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St Leonards & Crows Nest Precinct Urban Design Study

Stage 02

We create amazing places



At SJB we believe that the future of the city
is in generating a rich urban experience
through the delivery of density and activity,
facilitated by land uses, at various scales,
designed for everyone.

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Executive Summary

The St Leonards and Crows Nest Precinct will play a significant role in achieving the vision for Harbour City. The Precinct will support new jobs in close proximity to public transport, homes and amenity.

The proposed Crows Nest Metro Station will be a catalyst for bringing new life into the Precinct, strengthening the characteristics that make it a great place, while also delivering new experiences for existing and future residents.

The St Leonards and Crows Nest Station Precinct has a strategic role within the Sydney metropolitan area. It provides a unique opportunity to strengthen and develop many of the existing qualities which 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.

About St Leonards and Crows Nest

The St Leonards and Crows Nest Station Precinct was announced by Department of Planning and Environment in 2016 as a Priority Precinct. It is located 5 km north-west of the Sydney Central Business District (CBD). It overlaps three local government areas; Lane Cove Council, North Sydney Council and Willoughby Council.

The Precinct spans approximately 271 hectares. It provides a unique urban condition, comprising a variety of land uses including low, medium and high density residential and commercial developments, retail and industry, education establishments and medical and sporting facilities

Precinct Objectives

The key objectives for The Precinct are to deliver the following:

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

Starting with Place

To achieve the objectives, vision and underlying aspirations for the Precinct, a careful recognition and understanding of place was considered. It includes a number of distinct neighbourhoods, each with their own unique identity, built form and place-making qualities.

The design strategy for the Precinct has careful considered the impact of development pressure on character and place qualities. Qualities that make each area unique and memorable have been retained and celebrated.

Key Factors Influencing the Precinct

In delivering an urban design approach for the Precinct, the consultant team has considered a range of strategic drivers, which have been underpinned by state planning policy and economic analysis. These include:

- The Draft Greater Sydney Region Plan (GSC) vision for St Leonards as a Strategic Centre and Collaboration Precinct.
- Employment targets set by the Greater Sydney Commission (GSC), and subsequent floor space requirements.
- Residential capacity within the Precinct, influenced by the announcement of Crows Nest Metro Station.
- High level population growth analysis. GSC forecasting provided a population baseline for the Precinct.

Delivering a Precinct Concept

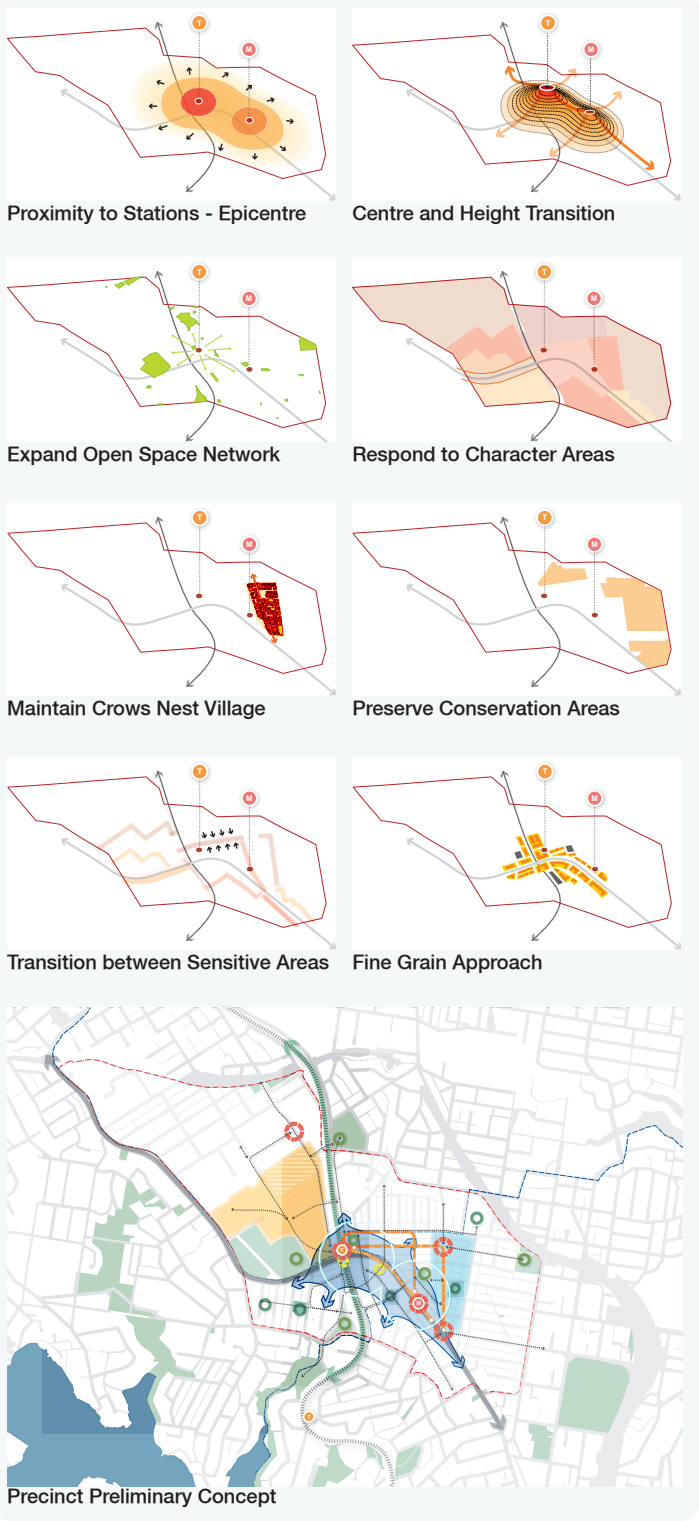
A primary concept was established for the Precinct and builds off the analysis undertaken in Stage 1 of the project. The concept aimed to unify the various character areas of the Precinct through an expanded green network of open spaces, active frontages and vibrant environments. Some key priorities included:

1. Consolidate commercial development around St Leonards and Crows Nest Station.
1. Increase the amount of open space and plazas.
2. Improve pedestrian and cycle connectivity.
3. Preserve character of Willoughby Road.
4. Retain Artarmon industrial sub-precinct.

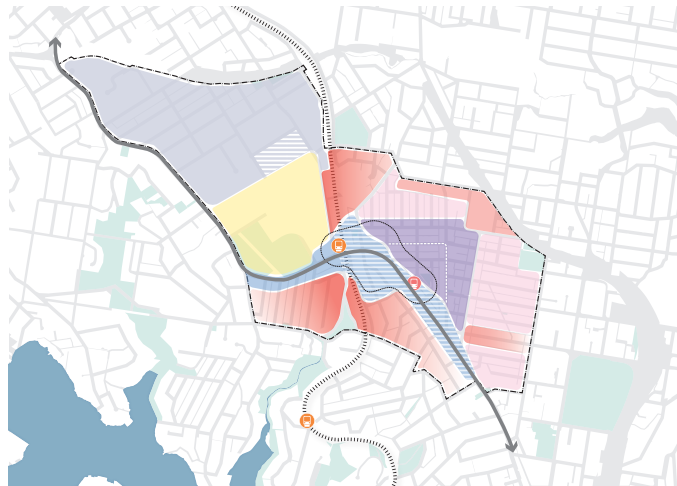
Preparing the Structure Plans

Building off the analysis from Stage 1, consultant team input, strategic drivers and place making factors, the design team prepared a suite of Structure Plans to support the vision for the Precinct. Structure Plans were prepared in relation to:

1. Land Use
2. Built Form
3. Environment, Public Domain and Community
4. Movement and Access

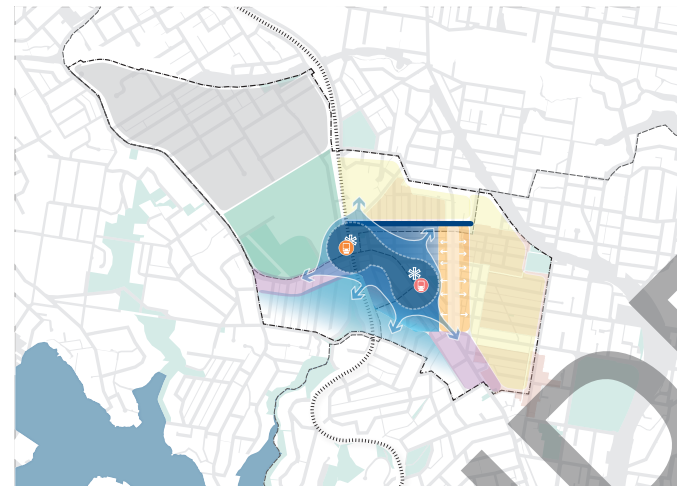


Structure Plan Overview



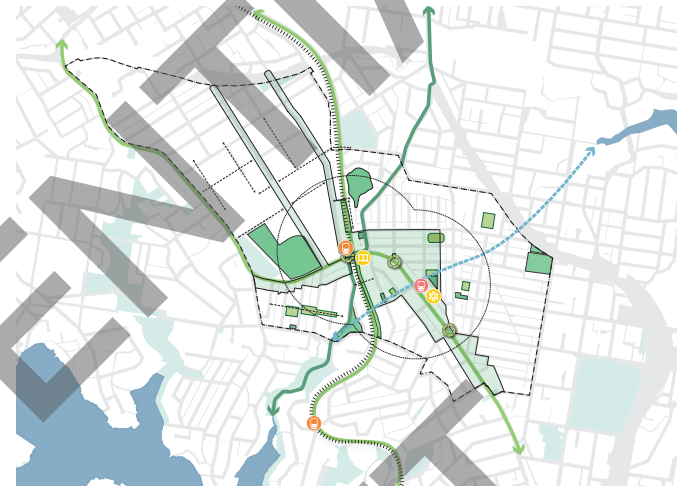
Land Use

1. Ensure high-density mixed use developments incorporate appropriate commercial floor space between St Leonards Station and the proposed Crows Nest Metro Station.
2. Protect the fine grain character of Naremburn Conservation Area and Holtermann Estates.
3. Encourage renewal of the commercial strip along the Pacific Highway, west of St Leonards Station.
4. Enhance the Health and Education Precinct.
5. Retain the function of Artarmon as one of the regions key population serving precincts for essential urban services.
6. Potential medium-high density residential development in St Leonards South with strong focus on transition to existing residential neighbourhoods.
7. Expand mixed use activities east towards Willoughby Road to a sensitive scale and form with appropriate transition.
8. Allow for medium density residential development along Willoughby Road, north of Chandos Street.
9. Allow for some future expansion of hospital precinct into Artarmon Employment Area.
10. Alternatively, allow for Evolution of higher order/high tech industrial urban services.



Built Form

1. High density mixed use, incorporating commercial and residential should be concentrated around and between Crows Nest Metro and St Leonards Station.
2. High density development should be located on both sides of Pacific Highway to enable appropriate density in close proximity to public transport.
3. Height will gradually transition to low scale towards Willoughby Road, ensuring the low scale and fine grain character of the "high" street is retained.
4. A transition and edge of commercial, mixed use and residential built form will be located along Chandos Street, delineating the St Leonards Centre from Naremburn residential neighbourhood and heritage conservation area in the north.
5. Crows Nest and Naremburn residential areas are to retain their low scale residential character.
6. Artarmon Industrial area is to retain its primary urban services function as a key employment and industry serving centre for the surrounding area.
7. Provide for the health precinct to evolve into the southern fringe of the Artarmon area and also areas around Herbert Street, Frederick Street and Reserve Road for higher order industrial/high tech uses.



Environment, Public Domain and Community

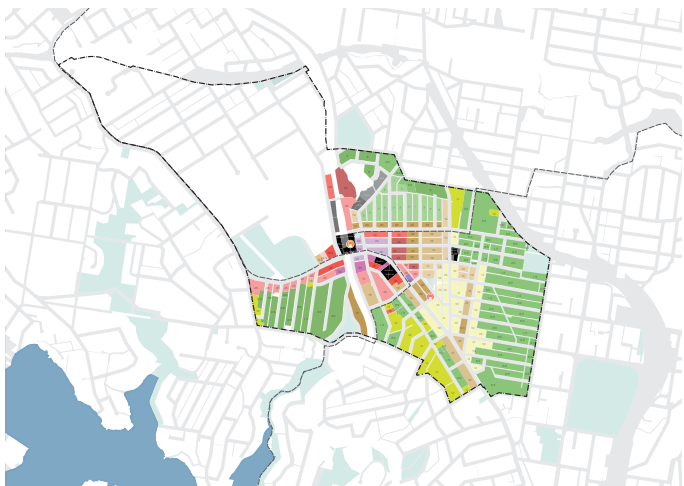
1. New street/pedestrian connections, including active street frontages within Artarmon Industrial Area around Frederick, Herbert and Waltham Streets.
2. Investigate opportunity for a sports facility in Artarmon Industrial Area (active facility).
3. Provide priority landmark street trees and avenue plantings along Pacific Highway between St Leonards Station and Crows Nest Metro Station.
4. Retain green edge and vista to Gore Hill Park and Cemetery, as well as investigate enhancement of Gore Hill Oval and facility upgrade in accordance with Council's masterplan.
5. Explore new street connections east-west to Newlands Park in St Leonards South.
6. Upgrade Hume Street Park and investigate relocation of sports facility in adjoining building.
7. Provide pedestrian and cycleway improvements to St Leonards Centre from surrounding suburbs, including on-road and off-road cycleways.
8. Provide open space link adjoining rail line south of St Leonards Station towards River Road.
9. Upgrade facility within the existing Naremburn Oval/ open space area.



Movement and Access

1. Enhance pedestrian and cycling links from the surrounding suburbs into St Leonards Centre.
2. Investigate crossing points and upgrade existing crossings within the Precinct, particularly around the proposed Crows Nest Metro.
3. Reinforce a hierarchy of roads/traffic movement through the Precinct.
4. Upgrade key roads and intersections to assist vehicles whilst implementing traffic management/ calming where appropriate to reinforce the hierarchy.
5. Strengthen the importance of pedestrian access and shared paths adjacent to Gore Hill Freeway.
6. Consider pedestrian and vehicular bypass link on the northern side of Pacific Highway across the rail line to support cyclist and vehicle movements away from Pacific Highway and St Leonards.
7. Establish a car parking policy to reduce parking rates for residential and commercial developments in close proximity to public transport.

Option Testing Summary



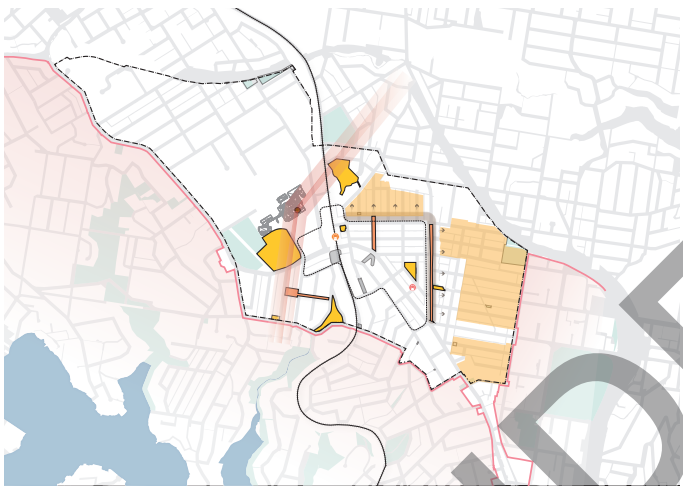
Test 1 - Base Case

Proposed Commercial (GFA)	845,500m ²
Existing Dwellings*	10,200
Test Dwellings*	12,500

Test 1 applied a ‘base case’ scenario for the Precinct and allowed each site to be developed under the existing Height of Buildings planning controls.

The outcome of this test failed to deliver the commercial floor space required under the Revised North District Plan (GSC 2017).

Therefore this test did not appear to be a viable strategy for delivering job targets outlined by the GSC. Additionally, this test was unlikely enhance the role of St Leonards as a Collaboration Area with a mix of high density commercial, mixed-use and residential development, as articulated under Draft Greater Sydney Region Plan.



Test 2 - Solar Amenity

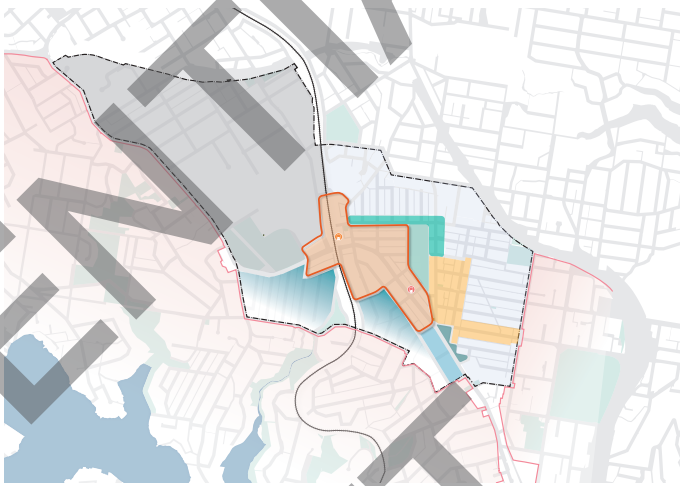
Proposed Commercial (GFA)	845,500m ²
Existing Dwellings*	10,200
Test Dwellings*	23,000

Test 2 applied a solar envelope to the Precinct, factoring in key public spaces, streets and conservation areas.

The outcome of this test was able to provide the commercial floor space required to meet the job targets identified by the GSC, as well as ensure key spaces, streets and areas received sunlight throughout key hours of the day (11:00am-3:00pm).

However, this test also allowed sites to significantly overdevelop in areas that were considered to juxtapose strongly with the surrounding character of neighbourhoods, whilst also ensuring solar access was preserved.

While providing the commercial floor space and appropriate quantum of dwellings, this test did not result in a good urban outcome for the Precinct and facilitated poor transitions between low-scaled neighbourhoods.



Test 3 - Transitions

Proposed Commercial (GFA)	845,500m ²
Existing Dwellings*	10,200
Test Dwellings*	20,000

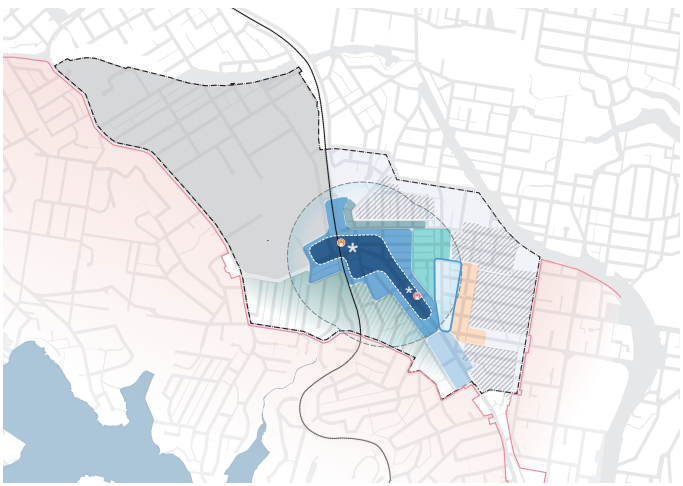
Test 3 took applied more considered approach to built form testing and considered the transition between neighbourhoods.

This approach proposed significant height within the St Leonards/Crows Nest and St Leonards South Sub-Precincts, addressed by overshadowing parameters of key open spaces plus consolidation of transitions and views.

4 storeys buildings were proposed in the Crows Nest area to retain its village character. A six storey height transition was proposed along Willoughby Road (north of Albany Street) and Chandos Street to buffer the low scale character of the Naremburn Conservation Area.

While this test provided the commercial floor space required to meet the job targets identified by the GSC and appropriate quantum of dwellings, the heights proposed across the entire Precinct were considered excessive, rivalling more prominent centres in Metropolitan Sydney.

The heights within this option were tapered down to present a more cohesive and unified approach to the Precinct.



Preferred Option

Proposed Commercial (GFA)	845,500m ²
Existing Dwellings*	10,200
Test Dwellings*	17,500

This was the culmination of findings, stakeholder consultation and lessons learnt from the previous tests and presents the preferred option for the Precinct.

Similar to Test 3, this option proposed significant uplift and development within the St Leonards Centre along Pacific Highway towards the proposed Crows Nest Metro Station.

Heights in surrounding streets and on the periphery were reduced to reflect a more suitable height transition between the various neighbourhoods including east towards Willoughby Road, north towards Naremburn Conservation Area and land south of Pacific Highway.

Under this option, solar access to key streets, areas and open spaces was maintained to ensure amenity to key places was preserved and existing qualities maintained.

This test was successful in delivering the commercial floor space required to meet the job targets identified by the GSC and an appropriate long-term dwelling target.

Land Use and Infrastructure Plan (LUIP)

The Land Use and Infrastructure Plan (LUIP) illustrates a unified and over-arching plan for the Precinct. It combines all the actions and directions identified in the Structure Plans. The Plan focuses on improving connectivity across character areas through a web of green streets, activity areas and public spaces.

The focus of development will be located within St Leonards Centre and along Pacific Highway, where sites can utilise close proximity to public transport and existing density to provide additional residential and commercial floor space for the centre.

Existing residential neighbourhoods and conservation areas of Naremburn and Crows Nest will undergo no change as a result of this Plan. Land in St Leonads South is being planned in line with Council's masterplan.

Artarmon Industrial Precinct will be preserved for urban services in line with the current zoning controls. However, efforts should be made to improve the public domain and provide ancillary retail within the Herbert and Frederick Street area. This will be in line with fostering tech start-ups and evolving industry in close proximity to the Hospital Precinct.

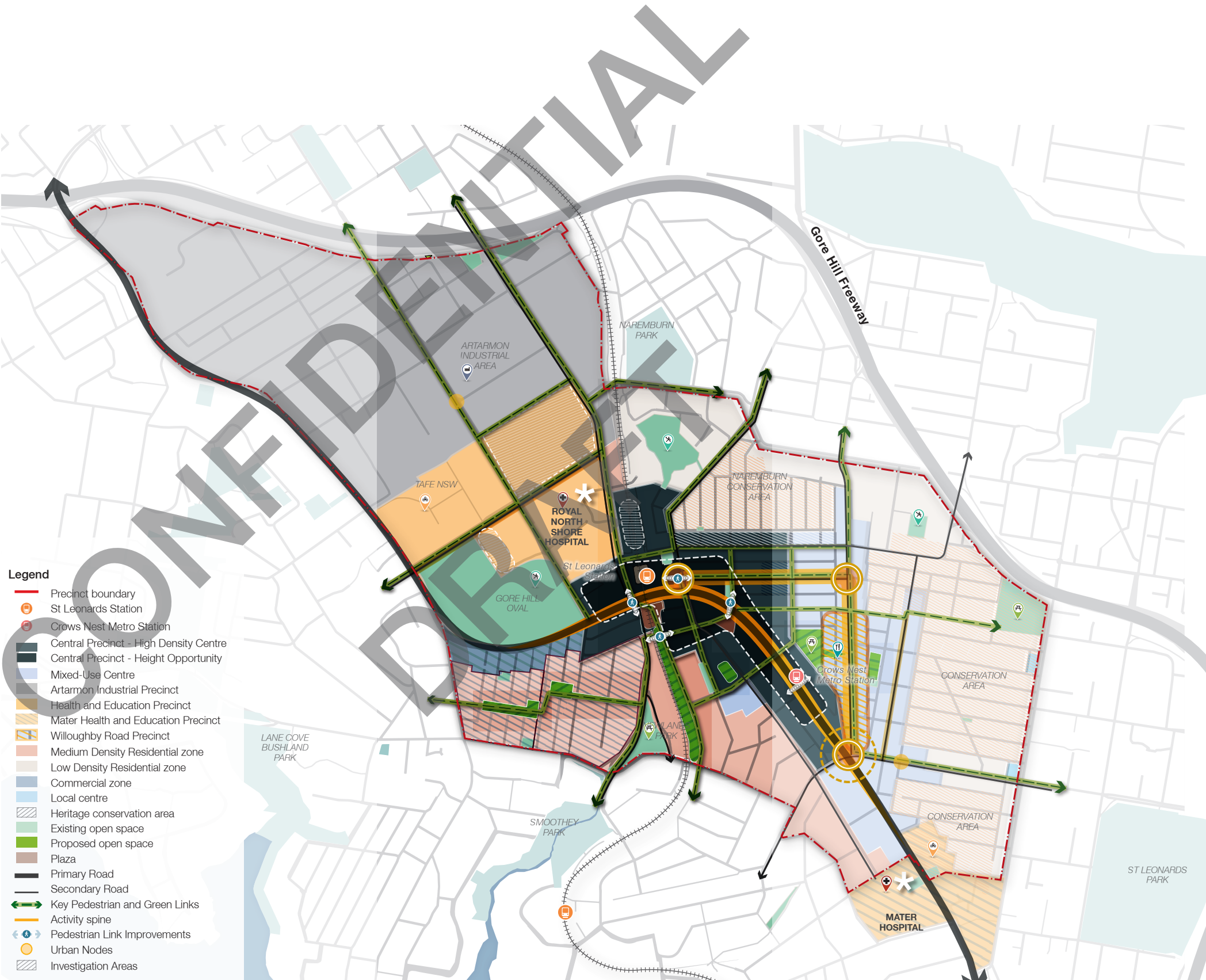
Part of the Hospital Precinct will expand into the southern portion of the Artarmon Industrial Precinct.

The Central Precinct, which is defined by Willoughby Road to the east, St Leonards Station to the west, Crows Nest Station and the Pacific Highway along the south, forms a triangular sub-precinct that crosses character areas and encapsulates the areas of greatest development uplift and public domain improvements.

Proposed Commercial (GFA)
845,500m²

Existing Dwellings*
10,200

Total Proposed Dwellings*
17,500



Purpose of Report

The Draft North District Plan (GSC 2016) identifies the St Leonards and Crows Nest Station Precinct as a Strategic Centre, Health and Education Super Precinct and Collaboration Area, playing a central role to the growth of Sydney's Global Arc. The St Leonards and Crows Nest Land Use Urban Design Study - Stage 2, has been prepared by SJB on behalf of the NSW Department of Planning and Environment to underpin the directions outlined in the Draft North District Plan.

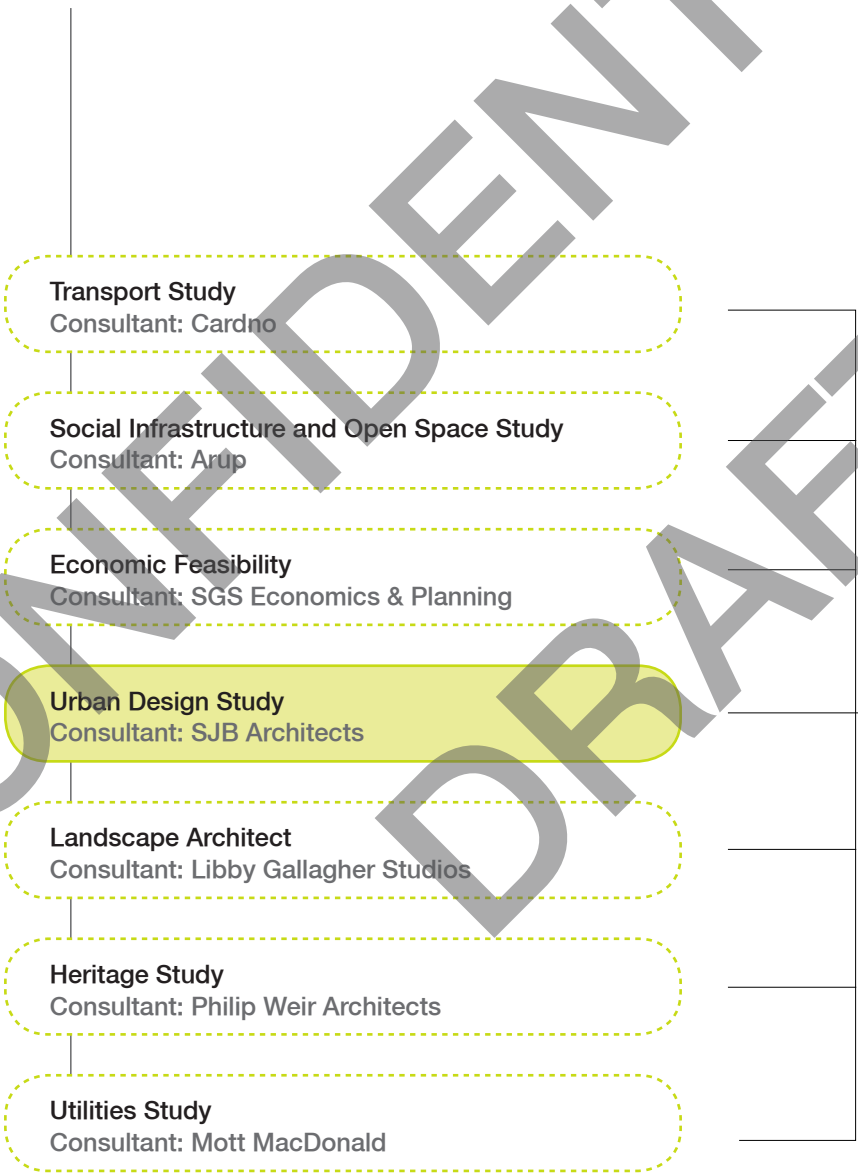
The information outlined in this study will inform the St Leonards and Crows Nest Land Use and Infrastructure Implementation Plan (LUIIP), and builds on the findings from the Stage 1 Precinct Preliminary Urban Design Analysis, which established a high level conceptual strategy and vision for the Precinct.

Stage 2 explores the strategies outlined in the Interim Statement, and accompanying Stage 1 Study, in greater detail, including the identification of how housing and job targets can be delivered within the Precinct through a variety of place-specific urban design and built form options. Each option reflects a series of urban design principles, desired built form and urban character statements, site specific design concepts and feasibility studies, and technical inputs from the broader consultant team (open space, social infrastructure, heritage and transport).

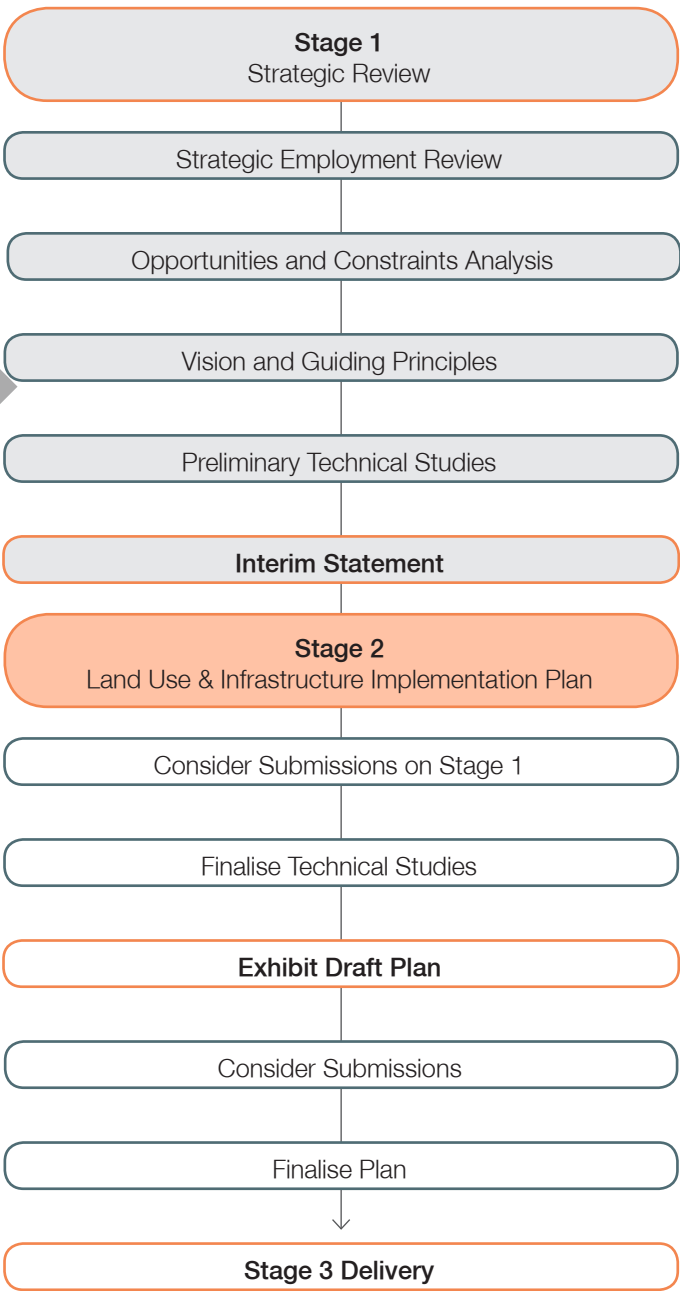
A central component of Stage 2 has been the iterative and collaborative design testing of the built form options and interrogation of their outcomes. This process has involved members of Lane Cove, Willoughby and North Sydney Councils, in addition to a number of state government agencies, who have assisted the team from SJB and the DP&E in refining the approaches to built form, including the consideration of visual and character impacts, heritage conservation interfaces, solar impact and view sharing, amenity to streets and spaces, movements and connectivity, and provision of social infrastructure, to name a few.

The findings and outcomes of Stage 2 will inform the next stage of the precinct planning, which may include a review of local planning controls and policies, provision of infrastructure and staging.

Consultant Team

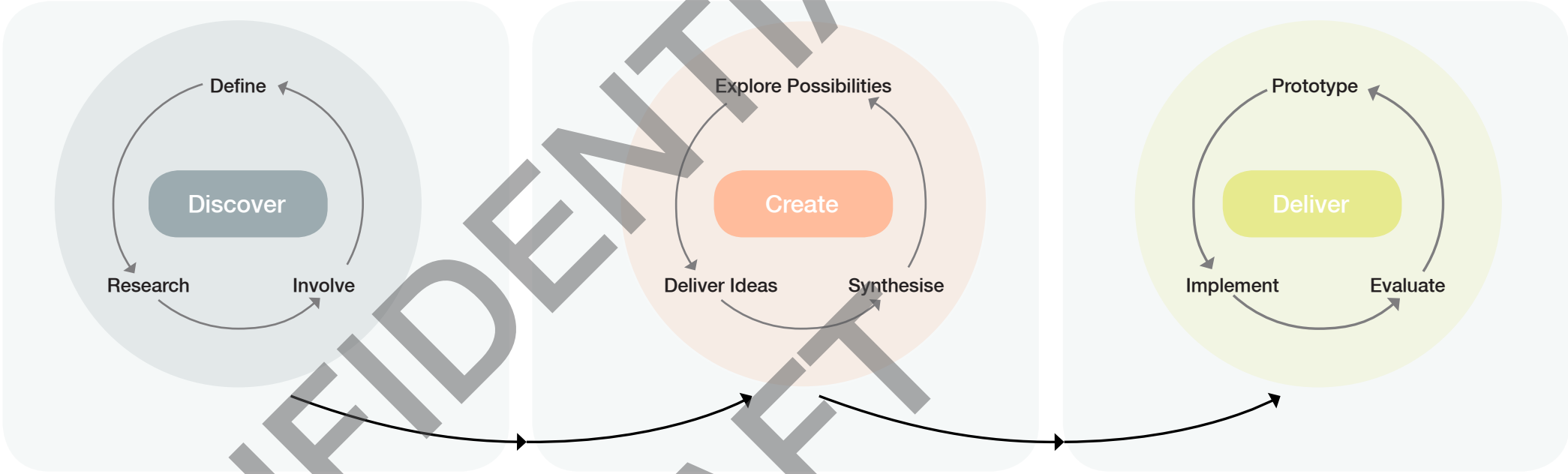
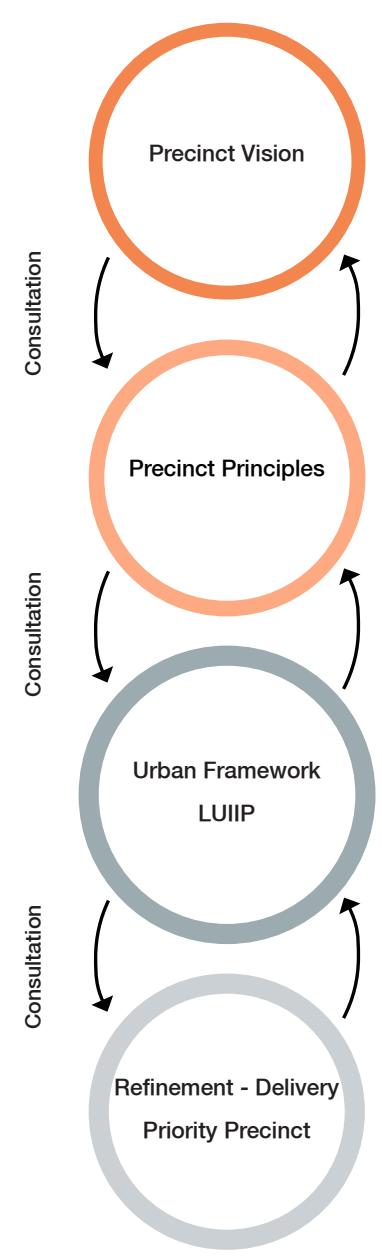


Project Staging



Stage 2 Process

The iterative design process that underpins Stage 2 of the project is outlined below and includes three key steps, which are based on the NSW Government Architect's document, 'Better Placed'. It includes the continual loop of refinement between the various stakeholders, facilitated by the DPE, with assistance from SJB and the consultant team.



