

Department of Planning, Housing and Infrastructure

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Crows Nest Precinct Design Guide

July 2024





Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land, and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Crows Nest Precinct Design Guide

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1. Introduction

1.1 Land to which this Design Guide applies

The design guide applies to the land identified as the focus for accelerated rezoning in **Figure 1**. This land is located within the Crows Nest Precinct (the Precinct).



Figure 1: Crows Nest Precinct - Land Application Map (source: the Department, 2024)

1.2 Commencement

The Design Guide commences on the day on which the Crows Nest TOD Precinct (the Precinct) amendments to the North Sydney Local Environmental Plan 2013, Lane Cove Local Environmental Plan 2009 and the Willoughby Local Environmental Plan 2012 come into effect.

1.3 Amendments to this Guide

Any amendment to this Design Guide requires consultation with the relevant Council, and the endorsement of the Secretary of the Department of Planning, Housing and Infrastructure (the Department).

1.4 Purpose and Application of this Guide

The purpose of this Design Guide is to support the implementation of the planning controls for the Crows Nest Precinct (**Figure 1**) by providing more detailed provisions to guide development.

It is given effect by reference in the provisions of the Lane Cove LEP 2009, North Sydney LEP 2013 and Willoughby LEP 2012 which requires the consideration of the objectives and guidance of this design guide as part of the assessment of future development applications in the Precinct.

The sections of this Design Guide inform the preparation, assessment and determination of Development Applications as follows:

- **Section 1** sets out the land to which the Design Guide applies, administrative matters and the relationship to other elements of the planning framework that apply to the Precinct.
- **Section 2** contains the Precinct Statement, Vision and Principles for the Precinct, which have informed the planning framework (including this Design Guide and relevant provisions of the LEPs). The vision, principles and objectives are to be considered when assessing whether a development application will deliver the intended outcomes for the Precinct.
- **Section 3** contains general provisions and design guidance for development applications in the Precinct.
- **Section 4** contains specific provisions and design guidance for development on the NSW Government owned land in Herbert St, St Leonards.

1.5 Relationship to Other Plans and Planning Instruments

The Design Guide forms part of suite of planning provisions that apply to the Crows Nest Precinct.

In the event of any inconsistency between the Design Guide and the relevant Council Development Control Plans (DCPs), the objectives and provisions of this Design Guide prevail to the extent of that inconsistency. Where no provisions are indicated this Design Guide, the relevant provisions in the DCP will apply.

1.6 How to use this Design Guide

This Design Guide provides the vision, principles, objectives and provisions to guide future development within the Precinct. Proposed development needs to demonstrate how it meets relevant objectives to ensure consistency with the vision and strategic framework for the Precinct.

The Design Guide sets clear provisions for how the objectives can be practically achieved. The Precinct has been informed by specialist technical studies available on the NSW Planning Portal:

The guidance provides benchmarks for how the objectives could be achieved. The guidance does not represent the only way the objectives can be achieved. Where alternative solutions to the guidance are proposed they must demonstrate how they achieve the objectives.

2. Precinct Statement

2.1 The 2036 Plan

The St Leonards and Crows Nest 2036 Plan (2036 Plan) area covers the 3 local government areas of Lane Cove, North Sydney, and Willoughby City. The area covered in the 2036 Plan is located 5km north of the Sydney CBD.

The 2036 Plan provides a variety of land uses, including low, medium, and high density residential, commercial, retail, light industry, education, major health, and sport and recreation facilities. The transport and movement network features a range of transport options including train, bus, cycle, walking and the new Crows Nest Metro station.

Urban renewal at St Leonards and Crows Nest will leverage off the new Metro Station at Crows Nest with connections to other strategic centres at Chatswood, North Sydney, Macquarie Park, and the Sydney CBD. Combined with the implementation of the St Leonards Crows Nest 2036 Plan, growth will be enabled for employment and residential dwellings consistent with the priorities and actions in the North District Plan and support the NSW Government's vision for Transport Oriented Development.

Renewal includes the opportunity to increase services and amenity with open space, upgrades to roads and pedestrian and cycleways and protecting heritage and local character. A focus is on improving connectivity across the Precinct through a network of green streets, active edges, and public spaces.

2.2 Crows Nest Precinct Vision

The vision for Crows Nest Precinct is of an area transforming into a mixed commercial and residential centre that provides a diverse range of homes supported by open spaces, jobs and services with increased accessibility through a new metro service. The combination of multiple factors including continued growth of the health and technology precinct, the unique local village character of Willoughby Road and heritage conservation areas convey the character of the existing area, that combines with the revitalisation of the St Leonards Core through a balance of commercial and residential development, improved connections and public spaces to deliver a vibrant and active precinct.

The structure plan (**Figure 2**) provides for higher density between the stations and improving connectivity across and between character areas and public open space.

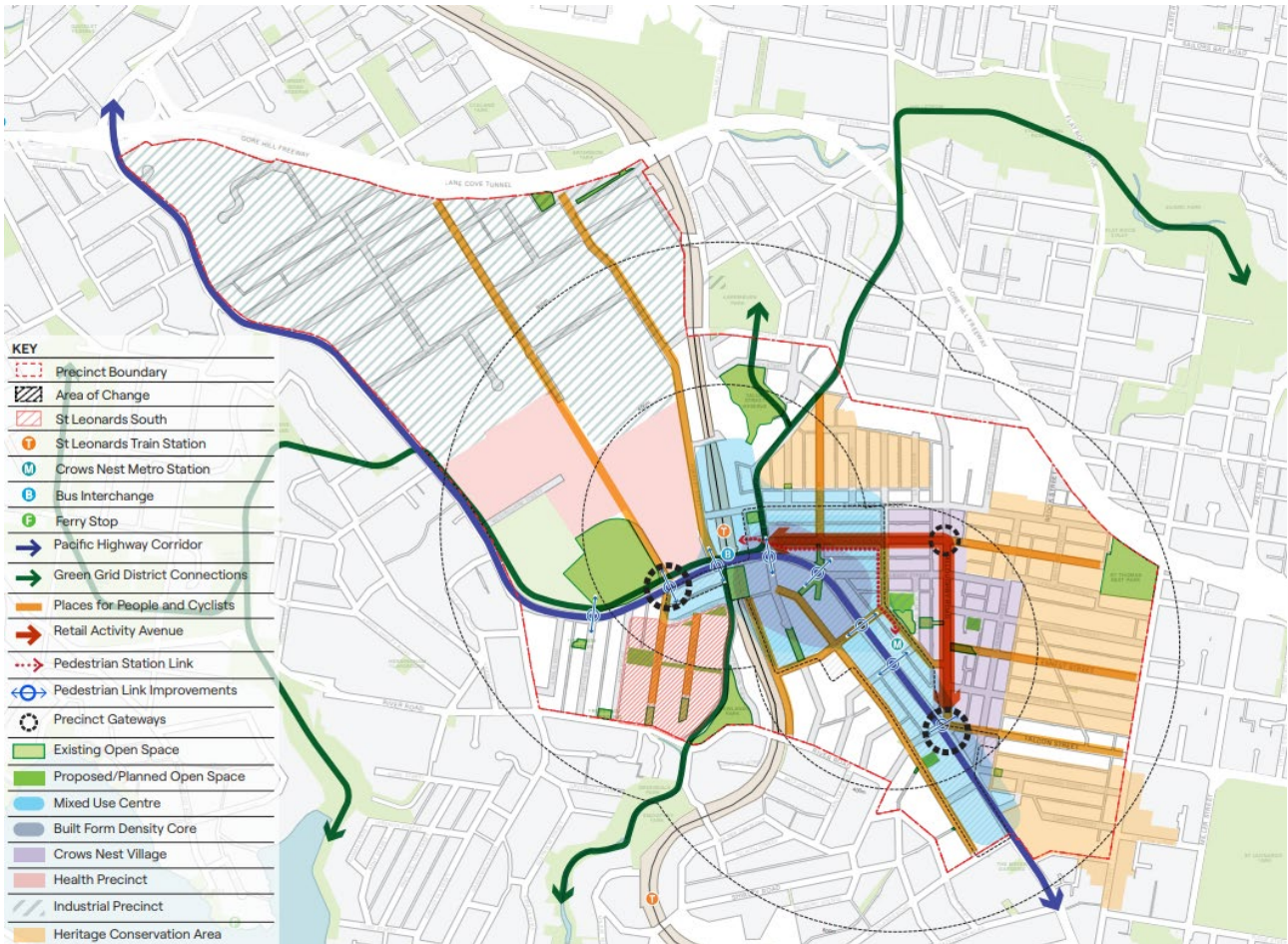
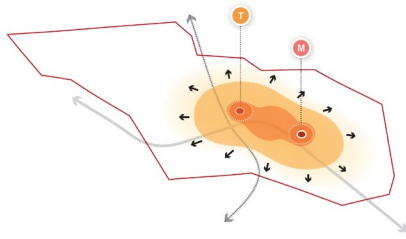


Figure 2: Structure plan (source: SJB, 2024)

2.3 Urban design principles

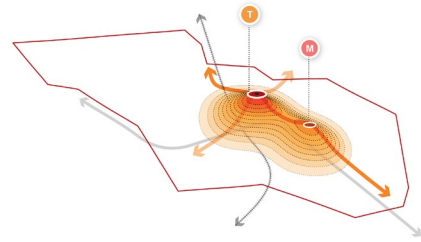
The vision and urban design principles for the Crows Nest Precinct build on the strategic framework of the 2036 Plan and form the design criteria which should be considered for future development (Figure 3). Many of the objectives and principles of the 2036 Plan have been retained and remain relevant to the Precinct.



