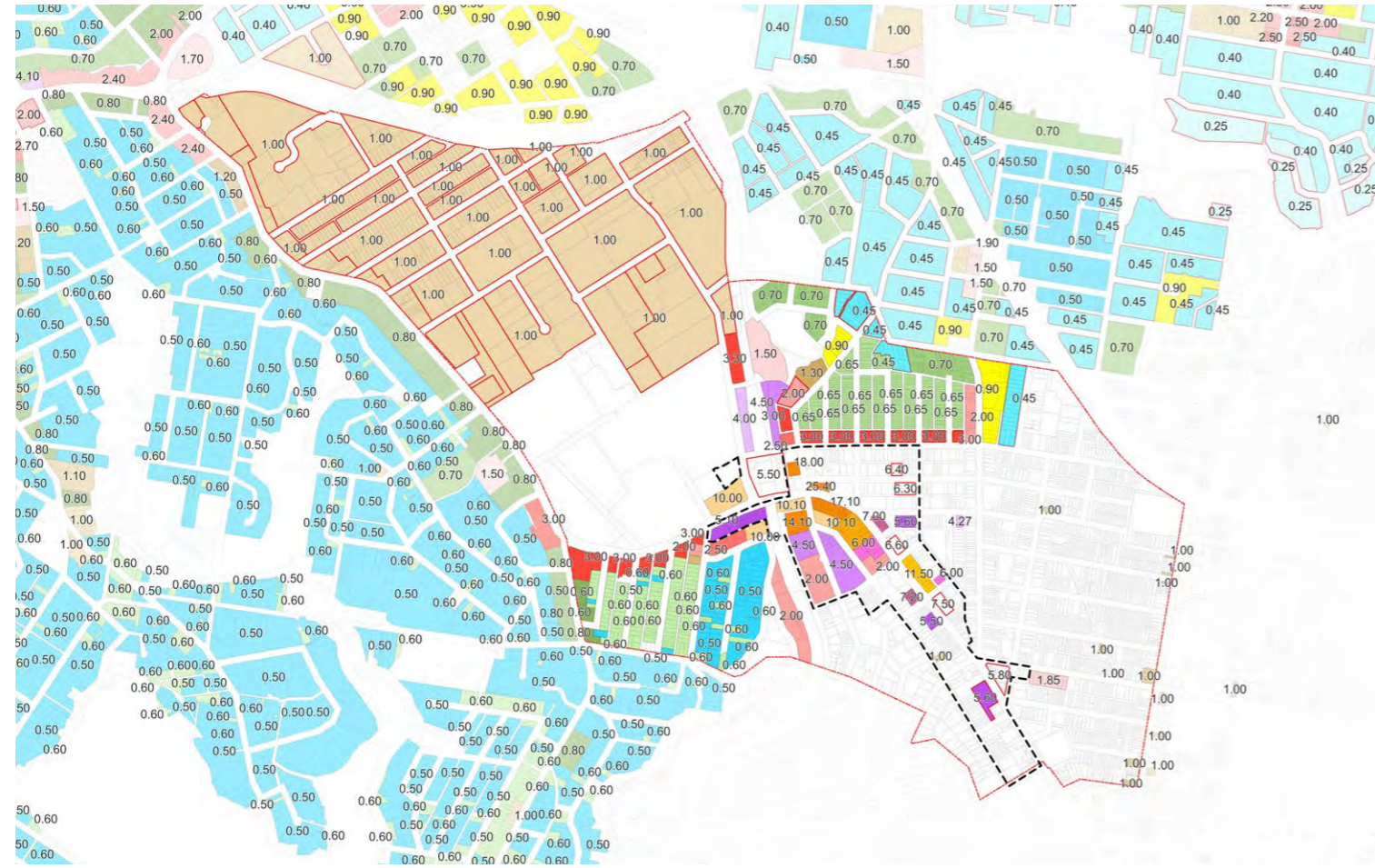
20,000 @ A3

KEY

	Precinct Boundary		25-29.9m
	TOD Accelerated Rezoning Area		30-34.9m
	7m		35-39.9m
	8.5m		40-44.9m
	9.5m		45-49.9m
	10m		50-54.9m
	11m		55-59.9m
	12m		60-79.9m
	13-14.9m		80-99.9m
	17-18.9m		125-149.9m
	19-20.9m		175-199.9m
	21-22.9m		60-80m (RL)
	23-24.9m		80-100m (RL)
			100m+ (RL)

Current Planning Controls

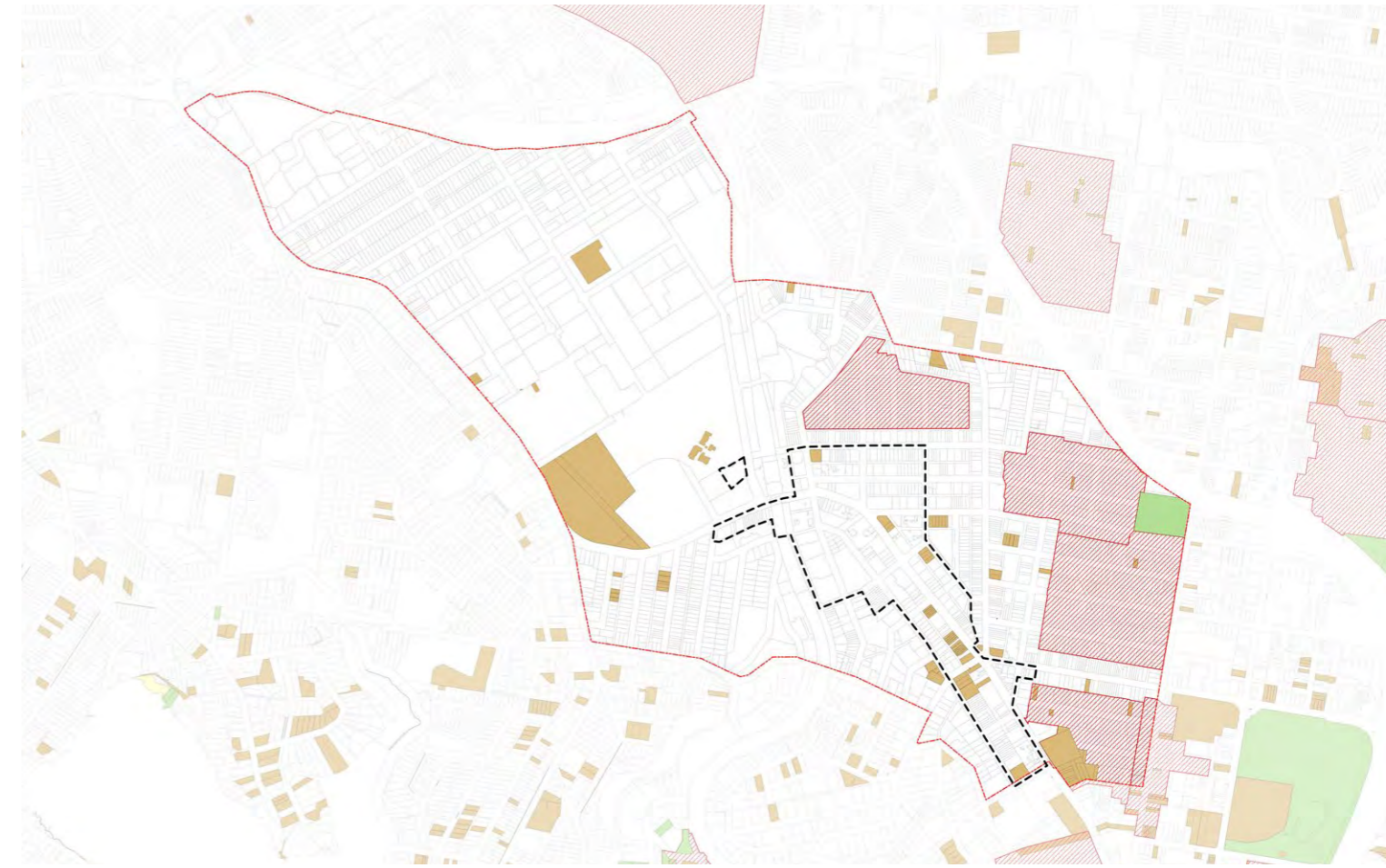
Floor Space Ratio



20,000 @ A3

KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	0.25
	0.4
	0.5
	0.6
	0.7
	0.8
	0.9
	1
	1.5
	1.85
	2
	2.5
	3
	4
	4.5
	5
	6
	7.2
	10
	11
	12
	13
	14+
	Additional Controls

Heritage



20,000 @ A3

KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	Heritage Item - General
	Heritage Item - Landscape
	Heritage Conservation Area

12,000 @ A3

Process

The Urban Design Study process has been developed across three key stages. These are Review, Verify & Validate, and Refine & Document.

Refine

This report is founded on the 2036 Plan (the Plan) and its proposed controls, objectives, and principles, along with the previous Urban Design Framework that supported the Plan. Since the Plan was finalised in 2020 there have been changes in the political, strategic, and spatial context of the site. Therefore, the report starts with identifying the Case for Change, a review of the key strategic drivers and the impacts they have on the current 2036 Plan proposal. Running in parallel to this, current Precinct Understanding identifies movement, open space, land use, and activity patterns across the precinct to ensure the final masterplan will be contextually accurate.

The outcome of these two works is a series of Outcomes that are used to inform the next stage.

Verify & Validate

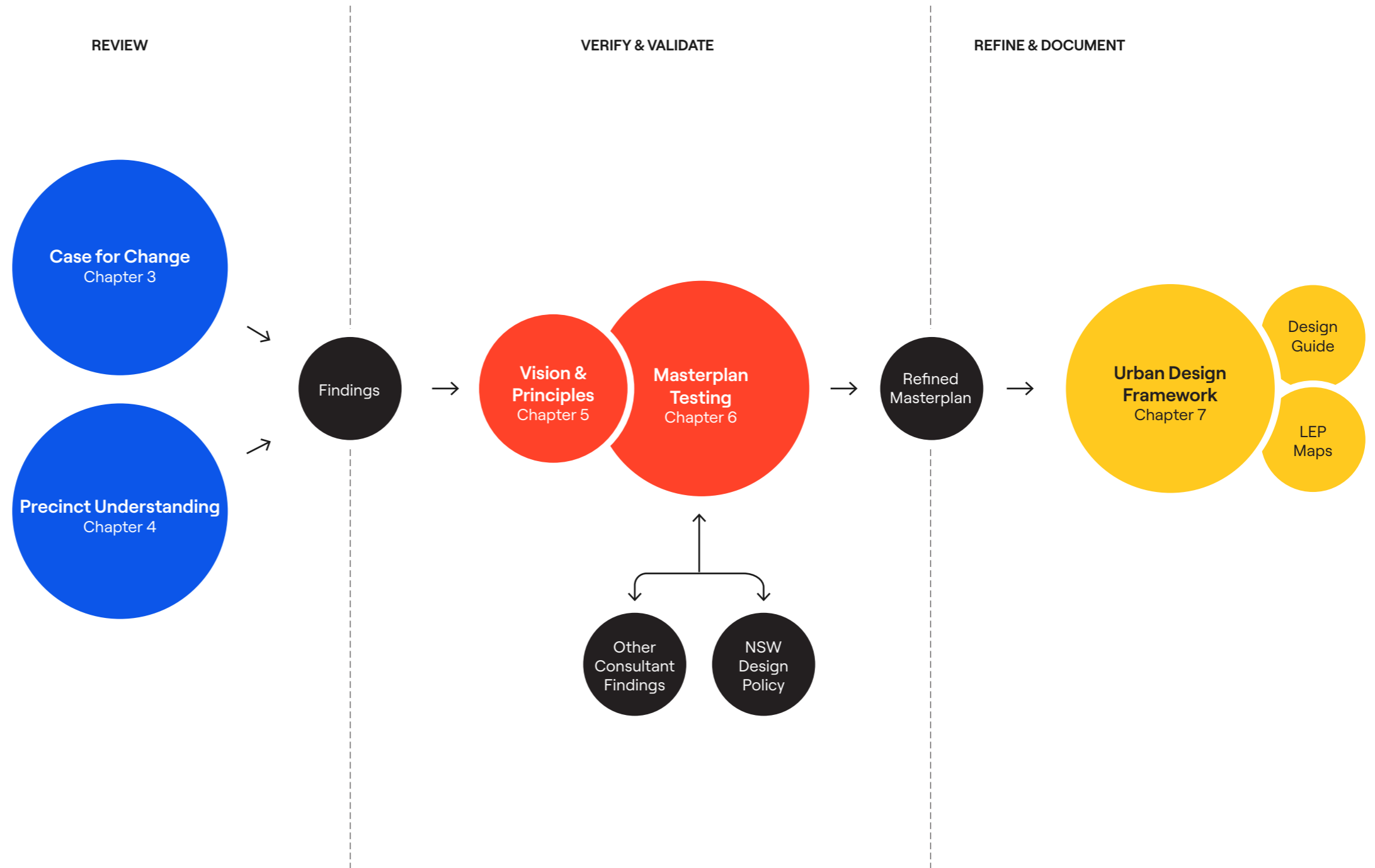
A number of tests have been performed on the Plan to ensure it is still meeting the needs of the precinct, and to identify ways in which it needs to change to accommodate those needs. Several factors inform these studies such as external consultant findings, current NSW design policy, and best-practice approaches to urban design.

The result is a preferred approach that represents an appropriate built form and urban outcome for the site.

Refine & Document

The final stage of the project is the refinement of the Urban Design Framework that supported the Plan. This includes updated maps for open space, built form, movement, and land use, ensuring that each of these captures the Preferred Approach and the findings from the Precinct Understanding. These maps represent the final urban outcome for the site and will guide any future developments in ensuring they are contextually appropriate within the broader place strategy.

To further support the State-Led Rezoning, input to a Design Guide and the creation of LEP maps is provided.



3

Case For Change

Project Drivers

There are several key considerations for creating a 'Case for Change' at St Leonards and Crows Nest. These considerations have been consolidated into three priority 'Project Drivers' that summarise the primary need to assess and amend the 2036 Plan proposed controls. They are:

- Transport-Oriented Development,
- Housing & Affordability, and
- Collaboration & Jobs.

The vision and objectives defined in the Plan are still relevant and are to be the guiding star for these drivers. However, it is important to understand that whilst the Plan was developed to be flexible, the key policy, strategic, and economic context that underpinned the Plan has changed. Therefore, the 'Case for Change' is a series of interventions on the Plan to update and refine it within the current context.

The three Project Drivers are unpacked in further detail on the following pages.



2036 Plan

Ensuring the controls prescribed in the 2036 Plan are meeting the future needs and aligning with the latest in policy and strategic objectives for the precinct.



Transport-Oriented Development

Providing jobs and homes in close proximity to public transport, in particular the new Crows Nest Metro and existing St Leonards Train Station.



Housing & Affordability

Increasing housing supply and ensuring that a diverse range of housing typologies including affordable options are deliverable within the precinct.



Collaboration & Jobs

Maintaining the precinct's status as a Health and Education Innovation cluster that ensures a substantial increase in jobs is available to support the cluster.

2036 Plan

The 2036 Plan (the Plan) is a collection of several documents that collate into a framework for the precinct as it evolves from 2020 to 2036. The key documents that make up the framework are:

- **Local Character Statement**
Outlines the community’s vision for the future character of the area.
- **Green Plan**
Guides planning of open space and tree canopy in a coordinated manner across the area.
- **Special Infrastructure Contribution Scheme (SIC)**
Recognises that new development should contribute to State and regional infrastructure upgrades required to support sustainable growth.
- **St Leonards and Crows Nest 2036**
Collates the community consultation outcomes and specialist technical studies to detail how the vision for the area can be achieved with future planning control changes and supporting infrastructure. The plans to the right are the primary structure plans from that report.

Whilst some things have changed, many of the priorities, actions, principles, and objectives set out in the Plan are still relevant to the current context. The Plan provides the foundation to support a considerable increase in dwellings (+6,683) and jobs (+16,500) in the area.

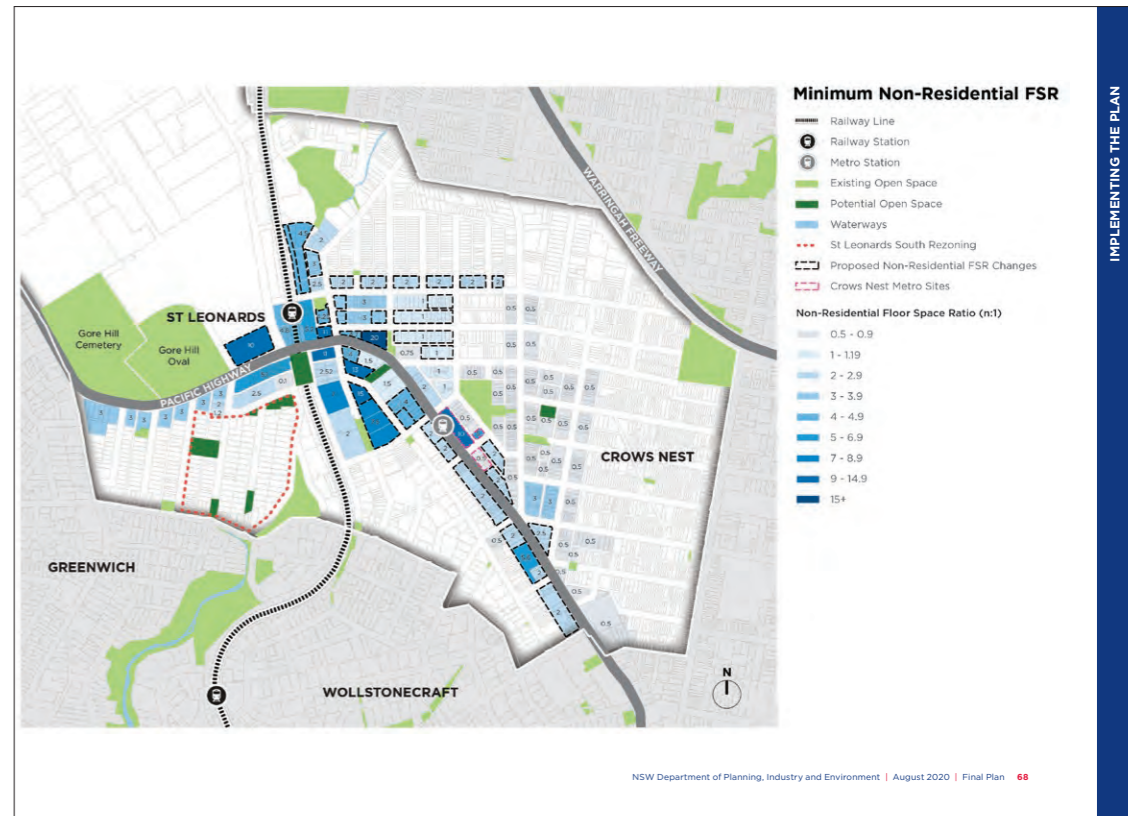
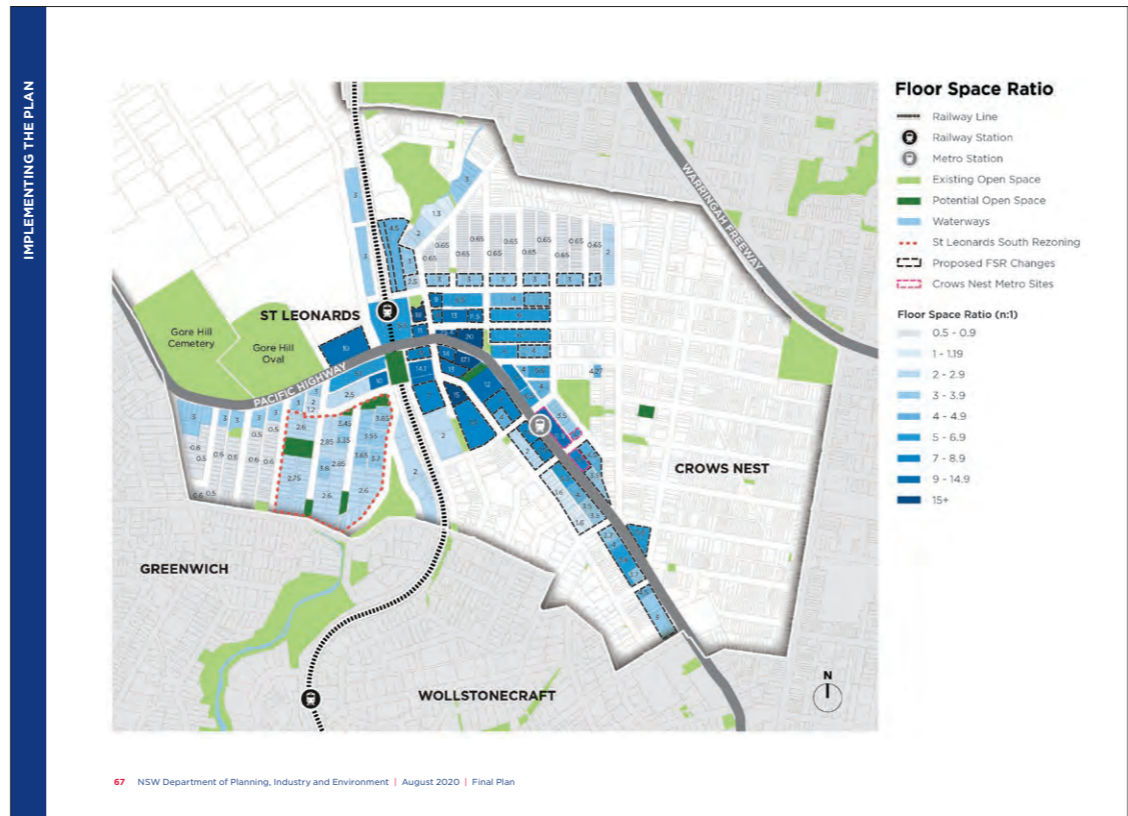
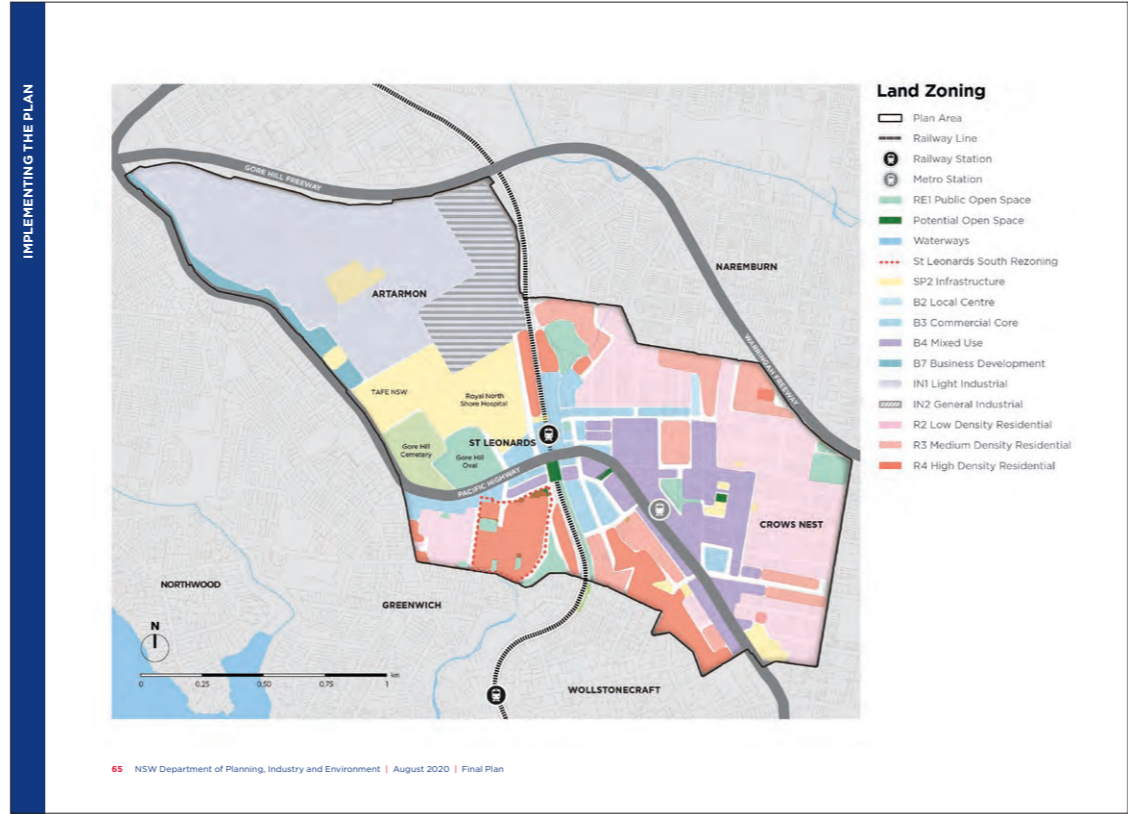
Taking on board the Plan’s approach to development intensity, this study is aimed at identifying new opportunities that have presented themselves since 2020, and ensuring that these can be captured in a renewed masterplan for the area. The culmination of which will be a State-Led Rezoning, as suggested in the Plans proposed planning control changes.

KEY STATISTICS

NEW DWELLINGS +6,683	NEW JOBS +16,500
PRIORITIES 22	ACTIONS 53

CASE FOR CHANGE

- Opportunity to update based on recent developments
- Capture the current approach to urban design and development
- Ensure consistency with State government drivers



2036 Plan

THE 2036 Plan was structured under four key themes. These are:

- Infrastructure & Collaboration
- Liveability
- Productivity
- Sustainability

Each theme had a number of Planning Priorities, as well as Precinct Objectives. These have been shown to the right. These priorities and objectives are still relevant and have been utilised within this report as the basis for change.

Under Sustainability, there are controls governing the overshadowing of open space. Whilst many of these have not changed, we have considered how these could be amended to better facilitate increased height in pursuit of additional affordable housing. This is discussed in more detail in the Masterplan Testing chapter of this report.

It is also important to flag that the 2036 Plan approached the delivery of commercial activity throughout the precinct as a jobs target of 16,500 growth. This report considers how jobs can be delivered in non-residential floor space as opposed to a jobs target. The same amount of jobs can be delivered, but we're talking about it in a slightly different way.

CASE FOR CHANGE

- Need to consider appropriateness of overshadowing controls
- Need to align jobs target to a non-residential GFA target

INFRASTRUCTURE & COLLABORATION	LIVEABILITY	PRODUCTIVITY	SUSTAINABILITY
<p>PRIORITIES</p> <p>Planning Priority N1: Planning for a city supported by infrastructure</p> <p>Planning Priority N2: Working through collaboration</p>	<p>PRIORITIES</p> <p>Planning Priority N3: Providing services and social infrastructure to meet people's changing needs.</p> <p>Planning Priority N4: Fostering healthy, creative, culturally rich and socially connected communities.</p>	<p>PRIORITIES</p> <p>Planning Priority N12: Delivering integrated land use and transport planning and a 30-minute city</p> <p>Planning Priority N14: Leveraging inter-regional transport connections</p> <p>Planning Priority N8: Eastern Economic Corridor is better connected and more competitive</p> <p>Planning Priority N9: Growing and investing in health and education precincts</p> <p>Planning Priority N10: Growing investment, business opportunities and jobs in strategic centres</p> <p>Planning Priority N11: Retaining and managing industrial and urban services land</p> <p>Planning Priority N13: Supporting growth of targeted industry sectors</p>	<p>PRIORITIES</p> <p>Planning Priority N16: Protecting and enhancing bushland and biodiversity</p> <p>Planning Priority N17: Protecting and enhancing scenic and cultural landscapes</p> <p>Planning Priority N19: Increasing urban tree canopy cover and delivering Green Grid connections</p> <p>Planning Priority N20: Delivering high quality open space</p> <p>Planning Priority N21: Reducing carbon emissions and managing energy, water and waste efficiently</p> <p>Planning Priority N22: Adapting to the impacts of urban and natural hazards and climate change.</p>
<p>OBJECTIVES</p> <ul style="list-style-type: none"> • Deliver key State and regional infrastructure to support long-term growth. • Coordinate the delivery of key infrastructure between NSW Government and councils. • Enhance quality of life by providing infrastructure to support place outcomes. • Coordinate the delivery of infrastructure with growth to ensure infrastructure is available at the right time. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> • Ensure new development retains and enhances important heritage elements by using sympathetic building materials and preserving key views and vistas. • Retain and enhance the village atmosphere in and around Crows Nest, particularly along Willoughby Road. • Apply casual surveillance and universal access principles to new development to create a safe, inclusive and comfortable environment. • New development should have consideration to wind impacts demonstrated through a wind assessment. • New buildings adjoining Hume Street Park should contribute to the village green atmosphere. They should also provide an active frontage to the park and encourage connections between Willoughby Road, Hume Street Park and Crows Nest Metro Station. • Consider cumulative impacts of new developments on existing areas, including overshadowing, wind impacts and view loss. • Contain taller buildings between St Leonards Station and Crows Nest Metro Station. • In transition areas between low and high-rise developments, new development should consider the prevailing scale and existing character in the design of their interfaces. • New building design should provide high on-site amenity and consider street width and character by providing ground and upper level setbacks and awnings to achieve a human scale at street level. • Ensure new development contributes to a range of dwelling types in the area to cater for all life cycles. • Investigate and secure locations for education establishments to service the precinct. This includes early childhood, schools, and tertiary education facilities that may be needed to deliver education services. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> • Ensure new employment sites in the area cater to a range of business types and sizes. • Foster development of high technology and health related uses in the light industrial area to support the surrounding hospitals. • New development in mixed-use areas should contribute to the delivery of active streets by providing a range of uses at ground floor. • Protect large commercial core zoned sites to ensure employment uses are protected into the future. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> • Ensure no additional overshadowing of public open spaces and important places in accordance with solar access controls identified on page 38 of the Plan. • New development along Chandos, Oxley and Mitchell Streets should provide wider setbacks to enable the creation of greener streets. • New development adjoining the increased setbacks and landscaped areas should contribute to its landscape character. For example, by providing planter boxes, lighting, green walls, deep planting, landscaped setbacks and forecourts. • New development in nominated areas along the Pacific Highway should be set back 3 metres and incorporate elements such as avenue planting, below ground setbacks for deep soil planting. • Incorporate new street trees to realise the tree canopy targets identified on Page 3 and increase the overall tree coverage in the area.

Transport-Oriented Development

In late 2023, the NSW Government announced the Transport-Oriented Development (TOD) program. The TOD program is part of the NSW Government's plan to create more well-located homes close to transport, jobs, and services.

There are 2 parts to the TOD program. Part 1 is a focus on 8 primary precincts that are undergoing an accelerated State-Led Rezoning pathway. These precincts are slated to create infrastructure and capacity for 47,800 new homes over 15 years. Crows Nest is the subject of one of these 8 accelerated precincts.

The second part of the TOD is a further 37 precincts around existing or proposed stations that are subject to an amendment in the Housing SEPP and will create capacity for 138,000 new homes over 15 years. The study area of this report is not subject to this part of the TOD program.

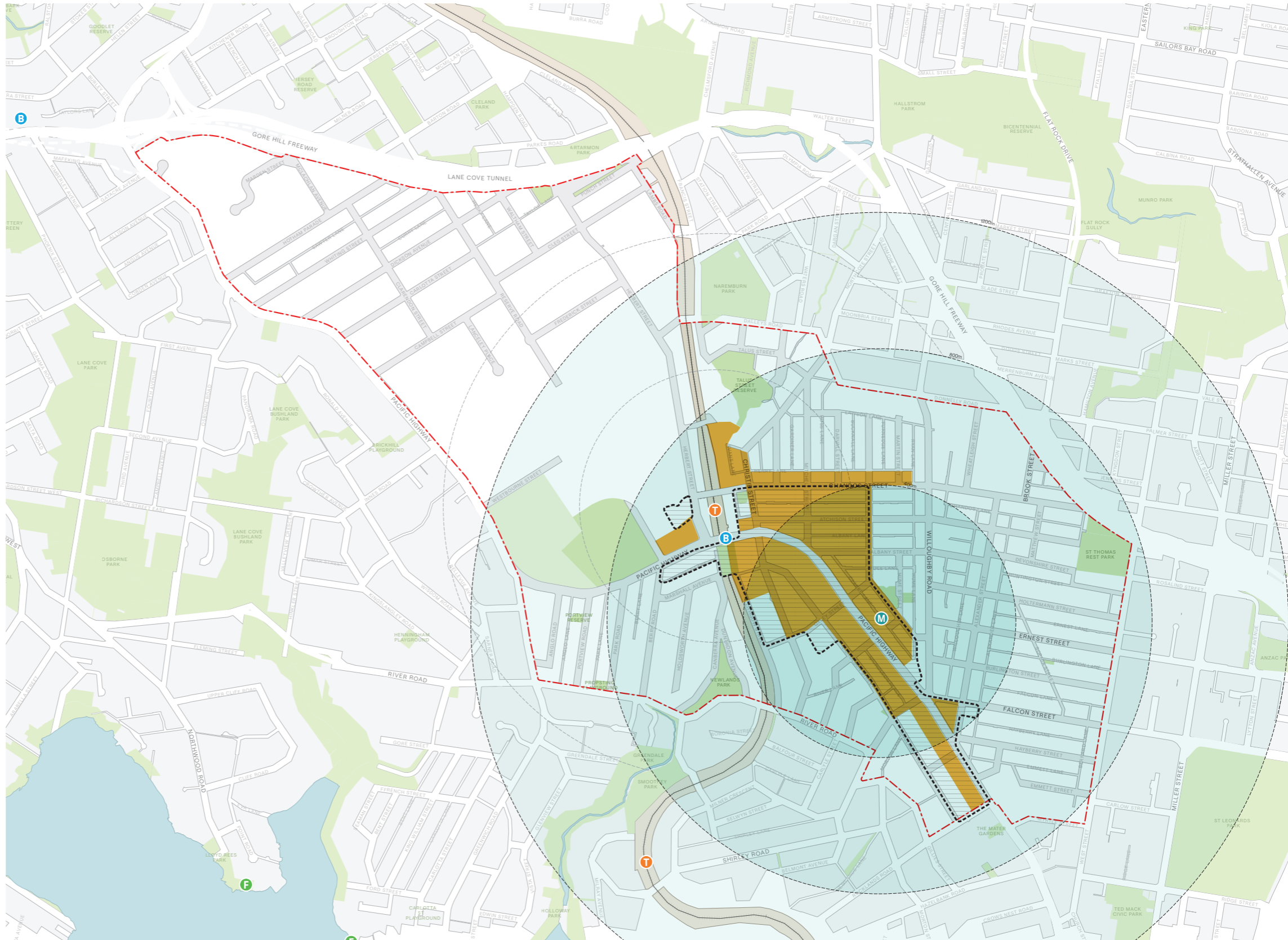
Whilst the TOD program calls for land within 1,200m of the identified station to be considered for rezoning, this precinct is already the subject of the 2036 Plan which has prescribed an area of change. That area of change was determined by a thorough spatial and economic context analysis of the precinct and is the likely area of change subject to this State-Led Rezoning. However, given recent changes since the Plan was finalised in 2020, there is capacity to consider if the area of change can expand and how the proposed controls can be reshaped to ensure an appropriate uplift in housing, jobs and affordable dwellings is possible.

CASE FOR CHANGE

- Increase housing supply within the precinct
- Ensure delivery of affordable housing
- Place more people in close proximity to public transport

KEY

	Precinct Boundary
	TOD Accelerated Rezoning Area
	2036 Area for change
	Ferry Stop
	Bus Interchange
	Train Station
	Metro Station
	Transport Buffer Area



Housing & Affordability

In October 2022 the Australian Government announced the National Housing Accord, an agreement between Federal and State/Territory Governments to address the supply of housing affordability. The Accord provided a series of actions that encouraged States and Territories to expedite zoning, planning, and land release for social and affordable housing. NSW was prescribed a target of 3,100 new affordable homes within 5 years from mid-2024.

The NSW Government is committed to this target, with 2,100 of those homes already in pipelines for delivery. To address the remaining target, the Government has several active commitments including the TOD program and several new or reformed SEPP's and planning policies. The NSW Government has also stated they aim to encourage up to 15% affordable housing contribution for new developments.

In addition to affordability, the Government's policies are also targeting an increase in the total amount of dwellings being delivered over the next few decades. Population projections from 2022 suggest that NSW will need 904,000 new homes by 2041.

When looking at projection and census data related specifically to the study area we can see that there is an anticipated growth of 7,700 new people living in the area, 3,600 new dwellings, and 10,400 new jobs by 2036.

The study area is a significant opportunity to meet the needs of the National Housing Accord and the NSW Governments commitments to generate more housing and affordability.

CASE FOR CHANGE

- Provide additional housing in high amenity area
- Increase the proportion of affordable housing in the precinct
- Future proof the precinct for evolving demographics

TARGETS

**NEW HOMES NEEDED BY 2041
IN NSW**
SOURCE: NSW Government

904,000

**NSW AFFORDABLE HOUSING
5 YEAR ALLOCATION**
SOURCE: Housing Accord

3,100
2,100 IN PROGRESS

**NSW AFFORDABLE HOUSING
DEVELOPER CONTRIBUTIONS**
SOURCE: NSW Government

UP TO 15%

GROWTH ESTIMATES

	ST LEONARDS & CROWS NEST 2021		ST LEONARDS & CROWS NEST 2036
PERSONS	SOURCE: ABS Census 2021 * 15,300	→	SOURCE: TfNSW Projections 2022 ^ 22,600 +7,700
DWELLINGS	SOURCE: ABS Census 2021 * 8,500	→	SOURCE: TfNSW Projections 2022 ^ 12,100 +3,600
JOBS	SOURCE: TfNSW Projections 2022 ^ 52,400	→	SOURCE: TfNSW Projections 2022 ^ 62,800 +10,400

Notes:

*ABS Census 2021 data based on Mesh Block boundaries

^TfNSW Projections 2022 based on Travel Zone boundaries

Boundaries do not exactly match the study area.

The ABS make small random changes for privacy reasons.

The above numbers have been rounded.

Collaboration & Jobs

St Leonards is a mixed use centre with high rise offices, a major health and education precinct, high density residential development, and good public transport. It is an attractive centre, bolstered by the restaurant village along Willoughby Road in Crows Nest and productive industrial employment area within Artarmon. In addition to leveraging the potential of the Royal North Shore Hospitals and the Mater Hospital to grow jobs in complementary health services and existing education facilities, a new Sydney Metro station at Crows Nest will further strengthen the centre's economic and employment functions.

Understanding this, the The North District Plan has identified Crows Nest and St Leonards as a 'Collaboration Precinct' with the opportunity to leverage the potential of the Royal North Shore Public and Private Hospitals, Mater Hospital, complimentary health services and the introduction of the Crows Nest Metro. This intends to further strengthen the centre's economic and employment functions.

The North District Plan presents several actions for the precinct that included setting targets for job growth. A baseline of 54,000 and a high target of 63,500 total jobs by 2036 was proposed. To support this, the 2036 Plan provided a breakdown of the jobs target across several sub-precincts across St Leonards and Crows Nest.

To meet these targets, the Stage 2 Urban Design Report that supported the Plan identified a target non-residential GFA of 34,000 to 106,600sqm was needed. This target is maintained for the purpose of this study. However, it is important to note that market conditions in the area have likely changed and the high-level target that was previously being achieved may no longer be appropriate. Since the finalisation of the 2036 Plan, several rezonings have occurred that have reduced the amount of non-residential floor space within the precinct.

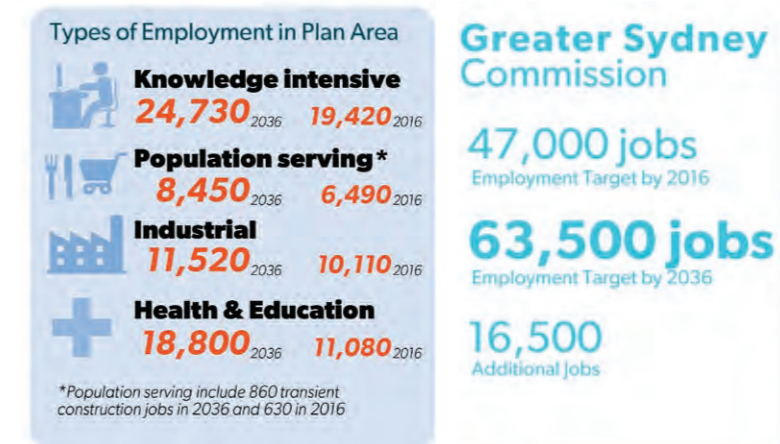
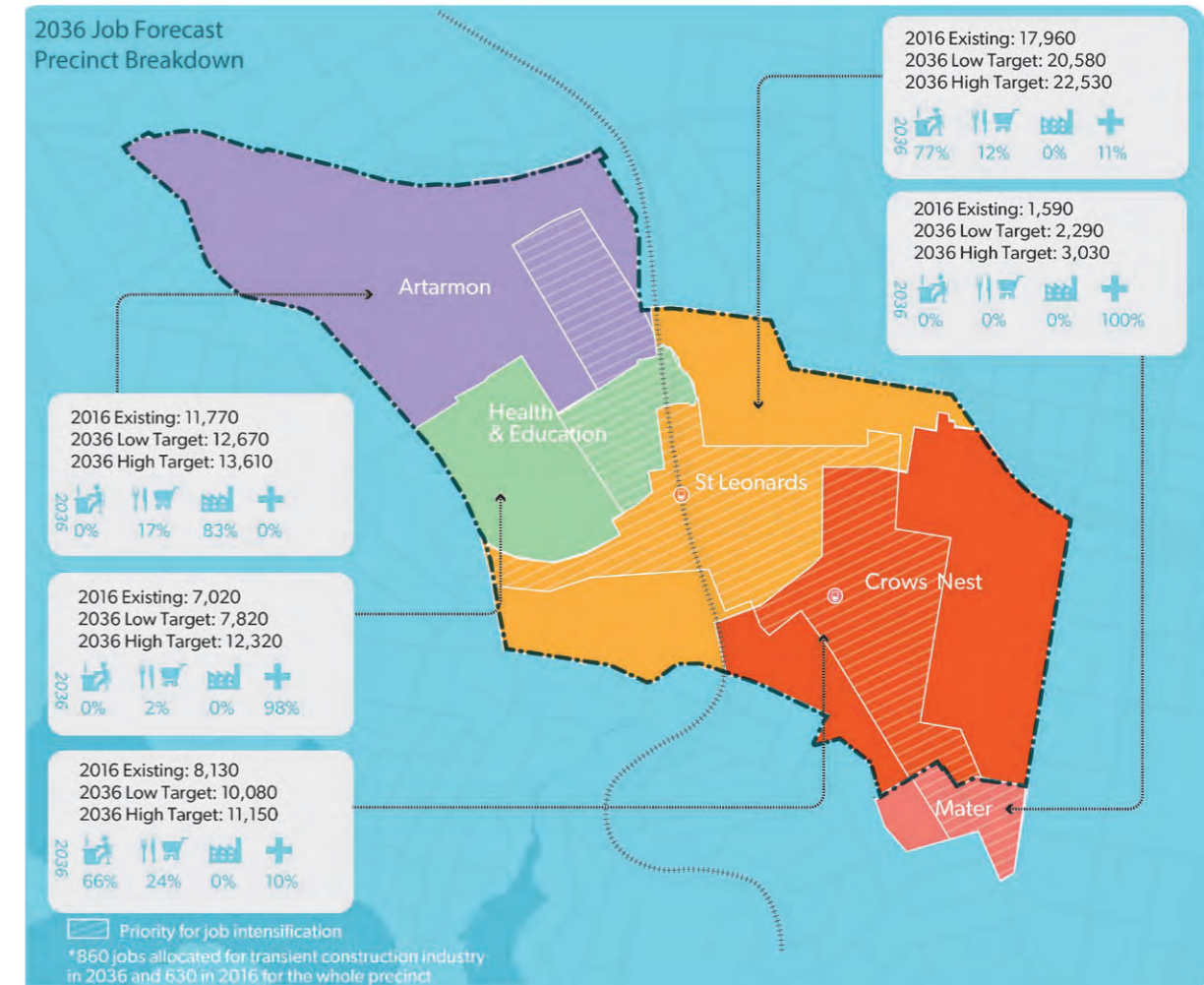
Several factors play into this such as the appetite for A-grade commercial floor space in a post-pandemic society and the opportunity to convert non-residential floor space to Build-to-Rent dwellings in applicable land zones. These factors are considered in the study to ensure that future is meeting the desires of the current economic context.

