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Western Sydney Aerotropolis Precinct Plan

MAY 2023





Acknowledgement of Country

The Department of Planning and Environment 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.

Published by NSW Department of Planning and Environment

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Western Sydney Aerotropolis Precinct Plan

First published: MAY 2023

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1 Introduction

1.1 The Precinct Plan

This Precinct Plan has been prepared and is in force under the provisions of State Environmental Planning Policy (Precincts – Western Parkland City) 2020, Chapter 4 Western Sydney Aerotropolis (the Aerotropolis SEPP). The Precinct Plan provides the place-based objectives and requirements to guide development in the Aerotropolis in a consistent and sustainable manner over time. This Plan sets out the finer grain detail to support the land use zoning and other provisions of the Aerotropolis SEPP.

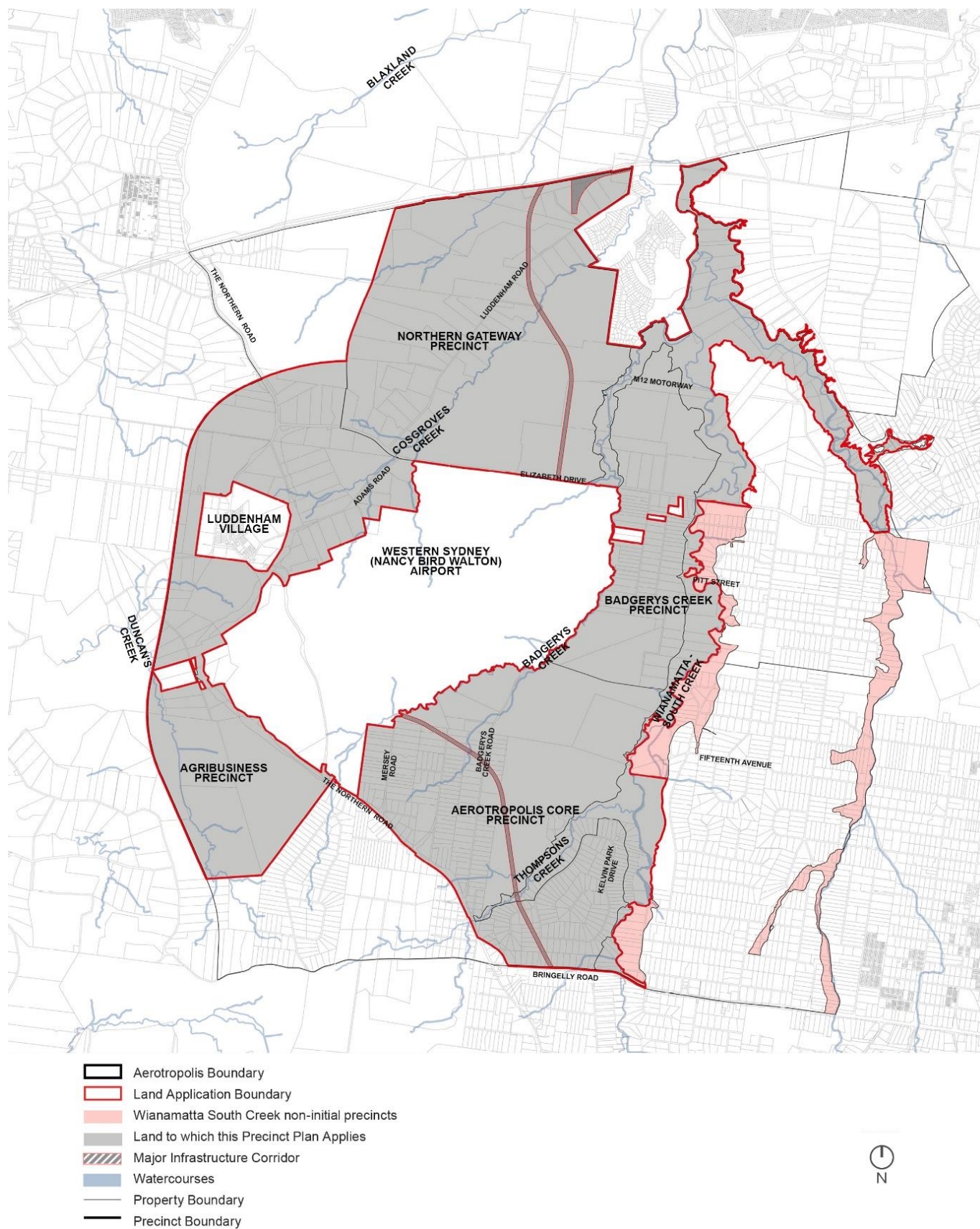
1.2 Land Application

This Precinct Plan applies to five precincts within the Western Sydney Aerotropolis, as shown on the Land Application Map at Figure 1:

- Aerotropolis Core
- Badgerys Creek
- Wianamatta-South Creek
- Northern Gateway
- Agribusiness (excluding Luddenham Village as shown on Figure 1)

Planning for the remaining precincts will be undertaken at a later stage, and the provisions of other planning instruments continue to apply to those areas.