1. Proximity to Stations

Density located close to transport hubs such as St Leonards Station or Crows Nest Metro.

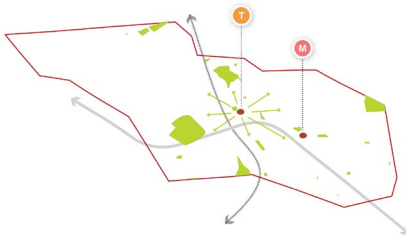
Taller buildings located within 150-200m of a transport hub and transition in height to surrounding areas.



2. Centre and Height Transition

St Leonards is the predominant centre to reinforce its commercial role. Crows Nest as a secondary lifestyle destination.

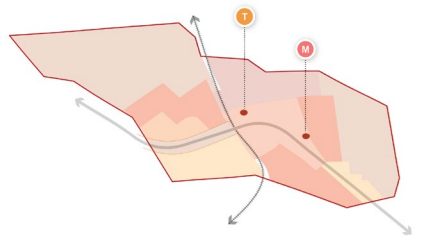
Large developments are located between the stations and transition in height, bulk and scale from the Pacific Highway to the surrounding neighbourhood.



3. Expand Open Space Network and Protect Amenity

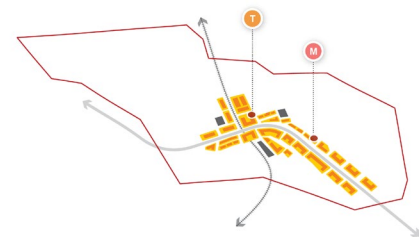
Investigate opportunities for additional open space and improvements.

New development does not cause unacceptable overshadowing to any key existing or proposed public open space.



4. Respond to Character Areas and transition between areas

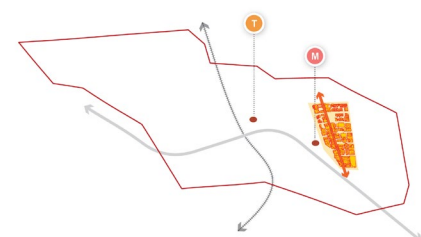
New development responds to built form character including height, bulk and scale as well as existing and proposed uses.



5. Fine Grain Approach

New development should consider its relationship to surrounding context and urban grain.

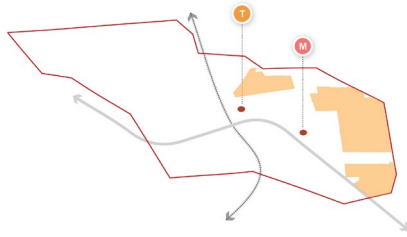
Provide improved accessibility through appropriate frontage treatment and provision of arcades, laneways, and enhanced public domain.



6. Maintain Willoughby Road

Willoughby Road is important and is to be protected.

New development is to ensure minimal overshadowing and avoid unreasonable visual impact to the public domain.



7. Reduce Impact on Heritage Conservation Areas

Protection of heritage conservation areas.

Ensure minimal overshadowing and avoid unreasonable visual impact to the public domain or private open spaces of dwellings within these areas.

Figure 3: Urban Design Principles (source: SJB, 2024)

2.4 Key themes and objectives

The vision, urban design principles and objectives form the design criteria to be considered for future development in the area and are driven by the key themes of land use, built form, movement and environment.

Table 1: Key Themes and Objectives

Theme	Objectives
Land Use	<p>Protect and strengthen the area’s commercial role supported by complementary uses to capitalise on the close proximity to stations. Leverage world-class health and education uses to provide opportunities for training and employment growth into the future. Expand residential opportunities through mixed-use development ensuring long-term activation across the precinct.</p> <p>Objectives</p> <ul style="list-style-type: none"> • Intensify all types of development around public transport, providing an appropriate balance of residential and non-residential land uses. • Prioritise affordable housing up to 15% aligning with the TOD Program and Housing Accord objectives. • Focus commercial activity in the mixed-use core between the stations. • Connect high density areas with development around local shops, services, community infrastructure, and open space. • Future proof the precinct to ensure spaces can grow with community needs. • Protect and leverage from significant contributors to the local economy such as the Artarmon Employment Area and the Royal North Shore Hospital Precinct.
Built Form	<p>Preserve, strengthen and enhance the existing diverse character areas and design and plan for the optimal built form outcomes. Height and density should be appropriate within the</p>

immediate context, emphasising key locations such as the stations whilst also protecting public spaces through solar access controls.

Objectives

- Promote diverse housing typologies which include culturally responsive dwellings.
- Design and orient buildings to respond to build upon their local context and mitigate impacts to public domain.
- Celebrate and integrate heritage where possible with sensitively designed interfaces.
- Consider the connecting with Country framework in development.
- Key gateways defined through built form and key junctions to attract attention and work as wayfinding markers.

Movement

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

Objectives

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

Environment

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

- Ensure the size, distribution and program of open spaces is proportional to the future needs of residents.
- Knit together the network of streets, civic spaces, and open spaces through green streets and active links.
- Maximise tree canopy cover and deep soil on public and private sites to encourage the growth of the local biodiversity.
- Protect solar access and amenity to key public spaces through the provision of design controls.
- Incorporate materials and planting that are endemic to the site and create ecological and cultural benefit.

-
- Acknowledge the cultural landscape of the area, it's importance to the Gammarigal people, and how it has changed over time.
 - Investigate opportunities to include Aboriginal art and other installation into green spaces and other urban design elements.
-

3. Precinct-wide Design Guidelines

3.1 Land to which this chapter applies

Chapter 3 of this Design Guide applies to the North Sydney, Lane Cove and Willoughby LGAs. It is noted where there is an inconsistency between Chapter 3 (precinct-wide guidelines) and Chapter 4 (site-specific guidelines), controls in Chapter 4 will prevail in the Willoughby LGA.

Chapter 4 only applies to Willoughby LGA.

3.2 Place

Connecting with Country

The Connecting to Country framework options for integrating Country into the controls in the Design Guide is to be addressed at the planning proposal stage and for consideration at the development application stage. Design excellence is required to ensure development is 'improving health and wellbeing of Country' (Government Architect NSW, 2020). Guidelines set out in the Government Architects' 'Connecting with Country Framework Connecting with Country Framework'.

Objectives

- Ensure development acknowledges and embeds Country.
- Ensure development is 'improving health and wellbeing of Country'.
- Ensure locally connected Aboriginal community voices are embedded into the development.
- Provide opportunities for collaboration and co-designing with locally connected Aboriginal people for the development and its ongoing operation.
- Celebrate Aboriginal culture and language particularly as it relates to the past, present and future of the site.
- Create and develop relationships with Aboriginal people and businesses to ensure benefits are shared with them and fostering ongoing connection to place.

Provisions

- 1 Consider how development can revive and enliven pre-development landscapes and traditional uses of Country and language.
- 2 Country centred approach -

- a. Encourage incorporation of locally indigenous vegetation that enhances environmental quality, relationship to Country and optimises opportunities for habitat for endemic and native flora and fauna species;
- b. acknowledge Aboriginal knowledge systems and consider how they can contribute to informing future building design and landscaping outcomes as an expression of Connecting with Country;
- c. acknowledge and celebrate Aboriginal living cultures, relationships and site-specific stories of place through architecture, landscaping, art, and other creative expression involving the engagement of suitably qualified Aboriginal practitioners and the protection of Aboriginal cultural and intellectual property rights;
- d. consider Aboriginal inclusion, comfort and access in the design and operation of publicly accessible space;
- e. identify opportunities to name streets, public places, and provide wayfinding signage in local traditional language or implement dual naming. Where Aboriginal naming is adopted, consider providing physical material that outlines the pronunciation and history behind the Aboriginal name, where appropriate and agreed to by relevant Aboriginal stakeholders.

Note: for Aboriginal naming and dual naming, it is encouraged to consult with the NSW Geographical Names Board, local language subject matter experts and with Aboriginal stakeholder groups.

3.3 Land Use

St Leonards is a Strategic centre and a Health and Education Precinct. Additional new dwellings will assist key workers in these sectors live and work in an area supported by new and existing infrastructure and services. The retention of commercial and non-residential floorspace will support employment particularly in allied health and education services as well as provide workers and residents with essential services.

Objectives

- Support the growth of the area as a Health and Education Precinct by maintaining and continuing to provide commercial and non-residential floorspace.
- Ensure that key workers are able to live and work in an area supported by a high level of infrastructure and services.
- Concentrating dwellings around transport hubs will preserve the local village character of the Willoughby Road and the heritage conservation areas.
- Land use objectives for the Precinct are set out in the key objectives outlined in section 2.4.

Provisions

1. The distribution of land uses in the precinct is to be generally consistent with **Figure 4** and as zoned under the relevant LEP.
2. Development should retain a balance of commercial and residential uses within the St Leonards Core with a minimum non-residential floor space requirement for the MU1 Mixed Use zone to provide jobs as required in the LEP.
3. Retain commercial core on appropriate sites to maintain viability of the St Leonards Core.