- CASE FOR CHANGE**
- Ensure jobs targets are still appropriate and achievable
 - Consider how Build-To-Rent may impact traditional floor space
 - Capture a rapidly changing commercial market

Non-Residential Floor Space Target



Whilst the job forecast talks about a number of jobs, this study aims to provide that target of jobs within non-residential floor space. This report will refer to this target of 34,000 to 106,600sqm non-residential floor space rather than the 16,500 jobs figure. This target is also based on the jobs required to fulfil the areas shown as St Leonards (orange) and Crows Nest (red) on the diagram to the right). Floor space outside of this area is assumed to be delivered through other methods.



2036 Job Forecast Breakdown

Outcomes

In analysing the objectives of the Transport-Oriented Development (TOD) program, the need for more housing and affordability under the National Housing Accord and State Government priorities, and in ensuring that the precinct can continue functioning as a hub of collaboration, a series of outcomes are evident.

These outcomes are the common reasons to determine a 'Case for Change' at St Leonards and Crows Nest. In particular, they represent the need to refine the approach taken in the 2036 Plan to ensure it is meeting the many objectives for the precinct and that these are still relevant in the current context.

01
Update the 2036 Plan to reflect recent changes in economic, social, spatial, and policy context

02
Capture latest approaches and best practice Urban Design and place-making

03
Ensure the outcomes are consistent with current State Government drivers

04
Provide additional housing in high amenity areas to support the TOD program objectives

05
Ensure deliverability of affordable housing to meet the objectives of the National Housing Accord and State Government priorities

06
Future-proof the precinct for evolving demographics in the area over the next few years

07
Ensure the job targets as defined in the Northern District Plan and the 2036 Plan area still appropriate and achievable

08
Consider how built-to-rent may impact on non-residential floor space and the jobs target

4

Precinct Understanding

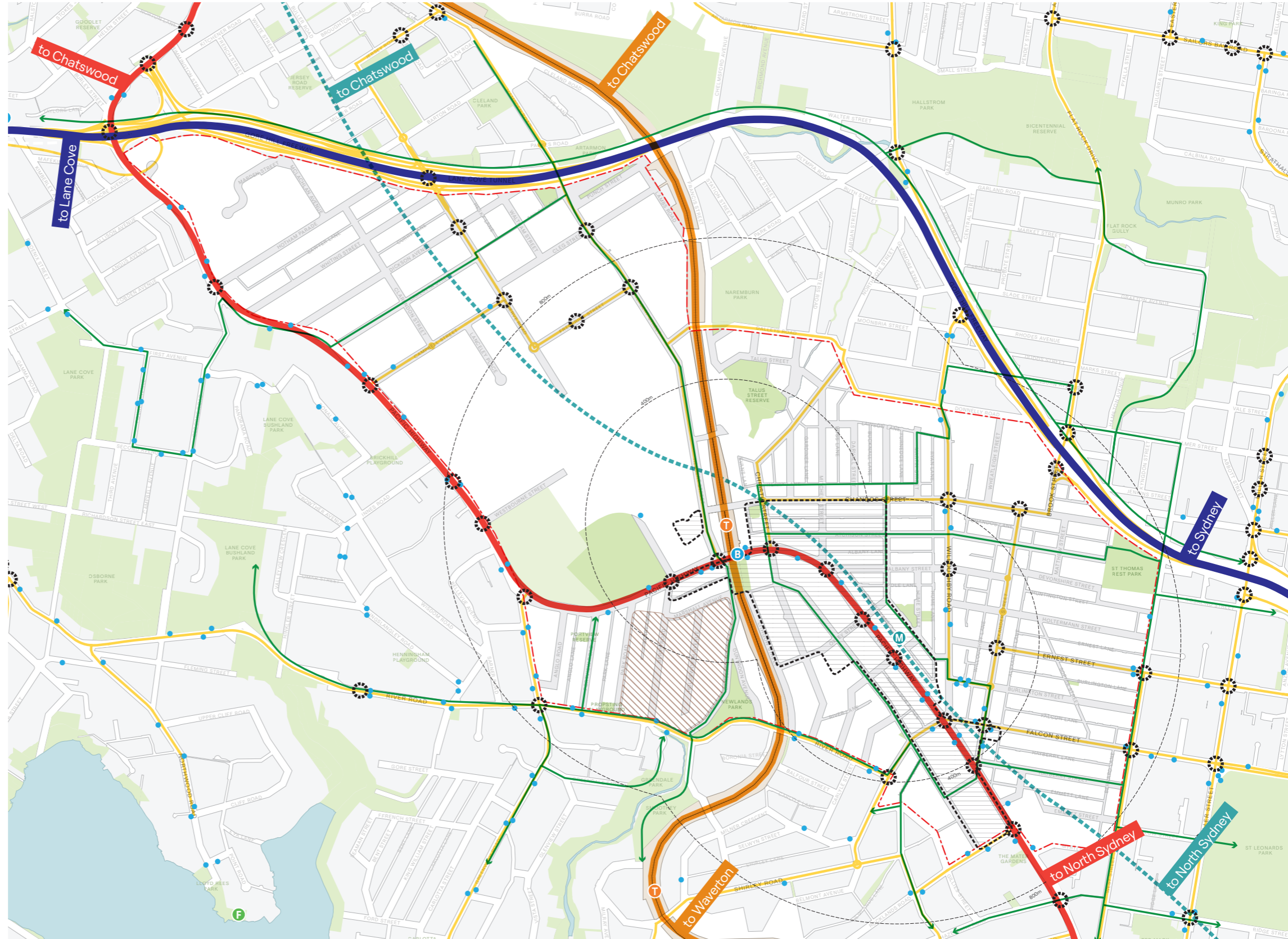
Vehicular Movement & Public Transport

The Precinct is well connected to the greater Sydney with the M1 (Gore Hill Freeway) in close proximity linking to the Cahill Expressway into the CBD, as well as Pacific Highway running through the site which links to Chatswood to the north and North Sydney to the south. A number of secondary roads connect throughout the area and into the major road networks surrounding.

The precinct is serviced by an existing heavy rail network connecting to Sydney and north to Chatswood and the new Metro Station currently under construction would provide additional rail travel north and south. A number of buses service the area as well, connecting to major bus interchanges at Lane Cove and Pacific Highway adjacent St Leonards Station. Serviced bus routes provide an approximate 15-20 minutes commute into the CBD.

There is a mixed network of cycleways throughout the area as well, with the majority provided on-road with few dedicated cycleways. There are a number of traffic lights, primarily along Pacific Highway, that provide pedestrian crossings. The safety and accessibility of the precinct for active transport users is considered in the Urban Design Framework.

KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	Motorway
	Primary
	Secondary
	Metro Line
	Train Line
	Cycleways
	Traffic Lights/Crossings
	Ferry Stop
	Bus Interchange
	Bus Stop
	Train Station
	Metro Station



Open Space

Access and quantum of open space in the area has been analysed to determine where any open space shortfalls are present which may require consideration. The analysis of open space has been developed in accordance with the GANSW Greener Places Design Guide that provides the following guides:

- **High Density Areas (>60 dwellings/ha)**
A local park of a minimum size of 1,500m² within 200m walking radius (3 min walk).
- **Medium/Low Density Areas (<60 dwellings/ha)**
A local park of a minimum size of 3,000m² within 400m walking radius (5 min walk).

Further recommendations are made for access to district and regional parks however that has not been considered for this analysis.

There are a number of local parks that are of sufficient size within the study area and there are also a number of planned parks to be delivered in the near future. Some open spaces in the area are too small and have not been included in the catchment analysis.

The analysis shows that a large portion of St Leonards and Crows Nest is within 200m of adequate sized open space. Some areas on the periphery of the precinct are not within 200m however for the most part, these are industrial and low density areas that are not necessarily subject to the same criteria.

There is one area to the south-west of the precinct that is slated for uplift in the 2036 Plan, yet is not within walking distance of existing spaces and has no open space planned for the future. This is an area that requires consideration if density is to change due to the rezoning in this area.

The below is a breakdown of the open space in the study area.

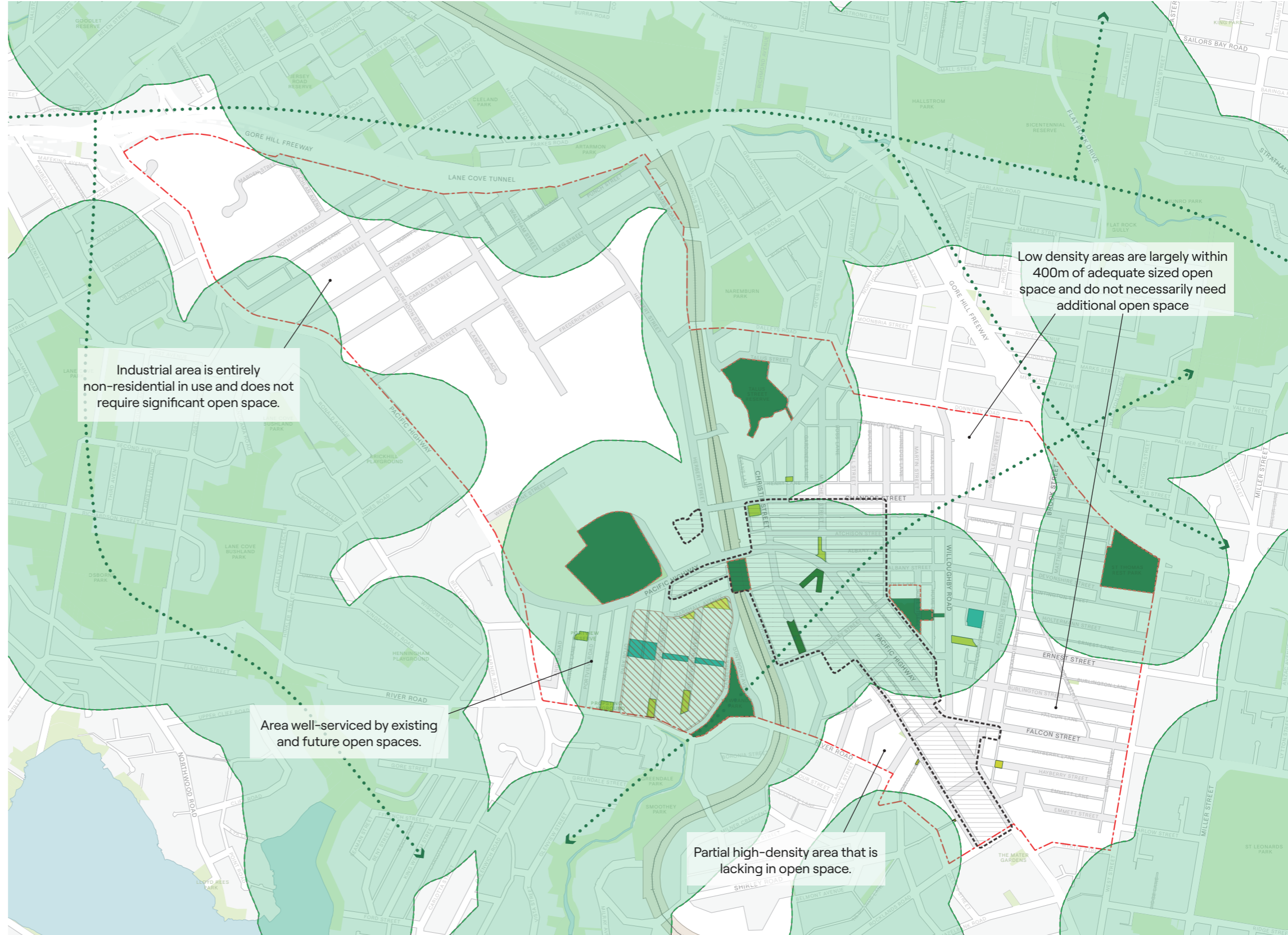
PRECINCT EXISTING OPEN SPACE METRICS:

99,116m² open space > 1,500m²
8,032m² open space < 1,500m²
* 6.5sqm per person

* based on approx. population of 15,300

KEY

- Precinct Boundary
- TOD Accelerated Rezoning Area
- St Leonards South
- Green Grid
- 200m Catchment Area of Existing Open Space >1,500m²
- Existing Open Space <1,500m²
- Existing Open Space >1,500m²
- Planned/Proposed Open Space <1,500m²
- Planned/Proposed Open Space >1,500m²

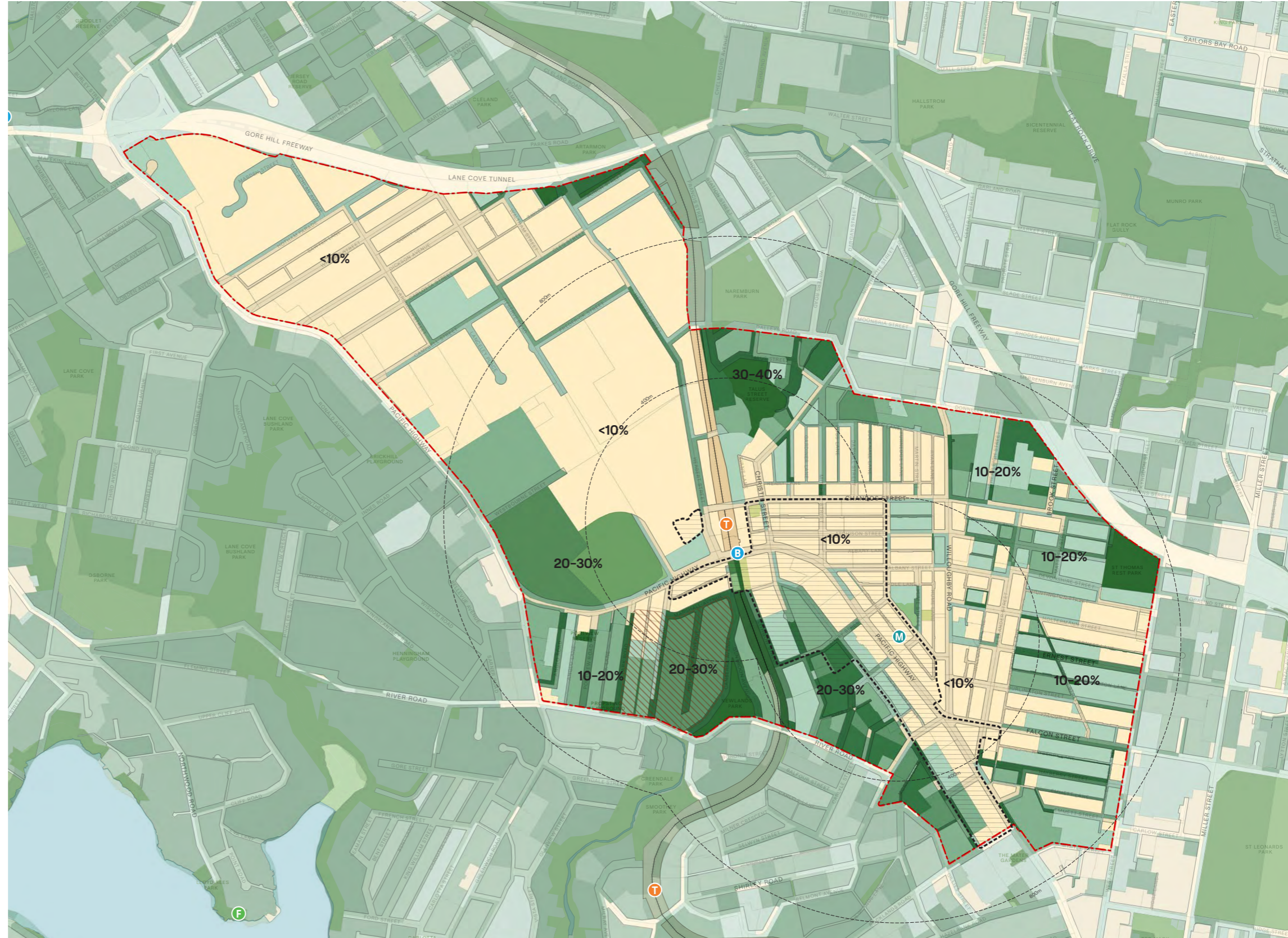


Tree Cover

The study area shows a range of tree canopy cover percentages. Large parts of the industrial area and St Leonards to Crows Nest centres along Pacific Highway have less than 10% cover. That is not uncommon in high density and industrial areas due to the typology of development that utilises more site area for building footprints. In these areas the primary areas trees are found are on the street rather than within private lots.

Higher percentages of tree canopy cover are found to the south-west in St Leonards South round Naremburn Park and to the periphery of the north-east. These areas are largely small lot subdivisions with single dwellings and large private gardens. Higher percentages of cover are found here due to the greater amount of land not used for building structures. Many of these areas are also historic neighbourhoods covered by heritage conservation areas and have been well protected. Significant plantings of high-quality, mature trees are usually found in these areas and are well preserved.

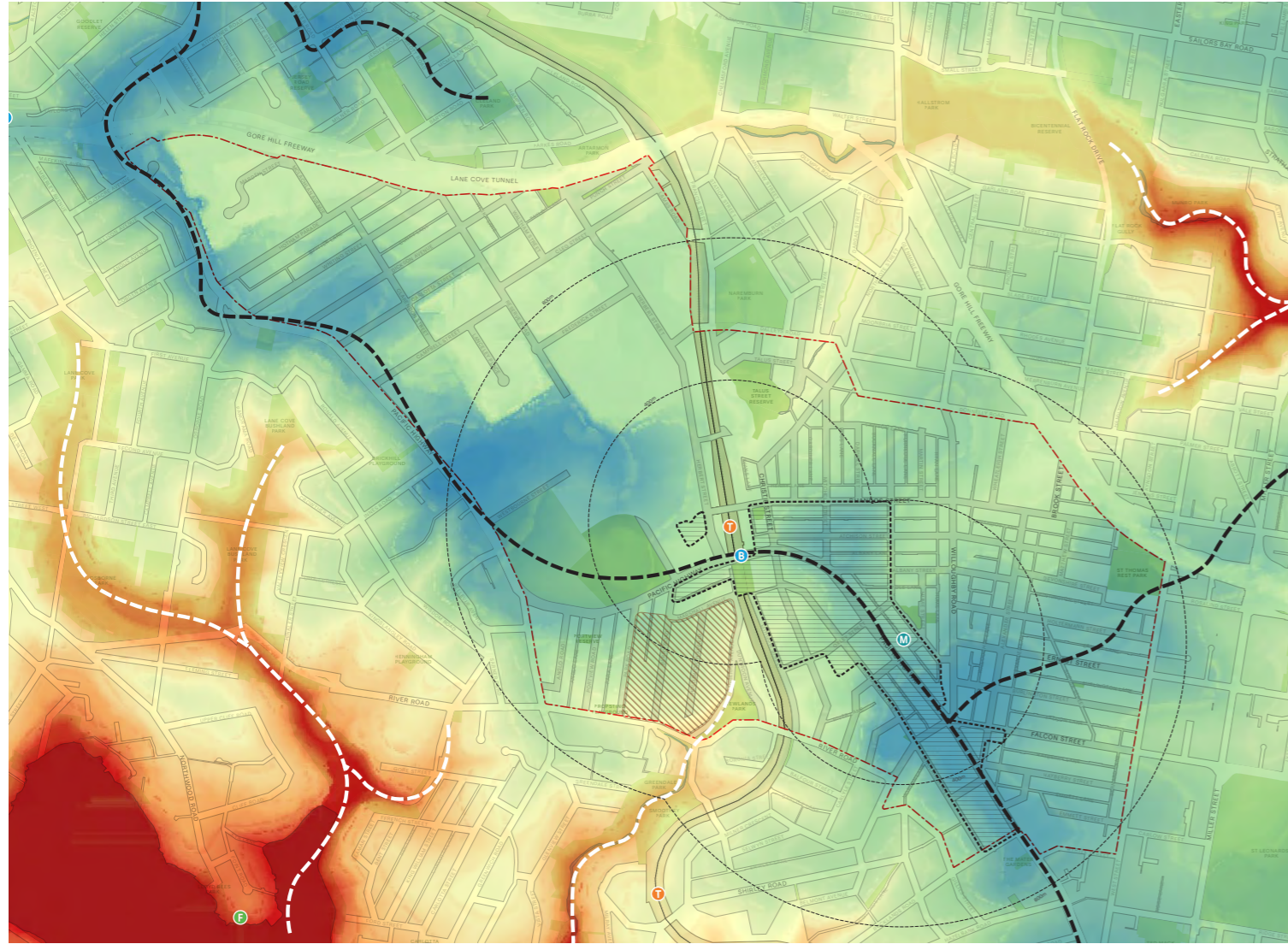
Consideration is to be given as to how tree canopy can be increased in the denser areas of the precinct to combat urban heat island effect and create more comfortable and enjoyable places.



KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	Less than 10%
	10 - 20%
	20 - 30%
	30 - 40%
	More than 40%

Source: NSW Tree Canopy Dataset 2022

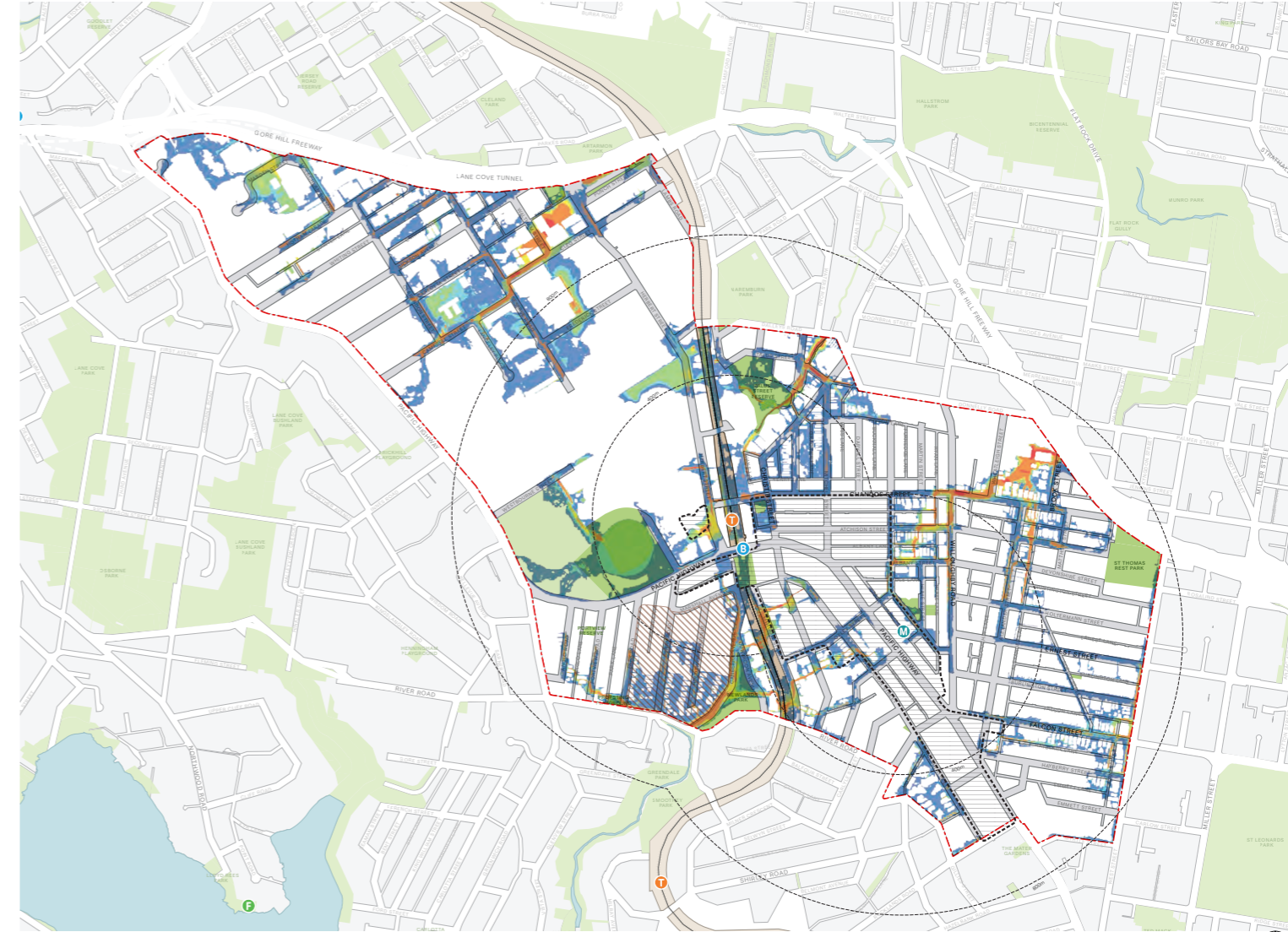
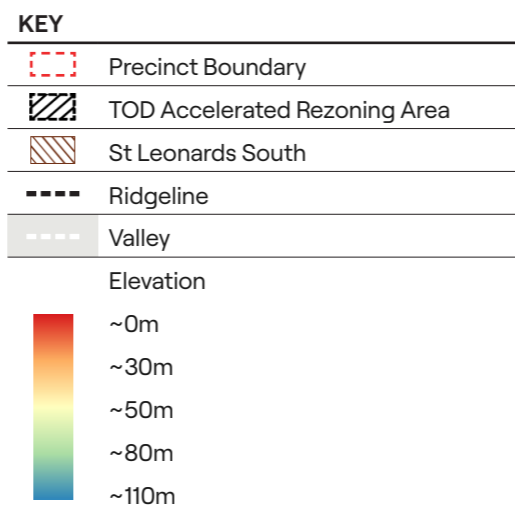
Topography & Flooding



Topography

The Precinct is located along a ridgeline, with steep inclines to the south towards the harbour. Pacific Highway follows a path with gentle rises and falls, whilst Atchison Street and Chandos Street have noticeably steeper inclines for pedestrians towards the train station.

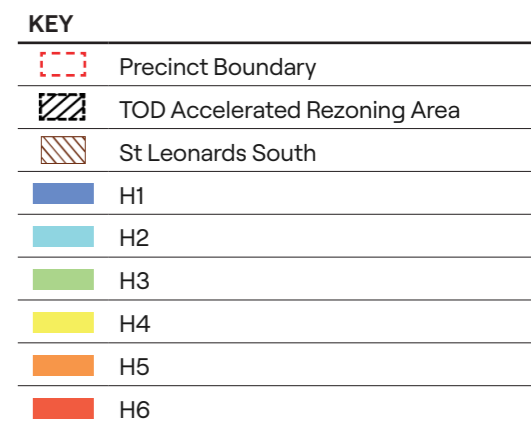
The Artarmon Employment Precinct is relatively flat making it ideal land for the existing industrial uses in the area.



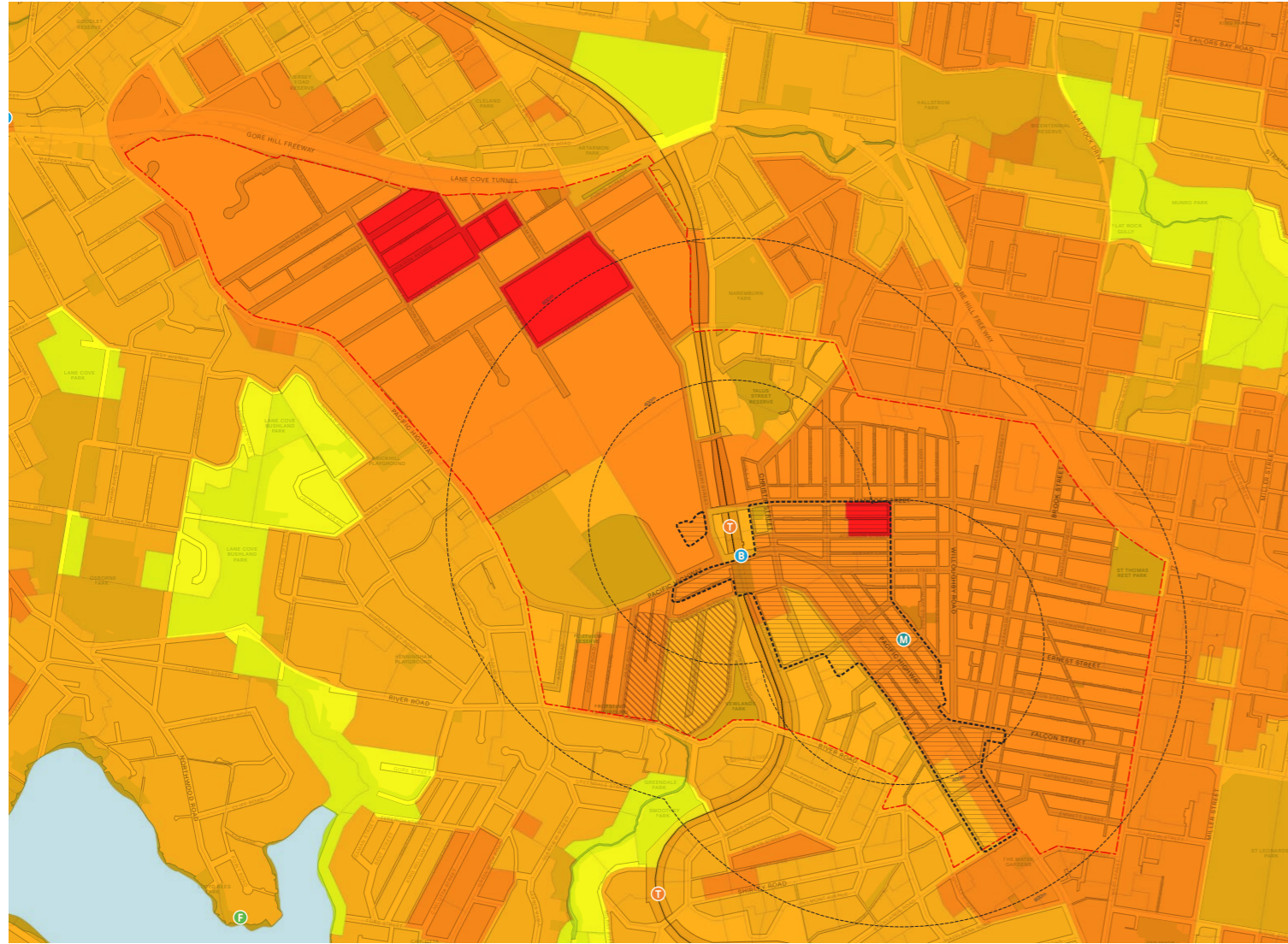
Flooding (PMF Hazards)

Flood modelling provided by GRC Hydro demonstrates PMF (probable maximum flood) Hazards for the study area. There are a number of potential hazard areas that are largely within low-density and the industrial areas.

The 2036 Plan Area of Change has been shown to identify potential impacts to the rezoning sites. Very few areas within the Area of Change are impacted by flooding. The majority of impacts in this area are on the street.



Urban Heat

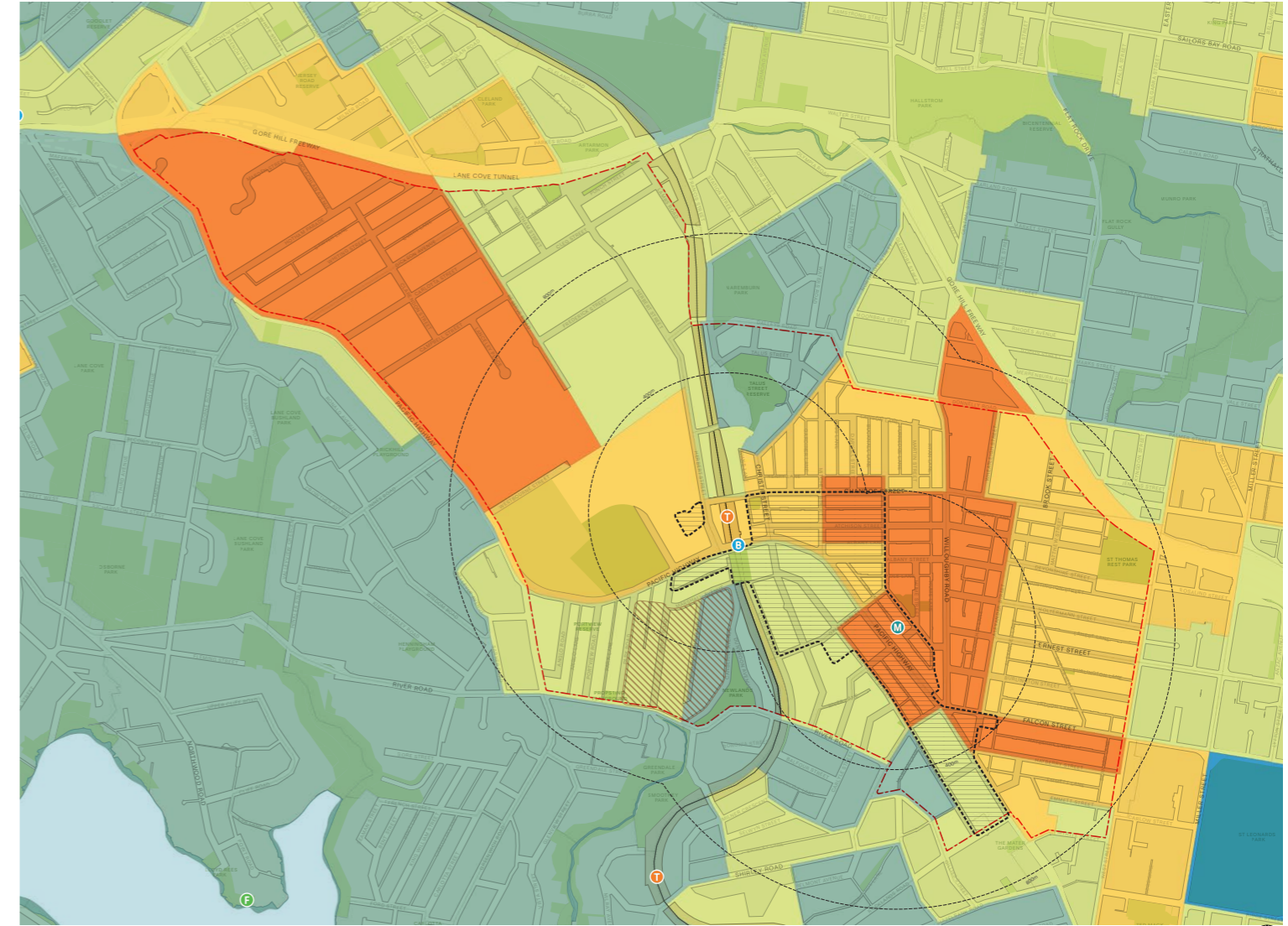


Urban Heat Island Effect

Urban heat island is a comparative measure of the local temperature compared to a baseline, non-urban area. It is represented as the amount of degrees celsius warmer it is than the baseline and is impacted by materials and amount of vegetation.

The precinct is heavily impacted by the urban heat island effect, with majority of the site experiencing 6-9 degrees warmer temperatures than the baseline. This includes the majority of the 2036 Plan Area of Change. Residential areas to the south of the precinct and open spaces experience are subject to temperatures 3-6 degrees warmer, while select blocks within the Artarmon Industrial Area and along Chandos Street are 9 degrees warmer than baseline temperatures.

KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	0-3 Degrees Warmer
	3-6 Degrees Warmer
	6-9 Degrees Warmer
	Warmer Than 9 Degrees



Heat Vulnerability

Heat vulnerability takes into account the heat island effect and compares it to the local demographics to understand which communities are most impacted by heat increase.

The areas most vulnerable to the adverse impacts of urban heat are the western portion of the Artarmon Industrial Area and mixed use and residential developments near Willoughby Road. This area is partially situated within the 2036 Plan Area of Change.

The hospital precinct and the heritage conservation areas of the Holterman Estate and Naremburn are also moderately vulnerable to urban heat.

KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	0 (no population)
	1 (least vulnerable)
	2
	3
	4
	5 (most vulnerable)

Key Views

Some key views within the precinct have been considered for how any future change may impact local character. Whilst there are no specific views that need to be considered through a view impact assessment, it is always important to recognise the value that framing and maintaining key views can have for the visual character of a precinct.

These particular views have been chosen as they are within the 2036 Plan area of change and may be impacted by future developments that align with the rezoning. These views should be considered, as a minimum, by any future proponent in assessing their impacts to the surrounding local character.

These key views include:

1. West along Pacific Highway
2. East along Pacific Highway
3. Wadanggari Park
4. South along Pacific Highway
5. East along Atchinson Street
6. Metro development site, Pacific Highway
7. South along Nicholson Street
8. South along Shirley Road



KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South

Heritage

There are a number of heritage items within the study area that are to be protected. These items form a part of the local character and contribute significantly to the quality of built form and historical nature of Crows Nest in particular.

Gore Hill Cemetery is a large heritage item that will remain entirely unchanged. Various interface considerations may be given to Pacific Highway to improve the presence of the cemetery, however no actual change will occur within it.

The other properties for consideration are mostly along Pacific Highway adjacent to the Five Ways Intersections. These items including a pub, fire station and old shop fronts should be preserved and enhanced as part of any future developments. Particular consideration should be given to how future development can be integrated with these structures to ensure they are not diminished in value and visual importance.



KEY

	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	Heritage Item
	Heritage Conservation Area

Infrastructure & Amenity

The precinct currently has a large proportion as social infrastructure or institutional uses in the form of the Northern Sydney Institute and the Royal North Shore Hospital along with a number of private medical facilities.

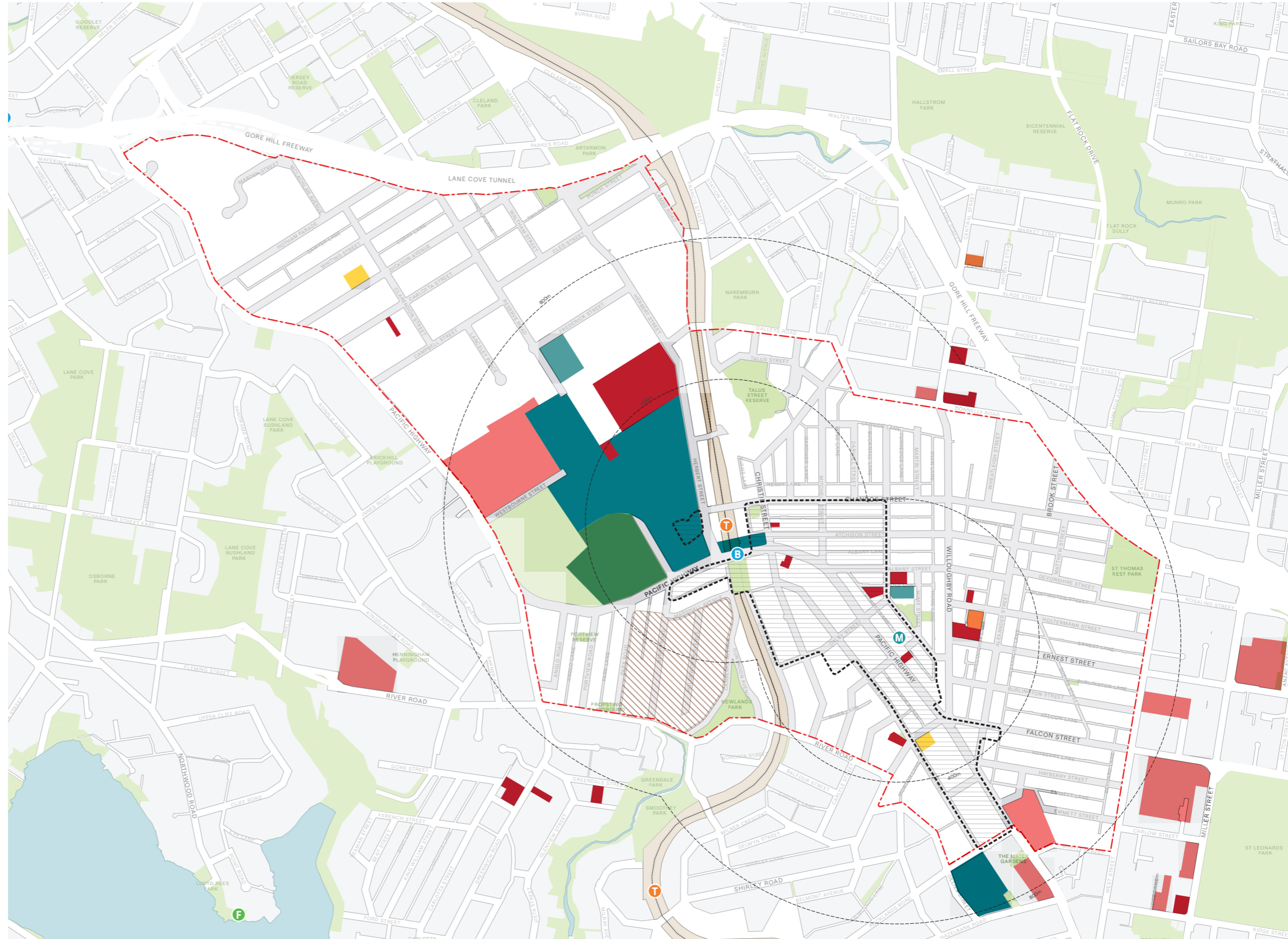
Gore Hill Oval offers the community access to outdoor sporting grounds that have recently be refurbished, whilst the North Sydney Indoor Sports Centre in Crows Nest allows patrons access to indoor activities in all weather conditions.

A number of churches service the community in the eastern section of the study area, and the Crows Nest Centre offers the only community centre within the site which can be hired out for events.

There are two fire stations within the study area, and Crows Nest Police Station sits just outside of the area.