1 - Preliminary Precinct Urban Design Analysis

Stage 1 was based on an analysis of the Precinct, including its immediate and broader urban contexts, constraints and opportunities. This stage provided the baseline analysis of social, environmental and statutory planning issues.

The process involved ongoing collaboration with the three Councils, workshops with key stakeholders, and synthesis of the preliminary findings into a robust and clear vision for the Precinct.

2 - Land Use and Infrastructure Implementation Plan

Stage 2 builds upon the preliminary analysis in Stage 1 and transforms these ideas into a number of land use, urban and built form options that deliver employment in line with the job targets outlined by the Greater Sydney Commission (GSC).

A major focus of this stage and the preparation of the LUIIP has been the built form testing and analysis of amenity and urban character throughout the precinct. This will be an ongoing process that continues into Stage 3.

Each iteration of the urban design for the precinct has been assessed and framed against the proposed vision for the precinct, and the principles identified in Stage 1.

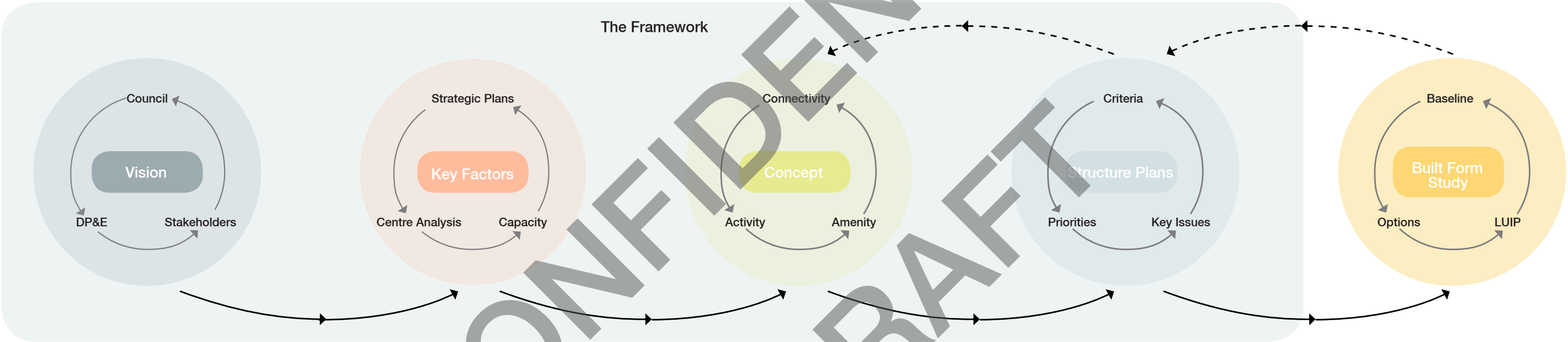
3 - Precinct Delivery

Stage 3 is likely to begin after the release of the LUIIP and review of the various submissions and feedback from the community and stakeholders. This final stage of the process will include the ongoing testing and refinement of the various mechanisms required to create a network of amazing places throughout the precinct - i.e. provision of open space and social infrastructure, amenity of streets and spaces, securing and strengthening local character, meeting job targets and ensuring excellent design outcomes.

As the approaches to built form, land use, open space, sense of place, character, connectivity, etc. become finalised work will begin on the mechanisms to deliver these outcomes - planning controls, infrastructure delivery.

Approach to Stage 2 - The Framework

The framework outlined below illustrates how the Precinct vision has been identified, refined and referenced throughout the design process, in addition to meet the objectives of the precinct, which includes significant employment targets, improving amenity and strengthening local character.



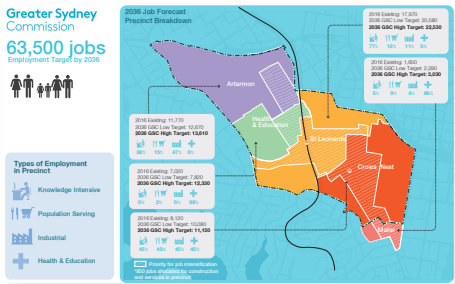
1 - Start with the Vision

The first step in the Structure Plan process was to recognise the place, goals, aspirations and objectives articulated by a Precinct vision. The vision seeks the creation of a resilient, liveable, responsive, equitable and integrated environment that builds on existing place making qualities.



2 - Identify Key Factors

The second step was to identify the key factors that have informed our understanding of the key opportunities and challenges of the Precinct. Key challenges include lack of open space and provision of future residential and commercial floor space.



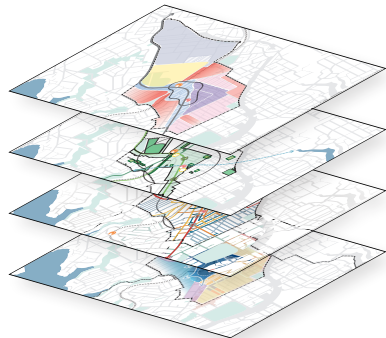
3 - Create a Concept

The third step involved the creation of a Precinct Concept, which has been informed by public domain, traffic and transport, heritage and economic consultant input. The concept identifies priority actions and directions to ensure the vision for the Precinct is achieved.



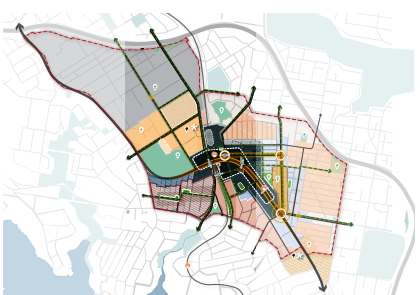
4 - Refine through Structure Plans

The Structure Plans convey how the priorities for the Precinct Concept can be achieved by addressing key issues through responsive principles and criteria.



5 - Design Testing and LUIP

Built form scenarios have been developed to test the design principles established in the structure plans and to investigate the preferred approach to built form that aligns with the vision and principles for the precinct.



Built Form Study Methodology

This overview identifies the steps taken to prepare the built form and land use studies as part the St Leonards and Crows Nest Land Use & Infrastructure Implementation Plan Stage 2 Report.

The Structure Plans remain a dynamic reference for this work and provide a layered approach to the delivery of employment, housing and amenity within the existing context. Considerations include public domain, transport, social and community infrastructure, heritage and land uses.

Additional built form considerations have also been identified including local character, visual impact, overshadowing, transition to sensitive areas and impact heritage areas. A combination of these factors have influenced different built form testing for both commercial and residential uses throughout the Precinct.

Each built form scenario has been tested against the Structure Plans to ensure they reflect the latest thinking by the consultant team, before progressing to the next iteration. This is in addition to the iterative and collaborative design process with the key stakeholders.

- 1

Built Form Testing

Built form strategies created to facilitate an initial approach to height in the Precinct. The parameters are derived from principles identified in the structure plans, located in Part 1 of the report.
- 2

Analysis

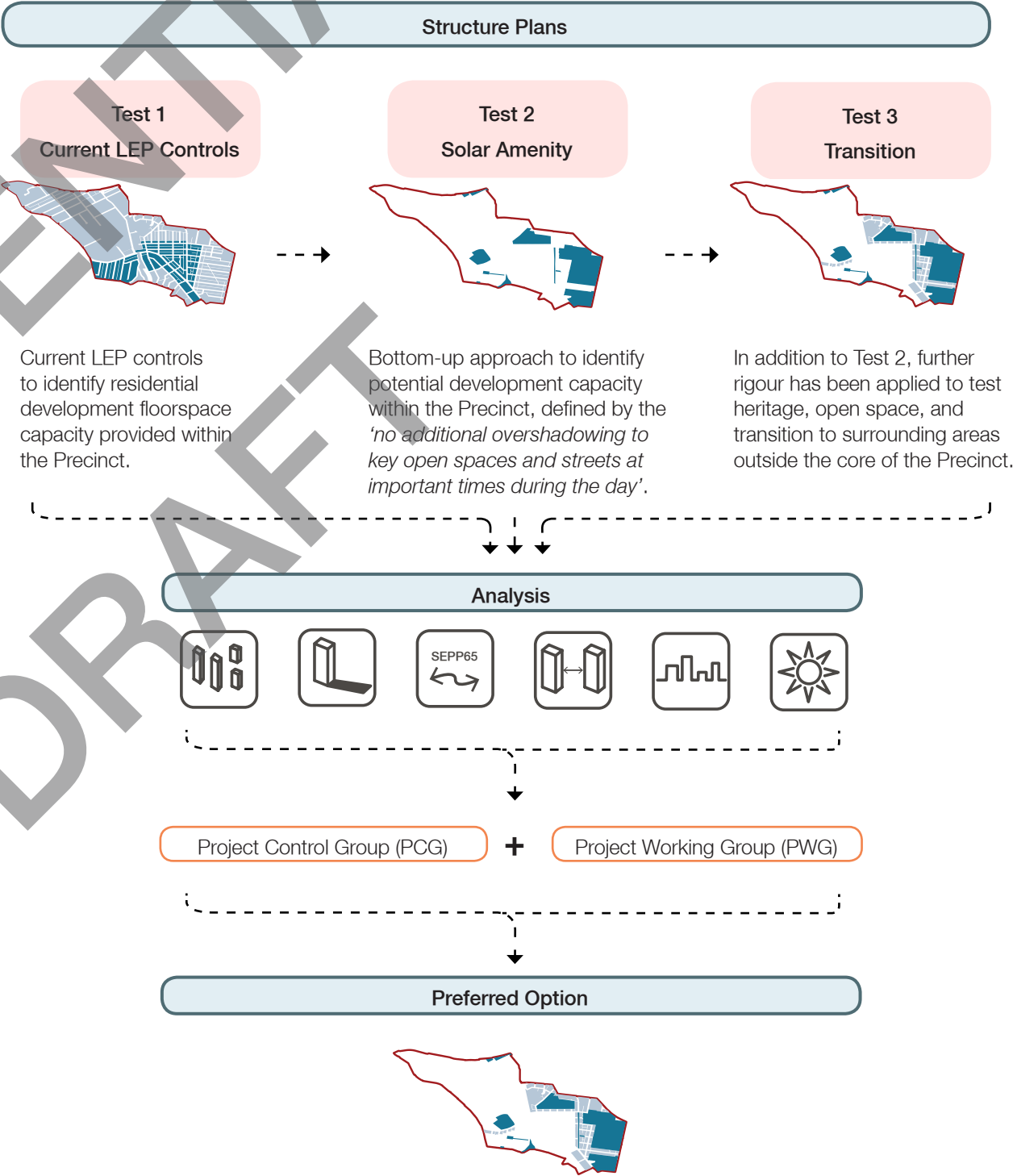
An analysis of each test is undertaken to identify their built form impact, capacity, and solar amenity. The analysis are assessed against overarching urban design principles and growth criteria.
- 3

Workshop with key stakeholders

A series of workshops have been undertaken with stakeholders such as the PCG and PWG to identify key issues and opportunities in the built form testing.
- 4

Preferred Option

A preferred option is formed through lessons learnt from these options and inputs from key stakeholders.



Introduction

An introduction to the project, including an overview of the Precinct, summary of Stage 1 and the Vision.

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Introduction

1.1 Regional Context

Strategic Context

The Draft Greater Sydney Regional Plan identifies St Leonards as a collaboration area, with a mix of high density residential and high-rise office developments.

The Precinct supports an office-based employment hub, health and education industries at Royal North Shore Hospital and North Shore Private Hospital as well as Northern Sydney TAFE and technology industries. The Precinct also provides a consolidated industrial sub-precinct in Artarmon.

In November 2015, Crows Nest was announced as the location for a metro station.

Legend

St Leonards

Rail Line

Urban Renewal Precincts

Western Sydney Priority Growth Area Precinct

Global Economic Corridor

Transport and Intermodal Hubs

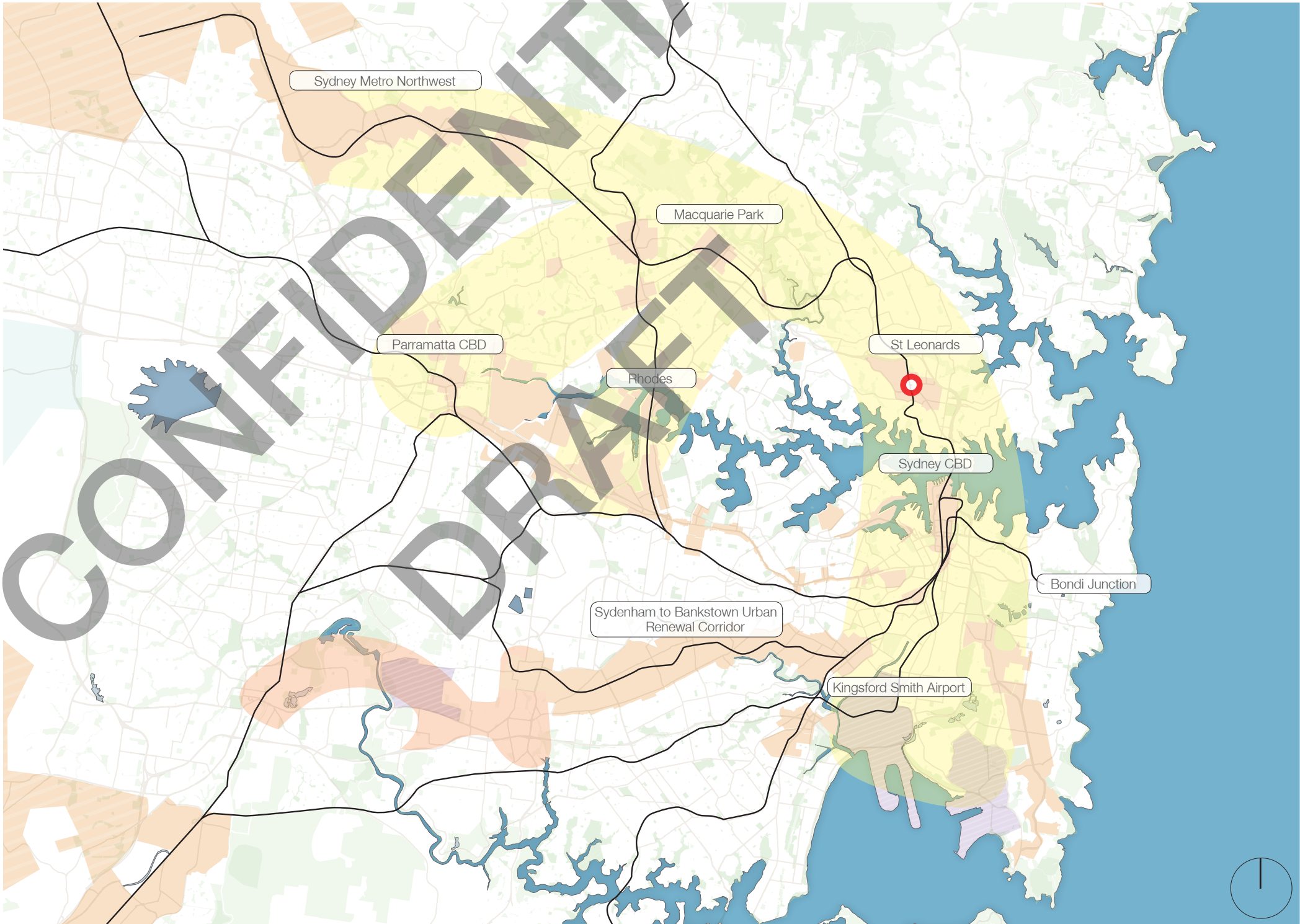


Figure 1.1.1 Regional Context Map

Introduction

1.2 The Precinct

The St Leonards and Crows Nest Station Precinct is located 5 km north-west of the Sydney Central Business District (CBD). It overlaps three local government areas; Lane Cove Council, North Sydney Council and Willoughby Council.

The Precinct provides a unique urban condition, comprising a variety of land uses including low, medium and high density residential and commercial developments, retail and industry, education establishments and medical and sporting facilities.

The morphology of the Precinct has been shaped by the Pacific Highway. This has become a challenge for improving connectivity across the Precinct.

Key features within the Precinct include The Forum at St Leonards Station, Royal North Shore Hospital, Artarmon Employment Area and the vibrant retail and eat streets of Crows Nest village.

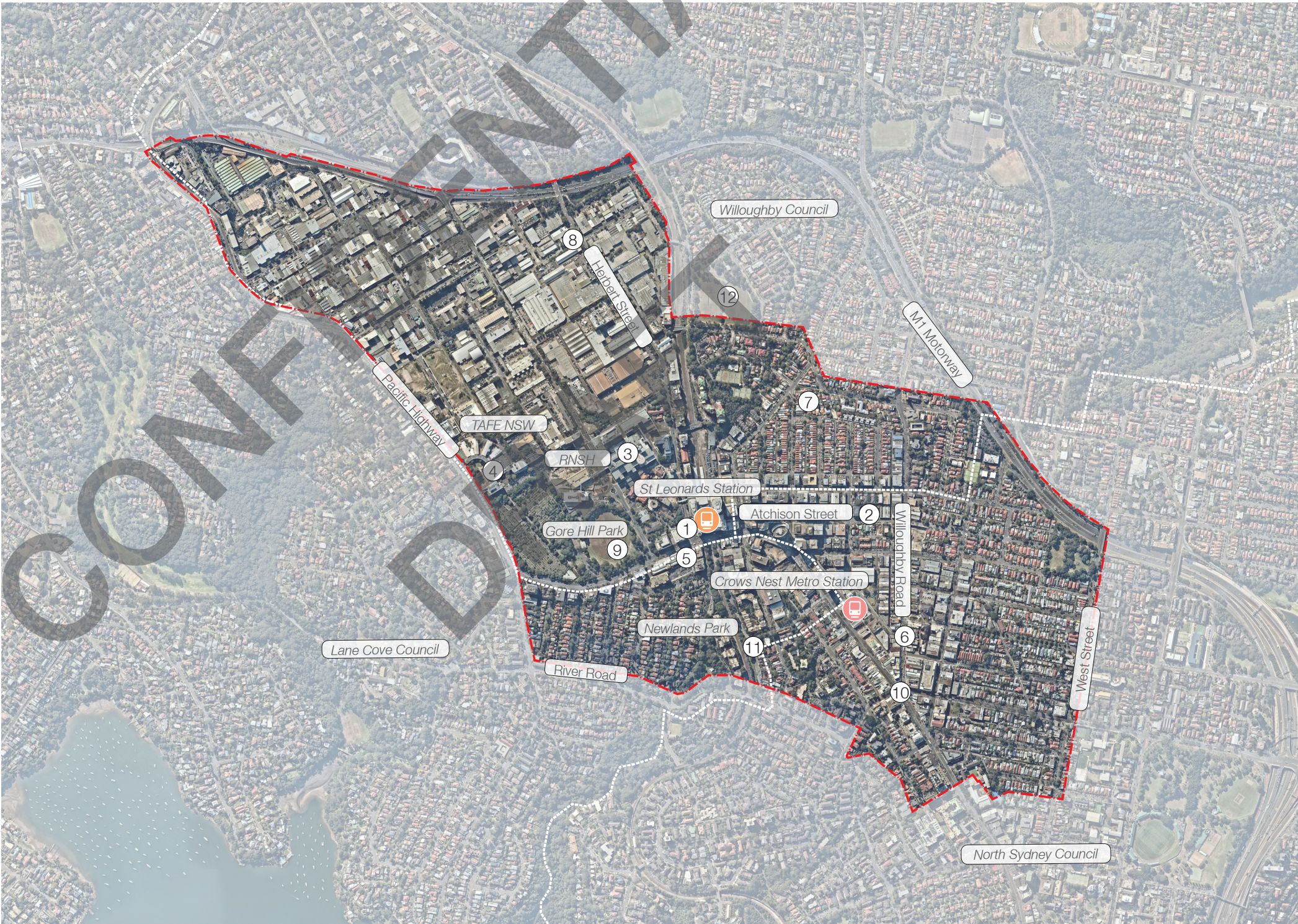


Figure 1.1.2 Aerial Context Plan

Introduction



Figure 1.1.3 Location 1 - St Leonards Station and The Forum



Figure 1.1.4 Location 2 -Atchison Street, looking west from Mitchell Street



Figure 1.1.5 Location 3 - Royal North Shore Hospital



Figure 1.1.6 Location 4 - TAFE NSW



Figure 1.1.7 Location 5 - The Forum, looking east from Pacific Highway



Figure 1.1.8 Location 6 - Eat Streets of Willoughby Road



Figure 1.1.9 Location 7 - Naremburn Conservation Area



Figure 1.1.10 Location 8 - Reserve Road



Figure 1.1.11 Location 9 - Gore Hill Park, looking east towards St Leonards



Figure 1.1.12 Location 10 - Crows Nest, looking north from Pacific Highway



Figure 1.1.13 Location 11 - Medium Density along Duntroon Avenue



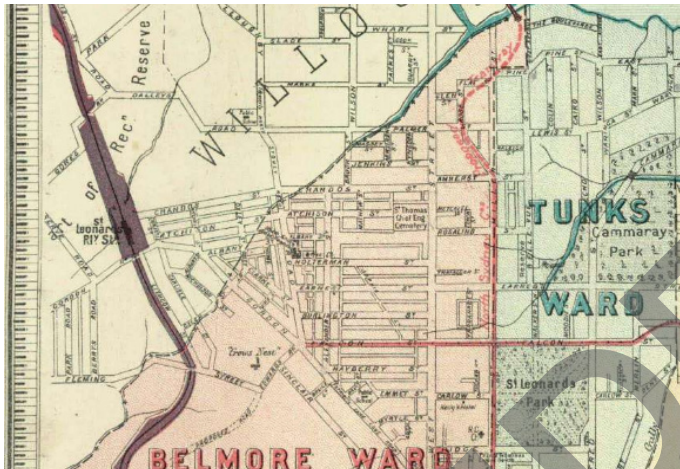
Figure 1.1.14 Location 12 - Naremburn Park

Introduction

1.3 St Leonards Yesterday, Today, Tomorrow



Pre-colonial era



1948



2001



2012

2017

Aboriginal Heritage

The traditional owners of the North Sydney area are the Cammeraygal people. Their lands extended from present day Cremorne Point in the east and potentially as far as the Kuring-gai area in the north.

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 remains one of Sydney's health and education super precincts, benefiting from multiple state of the art hospital and education facilities.

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.

Introduction

1.4 Stage 1 Summary

Stage 1 of the project developed a preliminary response to the existing urban conditions within the Precinct. These were distilled into challenges, opportunities and a combined conceptual strategy.

Challenges

- 1. The heavy rail line bisects the Precinct in a north-south direction, limiting east-west connectivity.
- 2. The Pacific Highway divides the Precinct in an east-west direction. At grade crossings are available for cars and pedestrians however, lack amenity due to traffic volumes and narrow footpaths.
- 3. Ensure uplift near the proposed Crows Nest Metro Station does not impact the character and grain of Willoughby and Crows Nest.
- 4. Land ownership patterns restrict the potential of land consolidation and subsequent delivery of public open space.
- 5. Development uplift will intensify height along the ridgeline, which will have a cumulative overshadowing effect on the properties downhill and on Newlands Park.
- 6. Ensure that any uplift within the centre does not erode the employment capacity of St Leonards, but that development increases job opportunities within the centre.
- 7. Protect Artarmon Employment Area from residential pressures. The area provides essential urban services for the regional population.
- 8. Provide residential development with good amenity along the Pacific Highway, which will require sound design responses in regards to noise, solar access, access and privacy.
- 9. Management of potential increased vehicle traffic due to increased residential and employment developments.
- 10. Lot sizes require amalgamation and may not achieve appropriate urban outcomes to provide adequate commercial buildings.

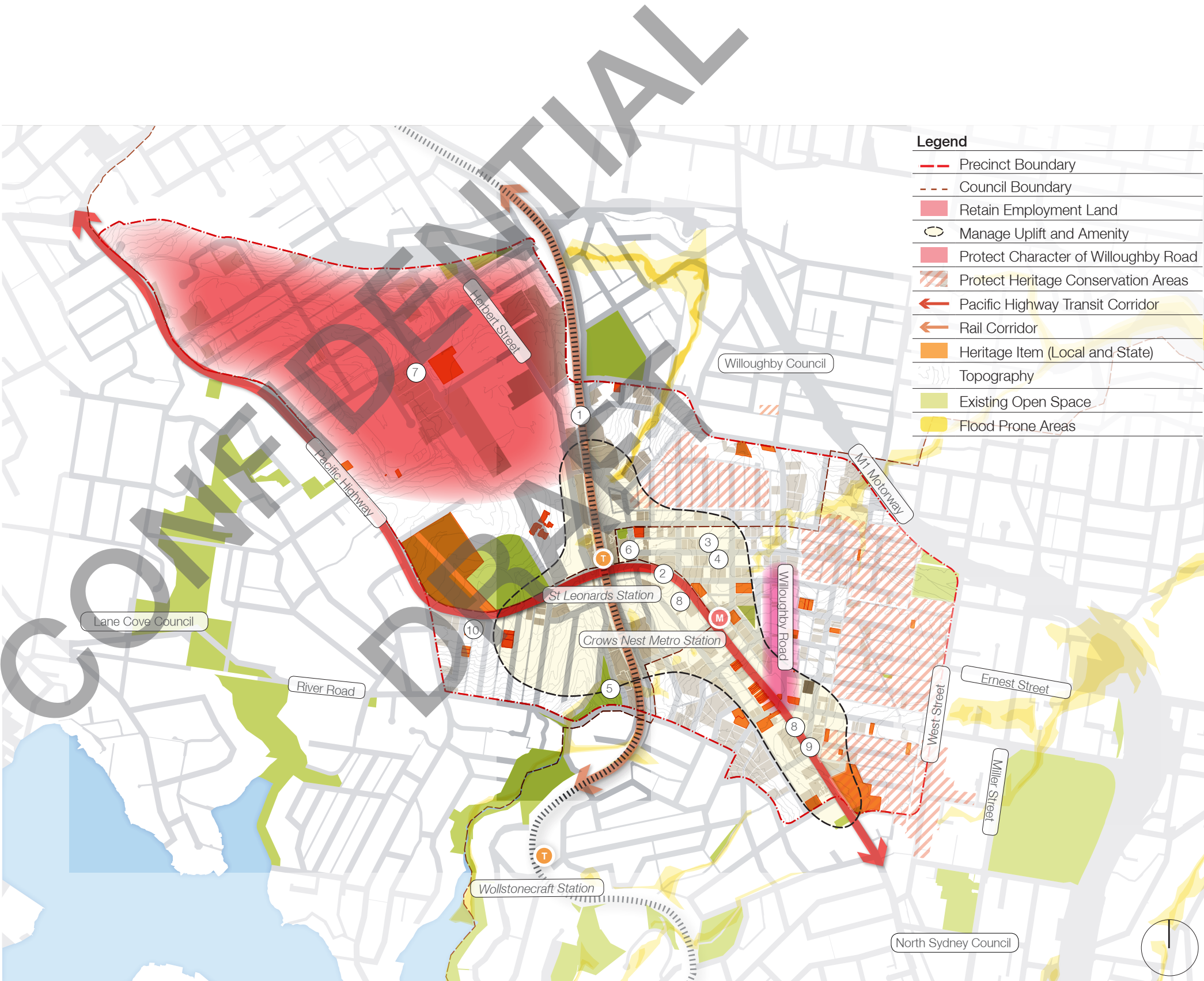


Figure 1.1.15 Stage 01 Challenges Diagram

Introduction

Opportunities

The analysis from Stage 1 identified the following opportunities for the Precinct:

- 1. The Metro Station should be capitalised upon to facilitate uplift and provide additional employment and residential capacity around public transit stations.
- 2. Any additional development value should be captured through appropriate mechanisms to improve the public domain throughout the centre. A consistent approach to placemaking and public domain should be coordinated between the three councils.
- 3. Connectivity and amenity throughout the centre should generally be improved for pedestrians.
- 4. Opportunity to provide additional public open space within the centre of St Leonards should be explored.
- 5. The character throughout Crows Nest Village should be retained and continue to attract business of local residents and workers, as well as provide a regional attraction.
- 6. The Health and Education Precinct around the Royal North Shore Hospital, North Shore Private Hospital and St Leonards TAFE should be strengthened through the provision of complimentary uses in the surrounding areas.
- 7. The opportunity to provide a smaller Heath Precinct around in the vicinity of Mater Hospital should be capitalised upon given the proximity to Crows Nest Metro Station and the RNSH Health and Education Precinct.
- 8. Increase density within the 400m catchments of the two stations to provide for transit oriented developments.
- 9. Encourage patronage of public transport and the minimisation of private vehicle usage.
- 10. Investigate crossings and connections across the Pacific Highway and the rail line.
- 11. Protect the character of the heritage and residential areas to the east of the Precinct.
- 12. Additional open space and amenity for workers in the Artarmon Employment Area should be investigated and provided.

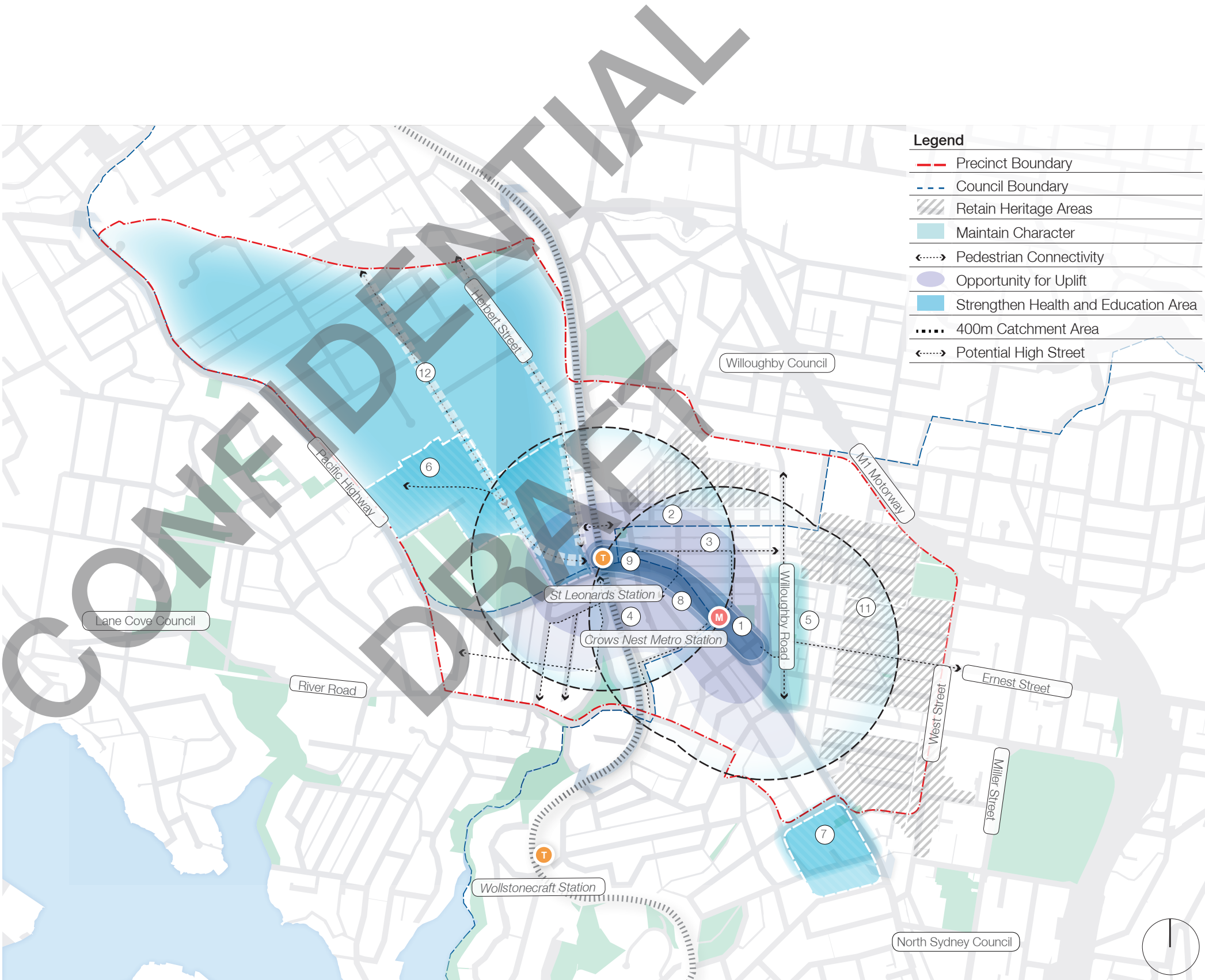


Figure 1.1.16 Stage 01 Opportunities Diagram

Introduction

Conceptual Strategy

Based on the analysis of the Precinct's challenges and opportunities, Stage 1 delivered a combined conceptual strategy.

- 1. Strengthen existing centres Crows Nest Village and St Leonards Centre.
- 2. Identify opportunities to provide additional public open spaces for passive recreation in St Leonards Centre.
- 3. Identify opportunities to deliver amenity for employees in the Artarmon Employment area. Part of Herbert Street near Frederick Street may function as a potential 'activity street' for the area.
- 4. Improve pedestrian connectivity across Pacific Highway and the rail line. Improve the public domain throughout the centre through a comprehensive place-making strategy.
- 5. Provide increased opportunities for job diversity.
- 6. Provide increased housing supply that has a range of dwelling sizes and provides a mix of affordable and market dwellings.
- 7. Facilitate appropriate uplift in height and density in areas close to public transport.
- 8. Encourage public transport and reduce the reliance on private vehicles to minimise congestion on the road network.
- 9. Balance increased development with the retention of heritage character areas.
- 10. Identify opportunities to implement sustainability initiatives.
- 11. Retain land throughout the Artarmon Employment Area for urban service employment that requires warehouse, and large format floorspace to ensure that essential urban services continue to be provided for.
- 12. Identify appropriate locations for new education facilities within the centre.
- 13. Develop a network of green and open spaces for the community to gather in and enjoy with connections to the broader green grid network.

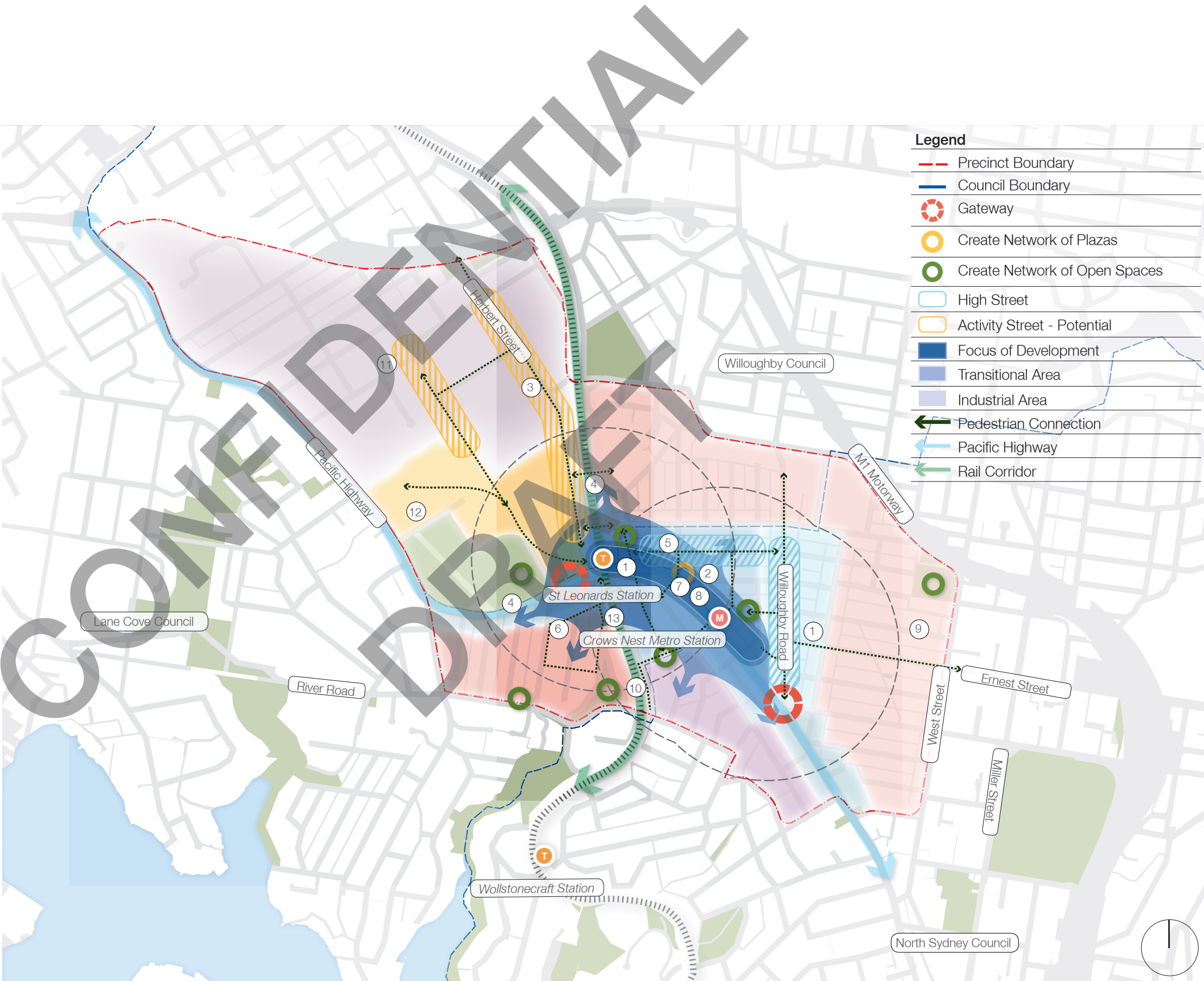


Figure 1.1.17 Stage 01 Combined Conceptual Diagram

Introduction

1.5 Vision and Objectives

St Leonards Tomorrow

The St Leonards and Crows Nest Station Precinct has a strategic role within the Sydney metropolitan area. It provides a unique opportunity to strengthen and develop many of the existing qualities which 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.