Figure 1: Land application map



1.3 How to use this Precinct Plan in development assessment

The Precinct Plan is primarily used to assess development applications on land to which it applies in the Aerotropolis and provides further details on expectations for development in the Aerotropolis. In assessing a development application, the consent authority is to consider:

- whether the application is accompanied by an assessment of consistency with the Western Sydney Aerotropolis Plan (WSAP) and this Precinct Plan, as required by clause 275C of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation); and
- if the application is not consistent with one or more Precinct Plan requirements, whether the application is accompanied by a statement to vary the Precinct Plan in accordance with the provisions of the Aerotropolis SEPP.

The provisions of this Precinct Plan include objectives and requirements which must be considered in the assessment of a development application. The consent authority will determine if a development application is consistent with the Precinct Plan based on an assessment of compliance with the requirements, and with reference to the relevant objectives.

Table 1 outlines the strategic plans, planning instruments and other documents that make up the planning framework for the Western Sydney Aerotropolis that are required to be considered in preparing a development application. In addition to this Precinct Plan and the planning framework identified below, the consent authority must have regard to other applicable environmental planning instruments that apply to the proposed development.

Table 1: Aerotropolis planning framework and hierarchy of plans

Plan / Instrument	Statutory Context	Purpose and alignment
Western Sydney Aerotropolis Plan (WSAP)	Clause 275C of the EP&A Regulation and Ministerial 9.1 Direction - Implementation of the Western Sydney Aerotropolis Plan	<ul style="list-style-type: none">• The EP&A Regulation requires a statement of consistency with the WSAP with every development application in the Aerotropolis.• The WSAP provides overarching strategic direction for the development of land in the Aerotropolis.• The WSAP aligns with the Greater Sydney Region Plan: A Metropolis of Three Cities and the Western City District Plan.• Informs the development of a precinct plan and Master Plan in the Aerotropolis.
Aerotropolis SEPP	Environmental planning instrument created under the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act)	<ul style="list-style-type: none">• Provides key development standards and controls for development in the Aerotropolis.• Zones land to permit or prohibit land uses and provides development controls.• Creates a framework for the creation and amendment of a precinct plan and master plan.• Provides for complying development pathways.• Provides authority for a Master Plan to implement a complying development pathway.

Plan / Instrument	Statutory Context	Purpose and alignment
Precinct Plan	Mandatory plan required under the Aerotropolis SEPP	<ul style="list-style-type: none"> Provides additional place-based objectives, performance criteria and precinct scale structure planning for five precincts within the Aerotropolis. Aligns with the WSAP and Aerotropolis SEPP.
Master Plan	Optional plan created under the Aerotropolis SEPP (subject to criteria specified in the Aerotropolis SEPP and the Master Plan guidelines)	<ul style="list-style-type: none"> Unlocks a complying development pathway by setting detailed development and design criteria for permitted development. Aligns with the Precinct Plan (or proposed precinct plan amendment). Enables a process to further investigate place based site-specific outcomes and fine grain development considerations. A Master Plan may include further development objectives, performance outcomes and benchmark solutions for development.
Aerotropolis Development Control Plan (DCP)	DCP under the EP&A Act.	<ul style="list-style-type: none"> Provides additional detail with regard development objectives, performance outcomes and benchmark solutions for development to support the WSAP, Aerotropolis SEPP and Precinct Plan. Used in development assessment

Inconsistencies with the Precinct Plan permitted by the Aerotropolis SEPP

The Aerotropolis SEPP outlines how this Precinct Plan is to be considered in the assessment of development applications. Some requirements in this Precinct Plan provide flexibility for development applications to demonstrate that objectives and requirements can be achieved through alternative design solutions (for example, in the placement and layout of local streets). In such cases, development applications can propose alternative solutions that comply with the assessment criteria set out in the relevant requirements in the Precinct Plan. This Precinct Plan is explicit on the controls that can be flexibly applied where an alternative design solution can be demonstrated by the proponent that achieves the same intent.

2 Precinct vision and objectives

The vision for the Aerotropolis is derived from the WSAP. [Section 2.1](#) provides objectives that apply to all land to which the Precinct Plan applies. Precinct specific visions and objectives are provided in [section 2.2 Aerotropolis Core](#), [section 2.3 Badgerys Creek](#), [section 2.4 Wianamatta-South Creek](#), [section 2.5 Northern Gateway Precinct](#), and [section 2.6 Agribusiness Precinct](#).