One school falls within the study area, North Sydney Girls High, and Cammeraygal High School falls adjacent to the boundary to the south and Naremburn Primary to the north.

The study area contains four post offices, two near the RNSH precinct, one in Crows Nest and another in St Leonards.



KEY

	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	Community Centre
	Education
	Health
	Service
	Fire Station
	Recreation
	Sporting Grounds

Recent & Proposed Developments

The table below identifies sites in progress subject to active planning proposals or current planning controls where a rezoning has been completed.

ADDRESS	STATUS	HEIGHT	FSR	NON RES FSR
1 100 Christie Street	Rezoned*	132m	18	4.25
2 20-22 Atchison Street	Active PP	118m	11.5	3
3 617-621 Pacific Highway	Rezoned*	180m	25.4	4.7
4 601 Pacific Highway	Active PP	RL259	20	-
5 524-542 Pacific Highway	State-led rezoning**	RL228.8	17.1	2.3
6 46-52 Nicholson Street	Rezoned**	RL 174.95	15	-
7 29-57 Christie Street	DA Approved*	75.1m	7.5	-
8 575-583 Pacific Highway	Rezoned	56m	7	2
9 448-456 Pacific Highway	Active PP	RL196.3	14.7	0.2
10 378-390 Pacific Highway	Rezoned**	RL 176	7.2	2
11 360 Pacific Highway	Rezoned	RL 163.8	5.5	2
12 270-272 Pacific Highway	Rezoned*	54m	5.6	5.6
13 Five Ways Triangle	Rezoned**	58.5m	5.8	2.5
14 17-25 Falcon Street	Active PP	22m	-	1
15 71-89 Chandos Street	Rezoned	43m	4	1
16 50-56 Atchison street	Rezoned	56m	6.4	1.7
17 Metro site A	Rezoned**	RL 180	11.5	10
18 Metro site B	Rezoned**	RL 155	7.5	0.5
19 Metro site C	Rezoned**	RL 127	6	5

*Subject to council DA

**Subject to SSDA

KEY

- Precinct Boundary
- TOD Accelerated Rezoning Area
- St Leonards South
- Metro OSD Sites
- Subject to Active Planning Proposal / Rezoning
- Rezoned
- Rezoned Subject to Additional Application
- Under Construction
- Subject to Separate Urban Design Study
- Site Number



1:6,000 @ A3

Recent & Proposed Developments

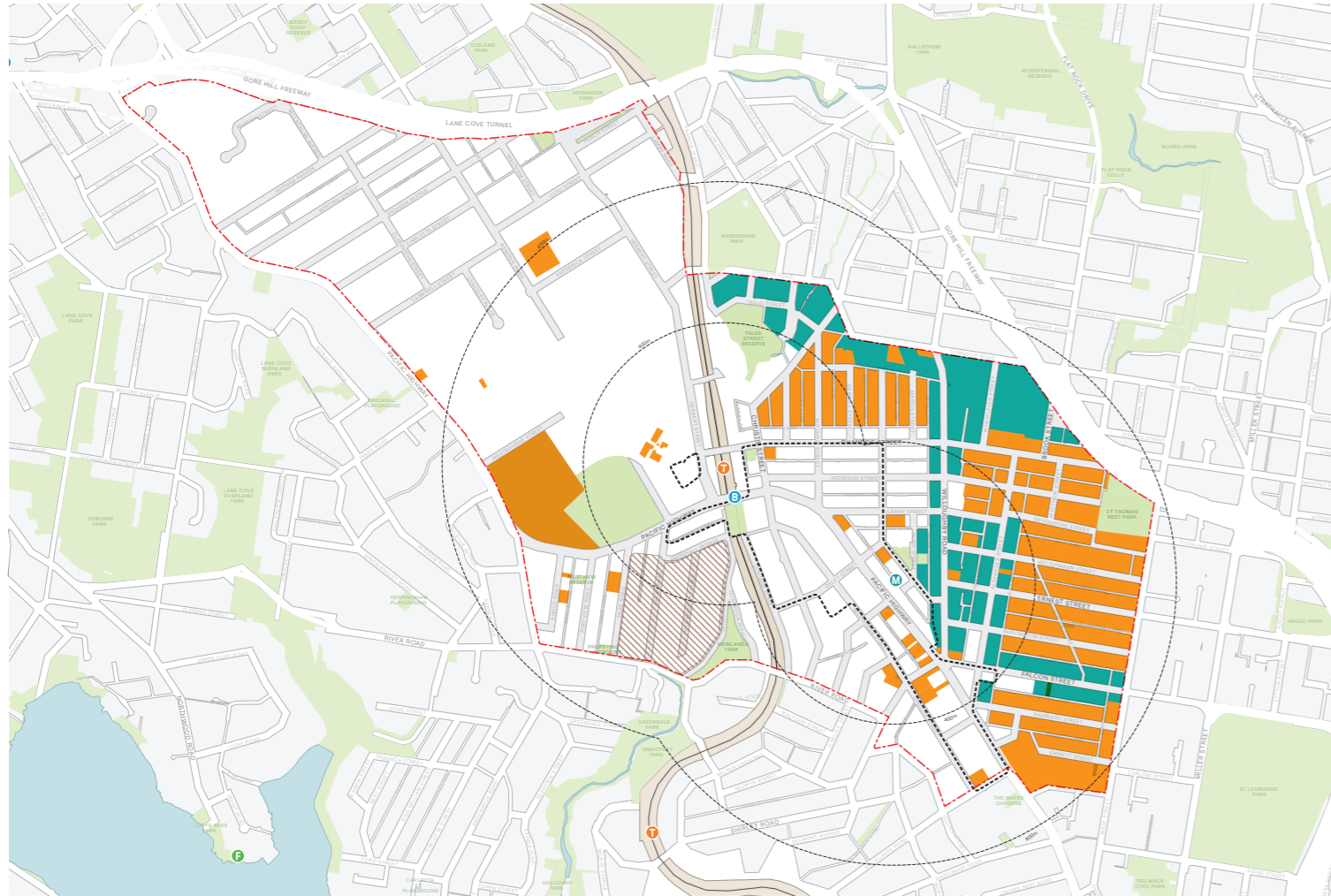
The adjacent image is a 3d representation of the previous plan showing in-progress, rezoned, and under construction developments.



KEY

	Precinct Boundary
	St Leonards South
	Subject to Active Planning Proposal / Rezoning
	Rezoned/DA Approved
	Subject to Separate Urban Design Study
	Under Construction

Constrained Sites

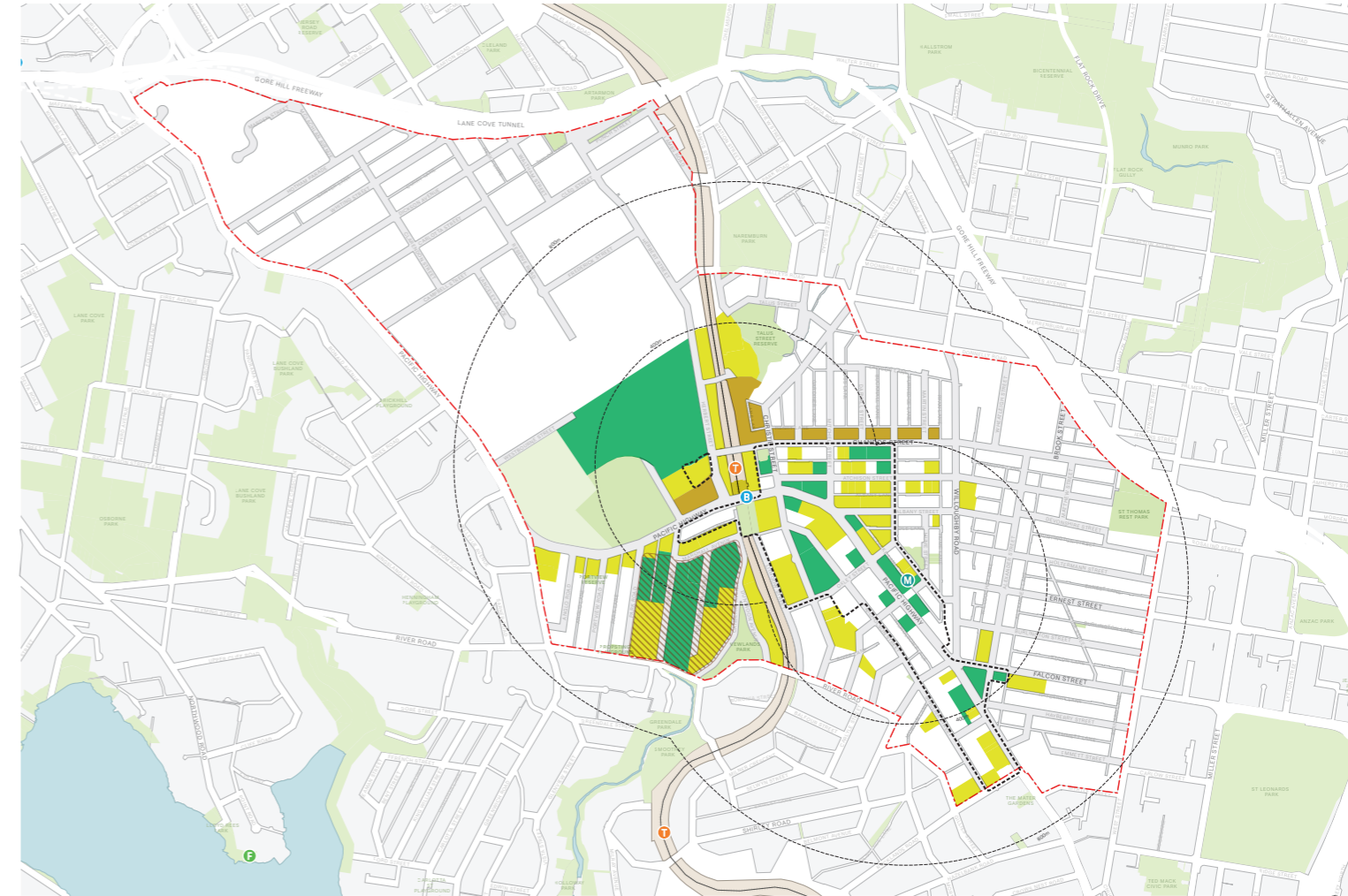


Heritage, High Character Areas, and Fine Grain Neighbourhoods

There are several heritage listed items and conservations areas across the precinct that would limit development to some degree. Developments may still occur on these sites however they will need to be respectful of reinforcing the heritage aspects of the site and their neighbours.

Willoughby Road is a primary high quality character area that will likely remain unchanged in scale and density. There are also a number of adjoining streets that exhibit a fine grain neighbourhood character that is also unlikely to see significant change due to the small lot size and limitations of amalgamation.

KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	Heritage Items/Conservation Areas
	High Character and Fine Grain Neighbourhoods



Recent/Significant Developments & Sites Subject to Existing Proposals/Plans

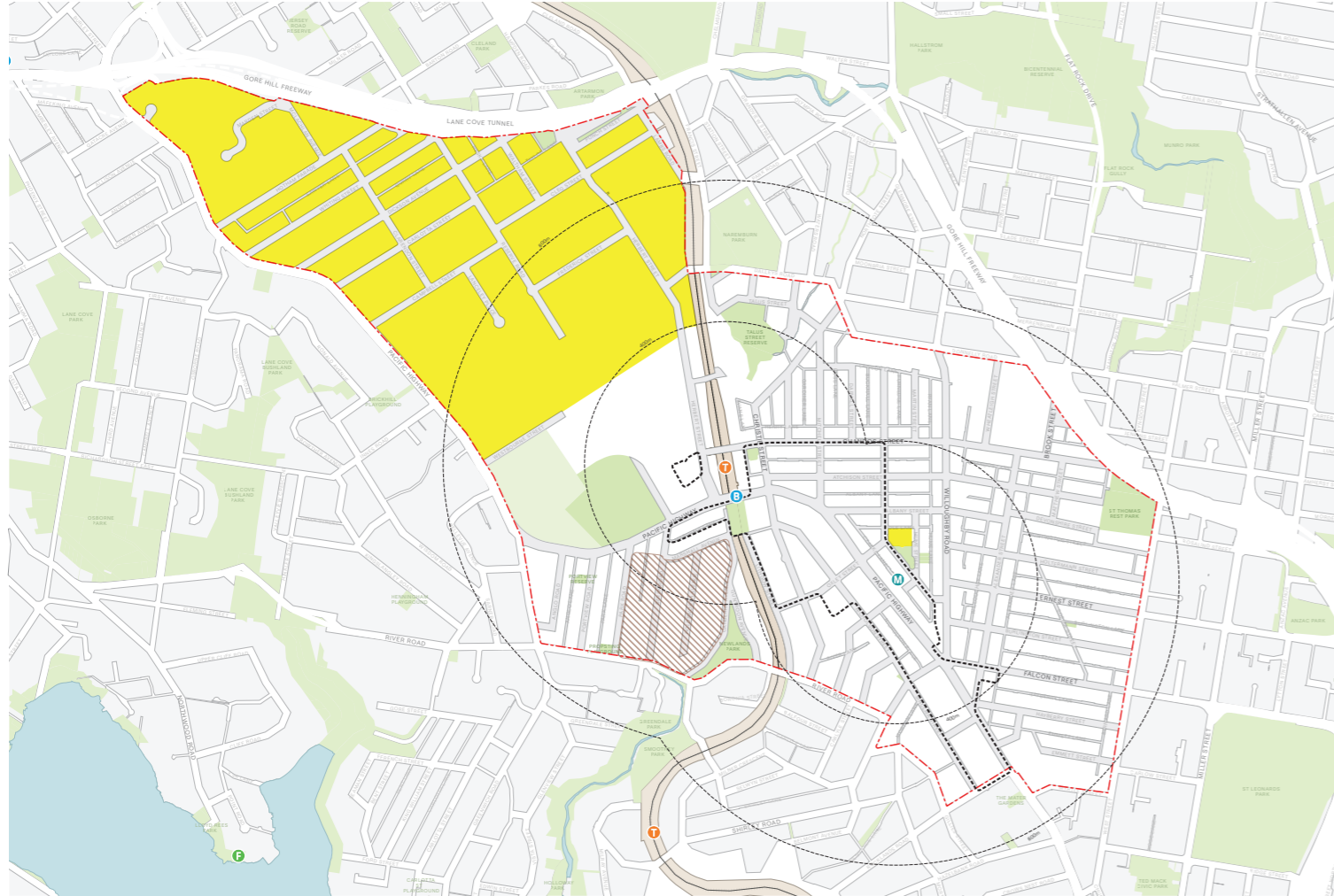
A number of recent and significant development sites are unlikely to change in the near future. Many of these sites are either recently constructed, under construction, or are existing tall buildings. These factors do not prohibit new development but make it feasibly difficult in the short term.

There are also a number of sites subject to recent, existing and ongoing proposals and plans. These may be Council led rezoning, planning proposals, DA's, or masterplans. These sites are not necessarily constrained to new development however are important to consider in identifying sites for change to limit conflict between existing proposals.

Some sites have already been rezoned in a recent review of the Willoughby LEP and DCP by Willoughby Council.

KEY	
	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	Recent/Significant Developments
	Subject to Willoughby Review
	Subject to Other Proposals/Plans

Constrained Sites



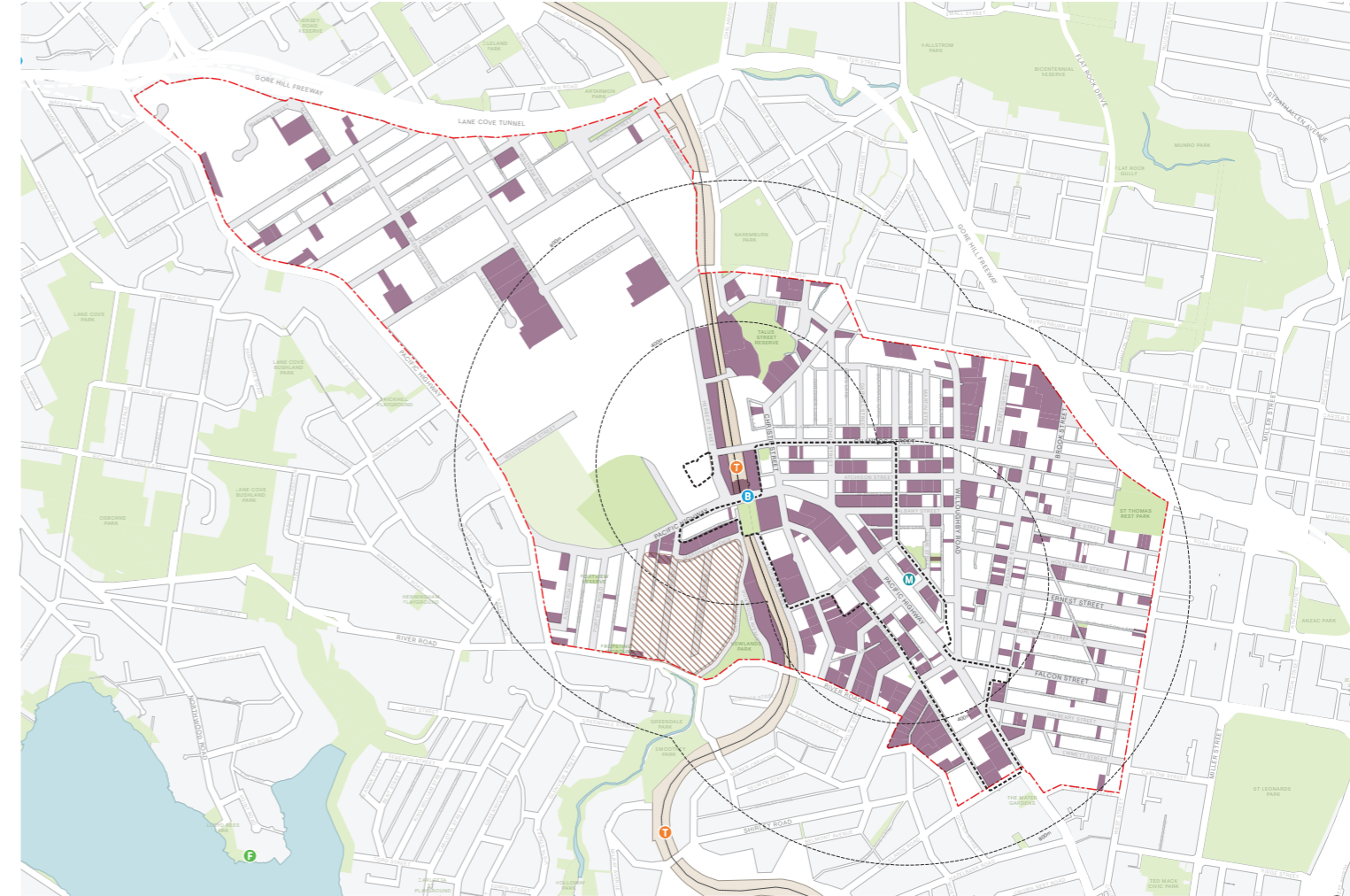
Key Infrastructure Areas/Items

The Artarmon industrial area to the north-west is a primary hub for jobs in the precinct and a key component of Willoughby’s ongoing support for industrial and commercial areas. This area is unlikely to see change, nor was it considered for change in the 2036 Plan.

The other key infrastructure item is the Northern Sydney Indoor Sports Centre that provides valuable sporting facilities for the local community and is unlikely to change.

KEY

- Precinct Boundary
- TOD Accelerated Rezoning Area
- St Leonards South
- Key Infrastructure Items



Strata Titled Properties

A considerable amount of properties in the area are strata titled either as residential or commercial. Majority of these are residential flat buildings and walk-ups with a few dual occupancies and terrace houses. These are not necessarily constraining to development however amalgamation of ownership may affect feasibility.

KEY

- Precinct Boundary
- TOD Accelerated Rezoning Area
- St Leonards South
- Strata Properties

NTS

Challenges

- ➔ Pacific Highway is a busy road with multiple intersections and traffic stops. It presents a barrier to pedestrian connectivity east-west and north-south. It is also the ridgeline throughout the precinct. Tall buildings are primarily located around Pacific Highway which presents a challenge for managing overshadowing particularly to properties and open spaces to the south.

- ➔ Besides Pacific Highway, the train corridor also presents a barrier to connectivity, providing few opportunities to cross the railway safely and thereby separating the precinct into 4 distinct areas.

- M** The new Metro station will bring change to Crows Nest. Managing the impacts of this change requires consideration of the scale of new buildings, overshadowing, pedestrian movements and demand on public spaces.

- ☀ The character and function of Willoughby Road is very important to the community and thus the impacts of change will need to be minimised and mitigated here.

- The dense urban character of the precinct presents limited opportunity for new open space areas and this presents a significant challenge in providing amenity to a denser population. There are a couple of areas within the precinct that are close to or inclusive of the 2036 Plan's area of change that do not have good access to adequate open space.

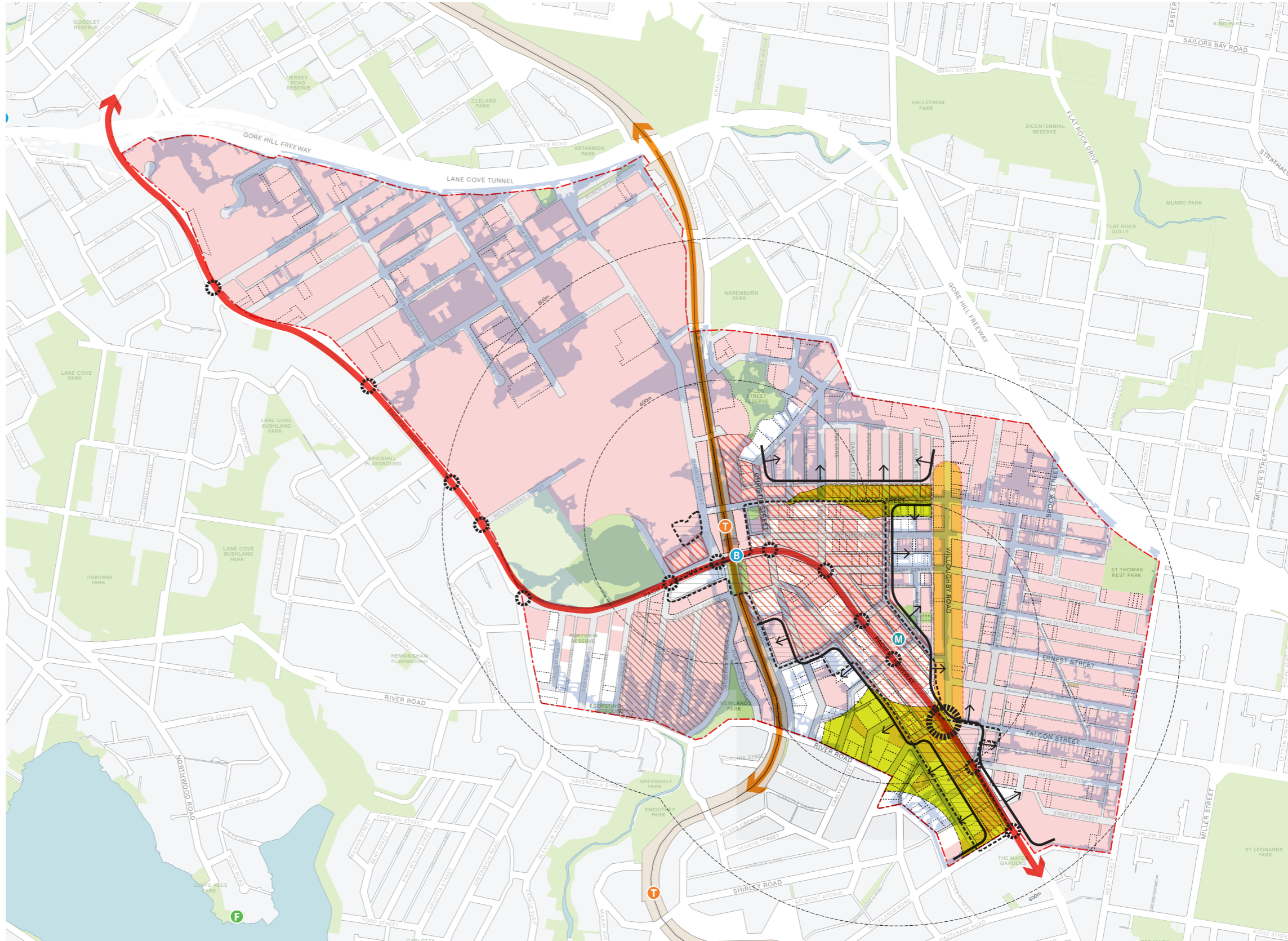
- ⌥ There is a need to manage the interface and relationship between new developments and existing areas where no changes are proposed. This is particularly important towards the north and east where there are sensitive heritage considerations.

- A large amount of land is considered constrained as it is subject to heritage, existing and significant developments, high quality character, industrial activity or contribution to the local community and economy.

- Recent flood modelling shows some area subject to PMF flood hazards. This may pose a risk to development in these areas.

KEY

- ▭ Precinct Boundary
- ▨ TOD Accelerated Rezoning Area
- ▨ St Leonards South
- ▨ 2036 Plan Area of Change
- ▭ Strata Titled Properties
- ⊙ Pacific Highway Intersections



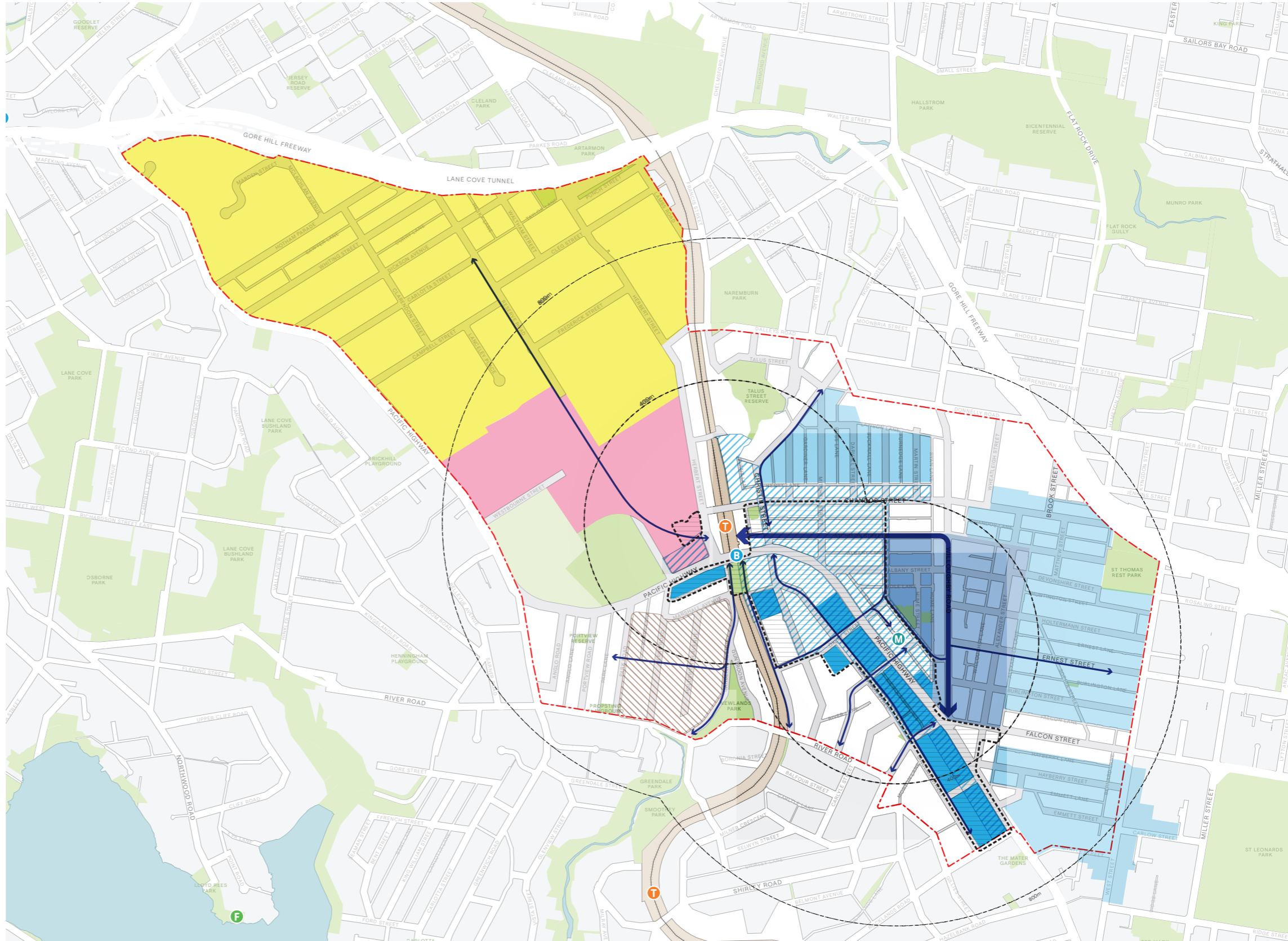
12,000 @ A3

Opportunities

- The precinct comprises many well-functioning places and spaces including active streets, open spaces and heritage areas which should be treated sensitively. The heritage conservation areas to the east and north provide a significant contribution to the local character and should be preserved.
- The character of Crows Nest Village is valued by the local community. It should be retained and encouraged to continue to attract business of local-residents and workers, as well as draw people to the area.
- M
 The Metro Station will greatly improve connectivity and presents opportunities for new active streets, employment areas and new homes around public transit. The new metro will put much of the precinct within 400m-800m walking distance of a station which presents significant opportunities for transport oriented development.
- The Health and Education Precinct around the Royal North Shore Hospital, North Shore Private Hospital and St Leonards TAFE presents an opportunity for innovative health, technology and education uses in surrounding areas. This precinct attracts a major component of the jobs forecast for the area, strengthening the local economy.
- Similarly, the Artarmon Employment Area should be managed and protected as it provides essential urban services for the regional population and a significant amount of industrial lands that are in high demand.
- Connectivity across the precinct can be improved with upgrades from development contributions. In particular, emphasis should be placed on key corridors such as Atchison Street and Willoughby Road to move people throughout the precinct in an active setting.
- Opportunity to investigate changes to the 2036 Plan on select sites that are not subject to major constraints. These sites could better facilitate uplift around the stations, improve height transition and possibly provide additional open space.

KEY

	Precinct Boundary
	TOD Accelerated Rezoning Area
	St Leonards South
	2036 Plan Area of Change



5

Vision and Principles

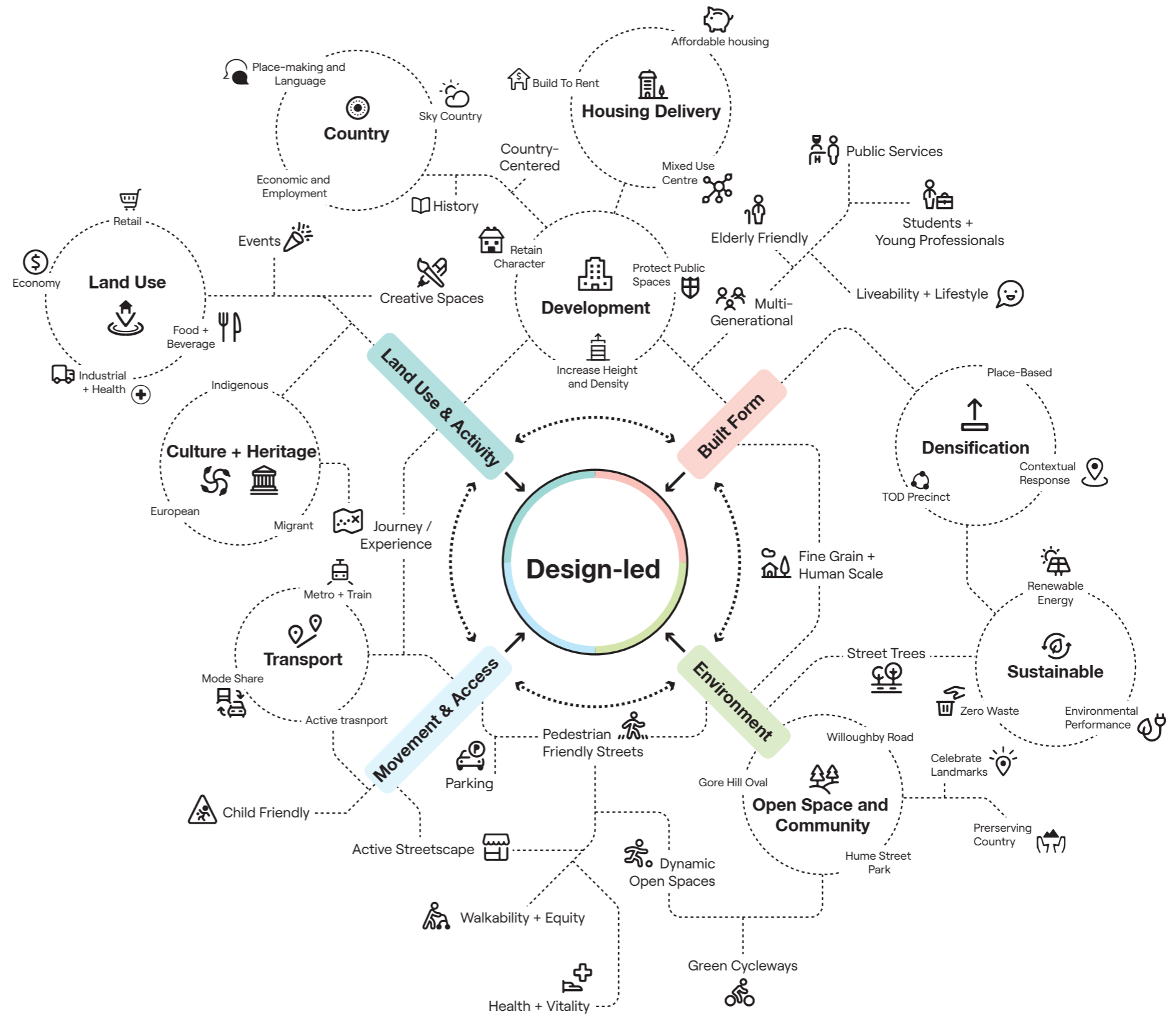
Vision

The Vision for St Leonards and Crows Nest is the coalescence of multiple factors that convey the complexity, diversity, and character of the existing area, combined with the desire to improve upon and build new facilities ensuring a vibrant and active precinct is delivered. This diagram conveys the essence of the framework, providing insight into how the key principles and elements intersect to guide the transformation of St Leonards and Crows Nest.

The Urban Design Vision and Principles are driven by 4 key themes. These are:

- **Land Use & Activity**
The utilisation of land for different purposes, creating a balanced mix of residential and non-residential to create long-term activation for the area and support the regional and local economy.
- **Movement & Access**
Ensuring the area is welcoming to all users regardless of the mode of transport, allowing for vibrant and accessible connections between places.
- **Environment**
Delivering high-quality and diverse public spaces that encourage connectivity and social interaction whilst preserving the natural systems and connection to Country.
- **Built Form**
Providing adequate controls to facilitate built form that contributes to the local character and provides places for people to live and work.

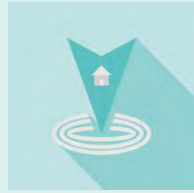
These themes and principles are governed by a design-led process that ensures best-practice approaches to urban design, spaces and buildings.



Principles

DESIGN-LED

Focus development based on a design-led process, pursuing best-practice urban design and architecture approaches for all spaces and buildings.



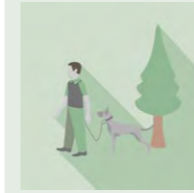
LAND USE

Protect and strengthen the area's commercial role supported by complementary uses to capitalise on close proximity to stations. Leverage world-class health and education uses to provide opportunities for training and employment growth into the future. Expand residential opportunities through mixed-use development ensuring long-term activation across the precinct.



MOVEMENT

Capitalize on the opportunity to improve movement and access towards transport-oriented development whilst prioritising pedestrian safety, considering the close proximity to both St Leonards station and Crows Nest metro station. Mitigate conflicts between different modes of transport and create new connections between core areas.



ENVIRONMENT

Create a network of new and existing useable, public open spaces which prioritise walking, cycling, and access to transport, promoting a healthier urban environment and encouraging social interaction. Ensure public streets are safer and more enjoyable places to be by improving safety and accessibility and ensure a diversity of spaces are delivered that cater to varying needs.



BUILT FORM

Preserve, strengthen and enhance the existing diverse character areas and design and plan for the optimal built form outcome. Height and density should be appropriate within its immediate context, emphasising key locations such as the stations whilst also protecting public spaces through solar access controls.

OBJECTIVES

- ▶ Intensify all types of development around public transport, providing an appropriate balance of residential and non-residential land uses
- ▶ Prioritise delivery of affordable housing up to 15% in alignment with the TOD Program and Housing Accord objectives
- ▶ Focus commercial activity in the mixed-use core between the stations
- ▶ Align expected land uses with appropriate development controls and desired future street character
- ▶ Connect high density areas with development around local shops, services, community infrastructure, and open space
- ▶ Continue to engage Aboriginal stakeholders in planning and design processes
- ▶ Future proof the precinct to ensure spaces are relevant and can grow with community needs
- ▶ Protect and leverage from significant contributors to the local economy and diverse workforce such as the Artarmon Employment Area and the Hospital Precinct

OBJECTIVES

- ▶ Establish a clear hierarchy of streets that cater to pedestrians, cyclists and vehicles
- ▶ Prioritise pedestrian and active transport oriented movement with safe and inviting connections
- ▶ Promote legibility between key public spaces and infrastructure with key sightlines and corridors
- ▶ Promote the learning of culture with signage, Aboriginal place naming, wayfinding and incorporation of multiple languages
- ▶ Utilise movement networks as a story telling device, recognising Pacific Highway was once an Aboriginal walking track
- ▶ Encourage multi-modal transport by creating better connections between St Leonards Station and the Crows Nest Metro

OBJECTIVES

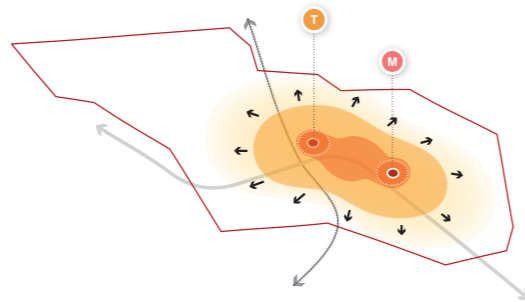
- ▶ Ensure the size, distribution and program of open spaces is proportional to the future needs of residents
- ▶ Knit together the network of streets, civic spaces, and open spaces through green streets and active links
- ▶ Maximise tree canopy cover and deep soil on public and private sites to encourage the growth of the local biodiversity
- ▶ Protect solar access and amenity to key public spaces through the provision of design controls
- ▶ Support setbacks for active uses and provide opportunities for tree planting
- ▶ Incorporate materials and planting that are endemic to the site and create ecological and cultural benefit
- ▶ Acknowledge the cultural landscape of the area, its importance to the Gammarigal people, and how it has changed over time
- ▶ Investigate opportunities to include Aboriginal art and other installation into green spaces and other urban design elements

OBJECTIVES

- ▶ Promote diverse housing typologies which include culturally responsive dwellings
- ▶ Design and orient buildings to respond to build upon their local context and mitigate impacts to public domain
- ▶ Transition heights from new development to surrounding heritage conservation areas
- ▶ Celebrate and integrate heritage where possible with sensitively designed interfaces
- ▶ Consider Sky Country, topography and view lines towards the mountains to minimise sky line impacts
- ▶ Recognise and celebrate historical and contemporary Aboriginal culture in the built environment, whilst also acknowledging the diverse cultures and histories and current urban landscape of the precinct
- ▶ Use buildings to emphasise key gateways and corners to attract attention and work as wayfinding devices

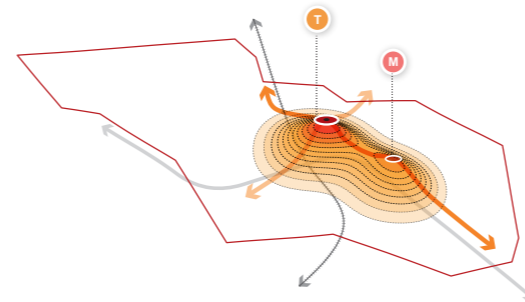
Key Moves

The key moves have guided development since the finalisation of the 2036 Plan and will continue to guide development into the future. These key moves are still relevant and are the guiding approach to urban design development throughout the precinct. They ensure appropriate relationships between character areas and the vision can be realised in balance with delivering a significant uplift of residential and non-residential uses. They have driven the masterplan testing and development of the Urban Design Framework.



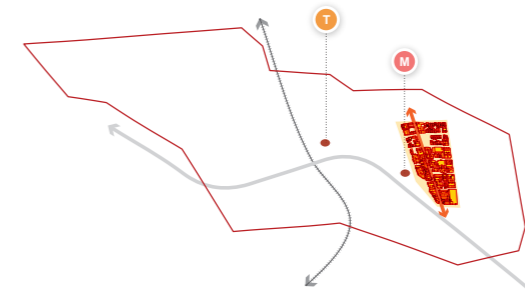
Proximity to Stations - Epicentre

This principle recognises that density located in close proximity to a transport hub such as St Leonards Train Station and Crows Nest Metro Station facilitates Transport Oriented Development (TOD). Taller buildings are to be located within 150-200m of either station, and transition in height outwards.



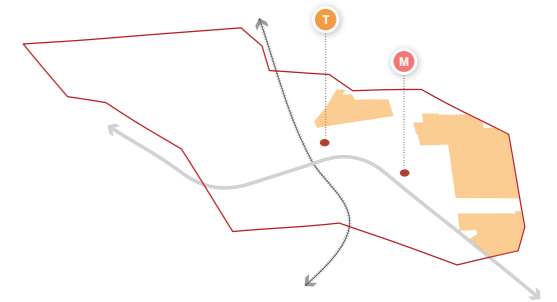
Centre & Height Transition - Height "Knuckle" Area

Through height and bulk, St Leonards is to be read as the predominant centre to reinforce its commercial role and Crows Nest as secondary to reinforce its role as a lifestyle destination. Large developments are to be located between St Leonards Train Station and Crows Nest Metro Station along the Pacific Highway with a transition in height, bulk and scale from the highway to the surrounding neighbourhood areas.



Maintain Willoughby Road

Willoughby Road is treated as a special area that is to be protected. Proposed developments are to ensure minimal overshadowing, and avoid unreasonable visual impact to the public domain along Willoughby Road.