The new metro station at Crows Nest will complement the existing heavy rail service at St Leonards to contribute to an integrated and highly accessible centre.

There is capacity for a diverse range of commercial and mixed uses to be focused around and between the two stations. New development will be responsive to the existing environment and context, particularly with respect to the village atmosphere of Crows Nest and surrounding heritage conservation areas which are a key asset and are to be preserved and enhanced

Additionally, Royal North Shore Hospital, North Shore Private Hospital (and the Mater Hospital just outside the Precinct) and the Northern Sydney TAFE will continue to service the Precinct with world class health and education facilities. Other significant employment opportunities such as industrial and urban services will also be retained and enhanced.

The Precinct will continue to foster the strong, established communities, whilst providing for new communities in a range of housing types reflecting different characteristics of the Precinct.

Equitable housing will be provided for a diverse demographic. These neighbourhoods will be highly liveable and sustainable, with connections to local retail and service amenities and high quality public open spaces supported by a resilient public domain.



1. Leverage world-class health and education uses to provide opportunities for future employment growth.



2. Protect and strengthen the Precinct's commercial role supported by complementary uses to capitalise on renewed confidence in the commercial market.



3. Create future employment opportunities leveraging off the increased transport capacity of the new metro station.



4. Strengthen and enhance opportunities in the Artarmon employment area to fulfil the important urban service needs of the wider North District.



5. Create a network of new and existing useable, public and diverse open spaces which prioritise walking, cycling and access to transport, promote a healthier urban environment and encourage social interaction.



6. Incorporate opportunities for transit oriented development including commercial and mixed use development that takes advantage of existing and future transport.



7. Develop high quality and diverse residential areas that create sustainable and liveable communities.



8. Preserve, strengthen and enhance the existing diverse character areas.

Introduction

1.6 Character Areas

The Precinct presents a number of unique environments and character areas, that should be considered in the future planning and development of St Leonards.

- Artarmon Employment
- Health & Education
- Gore Hill Oval & Cemetery
- Pacific Highway Corridor South-East
- Residential (St Leonards South)
- Residential (Wollstonecraft)
- St Leonards Centre and Crows Nest Station
- Crows Nest Village
- Residential (Naremburn)
- Residential (Crows Nest)

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.

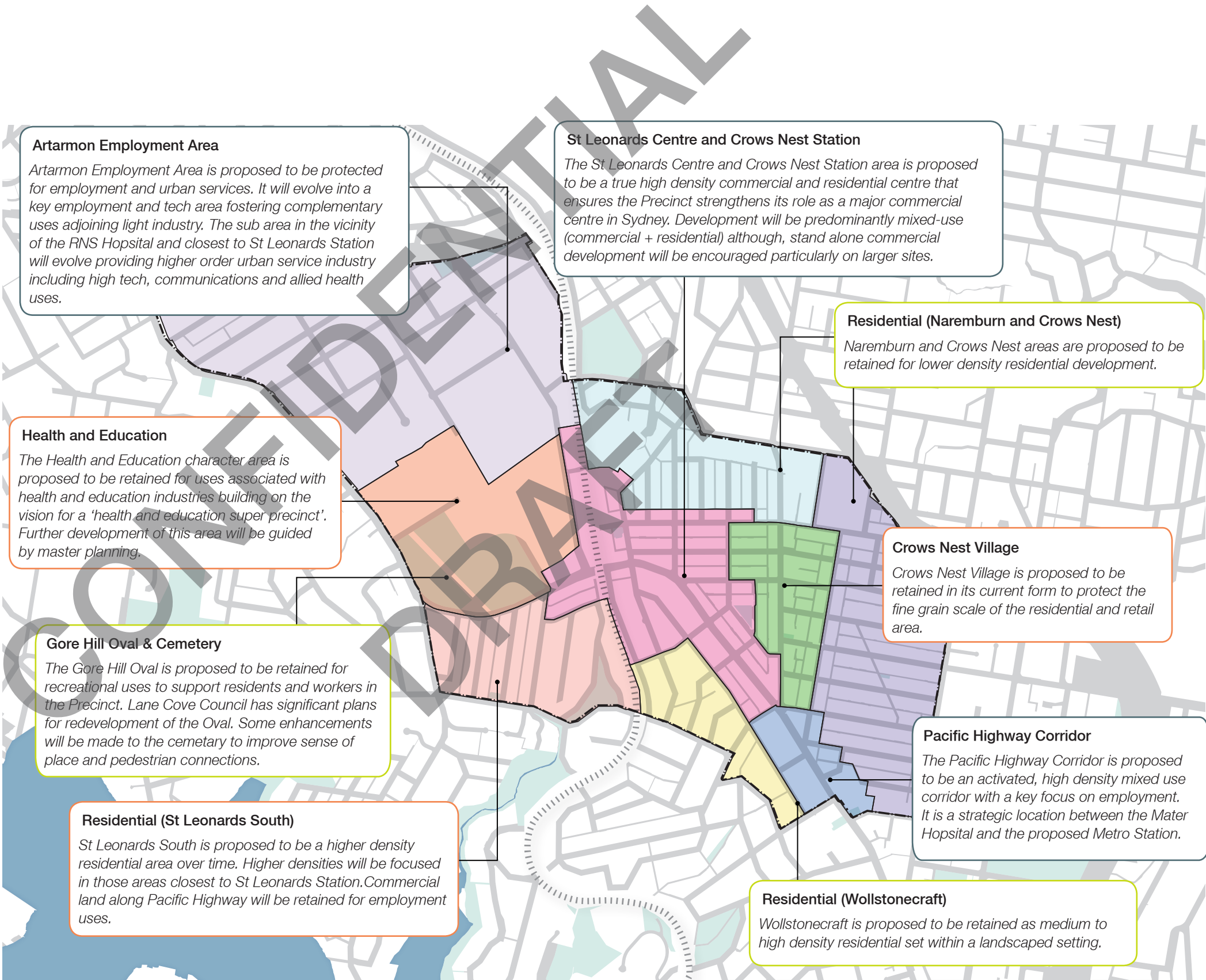


Figure 1.1.18 Character Areas

Key Factors

2

This section provides an overview of the key issues that have informed the Structure Plans.

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Key Factors

2.1 Key Factors Overview

This section provides an overview of the internal and external factors influencing the future of the Precinct, most notably the various tiers of planning policy that relate to the precinct, the objectives to deliver new jobs and the pressures from increased housing and population.

The key factors include:

- The Draft Greater Sydney Region Plan (GSC) vision for St Leonards as a Strategic Centre and Collaboration Precinct.
- Employment targets set by the Greater Sydney Commission (GSC), and subsequent floor space requirements.
- Residential capacity within the Precinct, influenced by the announcement of Crows Nest Metro Station.
- High level population growth analysis. GSC forecasting provided a population baseline for the Precinct.

When considering these points the team has also referenced the influence these will have on ‘place’, referring to the NSW Government Architect’s document ‘Better Placed’ and the process they outline to achieve better design outcomes, some of which are noted above.



Key Factors

2.2 Strategic Context

St Leonards as a Collaboration Area - Draft Greater Sydney Region Plan (GSC)

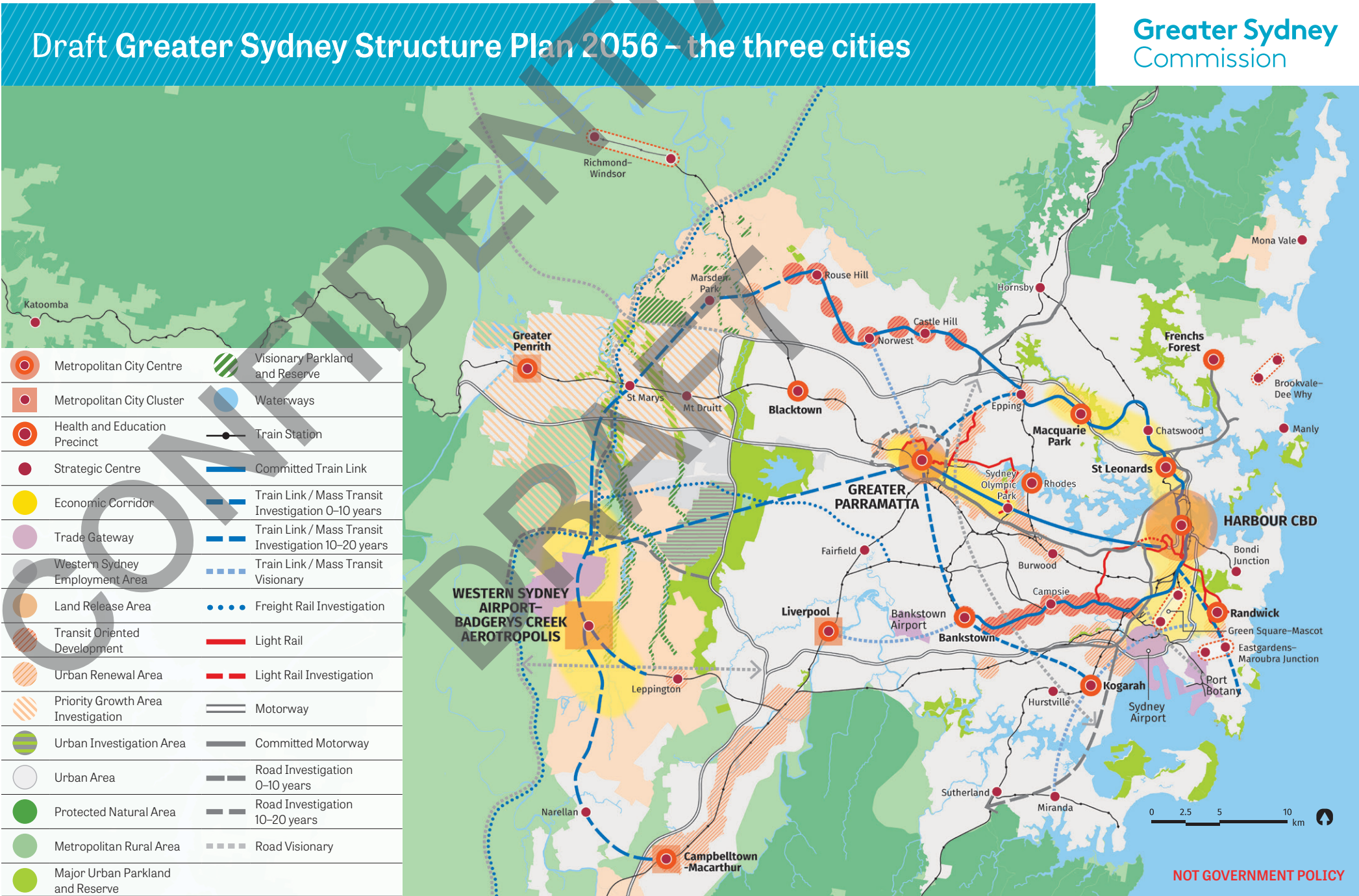
The Draft Greater Sydney Region Plan was released in October 2017 by the Greater Sydney Commission and outlines a vision to meet the needs of a changing population and transforming Greater Sydney into a metropolis of three cities.

St Leonards is a Collaboration Area within ‘Global Sydney’ and more specifically, within the Harbour CBD and Eastern Economic Corridor.

St Leonards Collaboration Area and is a mix of high density residential and high-rise office developments. The centre includes Royal North Shore Hospital, North Shore Private Hospital, and TAFE NSW St Leonards campus. There is a proposed new Sydney Metro Station at Crows Nest.

The Precinct is situated within the highly-connected Eastern Economic Corridor from Macquarie Park to Sydney Airport. It is noted as being one of Sydney’s key office markets alongside Harbour CBD, Macquarie Park and Norwest.

The Corridor is of national significance and currently contains approximately 775,000 jobs.



Key Factors

St Leonards as a Collaboration Precinct - Revised North District Plan (GSC)

St Leonards is a mixed use centre with high rise offices, a major health 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,

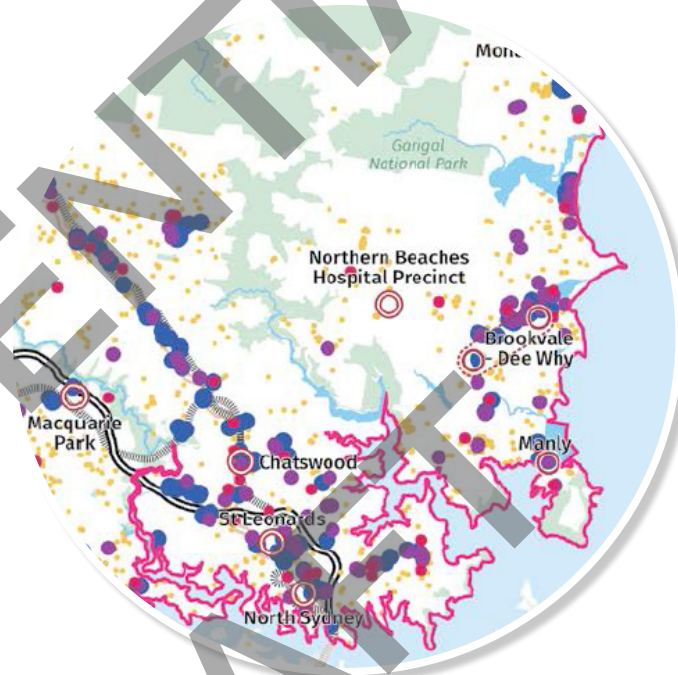
In addition to leveraging the potential of the Royal North Shore Public, North Shore Private Hospitals and the Mater Hospital to grow jobs in complementary health services and existing education facilities, a new Sydney Metro station at Crows Nest will further strengthen the centre's economic and employment functions. The Draft District Plan identifies the following:

- Sets baseline target of 54,000 jobs by 2036.
- Sets high level target of 63,500 jobs by 2036.
- Sets five year housing targets for LGAs within the Precinct.
- 1,900 dwellings in Lane Cove, 3,000 dwellings in North Sydney and 1,250 dwellings in Willoughby.
- Facilitates place making and job diversification opportunities in St Leonards.
- Leverage off the new Sydney Metro station at Crows Nest to deliver additional employment and residential capacity.
- Protect and enhance Willoughby Road's village character and retail/restaurant strip, while recognising the need for increased growth opportunities.
- Promote synergies between the Royal North Shore Hospital and other education-related activities in partnership with NSW Health.
- Define the northern perimeter of St Leonards to protect the adjoining industrial zoned land for urban services.



A Productive City

- P1: Develop better understanding of the value and operation of employment and urban services land
- P2: Develop and implement an economic development strategy for the Eastern City
- P4: Facilitate place making and the growth diversification of job opportunities in St Leonards
- P6: Grow and manage the visitor economy within the North District



A Liveable City

- L1: Prepare local housing strategies
- L2: Identify the opportunities to create the capacity to deliver 20-year strategic housing supply targets
- L3: Councils to increase housing capacity across the District
- L4: Encourage housing diversity
- L6: Support councils to achieve additional affordable housing
- L8: Undertake broad approaches to facilitate affordable housing
- L9: Coordinate infrastructure planning and delivery for growing communities
- L11: Provide design-led planning to support high quality urban design
- L15: Support planning for shared spaces
- L16: Support planning for school facilities
- L17: Support the provision of culturally appropriate services



A Sustainable City

- S3: Use funding programs to deliver the North District Green Grid Priorities
- S4: Develop support tools and methodologies for local open space planning
- S8: Support the development of initiatives for a sustainable low carbon future
- S10: Incorporate the mitigation of the urban heat island effect into planning for urban renewal projects and Priority Growth Areas
- S12: Identify and map potential high impact areas for noise and air pollution

Key Factors

2.3 Strategic Employment Review

The Draft North District Plan identifies the Precinct as a ‘Health and Education Super Precinct’ and sets targets for employment growth. Under the Plan, the Precinct has a high target of 63,500 jobs by 2036.

SGS Planning and Economics in collaboration with relevant stakeholders have undertaken analysis to identify the distribution of job targets within the Precinct to a sub-precinct level, as illustrated in Figure 1.1.19.

Job density in the Artarmon sub-precinct will largely be driven by existing industry and demand for space to accommodate evolving urban services. The Health and Education precinct will continue to grow but may need government intervention in order to achieve the GSC High Target for employment.

The white hatching depicts where the intensification of employment will be focused. The breakdown of existing and forecast employment are shown in the table for each sub precinct.

Employment in St Leonards and Crows Nest will largely be driven by private development, which will need to be facilitated by planning controls. Proposed controls will need to find a balance of delivering the GSC job target for 2036 as well as additional employment longer-term, and not sterilising existing development in the Precinct.

(Note - the Mater Hospital sub-area has been included as it is linked to the operation of the Precinct, contributing to, and leveraging off development and activities in the Precinct. It effectively forms part of the ‘Health and Education Precinct’ as referred to in a suite of planning documents).

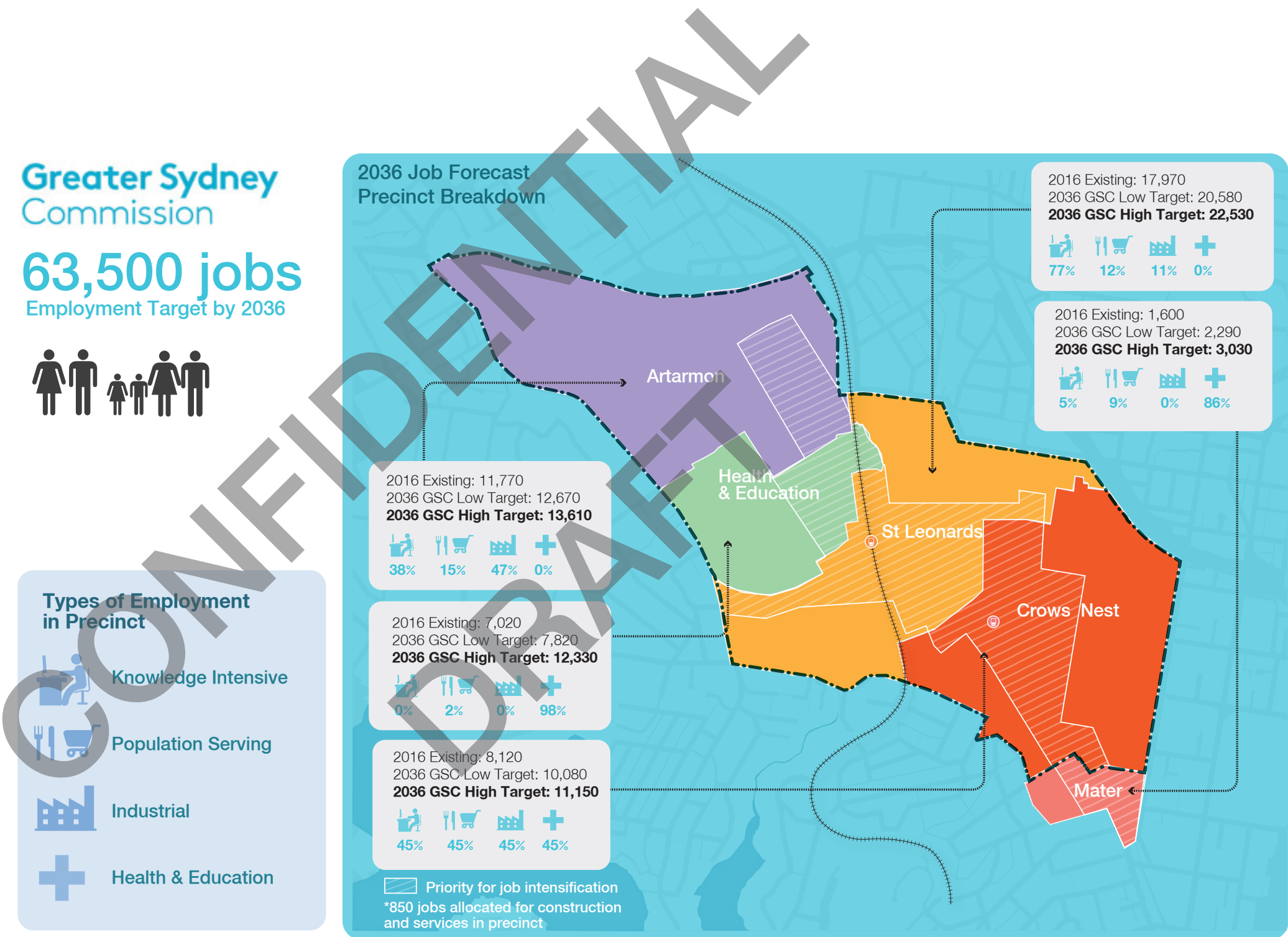


Figure 1.1.19 2036 Job Forecast Sub-Precinct Breakdown

Key Factors

2.4 Delivering Commercial

Over the past few years development pressures across Sydney for more housing has seen a gradual decline in the amount of B3 Commercial Core land available. This has also been the case in St Leonards, where a number of proposals have resulted in the rezoning of B3 Commercial Core to B4 Mixed Use. Many of these are located within the heart of St Leonards Centre along Christie and Atchison Streets, and south of the Pacific Highway.

While these developments include a non-residential component, some have also resulted in an overall net loss of commercial floor space and reduced the availability of future office space in close proximity to public transport.

Additionally, once they are converted, they are locked up in strata, which restricts the potential of the site being redeveloped in the future.

As a result of the need to deliver commercial floor space in St Leonards, two land use and built form options are proposed:

- 1. Stand alone commercial buildings on key sites that satisfy a series of criteria relating to lot size, potential amalgamation opportunities and proximity to public transport. Key sites should also be able to deliver stand alone residential buildings to make development viable.
- 2. Deliver commercial floorspace in podium elements across the broader Precinct to accommodate for future commercial demand, while also providing residential above podium.

Legend

Precinct Boundary

Commercial Core

Eroded Commercial Core

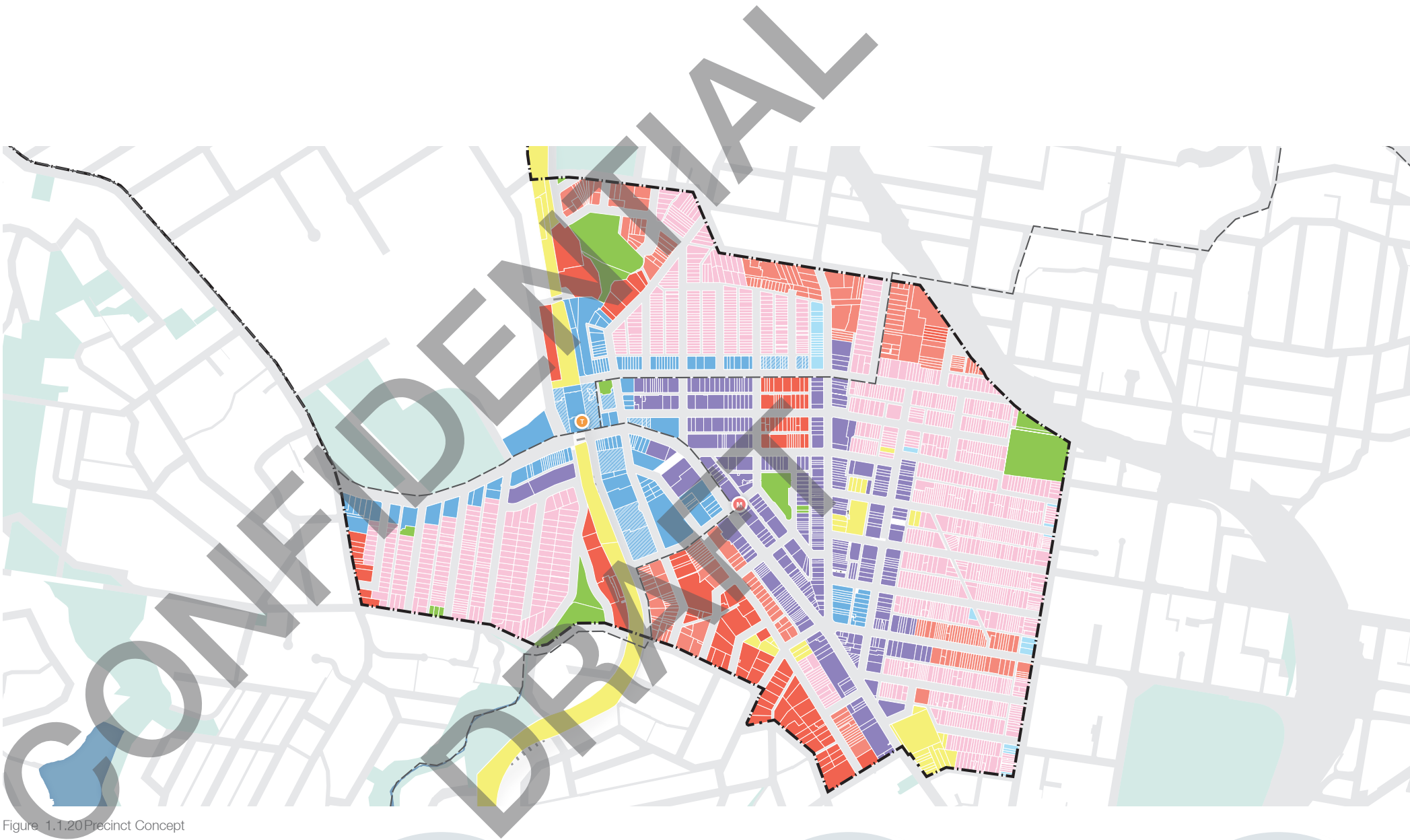
Mixed Use

Infrastructure

High Density Residential

Medium Density Residential

Low Density Residential



Required
Commercial GFA (SGS)
834,800m²

Commercial GFA has been based on the future job targets identified by the GSC.

Existing LEP
Commercial GFA
728,200m²

Residential development has eroded commercial floorspace from the commercial core. The existing control could only allow for 728,200m² today.

Gap of
Commercial GFA
106,600m²

The gap has been calculated as the difference between the job target and the current LEP allowable commercial floor area.

Key Factors

2.5 Residential Capacity

Sydney Metro Impact on Residential Uplift

Sydney Metro Northwest, City and Southwest projects will facilitate the delivery of approximately 28,800 dwellings in the north west and approximately 35,000 dwellings in the south west.

Work undertaken by SGS Economics and Planning has identified the spatial impacts of Sydney Metro across Metropolitan Sydney for employment and dwellings.

Figure 1.1.21 identifies areas in green are likely to gain significant volumes of dwellings and employment in preference of other locations (orange and red).

The proposed metro will likely result in additional residential demand along the Pacific Highway corridor including the centres of North Sydney, St Leonards and Chatswood, while reducing uplift demand in neighbouring suburbs.

Residential Uplift Forecast (SGS Economics and Planning 2017)

Dwellings	Current Supply	2036 Growth	2036 Stock	2066 Growth	2066 Stock
Private	8,000	6,500	14,500	16,000	24,000

Source: Dwelling Impact from Metro Project (SGS Economics and Planning 2017)

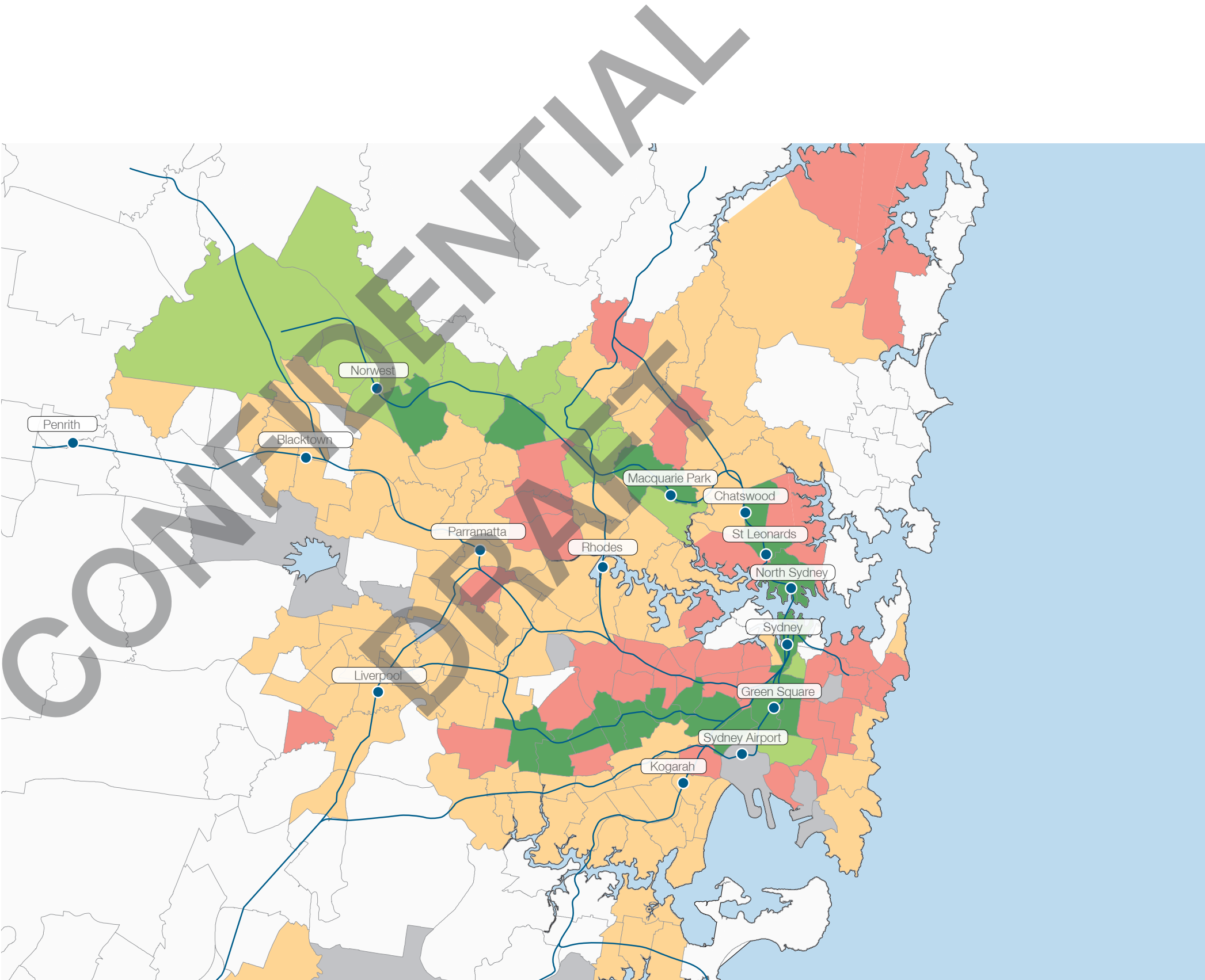
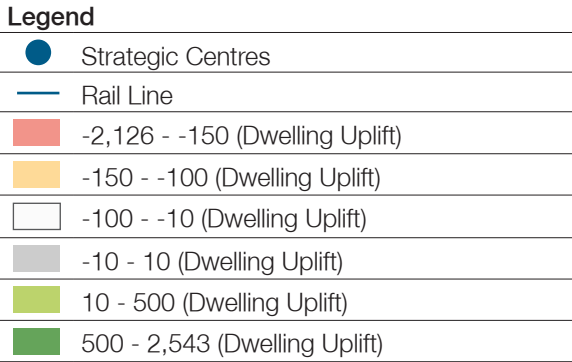


Figure 1.1.21 Sydney Metro Impact on Residential Uplift in Sydney Suburbs

Key Factors

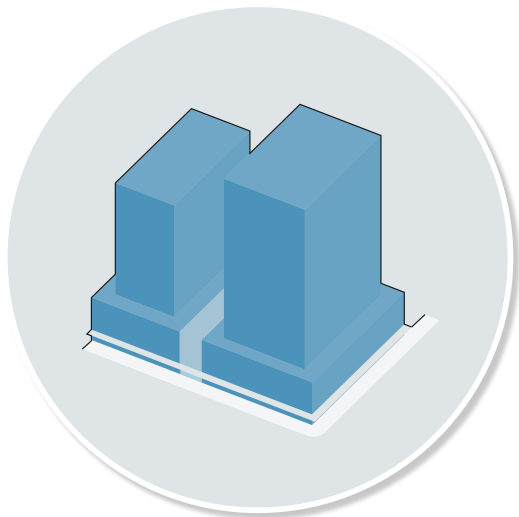
2.6 Centre Comparison Summary

Our understanding of the future challenges and opportunities within the Precinct has considered a comparative analysis of existing centres across Sydney.

	Approach to Commercial	Approach to Mixed Use/High Density Residential	Approach to Open Space and Height	Approach to Skyline Transition
North Sydney	<ul style="list-style-type: none">Explore options to expand and utilise B3 Commercial Core zone in North Sydney and continue to prohibit residential accommodation in the Strategic Centre.Non-Residential FSR control adopted for mixed use buildings to safeguard employment.Propose new building heights across the Centre to accommodate more commercial development.	<ul style="list-style-type: none">Potential height in the B4 Mixed Use zone subject to proponent-initiated proposals and contribution towards public domain outcomes.To maintain existing commercial space and allow for residential development in mixed use buildings, with non-residential uses concentrated on the lower levels.	<ul style="list-style-type: none">Civic spaces should be made accessible in close proximity to public facilities and amenities and should consider accessibility and solar access.Minimise overshadowing of, and loss to important outdoor open space areas, particularly in mid-winter.Opportunity to provide bonuses to developers to incorporate useful open space considered.	<ul style="list-style-type: none">Dense cluster of height across the centre with little or no transitions between heritage items.Consistent height and spacing between skyscrapers with larger areas or space between the building forms.Podiums attempt to relate to the scale of smaller buildings however, due to the size and volume of the buildings, this creates an imbalanced transition.Skyline defined by solar areas to surround R3 and R2 land to the south east.
Chatswood	<ul style="list-style-type: none">Expansion east across the railway for part of B3Expansion west across Pacific Highway of B3 Commercial Core into existing B5 Business Development zone.Protecting the Commercial Core from encroachment from interspersed residential development.Remove existing DCP controls limiting the size of offices east of the railway.Serviced apartments should be excluded from the B3 zone within the Chatswood CBD.	<ul style="list-style-type: none">Allow for growth in high-density residential uses on the fringe of the core without compromising on office growth.Expand B4 Mixed Use land south and north of Chatswood Station.Outer areas of the centre should generally be mixed use with ground floor commercial required and upper floor commercial encouraged.	<ul style="list-style-type: none">Establish joint partnerships between Council, State Government and the private sector to deliver open space.Upgrade existing ovals and enhance access.Investigate feasibility of indoor recreation centre and aquatic centres.Establish more community oriented programs and events at The Concourse.Develop a CBD Urban Trail strategy to create walking routes that link public spaces through the CBD.	<ul style="list-style-type: none">R3 zones and existing mixed use areas create sharp transitions in height.Podiums relate to the scale of smaller buildings however, this is not applied across the entire centre.Large areas of height are proposed and positioned around the train station with residential positioned on either end of the large scale built form.Some subtle attempts to transition in height however, they drop suddenly with little regard to the scale of the smaller built form.
Parramatta	<ul style="list-style-type: none">No FSR for B3 sites - development controlled by height and setbackNo residential uses in B3 Zones.	<ul style="list-style-type: none">Provide additional capacity for mixed use development in Parramatta CBD and surrounding precincts.Potential extension of mixed use development and residential development south in the Auto Alley Precinct.Renew Parramatta North into a mixed use precinct.	<ul style="list-style-type: none">Proposed solar access controls to key open spaces and plazas between 9:00am-3:00pm mid winter.Proposed linear park to connect train station to Parramatta River.	<ul style="list-style-type: none">Heritage and R3 Land on either side of the cluster of heightIncreased HOB in Parramatta CBD has created cluster of height with little or no transition between existing residential.The podiums however, do relate to the smaller scale buildings.Older buildings across the river provide a gradual transition from the river to larger scale building height.
Sydney	<ul style="list-style-type: none">Provide for employment growth in new tower clustersA new pathway to implement heights and densities above existing limits, areas less constrained by sun access planes.3 new zones for major tower clusters proposed in locations least constrained by sun access plans - Increased heights and density will facilitate projected employment growth within the centre.	<ul style="list-style-type: none">Limit residential and serviced apartment floor space in large development to maximum 50%, facilitating a genuine mixed use outcome.	<ul style="list-style-type: none">3 new public squares are proposed at Circular Quay, Town Hall and Central Railway Station, connected by a new pedestrianised spine along George Street.Retain solar access to key parks and squares including Hyde Park, Town Hall and Wynyard Park.	<ul style="list-style-type: none">Gradual height transition with more gradual inclinations and less dramatic drops.Smaller building footprint with more sudden and focused height increases.All buildings have podiums that help to relate to the scale of the smaller building heights.Solar access to open space defines the eastern edge of CBD.Cahill Expressway defines height to the north.Solar controls to key open spaces define buildin transitions e.g. Hyde Park to the east.