The vision and objectives provide strategic direction for the Land Use Plan in [section 4.1](#) of this Precinct Plan.

2.1 Precinct Plan objectives

The following objectives apply to all land to which this Precinct Plan applies.

- 01 'Start with Country' by promoting access to Country and designing the Aerotropolis through a process that includes Aboriginal people.
- 02 Celebrate culture by reflecting the cultural landscape and continuous connection of Aboriginal people and Country through:
 - a. the design of the public domain;
 - b. preservation and rehabilitation of the natural environment and systems;
 - c. the alignment of movement networks with culturally significant spaces;
 - d. the design of buildings; and
 - e. keeping language alive in the naming of places.
- 03 Integrate development and the delivery of infrastructure to maintain a supply of developable land that maximises the efficiency of infrastructure investment.
- 04 Protect Airport operations, including 24-hour operations, and protect future communities from aircraft noise.
- 05 Facilitate quality and innovative development to provide for a variety of employment uses that grow and diversify the economy of the Western Parkland City.
- 06 Enable land use to evolve in line with changing economic drivers, and facilitate development that will contribute to building the Western Parkland City.
- 07 Implement a landscape-led approach to designing the Aerotropolis, utilising the blue-green grid and natural topography of the Aerotropolis as the defining elements.
- 08 Provide for social infrastructure in strategic locations that support the residents, workers and visitors to the Aerotropolis.
- 09 Plan for a transport network that facilitates movement of freight and people, and prioritises active and sustainable transport modes to improve community health and minimise the impacts of development and economic activity on climate change.

- 10 Provide landscaped, safe, activated, interesting and healthy streets that prioritise pedestrian, cycle and public transport movements.
- 011 Design an urban environment that responds to the climate extremes of Western Sydney and mitigates and adapts to urban heat.
- 012 Manage water in the landscape to facilitate urban cooling, improve waterway health and biodiversity and promote sustainable water use.
- 013 Plan for a resilient city through implementation of a risk-based approach to management of natural hazards including flooding, bushfire, drought and heat.
- 014 Reinststate and rehabilitate natural landscape connections and systems to sustain biodiversity and allow natural systems to function sustainably.
- 015 Facilitate the establishment of circular economy industries to reduce waste, leverage synergies between industries and circulate resources within and beyond the industrial supply and materials chains of the Aerotropolis.

2.2 Aerotropolis Core

Vision

The Aerotropolis Core is a dense urban precinct planned around the Aerotropolis Metro station and the Wianamatta-South Creek Corridor system. It is defined by a new regional park system along Thompsons Creek and a focus on the new metropolitan centre.

It will offer attractive places for workers, residents and visitors and complement the metropolitan cluster of Greater Penrith, Liverpool and Campbelltown-Macarthur. The Western Sydney Aerotropolis Plan estimates that the Aerotropolis Core could accommodate 50,000 to 60,000 jobs, leveraging the positive economic impact of the adjacent Western Sydney Airport.

The metropolitan centre will be focused on advanced manufacturing, research and development, professional services, creative industries and science, technology, engineering and mathematics (STEM) focused educational facilities, and will facilitate the emerging aerospace and defence industries. The Precinct will also attract business incubator hubs and shared office workspaces.

While the land use focus for the Precinct is on employment and economic development, the Aerotropolis Core will include residential development in areas not significantly affected by aircraft noise. Residential development will be within walking distance of the Metro station or other public transport and will benefit from proximity to blue-green infrastructure including creeks and open spaces.

Additional Precinct Objectives

- 01 Develop a metropolitan centre, around the Aerotropolis Core Metro station that will be a focus for business, tourism and social experiences.
- 02 Be the location of choice for advanced manufacturing and high technology industries in Australia with accessible infrastructure, public transport and high design quality with fit-for-purpose buildings and green spaces.

- 03 Facilitate the establishment of an aerospace and defence industries sub-precinct through the provision of appropriate infrastructure, a variety of lot configurations and sizes and by enabling 24/7 operations of the Western Sydney Airport.
- 04 Facilitate the development of educational uses accessible by public transport and active transport.
- 05 Prioritise pedestrian and active transport within the Aerotropolis Core through infrastructure and amenity in the street network and the blue-green grid.
- 06 Enable residential development as part of a diverse mixed use sub-precinct in areas that are not impacted by airport noise and that benefit from proximity to Wianamatta-South Creek and Thompsons Creek.