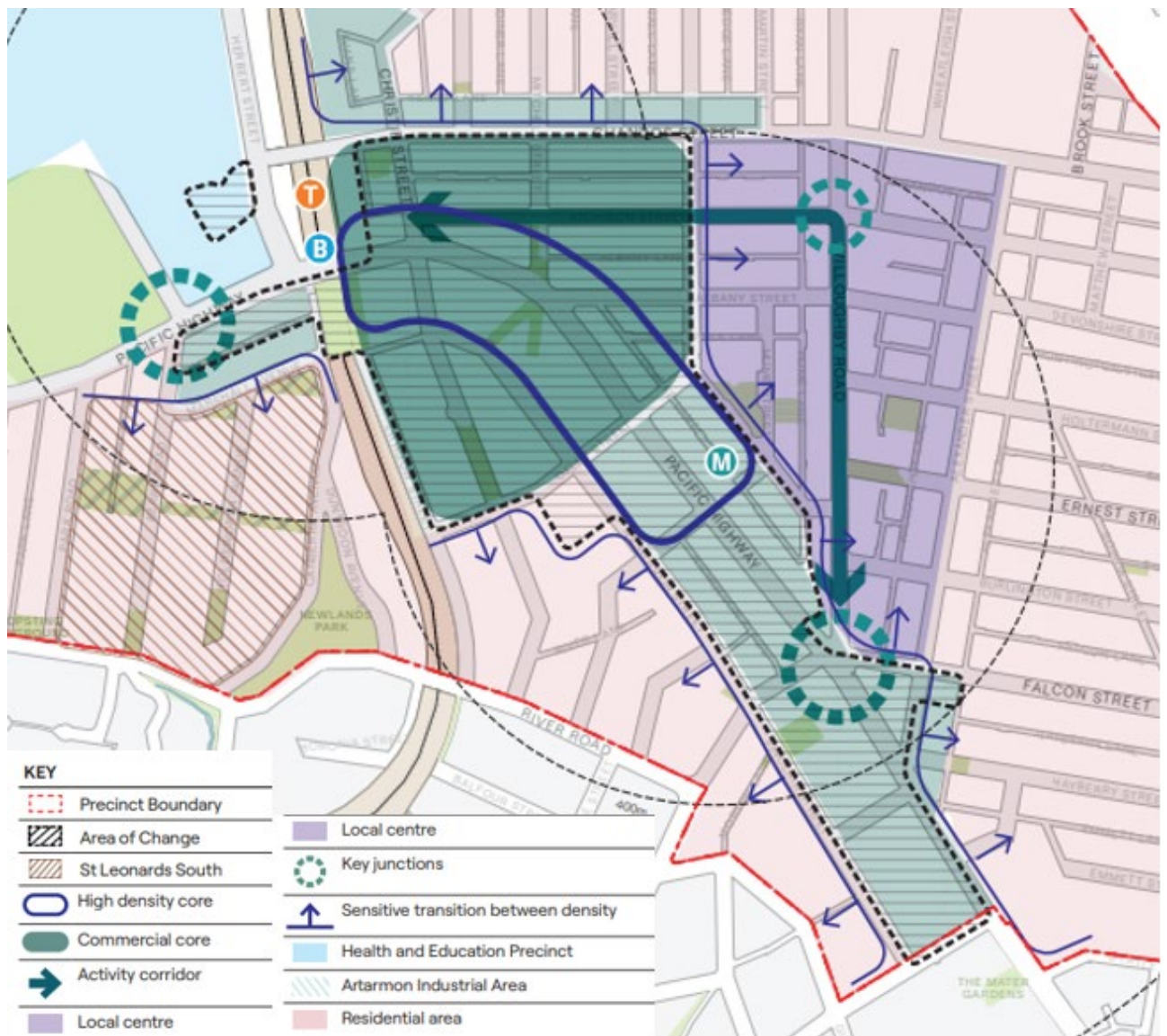


Figure 4: Land use (source: SJB, 2024)

3.4 Built Form

The tallest buildings are located around St Leonards Station and the commercial core. In this area, the topography allows taller buildings that minimise overshadowing of public open spaces and residential areas.

Height is also distributed along Pacific Highway, emphasizing the character along the corridor and the connection between the Train and Metro stations. Heights should transition from the Pacific Highway down to the surrounding low density areas while preserving appropriate density to encourage development and the delivery of housing and jobs.

Heights are to be maintained in the surrounding residential areas and Crows Nest Village to preserve their existing high quality local character.

The built form objectives and provisions in the relevant LEP are required to be applied in addition to any provisions in this Design Guide.

Objectives

The Built form objectives for the Precinct are set out in the key objectives in section 2.4.

Provisions

1. Building heights are to transition from St Leonards Railway Station, Crows Nest Station and the Pacific Highway down to the surrounding lower density areas.
2. Tall buildings are to be positioned to avoid significant impact on the solar amenity and wind impact of lower density areas and public open space.
3. Preserve the existing low-scale fine grain built form of Crows Nest Village to maintain its local shopping street character and limit overshadowing and view impacts.
4. Developments must consider appropriate interfaces and sensitive design to limit impact on heritage conservation areas and high-quality character areas.
5. Maximum floor height assumptions should be based on:
 - a. Ground Floor (all uses) – 5m.
 - b. Above ground floor (residential) – 3.2m.
 - c. Above ground floor (commercial) – 3.8m.
 - d. Rooftop service zone (2-30 storeys) – 2m.
 - e. Rooftop service zone (21-40 storeys) – 4.5m.
6. Maximum floorspace ratio (FSR) and minimum non-residential FSR assumptions should be based on the following gross building area (GBA) to gross floor area (GFA):

- a. Residential – 75%.
 - b. Ground floor (non-residential – retail) – 65%.
 - c. Non-residential – 85%.
7. Rooftop plant is to be incorporated into the overall building height as indicated in the maximum height of buildings map.
 8. Ensure active street frontages are provided at ground level and accommodate non-residential land uses, particularly along Christie, Mitchel, Oxley, Atchison, Chandos and Clarke Streets.
 9. The built form recommendations (**Figures 5, 6 and 7**) should be considered in future development.
 10. Preserve high quality heritage character around the Fiveways Intersection as a key gateway to the southern end of the Precinct (**Figure 6**).
 11. Taller buildings are to be concentrated close to the Crows Nest Metro to ensure a better transition to lower density areas (**Figure 7**).
 12. Increase permeability through blocks by providing through site links between the Metro Station and the mixed use core (**Figure 7**).

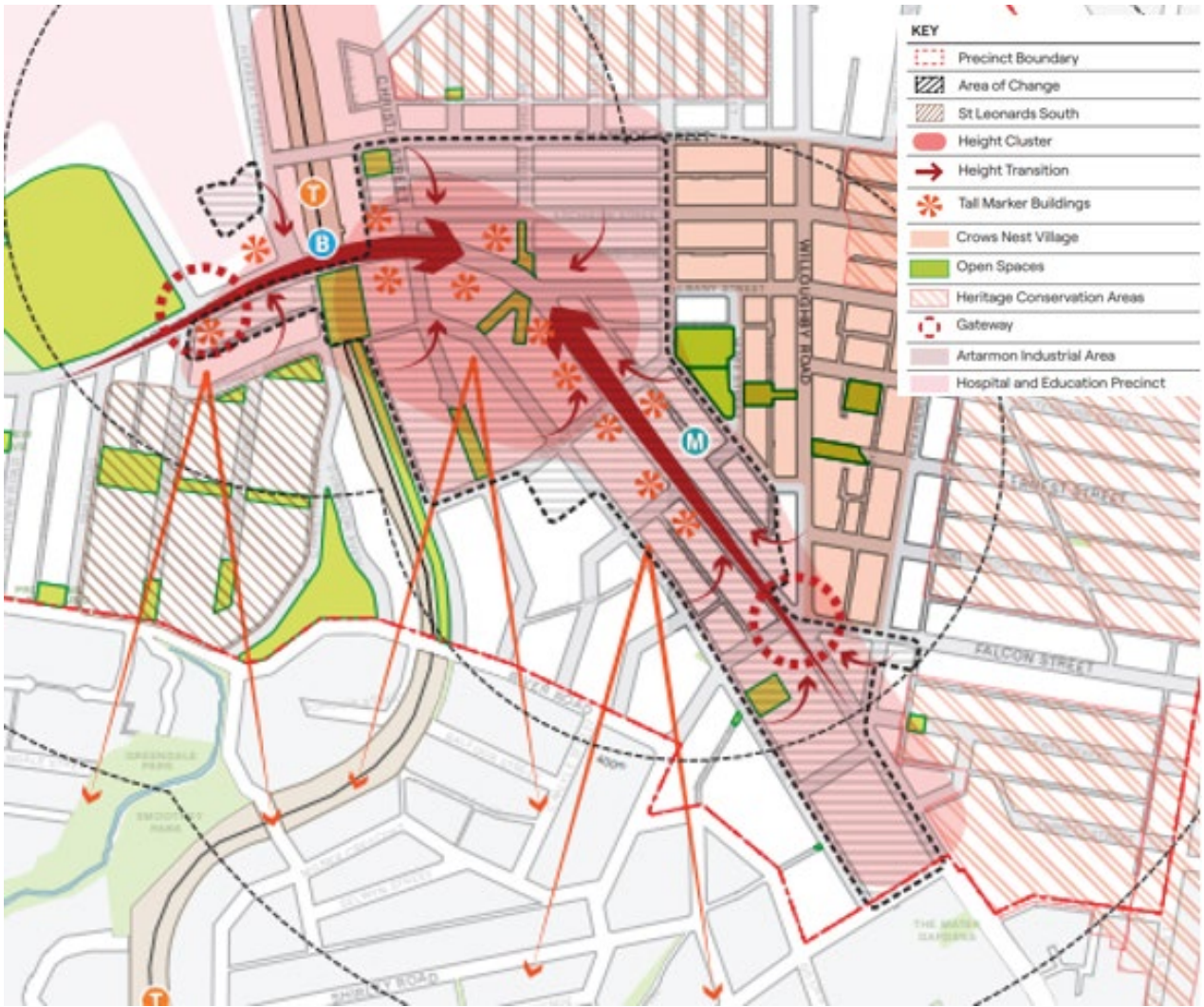


Figure 5: Built form (source: SJB, 2024)