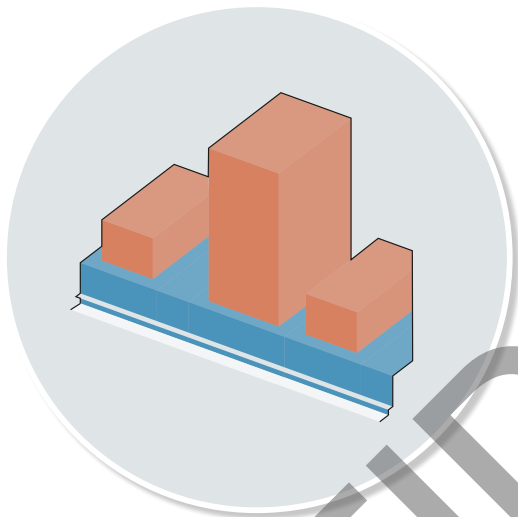
Key Factors

Analysis Summary for St Leonards and Crows Nest



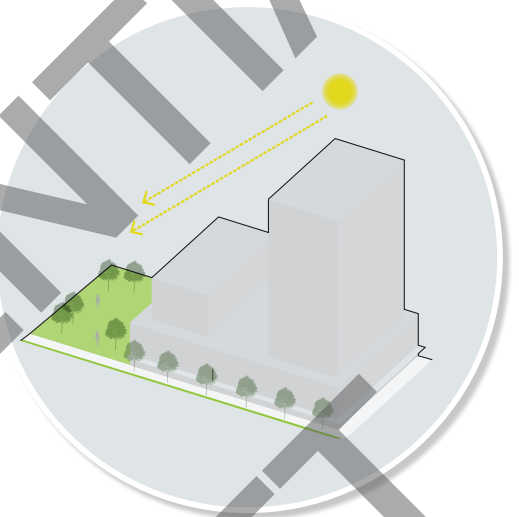
Commercial

- Reinforce B3 Commercial Core Zone and identify opportunity sites.
- Identify sites that are capable of providing stand-alone commercial towers in association with stand-alone residential.
- Identify amalgamation patterns within the centre that can facilitate the provision of commercial floor space.
- Ensure that when sites are re-developed there is no net loss of commercial floor space compared to existing.
- Serviced apartments should be excluded within the Central Core zone in the St Leonards centre.



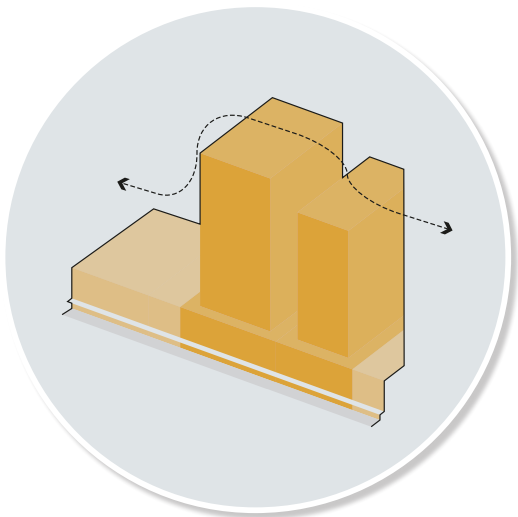
Mixed Use and High Density Residential

- Allow the expansion of mixed use and high density residential land within the centre.
- Adopt non-residential FSR controls within the centre to mitigate the erosion of commercial land.
- Higher non-residential FSR controls should be located in St Leonards Centre and along Pacific Highway from The Forum towards, and adjacent to, the proposed Crows Nest Metro Station.
- Podium and setbacks should relate to the character of the area.



Open Space

- Retain solar access to key open space and plazas within the Precinct.
- Solar access for all or portion of the time between 9:00am-3:00pm (winter solstice) of open space and plazas could be enforced to inform built form and building setbacks.
- Consider opportunities to provide functional green streets along north-south roads within the St Leonards Centre towards Hume Street Park and Ernest Place.
- Enhance connectivity to areas where there is a deficiency of open space through green networks.
- Establish new pedestrian and cycling connections throughout the Precinct including from Artarmon Employment Area towards RNSH and linking areas north to south of the Pacific Highway.



Skyline Transition

- Future development must have minimal (i.e solar amenity) impact on key open space and plazas between nominated hours (winter solstice).
- Establish appropriate and sensitive transition from St Leonards and Corws Nest Metro areas towards Willoughby Road - this includes consideration of views, overshadowing and visual impact.
- Create a soft edge of development along Chandos Street and Hume Lane frontages towards the Naremburn Conservation Area.
- Land from The Forum and the proposed Crows Nest Metro Station are to present large scale built form, and then taper off as it transitions towards Willoughby Road and Falcon Street intersection.
- Development in St Leonards South should respond to low and medium density context and topography by stepping down development from Pacific Highway towards River Road.
- Heritage and conservation areas are to be protected.

Key Factors

2.7 Starting with Place

What is Character?

Character is what distinguishes one neighbourhood from another. It is the way a place ‘looks and feels’, as well as how people establish a sense of belonging to it.

It is formed by a combination of physical and natural qualities, including the relationship of the public realm and private domain, buildings to the street, and building to building. It is unique and detailed, coming down to the complementary connection between built form, architecture, urban grain, movement, street life, topography and vegetation.

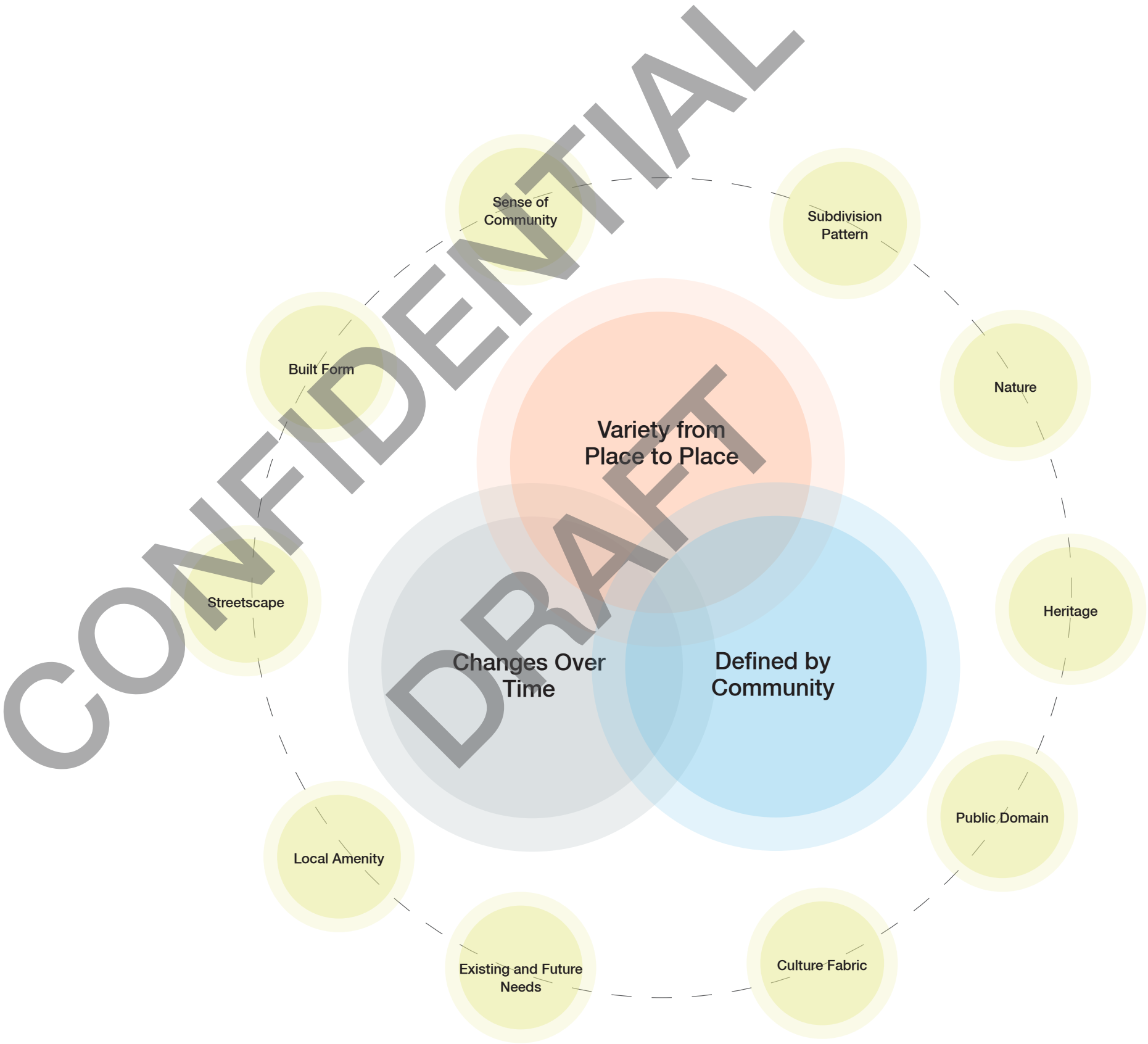
What is St Leonards and Crows Nest Character?

The St Leonards & Crows Nest Precinct includes a number of distinct neighbourhoods, each with their own unique identity, built form and place-making qualities.

The size of the Precinct naturally allows for a number of character areas to be identified and celebrated; ranging from the low-rise industrial and commercial buildings fronting wide street throughout Artarmon, as compared to the leafy low-scale, medium density residential streets in Crow Nest, and the high-density, tall buildings and mix of uses throughout St Leonards.

There is an intrinsic opportunity for the Precinct in celebrating its unique diversity. However, this is also a challenge, as there's the potential for the many diverse characteristics being eroded and diluted, potentially losing its ‘sense of place’.

A key objective of this stage is to unify and connect these unique places together through a series of improved vibrant and green links, open spaces and active transport connections. Its critical that as part of the Precinct’s evolution that development pressure doesn’t undermine its character. Qualities that make each area unique and memorable should also be retained and celebrated.



Concept

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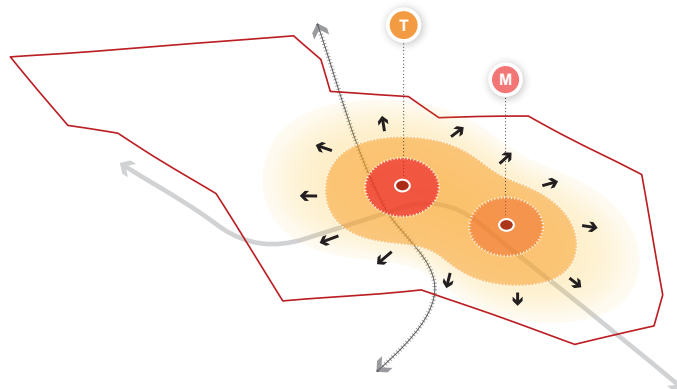
This section introduces the concept for the Precinct, including design ideas, character areas and future character statements

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Concept

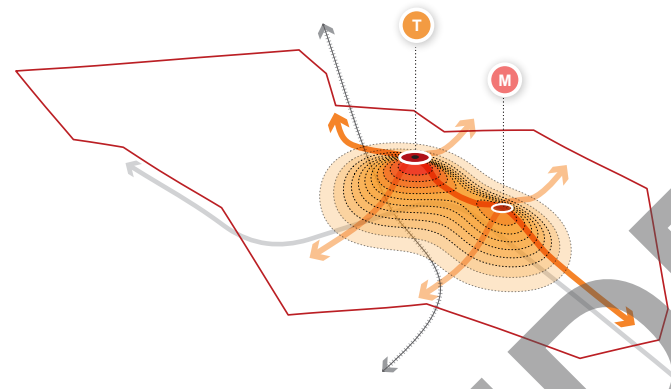
3.1 Design Ideas

1. Proximity to Stations - Epicentre



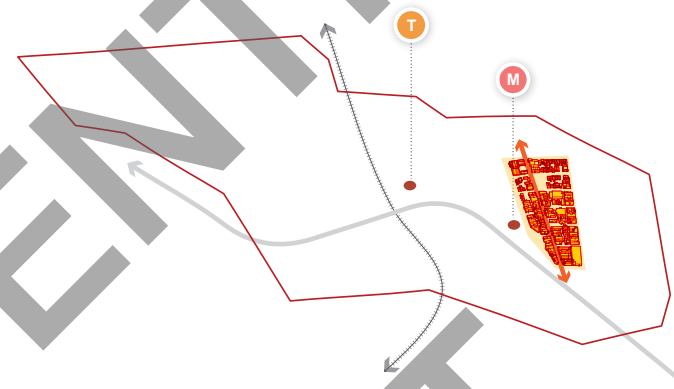
This principle recognises that density located in close proximity to a transport hub such as St Leonards Train Station or the proposed Crows Nest Metro Station facilitates Transit Oriented Development (TOD). Taller buildings are to be located within 150-200m of either station, and transition in height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

2. Centre & Height Transition



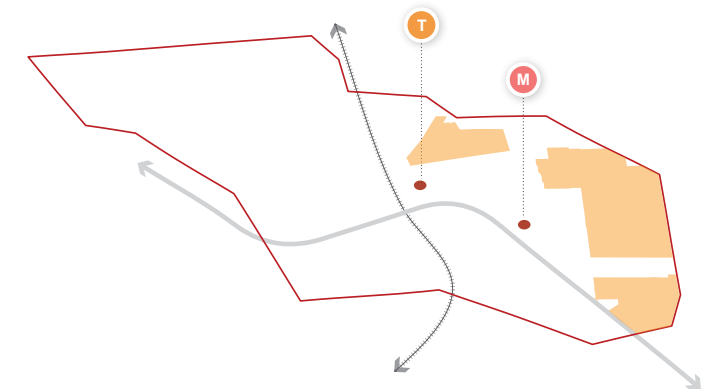
Through height and bulk, St Leonards is to be read as the predominant centre to reinforce its commercial role and Crows Nest as secondary to reinforce its role as a lifestyle destination. Large developments are to be located between St Leonards Train Station and Crows Nest Metro Station along the Pacific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

3. Maintain Willoughby Road and Conservation Areas



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.

4. Reduce Impact on Heritage Conservation Areas



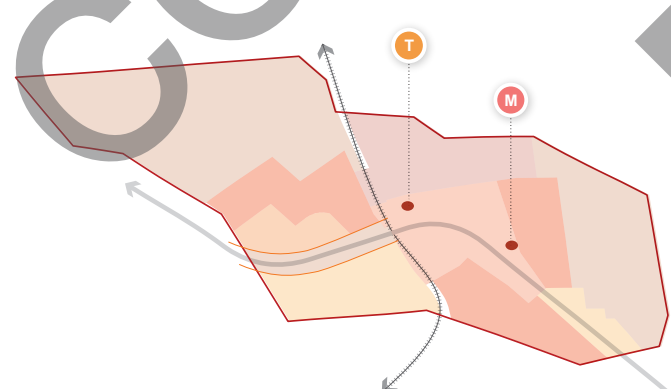
Similar to Willoughby Road, the Heritage Conservation Areas are to be protected. Proposed developments are to ensure minimal overshadowing, and avoid unreasonable visual impact to the public domain or private open spaces of dwellings within the Heritage Conservation Areas.

5. Expand Open Space Network and Protect Amenity



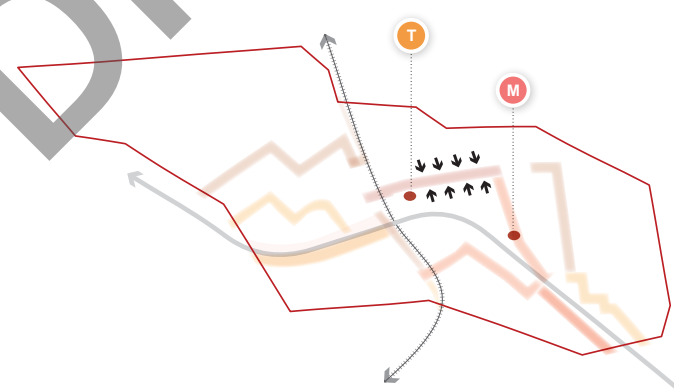
Find opportunities to provide additional open space in the Precinct. Proposed developments are not to cause unacceptable overshadowing to any key existing or proposed public open spaces.

6. Response to Character Area



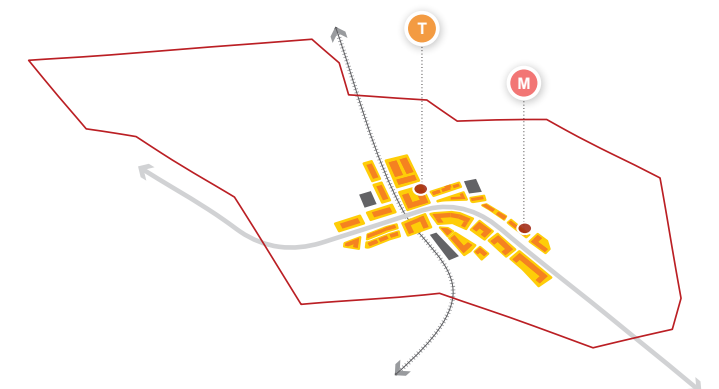
Proposed developments must respond appropriately to the built form character of the sub-precinct, including height, bulk and scale, as well as the character areas and existing and proposed uses.

7. Transition between Character Areas



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

8. Fine Grain Approach



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

Concept

3.2 Concept Overview

The St Leonards and Crows Nest Precinct is made up of a number of adjoining activity areas, each with unique characteristics.

The primary concept is to establish a series of focal points within the Precinct that are connected by an expanded green network of open spaces, active frontages and vibrant environments. 10 key priorities and actions for the Precinct include:

- 1. Increase the amount of open space and plazas.
- 2. Improve pedestrian and cycle connectivity.
- 3. Preserve character of Willoughby Road.
- 4. Improve activity offering within the Precinct core including a mix of retail, restaurants and services.
- 5. Expand mixed-use development along Pacific Highway around and between St Leonards Station and Metro.
- 6. Encourage expansion of RNSH sub-precinct with appropriate master planning and provide for some expansion of health/medical uses into the fringe Artarmon Industrial Precinct.
- 7. Consolidate commercial development around St Leonards and Crows Nest Station.
- 8. Retain Artarmon industrial sub-precinct and encourage higher order urban services in the Herbert and Frederick Street area.
- 9. Protect the heritage character of Naremburn Conservation Area.
- 10. Protect the heritage character of Holtermann Estate Conservation Area.

Legend

	Precinct Boundary
	Council Boundary
	Activity Nodes
	Create Network of Plazas
	Create Network of Open Spaces
	Activity Focus
	Focus of Employment
	Precinct Core
	Health and Education Precinct
	Crows Nest Village
	Pedestrian Connection
	Pacific Highway
	Rail Corridor

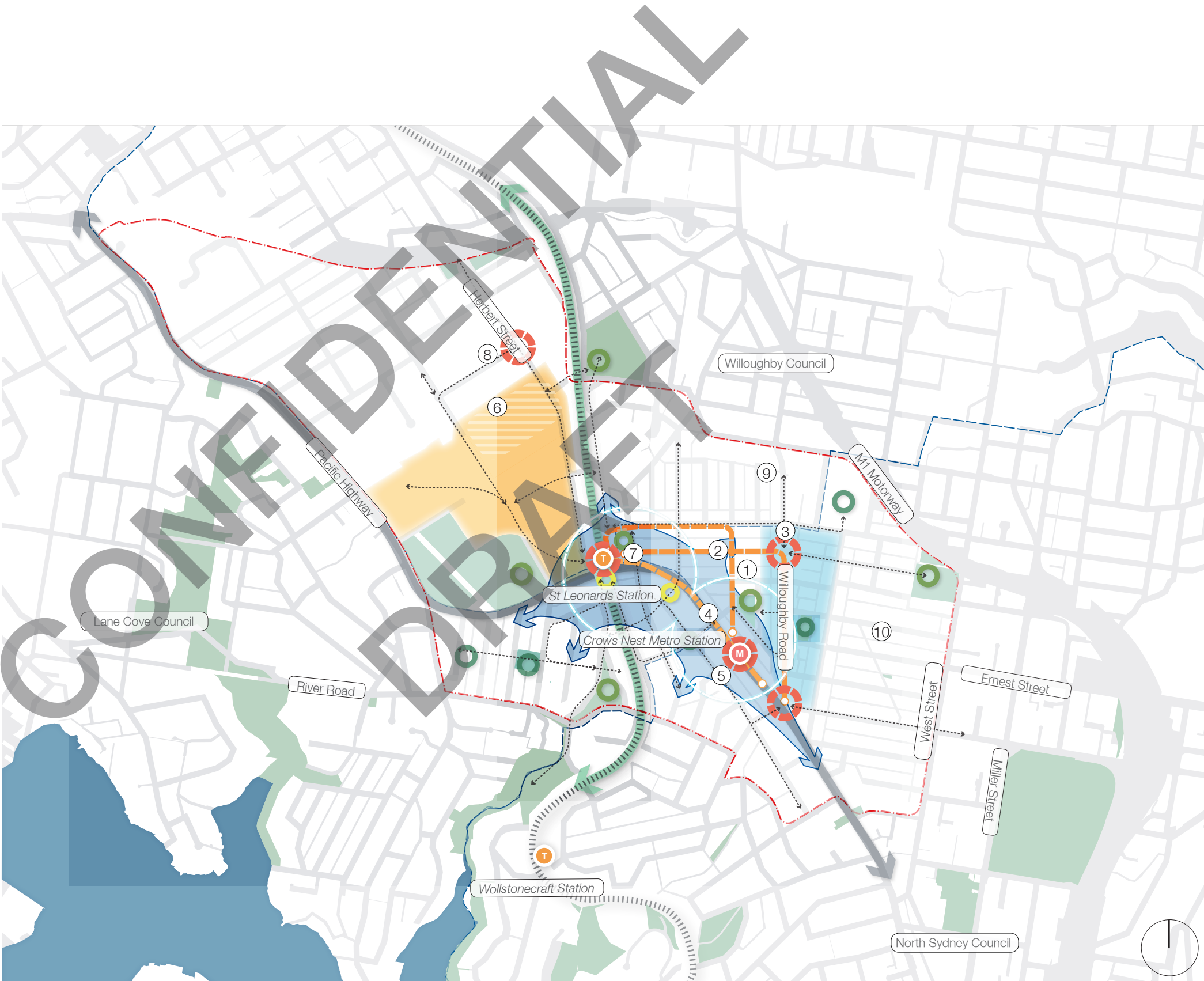


Figure 1.1.22 Precinct Concept Overview

Concept

3.3 Character Areas

The Precinct is made up of a number of activity centres that have their own unique character, role and function. Each area's characteristics will be reflected in the built form, public domain, land uses, and activities being retained, enhanced and proposed.

There is also an opportunity to better integrate the various character areas, particularly within the core of the Precinct between Willoughby Road, Crows Nest Metro Station and St Leonards Station. This can be achieved through a coherent public domain strategy and activation of key streets and spaces between destinations and transport hubs.

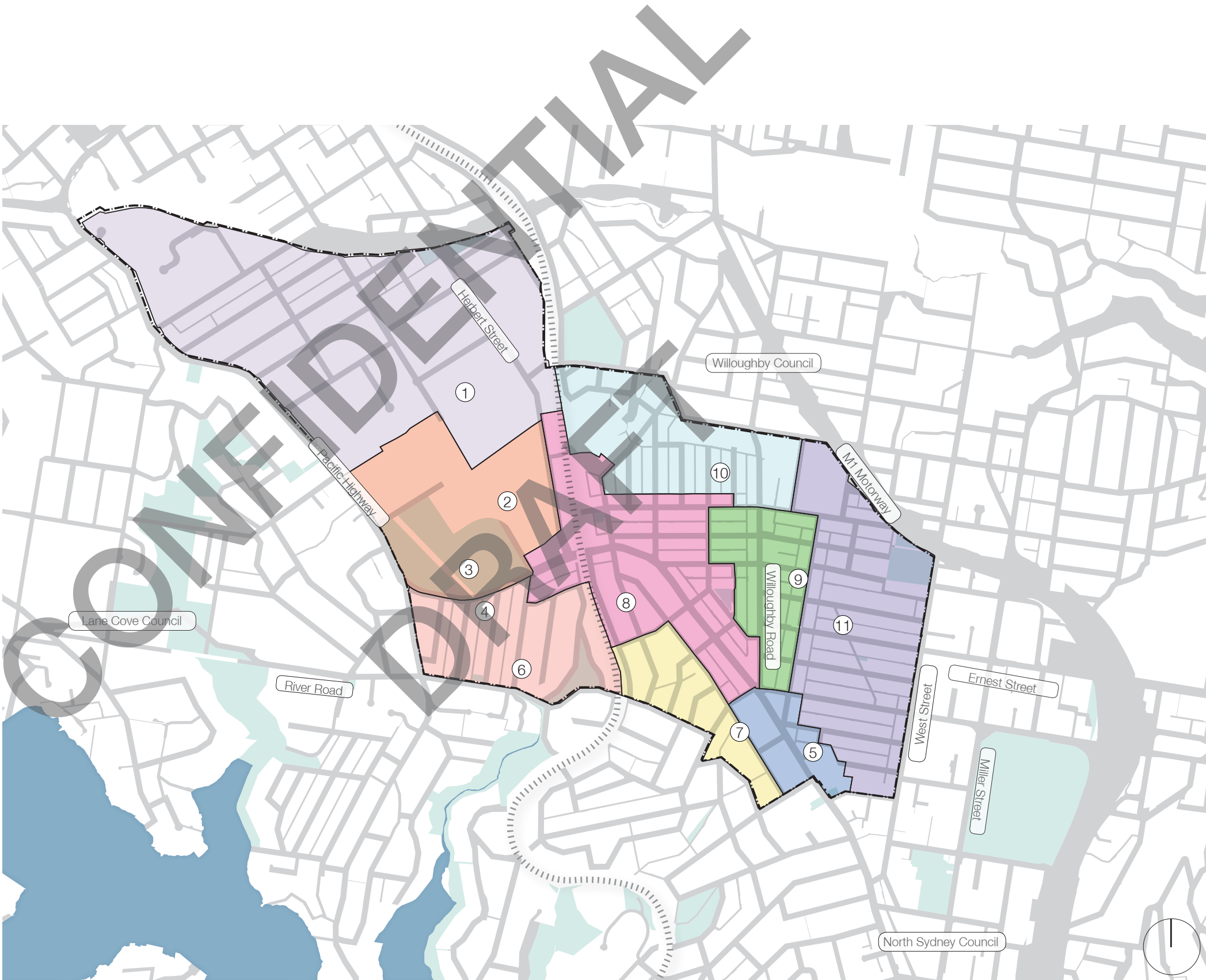
In terms of built form character, careful consideration has been given to existing conservation areas and urban fabric that contributes to the special qualities of a place (i.e. Willoughby Road). The intensity and density of built form is focused in the areas immediately surrounding the station stations, and along the Pacific Highway corridor, where development is already at its greatest. The transitioning of built form between these areas of intensity and between characters has also been reflected through the specific approaches to built form and public domain design.

The character areas identified across the precinct include;

- 1. Artarmon Employment
- 2. Health & Education
- 3. Gore Hill Oval & Cemetery
- 4. Pacific Highway Corridor South-East
- 5. Residential (St Leonards South)
- 6. Residential (Wollstonecraft)
- 7. St Leonards Centre and Crows Nest Station
- 8. Crows Nest Village
- 9. Residential (Naremburn)
- 10. Residential (Crows Nest)

Legend

— Precinct Boundary



3.4 Desired Future Character Statements



St Leonards Centre/Crows Nest Metro

1. Support compact mixed use urban form along Chandos Street, while providing a sensitive interface to the Naremburn Conservation Area.
2. Provide a strong commercial offering and a wide range of activities to support an 18-hour cycle (including night time economy)
3. Expand the Mitchell Street green link south of Pacific Highway
4. 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

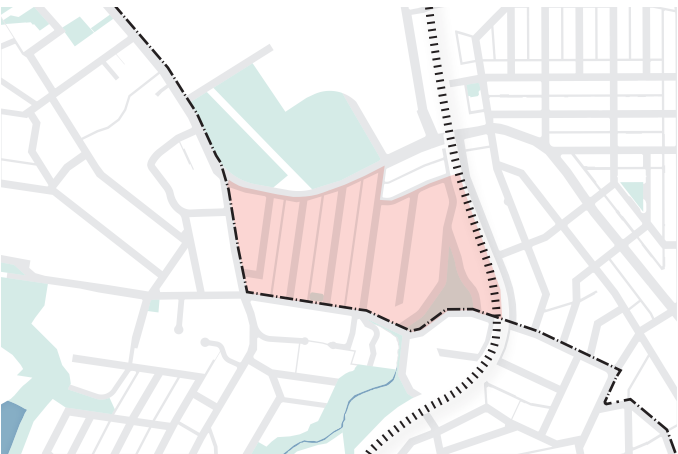
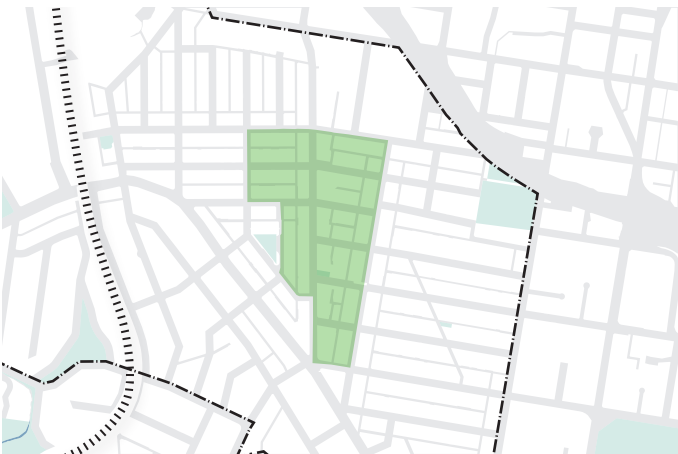
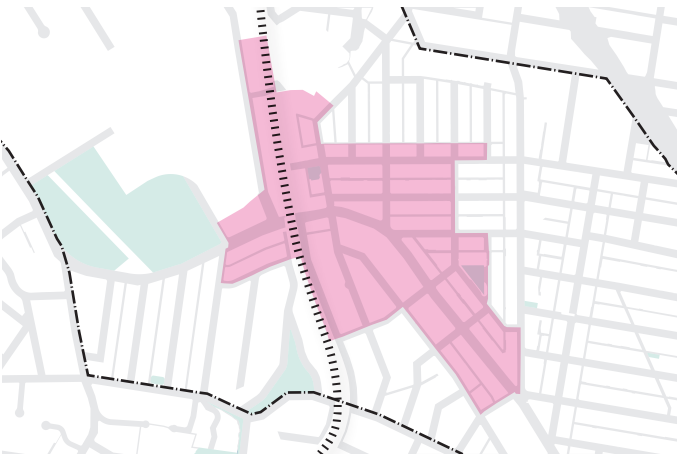
1. Retain the existing fine grain character of the Village/Willoughby Road area.
2. Sensitively transition development from Willoughby Road to ensure appropriate solar access and visual character is maintained
3. Support the continuous growth of active shop fronts and quality public domain.
4. Investigate opportunities to expand Ernest Place north onto existing car parking site.
5. Explore opportunities for medium density mixed use and residential development north of Albany Street, which adequately responds to the existing fine grain character of the area.

St Leonards South

1. Support the development of St Leonards South at appropriate densities through the St Leonards South Masterplan.
2. Focus higher density development in the north east, within close proximity to public transport.
3. Maintain view sharing and solar amenity by stepping development down from Pacific Highway to River Road.
4. Reinforce the existing north-south connections.
5. Investigate opportunities for improved east-west connections through St Leonards South Masterplan, including links to Newlands Park.
6. Protect existing heritage items within the area.

Artarmon Employment Area

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



Concept



Health and Education Precinct

1. The Health and Education Precinct is to evolve and reinforce St Leonards role as a major service and employment centre.
2. Investigate opportunity for new school at TAFE site to accommodate future enrolment demand.
3. Expansion of health precinct into fringe of Artarmon for allied services.
4. Improve north-south pedestrian connections from Artarmon through to St Leonards.
5. High priority for Health NSW to develop new master plan for the site to accommodate future growth and service provision.
6. Consider development of key worker housing and office accommodation between Reserve Road and Herbert Street.

Naremburn and Crows Nest Residential

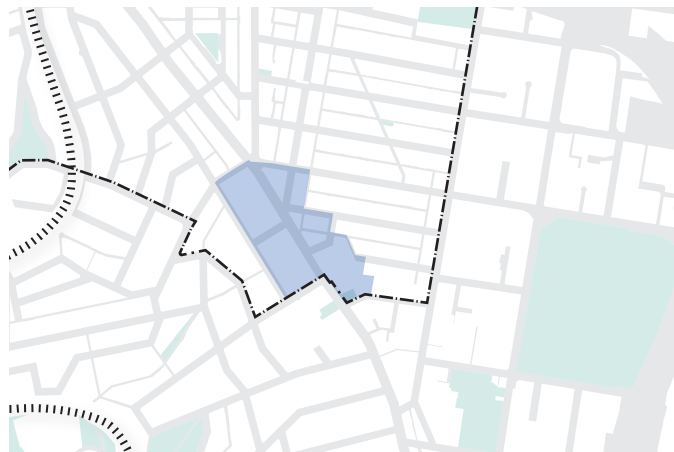
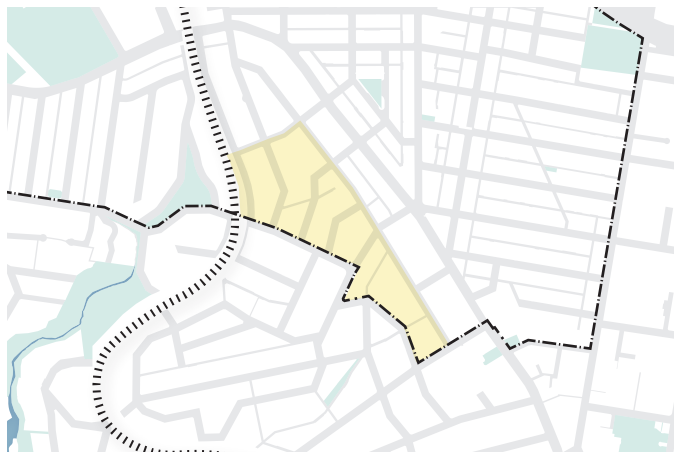
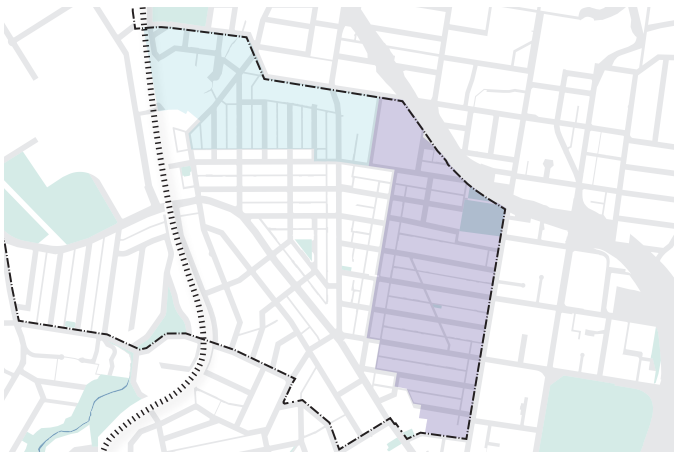
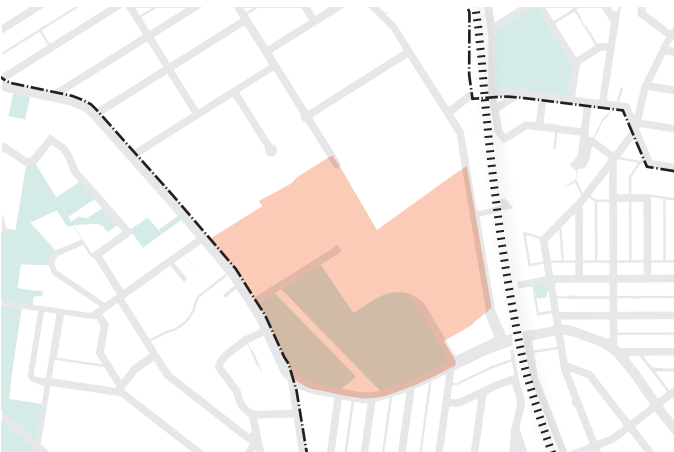
1. Protect and maintain the heritage conservation character of Naremburn and Holtermann Estate Conservation area.
2. Ensure both areas retain a largely low scale residential character with leafy streetscapes
3. Opportunity for low-medium density and mixed-use residential along Willoughby Road (north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

Wollstonecraft Residential

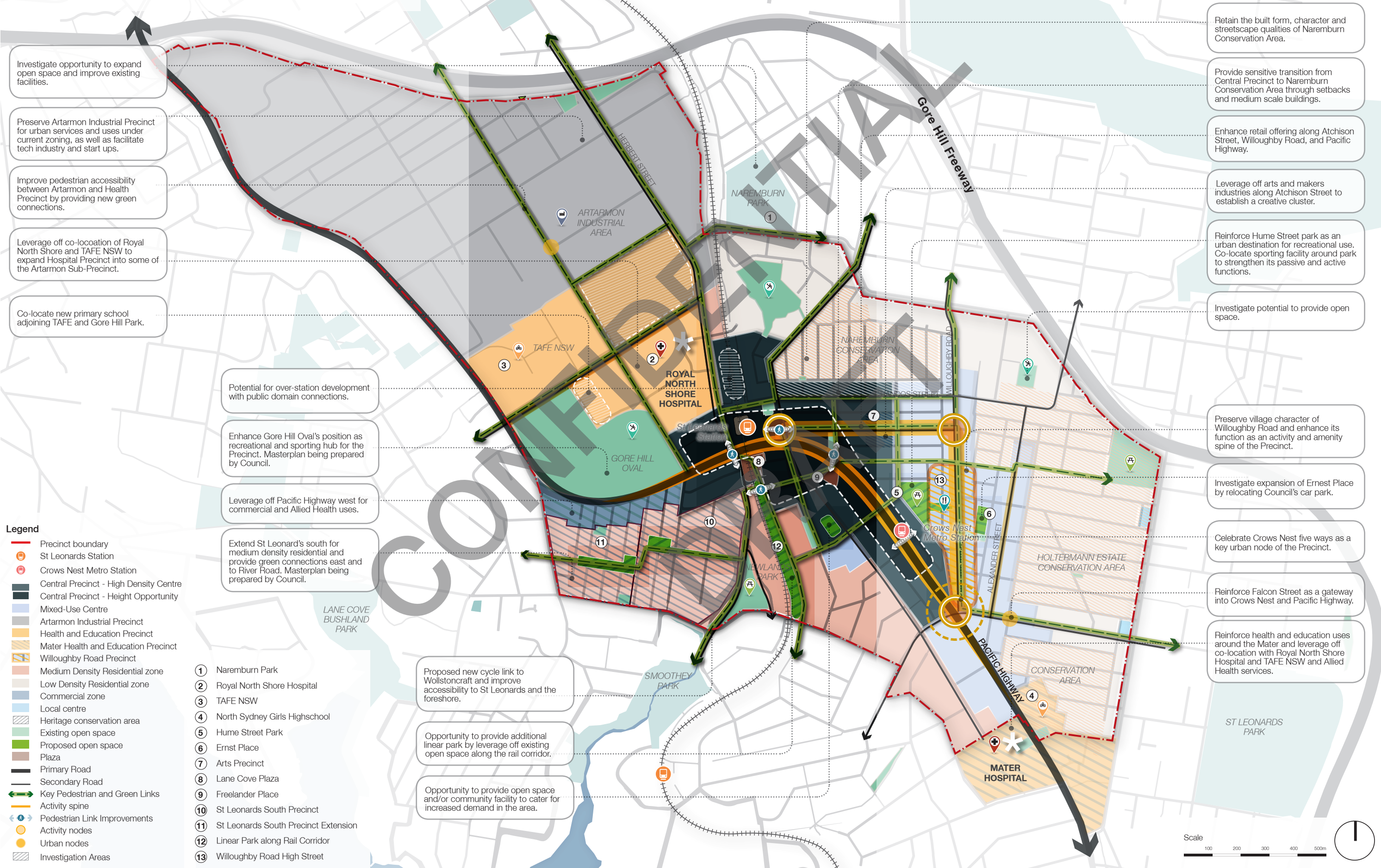
1. Protect and maintain the existing urban fabric of Wollstonecraft.
2. Allow opportunities for a mix of medium density and townhouse development.
3. Ensure future development responds to the surrounding context, considering existing views and topography.
4. Reinforce the landscape character of this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

Pacific Highway South

1. Explore opportunity for higher density development north towards St Leonards and Crows Nest Metro Station.
2. Potential mixed use and commercial development opportunities exist towards Crows Nest Five Ways, but within a scale and form that respects the grain of existing shop fronts and responds to the surrounding built form character at, and adjacent to, the intersection.
3. Explore opportunities for linking uses to the Mater Hospital.