2.3 Badgerys Creek

Vision

Badgerys Creek will support the Western Sydney Airport operations and be well connected to the Aerotropolis Core metropolitan centre to the south and the Northern Gateway to the north-west. The Precinct will transform from lower density and less intensive land uses, buildings and structures to higher order employment-focused technology, advanced manufacturing and industry uses with the opportunity for between 9,000 – 11,000 jobs (estimated by the WSAP). The Precinct will be linked to the east across Wianamatta-South Creek to areas such as Rossmore.

The Precinct adjoins the Western Sydney Airport with good access to Elizabeth Drive and the M12 Motorway. New developments will be designed to benefit from nearby major infrastructure and to appropriately integrate with existing resource recovery industries and new circular economy hubs.

Affected by aircraft noise, this Precinct is not suitable for noise sensitive land uses such as residential development. It will provide land for a range of employment generating uses that will benefit from proximity to the Western Sydney Airport.

Additional Precinct Objectives

- 01 Develop industries that leverage access to freight transport networks including the M12 and Elizabeth Drive.
- 02 Take advantage of proximity and direct access to the Western Sydney Airport for the production of goods for export.
- 03 Ensure that development is responsive to the Western Sydney Airport's operational constraints including noise, Obstacle Limitation Surfaces and runway approaches.
- 04 Ensure that development in the Precinct is integrated with and takes advantage of proximity to the blue-green networks of Badgerys Creek and Wianamatta-South Creek.

2.4 Wianamatta-South Creek Initial

Vision

The Precinct is located within the broader Wianamatta-South Creek Corridor. It will provide for a mix of land uses that are compatible with the environmental characteristics of the Precinct and development constraints including flooding. The Wianamatta-South Creek corridor will develop over time as an interconnected blue-green network that comprises privately owned land, parks, sporting fields, waterways and potential permanent water bodies, walking trails and community facilities.

The Wianamatta-South Creek Precinct will include places for workers and will provide a green break between surrounding urban development.

Additional Precinct Objectives

- 01 Prioritise the restoration and protection of the Wianamatta-South Creek Corridor system (including its tributaries) through integrated and naturalised water management, restoration of vegetation and protection and rehabilitation of watercourses and riparian zones.
- 02 Promote the role of water within Wianamatta-South Creek Corridor to support healthy, liveable and sustainable communities.

2.5 Northern Gateway

Vision

The Northern Gateway will be a major interface for the Western Sydney Airport and a specialised centre linking the Airport with the metropolitan cluster. It will be an employment precinct that can be easily accessed, with supporting residential areas where land is not severely affected by aircraft noise. It will provide skilled employment and business opportunities north of the Airport.

High order employment uses will include freight and logistics, warehousing, technology, commercial enterprise, offices, industry, creative industry, fresh food markets, education, civic, health, visitor accommodation, recreation and entertainment. The Precinct will have synergies with the adjacent Western Sydney Airport Business Park, south of Elizabeth Drive.

The Precinct will expand from the approved Sydney Science Park, which comprises a town centre with commercial buildings and housing.

Sydney Metro services will provide connections between the Northern Gateway, the Western Sydney Airport and Aerotropolis Core Precinct. Rapid bus services to Penrith will provide additional connectivity. The Precinct will have access via Luddenham Road, Elizabeth Drive and the Agribusiness Precinct to the Airport. New roads will over time provide links to the rest of the Aerotropolis, St Marys, Greater Penrith and Greater Sydney.

Residential mixed use will be medium and higher density within the walking catchment around the Luddenham Metro station, and oriented to address creek corridors and green spaces. In the north

west of the Precinct, lower density residential development will assist to activate the Precinct in the early stages of its development.

The topography of the Precinct provides opportunities for distinctive place-making and connection to Country, and challenges with respect to large footprint industrial buildings. The street pattern and location of open space responds to topography, links ridges to creeks and the proposed land use.

Additional Precinct Objectives

- 01 Develop the mixed use zone within walking distance of Luddenham Metro station into a specialised centre. Support a cluster of leading science-based business, tertiary institutions and research facilities connected by public transport.
- 02 Facilitate the development of a high technology employment precinct.
- 03 Facilitate a variety industrial and business enterprises and diverse residential development in locations that support the principles of transit-oriented development.
- 04 Provide for a mix of uses to support the specialised centre, including social and educational uses to meet the demands of workers, residents, and visitors.
- 05 Prioritise the restoration and protection of natural ecology and management of water in the landscape, particularly at Cosgroves Creek and its tributaries.
- 06 Promote the role of water within Wianamatta-South Creek Corridor and Cosgroves Creek to support healthy, liveable and sustainable communities.