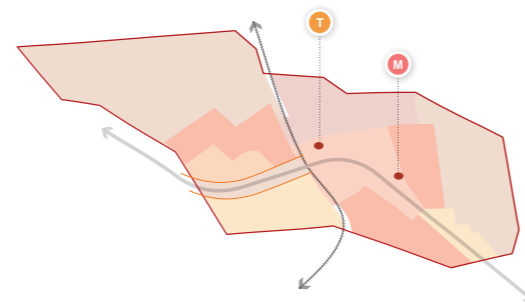
Reduce Impact on Heritage Conservation Areas

Similar to Willoughby Road, the Heritage Conservation Areas are to be protected. Proposed developments are to ensure minimal overshadowing, and avoid unreasonable visual impact to the public domain or private open spaces of dwellings within the Heritage Conservation Areas.



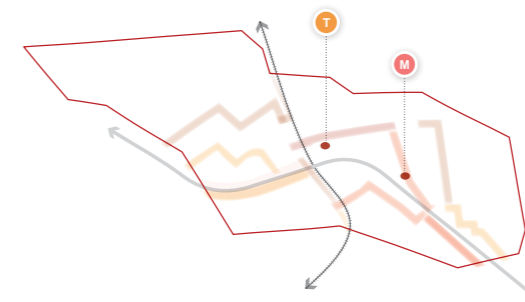
Expand Open Space Network & Protect Amenity

Find opportunities to provide additional open space in the Precinct. Proposed developments are not to cause unacceptable overshadowing to any key existing or proposed public open spaces.



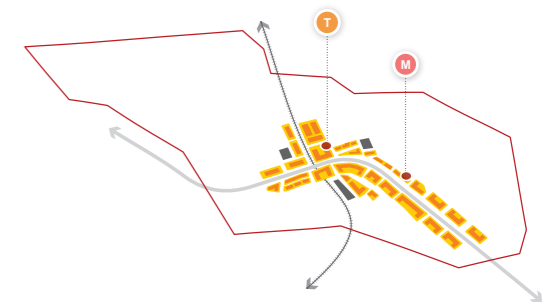
Respond to Character Areas

Proposed developments must respond appropriately to the built form character of the sub-precinct, including height, bulk and scale, as well as the character areas and existing and proposed uses.



Transition Between Character Areas

It is acknowledged that at the edges of a character area, development should respond to the adjacent character to create an appropriate transition between the two.



Fine Grain Approach

The suitability of a proposed development should consider relationship to surrounding context and urban grain, and seek to provide improved accessibility through appropriate frontage treatment and provision of arcades, laneways, and enhanced public domain.

Character Areas

The proposed character areas build upon the existing character areas, emphasizing the value they contribute to the overall precinct, preserving their key qualities, and working sensitively within them for new developments. Each area has a unique identity. Future planning for the precinct needs to strengthen good existing characteristics of place, while also allowing for sustainable growth to allow communities to flourish.

Artarmon Employment Area

Artarmon Employment Area is proposed to be protected for employment and urban services. It will evolve into a key employment and technology area fostering complementary uses adjoining light industry. The sub area in the vicinity of the RNS Hospital and closest to St Leonards Station will evolve providing higher order urban service industry including technology, communications and allied health uses.

St Leonards Centre and Crows Nest Station

The St Leonards Centre and Crows Nest Station area is to continue development as a high density commercial and residential centre that ensures the precinct strengthens its role as a major commercial centre in Sydney. Development will be predominantly mixed-use (commercial + residential) although, stand alone commercial development will be encouraged particularly on larger sites.

Residential (Naremburn and Crows Nest)

Naremburn and Crows Nest areas are proposed to be retained for lower density residential development with significant contribution to the local heritage character under the heritage conservation area status.

Health and Education

The Health and Education character area is proposed to be retained for uses associated with health and education industries building on the vision for a 'health and education super precinct'. Further development of this area is guided by separate master planning process. Included in this area is Gore Hill Oval, that is to be retained, providing valuable recreation uses to support local residents and workers.

Residential (St Leonards South)

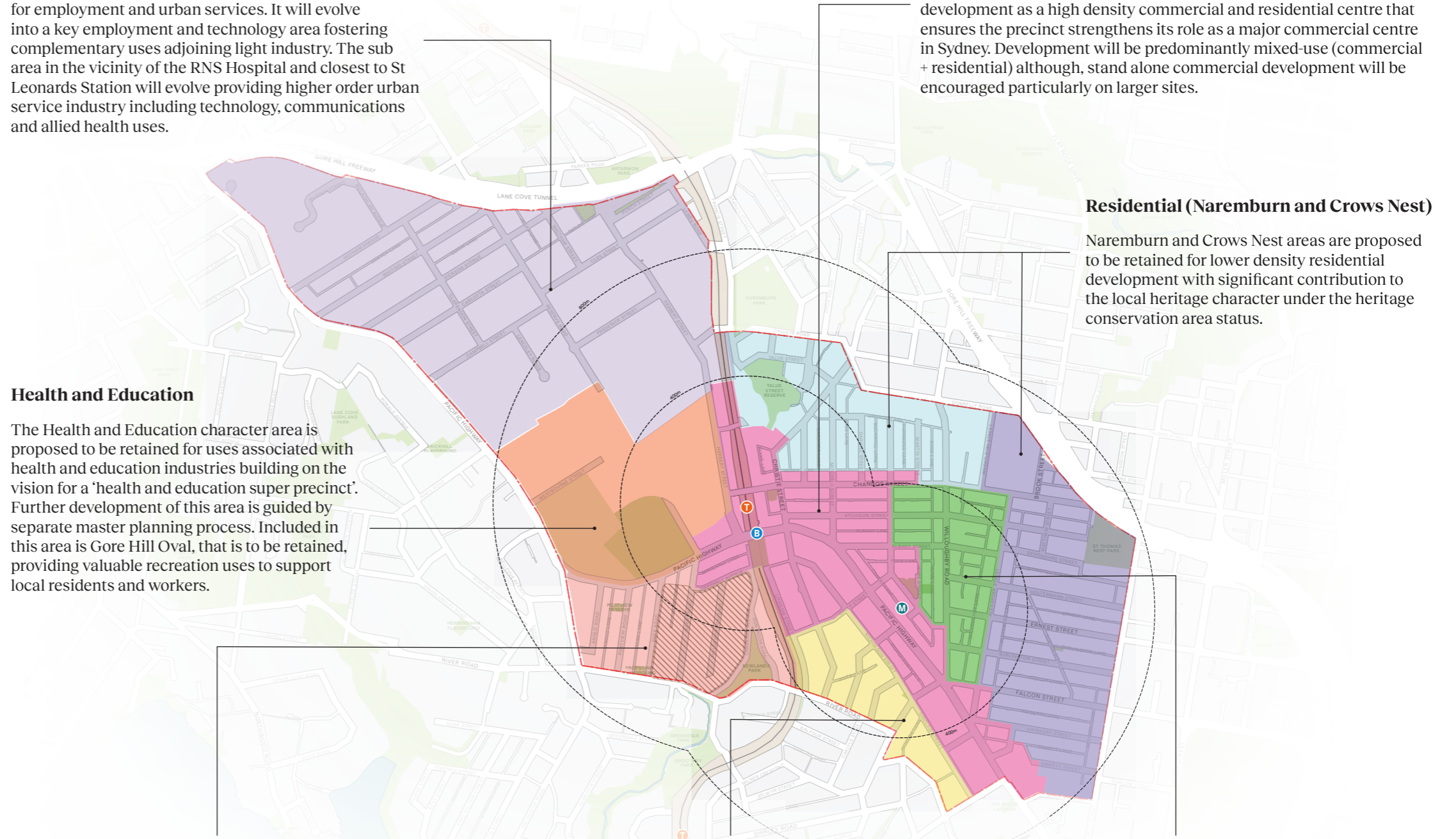
St Leonards South is currently under development with many approved and under construction residential flat buildings in progress. Higher densities will be focused in those areas closest to St Leonards Station with improvements along Pacific Highway to emphasize a gateway into the precinct from the west.

Residential (Wollstonecraft)

Wollstonecraft has a high-quality existing character with significant tree planting and is proposed to be retained as medium to high density residential set within a landscaped setting. Increased development here may reduce that quality. This area may also be subject to change under anticipated housing reform controls and therefore rezoning may not be required.

Crows Nest Village

Crows Nest Village is proposed to be retained in its current form to protect the fine grain scale of the residential and retail area, acting as a major activity hub with connections to Atchison Street and both St Leonards Train Station and Crows Nest Metro.



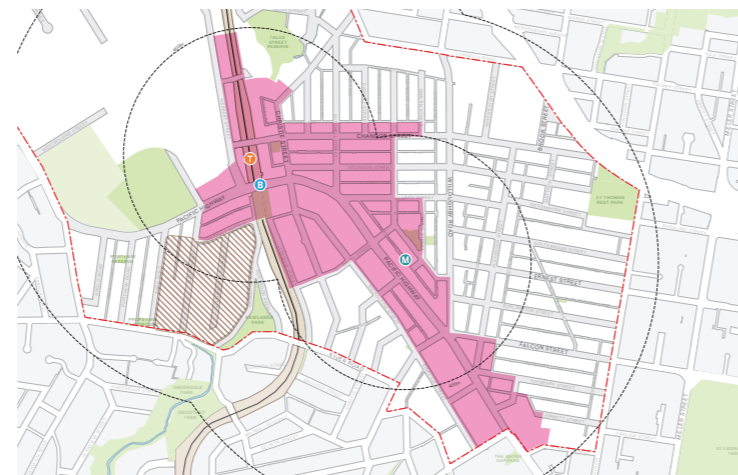
Desired Future Character Objectives

The following expand on the desired future character, providing a series of objectives that each area should be aiming to achieve and/or maintain as the precinct develops.



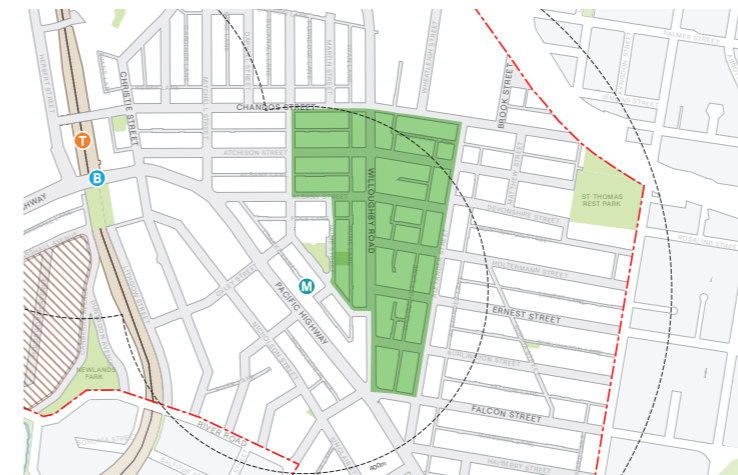
St Leonards Centre/Crows Nest Metro

- Protect conservation areas and existing character of Crows Nest east of Oxley Street.
- Focus height and density at the intersection of Pacific Highway and Albany Street between the two stations.
- Retain E2 commercial centres to encourage a high density employment within the area.
- Provide a strong commercial offering and a wide range of activities to support an 18-hour cycle (including night time economy)
- Expand the Mitchell Street green link south of Pacific Highway.
- Enhance existing east-west connections and investigate opportunities for north south laneways and through-site links including to Hume Park and Crows Nest Metro, St Leonards South and throughout the St Leonards centre.



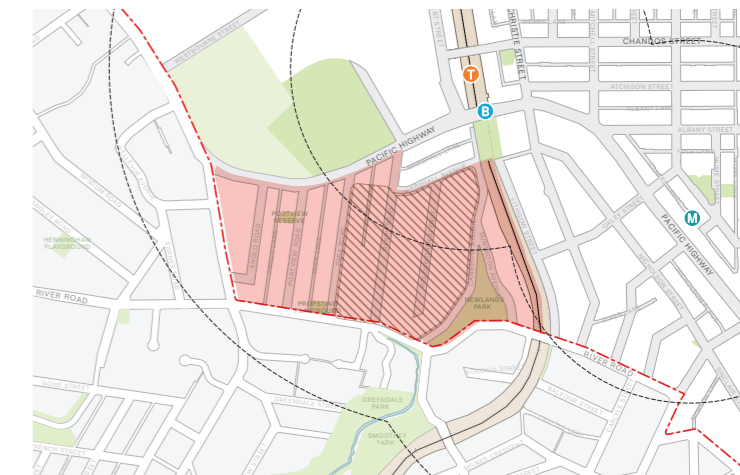
Crows Nest Village

- Retain the existing fine grain character of the Village and the Willoughby Road area.
- Sensitively transition development from Wiloughby Road to ensure appropriate solar access and visual character is maintained.
- Connect along Atchison Street encourage a pedestrian loop between the stations.
- Support the continuous growth of active shop fronts and quality public domain.

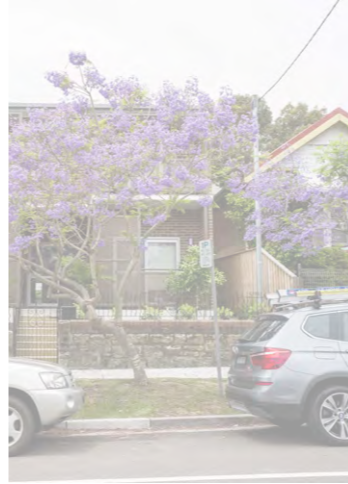


St Leonards South

- Continue to support the development of St Leonards South, considering how best to connect between new developments and the train station.
- Focus higher density development in the north east, within close proximity to public transport.
- Maintain view sharing and solar amenity by stepping development down from Pacific Highway to River Road.
- Reinforce the existing north-south connections.
- Protect existing heritage items within the area.



Desired Future Character Objectives



Artarmon Employment Area

- Artarmon Employment Area should continue as an industrial centre, providing key urban services to the local and regional population.
- Provide opportunities for health and medical uses to develop adjacent to RNSH site.
- Provide for industrial uses to develop in the Herbert-Frederick Street sub-area to cater for evolving technology.
- Potential to improve connections along Reserve Road through the hospital to Gore Hill Park.
- Potential to improve public domain and quality of the streetscape along Herbert Street and Frederick Street linking to Reserve Road.
- Ensure the area is robust to allow for the growth of tech industries, start-ups and ancillary retail.

Health and Education Precinct

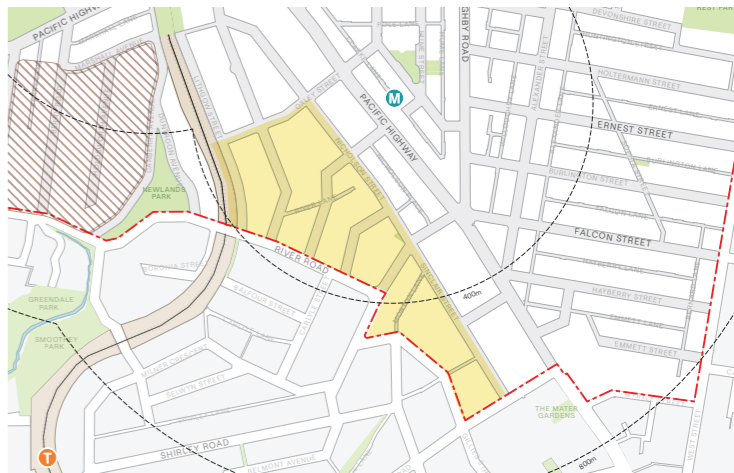
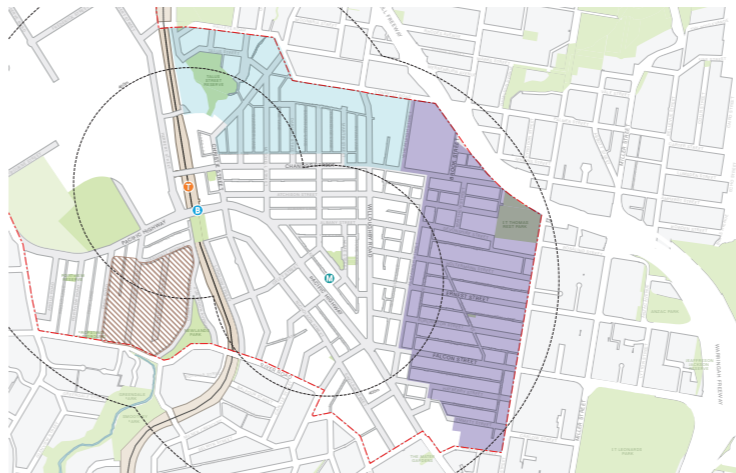
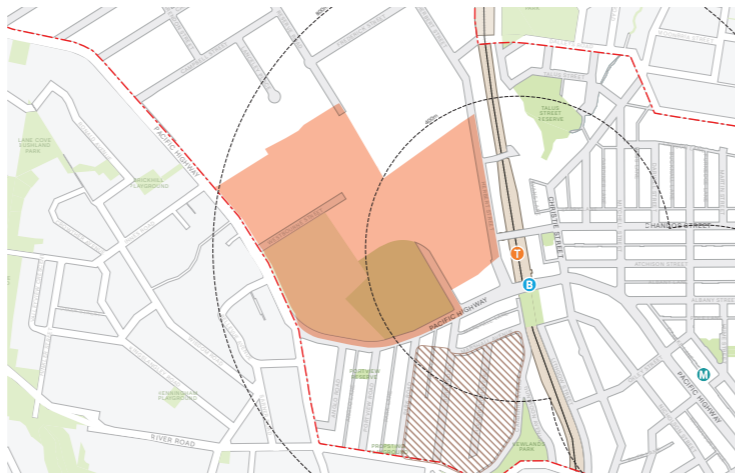
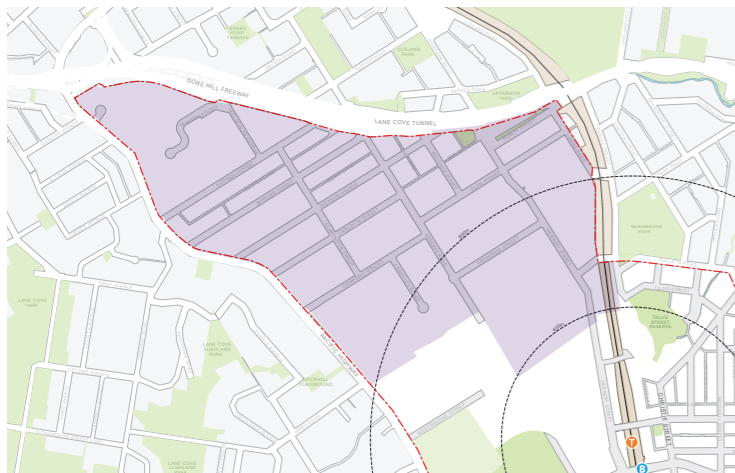
- The Health and Education Precinct is to evolve and reinforce St Leonards role as a major service and employment centre.
- Expansion of health precinct into fringe of Artarmon for allied services.
- Improve north-south pedestrian connections from Artarmon through to St Leonards.
- Support the development of the ongoing masterplan for the site.
- Consider development of key worker housing and office accommodation between Reserve Road and Herbert Street.
- Maintain Gore Hill Oval as a recreation site for local residents and workers.

Naremburn and Crows Nest Residential

- Protect and maintain the heritage conservation character of Naremburn and Holtermann Estate Conservation area.
- Ensure both areas retain a largely low scale residential character with leafy streetscapes
- Opportunity for low-medium density and mixed-use residential along Willoughby Road (north of Albany Street) and Christie Street.
- Ensure transitions to Chandos Street are adequately managed through streetscape and sensitive building heights along Henry Lane.
- Ensure future development within the Precinct does not significantly impact on solar amenity of existing residents.

Wollstonecraft Residential

- Protect and maintain the existing urban fabric of Wollstonecraft.
- Allow opportunities for a mix of medium density and townhouse development.
- Ensure future development responds to the surrounding context, considering existing views and topography.
- Reinforce the landscape character of this area by retaining existing trees and providing adequate setbacks to allow new landscape to be established



6

Masterplan Testing

Defining Targets

It is important to define the targets or brief for this study to ensure that the future needs of the area can be met. With the foundation of the 2036 Plan already proposing significant uplift, much of the heavy lifting has been done.

Jobs targets in the Plan have been converted to non-residential floor space and these have not changed. Residential targets do not technically exist. The aim of this study is The response will be design driven, and based on good place-based outcomes for the area. The number shown in the Plan (+6,683) was based on change from 2020 and is therefore outdated.

Non-Residential Floor Space / Jobs

EXISTING LEP CAPACITY
728,200sqm

—

REQUIRED GFA
762,200sqm
to
834,800sqm

=

TARGET GFA
34,000sqm
to
106,600sqm

Residential Dwellings
There is no specific target for residential dwellings.

2036 PLAN UPLIFT
From 2020
+6,683

NSW AFFORDABLE HOUSING
DEVELOPER CONTRIBUTIONS
UP TO 15%

Whilst the 2036 Plan showed an uplift of 6,683 dwellings by 2036, the total number of dwellings will be driven by an urban design response. That number was also based on development from 2020 when the Plan was finalised and multiple developments have progressed since that time.

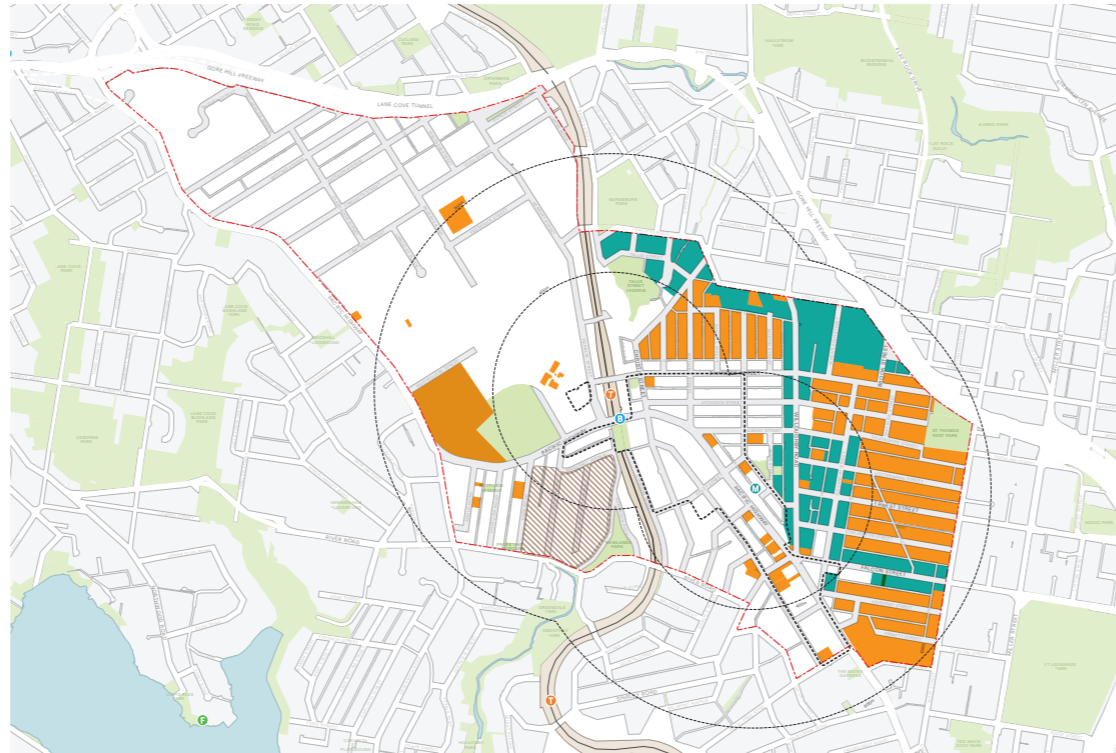
This study is aimed to review, validate and implement the 2036 Plan from which the capacity for additional housing will be considered with the primary intent of supporting feasible outcomes for additional affordable housing. The NSW Government target of 15% may not be achievable given the constraints of the area. The exact quantum of affordable housing will be driven by the economic outcomes and affordable housing strategy and not subject to this work. This study will however provide the capacity for growth.

Constrained Sites Summary

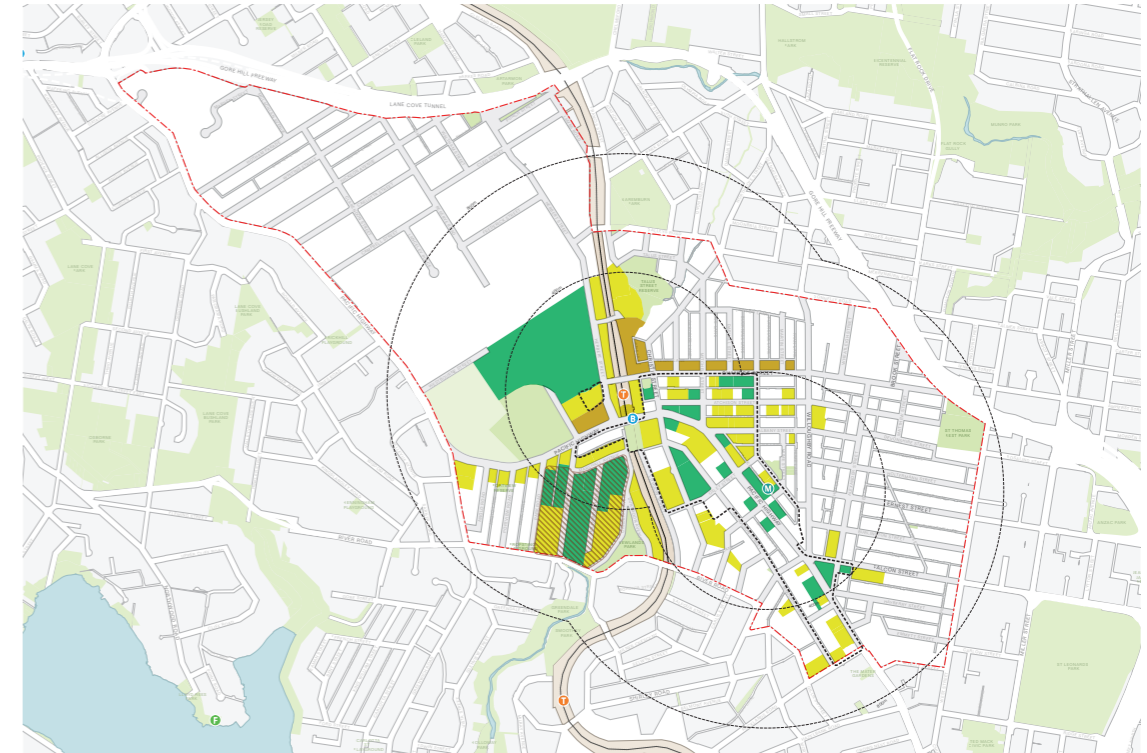
The constraints as previously identified in the Precinct Understanding chapter of this report have been shown again as a reminder of the various considerations across the precinct.

These considerations and constraints have been used on the following page to identify areas with less constraints as opportunity sites for investigation and renewal of the 2036 Plan controls. Whilst these are labeled as 'constraints', it does not necessarily mean that they could not develop, it is just another consideration to take into account when considering planning controls for these sites.

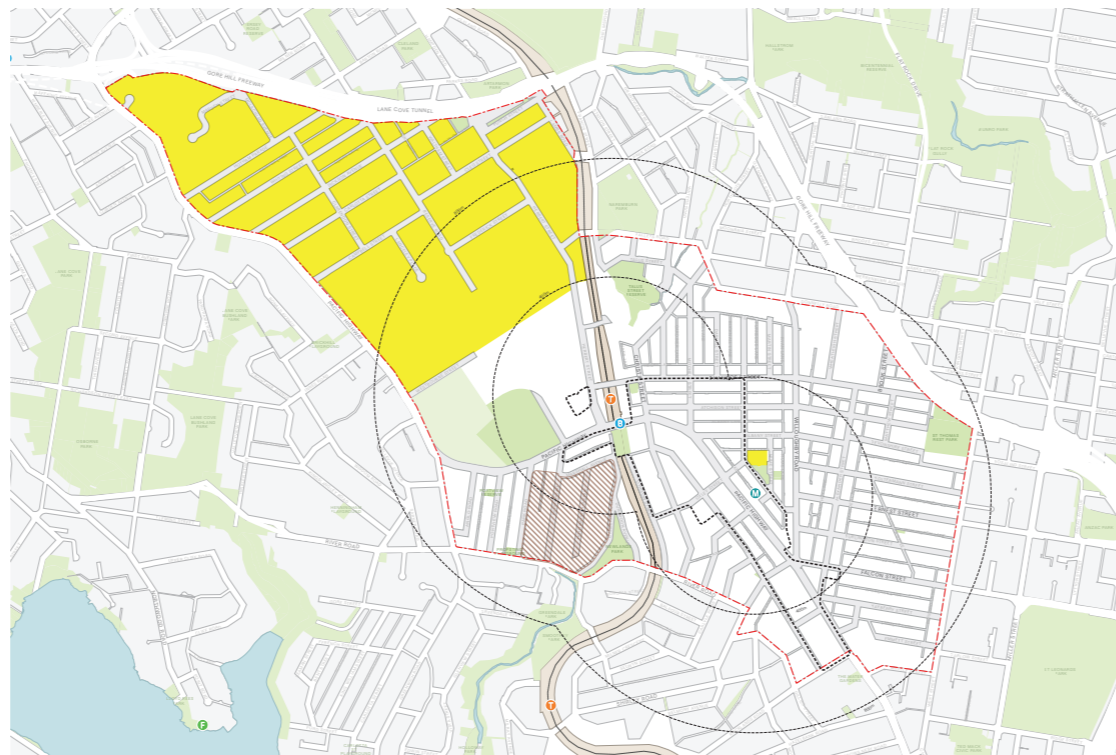
These constraints and considerations are shown collectively in red on the following page.



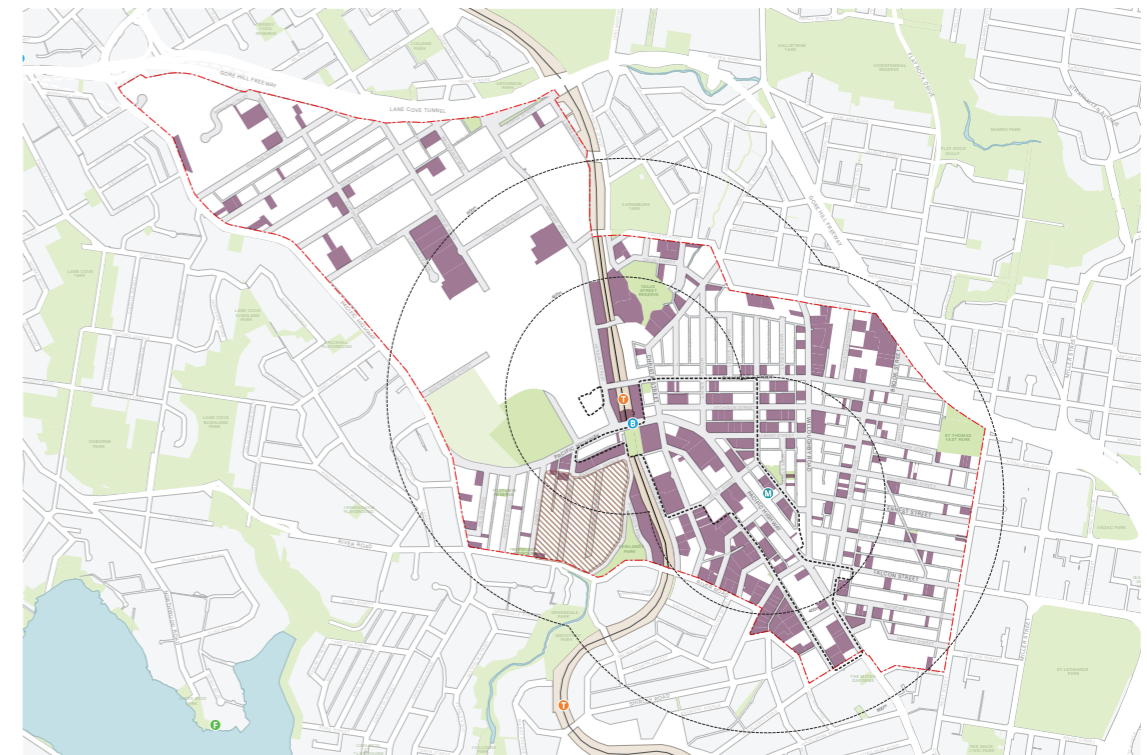
Heritage, High Character Areas, and Fine Grain Neighbourhoods



Recent/Significant Developments & Sites Subject to Existing Proposals/Plans



Key Infrastructure Areas/Items



Strata Titled Properties

KEY

	Precinct Boundary
	St Leonards South
	2036 Plan Area of Change
	Heritage Items/Conservation Areas
	High Character and Fine Grain Neighbourhoods
	Recent/Significant Developments
	Subject to Willoughby Review
	Subject to Other Proposals/Plans
	Key Infrastructure Items
	Strata Properties

Investigation Areas

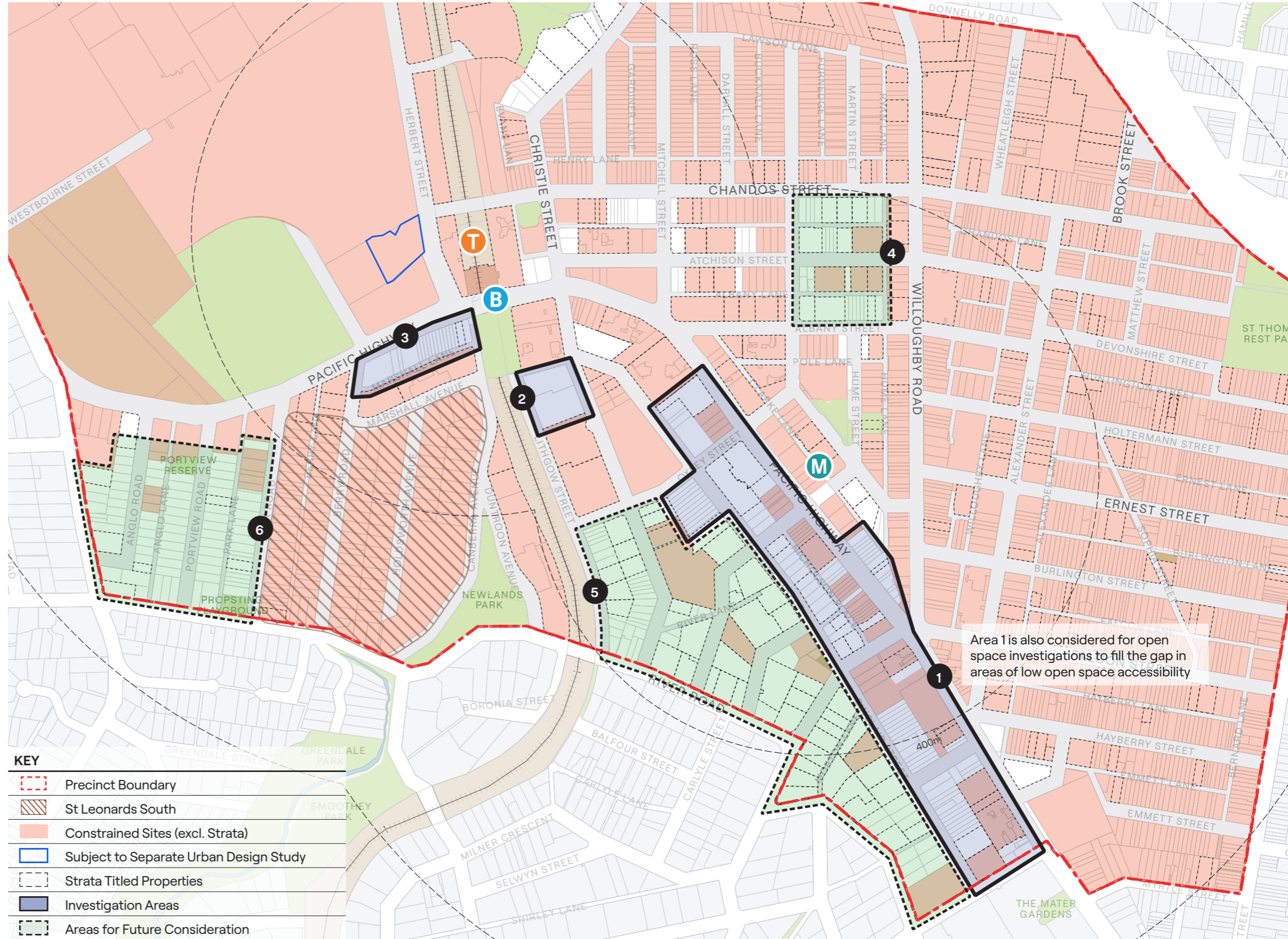
When overlaying the various constraints, as identified on the previous page, we can begin to identify the opportunity areas for investigation. These areas are based on filling the gaps between the constrained sites, selecting those that are more likely to develop and therefore could provide additional uplift beyond the proposed 2036 Plan controls. Whilst these areas still contain constrained sites, it does not mean that those sites are not capable of development. It simply means that there are more considerations that need to be applied to ensure a viable development. For this reason, strata has been exempt from the constrained site overlay as various development sites and proposals in the area are on strata titled properties and therefore it is not a major limiting factor.

The three primary investigation areas are:

1. Crows Nest Pacific Highway Corridor
2. Lithgow to Christie Street Block
3. St Leonards Pacific Highway Corridor

There are also three additional areas that present significant non-constrained sites. Whilst these areas exhibit a high number of non-constrained sites, they either fall too far outside the previous area of change identified in the 2036 Plan, or are already capable of delivering uplift under existing controls. These areas should be considered for future growth if additional housing is needed beyond the State-Led Rezoning. They are:

4. Albany Street to Chandos Street
Reason for exclusion:
This area has existing controls in place to facilitate reasonable uplift. Some sites have already developed, providing a diversity of housing typology in the area.
5. Southern Residential Precinct
Reason for exclusion:
This area has a high-quality existing character with significant tree planting. Increased development here may reduce that quality. This area may also be subject to change under anticipated housing reform controls and therefore rezoning may not be required.
6. Western Residential Precinct
Reason for exclusion:
This area is far from Crows Nest Station which is the primary area of interest for the study. Whilst being close to St Leonards station, St Leonards South is undergoing major changes. This area may be subject to further input and discussion with Lane Cove Council for consideration of future change.



Open Space Investigation

Based on the analysis of open space accessibility, the area to the south-west of Pacific Highway appears to be in need of open space. As part of the area is within the 2036 Plan area of change, it is likely to change in character and density. New residents and business will be increasing the population in the area, and therefore new open space is required.

To fulfil this gap in open space, two potential sites have been identified as potential locations for future open space. These sites are:

1. 7-17 Nicholson Street - 2,152sqm
Currently a Council operated carpark with strata units above.
2. 79-81 Sinclair Street - 1,681sqm
Currently an at-grade carpark on private property. Technically, the property is heritage listed, however it is understood the heritage is related to the facade fronting Pacific Highway and an internal staircase.






These sites have been selected due to their current existing properties of being Council operated or not currently developed, therefore making it easier to deliver open space on the site. Both are relatively well-located within walking distance of the Metro and being on the fringe of the area of change.

Both sites have been tested for solar analysis to demonstrate how each could perform in terms of solar amenity. This is done within the context of the revised masterplan. Site 1 is largely overshadowed by proposed development to the north, whilst site 2 maintains a large amount of direct sunlight to the majority of the surface area. This is due to the lower scale buildings to its north that are not to change due to their heritage status.

Site 2 can also be integrated within the heritage character and fabric of it's surrounds, allowing it to fit within the local character and possibly expand over time.

For these reasons, site 2 has been shown as a site for potential future open space on the following drawings. This study has not considered how this open space is to be delivered and or a plan of management considered.

The use of this site for open space is to be considered indicative only and is not to be rezoned for open space. Any site in this general area may be considered for open space. This site has simply been identified as a high opportunity location for the purpose of demonstrating a vision for the precinct.

KEY	
	Precinct Boundary
	St Leonards South
	TOD Accelerated Rezoning Area
	Area Lacking Open Space Accessibility
	Potential Open Space Locations

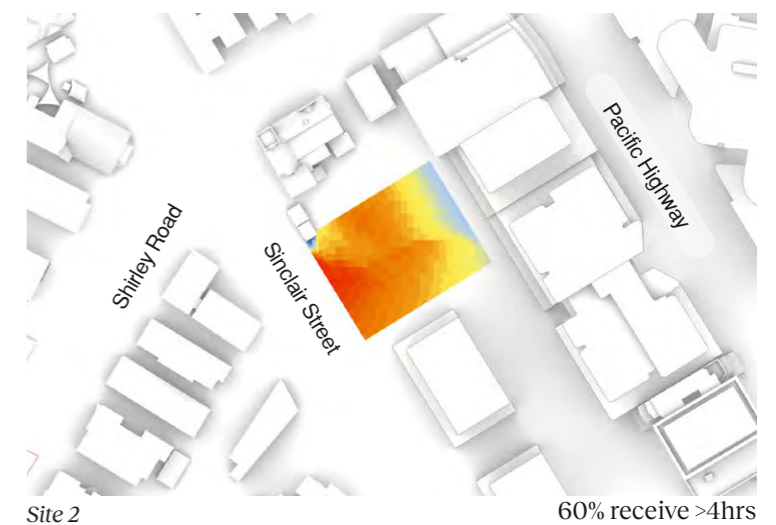
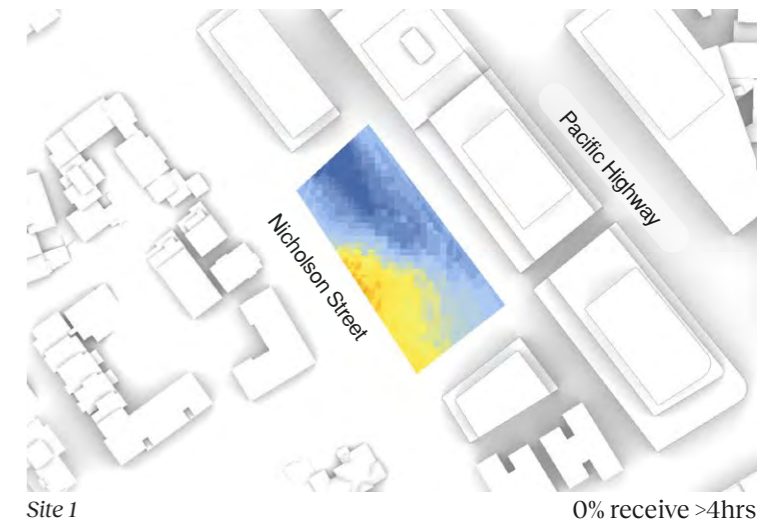


Site 1



Site 2

Solar Analysis - Winter Solstice 9am-3pm



Open Space Character

The increasing population of the area will require additional recreational opportunities that offer a wide range of facilities to support a variety of uses and encourage community engagement. Any future open space is to serve the neighbourhood area and function as a lively local park.

A combination of green space, landscaped gathering places and structured play areas should be provided to meet the needs of the community. Small pockets of grass and vegetated landscaping will offer greenery to the otherwise urban area. Vegetation and planting native to the area should be selected to attract local fauna and embed the values of Country.