3.5 St Leonards and Crows Nest Land Use Infrastructure and Implementation Strategy



3.6 Central Precinct Plan

Legend

	Precinct Boundary
	Proposed Open Space
	Investigation Open Space Area
	Existing Open Space
	Green Connections
	Asymmetric Streets
	New Setbacks
	Pedestrian/Laneway Connections
	Proposed Cycleway (On-street Separated)
	Proposed Cycleway (Off-street)
	Opportunity for Height (Primary)
	Opportunity for Height (Secondary)
	New/Improved Pedestrian Crossings
	Precinct Gateways
	Location for Community Facilities
	Location for Library
	Key Activity Streets
	High Density Centre
	Potential Hospital Expansion Zone
	Sensitive Transition Zone
	Active Frontages

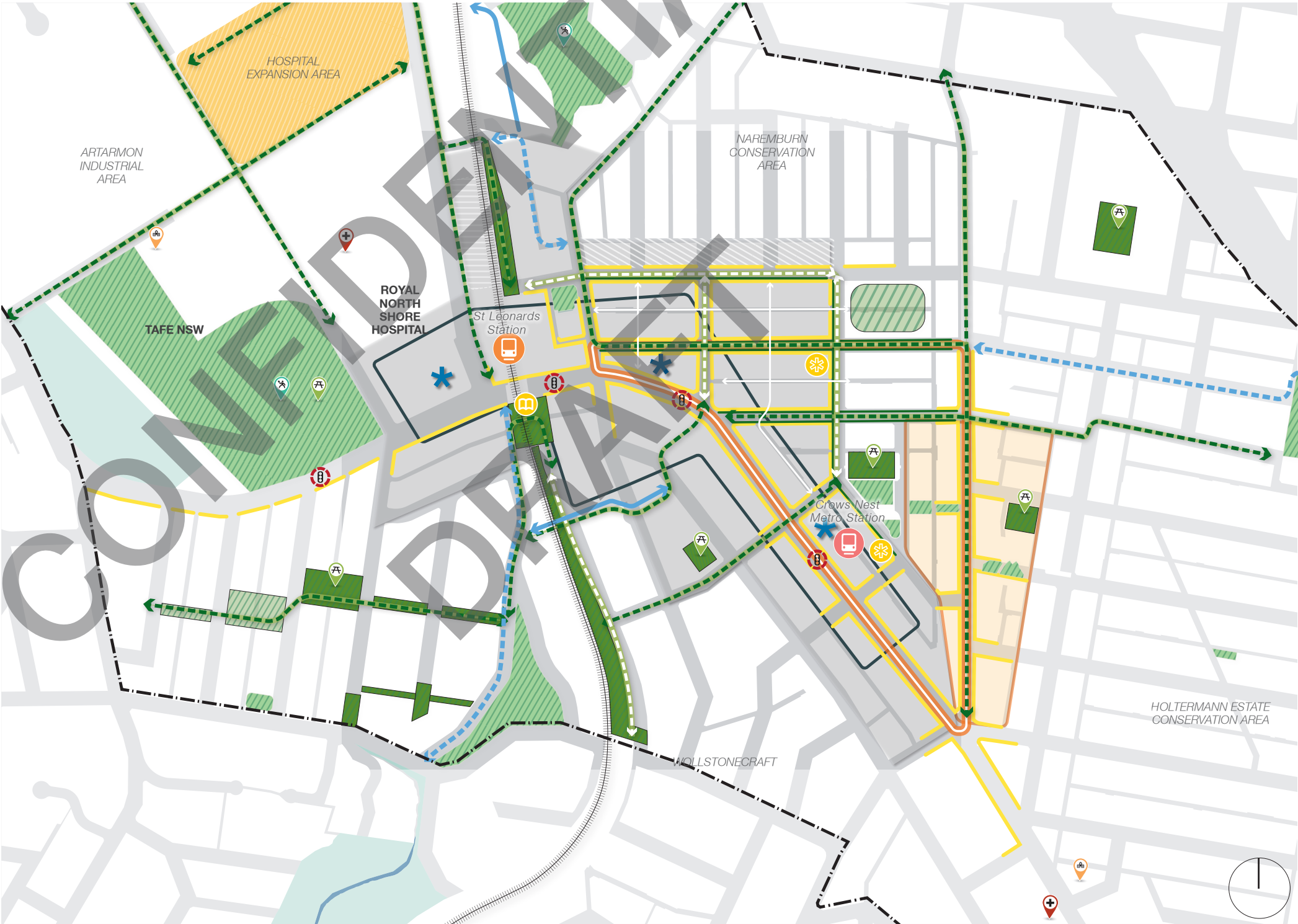
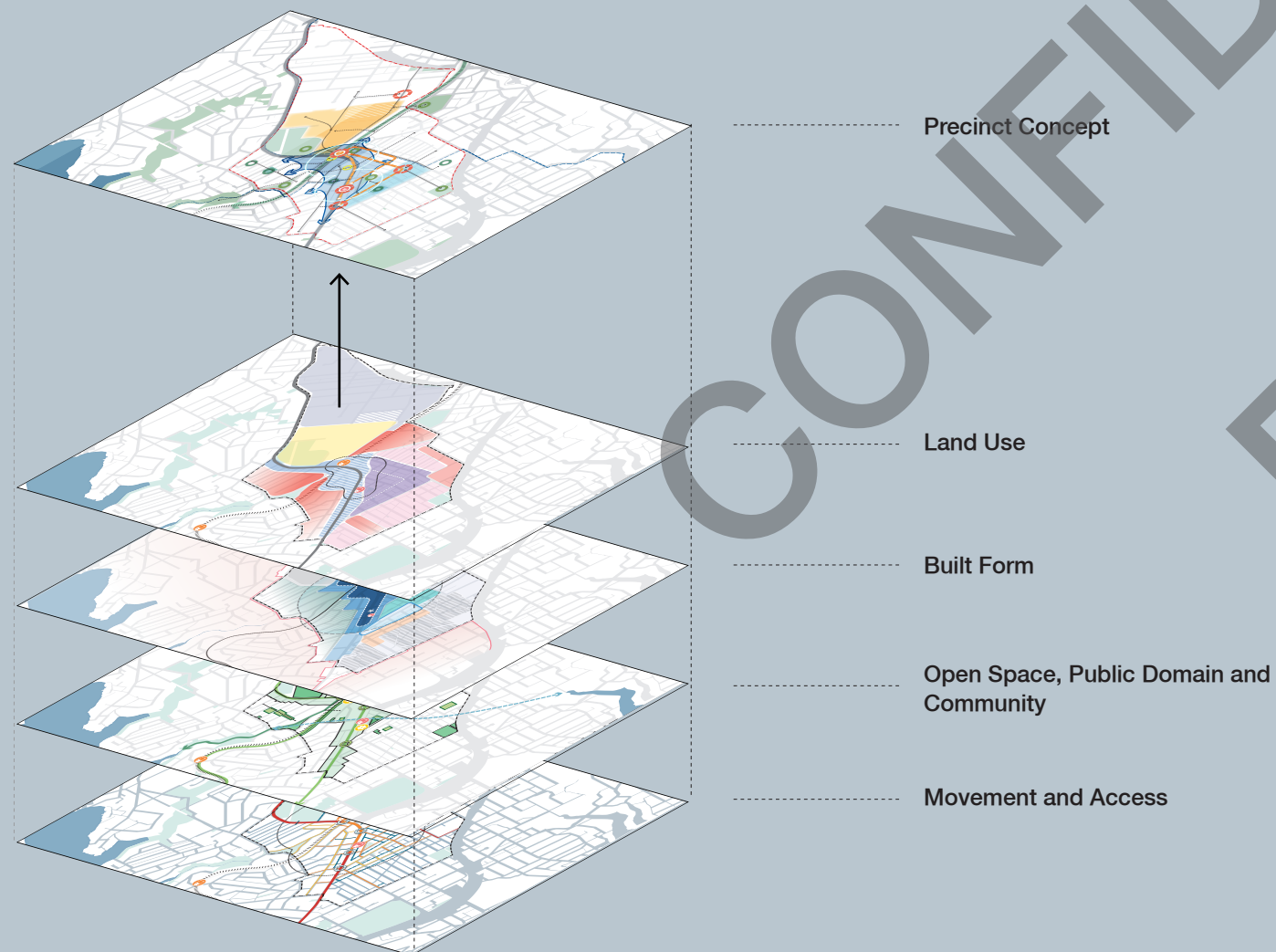


Figure 1.1.23 Central Precinct Plan

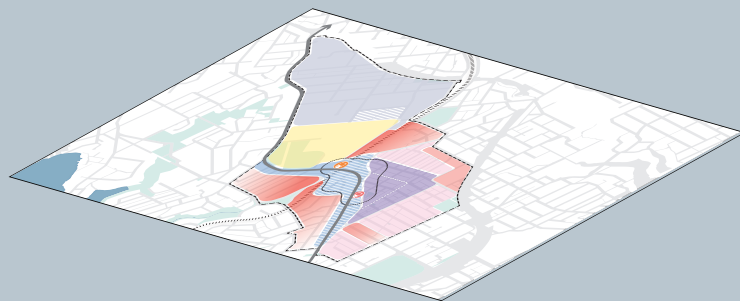
Structure Plans

This section identifies how to deliver the key concept and vision for The Precinct. These have been distilled into Structure Plans relating to **Land Use**, **Built Form**, **Open Space, Public Domain and Community**, and **Movement and Access**.



Land Use

The Land Use Structure Plan identifies different land use priorities for the Precinct including opportunities for employment, housing and activity.



Structure Plans

5.1 Land Use Principles

Ensure that buildings contribute to the life and Place of the Precinct

Buildings should provide visual interest and respond to function of the surrounding street through facade articulation and active ground floors.

Create an exciting, safe and memorable experience for pedestrians in the Precinct

Activation of the ground plane is key to creating a pedestrian focused environment. Active frontages can provide an enhanced connection to buildings and increase safety through passive surveillance and street activity.

This can be achieved through measures such as traffic calming, low vehicle speeds and clearly identified pedestrian linkages, crossings, arcades and laneway.

Reinforce and preserve the significance of heritage within the Precinct

New development should embrace the local built form heritage of the area by embracing building elements and treatments that reflect and celebrate their character.

Allow for flexibility and build in the ability for ground floors to adapt to future changes

Ground floors should be designed to respond to changing user needs by enabling a robust ground floor layout.

Ensure buildings contribute to the life of the Precinct



Create an exciting, safe and memorable experience for pedestrians



Reinforce and preserve the significance of heritage in the Precinct



Build in the ability for ground floors to adapt to future changes



Structure Plans

5.2 Land Use Structure Plan

The proposed land use structure plan seeks to facilitate the following outcomes:

- 1. Ensure high-density mixed use developments incorporate appropriate commercial floor space between St Leonards Station and the proposed Crows Nest Metro Station.
- 2. Protect the fine grain character of Naremburn Conservation Area and Holtermann Estates.
- 3. Encourage renewal and growth of the commercial strip along the Pacific Highway, west of St Leonards Station.
- 4. Retain and enhance the Health and Education Precinct.
- 5. Retain the primary function of Artarmon Employment Area as one of the regions key population serving precincts for essential urban services.
- 6. Potential medium-high density residential development in St Leonards South with strong focus on transition to existing residential neighbourhoods.
- 7. Expand mixed use activities east towards Willoughby Road to a sensitive scale and form with appropriate transition.
- 8. Allow for medium density residential development along Willoughby Road, north of Chandos Street.
- 9. Allow for some future expansion of hospital precinct into Artarmon Employment Area.
- 10. Alternatively, allow for Evolution of higher order/high tech industrial urban services.

Legend

	Precinct Boundary
	Precinct Core Area
	Commercial Core
	Commercial Core/Mixed Use
	Mixed Use
	Education and Health Infrastructure
	Hospital Expansion
	Industrial
	High Density Residential
	High Density Transition
	Medium Density Residential
	Low Density Residential
	Pacific Highway Corridor

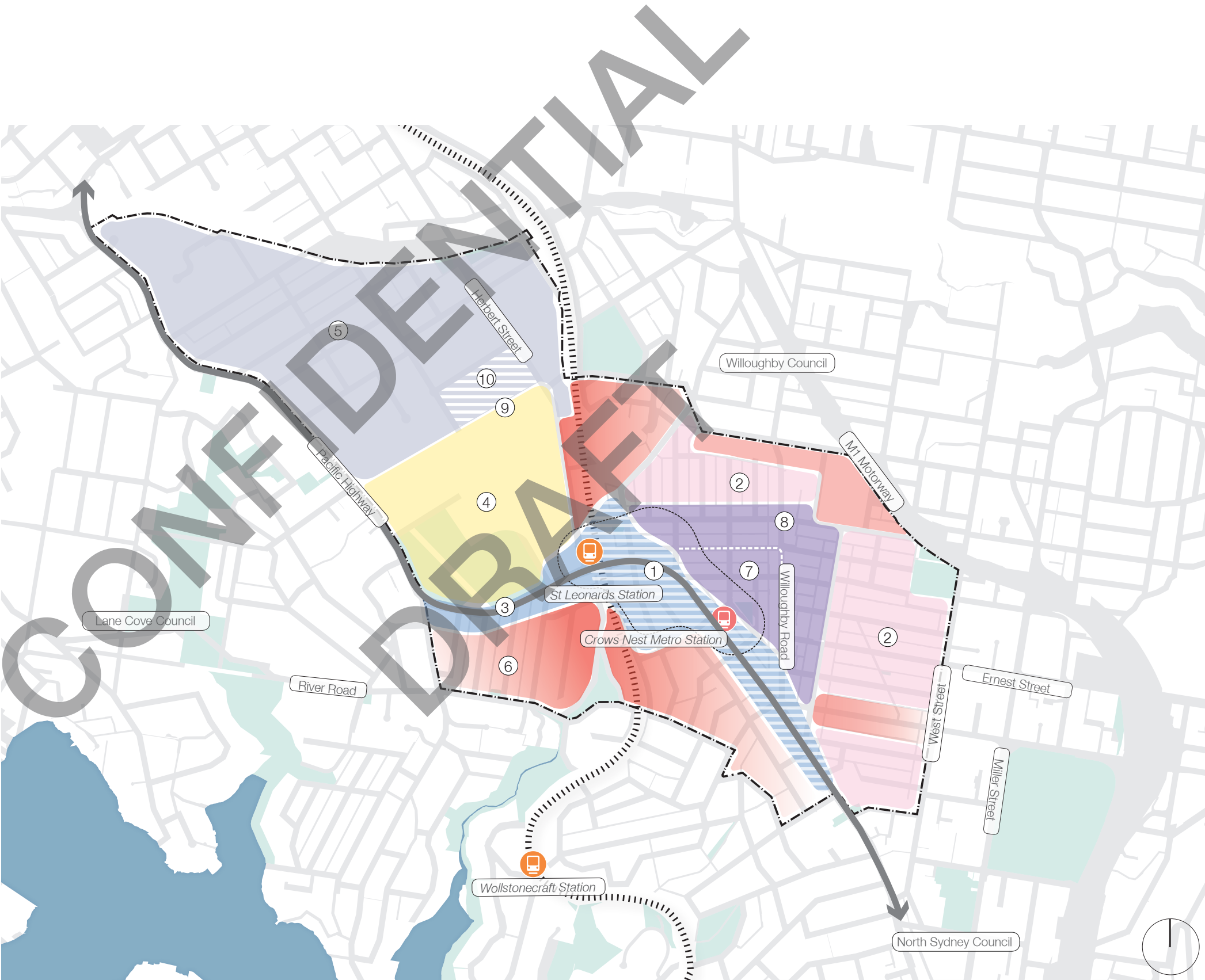


Figure 1.1.25 Land Use Structure Plan

Structure Plans

5.3 Land Use Priorities



Commercial and Employment Considerations

- The SGS study indicates that St Leonards will receive below market share of commercial floor space in the region.
- Condition - Primarily C and D grade office blocks.
- Commercially constrained viability to redevelop stand alone commercial. Increase from \$550 to at least \$700 per square metre would be required.
- Lot sizes will have implications for the size of commercial floorplates.
- Need to preserve floorspace for future employment needs.

Centre Core

Ensure delivery of 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

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



Residential Considerations

- Residential development should demonstrate high feasibility.
- Development needs to provide good access and enhanced public benefit/amenity.
- Residential and mixed-use developments must demonstrate provision of affordable housing target of 5%, consistent with the GSC Draft District Plans.

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.

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) with apartment buildings should seek to achieve the objectives of SEPP 65.



Health and Industrial Considerations

- Large floor plates required for medical and education institutions, located north of RNSH.
- Allied health sector may evolve along the Pacific Highway toward the Mater Hospital.
- Capacity for growth on RNSH and TAFE sites.
- Artarmon West primarily industrial uses.
- Herbert Street and Frederick Street area evolving industrial, communications, IT and warehouse activity.

Health, Education and Transport Infrastructure

Public sector administration, transport corridors and interchanges, health services, police services that are currently established within the Precinct.

Industrial and Business Development

Provide essential service industry and urban support to the area and wider region. Land use facilitates car service and repair; joinery, construction and building supplies; and domestic storage. Typically does not interfere with the amenity of the neighbourhood via pollution.



Retail Considerations

- Poor amenity for employees, lack of retail and after hours activities.
- Reinforce the retail character of Willoughby Road.
- Activity along Atchison, Chandos and Albany Streets need to be enhanced and diversified.
- Activity along Pacific Highway needs to respond to the form and function of the movement corridor.

High End Retail

High end retail provides a wide range of products to consumers. High end retailers are generally associated with popular and iconic local and international brands.

Standard Retail

Standard retail 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 Retail

Boutique and artesian retailers are 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.

Structure Plans

5.4 Non-Residential Floor Space - Concept

The following diagram depicts the non-residential floor space concept for the Precinct.

The focus of employment is located between St Leonards and Crows Nest Metro, along the Pacific Highway.

This will be supported by a contiguous provision of employment along the Pacific Highway Corridor south and west.

Focus of employment becomes less intense as land becomes further away from Pacific Highway to respond to the fine grain retail of the surrounding areas, such as Willoughby Road.

Artarmon Employment Area will continue to provide employment as a result of its industrial and business development zones.

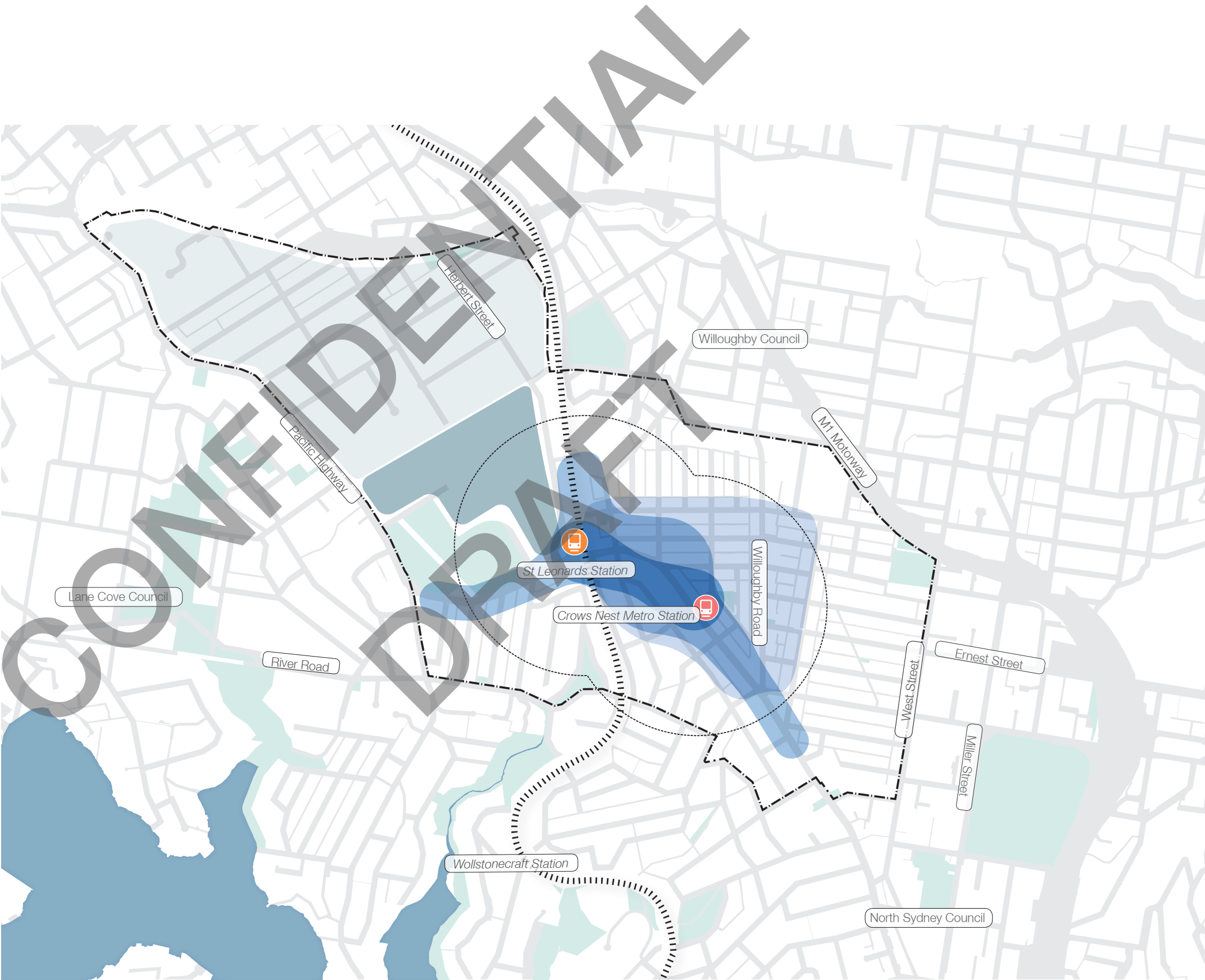
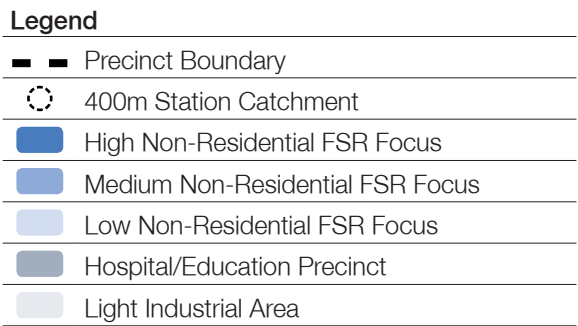


Figure 1.1.26 Commercial Floor Space Ratio Concept Diagram

Structure Plans

Distribution of Floor Space

Figure 1.1.27 depicts the proposed non-residential FSR distributed across the Precinct on sites that are likely to redevelop by 2036.

The FSR on these sites, if redeveloped, would deliver the High Job Target set by the GSC. Non residential FSRs will also be applied to sites that are not likely to redevelop in the short term in order to safeguard employment within the Precinct beyond 2036.

- Designation of FSR has taken the following into consideration:
- High FSRs located at St Leonards Station along Pacific Highway and gradually taper off towards the proposed Crows Nest Metro Station.
 - Sites with the greatest FSRs (>8) generally reflect the existing commercial floor space on each site
 - Medium FSRs located south of Pacific Highway and west of St Leonards Station.
 - Low FSRs located along Willoughby Road to retain existing streetscape retail character.
 - Sites that redevelop must provide at least the non-residential floor space currently existing on the site.

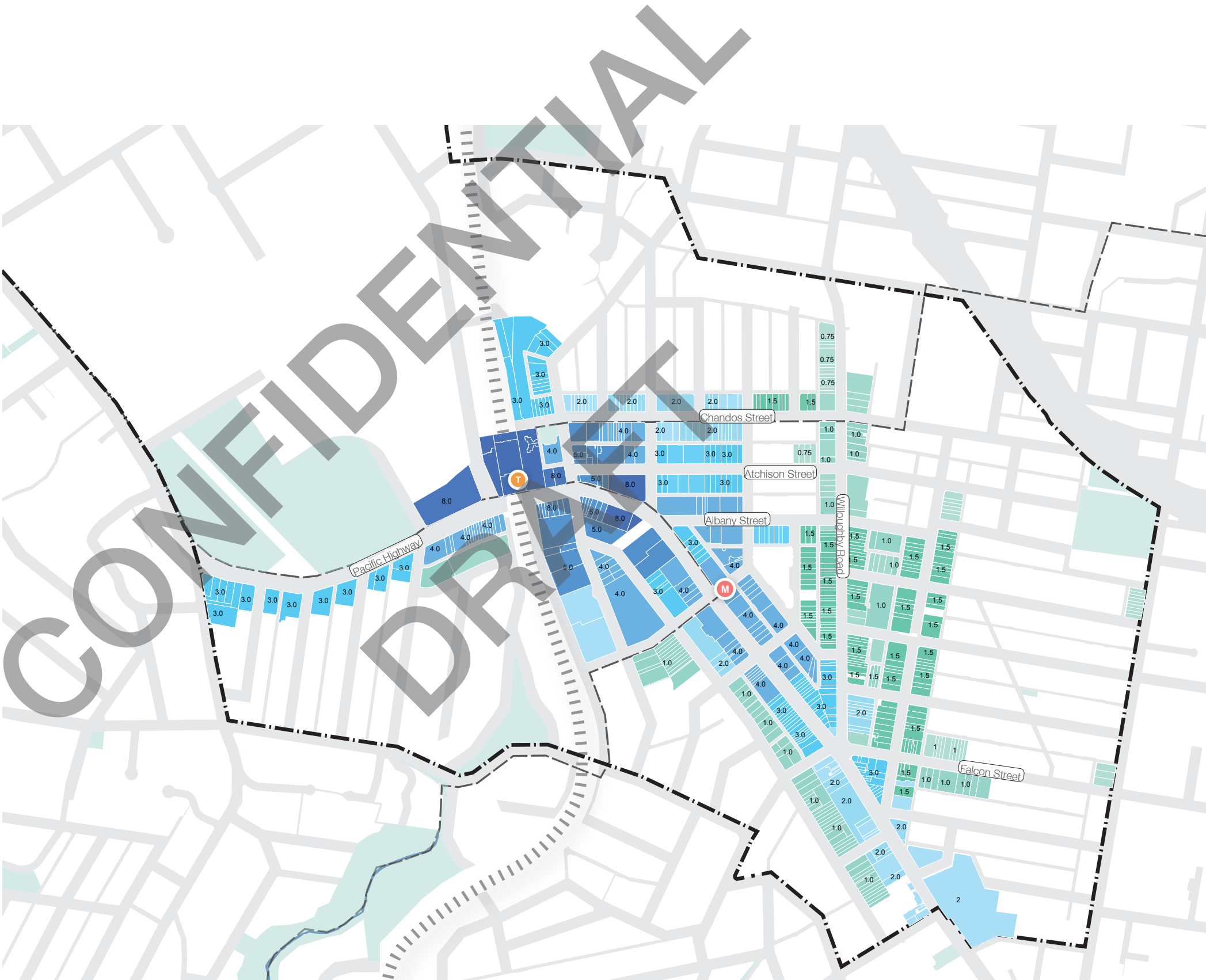
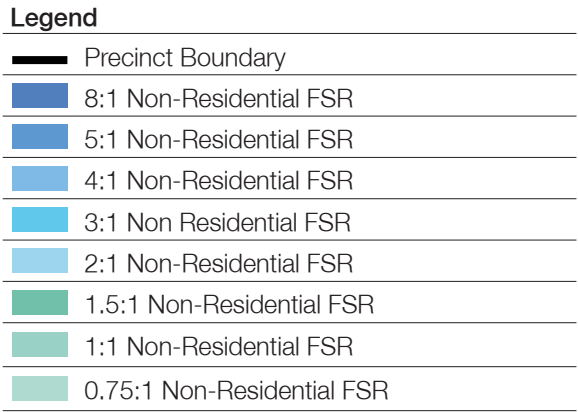


Figure 1.1.27 Distribution of Commercial Floor Space Ratio Diagram

Structure Plans

Activity

The Precinct has four key activity areas, promoting different activities and services that will support the future commercial and residential areas. This will provide focus points within key activity areas.

- 1. St Leonards Centre and Atchison Street
- 2. The Forum to Crows Nest Metro Station
- 3. Crows Nest (Willoughby Road)
- 4. Artarmon (Herbert Street/Frederick Streett)

Legend

Precinct Boundary

Train Station

Proposed Metro Station

400m Station Catchment

St Leonards/Pacific Highway Activity Area

Willoughby Road High Street

Emerging Activity Area

Spillover Activity Area

Local Residential Catchment

Activity Area Gateway/Junction

Immediate Industrial/Employment Area

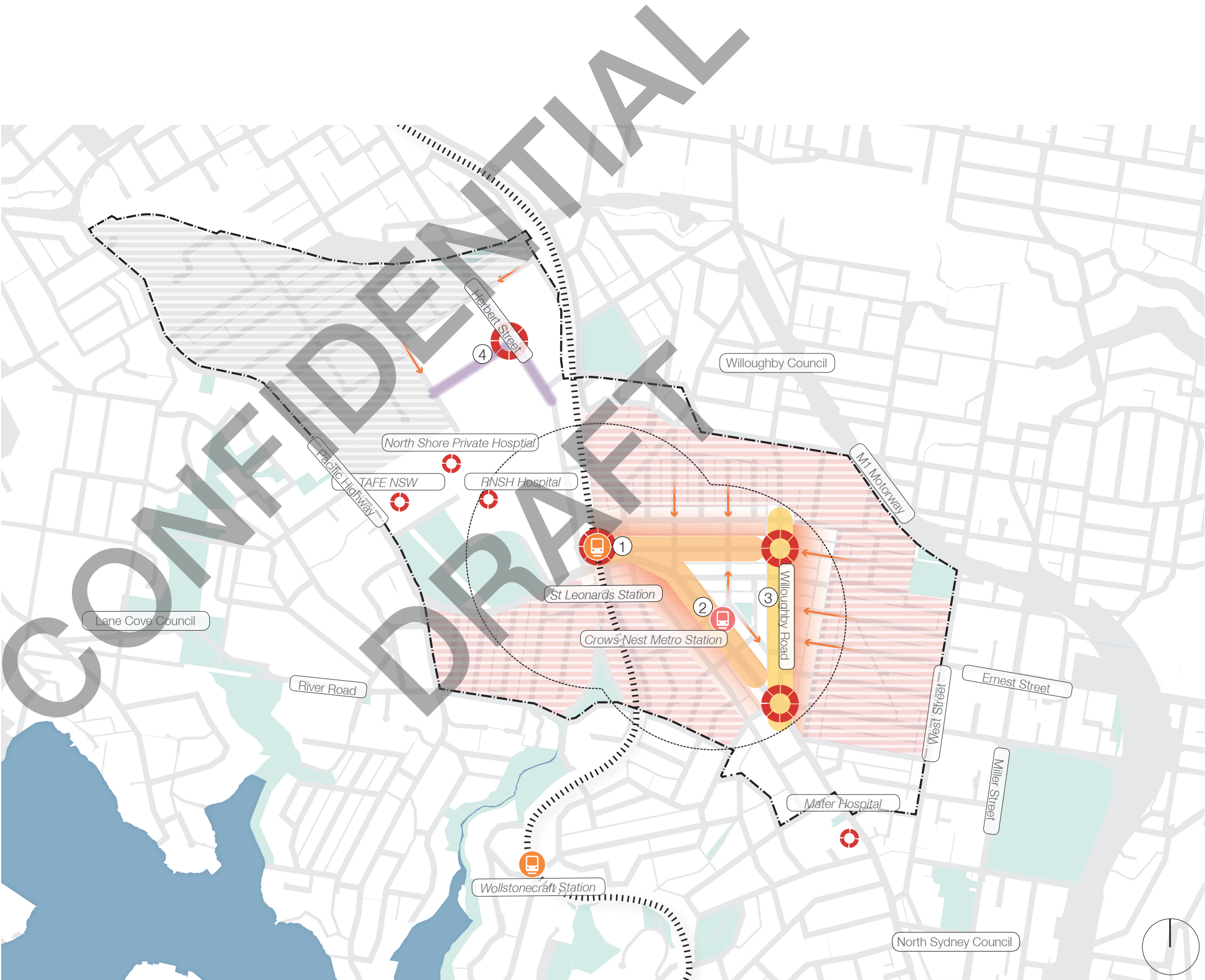


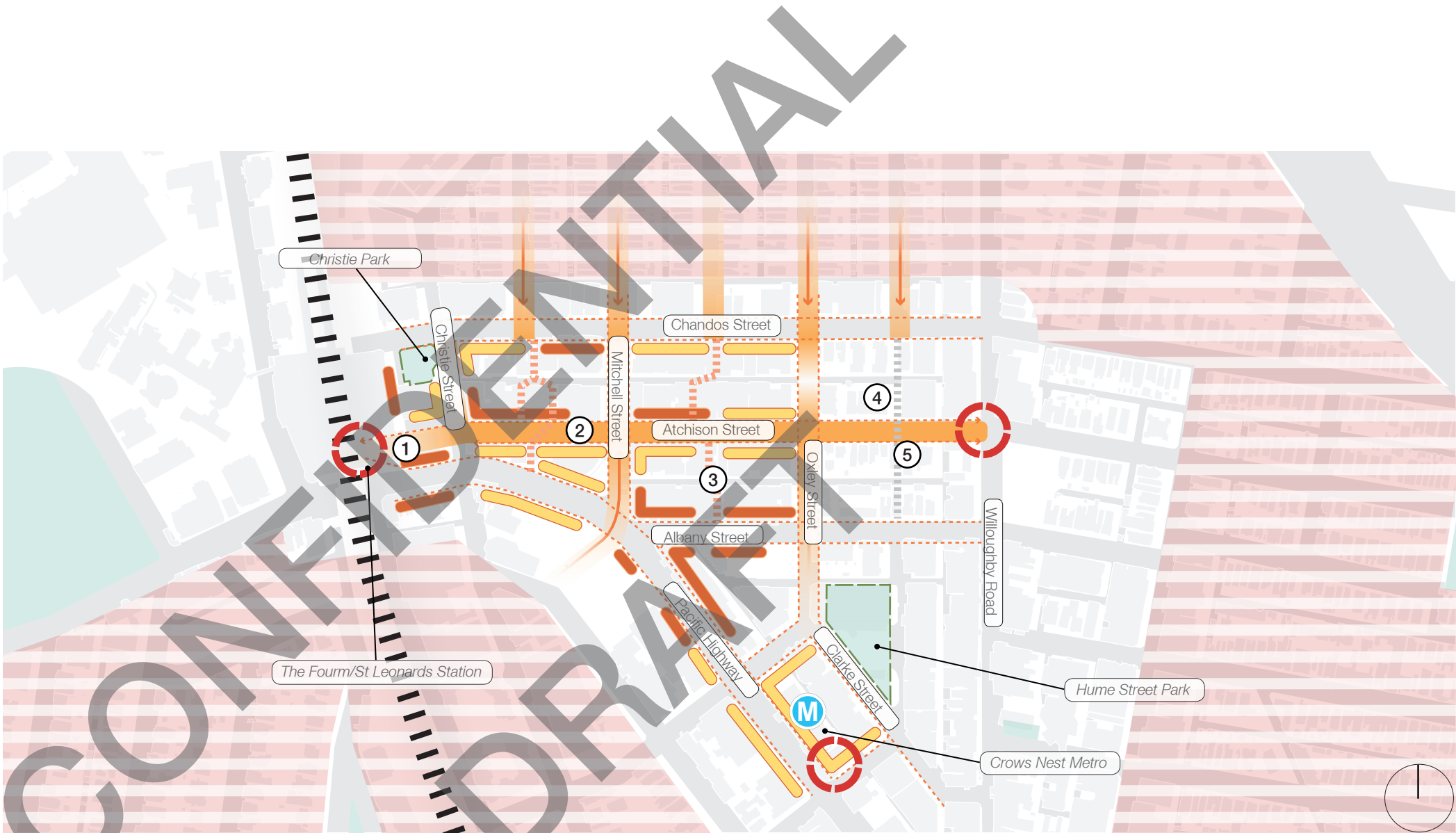
Figure 1.1.28Activity Diagram

Structure Plans

St Leonards Centre

Recommendations

- 1. Concentrate new retail and activity primarily along Atchison Street, The Forum and Oxley Street, and outwards into the surrounding street network including Chandos Street, Christie Street, Mitchell Street and Albany Street.
- 2. Pathways between two main attractors (The Forum and Atchison Street) and linkages to the train station and bus interchange are to be enhanced to prioritise pedestrian traffic in these areas.
- 3. Opportunity for Atchison Street to become an Eat Street and link up with Willoughby Road.
- 4. Opportunities to provide site links and pedestrian laneway activity between Chandos Street and Albany Street.
- 5. Leverage off the existing arts precinct to support the establishment of craft and makers through flexible ground floor spaces.