2.6 Agribusiness

Vision

The Agribusiness Precinct is on the western edge of the Western Sydney Airport, and framed by the proposed Outer Sydney Orbital. The Precinct offers key access points to the Airport, allowing the development of agribusiness uses which could include integrated logistics, air freight, integrated intensive production, food innovation, fresh product and value-added food – pharmaceuticals.

Development in the Precinct will build on the existing topography and natural features. Open spaces have been identified in strategic locations to protect creek corridors and areas of high biodiversity significance, and to improve access to open space for residents in Luddenham Village. Access and connection with Country will be facilitated and encouraged to enable opportunities for recreation, education, employment and business.

The Precinct will build on successful agricultural operations and develop new agribusiness opportunities while protecting and embracing important vegetation within the landscape. This includes the development of integrated food and supply chain-related industries particularly those that rely on the skills of the growing population in the Western Parkland City. These industries will generate employment opportunities in high technology agriculture with customer-centric digitally enhanced systems, processes and platforms to enable rapid distribution connections to the broader

road freight supply chain in Greater Sydney. The Precinct will provide opportunities for education and tourism.

Additional Precinct Objectives

- 01 Enable fresh and value-added food production with access to local and global markets, and support Australia's value-added agribusiness export industries.
- 02 Enable agricultural value-added industries and related freight and logistics facilities with access to the Outer Sydney Orbital and air-side access to the Western Sydney Airport.
- 03 Encourage education opportunities related to agriculture and agribusiness.
- 04 Preserve and enhance significant landscaped vistas within and from the Precinct towards the Blue Mountains and along Cosgroves Creek.
- 05 Promote the role of water as a resource for agricultural production and its contribution to a healthy urban and natural environment.

3 Infrastructure and Development Staging

Meeting the vision for the Aerotropolis (as set out in the WSAP) requires the coordination of land use, infrastructure and transport infrastructure. This part of the Precinct Plan sets out priority areas within the Initial Precincts based on infrastructure delivery programs and development objectives. It also specifies objectives and requirements to ensure development is orderly and efficient.

3.1 Infrastructure Delivery

Objectives

- I01 Ensure the staging of development and infrastructure delivery are aligned spatially and temporally.
- I02 Ensure utilities and services are planned and delivered to meet demand from development.
- I03 Protect existing utility infrastructure, including the Warragamba pipeline corridor and TransGrid transmission lines.
- I04 Deliver utilities, roads infrastructure and services in a manner that is safe, efficient and cost effective.
- I05 Ensure design and location of utilities infrastructure allow space for planting, water sensitive urban design and footpaths.
- I06 Ensure utilities design and locations consider space for alternative future services and allow for multi-utility corridors in the future.
- I07 Use technology and data driven solutions to maximise quality of life across the Aerotropolis, in line with the NSW Smart Places Strategy and Smart Western City Program.
- I08 Ensure that the design and location of infrastructure provision considers the impacts of climate change.

Requirements

- I1 Prior to granting development consent, the consent authority must be satisfied that essential services and infrastructure are available or will be available when required for the development. Essential services and infrastructure is road access, water supply, sewer, electricity and stormwater infrastructure.
- I2 Development near utility infrastructure should be in accordance with the relevant service authority's guidelines and requirements.
- I3 Development will need to investigate and consider future planned utility infrastructure including the aviation fuel pipeline.

- I4 Where the alignment of an aviation fuel pipeline is specified, applicants for development that adjoins the pipeline (including the planned pipeline alignment if not yet constructed) are to undertake a land use safety assessment to determine appropriate buffers and mitigation measures to reduce public risk in consultation with the relevant authority.
- I5 Shared utility trenches are to be used and located generally in accordance with the utilities allocations in the Western Sydney Street Design Guideline and relevant cross-sections in the DCP to minimise the impacts of utilities allocations on landscaping and street tree planting.
- I6 Fast, reliable and high-speed internet connectivity infrastructure is to be provided as part of all subdivision development and all buildings are to have direct connection to high speed broadband that complies with the standards listed in the Australian and New Zealand Smart Cities Council Code for Smart Communities.

3.2 Development Sequencing

Within each Precinct, areas are categorised or sequenced into first, second and third Priority areas. First Priority areas align with the first stages of transport and utilities infrastructure delivery and are intended to be the initial stages of development, working towards achieving the employment and population targets of the WSAP.