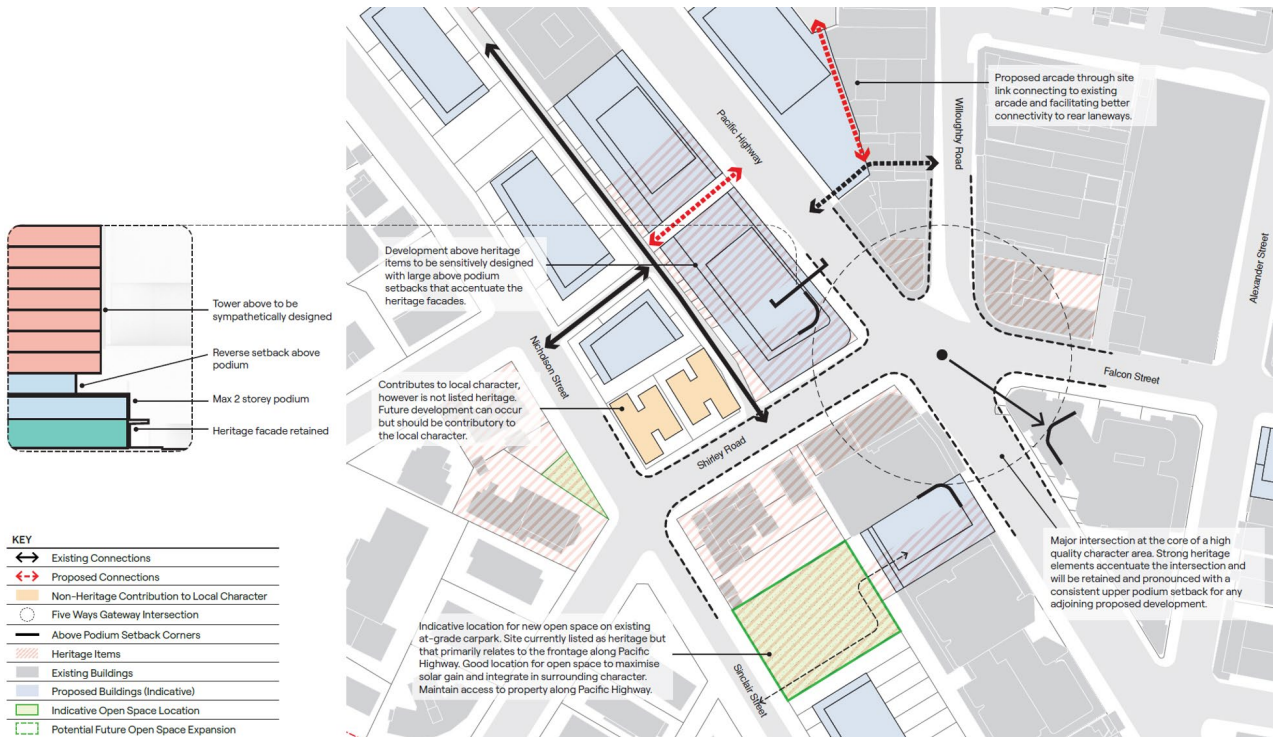


Figure 6: Built form transition at the Five Ways intersection (source: SJB)

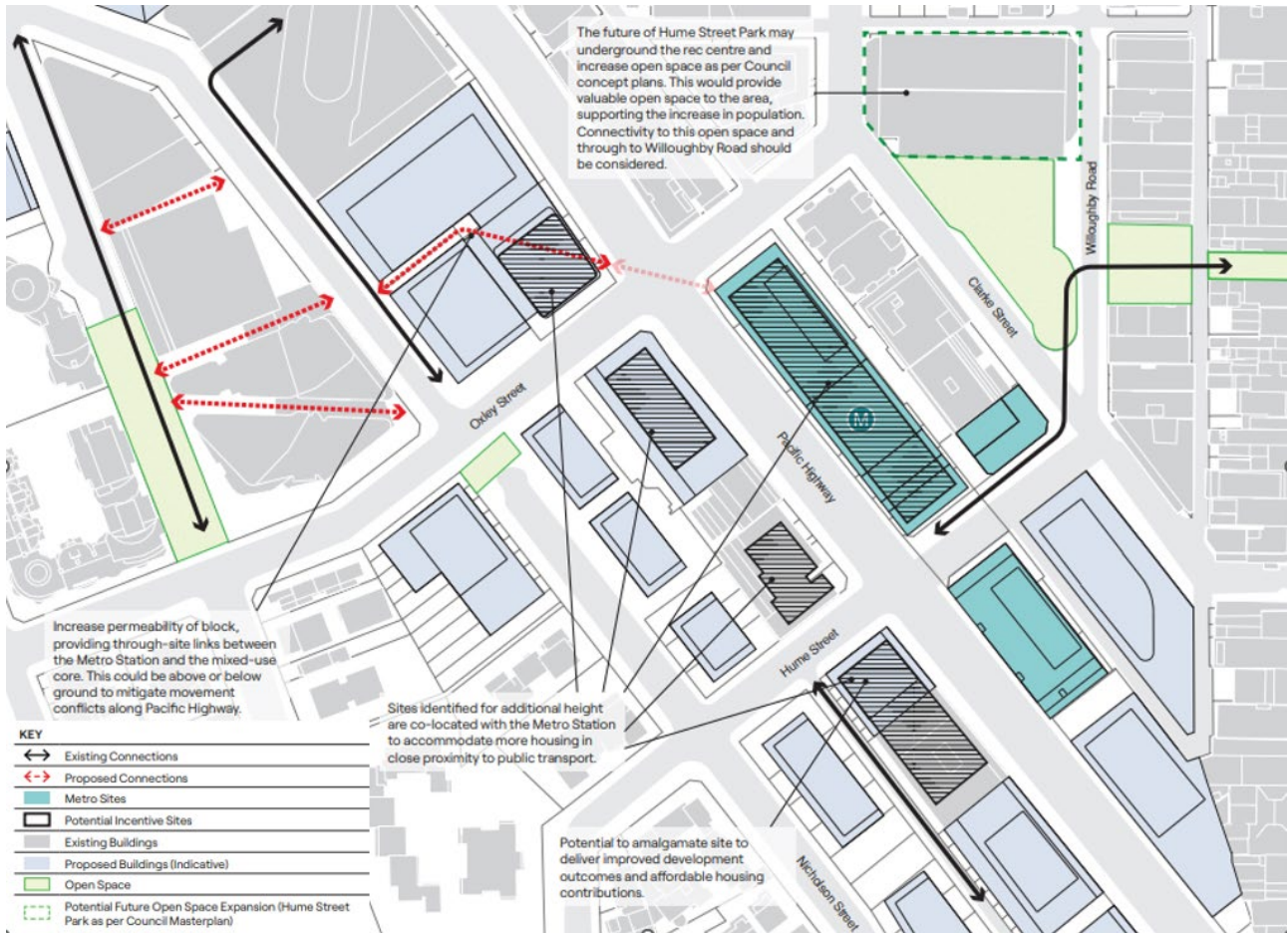


Figure 7: Built form transition at the Crows Nest Metro Interchange (source: SJB)

3.4.1 Solar Amenity and Overshadowing

Overshadowing controls were recommended in the 2036 Plan and remain relevant to any future development of the Crows Nest Precinct (**Figure 8**). Retaining solar access to public open space, valued streetscapes, and residential areas is vital acknowledging that these requirements can limit the bulk and scale of new development in order to maintain hours of solar access.

Objectives

- Minimise overshadowing to existing and proposed public open space and residential areas.
- Maintain solar access to key streets, public open spaces and surrounding residential areas during mid-winter to maximise useability and amenity to these places.

Provisions

1. Solar amenity and protection from overshadowing should be consistent with **Table 2**.

2. The consent authority may grant consent to development that seeks to provide affordable housing consistent with the LEP incentive height and FSR clause. In this case, residential areas located outside the Precinct boundary should not receive less than 2 hours of sunlight in accordance with **Table 1**.