① Interchange Node



② Pedestrian Priority



③ Laneway Activity



④ Eat Street



Legend

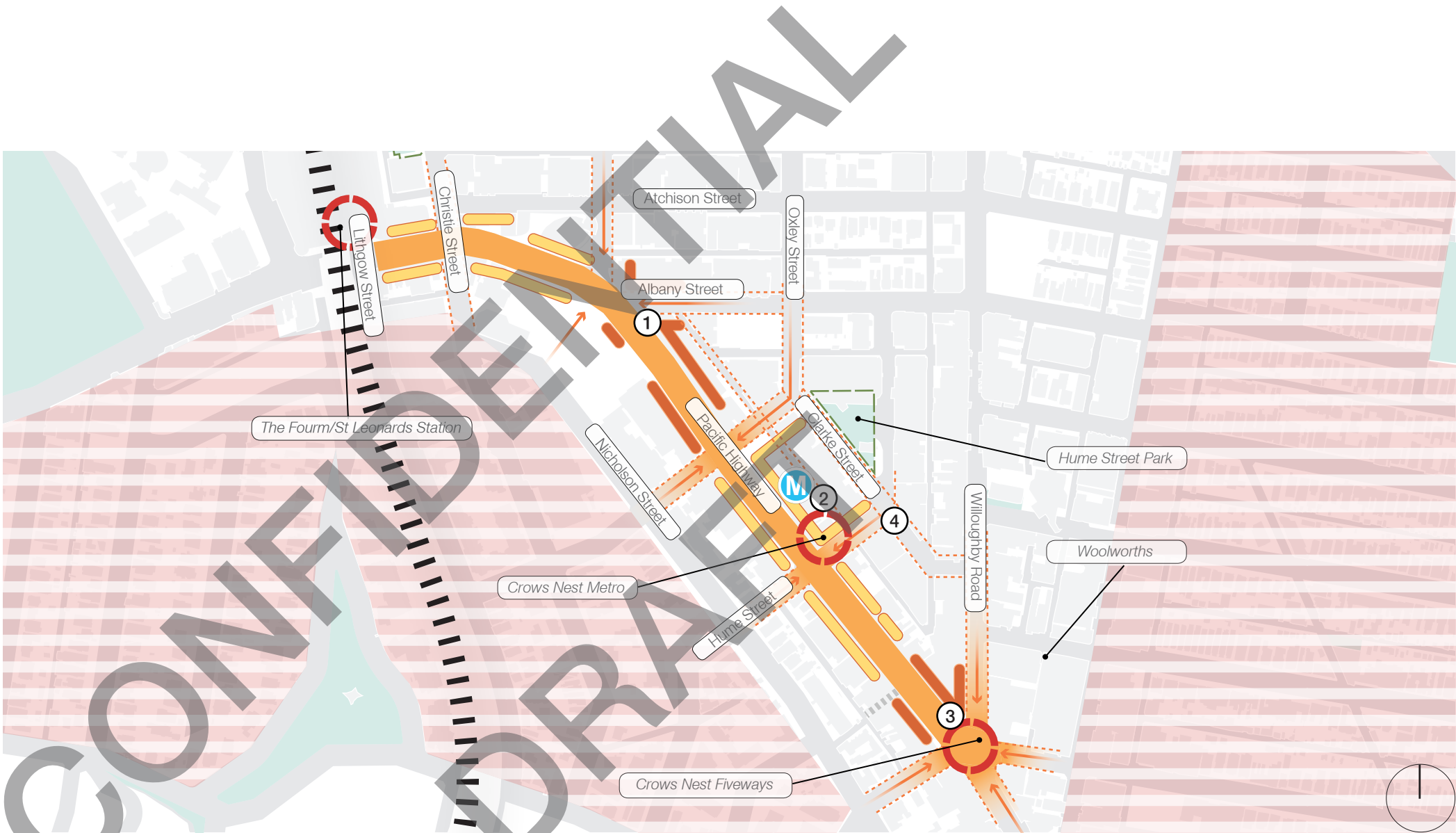
	Activity Area Gateway/Junction
	Existing Active Frontage
	Proposed Active Frontage
	Laneways/Site Through Links (Identified)
	Laneways/Site Through Links (Proposed)
	Active Streets
	Surrounding Low Density Residential

Structure Plans

The Forum to Crows Nest Station

Recommendations

- 1. Provide an improved activity experience along Pacific Highway, without compromising on its transport function by widening footpaths and articulated frontages where appropriate.
- 2. New retail and dining clusters on Hume Street and Oxley Street to leverage off the location of the proposed Crows Nest Metro Station.
- 3. Establish Crows Nest Five Ways as a gateway into the Precinct, supported by a range of retail, services, cafés and restaurants linking to Willoughby Road.
- 4. Improve linkages from Willoughby Road and Clarke Lane to the proposed Crows Nest Metro including activated laneways, and/or arcades where appropriate.
- 5. Explore opportunities for pedestrian crossing across highway at Metro.



① Improved Retail Experience



② Activity Cluster



③ Laneway Activity



④ Improve Linkages



Legend

	Activity Area Gateway/Junction
	Existing Active Frontage
	Proposed Active Frontage
	Laneways/Site Through Links (Identified)
	Laneways/Site Through Links (Proposed)
	Active Streets
	Surrounding Low Density Residential

Structure Plans

Crows Nest

Recommendations

- 1. Boutique retail activities are to be concentrated along Willoughby Road, with Clarke Street, Hume Street, Falcon Street, Oxley Street and Atchison Street supporting the flow of pedestrian traffic to the proposed Crows Nest Metro Station.
- 2. Improve connections from Willoughby Road to Hume Street Park through Council's planned expansion.
- 3. Improve pedestrian experience along side streets and laneways with the introduction of boutique crafts and retailers with small floor plates.
- 4. Future development is to ensure active shop frontages are consistent with the prevailing character of the area and provide appropriate treatments for glazing, facade depth, articulation, width and openness.



① Boutique Retail



② Pedestrian Priority



③ Laneway Activity



④ Maintain Scale



Legend

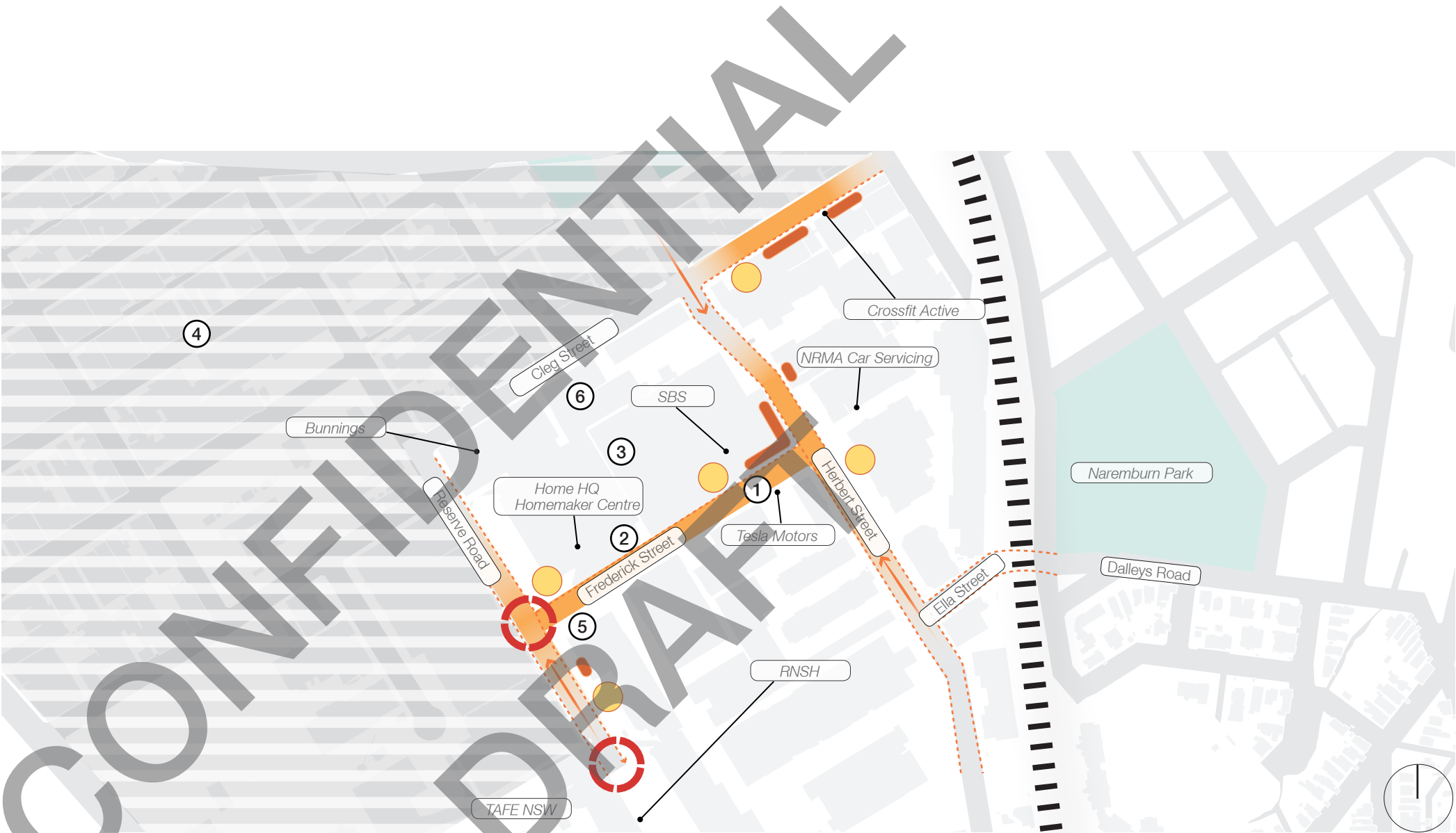
	Activity Area Gateway/Junction
	Existing Active Frontage
	Proposed Active Frontage
	Active Streets
	Surrounding Low Density Residential

Structure Plans

Artarmon Industrial Area

Recommendations

- 1. Activities should be concentrated along Herbert Street, Frederick Street and Reserve Road.
- 2. Opportunities to enhance ancillary retail, leisure and dining in this area, with appropriate setbacks and landscaping treatments to provide a comfortable interface between busy roads and noise.
- 3. Indoor recreation activities and sports facilities should also be expanded in this area.
- 4. Ensure the Atarmon Industrial Area maintains a primary role in promoting the delivery of urban services and industrial related employment.
- 5. Opportunity for retail offering to be ancillary with emerging industries within the area. For example, Archie Rose Whisky Distillery in Roseberry.
- 6. Provide opportunity for this area to evolve into higher order/high tech industrial urban services uses in line with the current IN2 zoning.



① Adaptive Reuse



② High Order Industrial



③ Warehouse Conversion



④ Preserve Character

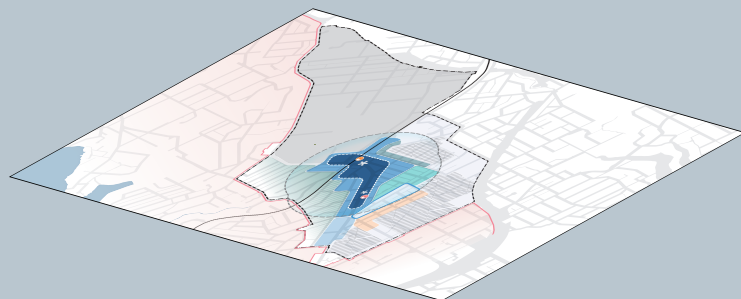


Legend

	Activity Area Gateway/Junction
	Existing Active Frontage
	Proposed Active Areas
	Immediate Industrial/Employment Area
	Active Streets

Built Form

The Built Form Structure Plan identifies proposed heights within the Precinct including consideration of setbacks and street walls, solar amenity, sensitive areas and transitions.



Structure Plans

5.5 Built Form Principles

Height and Density Transitions

Different building heights and typologies should facilitate good access to public infrastructure and open space. Density should generally reduce further from public transport hubs and adjacent to open spaces or significant sites, to create a transition of height and scale and minimise visual impact.

Height and density needs to sensitively respond to the character of surrounding conservation and low character areas, particularly to the north along Henry Lane, and to the east towards Willoughby Road. This includes protection of solar amenity, views and privacy.

Landscape and Topography

Landscape and topography can impact the visibility, delivery and appropriateness of density. While it might provide the opportunity to provide views or provide significant density without significant impact on its surrounds, it can also provide access, servicing and streetscape quality difficulties.

The Precinct offers a unique opportunity to connect the various character areas around St Leonards Centre together through a network of green streets, plazas and landscape improvements.

Heritage Character and Streetscape

Heritage character and streetscape are key considerations for the delivery of additional density.

The scale and articulation of conservation areas should be interpreted to provide an appropriate site specific response on in-fill sites, particularly within the conservation areas, Willoughby Road and in St Leonards South.

New residential development should provide a mix of dwellings

The mix of dwellings proposed should respond to the housing need of the local area. A mix of dwelling types provides housing choice and supports equitable housing access.

This includes consideration of mix of dwellings in St Leonards south to respond to the low density character of the area. Low-medium density mixed use along Willoughby Road north of Chandos Street and high density in St Leonards Centre towards Crows Nest Metro.

Height and Density Transition



Landscape and Topography



Heritage Character and Streetscape



Residential Mix



Structure Plans

5.6 Built Form Structure Plan

- 1. Retain High Density in St Leonards Centre**
High density mixed use, incorporating commercial and residential should be concentrated around and between Crows Nest Metro and St Leonards Station. High density development should be located on both sides of Pacific Highway and around the stations to enable appropriate density in close proximity to public transport.

2. Protect the Fine Grain of Willoughby Road
Height will gradually transition to low scale development towards Willoughby Road, ensuring the low scale and fine grain character of the “high” street is retained. High density from the St Leonards and metro areas should not be overly visually imposing on the character of the area and appropriate solar access in mid winter should be maintained.

3. Establish Transition towards Naremburn
A transition and edge of commercial, mixed use and residential built form will be located along Chandos Street, delineating the St Leonards Centre from Naremburn residential neighbourhood and heritage conservation area in the north.

4. Preserve Character of Crows Nest and Naremburn
Crows Nest and Naremburn residential areas are to retain their low scale residential character. There is opportunity for medium density mixed use along Willoughby Road, north of Chandos Street.

5. Maintain Function of Artarmon Industrial Area
Artarmon Industrial area is to retain its primary urban services function as a key employment and industry serving centre for the surrounding area and broader region.

It is proposed to evolve the health precinct into the southern fringe of the Artarmon area and also areas around Herbert Street, Frederick Street and Reserve Road. This will seek to facilitate higher order industrial/high tech uses to support evolving industry in the area.

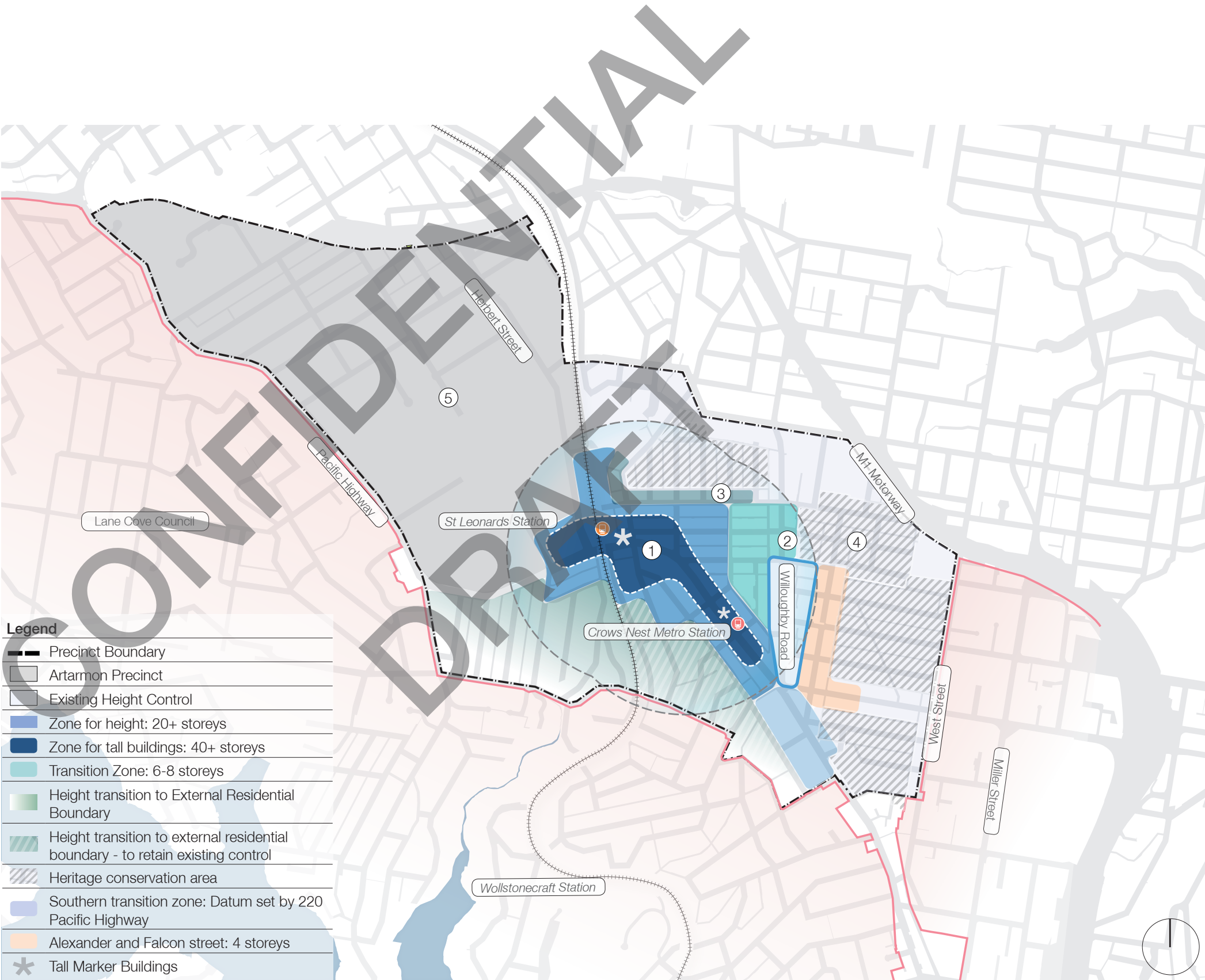


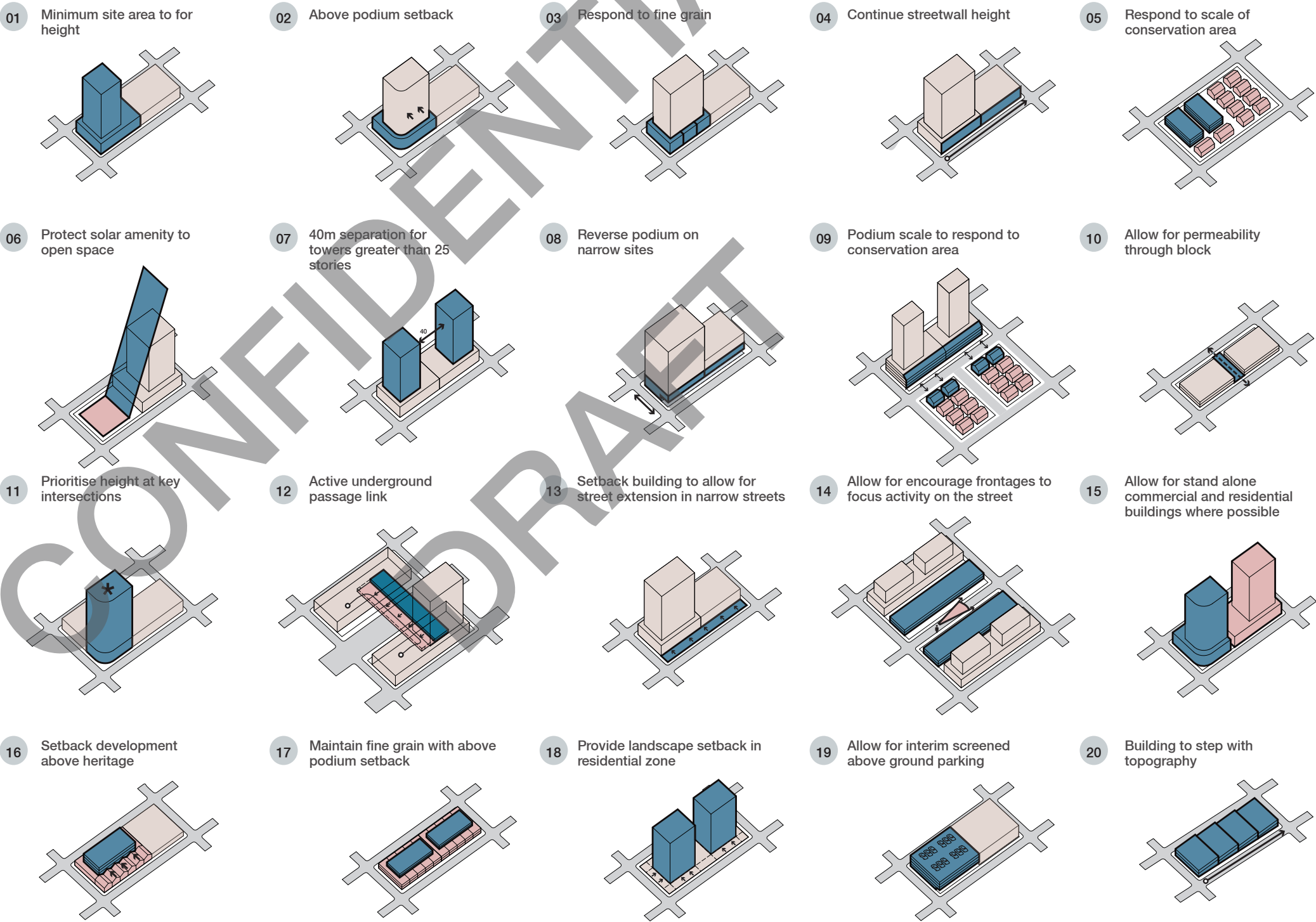
Figure 1.1.29 Built Form Structure Plan

5.7 Built Form Recommendations

The following items and accompanying diagrams identify built form recommendations and priorities to be considered as part of new developments within the Precinct to deliver objectives of the Structure Plan.

1. Towers greater than 25 stories to be considered on sites larger than 1,500m².
2. Above podium setback to be provided.
3. Respond to grain of cadastral lots.
4. Continue street wall height and minimise its length.
5. Respond to height and scale of conservation area.
6. Protect solar amenity to open space.
7. 40m separation for towers greater than 25 stories.
8. Reverse podium to narrow sites where an above podium setback can't be achieved.
9. Have podium respond to scale in edges of conservation area.
10. Allow for permeability through blocks.
11. Prioritise height at key intersections.
12. Active underground passage link to be provided adjacent to mass transit system.
13. Setback building to allow for street extension in narrow streets.
14. Allow for engaging frontages to encourage activity on the street.
15. Allow for stand alone commercial and residential buildings where possible.
16. Setback development above heritage.
17. Maintain fine grain character with above podium setback.
18. Provide landscape setback in residential zone.
19. Allow for interim screened above ground parking that could later be retrofitted into commercial use.
20. Building to step with topography.

Note: The location of land near gateways does not relate to increased height. Land in these locations needs to function and respond to the thresholds into the Precinct. This includes relating to the surrounding context and character of the area.



Structure Plans

5.8 Solar Amenity and Sensitive Areas Consideration

Solar access to key open space and existing residential areas provides guidance regarding the maximum building heights across the Precinct along with sensitive transitions to established character areas.

Built form controls have considered overshadowing of critical open spaces and surrounding low density residential areas, ensuring future envelopes do not result in additional unacceptable/prolonged impact within the time periods identified below.

The periods identified below take into consideration the nature of the open space area and the likely hours of predominant use.

Public Open Space

- | | | |
|----|----------------------|----------------|
| 1. | Christie Park | 11:00am-1:00pm |
| 2. | Newlands Park | 10:00am-2:00pm |
| 3. | St Leonards South #1 | 10:00am-2:00pm |
| 4. | St Leonards South #2 | 10:00am-2:00pm |
| 5. | Hume Street Park | 10:00am-2:00pm |
| 6. | Ernest Place | 10:00am-2:00pm |
| 7. | Gore Hill Oval | 9:00am-3:00pm |

Streetscape

- | | | |
|----|-----------------|----------------|
| 8. | Mitchell Street | 11:00am-1:00pm |
| 9. | Willoughby Road | 11:00am-2:00pm |

Aviation

- | | |
|-----|-------------------------------------|
| 10. | RL 335 (Maximum Height of Pans-Ops) |
|-----|-------------------------------------|

Residential Area

- | | | |
|-----|------------------------------|---------------|
| 11. | Conservation Areas | 9:00am-3:00pm |
| 12. | Residential outside boundary | 9:00am-3:00pm |

Legend

- | | |
|--|------------------------------|
| | Precinct Boundary |
| | Focus of Development |
| | Streetscape |
| | Open Space |
| | Conservation Area |
| | Pans-Ops |
| | Overshadowed open space |
| | Residential outside boundary |

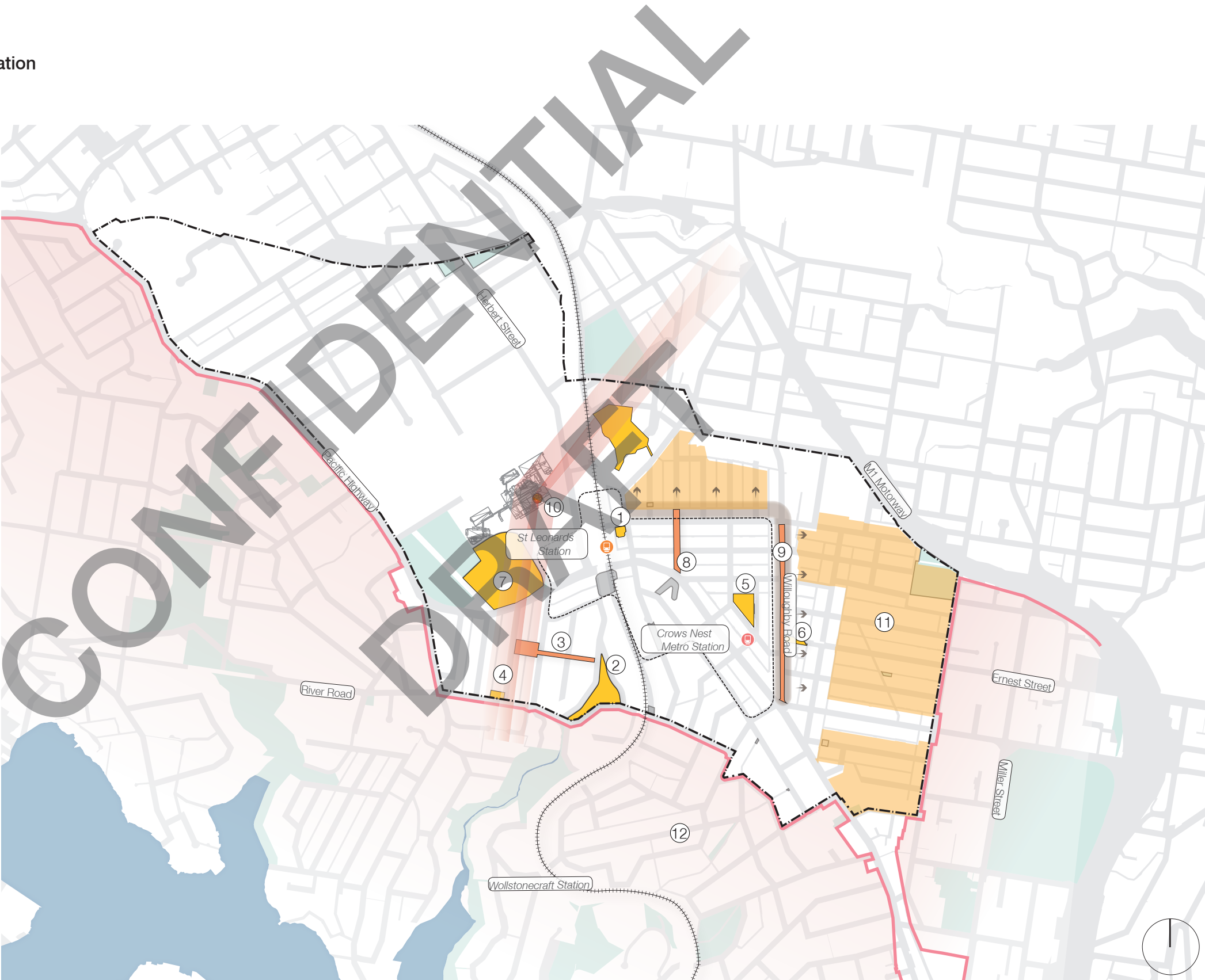


Figure 1.1.30 Solar Amenity Diagram

Structure Plans

5.9 Building Heights

Figure 1.1.31 depicts the proposed built form typology and height throughout the Precinct.

Generally taller developments are concentrated in the St Leonards Centre, and along and around the Pacific Highway between St Leonards Station and the proposed Crows Nest Metro station.

These developments will also generally require a large amount of employment (non-residential) floorspace, and where appropriate mixed use including residential development.

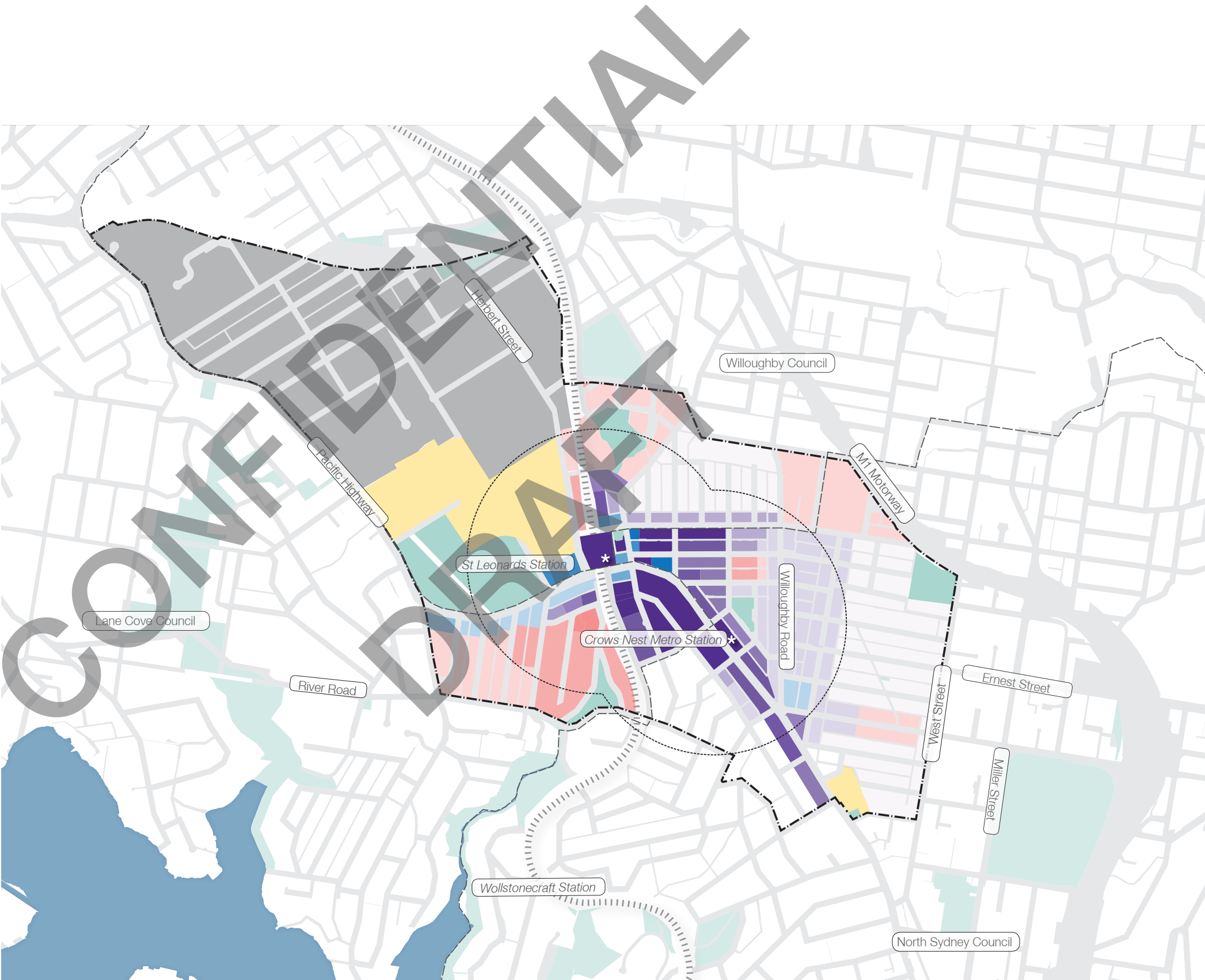
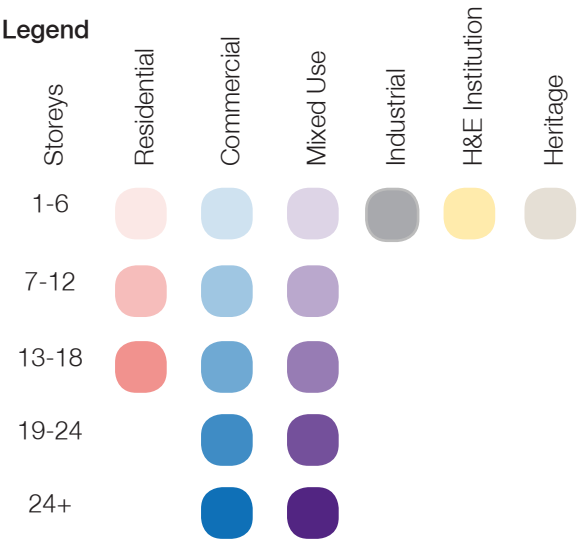


Figure 1.1.31 Recommended Building Heights Diagram

Structure Plans

5.10 Height Sections

The following sections depict the overall height strategy for the Precinct and how it relates to surrounding character areas and suburbs.

These sections effectively convey the strategic approach to height across the Precinct, taken from both north south and east west views.