Hardscapes and seating areas should incorporate the heritage and local character of the area and offer spaces to gather. The open space should offer facilities that encourage physical activity, such as a basketball half-court and outdoor gym equipment. Children's play equipment should also be delivered to support the needs of the community.

The precedents showcased reflect some examples of high quality, well-designed open spaces in high density areas or heritage sensitive areas. The design of the open space should be consulted with an appropriately qualified landscape architect.



Wulaba Park, Waterloo

Playgrounds and fitness stations situated throughout the park cater to diverse recreational needs within a high-density urban setting and fosters community gathering and social interaction.

New City Centre, Kalgoorlie, WA

The plaza offers open space enhances livability while also celebrating the rich heritage of the area and integrating historical elements into the urban fabric and strengthening the town's sense of place and identity.

Darling Square, Haymarket

Flexible open spaces within a high-density urban environment are able to cater to diverse community needs, from casual gatherings to local cultural events.

Crows Nest Pacific Highway Corridor

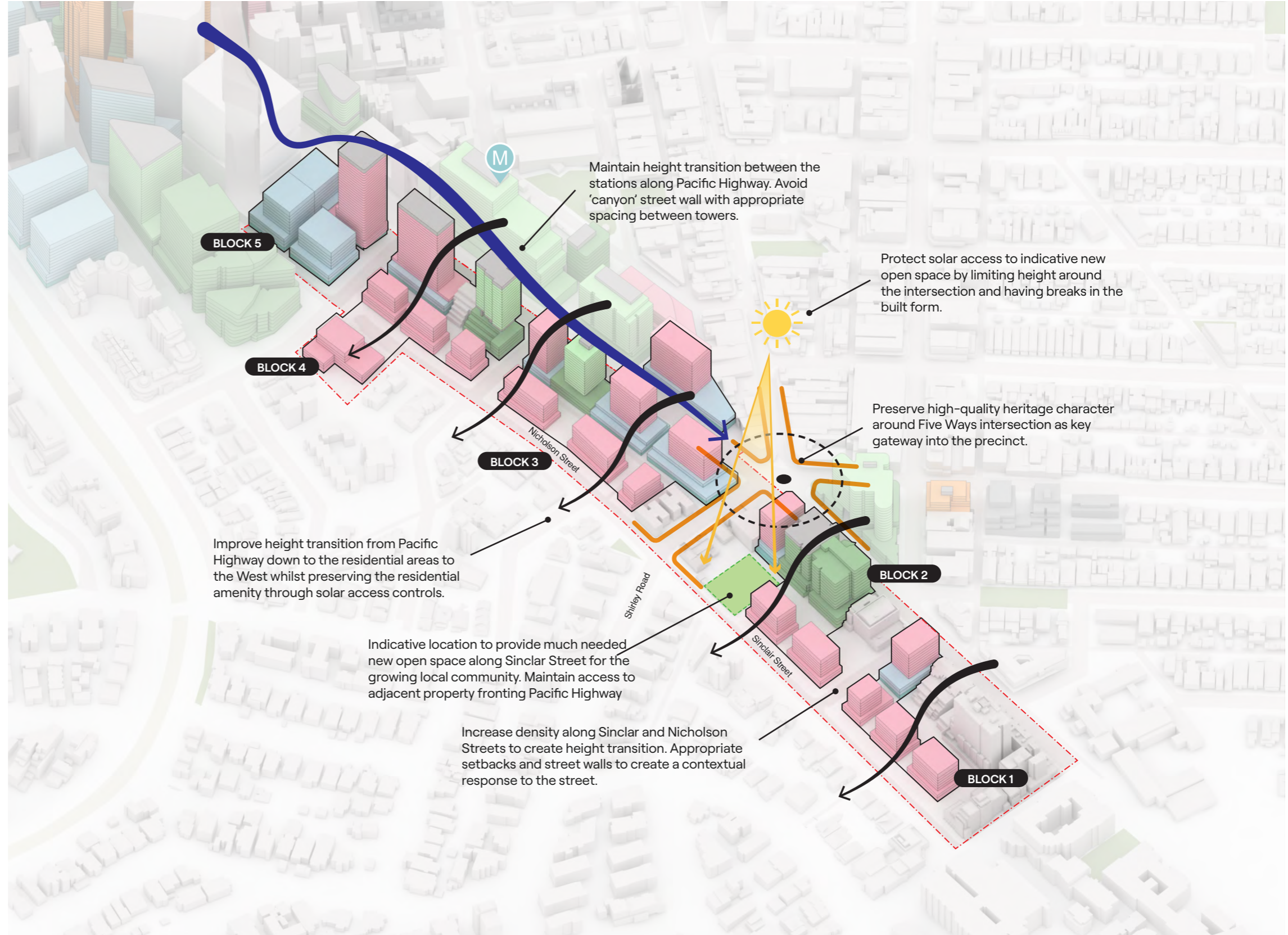
The Crows Nest Pacific Highway Corridor is the most expansive area that has been tested for change from the 2036 Plan. It is bound by Pacific Highway to the east, Sinclair and Nicholson Streets to the west, Rocklands Road to the south, and just north of Oxley Road to the north.

The primary intent of testing here was to identify additional sites for uplift to accommodate more housing close to the Metro Station, and to improve height transition between Pacific Highway and the residential area to the west. Attention has also been given to ensuring the controls presented in the 2036 Plan are still adequate and if change is required to ensure new developments sit well within the context of approved developments.

Key moves applied to this area include:

- Identified additional sites for uplift.
- Improved height transitions.
- Preserved gateway and heritage character around Five Ways.
- Identified indicative new open space.
- Increased height to select sites to incentivise development and delivery of affordable housing.

The following pages present a breakdown of the approach per block, representing the change from the 2036 Plan to the proposed.



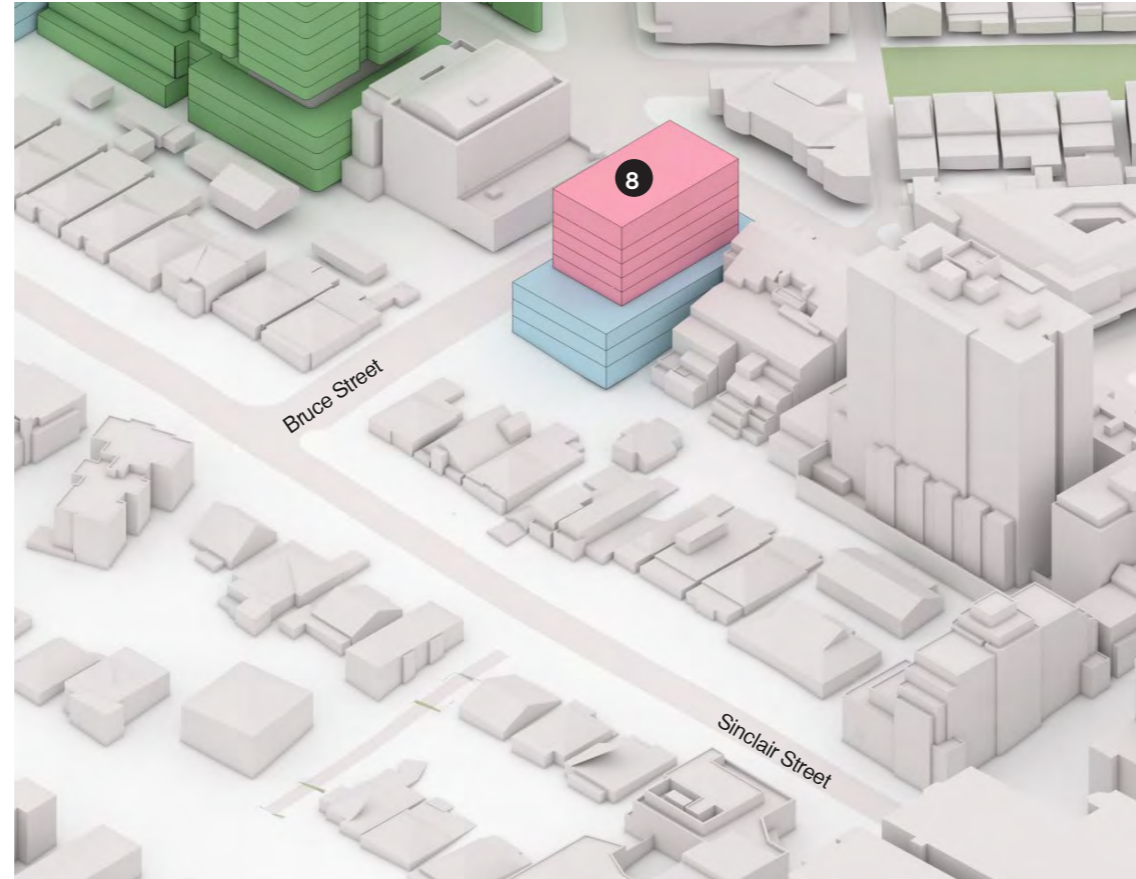
KEY

	Proposed Residential
	Proposed Non-Residential
	Rezoned/DA Approved
	Subject to Active Planning Proposal / Rezoning
	Existing Built Form

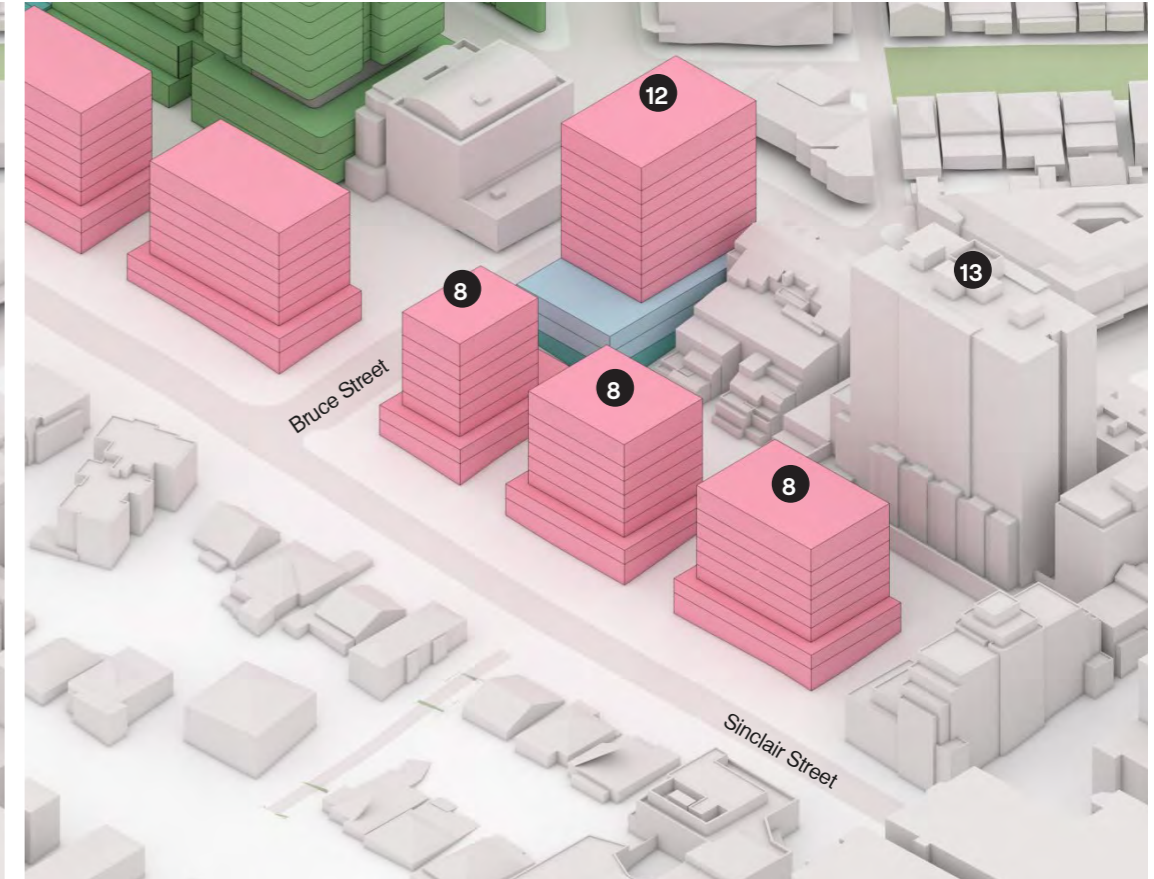
Block 1

The block has potential to provide increased height along Sinclair Street to improve height transition from Pacific Highway to the low to mid rise housing in the south-west. The 2036 Plan did not previously consider change to this area. The proposed design solution exhibits an 8 storey building height with a 2 storey street wall that responds to the local context. These properties would have an FSR of 2:1.

The property along Pacific highway is shown as 12 storeys with a total FSR of 6:1 to match the surrounding developments. This is an increase from the 2036 Plan that showed 8 storeys and an FSR of 4.5:1.



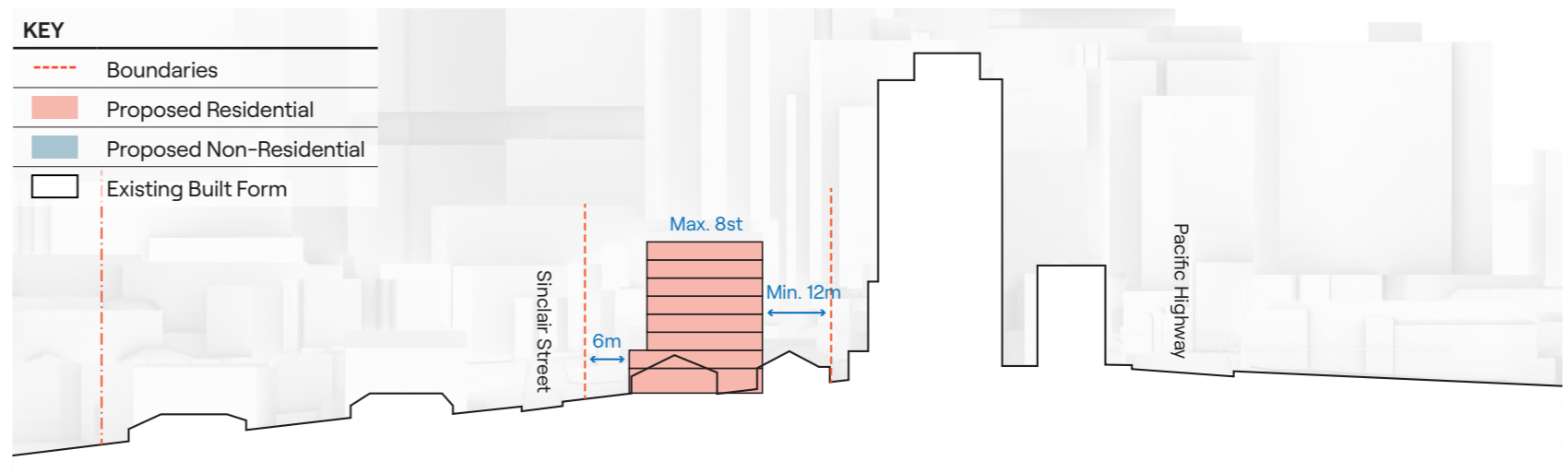
2036 Plan



Proposed

KEY

■	Proposed Residential
■	Proposed Non-Residential
■	Rezoned
■	Existing Built Form



Block 2

Similar to block 1, this block has potential to provide increased height along Sinclair Street to improve height transition from Pacific Highway to the low to mid rise housing in the south-west. The 2036 Plan did not previously consider change to these properties. The proposed design solution exhibits an 8 storey building height with a 2 storey street wall that responds to the local context. These properties would have an FSR of 2:1.

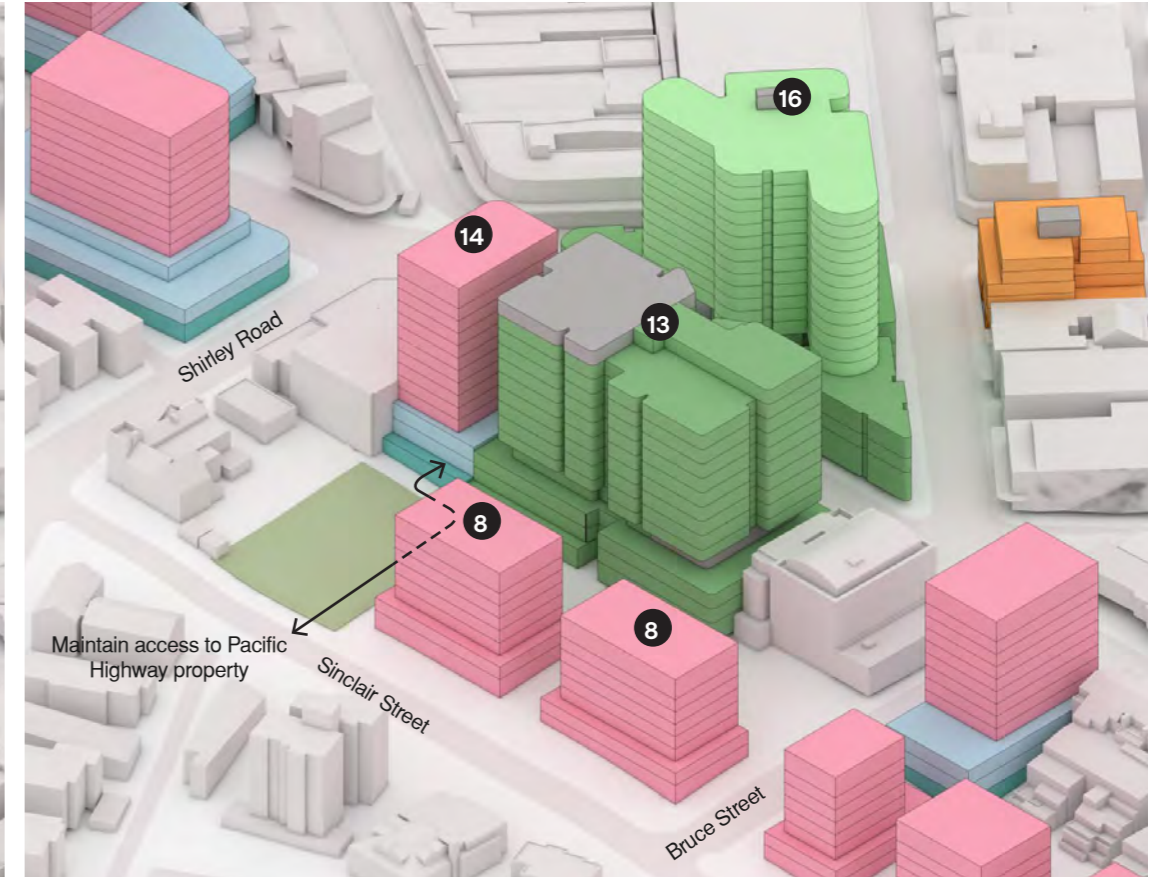
Since the finalisation of the 2036 Plan, a development at 270-272 Pacific Highway has been approved in line with the controls recommended in the Plan.

The adjacent property also has capacity to develop as mixed-use to a similar height and density. This site has been split in two, with the portion at the front identified as a heritage item and the portion at the rear flagged as an indicative location to provide much needed open space. If open space is delivered, the controls will thus only apply to the front of the lot, shown as 14 storeys with a total FSR of 6:1 to match the surrounding developments. If open space is not provided to the rear of the lot, the site remains subject to the 2036 Plan controls that showed 8 storeys and an FSR of 4:1.

The use of this site for open space is to be considered indicative only and is not to be rezoned for open space. Any site in this general area may be considered for open space. This site has simply been identified as a high opportunity location for the purpose of demonstrating a vision for the precinct.



2036 Plan



Proposed

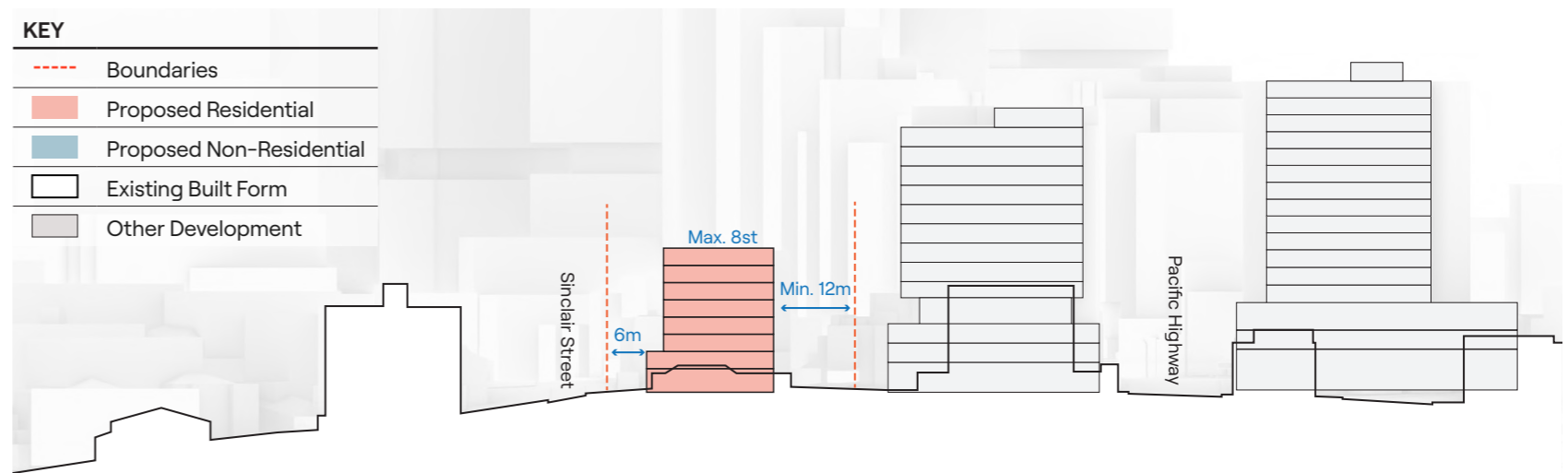
KEY

■	Proposed Residential
■	Proposed Non-Residential
■	Rezoned/DA Approved
■	Subject to Active Planning Proposal / Rezoning
■	Existing Built Form



KEY

- - -	Boundaries
■	Proposed Residential
■	Proposed Non-Residential
□	Existing Built Form
■	Other Development



Block 3

Similar to previous blocks, this block has potential to provide increased height along Nicholson Street to improve height transition from Pacific Highway to the low to mid rise housing in the south-west. The 2036 Plan considered a 4 storey building height. The proposed design solution exhibits a 6 to 8 storey building height with a 2 storey street wall that responds to the local context. These properties would have an FSR of 2:1.

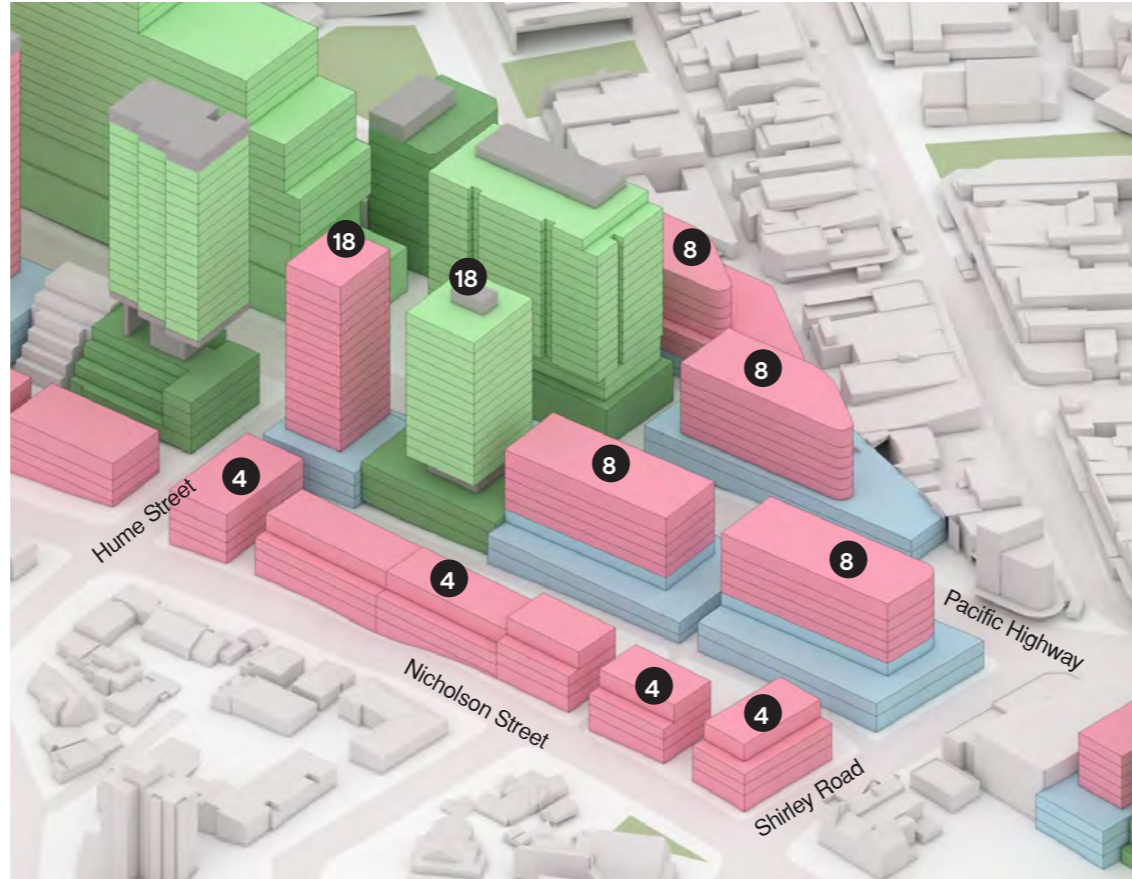
The property at the intersection of Nicholson Street and Shirley Road is shown here as not changing as it contributes to the local character around the Five Ways intersection and the heritage items surrounding. However, it is proposed for rezoning as it is not a heritage item itself and future development may be done sensitively to its context. A lower building height is prescribed here to create a less impact on the street scape and heritage items surrounding.

The properties along Pacific highway will transition upward in height from 12 storeys at Shirley Road, emphasizing the retained heritage elements on the corner, to 18 storeys at Hume Street and continuing upward in height onto the next block. There is an increase from the 2036 Plan at the southern portion of the block, from 8 storeys at 3.5:1 to 12 to 16 storeys and 4:1 to 5:1.

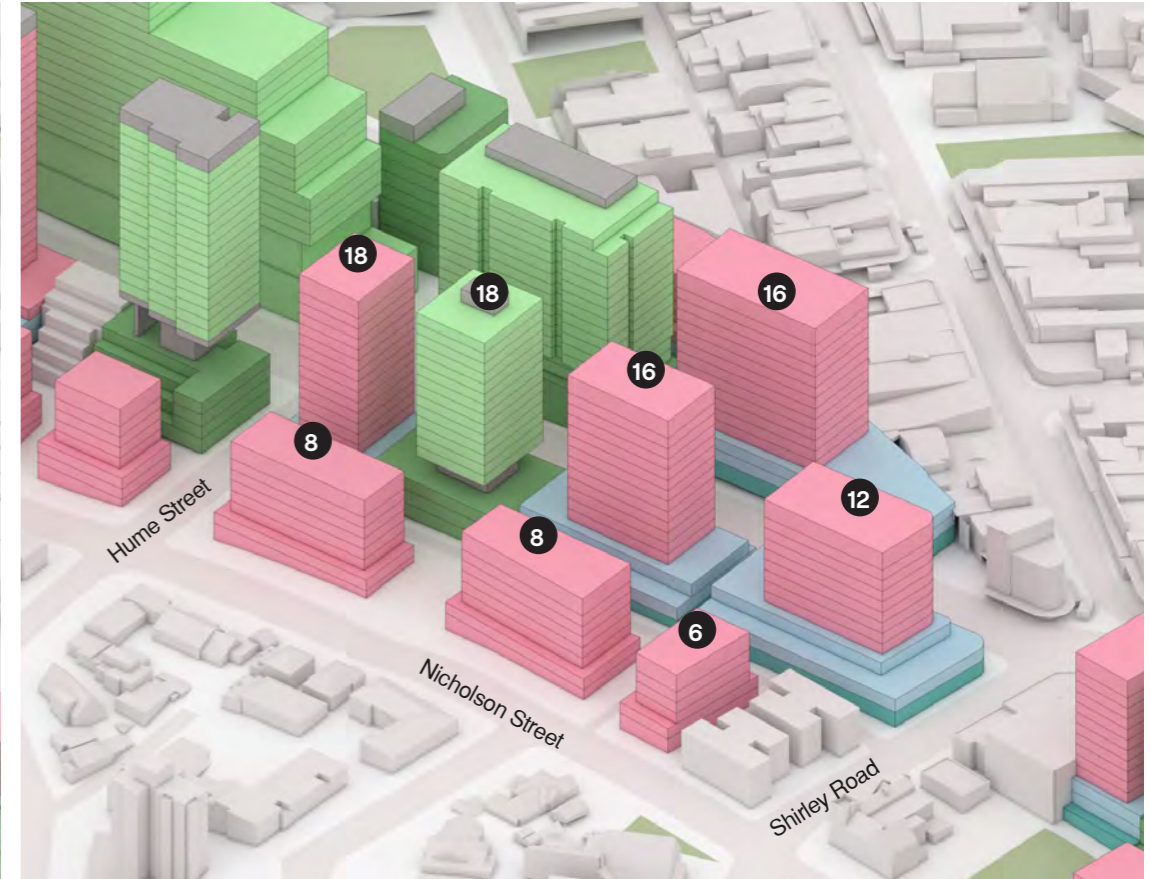
Since the finalisation of the 2036 Plan, a development at 360 Pacific Highway has been approved to 18 storeys and 5.5:1. The adjacent site has been shown to the same scale however with an FSR of 6:1 allowing it to increase marginally to the north.

These two sites have been considered for increased height if they were to amalgamate and deliver increased affordable housing. This is discussed more later in this chapter.

Over Pacific Highway, a single development sites adjacent to the Metro OSD sites has been increased from 8 storeys to 14 storeys and provided with an FSR of 6:1. This site would still need to consider overshadowing impacts to Willoughby Road which may further limit height.



2036 Plan

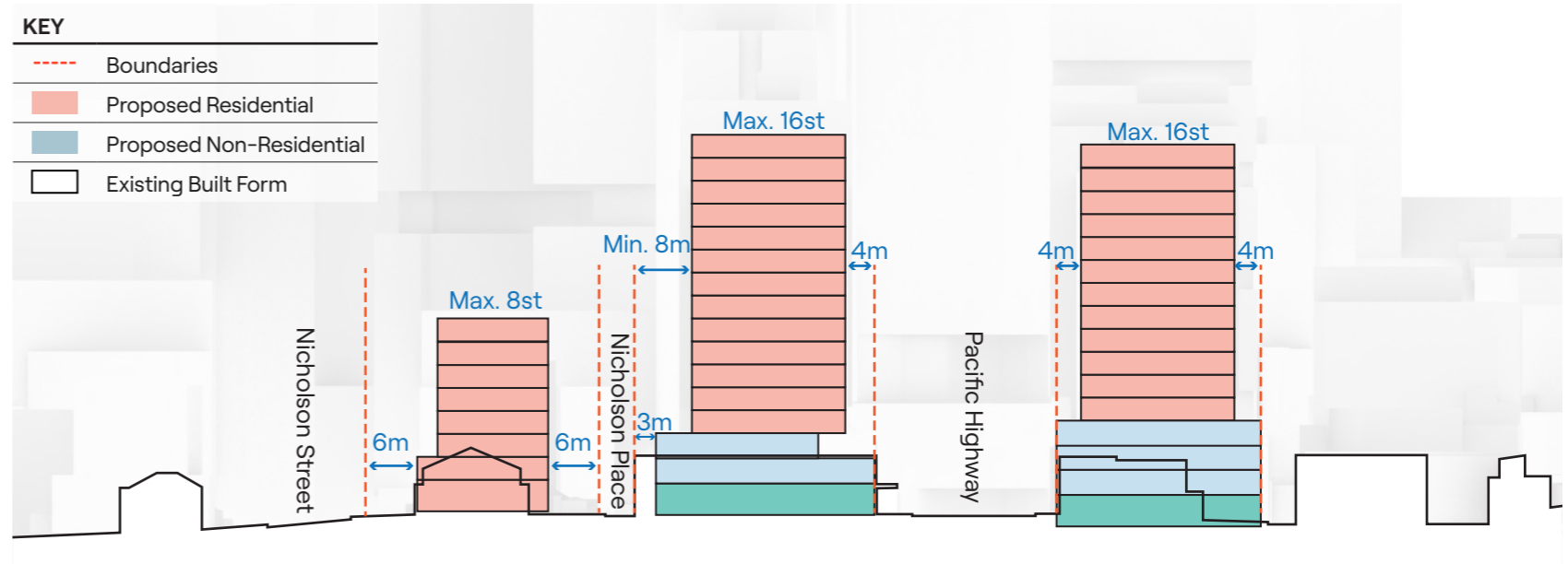


Proposed



KEY

---	Boundaries
■	Proposed Residential
■	Proposed Non-Residential
	Existing Built Form



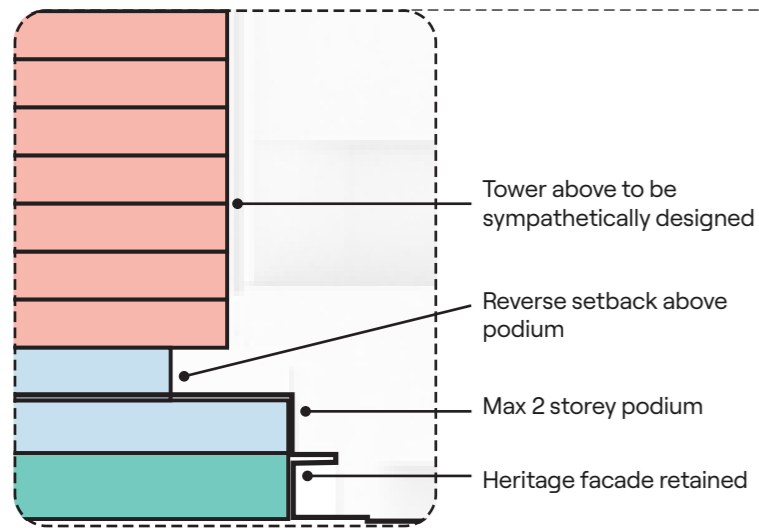
Heritage Interface

KEY

■	Proposed Residential
■	Proposed Non-Residential
■	Rezoned/DA Approved
■	Subject to Active Planning Proposal / Rezoning
■	Existing Built Form

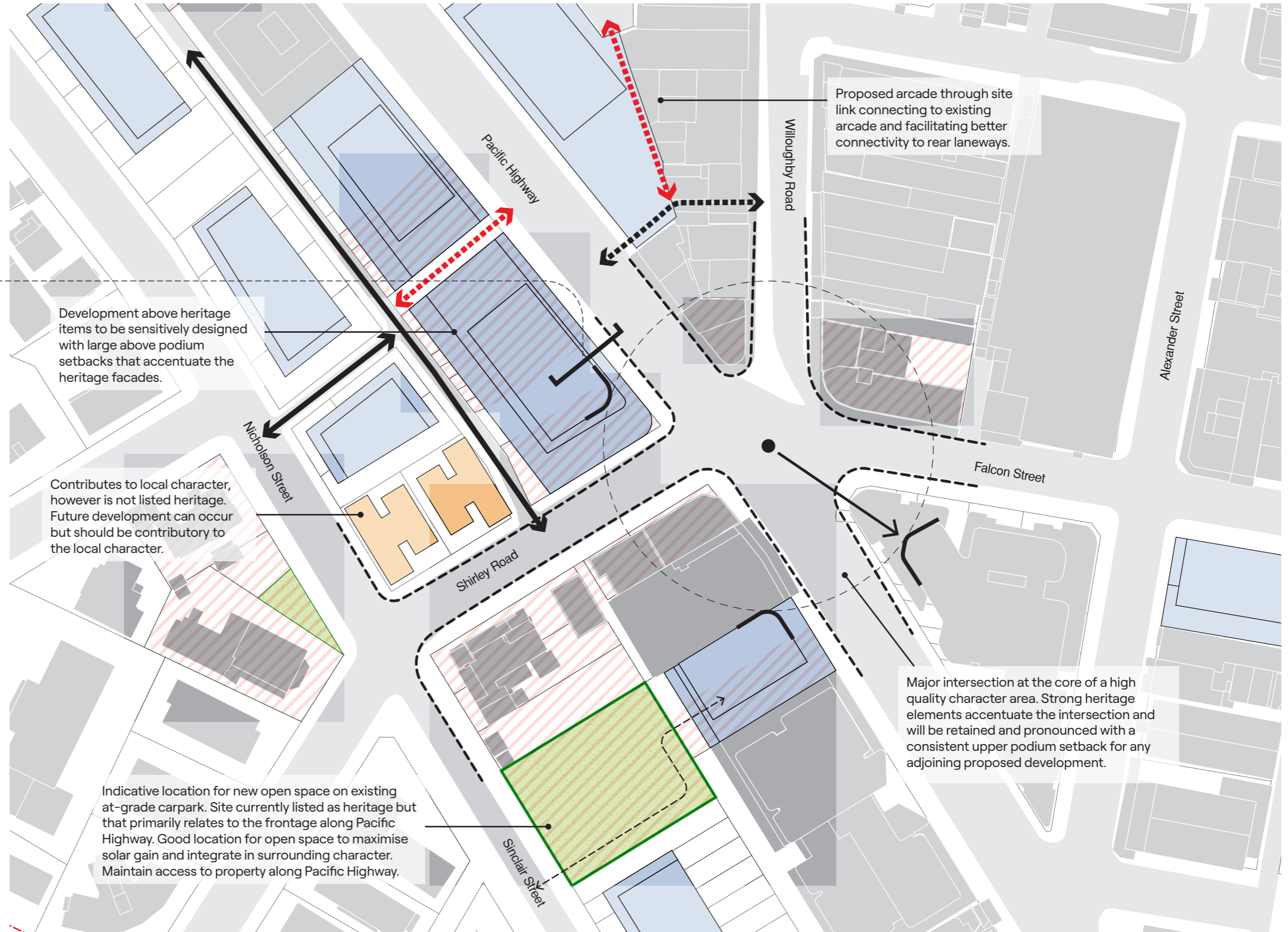
Five Ways Intersection

The Five Ways Intersection is a major gateway into and through the precinct, connecting Pacific Highway to the adjacent areas including along Willoughby Road. Strong heritage elements accentuate the intersection and therefore, further attention has been given to how above new developments can respond sensitively.



KEY

	Existing Connections
	Proposed Connections
	Non-Heritage Contribution to Local Character
	Five Ways Gateway Intersection
	Above Podium Setback Corners
	Heritage Items
	Existing Buildings
	Proposed Buildings (Indicative)
	Indicative Open Space Location



Block 4

Similar to previous blocks, this block has potential to provide increased height along Nicholson Street to improve height transition from Pacific Highway to the low to mid rise housing in the south-west. The 2036 Plan considered a 4 storey building height. The proposed design solution exhibits an 8 storey building height with a 3 storey street wall that has stepped up coming closer to the mixed-use core. These properties would have an FSR of 2:1.

Across Nicholson Street, the properties on the corner of Oxley Street have been provided with 6 storeys and 1.6:1 FSR. It is understood these properties have formed a consortium of homeowners and have made a submission on the 2036 Plan. Development here would need to be sensitive towards solar access controls for neighbouring properties as per the North Sydney DCP.

Since the finalisation of the 2036 Plan, the property at the corner of Pacific Highway and Hume Street has been approved to meet the controls of the 2036 Plan. It is also currently seeking amendments to increase height to deliver additional affordable housing. For the purpose of this study, the original approved proposal is the expected outcome however additional height may be considered as part of an incentive scheme discussed later in this chapter.

The adjacent property is unlikely to change, however it is understood it is owned by the same proponent and may be subject to change in the future. The final site at the corner of Pacific Highway and Oxley Street has been increased from 24 to 27 storeys and from 7.5:1 to 9.2:1. This is to incentivise development whilst still meeting the solar access provisions that have limited height along Pacific Highway.

The two primary corner sites on Pacific Highway have also been considered for increased height to accommodate delivery of affordable housing. This is discussed more later in this chapter.

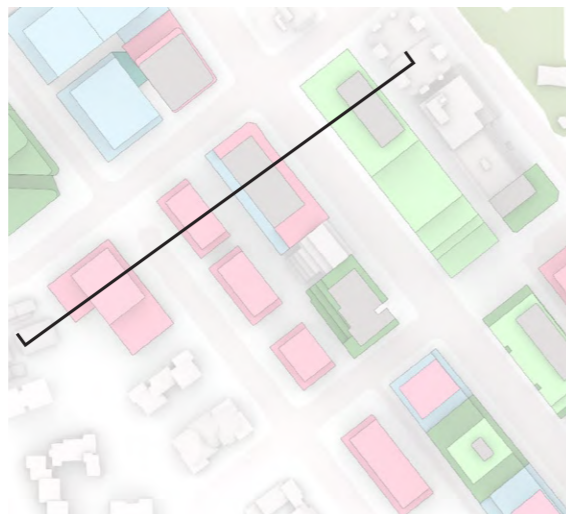


2036 Plan

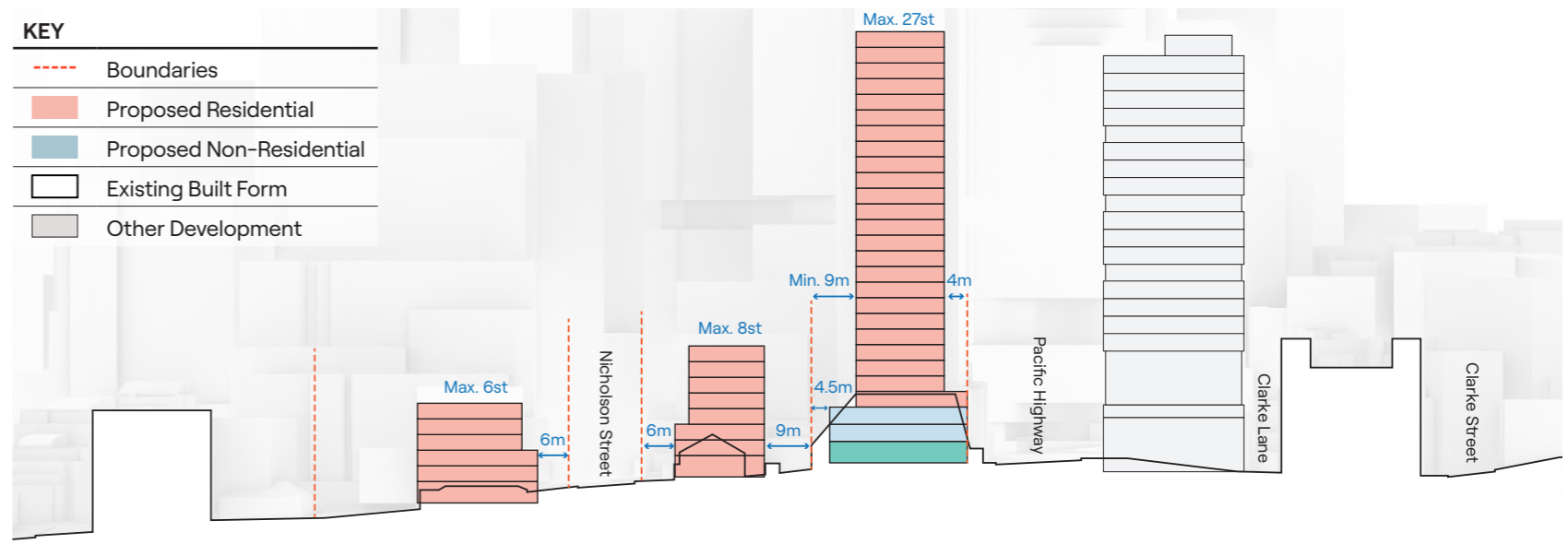


Proposed

KEY	
■	Proposed Residential
■	Proposed Non-Residential
■	Rezoned/DA Approved
■	Subject to Active Planning Proposal / Rezoning
■	Existing Built Form



KEY	
- - -	Boundaries
■	Proposed Residential
■	Proposed Non-Residential
□	Existing Built Form
■	Other Development



Block 5

At the corner of Pacific Highway and Oxley Street, a pending proposal is seeking a height of 30 storeys and 14.7:1 FSR. This site, along with the site to its north, was proposed as 7:1 and 30 storeys in the 2036 Plan. Whilst the height is appropriate, the proposal sought a 0m tower setback to its western boundary that would thereby limit development of that site. For this reason, the rezoning has considered an appropriate setback to the tower resulting in an FSR of 11:1.