Table 2: Areas to be protected from overshadowing

Space	Requirement
Existing and Planned Public open spaces	No additional overshadowing
1. Christie Park	10am to 3pm Winter Solstice (June 21)
2. Newlands Park	
3. St Leonards Park (indicative)	
4. Propsting Park	
5. Hume Street Park	
6. Ernest Park	
7. Gore Hill Oval	
8. Talus Reserve	
Other open space	<ul style="list-style-type: none"> Minimum 3 hours to 50% of the area 10am to 3pm Winter Solstice (June 21) Consideration should also be given during the Equinox periods (March/September 21) Potential park (9 in Figure 8) – note this park is indicative
9. Potential Park	
Streetscapes	No additional overshadowing 11.30am to 2.30pm Solstice (June 21)
10. Mitchell Street	
11. Oxley Street	
12. Willoughby Road	
Conservation Areas (inside Precinct Plan boundary)	Minimum 3 hours 9am to 3pm Winter Solstice (June 21)
Residential Areas (inside Precinct Plan boundary)	Minimum 2 hours 9am to 3pm Winter Solstice (June 21)
Residential Areas (outside Precinct Plan boundary)	<p>No additional overshadowing 9am to 3pm Winter Solstice (June 21)</p> <p>For incentive affordable housing provisions, any increase in height or FSR should not result in residential areas located outside the precinct receiving less than 2 hours of sunlight between 9am and 3pm Winter Solstice (June 21).</p>

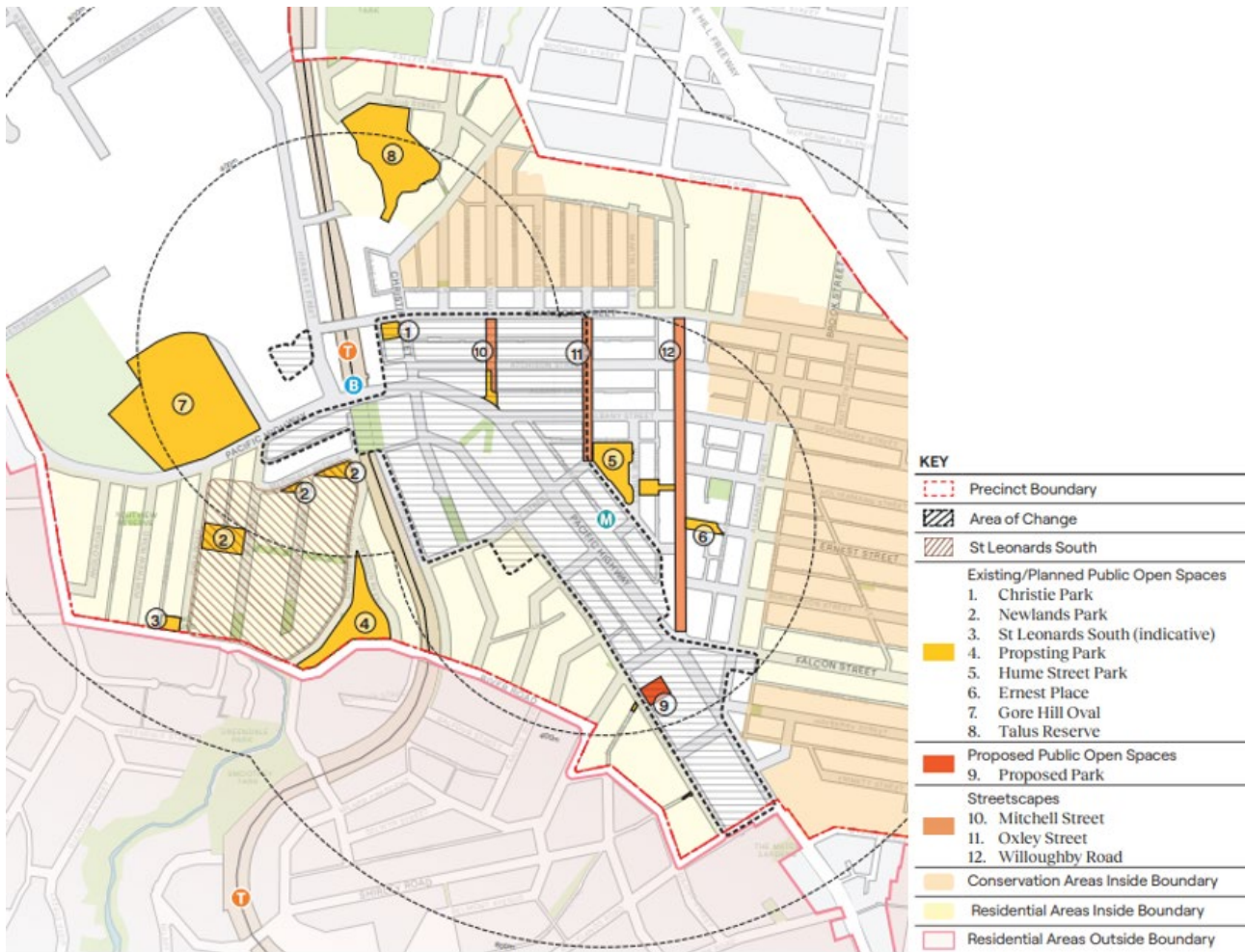


Figure 8: Solar access map (source: SJB)

3.5 Landscape and Environment

3.5.1 Public Spaces

High quality and variety of public open spaces is greatly valued by the community. Some public open space has been delivered aligning with the recommendations in the 2036 Plan and the supporting Green Plan. However, the provision and upgrade to existing public open space needs to increase with the proposed increase to the population in and surrounding the Crows Nest Precinct.

Objectives

- As a guide, open space in urban areas should be considered and provided consistent with the following: For high density areas typically greater than 60 dwellings per hectare (ha):
 - A local park of a minimum size of 1,500m² within 200m walking radius (3 minutes walk).
- For medium/low density areas typically less than 60 dwellings per ha:

- A local park of a minimum size of 3000m² within 400m walking radius (5 minutes walk).

Provisions

1. Ensure publicly accessible open spaces have appropriate solar access for their intended purpose.
2. Ensure the public spaces support the integration of all levels of pedestrian activity. Road frontage and visibility are key considerations, especially in high-density areas so open space is accessible for all.
3. Reconnect the surrounding streets and neighbourhoods through the creation of a clear and legible network of high amenity, safe and accessible public spaces that support pedestrian and cycle access through and across the Crows Nest Precinct.
4. Investigate the provision of additional public open space as part of future development.

3.5.2 Tree Canopy and Deep Soil

A key aspect of the Green Plan that supported the 2036 Plan is to retain and enhance the existing network of tree lined streets and remains relevant to including the plans for the Crows Nest Precinct.

Development can meet urban tree canopy requirements by planting trees in line with the tree planting rate or by planting a combination of trees that achieve the minimum tree canopy percentage cover. The required number of trees that will meet minimum tree canopy percentage cover can be calculated by using the assumed canopy area of small, medium and large trees in **Table 5**.

Objectives

- Maintain and enhance canopy cover to address urban heat, contribute to local amenity, reduce air pollution, support biodiversity and improve community health and wellbeing across the Crows Nest Precinct.
- Build on the 2036 Plan to increase the health and extent of the tree canopy or vegetation cover for Crows Nest.
- Ensure development provides sufficient deep soil to support healthy root systems and ensure trees reach maturity.
- Retain and protect existing trees.
- Contribute to improving the diversity of locally endemic and native flora and fauna that contributes to the natural characteristics of Crows Nest.

Provisions

Deep soil

1. Provide deep soil zones are to be a minimum dimension of 3m x 3m to support new trees and retain any existing trees. Deep soil zones for development should be provided as per the benchmarks in **Tables 3** and **4**. Development is not to reduce the amount of deep soil provided.
2. Deep soil is to be unimpeded by any building or structure above or below ground, except for minor structures such as pathways, access ramps or area of paving with a maximum width of 1.2m; essential services infrastructure (such as stormwater pipes) with a maximum diameter of up to 300mm; and landscape structures (such as lightweight fences, light poles or seating) requiring a footing with a maximum size of up to 300mm x 300mm in cross section.
3. Where possible establish contiguous deep soil zones within and between property boundaries to maximise tree planting by establishing them right up to abutting boundary walls and fence lines.

Tree canopy

1. Canopy cover for private land should be provided as per the canopy cover or tree planting rate in **Table 3**. Development shall not reduce the amount of canopy coverage provided.
2. Canopy cover on streets and public open space should be provided as per **Table 4**. Development shall not reduce the amount of canopy coverage provided.
3. All proposed trees are to align with the minimum diameter spread and canopy area at maturity in **Table 5**.
4. Provide adequate setbacks as outlined in section 3.8 and **Figure 9** to allow for opportunities to enhance transition areas and pedestrian links.
5. Maintain existing trees where possible.
6. Trees planted should reflect diversity of local and endemic indigenous flora and fauna that is tolerant and resilient within the urban environment.
7. Preserve the green edge and views along Gore Hill Park and Cemetery emphasising its significance to the community by preserving view lines.