Legend

Desired Height Transitions

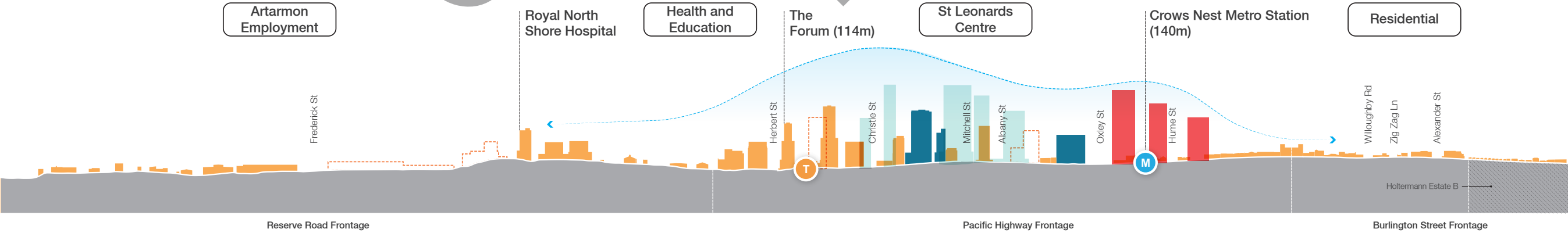
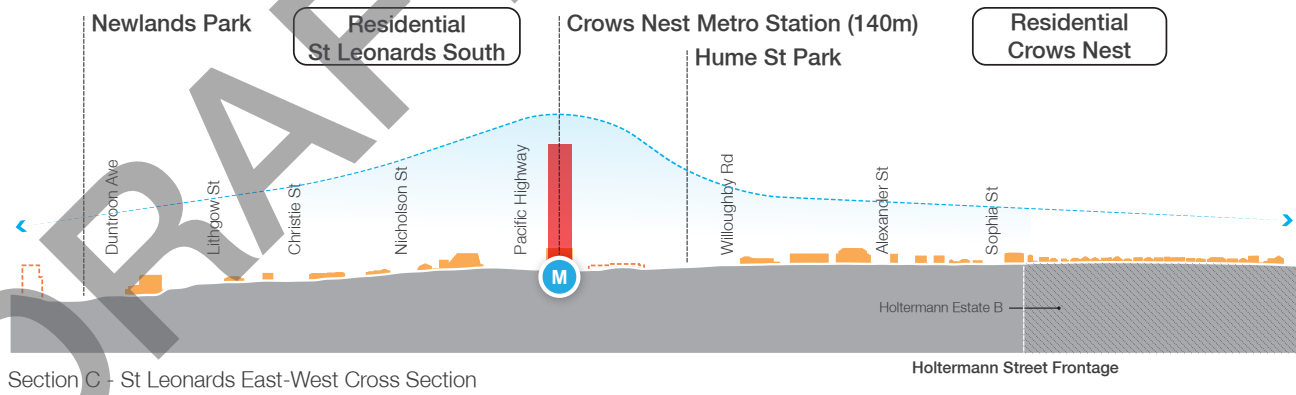
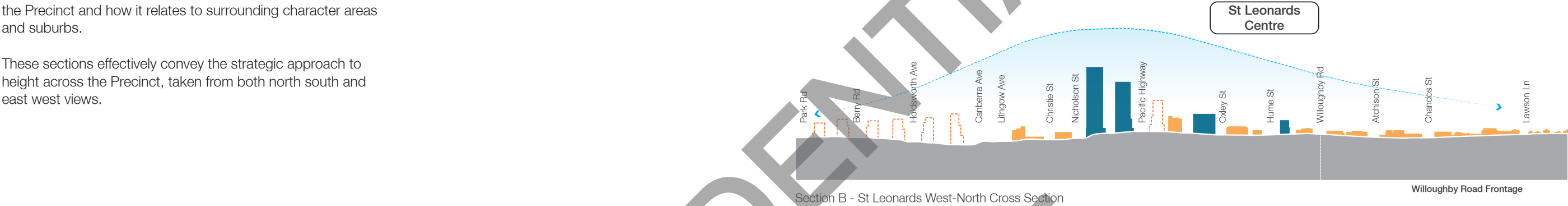
Existing Buildings

Approved Planning Proposals

Approved Planning Proposals south of Pacific Highway

Indicative Metro Site Development

Undetermined Planning Proposals



Section A - St Leonards North-South Cross Section

5.11 Proposed Setbacks and Street Wall Heights



Figure 1.1.33 Consolidated Council Setback Diagram

The proposed setbacks are located with the St Leonards Centre towards the proposed Crows Nest Metro.

3 metre setbacks have been identified on key east-west streets including Chandos, Atchison and Albany Street to facilitate wider footpaths, outdoor dining, cycleways and street trees to improve the quality of the public domain.

5 metre setbacks have been identified along Oxley Street linking to Hume Street Park and the proposed Crows Nest Metro to facilitate a green connection and potential cycle links.

Parts of Pacific Highway have varied setbacks. This is to ensure the movement function can be preserved, while also facilitating landmark tree planting, pedestrian comfort and relief from the road.

A 4 metre setback has been identified along Henry Lane to act as an increased buffer to residential land to the north.

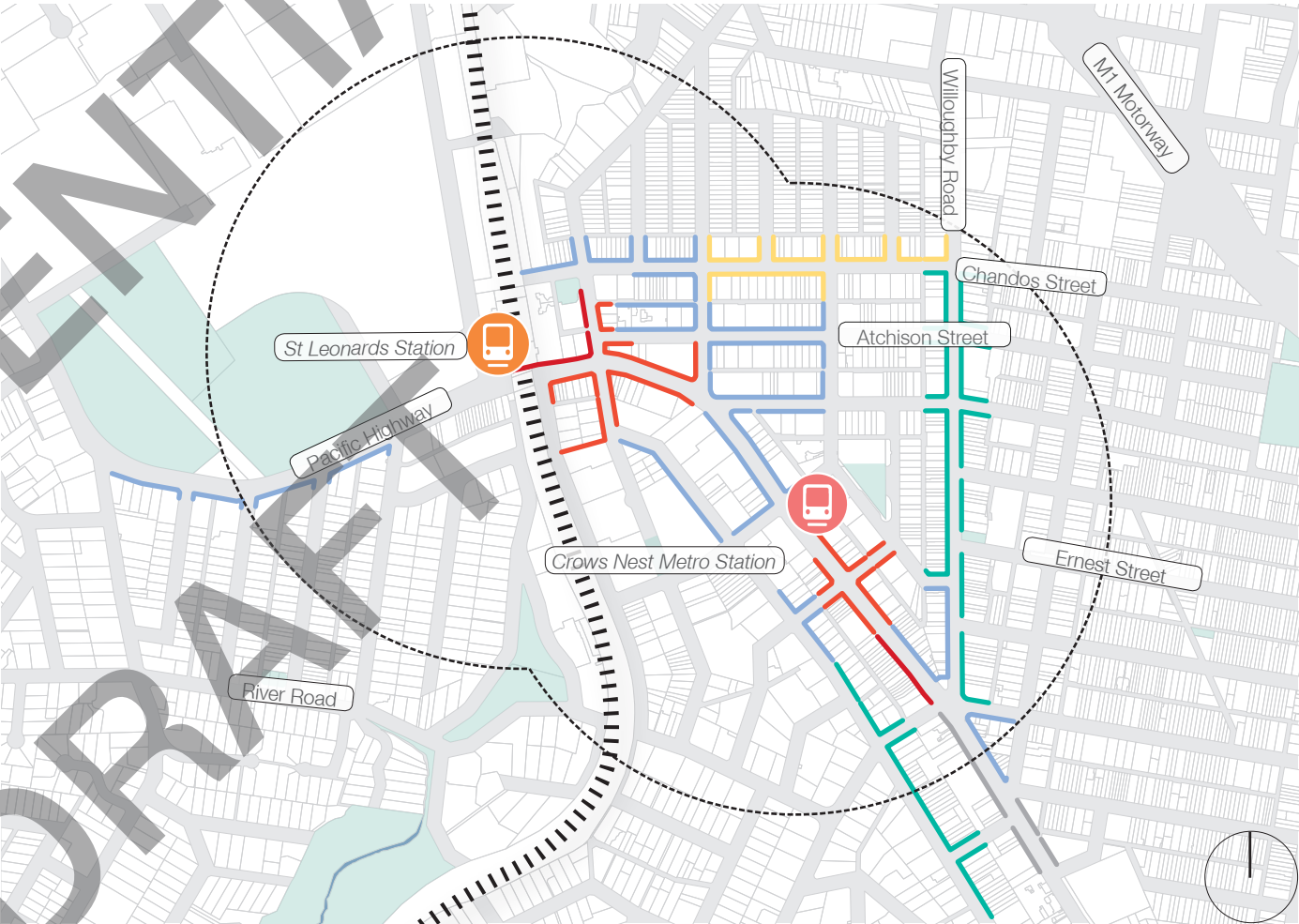
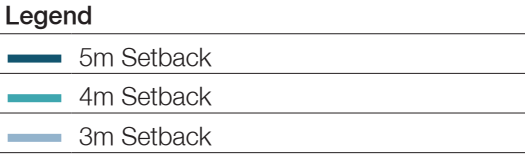


Figure 1.1.32 Street Wall Heights Diagram

4-8 storey street walls are proposed along Pacific Highway between the proposed Crows Nest Metro and St Leonards Station. The street wall heights respond to the form and function of the Pacific Highway and ensure future development is able to supply future commercial (non-residential) floor space in the central area.

2-4 storey street walls are proposed along transition edges and low scale activity areas such as Chandos Street and Willoughby Road. This is to ensure future development responds to the fine grain form of the existing streetscape, while also being able to support commercial and retail activities that promote the character of the area.

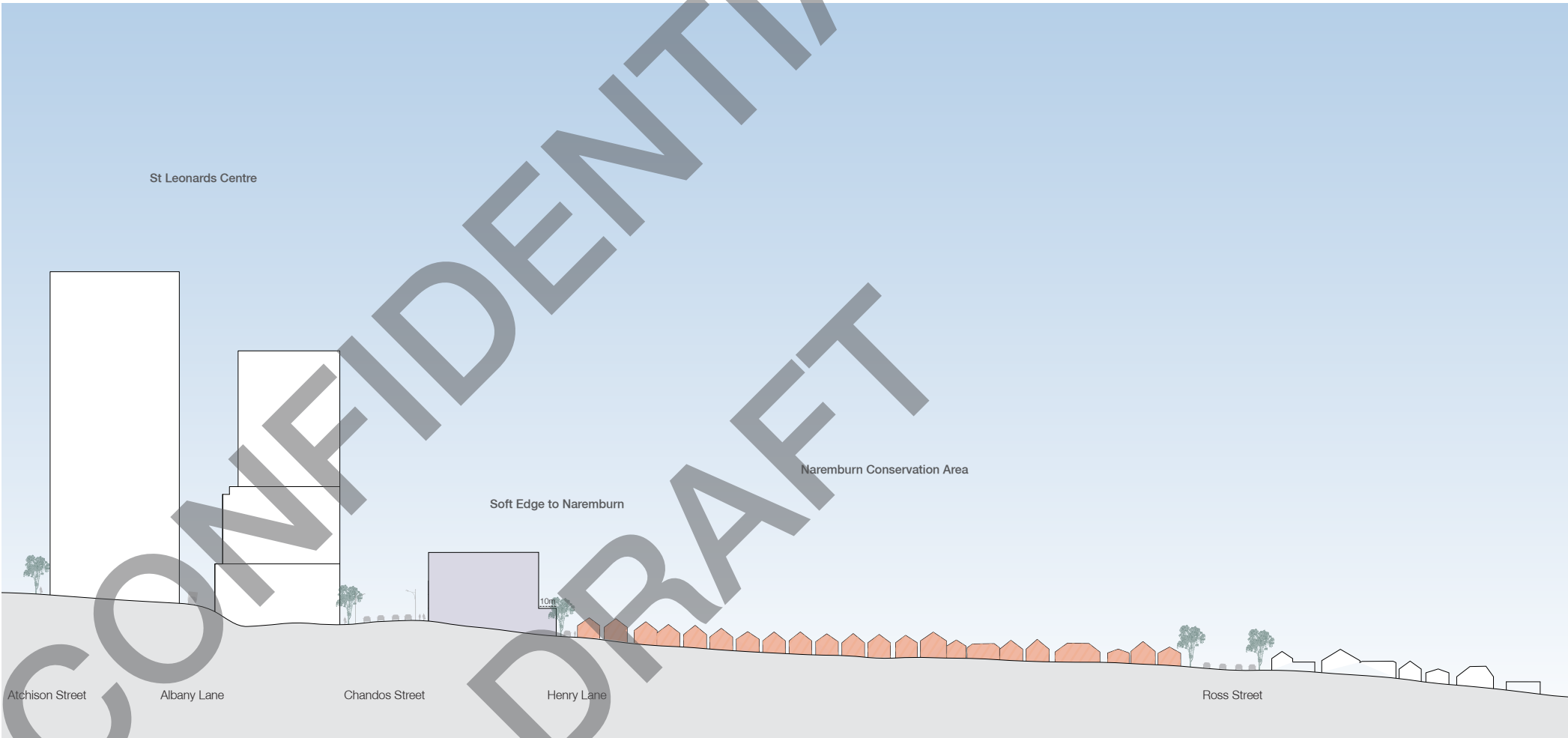


Structure Plans

Henry Lane

Recommendations

- Provide 4-6 storey built form next to low scale detached dwellings, including a setback of approximately 4 metres to Henry Lane.
- Residential component along the northern side of Chandos Street to be setback (approx 10m) from Henry Lane to ensure development reads as 2 storeys from the conservation area.
- Underground overhead powerlines along Mitchell and Martin Street to enable large street trees to be established, improving the visual character and obscuring the scale of development to the south.
- Investigate potential road trimming/verge widening at various locations to facilitate planting and the transition from Naremburn into Chandos Street.
- Consider the location of substations, other services and their location to adjoining development. Adopt screening or design elements to conceal these within the public domain.



① Sensitive Scale on Chandos



② Tree Canopy to Soften Scale



③ Edge to St Leonards



④ Stepping Back Buildings



Legend

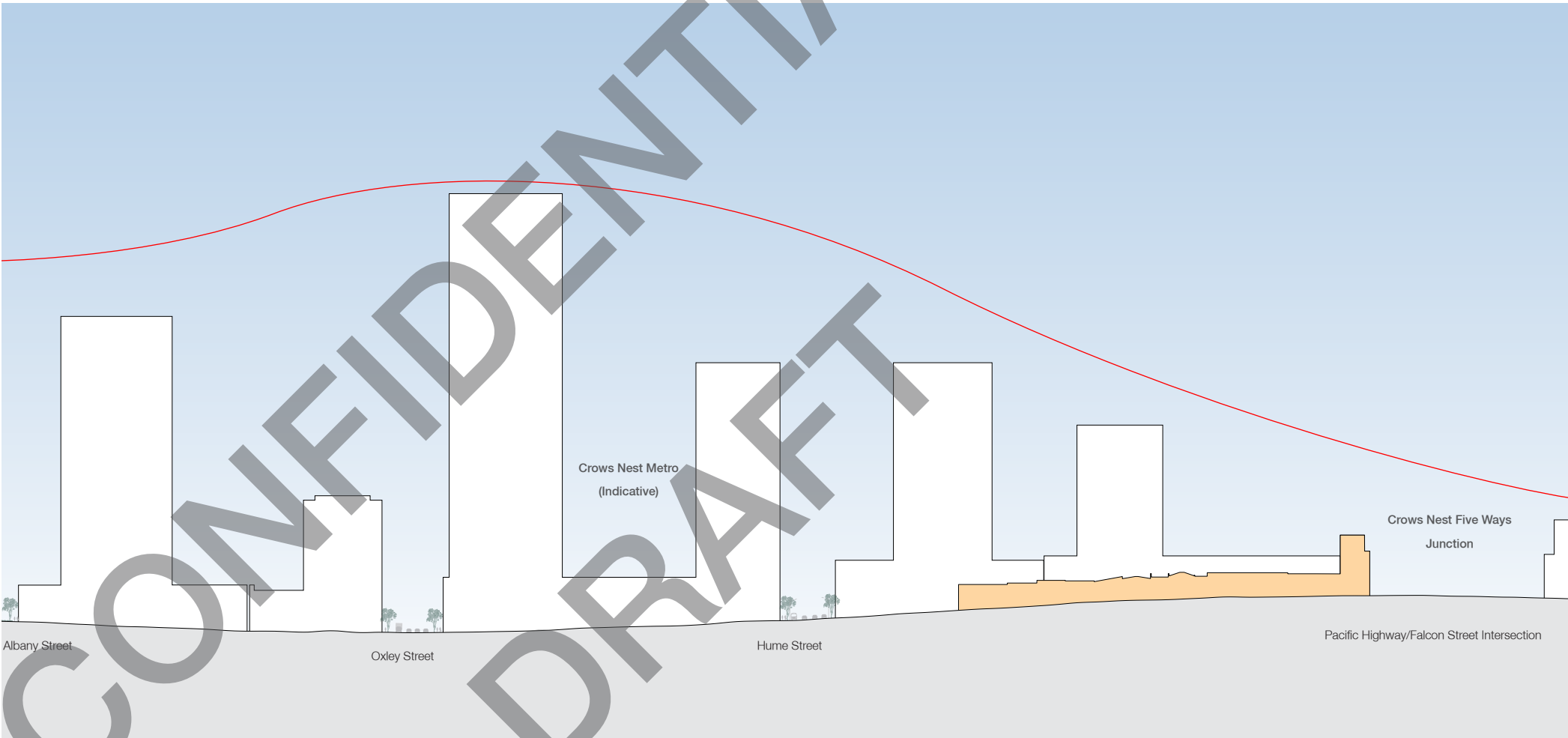
Indicative Building Transition

Structure Plans

Pacific Highway from St Leonards to Crows Nest Metro

Recommendations

- Establish street wall heights that reflect the character of the various areas along Pacific Highway and the surrounding transition areas.
- Ensure the proportion of infill development respects the ground floor heights and grain of the existing heritage buildings.
- Ensure ground and podium floors can accommodate viable commercial uses and activities that will reinforce and support the character of Willoughby Road
- Celebrate the five-ways intersection through the preservation of existing built form and streetscape character, whilst ensuring any infill development compliments the unique scale and grain
- Development along this area should provide human scale relationship, including retention of fine grain and heritage frontages, awnings and tree planting.



① Maintain Fine Grain Shopfronts



② Preserve Heritage



③ Celebrate Intersection



④ Transition to Fine Grain



Legend

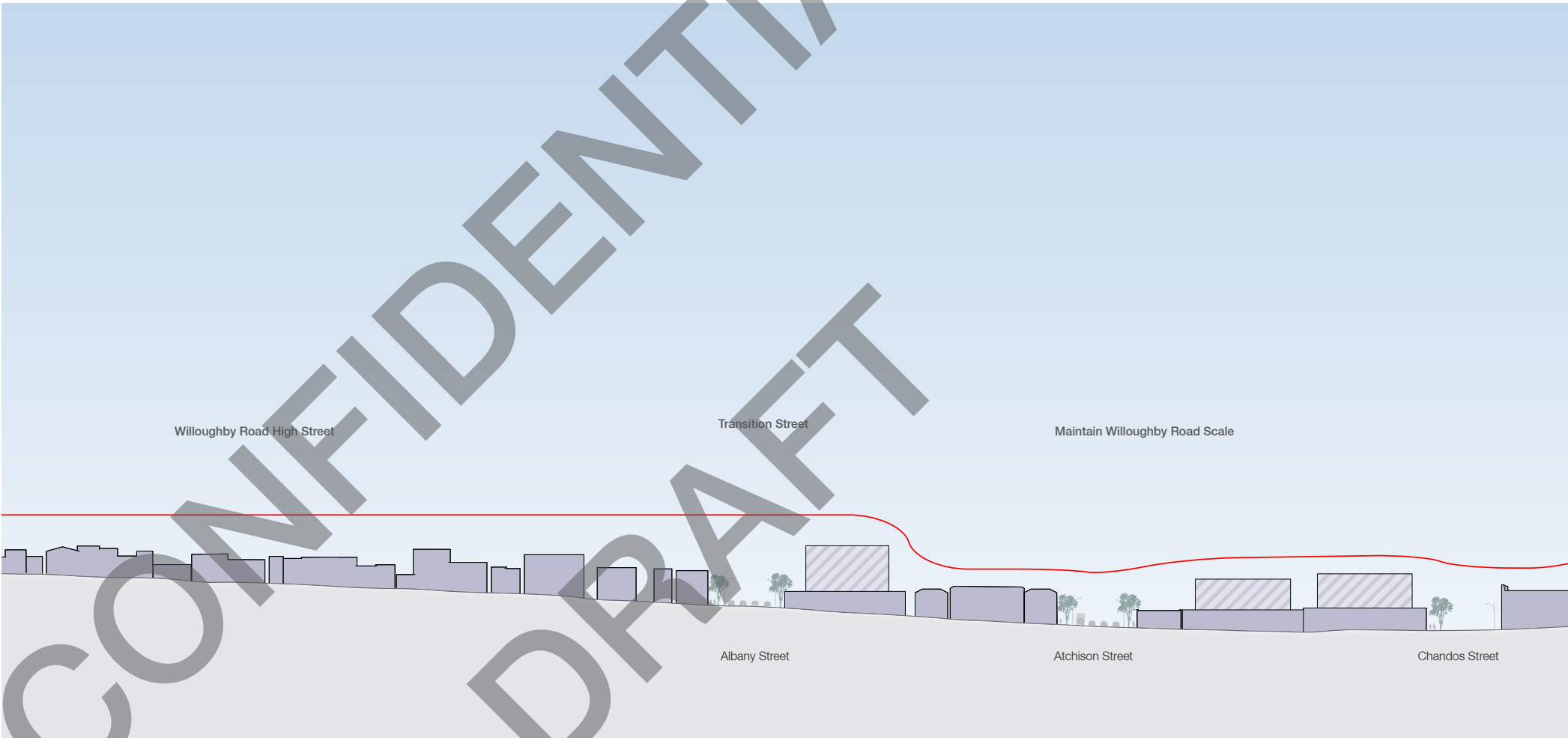
 Existing Fine Grain Façades

Structure Plans

Willoughby Road

Recommendations

- Maintain 2 storey shop-front character to facilitate boutique retail and food tenancies.
- Consider setbacks for any development above street wall to while ensuring appropriate residential floor plates and dwelling efficiencies are achieved.
- Review traffic management/facilities to ensure traffic can move through the precinct at appropriate speeds, whilst improving vibrancy and activity
- Limit amalgamation and site consolidation to a few key areas to facilitate appropriately scale developments.
- Allow for land north of Albany Street to undertake urban regeneration with sensitive scaled redevelopment mixed-use opportunities that is reflective of the shop-front character to the south.



① Maintain Fine Grain Streetscape



② Reinforce Low Scale Character



③ Define Transition Streets



④ Respond to Context

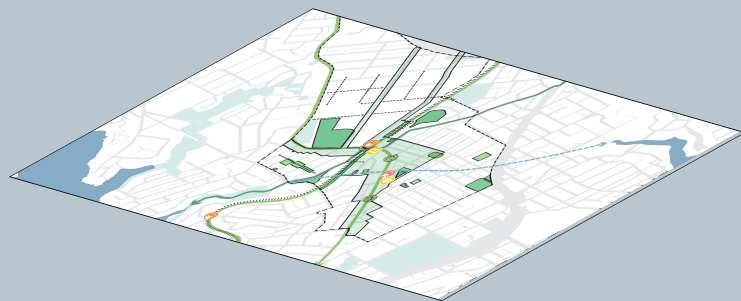


Legend

Indicative Building Transition

Open Space, Public Domain and Community

The Open Space, Public Domain and Community Structure Plan identifies opportunities to expand and improve the Precinct's existing open space network.



5.12 Open Space, Public Domain and Community Principles

Create a pedestrian and cycle green network

Define a pedestrian and cycle network that provides appropriate access within and to/from areas beyond the Precinct. This includes connectivity to local and regional open spaces. Provide areas of open space, including making use of opportunity sites for new local open spaces.

Protect, maintain and enhance the existing urban canopy

Improve the existing tree canopy specifically along key roads, main streets, plazas and parks.

This can be achieved through measures such as traffic calming, low vehicle speeds and clearly identified pedestrian linkages, crossings, arcades and laneway.

Enhance existing open spaces

Enhance the existing regional open space assets and connectivity to nearby centres. Open space and facilities should also be co-located and shared with schools where possible.

New schools should be located within accessible areas with access to open space and public transport infrastructure

Schools should have a strong street presence. Safe and accessible schools should consider local road design and be co-located next to complementary land uses. Shared use of school facilities is encouraged.

Create a green network



Protect, maintain and enhance the existing urban



Enhance existing open spaces



New schools should be located within access to open space



Structure Plans

5.13 Open Space, Public Domain and Community Structure Plan

A key finding in the Stage 1 Report has been limited opportunities exist to provide new open space within the Precinct. Therefore, prioritisation for the expansion and improved utilisation of existing open space has been explored.

Artarmon Industrial Area

- 1. New street/pedestrian connections on Frederick, Ella and Waltham Street.
- 2. New active street frontages on Herbert Street and Frederick Street.
- 3. Priority on street trees and improving walkability.
- 4. Possible opportunity for active sports facility.

Pacific Highway

- 5. Retain green edge and vista to Gore Hill Park and Cemetery.
- 6. Investigate enhancement of Gore Hill Oval and facility upgrade in accordance with Council master plan.
- 7. Priority on landmark trees and avenue plantings.

Residential (St Leonards South)

- 8. Explore new street connections east west connecting to Newlands Park. Provide connected open space areas with new development.
- 9. Open space extension in St Leonards South.

St Leonards Centre/Crows Nest Village

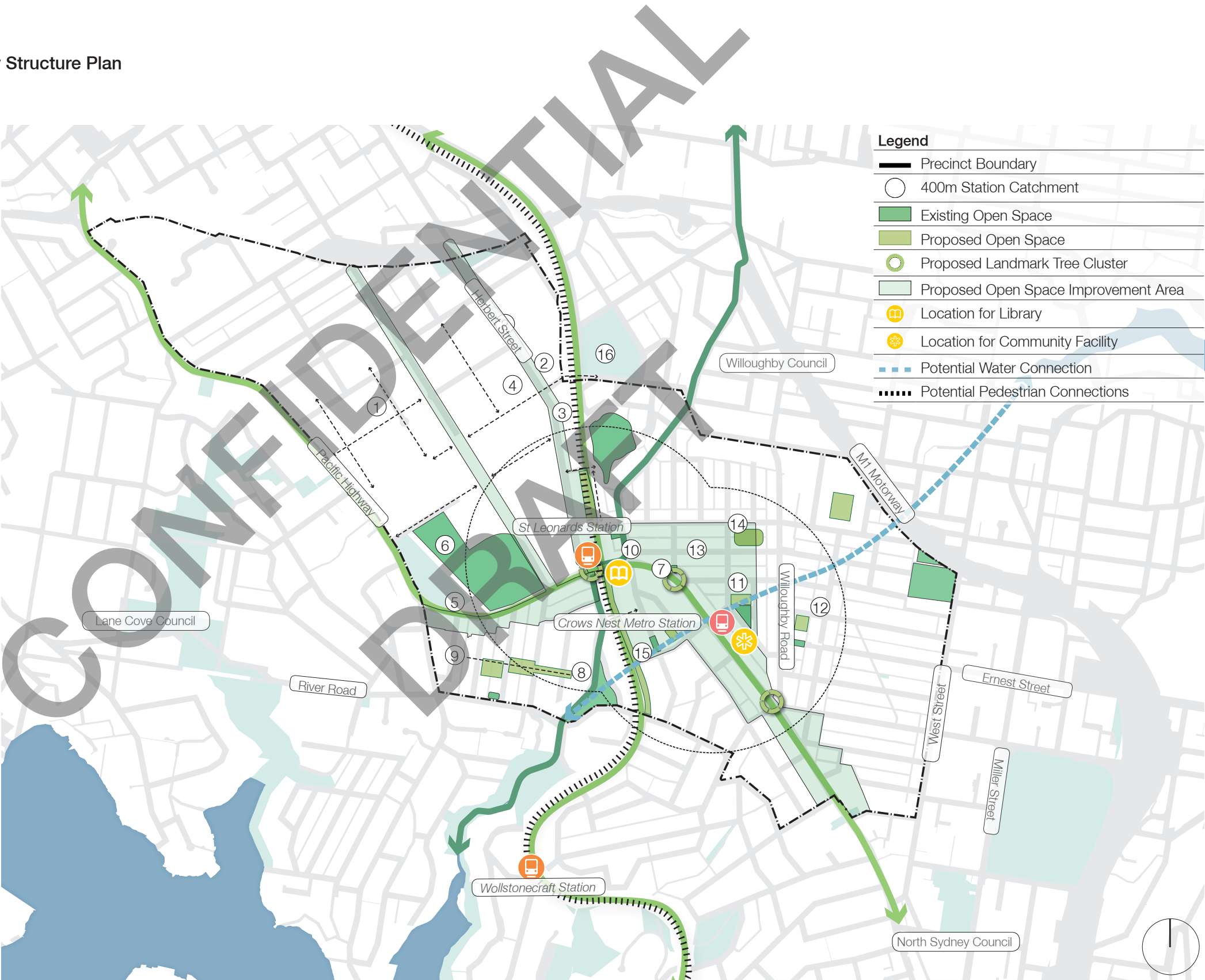
- 10. Proposed open space to align with the Green Grid.
- 11. Upgrade Hume Street Park (investigate relocation of sports facility).
- 12. Investigate Ernest Place north to Holtermann Street.
- 13. Pedestrian/cycleway improvements to access the core.
- 14. Investigate future open space along Chandos/Atchison Street.

Residential (Wollstonecraft) + Health and Education

- 15. Open space link adjoining rail line south of St Leonards towards River Road.

Naremburn Conservation Area

- 16. Upgrade facility within the existing Naremburn oval/ open space area.



Structure Plans

Hume Street Park

Recommendations

- Upgrade Hume Street Park. Investigate opportunities to relocate proposed underground sports facilities in adjacent buildings or alternative sites.
- Investigate future open space area north of Hume Street Park along Chandos/Atchison Street to support improved cycleway and pedestrian connections.



① Informal Seating



② Recreational Space



③ Green Pathways



④ Investigate Future Space



Legend	
	Existing Open Space/Avenue
	Proposed Open Space
	Future Investigation Area for Open Space
	Proposed Green Connections
	Gateway
	Location for Community Facility

Structure Plans

Ernest Street Plaza

Recommendations

- Expand Ernest Place to Holtermann Street. Council currently own the car park site on Holtermann Street, which provides opportunity to demolish the existing building and re-purpose the site as an extension of Ernest Place.
- The possibility may exist to relocate the car parking or to underground any future car parking structure.
- Development to the north is low scale in character and is defined by the intimate scale of Willoughby Road. This would ensure solar access to the Ernest Place extension would be maintained.
- Existing above ground car parking to be relocated to provide additional parkland within Crows Nest Village.



① Recreation Space



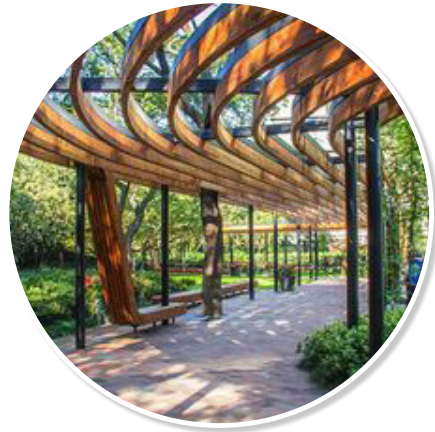
② Markets



③ Plaza Seating



④ Shade



Legend

	Existing Open Space/Avenue
	Proposed Open Space
	Active Frontage Area
	Proposed Green Connections
	Gateway
	Location for Community Facility

Structure Plans

St Leonards South

Recommendations

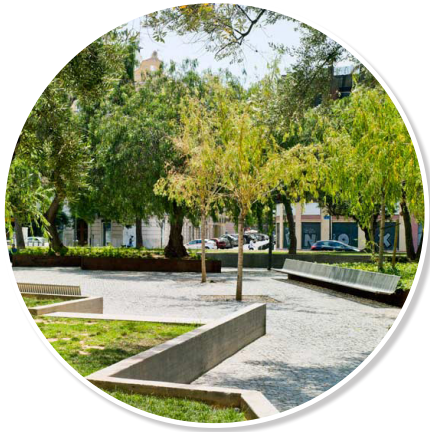
- Redevelopment of the area needs to realign open space to align with Green Grid (closer to station). Open space could be located within land subject to the St Leonards South Masterplan to assist with the distribution of quality open space across the Precinct.
- Open space provision in this area would also benefit from the existing tree canopy and built form of St Leonards South and would be located away from potential noise conflicts along Pacific Highway. Potential open space in this area would need to consider improved access from St Leonard Centre.
- Opportunity to enhance connectivity from St Leonards South to Gore Hill Oval. Access to Gore Hill is currently restricted by limited crossings on Pacific Highway. Investigation of a pedestrian bridge or new crossing could facilitate improved access for existing residents.



① Recreation Space



② Green Links



③ Paved Open Space



④ Shade



Legend

- Existing Open Space/Avenue
- Proposed Open Space
- Future Investigation Area for Open Space
- Proposed Green Connections
- Gateway
- Location for Community Facility

Structure Plans

St Leonards Plaza

Baseline Analysis

St Leonards Plaza is a proposed open space south of Pacific Highway, opposite St Leonards Station and above the rail line. Concept designs have been prepared by Lane Cove Council and and identify the following design outcomes:

- Development of the extent and profile of the plaza deck.
- Connection from the plaza to St Leonards Station.
- Connections from the plaza to existing streets and laneways.
- Connections from the site to current and future developments on neighbouring sites.
- Integration of a cycle route that traverses the site and completes a holistic cycle network for the Precinct.

Recommendations

- Provide new linear park adjacent to the rail line, south of the proposed St Leonards Plaza to improve connections from Wollstonecraft to St Leonards Centre.
- Provide for new Nicholson Street Park to service surrounding residential area and support connections from Mitchell Street across to Friedlander Place.



① Recreation Space



② Green Links



③ Paved Open Space



④ Linear Connections



Legend

	Existing Open Space/Avenue
	Proposed Open Space
	Proposed Green Connections
	Gateway

Movement and Access

The Movement and Access Structure Plan identifies opportunities to improve the Precinct's existing road network including cycleway connections and public domain upgrades.



Structure Plans

5.14 Movement and Access Principles

Transit oriented development

Allow for new transport infrastructure to facilitate the growth of jobs and employment opportunities, by reinforcing and strengthening connections to places of work. Integrate land use and planning to support public and active transport solutions.

Manage the delivery of future car parking with existing vehicle usage

Balance commuter car parking with the objective of reducing private vehicle use. A ‘minimalist’ car parking policy should apply to new residential and commercial development in the Precinct, in the vicinity of the rail and metro stations.

Multi-modal approach

A multi-modal approach considers several different methods of movement. Transport connections should consider the role of new and existing centres and provide an integrated link for connecting people across Sydney, while also prioritising active and public transport.

Integrate urban canopy with open space and liveable roads

Urban canopy should provide integrated connections between pedestrian friendly streets and open space to improve the quality of the public domain.

Transit oriented development



Manage the delivery of future car parking with existing vehicle usage



Multi-modal approach



Integrate urban canopy with open space and liveable roads



Structure Plans

5.15 Movement and Access Structure Plan

The Precinct offers a unique transport condition, where the proposed Crows Nest Metro Station, in tandem with the existing St Leonards station, provides a high-quality public transport service that supports a strong justification to minimise parking provisions across the precinct.

Chandos Street, Atchison Street and Albany Street provide key movements east west, while Christie Street, Willoughby Road and Herbert Street provide key movements north south.

Pacific Highway is the major movement corridor running through the Precinct. Campbell Street, Reserve Road and Herbert Street are primary vehicle routes towards Artarmon, while River Road and Falcon Street are primary vehicle routes towards Crows Nest and Lane Cove.

There are a number of key opportunities to enhance the existing movement within the centre.

- 1. Enhance pedestrian and cycling links from the surrounding suburbs into St Leonards Centre.
- 2. Investigate crossing points and upgrade existing crossings within the Precinct.
- 3. Reinforce a hierarchy of roads/traffic movement through the Precinct.
- 4. Upgrade key roads and intersections to assist vehicles whilst implementing traffic management/calming where appropriate to reinforce the hierarchy.
- 5. Strengthen the importance of pedestrian access and shared paths adjacent to Gore Hill Freeway.
- 6. Consider pedestrian and vehicular bypass link on the northern side of Pacific Highway across the rail line to support cyclist and vehicle movements away from Pacific Highway and St Leonards.
- 7. Establish a car parking policy to reduce parking rates for residential and commercial developments in close proximity to public transport.