Despite limiting the FSR as part of the rezoning, this site has been considered for increased height to accommodate delivery of affordable housing. This is discussed more later in this chapter.

Considering this site has taken up the majority of residential GFA that was previously prescribed across multiple sites in this same block, the remainder of the sites here are to be rezoned for non-residential uses only. The property at the corner of Oxley and Nicholson Streets is proposed for 8 storeys and 4.5:1 FSR and the property to the north is 11 storeys and 6:1 FSR.



2036 Plan



Proposed

KEY

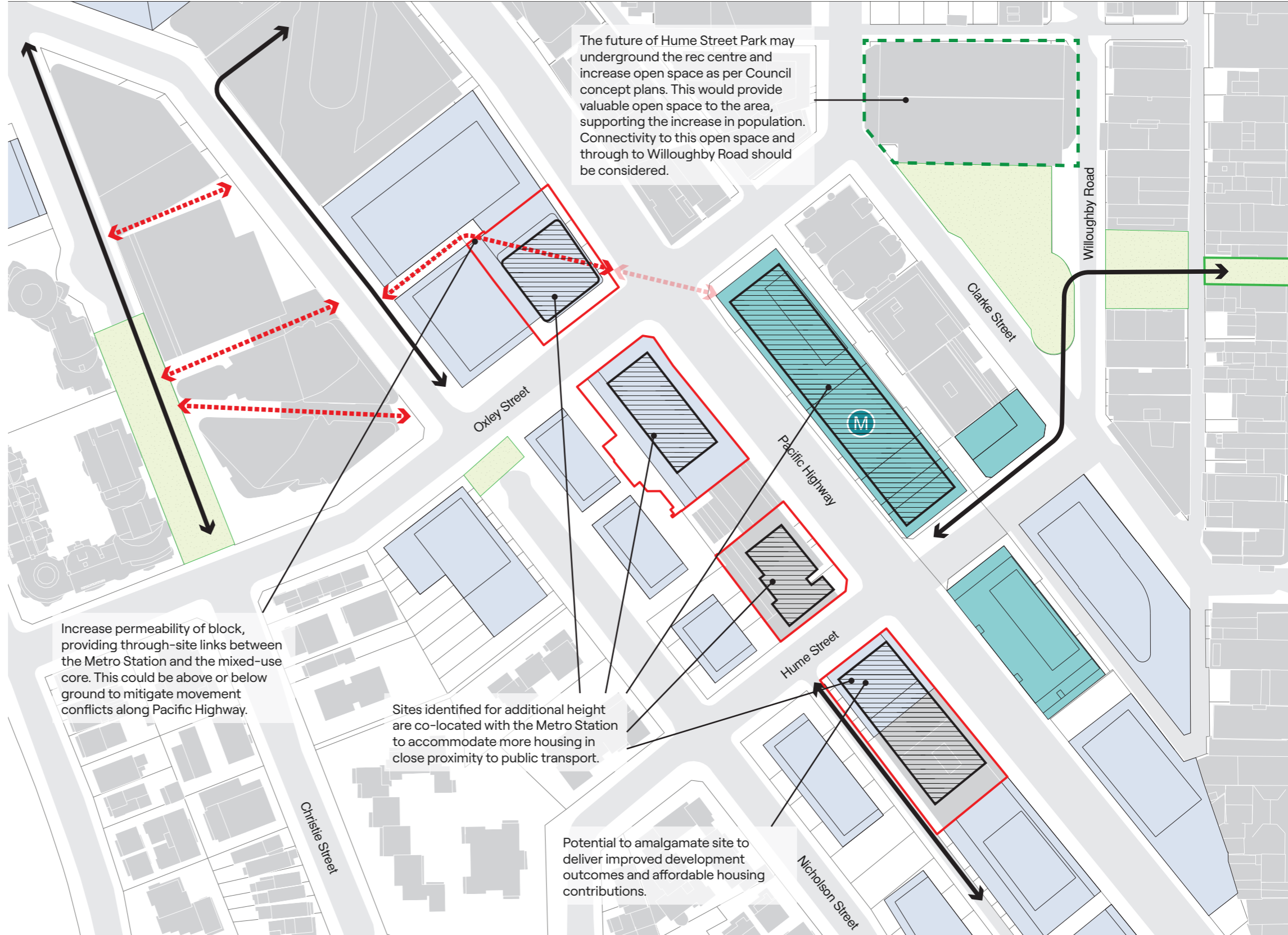
	Proposed Residential
	Proposed Non-Residential
	Rezoned/DA Approved
	Subject to Active Planning Proposal / Rezoning
	Existing Built Form

Metro Interface

The interface with the Metro Station sites provides opportunity to increase density in locations within close proximity to public transport, in alignment with the TOD program objectives. Therefore, further interrogation of the sites opposing the station along Pacific Highway has been considered.

Improved connectivity should be considered in any future development to increase movement across Pacific Highway for new residents and workers, ensuring direct and clear access between high density areas and modes of transport. A connection at the intersection of Oxley Street and Pacific Highway would benefit access to the mixed-use core and could be delivered as above ground or below ground to mitigate movement conflicts. Extending this connection through the development block to the north of Oxley Street would improve activation of this block.

A select few sites have been considered along this interface to accommodate increased height if more affordable housing were to be delivered. The following page discusses this in more detail.



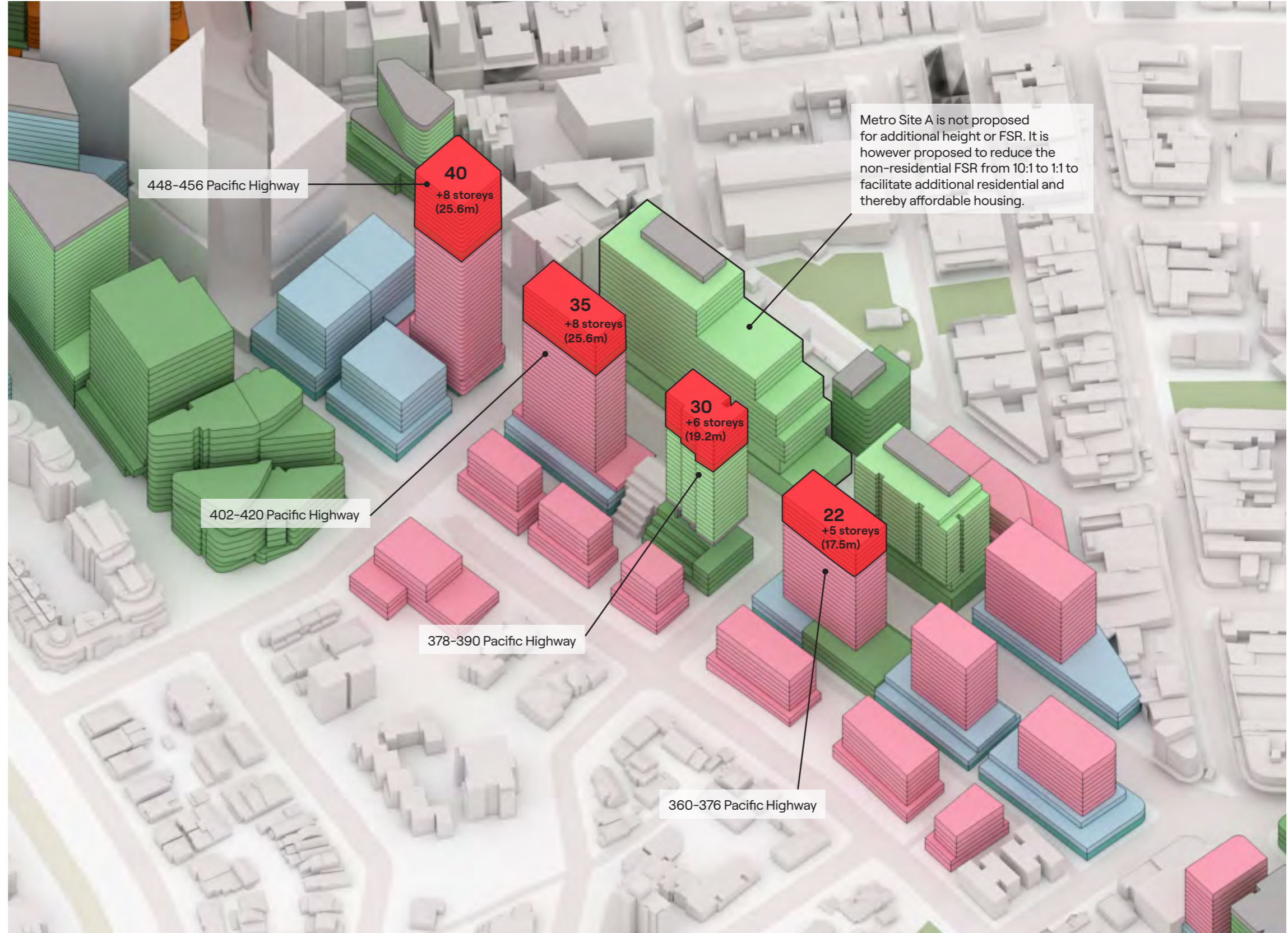
KEY	
	Existing Connections
	Proposed Connections
	Metro Sites
	Existing Buildings
	Proposed Buildings (Indicative)
	Open Space
	Potential Future Open Space Expansion (Hume Street Park as per Council Masterplan)
	Potential Incentive Sites
	Potential Incentive Site Tall Buildings

Indicative Incentive Scheme

To incentivise the delivery of more affordable housing, a select few sites have been considered for increased height and amalgamation to ensure feasible development outcomes. These sites have been selected based on their close proximity to the Metro Station and their ability to increase height whilst mitigating impacts on the surrounding residential areas to the south. Two of these sites have also sought interest in increased height or density with the intent to provide additional affordable housing, therefore setting the benchmark for what is achievable on these sites. All affordable housing sites will be subject to a 15% affordable housing provision requirement.

These sites are to be rezoned as per previous pages, however these incentive controls would need to be embedded in an LEP to ensure capability for these select sites only. The adjacent diagram represents a maximum height increase that may provide a minimum of 15% affordable housing per site. Actual design solutions should be assessed on a merit-based process that takes into account various considerations such as solar access to public spaces and visual impact.

Proposed incentive controls have been provided in the final chapter of this report.



KEY

■	Proposed Residential
■	Proposed Non-Residential
■	Rezoned/DA Approved
■	Existing Built Form
■	Additional Height

Solar Studies

The control is to provide a minimum 2 hours sunlight to private open spaces from 10am to 3pm during the winter solstice (June 21). The adjacent diagrams are a heat map where each colour represents the amount of sunlight that surface is receiving. Areas in red receive the most possible sunlight and areas in blue are least.

A comparison has been performed between the impacts of the 2036 Plan, this proposal, and this proposal inclusive of the indicative heights shown on the previous incentives scheme page.

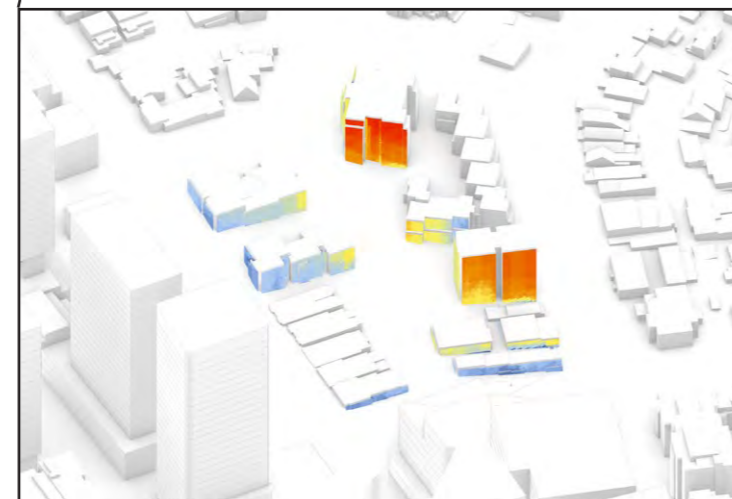
Overall, there are no significant impacts to the ground for any of these options, in particular, the incentive scheme does not negatively impact despite the increase in height. The properties at the corner of Oxley and Nicholson Street are already receiving low amounts of sunlight at ground from the 2036 Plan, therefore these properties have been considered for development. Development of these sites also exhibits no major impact to the facades of surrounding buildings ensuring solar access compliance.

This study is a cumulative study and further analysis would need to be performed on a site-by-site basis to confirm impacts.

2036 Plan

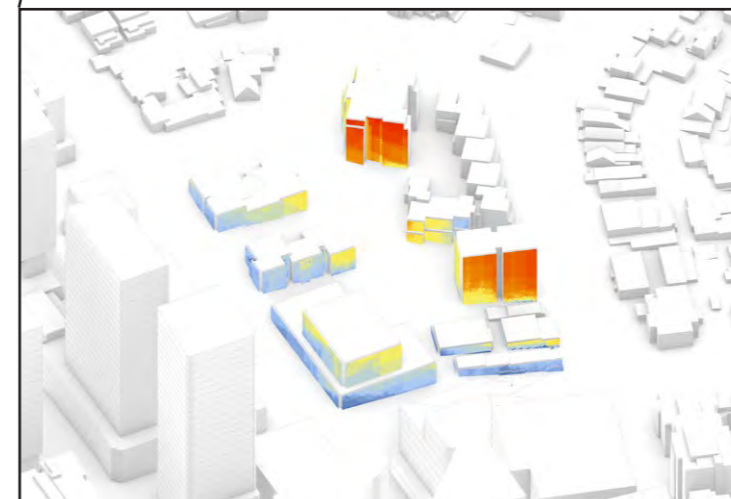


Ground Tests

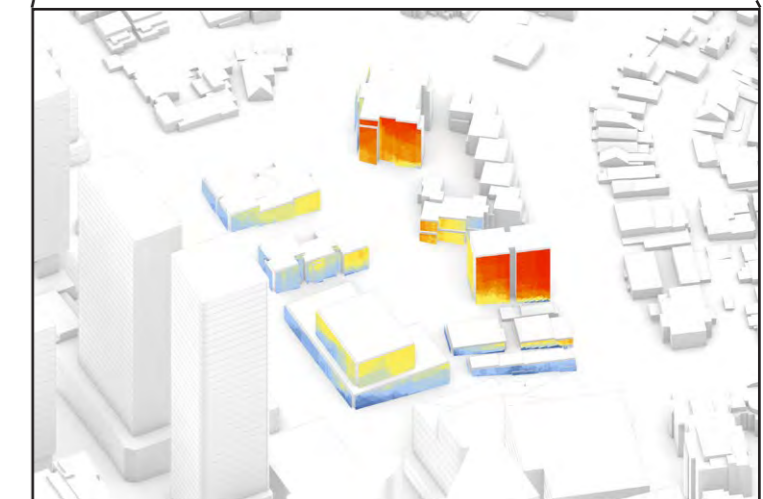


Residential Facade Tests

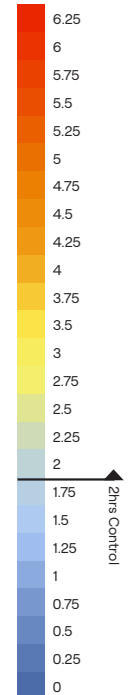
Proposed



Proposed with Incentives



Winter Solstice - 10am - 3pm



Solar Studies

Solar analysis of the south-western residential area outside the precinct has been performed to assess compliance with the prescribed controls in the 2036 Plan and Council DCPs. The 2036 Plan stipulates that new development is not to produce substantial additional overshadowing impacts between 9am-3pm on residential areas outside the precinct. Council controls require a minimum 3 hours sunlight must be provided to private open spaces from 9am to 3pm during the winter solstice (June 21).

The adjacent diagrams are a heat map where each colour represents the amount of sunlight that surface is receiving. Areas in red receive the most possible sunlight and areas in blue are least.

A comparison has been performed between the impacts of the 2036 Plan, this proposal, and this proposal inclusive of the indicative heights shown on the previous incentives scheme page.

Overall, analysis identifies that there is no material impact to ground for any of these options, in particular, the incentive scheme does not negatively impact residential properties outside the precinct despite the increase in height.

Consideration should be given to the incentive sites delivering affordable housing to allow for overshadowing impact to include criteria only for these sites.

This study is a cumulative study and further analysis would need to be performed on a site-by-site basis to confirm impacts.

2036 Plan



Ground Tests

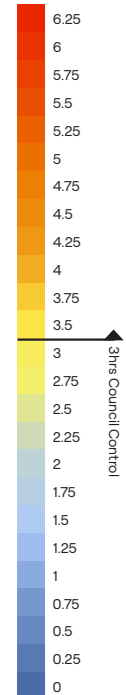
Proposed



Proposed with Incentives



Winter Solstice - 9am - 3pm



St Leonards Pacific Highway Corridor and Mixed Use Core

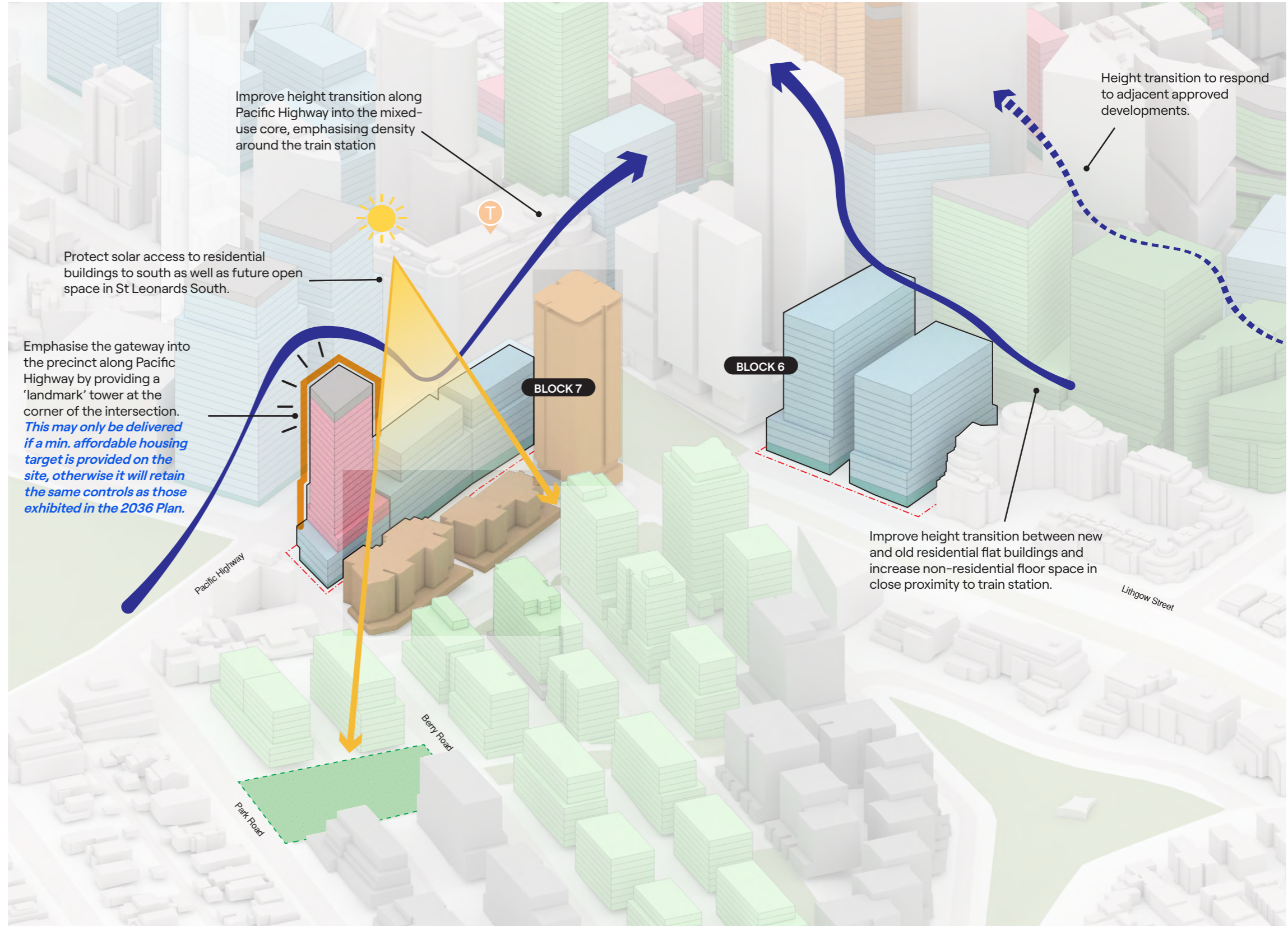
Two areas within the mixed-use core and along the St Leonards Pacific Highway Corridor have been considered for amendments to the controls shown in the 2036 Plan.

These sites have been identified to provide improved height transition, ensure the precinct gateway character is emphasized, and to achieve increased residential and non-residential floor space in appropriate locations. Attention has also been given to ensuring the controls presented in the 2036 Plan are still adequate and if change is required to ensure new developments sit well within the context of approved developments.

Key moves applied to this area include:

- Improved height transitions.
- Ensure delivery of non-residential floor space.
- Emphasize gateway character at entrance to precinct.
- Protect solar amenity of residential and open spaces.

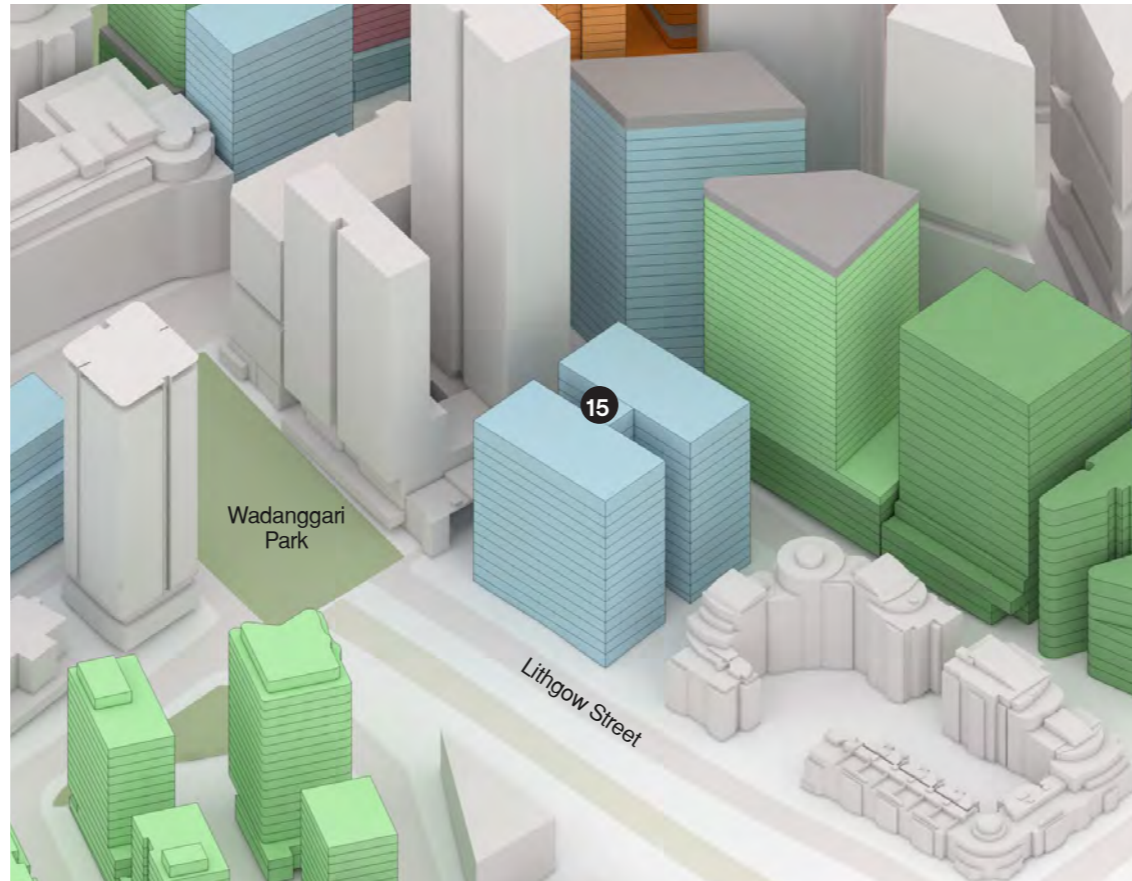
The following pages present a breakdown of the approach per block, representing the change from the 2036 Plan to the proposed.



KEY	
	Study Boundary
	Proposed Residential
	Proposed Non-Residential
	Rezoned
	Subject to Active Planning Proposal / Rezoning
	Existing Built Form
	Under Construction
	Open space

Block 6

The block has potential to improve height transition between the new tall residential flat building to its north and the existing older residential flat building to the south. The 2036 Plan considered a 15 storey building height and an FSR of 7:1 across the entire block. The proposed design solution presents two separate sites with heights of 13 and 17 storeys stepping up to the north and an FSR of 7:1 and 10:1 respectively. Appropriate interface considerations would have to be made between any new development and existing developments to increase residential amenity to those impacted sites and dwellings.

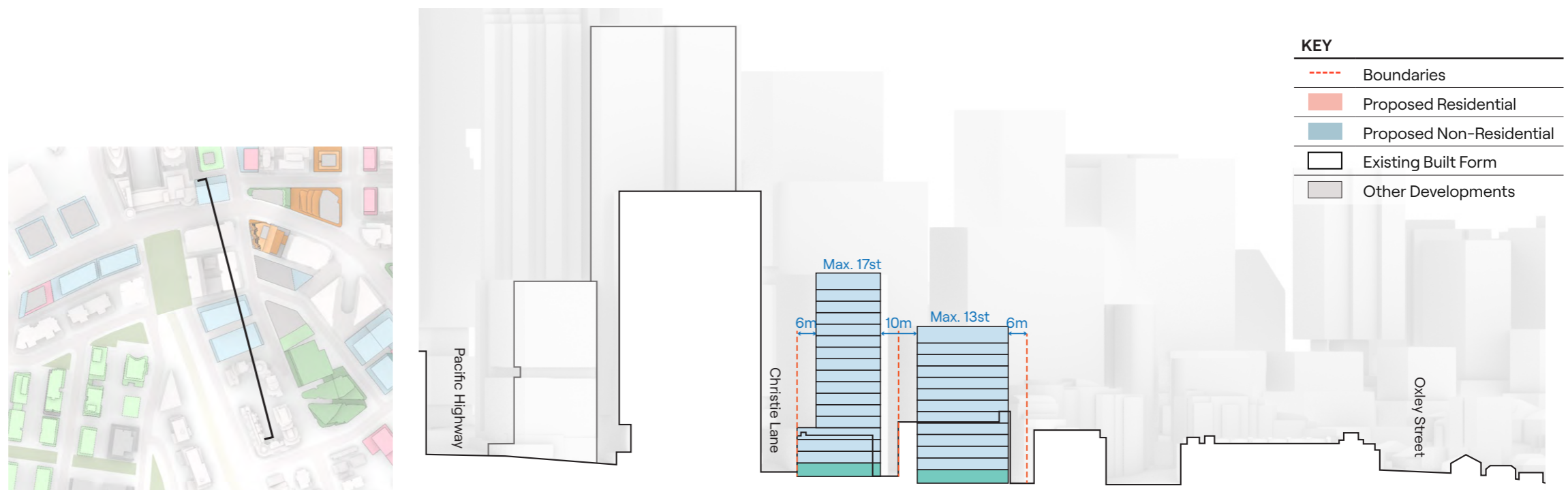


2036 Plan



Proposed

KEY	
■	Proposed Residential
■	Proposed Non-Residential
■	Rezoned/DA Approved
■	Subject to Active Planning Proposal / Rezoning
■	Existing Built Form

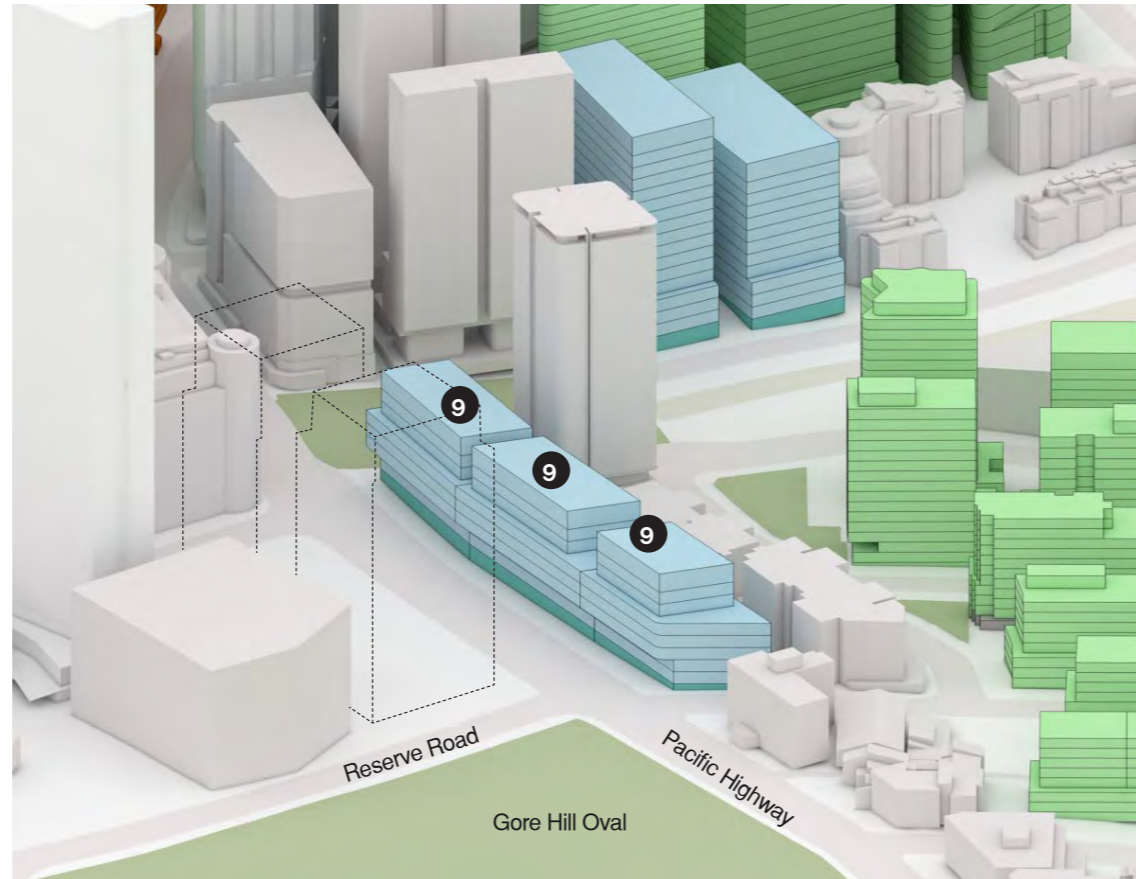


Block 7

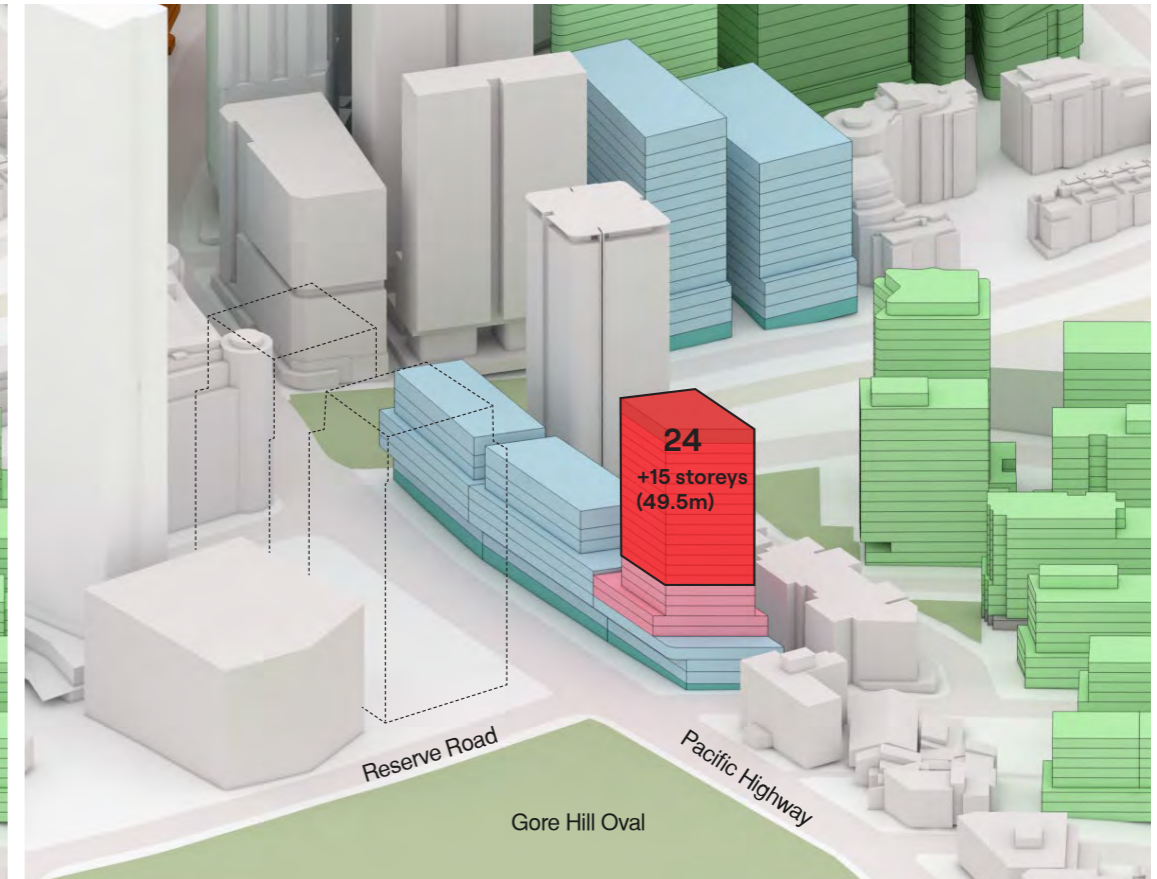
The final block tested is to be rezoned as per the 2036 Plan proposed controls, however may be subject to increased height on the corner of Reserve Road and Pacific Highway to create a gateway to the precinct with a landmark tower, whilst delivering a minimum amount of affordable housing. This is provided in a similar planning context as previously described affordable housing incentive sites.

The incentive outcome height is to be constrained by overshadowing considerations to the public open spaces and building amenity on the adjacent sites and within the St Leonards South precinct. The 2036 Plan presented a consistent 9 storey building height and an FSR of 5.1:1, all non-residential, across the block. The proposed incentive scheme maintains the 9 storey building height and upper podium setback, but now includes a 24 storey landmark tower with an FSR of 8.5:1 with provision for residential floor space.

The rezoning will rezone this site to match the 2036 Plan at 9 storeys and 5.1:1 FSR. Additional incentive controls will apply to the corner site to accommodate the delivery of affordable housing. These controls will include the additional height and change of FSR and land zoning to accommodate mixed use development.



2036 Plan + Baseline Proposed Controls



Affordable Housing Incentive

The incentive proposal does not overshadow the larger open space in St Leonards South. Smaller open spaces to north will be affected however are largely affected by existing or 2036 Plan shadows already.

KEY

	Proposed Residential
	Proposed Non-Residential
	Rezoned/DA Approved
	Existing Built Form



9am - Winter Solstice



12pm - Winter Solstice



3pm - Winter Solstice

Rezoning Sites

The adjacent plan represents the sites that are subject to rezoning as a result of the masterplan testing. Some of these sites are as a result of this testing, whilst others are the same as those in the 2036 Plan and did not require further testing.

This plan also shows sites that are subject to other proposals, rezoned and in-progress, and therefore also likely to change in the near future.

Land within the St Leonards South Precinct has been rezoned with controls in the Lane Cove LEP. There are no changes proposed to St Leonards South.

- Subject to Rezoning - Anticipated Change**
These sites are to be changed as a result of this rezoning and urban design study as per controls in Chapter 7-8 of this report

- No Change Anticipated**
Sites subject to rezoning to increase controls to match existing built form or those shown in the 2036 Plan but are unlikely to change

- Subject to Active Planning Proposals / Rezoning**
Sites subject to rezoning and have in-progress approvals that are to be captured as part of this process as well

- Subject to Separate Urban Design Study**
Subject to separate master planning process but controls to be captured in this rezoning

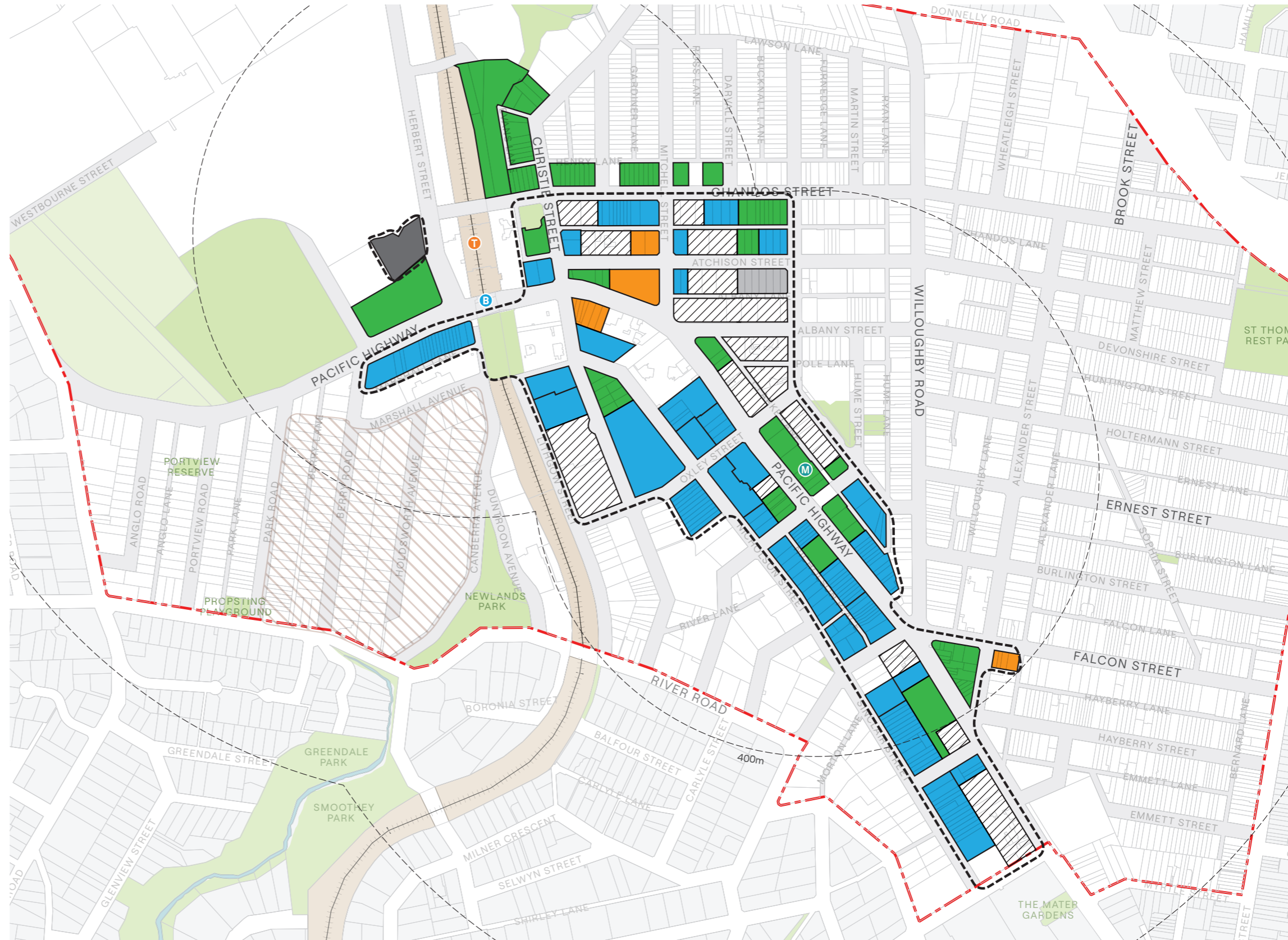
- Already Rezoned**
Sites that have already progressed proposals and achieved changes to the LEP as part of a rezoning process and therefore not included in this rezoning.

- Under Construction**
Not subject to rezoning.

- KEY**
- Precinct Boundary

 - St Leonards South

 - Area of Change



Indicative Yield

TOD Accelerated Rezoning Area

The below numbers represent the total change in dwellings and non-residential floor space across the precinct due to the rezoning, as well as approved proposals that have not yet been delivered, and under construction sites (labelled collectively as 'Already Rezoned' in the tables). The proposed change is exclusive of development occurring at St Leonards South and the hospital precinct. Two tables are provided showing the totals exclusive and inclusive of the proposed incentive controls.

	ALREADY REZONED	SUBJECT TO REZONING*
DWELLINGS	3,182	3,255
NON-RESI GFA	81,607	89,706

Rezoning per LGA

A breakdown of the rezoning totals per LGA is provided to represent where the change is occurring. The majority of which is within North Sydney. These are exclusive of incentives.