Table 3: Site scale benchmarks - private residential areas

Mixed Use (all lots)	Development should be assessed on case-by-case basis, considering both the Apartment Design Guidelines and proposed setbacks. At a minimum, proponents should demonstrate maximised tree planting in deep soil zones, a no-net loss of canopy, and a contribution to strategic canopy targets.		
	Detached Dwellings	Canopy Cover	Deep Soil

<300 m ²	20%	20%	For every 200m ² of site area, or part thereof at least 1 small tree
300 m ² – 600 m ²	25%	25%	For every 250m ² of site area, or part thereof at least 1 medium tree
>600 m ²	30%	30%	For every 350m ² of site area, or part thereof at least 2 medium trees or 1 large tree
Attached Dwellings*	Canopy Cover	Deep Soil	Tree Planting Rate
< 150 m ²	15%	15%	At least one small tree
150 m ² – 300 m ²	20%	20%	For every 200m ² of site area, or part thereof at least one small tree
> 300 m ²	25%	25%	For every 225m ² of site area, or part thereof at least 1 medium tree
Multi Dwelling	Canopy Cover	Deep Soil	Tree Planting Rate
< 1,000 m ²	20%	20%	For every 300m ² of site area, or part thereof at least 1 medium tree
1,000m ² –3,000 m ²	25%	25%	For every 200m ² of site area, or part thereof at least 1 medium tree
> 3,000 m ²	30%	30%	For every 350m ² of site area, or part thereof at least 2 medium trees or 1 large tree
Apartments	Canopy Cover	Deep Soil	Tree Planting Rate
< 650 m ²	15%	7%.	For every 350m ² of site area or part thereof, at least 1 small tree is to be planted in the deep soil area
650 m ² – 1,500 m ²	15%	10%.	For every 350m ² of site area or part thereof, at least one medium tree is to be planted in the deep soil area
>1,500 m ²	20%	15%.	For every 575m ² of site area or part thereof, at least 2 medium trees or one large tree is to be planted in the deep soil area

*Attached dwellings, dual occupancies, terraces on each proposed dwelling

Table 4: Site scale benchmarks – non-residential

On-Grade Car Park	One medium tree should be planted in every fifth car parking space provided. The tree is to be in a planted zone of 13 m ² – the equivalent of a car parking bay area. Trees should be evenly distributed in a chequerboard fashion to increase shading
Unlisted land uses, such as large-scale precinct planning or urban design strategies.	Use zone-based benchmarks for setting canopy benchmarks for development where the street network or detailed development mix is unknown.
Open space (RE1) including streets	45%
Residential zoned land (R1, R2, R3, R4) including streets	40%

Table 5: Tree size at maturity

Tree Category	Minimum Diameter Spread	Minimum Canopy Spread
Small tree	6m.	28m ²
Medium tree	8m	50m ²
Large tree	12m	113m ²

3.6 Design Excellence

Future development in the Crows Nest Precinct area in the North Sydney Local Government Area and the Lane Cove Government Area are not subject to a design competition if triggered in any LEP. However, good design is NSW Government policy and it is planned to apply a prescribed procedure to ensure and deliver a high-level of development in the Precinct.

Design excellence applies to a mapped area adjacent to the Crows Nest Metro Station under clause 6.19B of the North Sydney LEP. This land includes the three Metro station sites (known as Sites A, B and C) which were the subject of a State led rezoning for the over station development in 2020. Development consent has been granted to concept development applications for these sites.

The clause does not require a design competition, however does require consideration of a number of matters including appropriate solar access, prior to development consent being granted to ensure the development exhibits design excellence. Similarly, St Leonards South is

subject to a design excellence clause under the Lane Cove LEP, which also requires design excellence considerations prior to the consent authority granting approval.

Willoughby LEP has a design excellence clause (clause 6.23) that requires developments to deliver the highest standard of architectural, urban and landscape design through a design competition process. Given the significance and scale of the future development of Lot 4B at Herbert Street, it is essential that design excellence is demonstrated as part of any future design. Where a LEP requires a design competition in the Crows Nest TOD Precinct there is a planning pathway offering an alternative design excellence pathway to be developed by the Government Architect NSW for any design competitions required by the local Council.

Objectives

- All projects, large or small, should demonstrate good design. This expectation is now embedded in the objects of the EP&A Act.
- Ensure development demonstrates design excellence and is the result of a best practice architectural design competition where required.

Provisions

1. The proposed process for high-density residential development will require:
 - a. A pre-approved architect chosen from a pool.
 - b. Bespoke design review panel.
 - c. Maximum of reviews, a minimum of 4 weeks apart.
 - d. Enhanced Design verification Statement to strengthen the existing requirement under the SEPP (Housing) 2021 and the ADG.
2. To be considered for 'pre-approval' the architect must;
 - a. Provide examples of a minimum of 5 projects over \$30m CIV that have been delivered in the past 5 years.
 - b. Provide examples of a minimum of 5 built multi-residential projects in NSW that demonstrate:
 - i. Street level quality, showing how the following have been integrated into the design:
 - Activation of the street through entries, retail and detailing.
 - Landscape – tree canopy and green cover.
 - Material and detailing – indicating how quality and durability have been considered.
 - Equitable access -driveway access, services, loading docks.

- ii. Building form – modulation, considering context and neighbours, management of wind at ground plane.
 - iii. Façade treatment and detailing (material quality and detailing, extent of glazing, balcony detailing, sunshading, modulation).
 - iv. Apartment amenity – effectiveness of apartment layouts (efficient and functional planning).
 - v. Sustainability – orientation, cross ventilation, sunshading, passive systems, provision of solar.
- c. Must be able to show evidence of receiving minimum 3 AIA awards or commendations in the last 10 years, with at least one of those awards being for multi-residential housing.
 - d. Demonstrate how you have or could collaborate with small, medium or emerging architectural practices.

3.7 Setbacks

Property setbacks ensure future development is appropriately scaled and positioned in relation to its context. Increased setbacks will enable increased landscaping and tree planting for greener more walkable streets. The relative DCP's have been used to determine the appropriate setbacks at various sites.

Objectives

- Strengthen the spatial characterisation of streets and public spaces.
- Emphasis the street as distinct with a street wall frontage at an appropriate human scale.
- Provide consistent street frontages to the street alignment.
- Respond to context as required to recognise any variation in street frontage heights.
- Provide suitable transition in scale from the various land uses such as employment, mixed use zones and residential zones.
- Provide suitable setbacks to allow deep soil planting to the Pacific Highway if possible and any existing or proposed public open space.

Provisions

1. Buildings are to be setback from all street frontages in accordance with the setbacks shown in the map at **Figure 9**.

2. New development adjoining the increased setbacks and landscaped areas should contribute to its landscape character. For example, by providing planter boxes, lighting, green walls and deep soil to support larger trees.
3. Above podium setbacks are to be provided in accordance with the relevant Council DCP.



Figure 9: Recommended setbacks (source: SJB)

3.8 Street wall heights

Street wall height controls are guided by existing development and the relevant DCPs.

Objectives

- To guide the height of podiums and the setbacks for towers above ground.

- Provide a street wall height at a human scale to improve the street quality and amenity for pedestrian and other active transport.

Provisions

1. Podium heights are to be provided in accordance with the heights shown in the map in **Figure 10**.
2. Corner sites are to maintain a consistent podium height to all street frontages.