Objectives

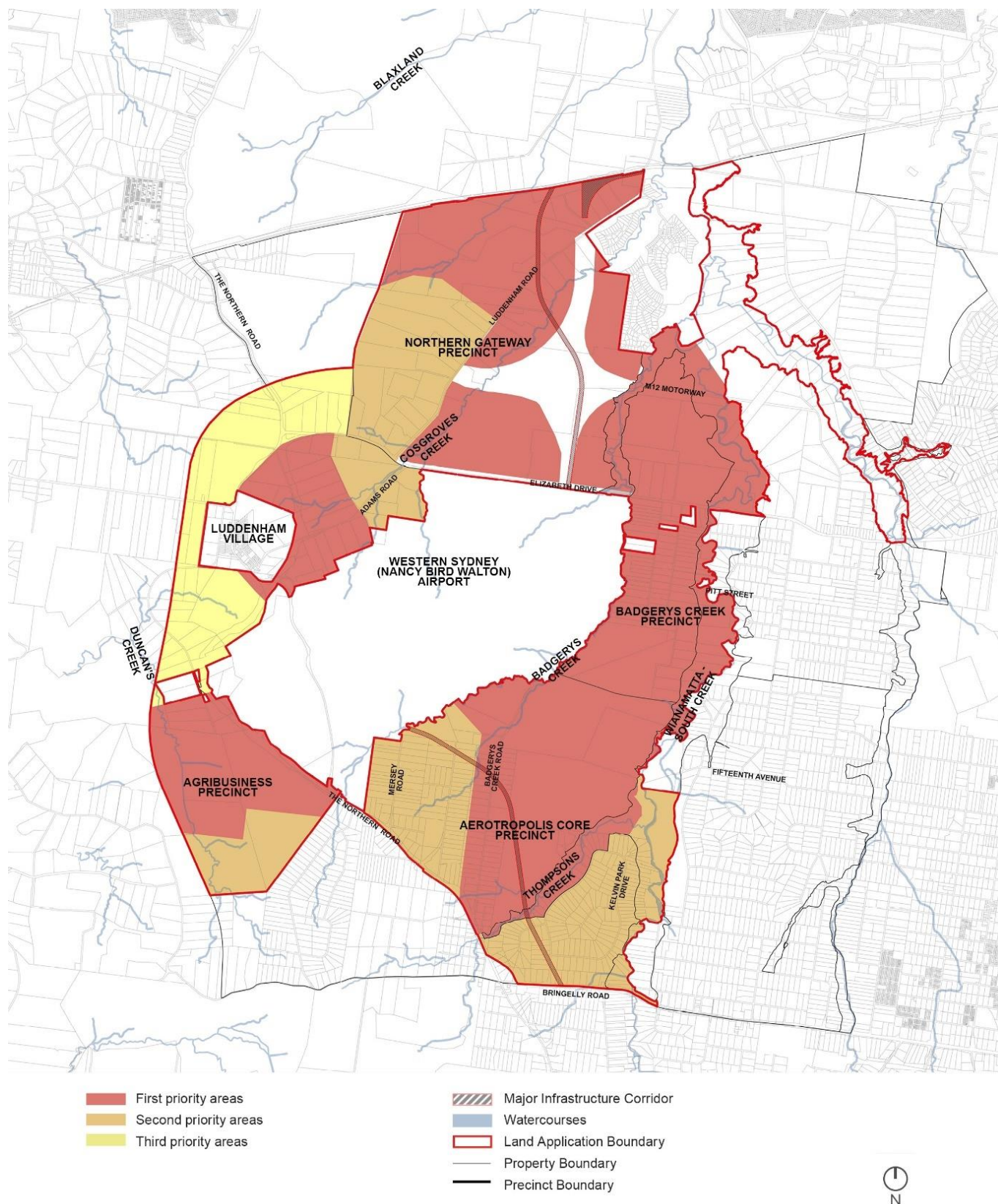
- DSO1 To ensure that development proceeds in an orderly and efficient sequence, aligned with the efficient delivery of infrastructure.
- DSO2 To enable the rate of development to keep pace with demand for jobs, housing and services within the Aerotropolis.
- DSO3 To align the sequencing of development within the Aerotropolis with the following criteria:
 - a. Efficient infrastructure utility investment extending from existing infrastructure;
 - b. focus on and around Metro stations to support investment in public transport;
 - c. Proximity to, and the timing of delivery of the M12, The Northern Road and Elizabeth Drive upgrades;
 - d. Access to the Western Sydney Airport for freight and passengers;
 - e. Implementation of Western Sydney City Deal commitments;
 - f. Job creation potential and demand for land for new development; and
 - g. Government priority areas within the Aerotropolis Core (refer below).

Requirements

- DS1 The sequencing of development is to be generally in accordance with the Sequencing Plan at Figure 2 (Out of Sequence provisions are outlined in [section 3.3](#)).
- DS2 Development is not to compromise the efficient and orderly provision and staging of the transport network, utilities and servicing.