NORTH SYDNEY	ALREADY REZONED	SUBJECT TO REZONING*
DWELLINGS	1,122	2,170
NON-RESI GFA	-16,397	22,697

LANE COVE	ALREADY REZONED	SUBJECT TO REZONING*
DWELLINGS	2,000	637
NON-RESI GFA	29,126	66,386

WILLOUGHBY	ALREADY REZONED	SUBJECT TO REZONING*
DWELLINGS	60	448
NON-RESI GFA	68,878	623

Calculations do not include developments completed since the 2036 Plan was adopted.

*Figures assume complete take up of affordable housing incentive sites.

Difference from 2036 Plan

To compare against the 2036 Plan, the below table represents the additional uplift from the 2036 Plan to the proposed rezoning controls of this report and is inclusive of incentive controls. The dwellings would be expected to increase to 1,314 above the 2036 Plan and there would be a loss of non-residential GFA of 29,523sqm that is due to the transfer of non-residential FSR on select sites to residential FSR to facilitate greater residential uplift. The precinct is still meeting the target GFA of this study and of the 2036 Plan overall.

REZONING CONTROLS	DIFFERENCE FROM 2036 PLAN
DWELLINGS	+1,762
NON-RESI GFA	-28,900

Assumptions:

- Numbers subtract existing non-residential floor space and dwellings.
- Existing non-residential floor space based on information provided by SGS c.2018 that supported the 2036 Plan. Assume as estimate only.
- Existing dwellings based on strata information and visual inspection. Assume as estimate only.
- Proposed non-residential floor space and dwellings based on proposed FSR and average GFA per dwelling except where proposal exists in which case the proposed is adopted.
- Average GFA per dwelling - 90sqm.

KEY	
	Precinct Boundary
	St Leonards South
	Proposed Residential
	Proposed Non-Residential
	Subject to Active Planning Proposal / Rezoning
	Rezoned/DA Approved
	Under Construction
	Subject to Separate Urban Design Study



Proposed Excluding Affordable Housing Incentives



Proposed Including Affordable Housing Incentives

7

Urban Design Framework

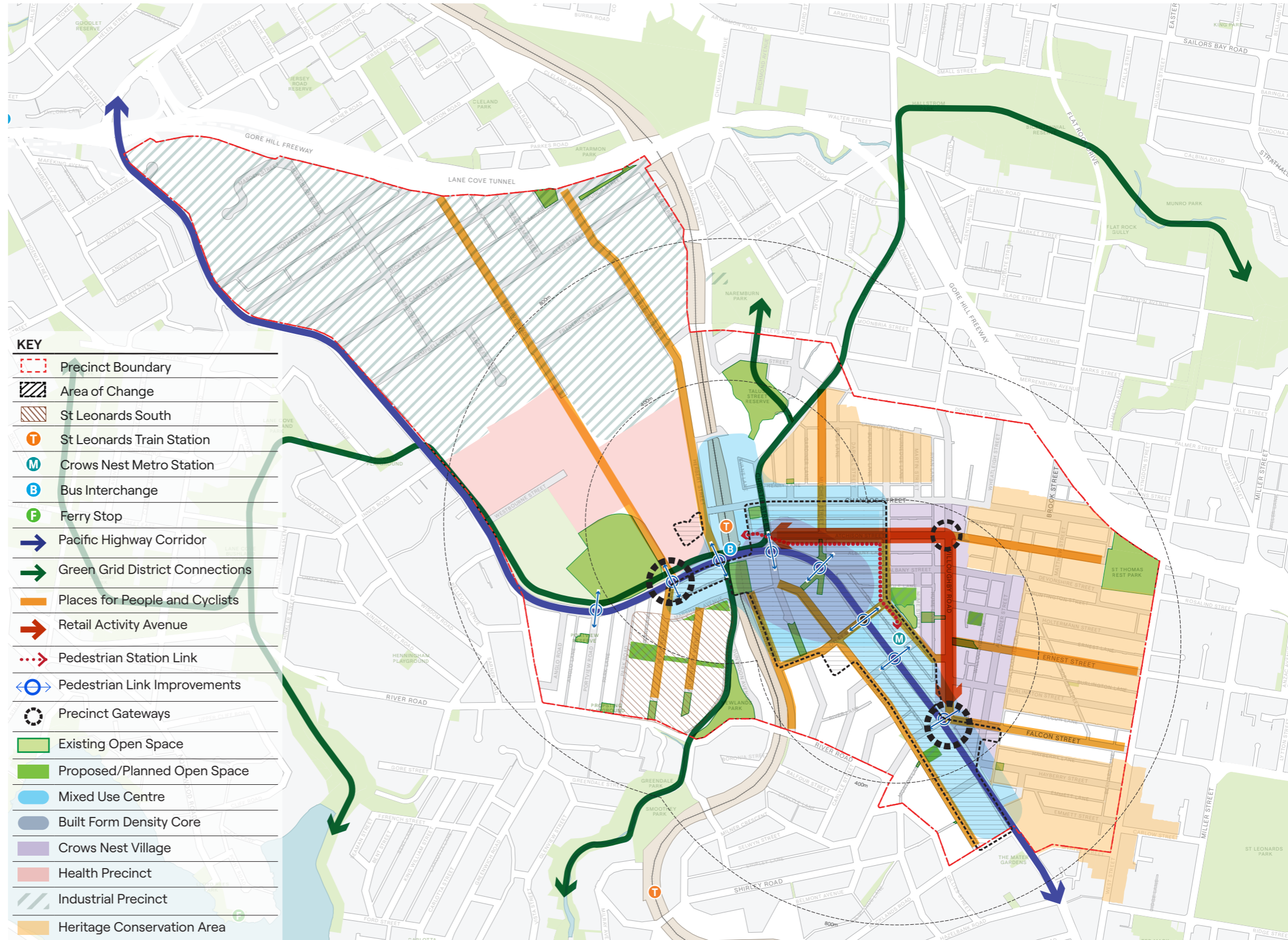
Structure Plan

St Leonards and Crows Nest is made up of a number of adjoining activity areas, each with unique characteristics. The Plan for St Leonards and Crows Nest illustrates a unified and over-arching approach for the study area. It combines and distils the actions and directions identified in a series of Framework Plans, which cover a number of key themes. The Plan focuses on improving connectivity across and between the identified character areas through a network of green streets, active edges, and public spaces.

The key objectives for St Leonards and Crows Nest plan are to:

1. Preserve, strengthen, and enhance the existing diverse character areas through careful consideration of place.
2. Leverage world-class health and education uses to provide opportunities for future employment growth.
3. Protect and strengthen the area's commercial role supported by complementary uses to capitalise on renewed confidence in the commercial market.
4. Create a network of new and existing useable, public, and diverse open spaces which prioritise walking, cycling, and access to transport to promote a healthier urban environmental and encourage social interaction.
5. Increase opportunities for transport-oriented development including commercial and mixed-use development that takes advantage of existing and future transport.
6. Create future employment opportunities leveraging off the increased transport capacity of the new Sydney Metro Station.
7. Strengthen and enhance opportunities in the Artarmon employment area to fulfil the important urban service needs of the wider North District.
8. Develop high quality and diverse residential areas that create sustainable and liveable communities.

The following framework plans unpack these objectives in more detail in response to the Urban Design Principles. They are categorised under the same themes of Environment, Movement, Land Use, and Built Form.



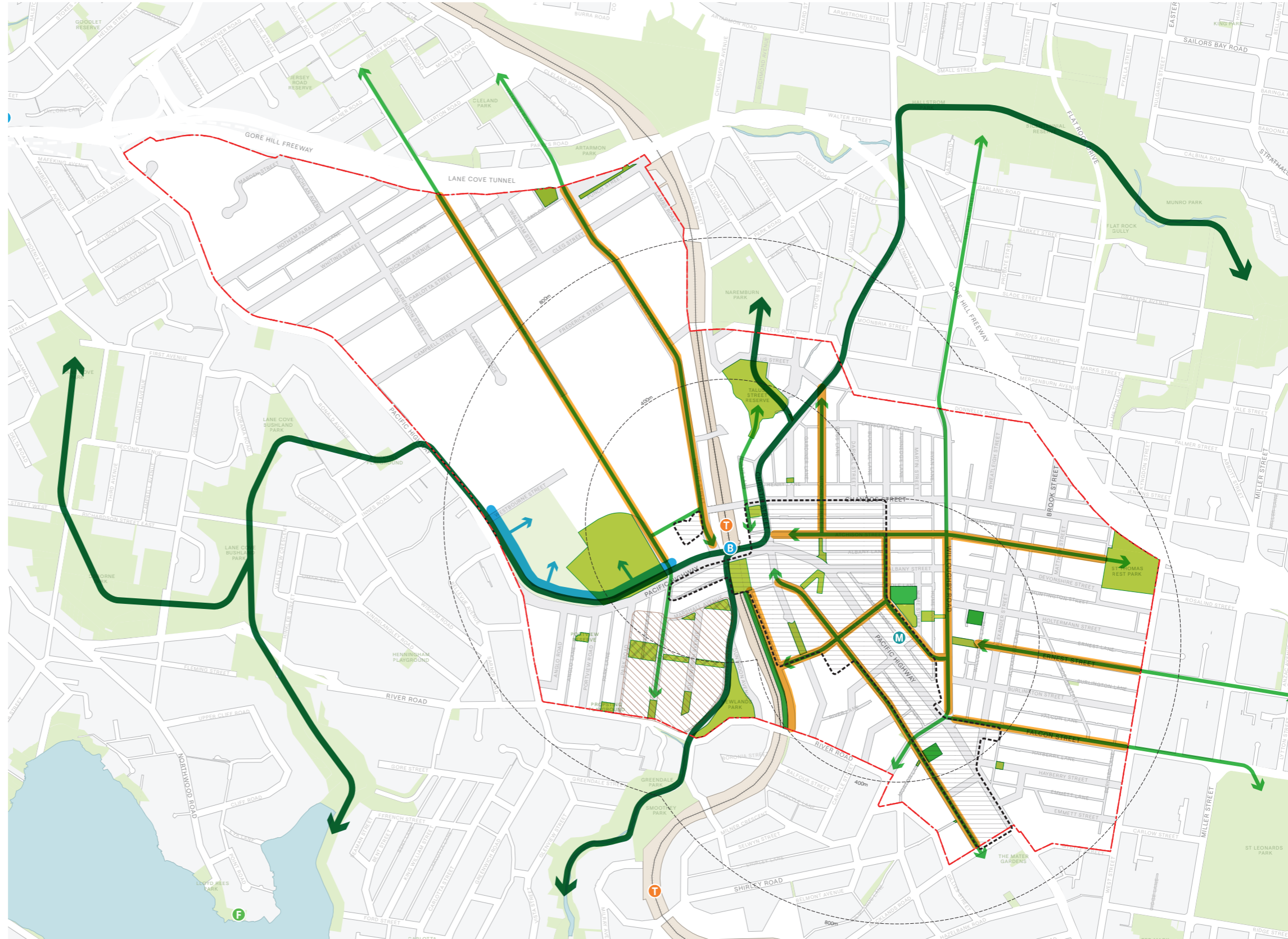
KEY	
	Precinct Boundary
	Area of Change
	St Leonards South
	St Leonards Train Station
	Crows Nest Metro Station
	Bus Interchange
	Ferry Stop
	Pacific Highway Corridor
	Green Grid District Connections
	Places for People and Cyclists
	Retail Activity Avenue
	Pedestrian Link Improvements
	Precinct Gateways
	Existing Open Space
	Proposed/Planned Open Space
	Mixed Use Centre
	Built Form Density Core
	Crows Nest Village
	Health Precinct
	Industrial Precinct
	Heritage Conservation Area

Indicative Built Form Massing



Environment

- ➔ Connect into the district and regional open space network that extends beyond the precinct through pedestrian and cycling links.
- ➔ Create a secondary network of green links that connect across the precinct from the regional links to surrounding residential areas.
- ➔ Maintain, enhance, and create new green streets that have significant tree canopy cover to create safe and enjoyable active links between spaces.
- ➔ Preserve and improve existing and planned open spaces so that they can serve the growing population and community needs.
- ➔ Investigate potential for additional open space in select locations such as along the railway line, in the south-west precinct, and around Hume Street Park.
- ➔ Retain green edge along Gore Hill Park and Cemetery, preserving views across the park and emphasizing its significant value to the local community.



KEY

	Precinct Boundary
	Area of Change
	St Leonards South

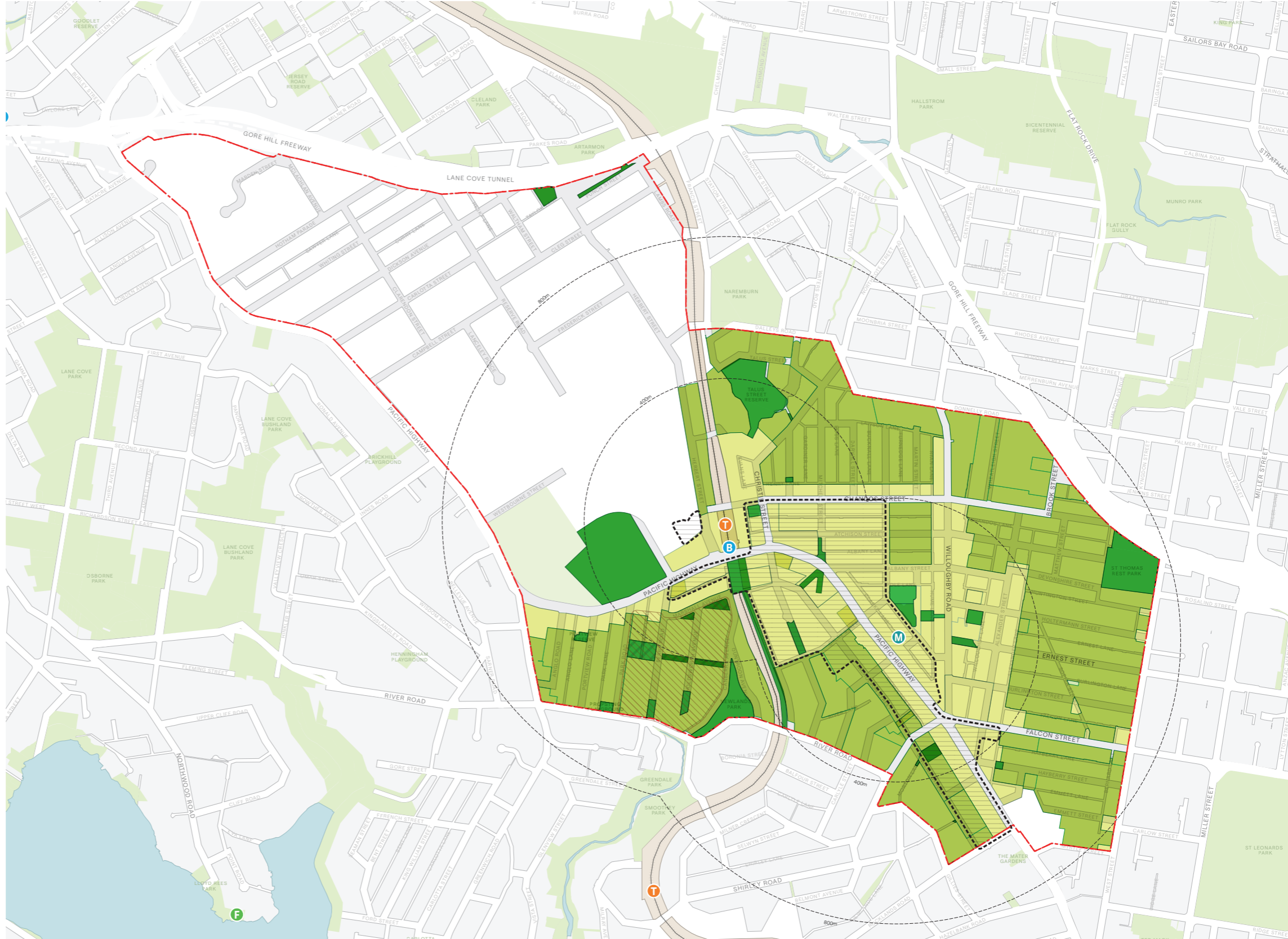
Environment

Canopy Cover

- Deliver between 15-30% canopy cover on commercial and mixed use sites, as per Section 3.2.2 of the Crows Nest Design Guide

- Achieve 40% canopy cover on streets and open space within residential areas. Development shall not reduce the amount of canopy coverage provided.

- Achieve 45% canopy cover in areas zoned RE1, including streets and open spaces. Development shall not reduce the amount of canopy coverage provided.



KEY

- Precinct Boundary

- Area of Change

- St Leonards South

Environment

Solar Amenity and Sensitive Areas

A number of overshadowing controls were recognised in the 2036 Plan and are still relevant to any future development of the precinct. These controls aim to protect open spaces, public areas and residential areas from significant impact as a result of tall building development. These controls are:

- Existing/Planned Public Open Spaces**
No additional overshadowing
10am to 3pm Winter Solstice (June 21)
 1. Christie Park
 2. St Leonards South (indicative)
 3. Propsting Park
 4. Newlands Park
 5. Hume Street Park
 6. Ernest Place
 7. Gore Hill Oval
 8. Talus Reserve

- Potential Public Open Spaces**
Min. 3 hours to 50% area
10am to 3pm Winter Solstice (June 21)
Consideration should also be given during the Equinox periods (March/September 21)
 9. Potential Park

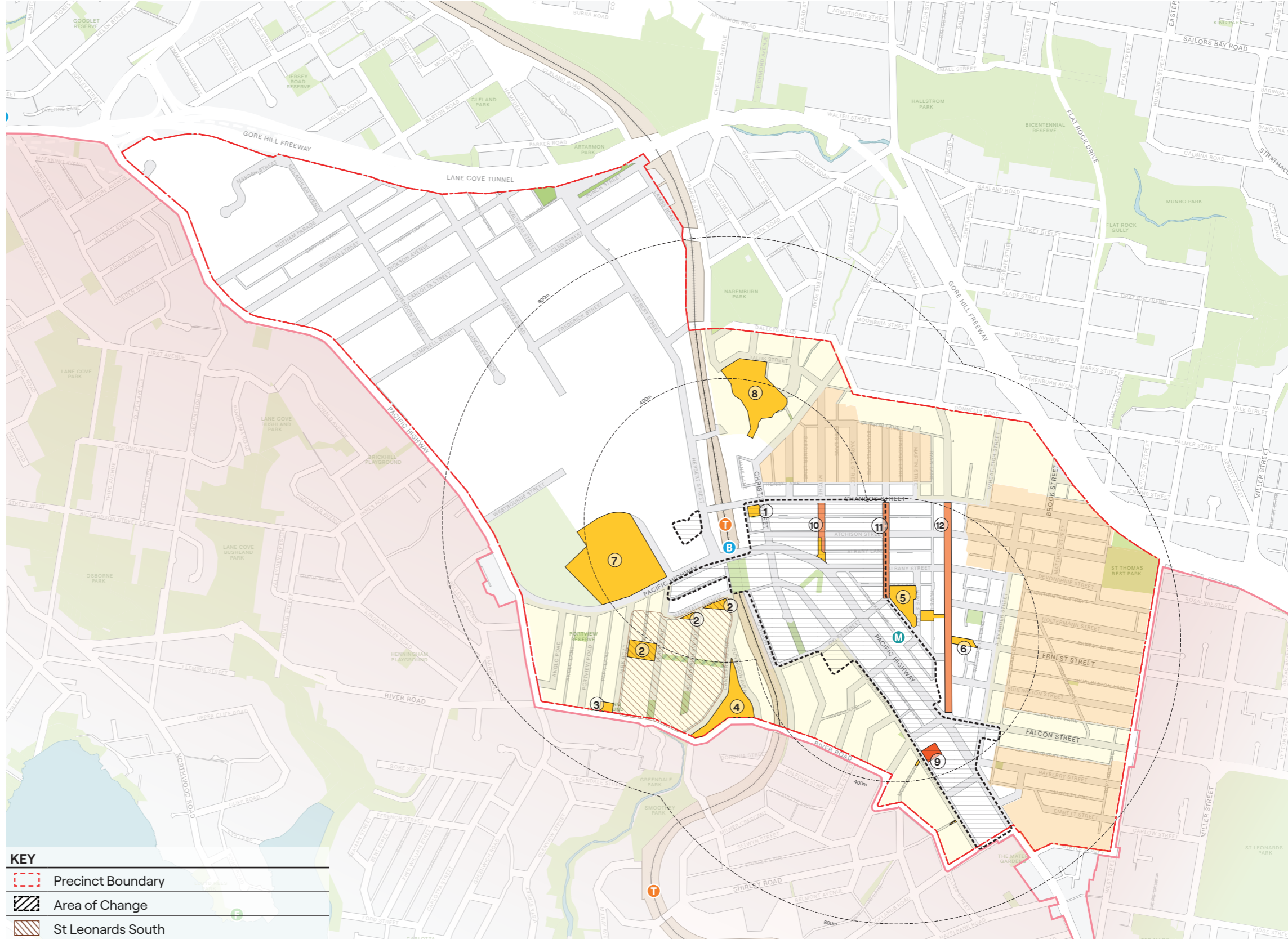
Note - This park location is indicative only and may be provided in any appropriate location that responds to the need for open space in areas of need.

- Streetscapes**
No additional overshadowing
11.30am to 2.30pm Winter Solstice (June 21)
 10. Mitchell Street
 11. Oxley Street
 12. Willoughby Road

- Conservation Areas Inside Boundary**
Min. 3 hours
9am to 3pm Winter Solstice (June 21)

- Residential Areas Inside Boundary**
Min. 2 hours
9am to 3pm Winter Solstice (June 21)

- Residential Areas Outside Boundary**
No additional overshadowing
9am to 3pm Winter Solstice (June 21)
This control is not applicable to sites incentivised to deliver additional affordable housing.



KEY

	Precinct Boundary
	Area of Change
	St Leonards South

Movement

-  Pacific Highway is a major connector through the precinct and also forms the topographic highpoint along the ridgeline. Focus activity along this corridor and ensure appropriate approaches to development that aim to mitigate impact without compromising its role within the movement network.

-  Preserve the secondary network for local movement and connection between the core of the precinct and surrounding areas.

-  Establish a tertiary movement network for pedestrians and cyclists that encourages active transport movement in a safe and accessible way. Locate these streets away from high traffic roads to offer a protected pedestrian experience.

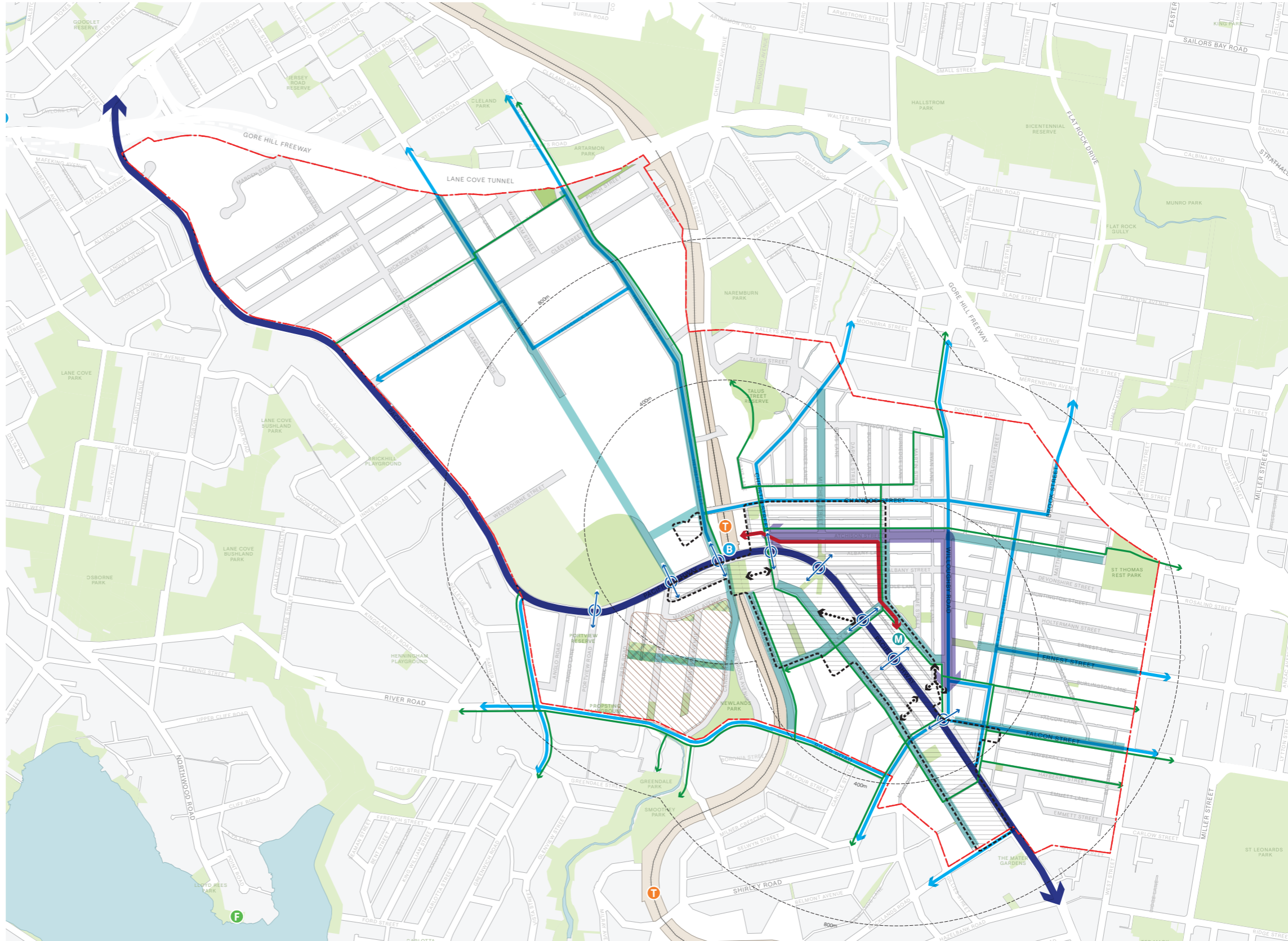
-  Connect into the regional cycling network to support active transport movement.

-  Connect Willoughby Road and Chandos Street to create a connected pedestrian avenue that supports commercial and retail uses in a high activity area spanning between the stations.




-  Establish a defined pedestrian route between the stations to support wayfinding and mode share. These routes are to be direct but also safe and enjoyable.

-  Introduce through-site links to improve block permeability and walkability of the precinct, and allowing secondary connections between blocks that are pedestrian prioritised.



-  Establish and upgrade crossing points to improve pedestrian amenity and safety, particularly around the proposed Crows Nest Sydney Metro and along Pacific Highway. Focus should be given to key intersections that would facilitate greater active transport movement, improving connectivity both north-south and east-west.

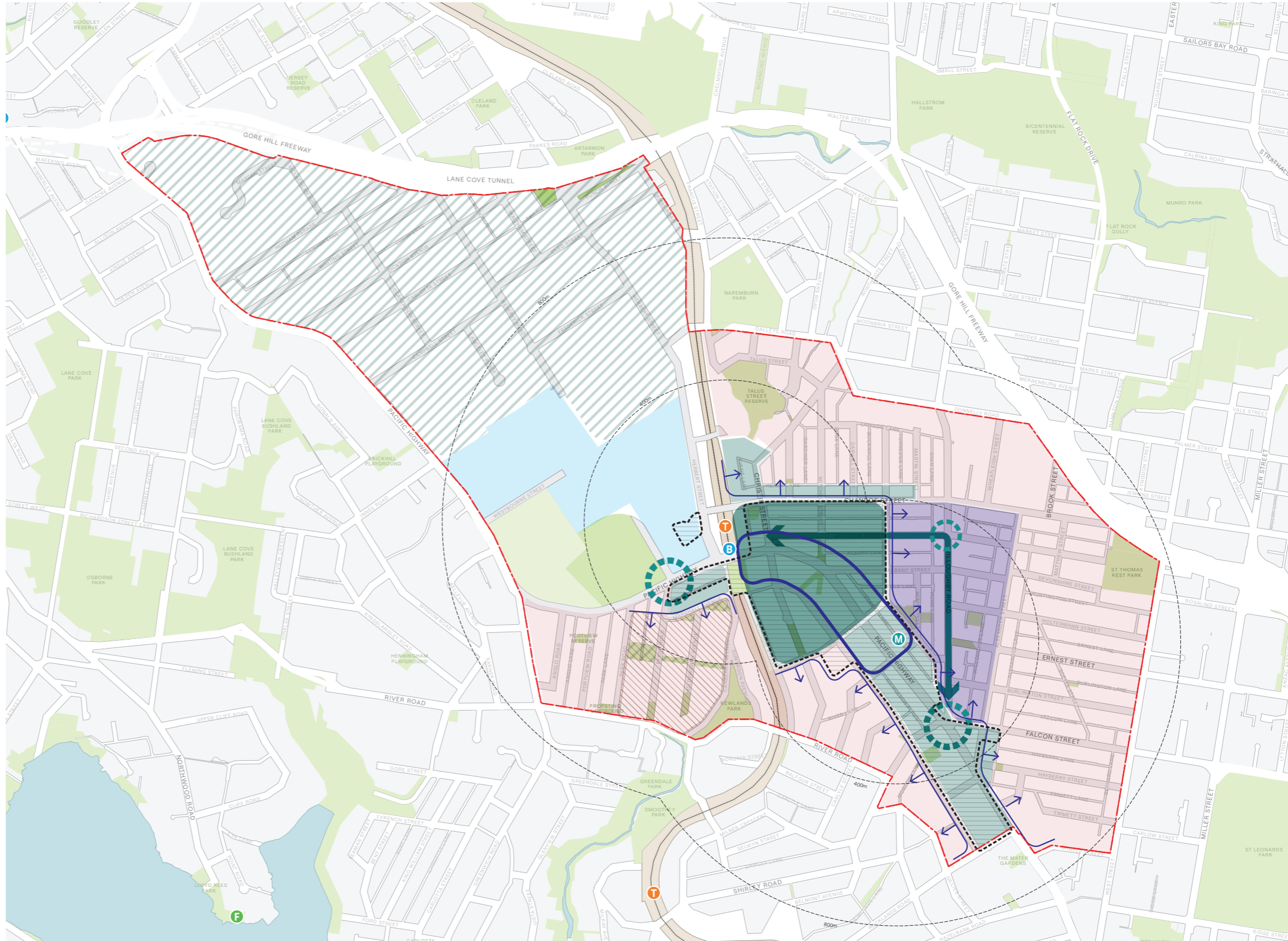


KEY




	Precinct Boundary
	Area of Change
	St Leonards South

Land Use

-  Concentrate density along Pacific Highway between the stations to maximise the benefit of high capacity transport infrastructure for jobs and dwellings.
-  Centre the commercial core around St Leonards Station to cultivate a synergistic employment hub in close proximity to public transport and facilitating a high-level of activation. Extend mixed use down Pacific Highway.
-  Distribute commercial and retail activity along Chandos Street and Willoughby Road to create a connected activity corridor in a high quality character area, supporting local business growth and opportunities.
-  Preserve the character of Crows Nest Village and its role within the precinct as a local centre. Future development in the area to be sensitive to it's high quality local character and impacts on the public domain and economic prosperity.
-  Locate key junctions at the intersection of the activity corridors to provide a gateway to the precinct, emphasizing the entrance and creating a clear definition of the higher density character surrounding the stations.
-  Cultivate a sensitive transition between high density along Pacific Highway and low density residential areas and ensure appropriate land uses correspond with the adjacent character areas that will remain largely unchanged.
-  Enhance the amenity of the Health and Education Precinct to attract greater employment and innovation opportunities. Work with ongoing masterplans to ensure successful delivery that is in alignment with the broader characteristics of the precinct.
-  Preserve the role and character of the Atarmon Industrial Area in providing jobs and business premises, promoting diversity for the local and regional economy.
-  Retain the surrounding residential area and ensure development does not impact its amenity.

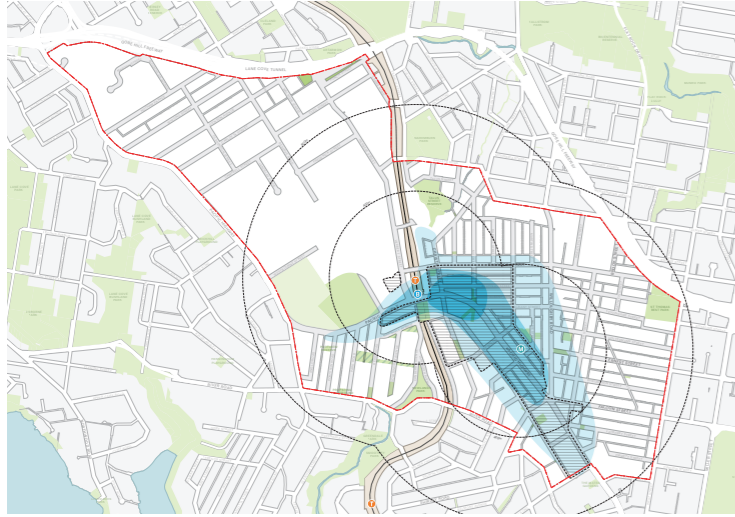


KEY

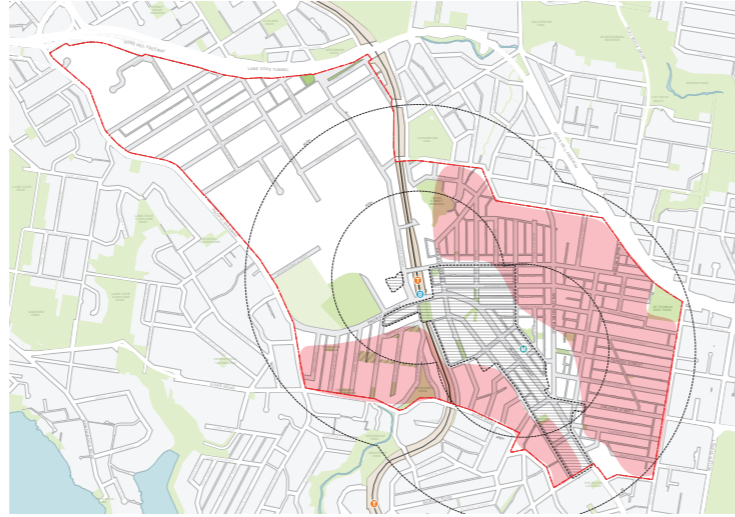
	Precinct Boundary
	Area of Change
	St Leonards South

Land Use

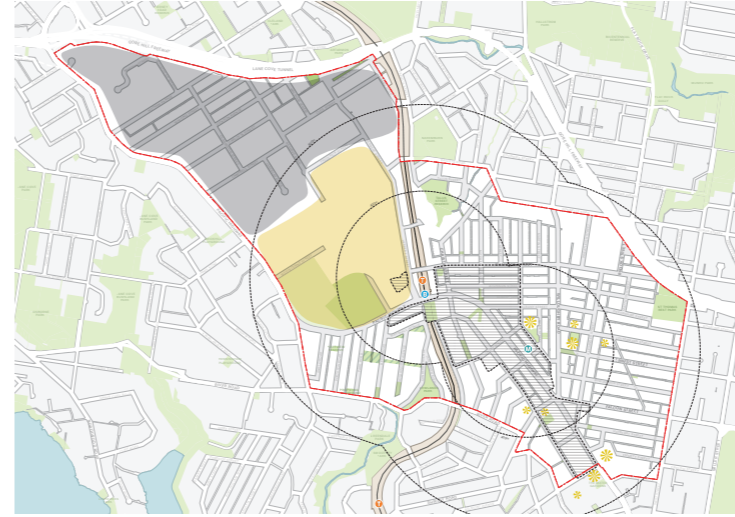
Commercial and Employment Priorities



Residential Priorities



Health, Industrial and Community Priorities



Retail Priorities



General Considerations

- Need to preserve floorspace for future employment as there is an opportunity for Metro to catalyse the commercial market.
- Existing Lot sizes will impact the size of commercial floor plates achievable within the commercial core.
- Existing E2/MU1 sites to the south of the precinct have opportunity to increase in height to maximise potential.
- Opportunity to develop commercial buildings within the existing shadow of other tall buildings as they do not require direct sunlight.

Commercial Core

- Prioritise stand-alone office buildings that are independent (i.e. are not ancillary to another use on site) and likely to accommodate a significant number of staff.
- This area should accommodate intensification of employment and consolidate employment activities with premium commercial space.
- Encourage amalgamation of large sites to include stand-alone commercial building in association with a residential building.

Mixed Use

- Facilitate main street retail and services involving large scale and local retailing activities, traditionally found on the main street of an area.
- Mixed use zones also to deliver substantial commercial uses, subject to proximity to transport and other key requirements.

General Considerations

- Residential development should demonstrate a high level of feasibility to encourage development.
- Development needs to provide good access and enhanced public benefit/amenity.
- Residential and mixed-use developments must prioritise provision of affordable housing target of up to 15%, consistent with TOD objectives.

Low Density Residential

- Existing areas to largely retain their existing scale and dwelling mix.
- Protect character and amenity of existing low scale development, heritage conservation areas, and heritage items.
- Minimise impact on solar access to private open spaces and maintain high ecology areas with tree cover.

Medium-High Density Residential

- Facilitate the delivery of medium and high density apartments for future residents near public transport nodes and employment.
- Depending on their location, this may include 2-4 storeys in low scale areas such as St Leonards South and Falcon Street to 24 + storeys in the centre (either side of the existing railway corridor).
- Apartment buildings should seek to achieve the objectives of the Apartment Design Guide criteria for residential amenity.

General Considerations

- Large floor plates should be considered for medical and education institutions, located north of RNSH.
- Allied health sector may evolve along the Pacific Highway toward the Mater Hospital.
- Align future masterplans for the Hospital precinct with the objectives of this study.
- Artarmon West to support primarily industrial uses.
- Herbert Street and Frederick Street to continue evolving industrial, communications, IT, and warehouse activity.

Health and Community Infrastructure

- Support the delivery and improvement of public sector administration, health services, community services and other infrastructure already in the precinct.
- Ensure community and public services are accessible for all and are appropriately distributed throughout the precinct in key areas.
- Work with local Councils to support their plans for community infrastructure as the precinct develops.

Industrial and Business Development

- Provide essential service industry and urban support to the area and wider region.
- Establish Artarmon as the regions priority industrial services sector, ensuring continued economic growth.
- Ensure development and uses do not interfere with the amenity of the precinct via pollution and noise. Work to minimise ecological impact by using sustainable methods.

General Considerations

- Provide a high level of amenity with retail and high activity services after hours, ensuring workers remain in the precinct after work.
- Reinforce the retail character of Willoughby Road and connect into Atchison Street to create an indirect connection between the stations.
- Enhance activity along Atchison, Chandos, and Albany Streets to diversify the retail offering in the precinct.
- Activity along Pacific Highway needs to respond to the form and function of the movement corridor.
- Consider variable types of retail as per the below to support a diversity of offerings in the precinct.

Types of Retail Services

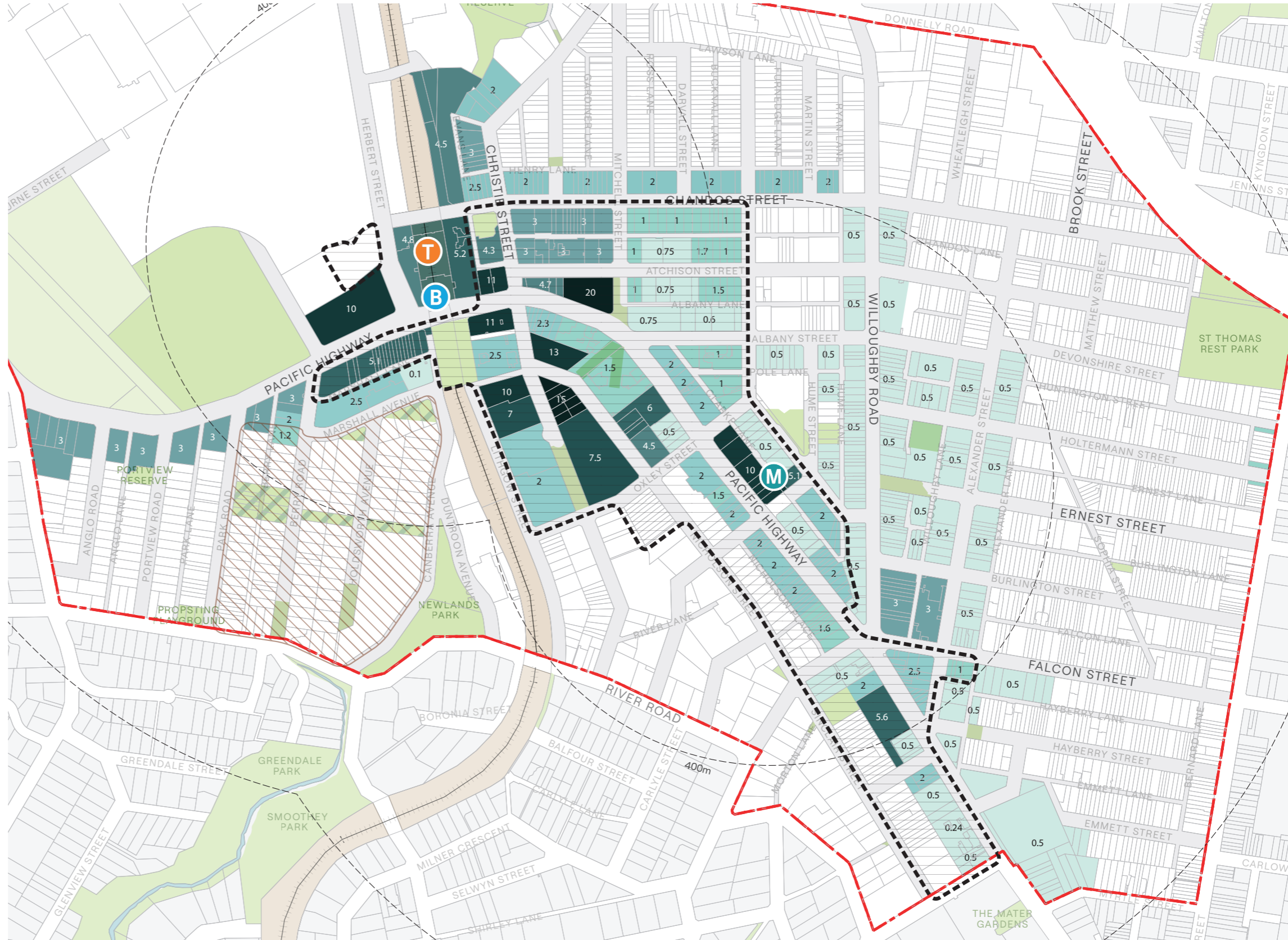
- **High End**
Provides a wide range of products to consumers. High end retailers are generally associated with popular and iconic local and international brands.
- **Standard**
Provides a wide range of products at various price levels. They provide products for a broad market and can operate in small, medium and large tenancies.
- **Boutique and Artesian**
Generally small businesses that provide a product for a specialised target market. They provide a specialised and limited inventory and occupy small tenancies along high streets.