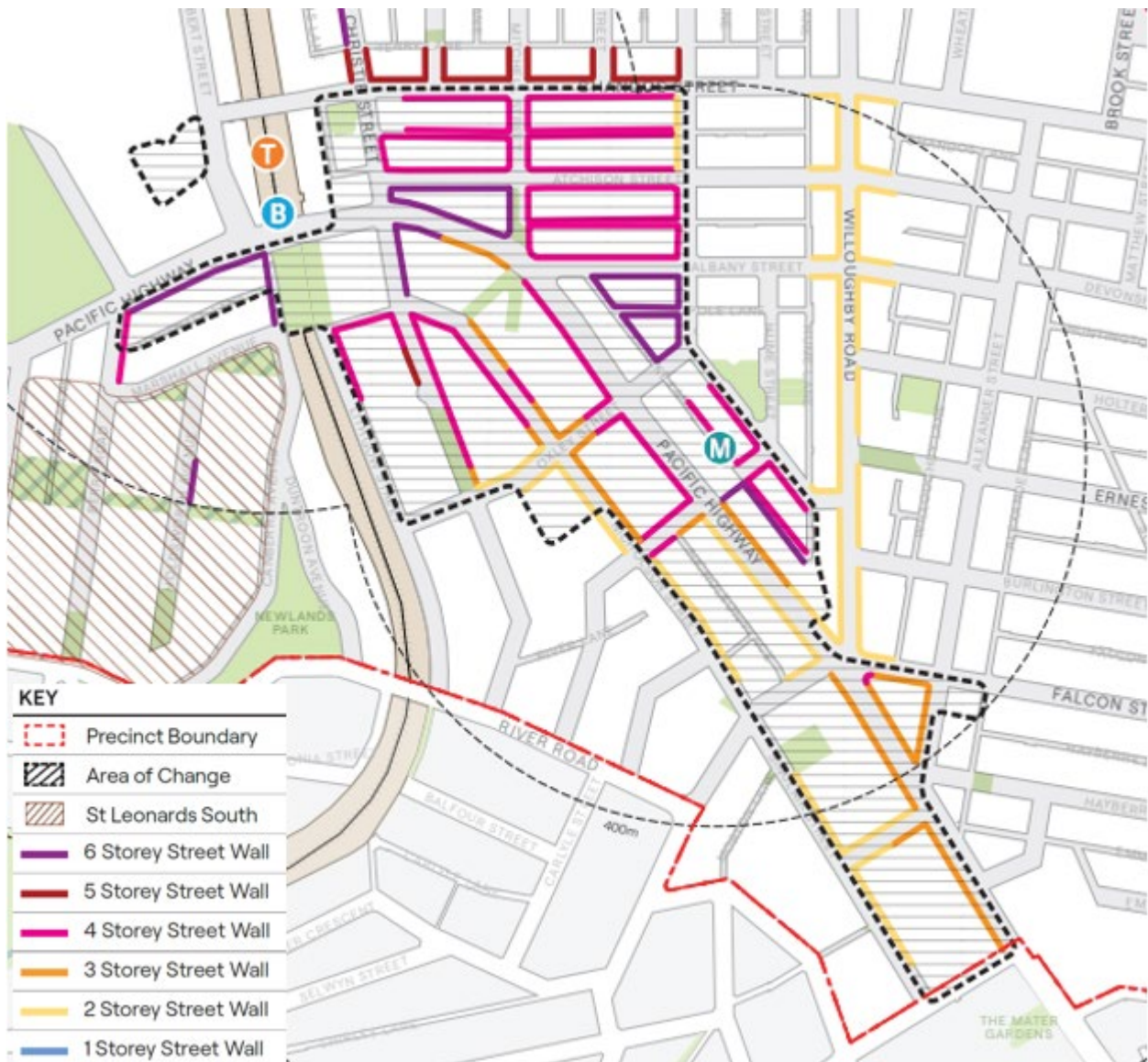


Figure 10: Recommended Street wall heights (source: SJB)

3.9 Movement

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

Objectives

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

Provisions

1. The movement network should consider the movement map in **Figure 11**.
2. Establish a pedestrian route between St Leonards Train Station and the Crows Nest Metro.
3. Provide shade and shelter for pedestrians with reverse setbacks where possible.
4. Establish active transport routes away from high traffic networks.
5. Introduce through site links to improve permeability and walkability.
6. Establish and upgrade crossings and footpaths to improve pedestrian amenity particularly around the Crows Nest Metro Station and along the Pacific Highway.

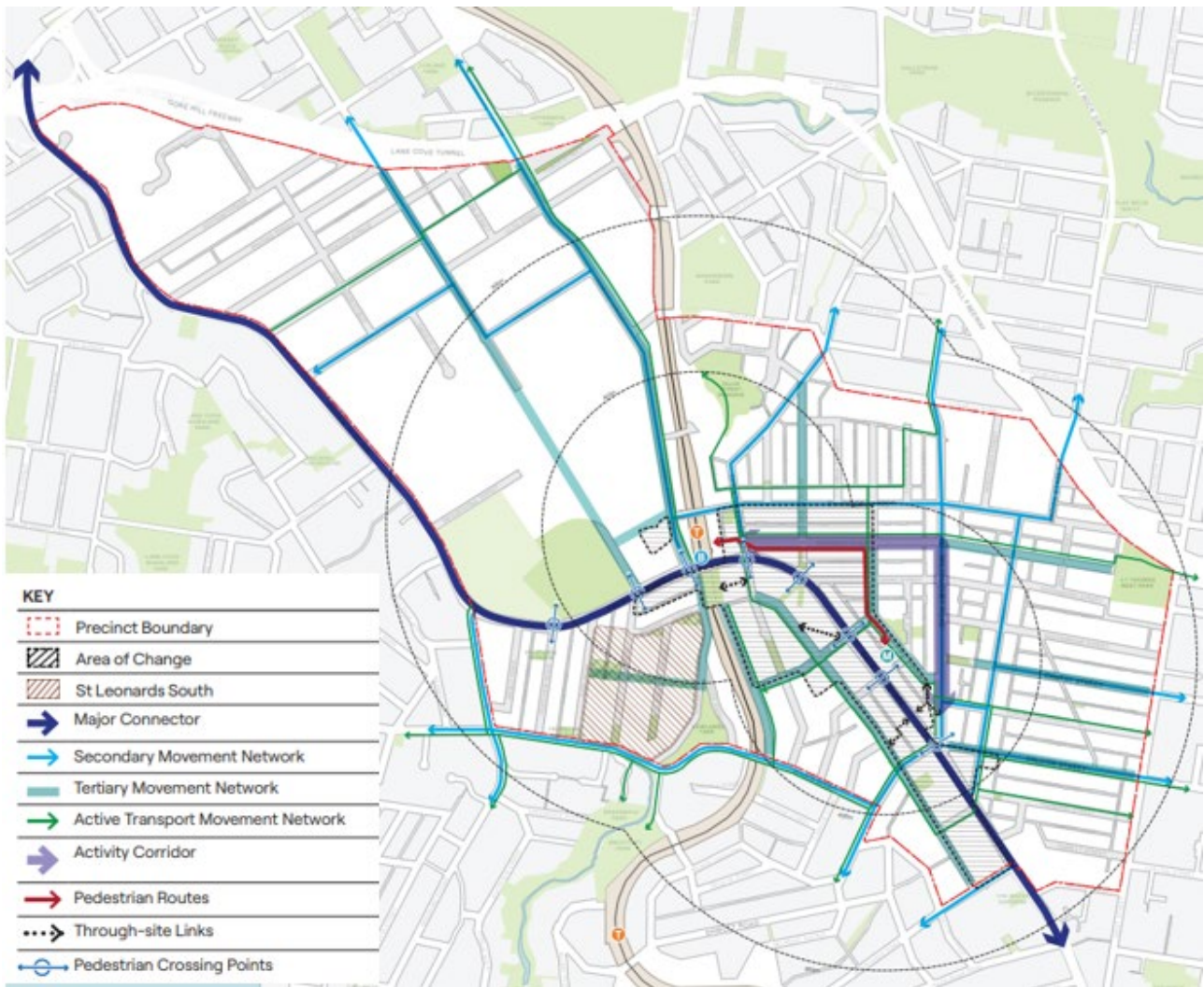


Figure 11: Movement map (source: SJB)

3.10 Carparking

Objectives

- Prioritise the safe and comfortable access and movement of people.
- Minimise through traffic and the impact of vehicular access and servicing in public space.
- Promote a walkable urban environment and ensure access for people with all abilities.
- Ensure car parking allows for the planting of trees to promote the greening and biodiversity in the precinct.
- Ensure new development caters for EV charging to support net zero objectives and improve air quality.

Provisions

1. The parking provisions in the relevant Council DCP will apply and must be referred to as part of any planning proposal and/or development application.

2. Notwithstanding maximum car parking rates in the relevant LEP's and DCP's, minimised provision of parking for all land uses is encouraged to capitalise on the proximity of St Leonards Station and the Metro Station.
3. The provision of car parking (including driveways and ramps) is not to result in the underachievement of deep soil requirements.
4. All above ground car parking areas must be sleeved through architectural treatments or landscaping.
5. Electric vehicle (EV) charging stations are to be provided in accordance with the following provisions:
 - All garages and car spaces allocated to an individual residential apartment must make provision for charging stations, as defined by NSW Electric and Hybrid Vehicle Plan (part of Transport for NSW's *Future Transport 2056*) which provides faster, more secure charging.
 - In new development:
 - EV charging switchboards should have sufficient capacity for a future when all residents are charging.
 - For commercial development, EV charging is to be provided to cover a wide range and future possibilities for EV charging, including individual tenancies and public fast-charging infrastructure options.
6. Loading and servicing facilities are to be provided according to the applicable Council DCP.

3.11 Wind Management

Objectives

- Future development on the site is to ensure the impact on the wind environment does not result in uncomfortable or unsafe wind conditions in the public domain or on surrounding sites.

Provisions

1. All new development is to be designed to mitigate adverse wind effects.
2. A development application is to be accompanied by a quantitative wind effects report.

4. Site Specific Design Guidelines

4.1 Land to which this chapter applies

Chapter 4 of this Design Guide applies to Willoughby LGA only, specifically Lot 4B at Herbert Street (part Lot 41 of Deposited Plan 1252021) as shown in **Figure 12**.



Figure 12: Land application map for site-specific guidelines

4.2 Vision and Objectives

4.2.1 Desired Future Character for Lot 4B

The vision for Lot 4B Herbert Street is to:

- (a) Enable a scale of high-density development on Government owned land to optimise proximity to St Leonards railway station.

- (b) Complement the land use, built form and operation of the RNSH precinct.
- (c) Deliver upon a critical shortage of affordable and key worker housing through provision of a high-density development on the site.
- (d) Provide for the mixed-use of the site with infill residential accommodation and supporting commercial land uses.
- (e) Provide an appropriate mix of dwelling types to improve housing choice and support equitable housing access.
- (f) Provide a density and critical mass of floor space that will leverage from and support the investment in infrastructure upgrades, including the Crows Nest metro station and the existing St Leonards railway station.
- (g) Deliver a future design that is capable of design excellence and demonstrate leadership in sustainable initiatives.
- (h) Improve connections between Gore Hill Park and St Leonards railway station through a realignment of the pedestrian bridge.
- (i) Provide social infrastructure necessary to support resident, employee and visitor growth.
- (j) Create a new arrival space at Herbert Street with active frontages and a retail plaza.
- (k) Respond to site constraints and adopt passive design strategy, innovation and technology.