- DS3 Early development must prioritise locations well supported by high levels of public and active transport accessibility.
- DS4 Development does not result in isolated areas requiring out of sequence servicing by transport networks, utilities and services, or at additional cost to government or utility agencies.
- DS5 The road network proposed as part of development applications is to be consistent with the Street Hierarchy Map at Figure 9, or temporary arrangements must be made with agreement of the relevant Roads Authority.
- DS6 Locations with good access to the Western Sydney Airport for freight and passengers are to be prioritised.

Figure 2: Development Sequencing



3.3 Out of Sequence Development

Where a developer proposes to develop land that is within Priority Area 2 or Priority Area 3, or in parts of Priority Area 1 where essential infrastructure is not yet available or planned to be provided when required to service development, the consent authority is required, in consultation with utilities providers and Transport for NSW, to determine whether consent can be granted with reference to the requirements below.

Objectives

- OSO1 To enable development that does not yet have access to essential infrastructure to proceed where an applicant proposes to deliver essential infrastructure.
- OSO2 To avoid additional and inefficient costs to government and utilities providers arising from development that does not align with the planned delivery of infrastructure.
- OSO3 To ensure that out of sequence development does not unduly impact the orderly and efficient development of other land.

Requirements

- OS1 Where a development application proposes development that does not meet the Requirements of [section 3.1](#), the applicant is required to demonstrate, to the satisfaction of the consent authority, that arrangements have been made for all essential services and infrastructure to be provided when required and at no additional cost to government (including the relevant Council and the NSW Government) and utilities authorities.
- OS2 Applicants for development under Requirement OS1 must provide, as part of the development application, confirmation from utilities providers including Sydney Water and infrastructure delivery agencies including the relevant Council and Transport for NSW that:
 - a. planned servicing and infrastructure provision will be in place to support development; and
 - b. the development is capable of connecting to and integrating with existing or planned services and infrastructure.
- OS3 Applicants for development under Requirement OS1 must demonstrate, to the satisfaction of the consent authority, that out of sequence development does not unreasonably impact on the ability of adjoining or nearby land owners to develop their land in accordance with the Precinct Plan, or result in unreasonable impacts on the environment of adjoining land.

4 Urban Structure

This part of the Precinct Plan provides objectives and requirements that relate to the overall layout of the Precinct. The objectives and requirements in this part will predominantly apply to subdivision development applications, and guide the layout of the key elements that will form the urban structure of the Aerotropolis, including the blue-green grid, cultural heritage and connection to Country, the transport and movement networks.

4.1 Proposed Land Use and Structure Plan

The map showing proposed land uses, as required by the Aerotropolis SEPP, is at Figure 3. The Proposed Land Use Plan provides the overall layout of development, areas of open space and environmental value, transport and stormwater infrastructure for the land to which this Plan applies.

Objectives

LUO1 A mix of land uses are proposed that:

- a. Deliver employment diversity
- b. Leverage off the locational advantages of proximity to the Western Sydney Airport
- c. Grow and diversify the Greater Sydney and Western Parkland City economies
- d. Support workers and residents through diverse housing, community, social and recreational uses
- e. Support the needs of visitors reflective of the Aerotropolis' role as an international gateway
- f. Respect and safeguard operations of the Western Sydney Airport

LUO2 A blue-green framework is delivered as development occurs that:

- a. Provides access to open space that meets the needs of workers and residents, students and visitors
- b. Preserves significant natural features including watercourses and remnant vegetation
- c. Accommodates infrastructure required to manage the flooding and water quality impacts of development
- d. Respects and enhances Aboriginal cultural heritage and archaeology and maximises opportunities to connect with Country

LUO3 Subdivision and civil works design creates the urban structure and:

- a. Reflects the Land Use Plan (Figure 3), Transport Network Plan (Figure 7) and Blue-Green Infrastructure Framework (Figure 5)
- b. Creates a network of accessible, connected, efficient and sustainable neighbourhoods

- c. Optimises active transport and public transport connectivity, and the efficient movement of goods and delivery of services
- d. Responds to topography and natural systems including movement of water through the landscape
- e. Includes space for greening the urban environment, including canopy cover and green, pervious landscape to manage water flows, water quality and local climate conditions

LUO4 Buildings are situated and designed to:

- a. Contribute positively to the planned character of the place
- b. Concentrate worker and resident population density in locations that have good access to transport, services and amenity
- c. Reflect airport safeguarding requirements, accessibility for workers, and the functional requirements of businesses
- d. Respond to topography
- e. Integrate with and enhance the public domain
- f. Respond to natural features including retained vegetation and waterways
- g. Respect heritage items and culturally significant places
- h. Are energy efficient, comfortable and minimise consumption of resources and materials
- i. Contribute to appropriately managing water in the landscape

Requirements

LU1 The types and densities of land uses are to be consistent with the Land Use Plan at Figure 3. Key land use terms used in the Land Use Plan are described in the Glossary.