Land Use

Non-Residential Floor Space

The distribution of non-residential floor space is done so to prioritise commercial activity around St Leonards Station as it becomes the primary core of the precinct. Further non-residential floor space, mostly in the lower levels of mixed-use buildings, are distributed down Pacific Highway with some additional existing floor space along Willoughby Road.

By diversifying the extent of non-residential floor space, the precinct can encourage vitality and diversity of retail and commercial typologies, catering to many business needs and supporting the local and regional economy.



KEY

- Precinct Boundary
- Area of Change
- St Leonards South
- 0.5:1
- 1:1
- 2:1
- 3:1
- 4:1
- 5:1
- 7:1
- 9:1
- 15:1 or greater

Built Form

-  Concentrate tall buildings around St Leonards Station, emphasizing its character as the commercial core for the precinct. Tall buildings here are also well positioned to avoid impacting solar amenity of public open spaces.

-  Ensure built form height creates an apex cluster near the St Leonards train station and define a sensitive transition in height stepping down from the ridge-line along Pacific Highway to lower density areas. Ensure buildings in these areas respond sensitively to the adjacent character areas.

-  Stagger tall buildings along Pacific Highway with appropriate separation between towers and height variation where possible. Avoid a 'canyon' effect with long walls of buildings and ensure view sharing between sites towards regional views such as Sydney CBD.

-  Preserve the existing low-scale fine grain built form of Crows Nest Village to maintain its local shopping street character. Ensure this area retains appropriate amenity by limiting overshadowing and view impacts.

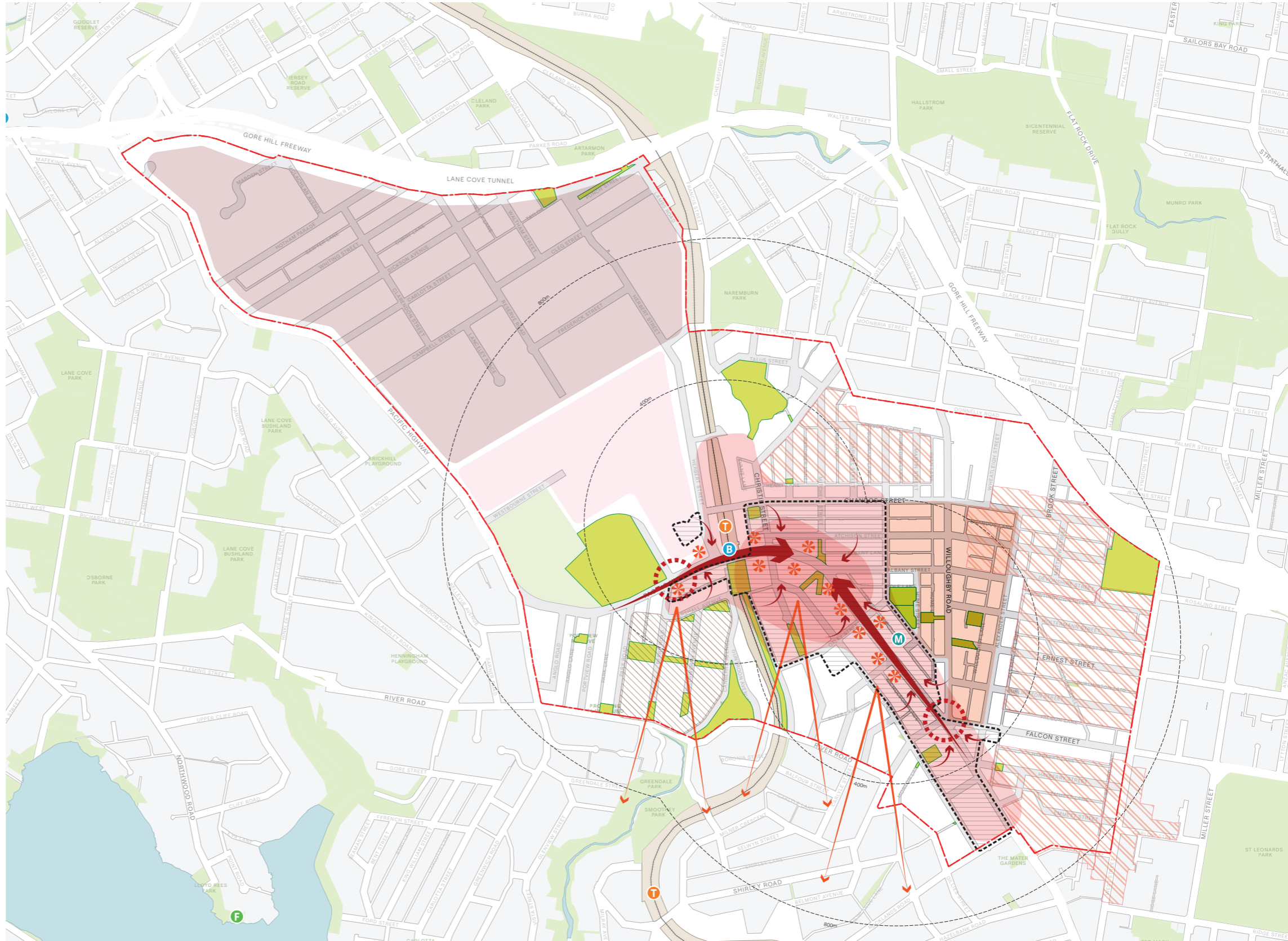
-  Preserve and improve the quality of open spaces by limiting overshadowing, ensuring adequate servicing of future community needs.

-  Limit impact upon heritage conservation areas and high quality character areas by ensuring appropriate interfaces and sensitive development.




-  Emphasize the entrance to the precinct with developments that increase in height at key junctions to create a clearly defined gateway.

-  Preserve the industrial typology of the Artarmon Industrial Area to facilitate its strategic role in the distribution network.

-  Deliver high quality design of public buildings to cultivate a cutting-edge reputation of the Hospital and Education Precinct.



KEY

	Precinct Boundary
	Area of Change
	St Leonards South

Built Form

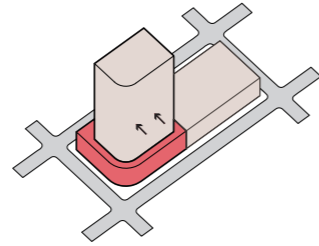
Design Recommendations

A number of design recommendations that were previously exhibited with the 2036 Plan and associated reports are still relevant to future development in the precinct.

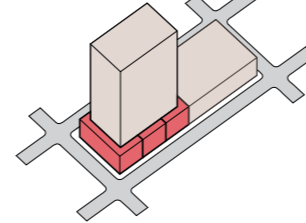
These recommendations are not aimed to supersede any design guides or development controls plans (DCP), however aim to work with them to facilitate sensitive approaches to urban design and architecture that are responsive to the local character and context.

Good design is paramount in delivering a high quality built form in the future. These recommendations aim to provide a guide to any future developments as they begin their design process.

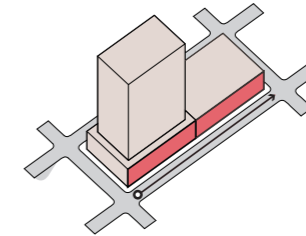
01 Above podium setbacks



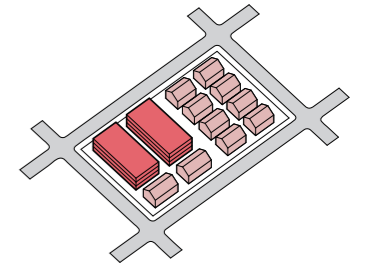
02 Respond to fine grain and retain existing cadastral pattern



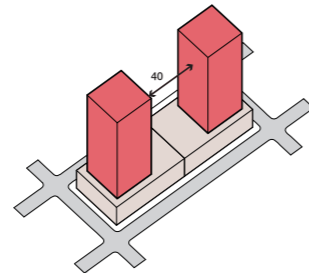
03 Continue streetwall height



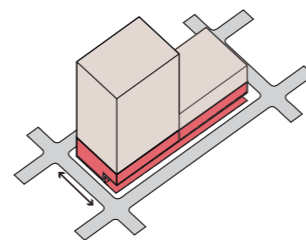
04 Respond to scale of conservation area



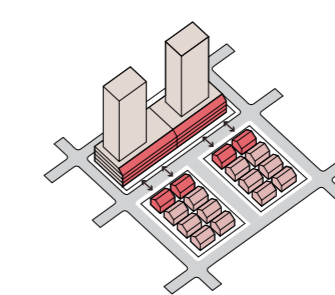
06 Maximise tower separation



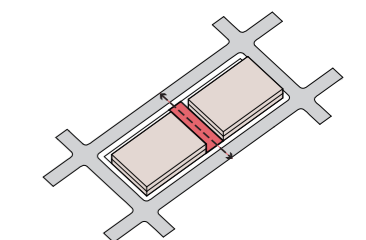
07 Reverse podium on narrow sites



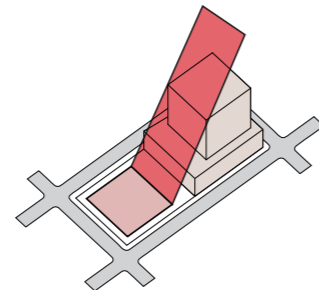
08 Podium scale to respond to conservation area



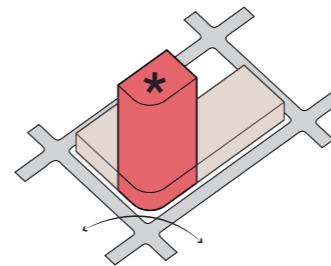
09 Allow for permeability through large blocks



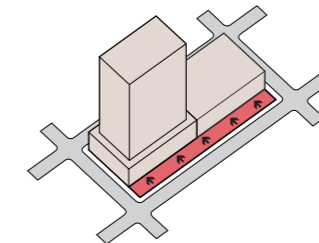
05 Protect solar amenity to public spaces



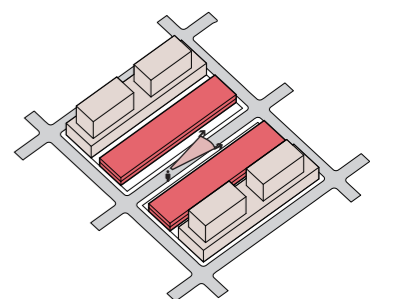
10 Prioritise height at key corners



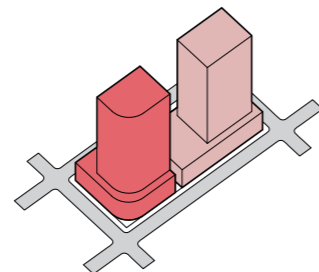
11 Setback building to allow for street extension in narrow streets



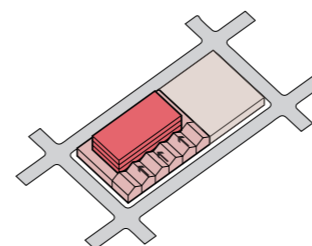
12 Encourage frontages that focus activity on the street



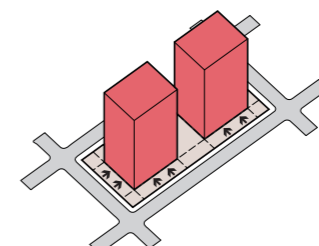
13 Allow for stand alone commercial and residential buildings where possible



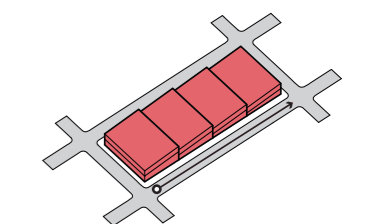
14 Setback development above heritage



15 Provide landscape setback in residential zone



16 Building to step with topography



Built Form

Building Heights

Similar to non-residential floor space, tallest buildings are prioritised around St Leonards Station and the commercial core. In this area, the topography allows taller buildings that minimise overshadowing of public open spaces and residential areas.

Height is also distributed along Pacific Highway, emphasizing the character along that corridor and the connection between the Train and Metro stations. Height transition from Pacific Highway down to surrounding low density areas has been accommodated for whilst also preserving appropriate density to encourage development and the delivery of housing and jobs.

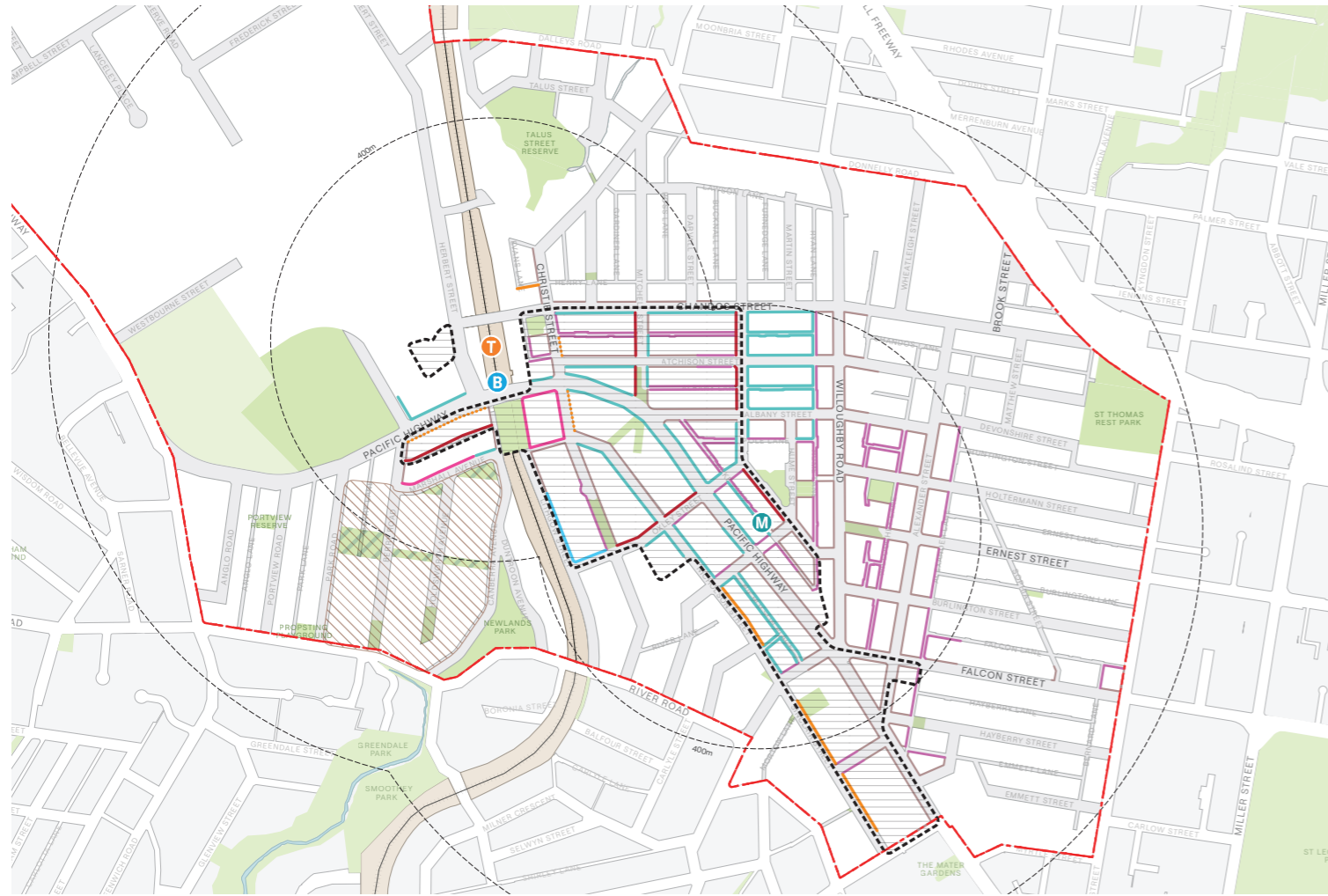
Height is maintained as per existing in majority of the surrounding residential areas and Crows Nest Village to preserve their existing high quality local character.



KEY

	Precinct Boundary
	Area of Change
	St Leonards South
	2-3 Storeys
	4-12 Storeys
	13-19 Storeys
	20+ Storeys

Built Form



1:12,000 @ A3

Setbacks

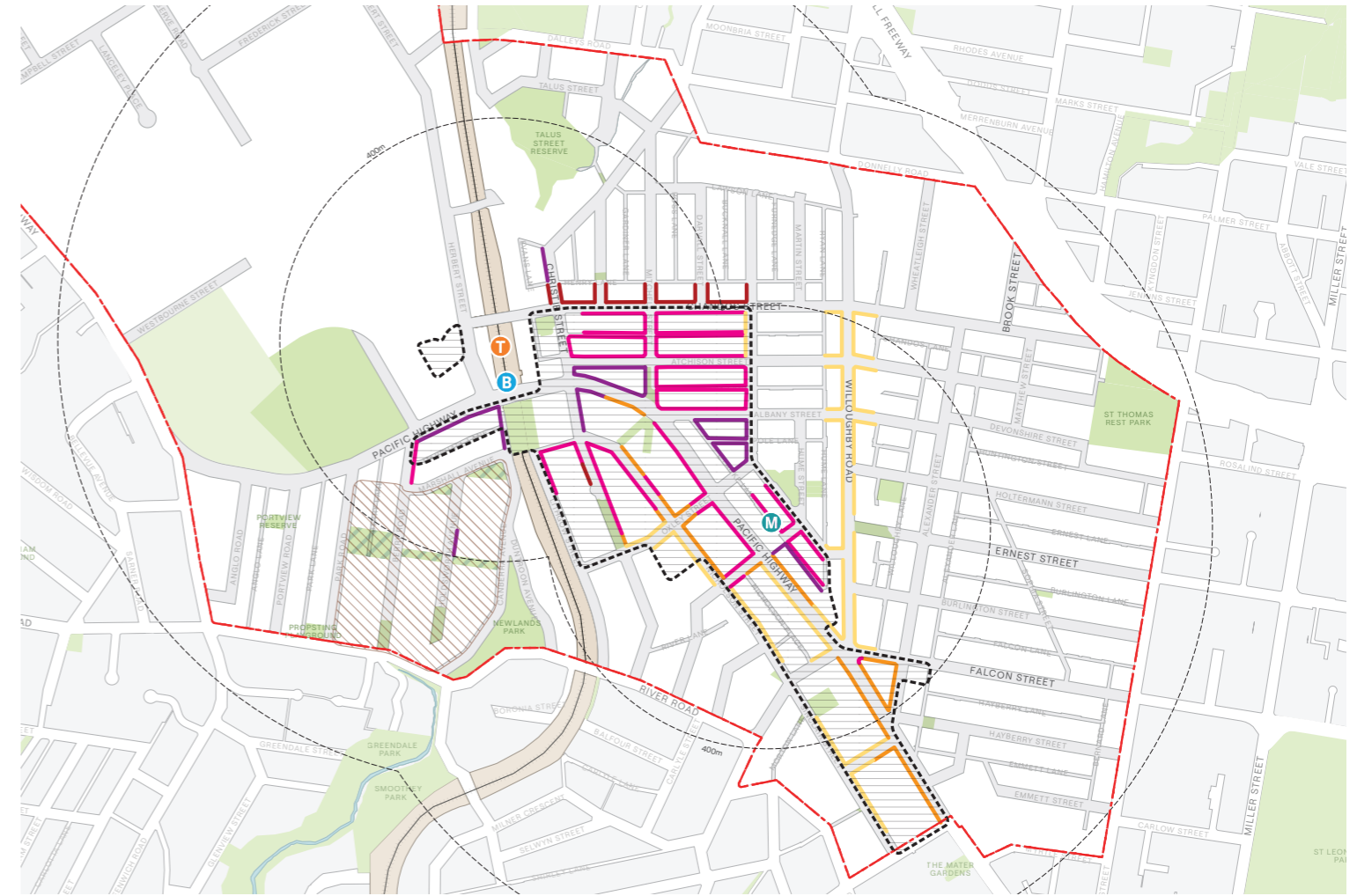
Property setbacks have been considered to ensure that future development is appropriately scaled and positioned in relation to its context. Cues from existing developments and controls in the various DCP's have been used to determine the appropriate setbacks to provision to various sites.

Proprietries fronting Pacific Highway largely provide a 0m setback to accommodate delivery of as much non-residential floor space as possible on small lots.

Variable other setbacks are used towards residential interfaces and along key corridors to emphasize the delivery of better streets and laces for people and active transport. They also ensure developments are appropriately spaced and provide an appropriate sense of enclosure to the street.

KEY

- Precinct Boundary
- Area of Change
- St Leonards South
- 10m Setback
- 6m Setback
- 5m Setback
- 4m Setback
- 3m Setback
- 1.5m Setback
- 0m Setback
- Reverse Setback



1:12,000 @ A3

















Streetwall Heights

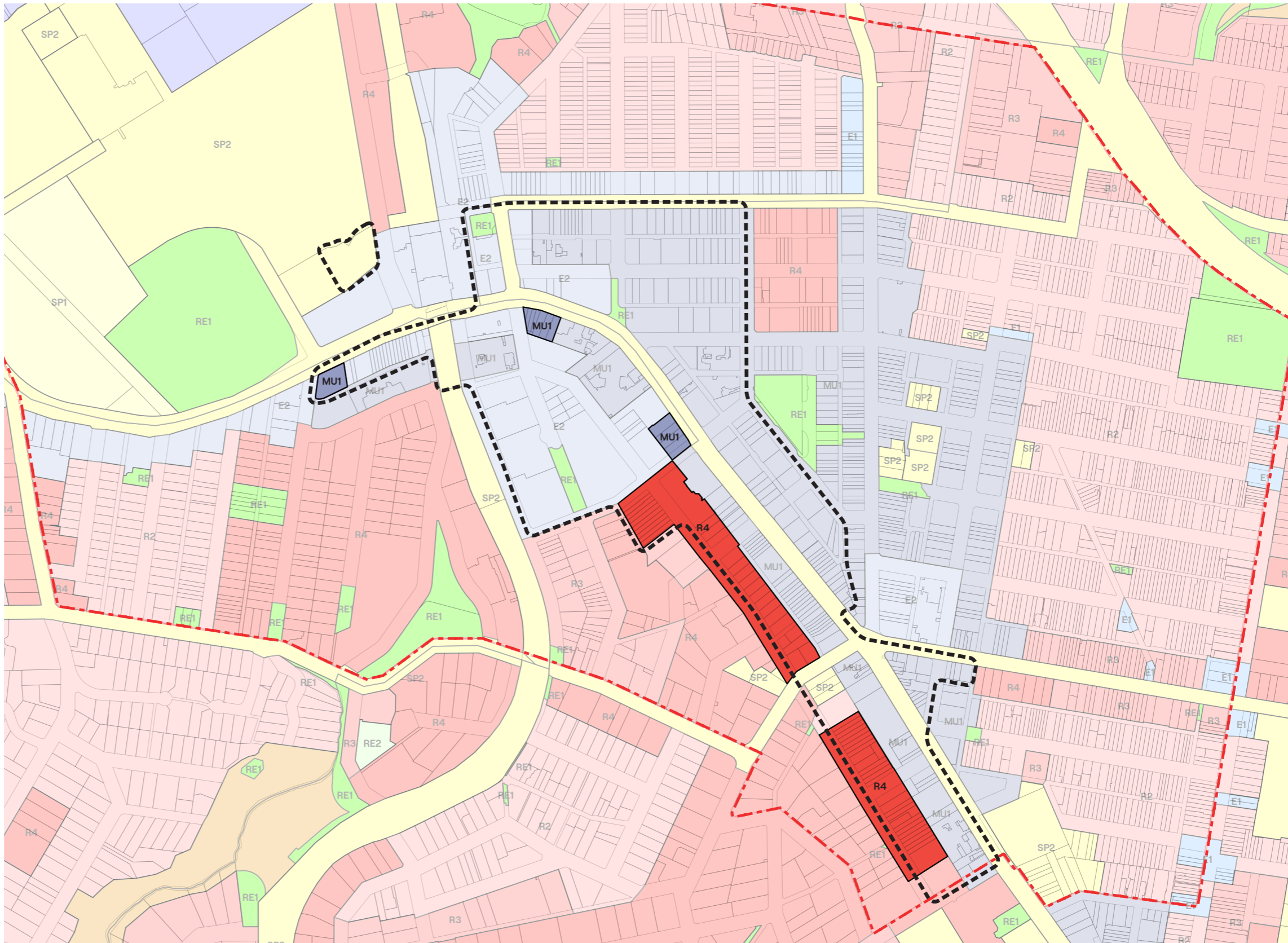
Similarly, street wall controls have been developed to guide the height of podiums and therefore the setbacks for towers above ground. These controls have also been guided by existing development and DCP's and follow the same logic of improving the street quality for pedestrian and active transport.

KEY

- Precinct Boundary
- Area of Change
- St Leonards South
- 6 Storey Street Wall
- 5 Storey Street Wall
- 4 Storey Street Wall
- 3 Storey Street Wall
- 2 Storey Street Wall

Land Zoning

KEY	
	Site Boundary
	TOD Accelerated Rezoning Area
	Proposed Change
	MU1 - Mixed Use
	E1 - Local Centre
	E2 - Commercial Centre
	E3 - Productivity Support
	E4 - General Industrial
	R2 - Low Density Residential
	R3 - Medium Density Residential
	R4 - High Density Residential
	RE1 - Public Recreation
	RE2 - Private Recreation
	SP1 - Special Activities
	SP2 - Infrastructure
	C2 - Environmental Consideration



1:6,000 @ A3

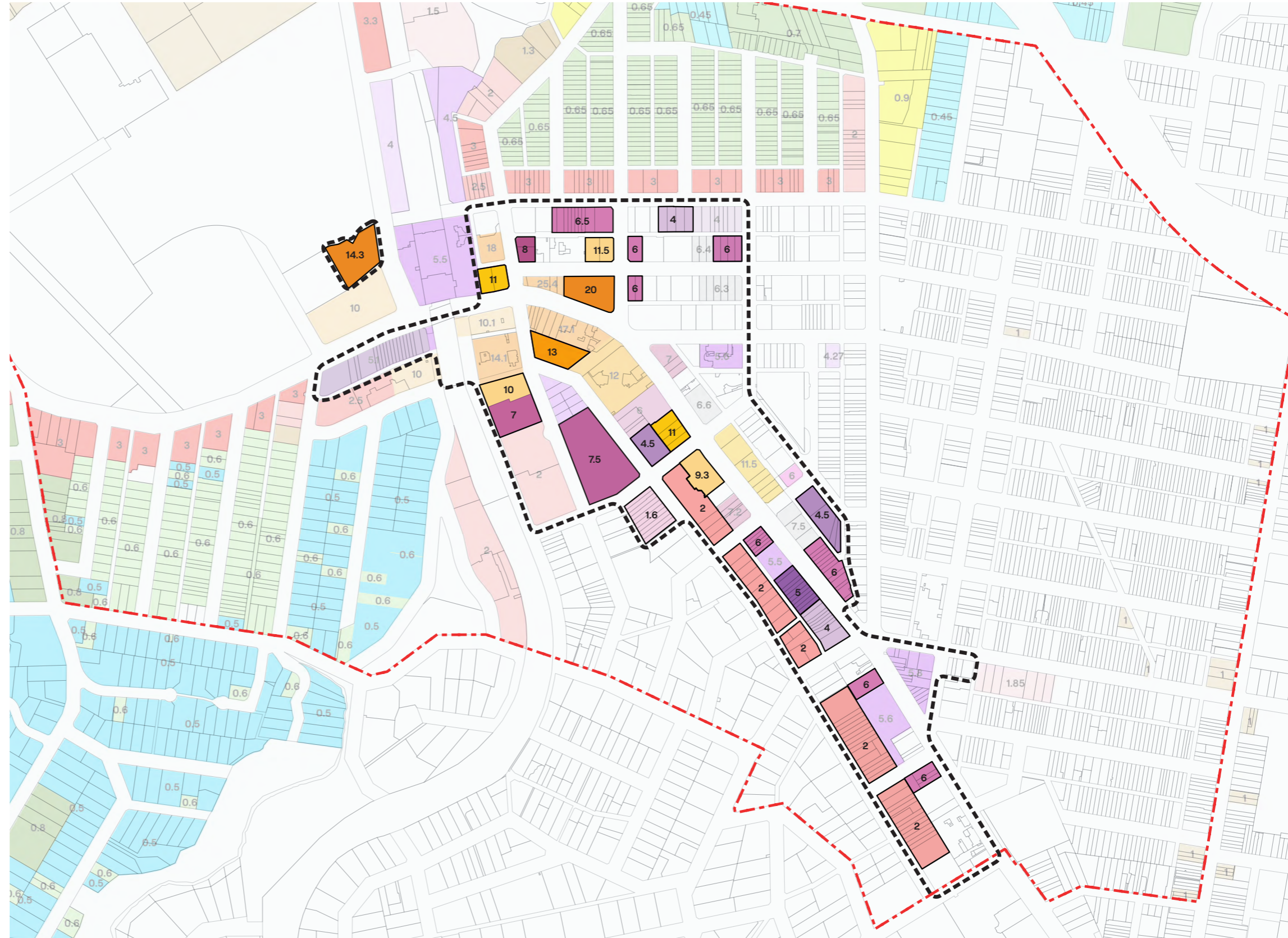
Floor Space Ratio

Floor Space Ratio plans have been developed based on analysing the massing model based on the below assumptions. The massing model is an indicative representation of these controls only. In some cases, the shown massing may differ from the proposed controls to demonstrate an appropriate urban design outcome, however may still develop under the proposed controls.

Program	GBA to GFA
Residential	75%
Ground Floor (Retail Nonresidential)	65%
Non-Residential	85%

KEY

- - - Site Boundary
- TOD Accelerated Rezoning Area
- Proposed Change
- 0.4-0.49
- 0.5
- 0.6
- 0.7
- 0.8
- 0.9
- 1-1.9
- 2
- 2.5
- 3
- 4-4.4
- 4.5
- 5-5.9
- 6-6.9
- 7-7.9
- 9-10.9
- 11
- 11.5
- 12
- 13
- 14+



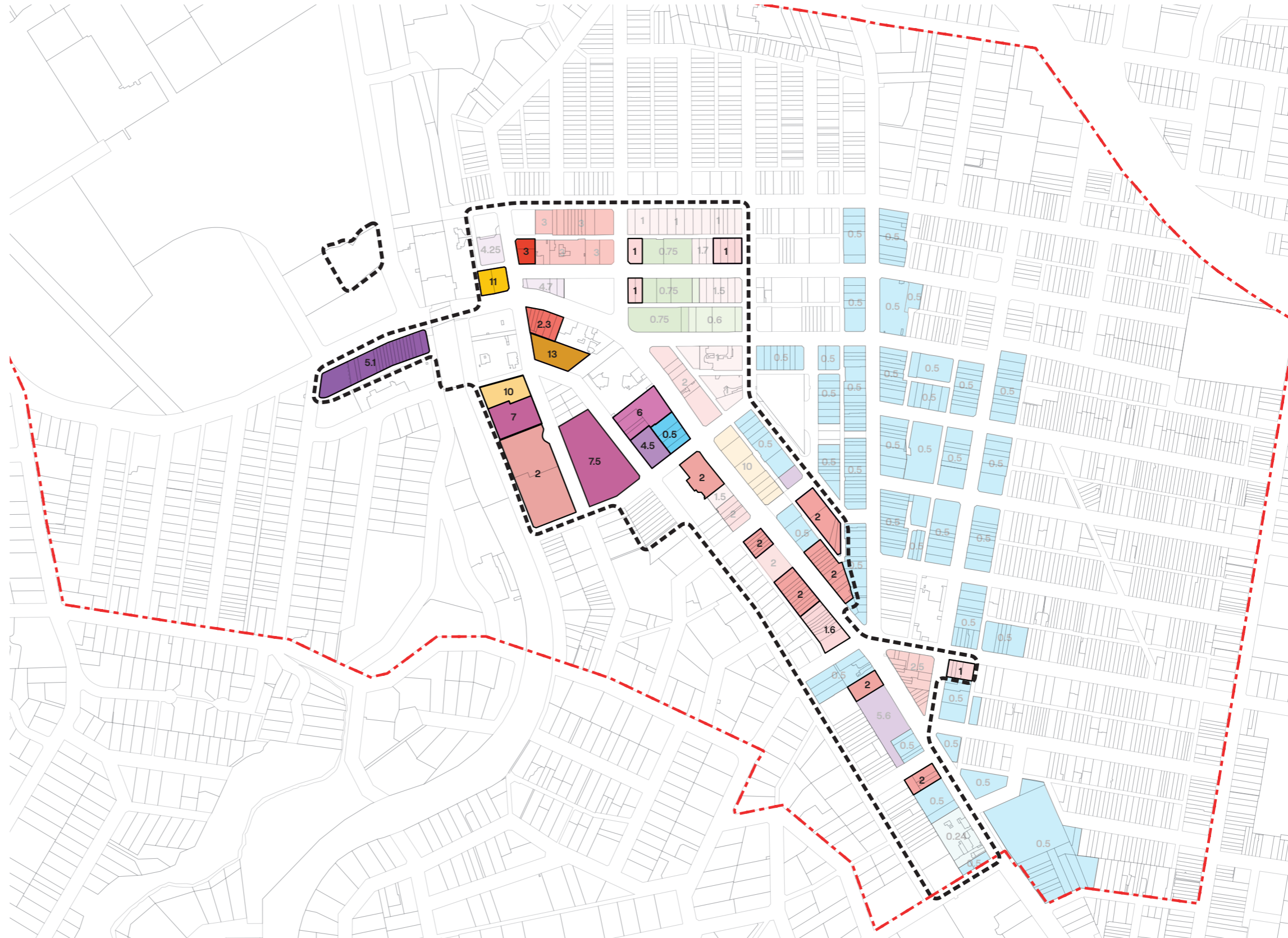
Non-Residential Floor Space Ratio

Floor Space Ratio plans have been developed based on analysing the massing model based on the below assumptions. The massing model is an indicative representation of these controls only. In some cases, the shown massing may differ from the proposed controls to demonstrate an appropriate urban design outcome, however may still develop under the proposed controls.

Program	GBA to GFA
Residential	75%
Ground Floor (Retail Nonresidential)	65%
Non-Residential	85%

KEY

- - - Site Boundary
- TOD Accelerated Rezoning Area
- Proposed Change
- 0.4-0.49
- 0.5
- 0.6
- 0.7
- 0.8
- 0.9
- 1-1.9
- 2
- 2.5
- 3
- 4-4.4
- 4.5
- 5-5.9
- 6-6.9
- 7-7.9
- 9-10.9
- 11
- 11.5
- 12
- 13
- 14+




























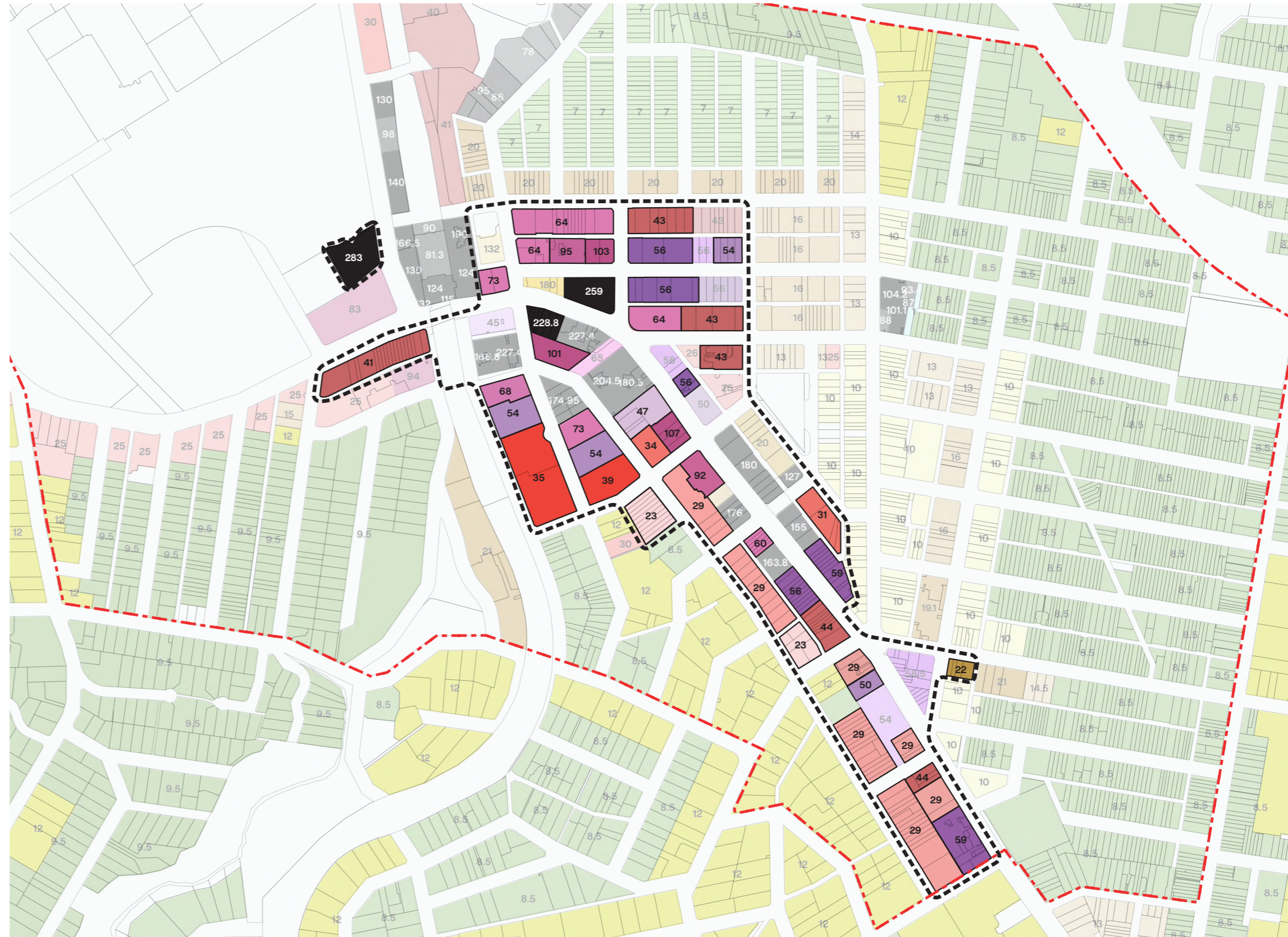
Height of Building

Controls have been based on analysing the massing model and converting the storey heights into a height of building in metres controls. The below storey heights have been used to develop the assumed controls. The proposed height of building is a height in metres from any point within the site.

Type	Height
Ground Floor (all uses)	5m
Above GF Residential	3.2m
Above GF Commercial	3.8m
Rooftop service zone (2-20 storeys)	2m
Rooftop service zone (21-40 storeys)	4.5m

KEY

	Site Boundary
	Proposed Change
	7m
	8.5m
	9.5m
	12m
	13-14.9m
	17-18.9m
	19-20.9m
	21-22.9m
	25-29.9m
	30-34.9m
	35-39.9m
	40-44.9m
	45-49.9m
	50-54.9m
	55-59.9m
	60-79.9m
	80-99.9m
	100-109.9m
	125-149.9m
	175-199.9m
	60-80m (RL)
	80-100m (RL)
	100m+ (RL)



Affordable Housing Bonus Sites

These sites are subject to bonus height and FSR to incentivise the delivery of affordable housing. Details regarding the affordable housing incentives will be available in documents produced by DPHI.



Height of Buildings

KEY

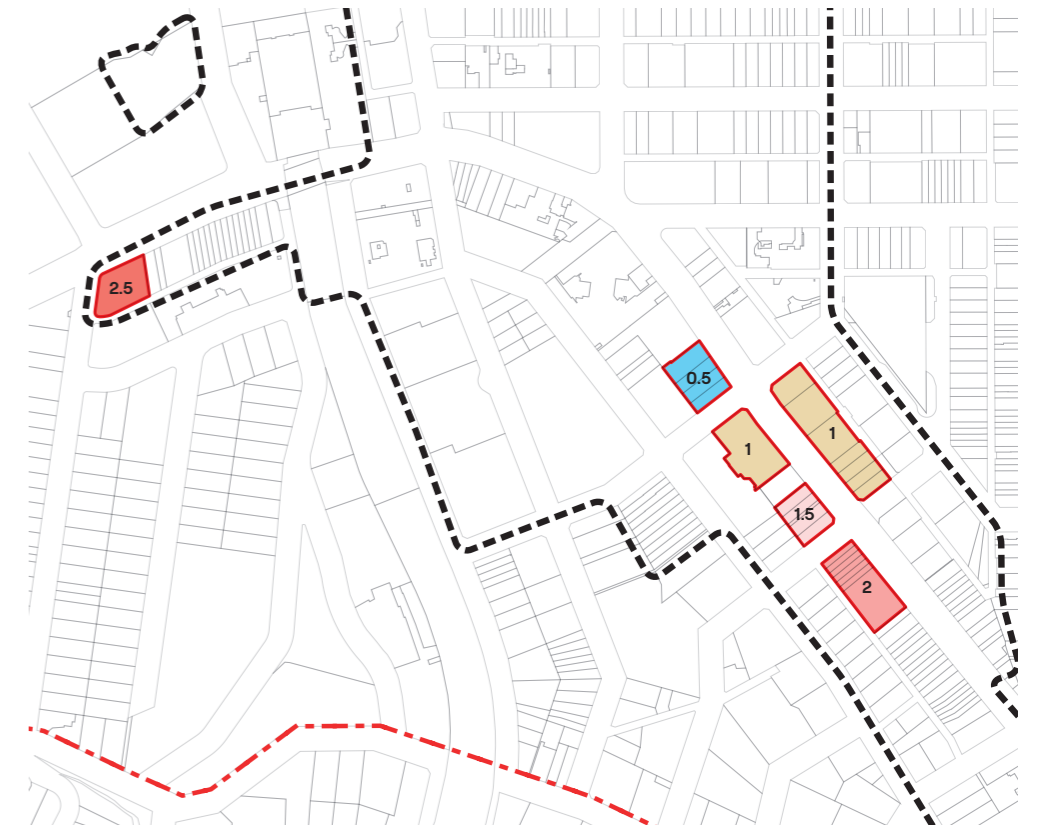
- - - - Site Boundary
- TOD Accelerated Rezoning Area
- Proposed Change
- 50-99.9m
- 100-124.9m
- 125-149.9m
- 100m+ (RL)



Floor Space Ratio

KEY

- - - - Site Boundary
- TOD Accelerated Rezoning Area
- Proposed Change
- 8-8.9
- 9-9.9
- 11-11.9
- 12-12.9
- 14+



Non Residential Floor Space Ratio

KEY

- - - - Site Boundary
- TOD Accelerated Rezoning Area
- Proposed Change
- 0.5
- 1
- 1.5
- 2
- 2.5

SJB is passionate about the possibilities of architecture, interiors, urban design and planning. Let's collaborate.

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