4.2.2 Design Principles

Lot 4B at Herbert Street is informed by the following key design principles.

- (a) Respond effectively to existing landscape conditions.
- (b) Define a podium in response to site conditions and Apartment Design Guide provisions.
- (c) Provide pedestrian and vehicle access along Herbert Street as an active street address.
- (d) Improve public safety and line of sight through a new public lift and stair connection from Herbert Street.
- (e) Provide a realigned pedestrian bridge across Herbert Street to unlock large public plaza amenity.
- (f) Deliver activated edges to promote activity and passive surveillance.
- (g) Resolve topography changes and achieve level alignment across the site and adjacent RNSH precinct to achieve integration and connectivity, consistent with the objectives of the RNSH Masterplan.
- (h) Deliver a centrally located communal area surrounded by supporting outdoor open space.

- (i) Maximise tower floor plate efficiency along an east-west axis.
 - (j) Extrude tower form to reveal extensive 360-degree views and maximise visual amenity.
-

4.3 Built Form

4.3.1 Building Massing and Envelope

Objectives

- Ensure development provides an adequate street wall height along Herbert Street.
- Ensure a suitable ground level setback is delivered to Herbert Street.
- Ensure development provides appropriate tower setbacks to provide for visual separation between the subject tower and future development on adjoining sites.
- Achieve an appropriate level of solar amenity, wind comfort and daylight on the site.
- Maintain a high level of daylight access to public domain within the site and to the adjacent Gore Hill Oval during the period of the day when they are most used by the community.

Provisions

1. Built form within Lot 4B is to be in accordance with **Figures 13 to 14** relating to setbacks, street frontage heights and tower setbacks.
2. The envelopes prescribed by these figures are the maximum permissible extent of any future built form on the site. Variances will only be considered where design excellence can be demonstrated.
3. Building massing, setbacks and articulation zones are to be designed to enable the achievement of appropriate wind conditions as set out below.
4. Development is to ensure that public domain within the site and Gore Hill Oval receive an appropriate solar amenity for their intended use.



Figure 13: Podium envelop (source: Urbis)



Figure 14: Tower envelop (source: Urbis)

4.3.2 Active Frontages

Objectives

- Maximise activate frontages with activation at both day and night, and minimise services, vehicle access and lobbies.

Provisions

1. Development is to maximise active frontages along the northern ground level frontage through provision of retail, food or drink premises, or both.
2. Ground level frontages are to be of high-quality design to contribute to the amenity of the public domain.
3. Retail premises and food and drink premises are to open on to public domain.
4. Active street frontages are to be provided on the locations nominated on **Figure 15**.
5. Provide building design features, such as permanent or retractable awnings, along the northern frontage to provide adequate protection to pedestrians from the elements. Awnings are to be generally in accordance with the locations nominated on **Figure 15**.



Figure 15: Active frontages map (source Urbis)

4.4 Movement

4.4.1 Movement and Access

Objectives

- Minimise conflicts between pedestrian and vehicles on footpaths, particularly on Herbert Street.
- Ensure the location and design of vehicular access points avoids disruption of traffic flow along Herbert Street.
- Promote the use of public transport infrastructure including St Leonards railway station, Crows Nest Metro station and the St Leonards bus interchange.
- Prioritise active transport.
- Minimise the provision of on-site car parking within future development.
- Ensure the movement network is integrated with surrounding public spaces.

Provisions

1. Basement parking and service vehicle entry and exit points is to be provided from Herbert Street only, generally in the locations nominated on **Figure 16**.
2. The width of a vehicular crossover on Herbert Street is to be minimised as far as practical whilst still enabling service access to enter the site.
3. Pedestrian accessways are to be provided on upper ground and lower ground to enable access to surrounding transport options and adjoining sites.
4. Car parking is to be provided in accordance with the minimum rates for the St Leonards precinct as outlined in Part F of the Willoughby DCP.



Figure 16: Vehicular access map

4.5 Landscape

4.5.1 Public Domain and Landscaping

Objectives

- Reduce urban heat island effect through landscaping that provides shade and enhances the precinct's microclimate.

- Deliver east-west through site linkages through the site to promote greater site permeability and connectivity with St Leonards station.
- Maximise activate frontages with activation at both day and night, and minimise services, vehicle access and lobbies.
- Improve wayfinding through Lot 4B to support pedestrian connectivity to public transport and the RNSH precinct.
- Maintain pedestrian connectivity through the site.

Provisions

1. The layout and positioning of public domain is to be generally delivered in accordance with **Figure 17**. Alterations to the layout may be considered where an increased public benefit is demonstrated.
2. Local Indigenous species are to be selected in planting design where possible.
3. Future development should consider realignment of the Herbert Street pedestrian bridge in accordance with Figure 16 to formalise a pedestrian connection from St Leonards Station to the site.
4. Future development of public domain at upper ground level is to achieve clear sightlines from the public domain through a minimum 4m setback from Herbert Street. Any built form including lifts and stairs is not to be provided within the setback zone.

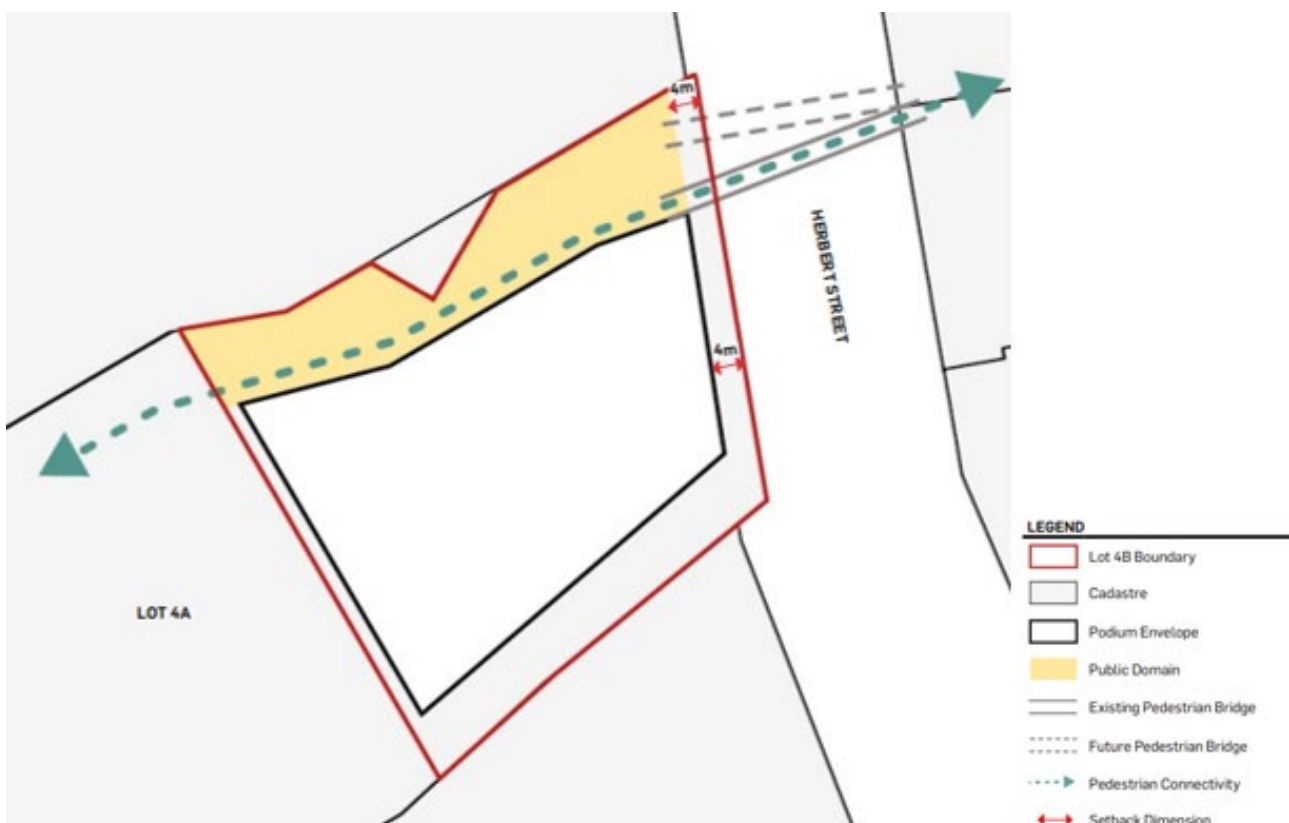


Figure 17: Public domain map (source Urbis)

4.6 Flooding

Objectives

- Ensure development is consistent with best practice performance benchmarks for ecologically sustainable development.
- Mitigate potential flood impacts on the development site.

Provisions

1. A development application is to be accompanied by a Flood Risk Assessment that outlines measures to manage and mitigate flood risk, minimise impact of flood damage or hazard on surrounding properties, and consider overland east-west flow paths along the southern boundary of Lot 4B.
2. Development is to consider and include Water Sensitive Urban Design (WSUD) measures to contribute to the minimisation of water quality pollutants.

5. Amendment Notes

List of Amendments