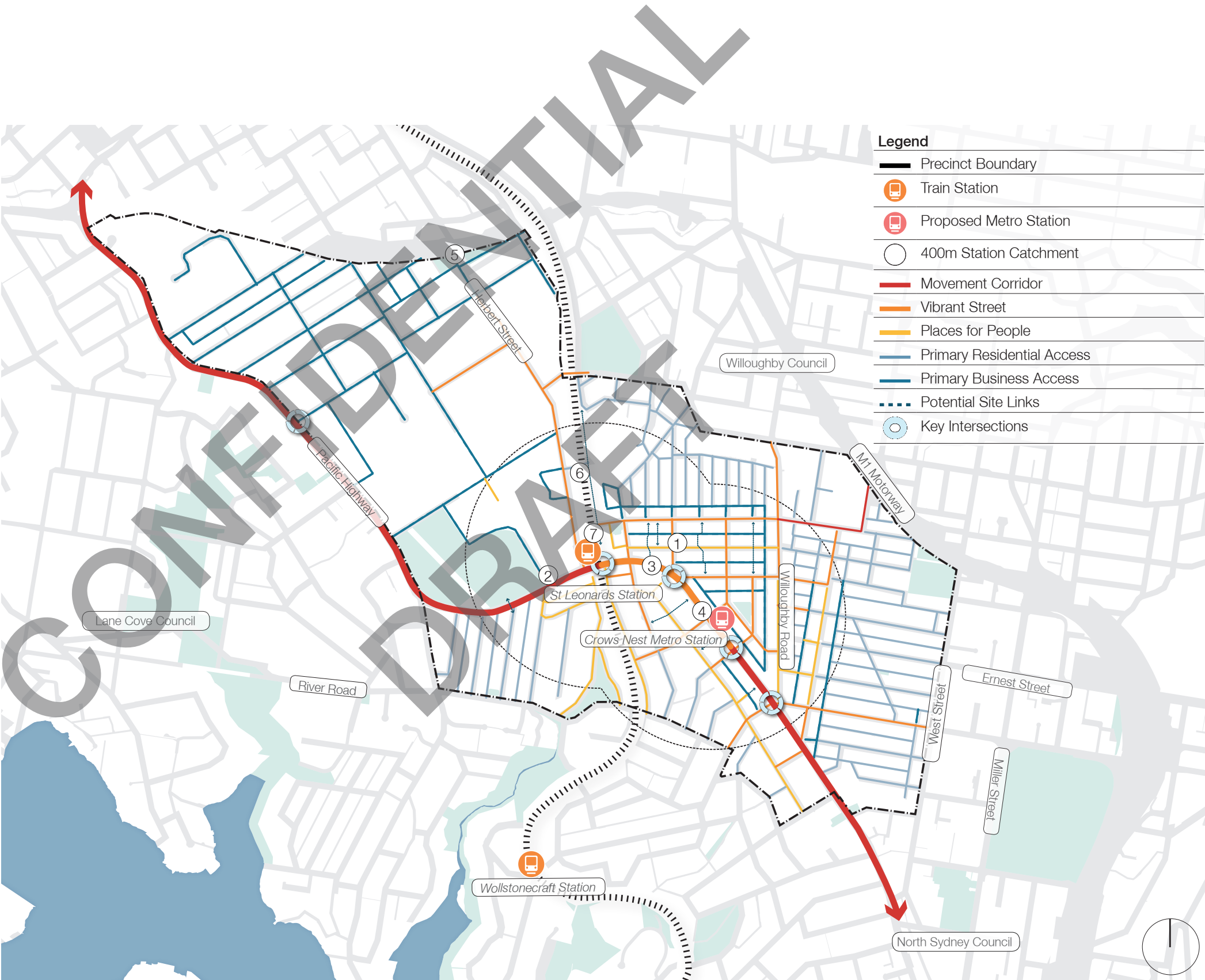


Figure 1.1.35 Movement and Access Structure Plan

Structure Plans

5.16 Movement and Place

RMS has an established street hierarchy, which focuses on ‘movement’ and ‘place’. These comprise local streets to movement corridors that carry local and regional traffic.

The following images relate to the Movement and Access Structure Plan and indicate the levels of traffic movement and space for pedestrians throughout the Precinct.

Categorising Movement

Movement has been classified according to the relative role of links within metropolitan modal networks, with an overarching classification between motorways and local streets.

Categorising Place

Place has been classified according to the role of locations as a ‘destination’ within metropolitan Sydney.

Vibrant streets and places for people can also operate at local and neighbourhood levels and form an integral part of the streetscape.



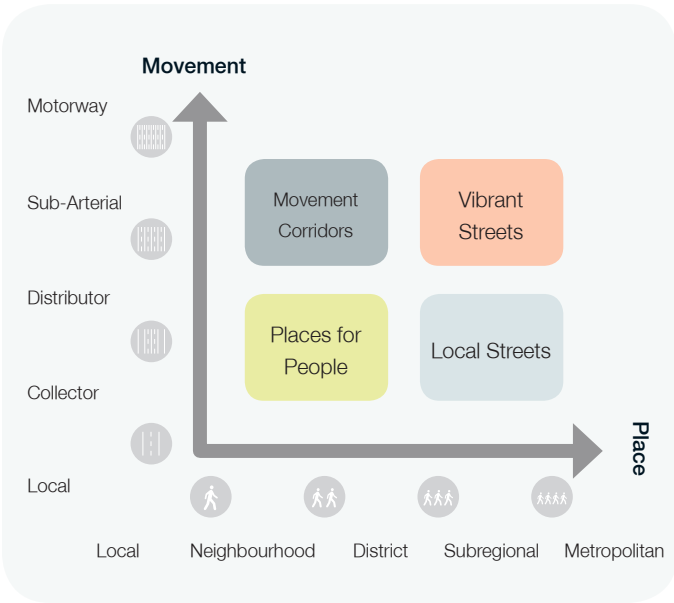
● **Movement Corridor**
Movement corridors provide key connections between strategic centres. They prioritise road function, including the provision of bus services and freight.

Precinct examples:
· Pacific Highway



● **Vibrant Street**
These streets provide wide footpaths and cycleways, assisted by reverse podium buildings to create comfortable and human scale street frontages.

Precinct examples:
· Albany Street
· Chandos Street
· Christie Street



● **Places for People**
Existing streetscape elements reinforce the dominance of pedestrian movement including a series of crossing points, wide footpaths, two lane traffic and benches and seating.

Precinct examples:
· Atchison Street
· Willoughby Road



● **Local Streets**
Local streets accommodate vehicles and cyclists and are used to provide access to properties and businesses. They have capacity to support cycle lanes and bus stops.

Precinct examples:
· Canberra Avenue
· Oxley Street
· Darvall Street
· Holtermann Street

Structure Plans

5.17 Priority Streets

There are a range of streets that provide connections to adjacent neighbourhoods and suburbs.

There is an opportunity to provide cycleway links into priority destinations, such as St Leonards Train Station and the proposed Crows Nest Metro, commercial core, TAFE NSW and RNSH.

This can be achieved by providing redesigned streets and links within the Precinct. Specific recommendations include:

- 1. Provide a bi-directional cycleway on Atchison Street connecting from West Street to St Leonards Station.
- 2. Provide a cycleway link from Herbert Street west to the Pacific Highway. This would provide a cycleway connection to the TAFE area.
- 3. Provide a cycleway link east of the rail line, linking to Naremburn Park/Eva Street.
- 4. Provide separate cycleways on bridges crossing the rail corridor.
- 5. Provide cycling facilities including commuter cycle parking at the Metro/St Leonards Station.
- 6. Investigate options for arcades and through site links to align with existing streets to the north at mid-blocks between Chandos Street and Pacific Highway.
- 7. Provide expanded footpaths by reducing excess carriageway space where possible.

Legend

Precinct Boundary

Train Station

Proposed Metro Station

Existing On Road/Off Road Cycleway

North Sydney Council Bi-Directional Cycleway

Proposed On Street Separated Cycleway

Proposed Off Street Cycleway

Proposed Cycle Facilities

Heritage Street (Retail)

Shareway: Pedestrian Priority

Asymmetric Street

Lanes/Arcades/Mid-Blocks

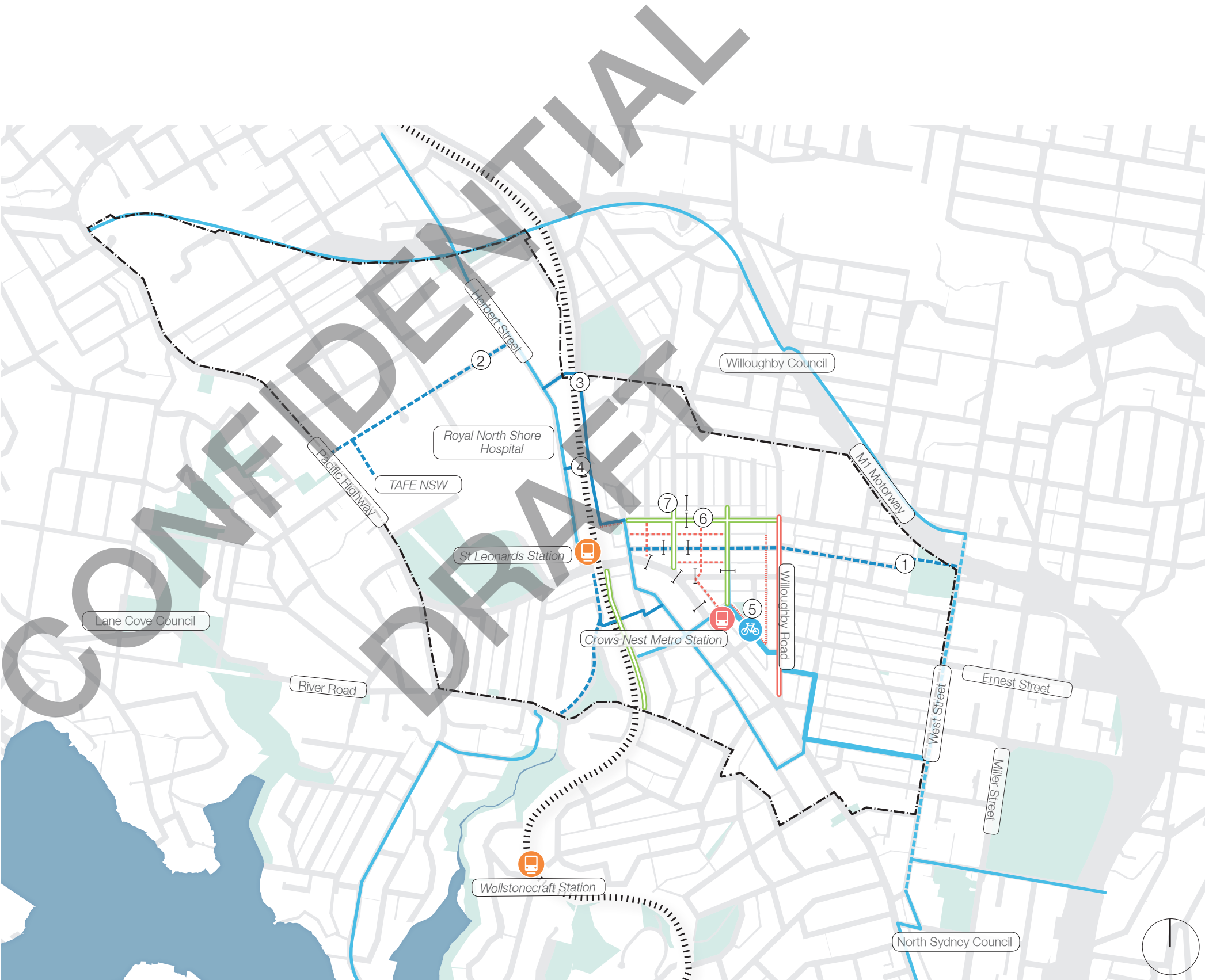
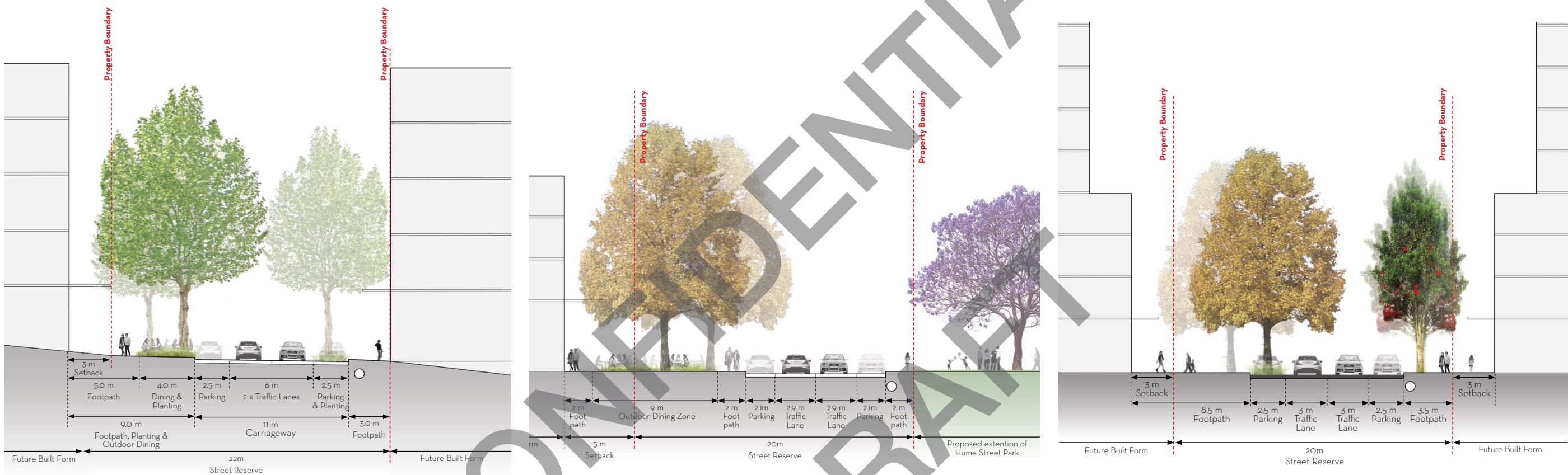


Figure 1.1.36 Proposed Pedestrian Priority Strategy

Structure Plans

Streetscape Recommendations



Recommendations - Chandos Street (Vibrant Street)

- Expanded southern footpath (through dedication and kerb realignment) for outdoor dining/seating and double row of street trees; and
- New tree planting in parking bays and under-ground overhead power lines on the northern side of the street.

Recommendations - Oxley Street (Places for People)

- Expanded footpath on western side of street through 5m setback of built form;
- Provide double row of deciduous street trees on western side of the street; and
- Hume Street Park (north) located on the eastern street edge.

· UPDATE

Recommendations - Albany Street (Vibrant Street)

- Expanded southern footpath (through dedication and kerb realignment);
- New tree planting in parking bays on southern side of street to achieve double row of deciduous trees; and
- Planting of evergreen trees in footpath and uderground overhead power lines on the northern side of the street.

Structure Plans



Recommendations - Atchison Street East (Places for People)

- Remove street parking on southern street edge;
- Provide bi-directional separated cycleway on southern edge, provide deciduous tree planting to define cycleway and clear of overhead power lines;
- Remove hedge planting and provide lower planting, retain existing street trees and infill with gum trees as planted in Atchison Street west; and
- Incremental bundling/under-grounding of power lines with site redevelopments.

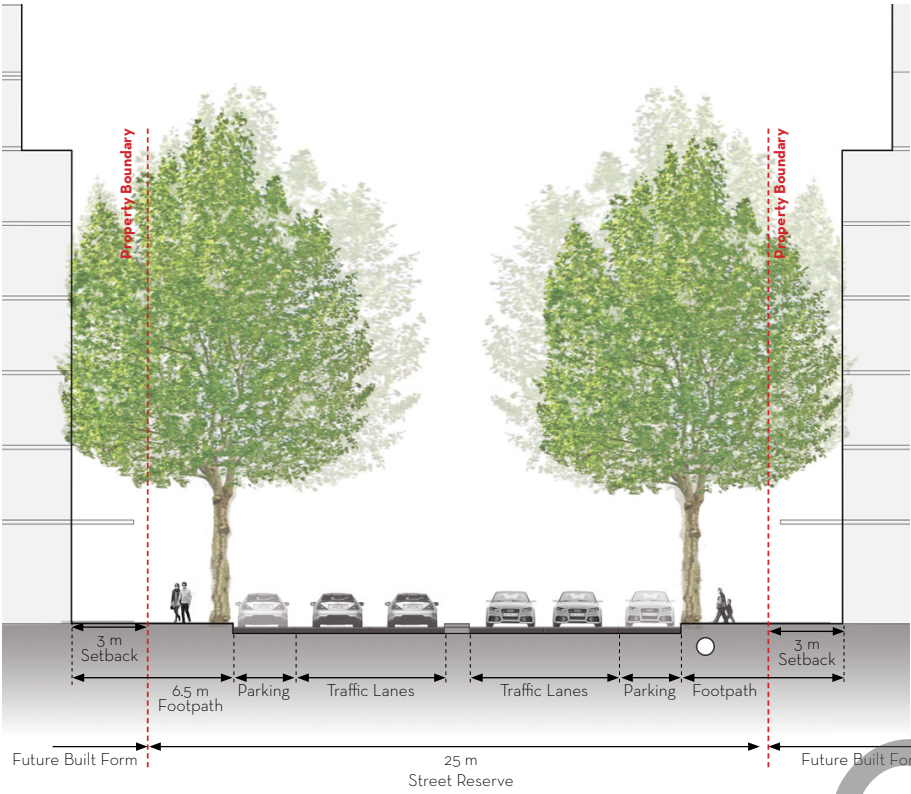
Recommendations - Atchison Street West (Places for People)

- Remove on street parking on southern street edge;
- Provide bi-directional separated cycleway on southern edge, provide deciduous tree planting to define cycleway and clear of overhead power lines;
- Remove hedge planting and provide lower planting; and
- Incremental bundling/under-grounding of power lines with site redevelopments.

Recommendations - Henry Street (Local Street)

- 4m building setback/dedication on southern edge for street tree plantings (tall, narrow habit) to provide scale transition; and
- Carriageway dimensions unaltered.

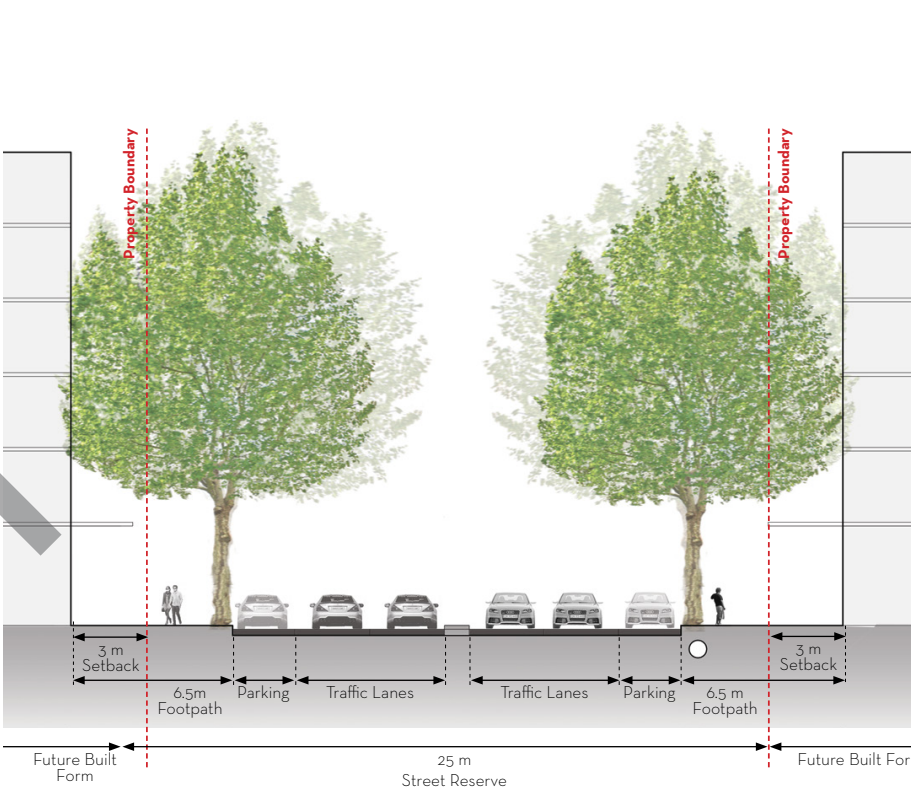
Structure Plans



- Recommendations - Pacific Highway (Movement Corridor)**
- Expanded footpath through setback controls;
 - Avenue of Plane trees on both sides of the street; and
 - Underground power lines to achieve optimum tree outcome.



- Recommendations - Pacific Highway (Movement Corridor)**
- Expand footpaths through setback controls; and
 - Landmark trees at key public locations (e.g. Mitchell Street Plaza).



- Recommendations - Pacific Highway (Movement Corridor)**
- Expand footpaths through setback controls;
 - Avenue of Plane trees on both sides of the street; and
 - Underground powerlines to achieve optimum tree outcomes.

Land Use Infrastructure and Implementation Plan

6

This section consolidates the Design Concept, Built Form Testing and Structure Plans. It articulates the key priorities for the Precinct and how they could be achieved.

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6.1 Test Summary

The following section provides an overview of the three options tested for the Precinct.

Test 1 - Base Case

This test applied the maximum height of buildings control that applies to the Precinct.

Test 2 - Solar Amenity

This test applied a solar envelope to the Precinct. Solar envelope was informed by conservation areas, key streets and parks and public spaces.

Test 3 - Transitions

This test applied a nuanced approach for transitioning to sensitive areas within the Precinct including Naremburn Conservation Area, Willoughby Road and residential land to the south.

A summary of each test is provided and outlines the opportunities and challenges associated with their outcome.



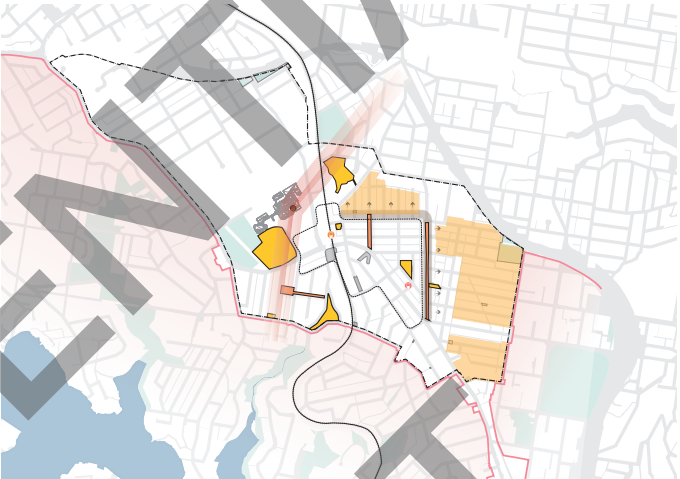
Test 1 - Base Case

Proposed Commercial (GFA)	845,500m²
Existing Dwellings*	10,200
Test Dwellings*	12,500

Test 1 applied a 'base case' scenario for the Precinct and allowed each site to be developed under the existing Height of Buildings planning controls.

The outcome of this test failed to deliver the commercial floor space required under the Revised North District Plan (GSC 2017). Therefore this test did not appear to be a viable strategy for delivering job targets outlined by the GSC.

Additionally, this test was unlikely enhance the role of St Leonards as a Collaboration Area with a mix of high density commercial, mixed-use and residential development, as articulated under Draft Greater Sydney Region Plan.



Test 2 - Solar Amenity

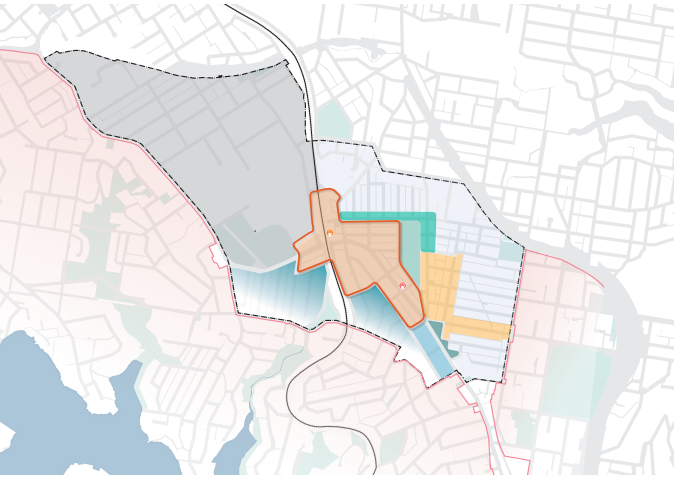
Proposed Commercial (GFA)	845,500m²
Existing Dwellings*	10,200
Test Dwellings*	23,000

Test 2 applied a solar envelope to the Precinct, factoring in key public spaces, streets and conservation areas.

The outcome of this test was able to provide the commercial floor space required to meet the job targets identified by the GSC, as well as ensure key spaces, streets and areas received sunlight throughout key hours of the day (11:00am-3:00pm).

However, this test also allowed sites to significantly overdevelop in areas that were considered to juxtapose strongly with the surrounding character of neighbourhoods, whilst also ensuring solar access was preserved.

While providing the commercial floor space and appropriate quantum of dwellings, this test did not result in a good urban outcome for the Precinct and facilitated poor transitions between low-scaled neighbourhoods.



Test 3 - Transitions

Proposed Commercial (GFA)	845,500m²
Existing Dwellings*	10,200
Test Dwellings*	20,000

Test 3 took applied more considered approach to built form testing and considered the transition between neighbourhoods.

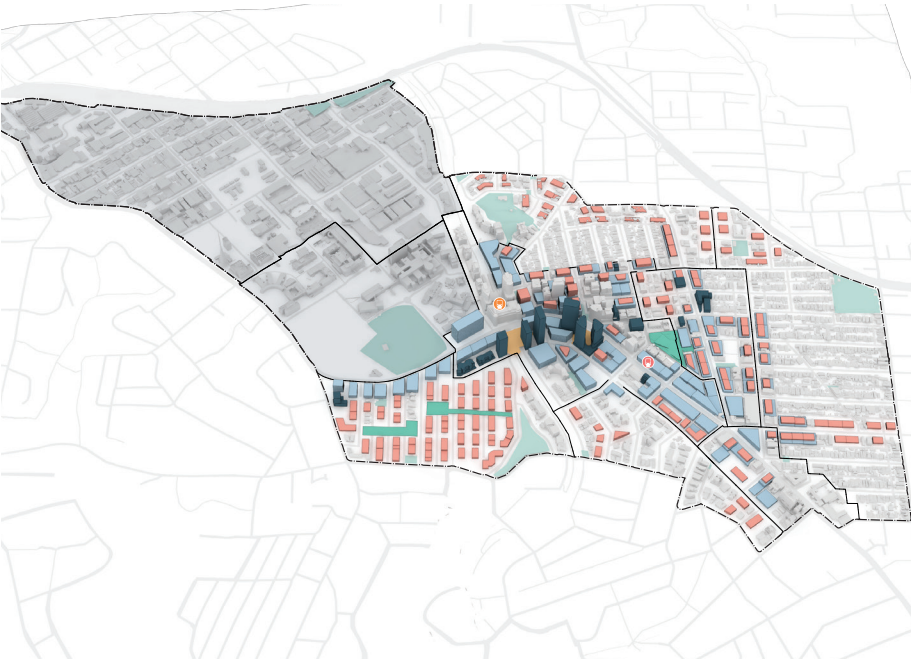
This approach proposed significant height within the St Leonards/Crows Nest and St Leonards South Sub-Precincts, addressed by overshadowing parameters of key open spaces plus consolidation of transitions and views.

4 storeys buildings were proposed in the Crows Nest area to retain its village character. A six storey height transition was proposed along Willoughby Road (north of Albany Street) and Chandos Street to buffer the low scale character of the Naremburn Conservation Area.

While this test provided the commercial floor space required to meet the job targets identified by the GSC and appropriate quantum of dwellings, the heights proposed across the entire Precinct were considered excessive, rivalling prominent centres in Metropolitan Sydney.

The heights within this option were tapered down to present a more cohesive and unified approach to the Precinct.

6.2 Test Results



Test 1 - Base Case

Proposed Commercial (GFA)

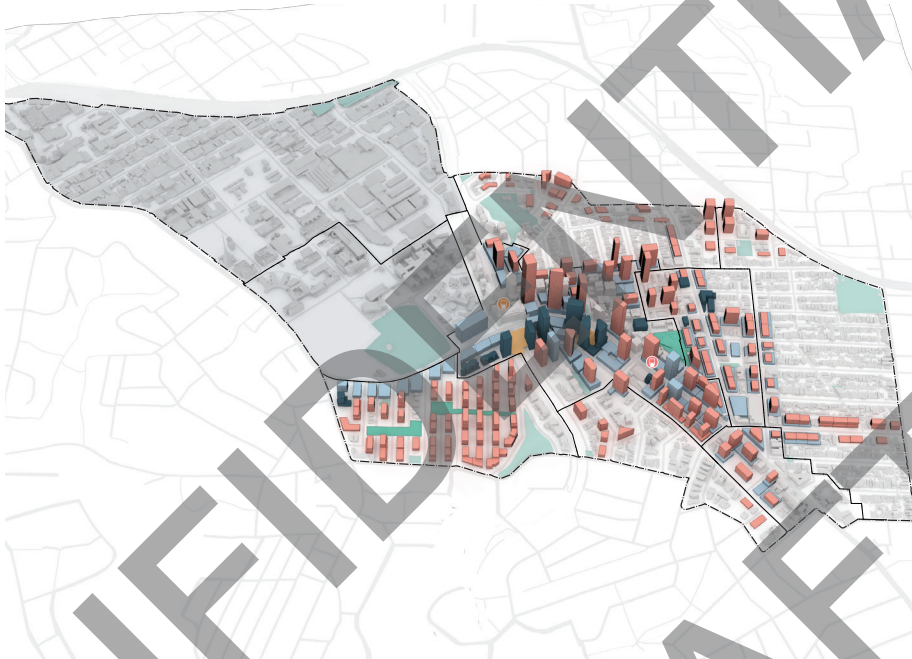
845,500m²

Existing Dwellings*

10,200

Total Proposed Dwellings*

12,500



Test 2 - Solar Amenity

Proposed Commercial (GFA)

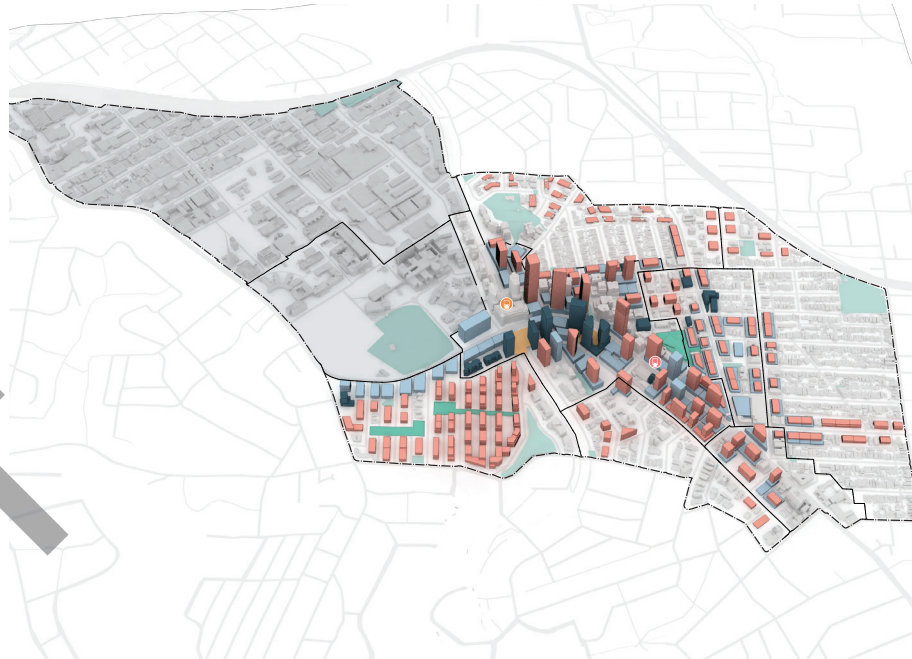
845,500m²

Existing Dwellings*

10,200

Total Proposed Dwellings*

23,000



Test 3 - Transitions

Proposed Commercial (GFA)

845,500m²

Existing Dwellings*

10,200

Total Proposed Dwellings*

20,000

6.3 Preferred Option

Through lessons learnt from previous test options and workshop with PCG and PDG, a tailored approach to height was formed in a block by block basis. The general provision includes:

- 1. Height predominately in the Central Precinct
- 2. Tall buildings accommodated along Pacific Highway with St Leonards Station and Crows Nest Station reflecting two high points in the Precinct.
- 3. Accommodate medium-high density in St Leonards south. Height and density tappers down to residential area
- 4. Transition buffer to heritage conservation area to the north. Height of 6-10 stories for developments west of Northcote Street and 6 stories north of Chandos.
- 5. Transition zone for height from Central Precinct to Willoughby Road and Conservation Area - height range 6-8 stories.
- 6. Willoughby Road to retain existing character and height.
- 7. 4 storeys on Albany Street and intersection of Albany and Falcon to reinforce the gateway position to St Leonards.
- 8. Transition of height to the Mater Precinct set by the datum of 220 Pacific Highway, Crows Nest.
- 9. Retain existing height control for residential south of Central Precinct and Conservation Area.
- 10. Height for Artarmon Industrial Area and Health and Education sub-precinct subject to further masterplan and interrogation.

Proposed Commercial (GFA)

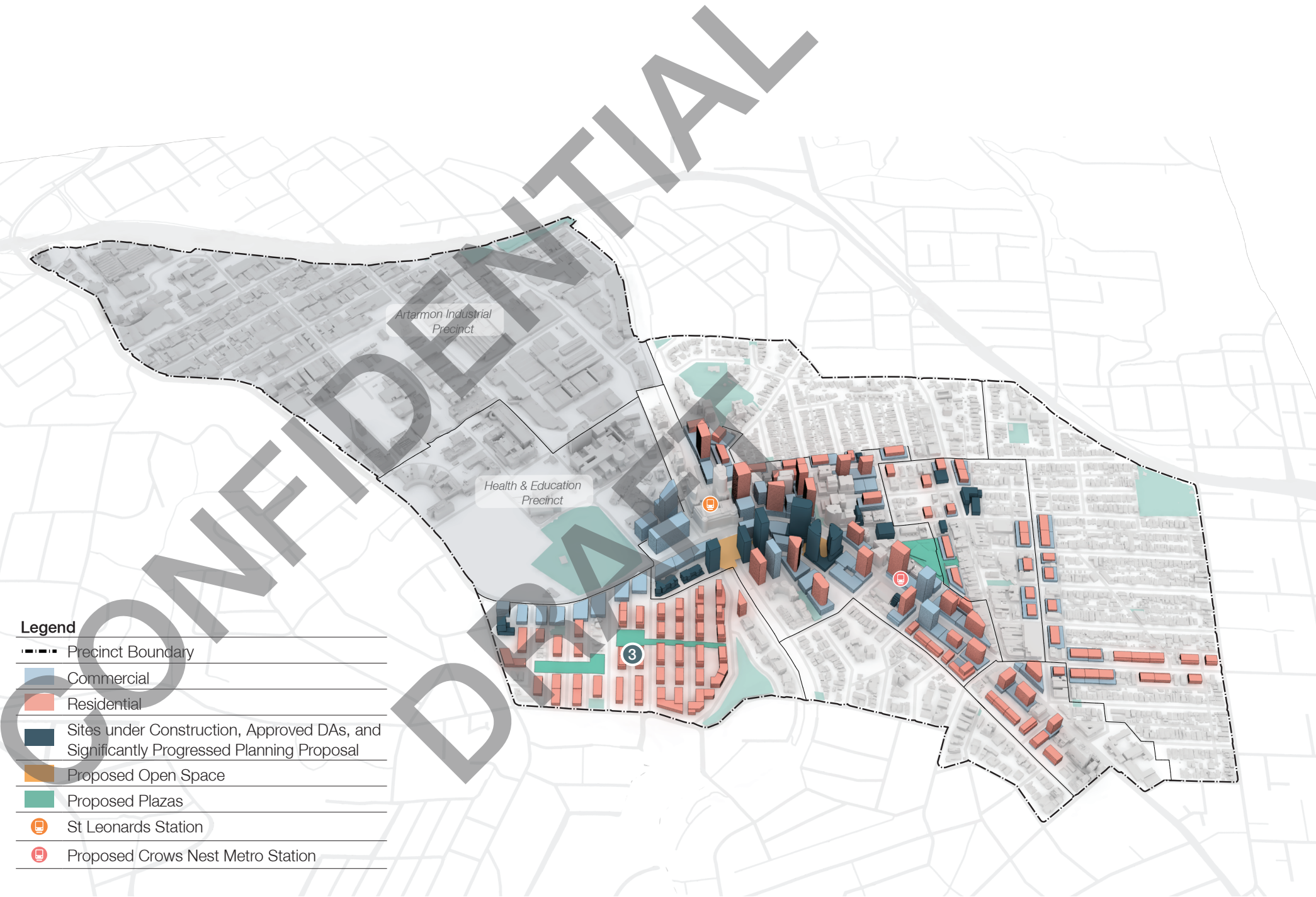
845,500m²

Existing Dwellings*

10,200

Total Proposed Dwellings*

17,500



Index	Character Area	Existing Commercial (GFA)	Proposed Commercial (GFA)*	Existing Dwellings	Preferred Option Dwellings*	Additional Dwellings
3	Residential (St Leonards South)	43,000 m ²	44,300 m ²	600	2,800	2,200
4	Central Precinct	489,100 m ²	591,000 m ²	5,300	9,400	4,100
5	Residential (Naremburn)	8,900 m ²	4,300 m ²	1,000	1,000	0
6	Crows Nest Village	93,700 m ²	78,700 m ²	700	900	200
7	Residential (Wollstonecraft)	900 m ²	4,100 m ²	800	800	0
8	Residential (Crows Nest)	44,800 m ²	32,800 m ²	1,200	1,500	300
9	Pacific Highway Corridor East)	55,700 m ²	90,300 m ²	600	1,100	500
Totals		736,100 m ²	845,500 m ²	10,200	17,500	7,300