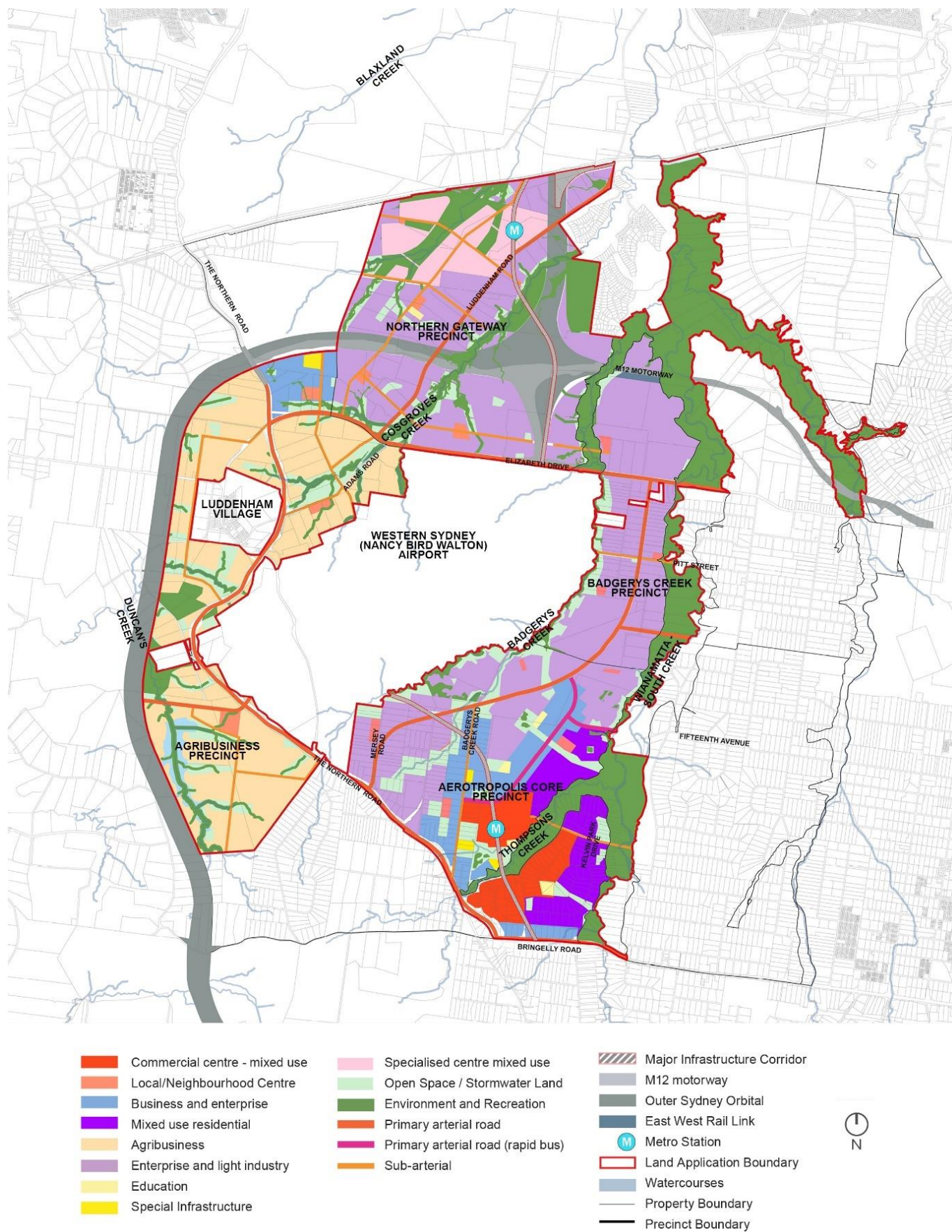
LU2 Subdivision and civil works are to be consistent with the road network shown on the Transport Network Plan (Figure 7). Local streets, laneways and active transport routes are designed to integrate with the Transport Network Plan and to:

- a. Ensure connectivity
- b. Encourage sustainable transport choices by providing direct routes that prioritise active transport and public transport for workers
- c. Appropriately cater for heavy vehicles including freight movements and public transport vehicles
- d. Facilitate coordinated development of parcels in different ownerships or at different times
- e. Assist with managing water in the landscape
- f. Minimise the extent and depth of earthworks and the need for retaining walls.

LU3 Local or Neighbourhood Centres in the Enterprise Zone or Agribusiness Zone are to be located within 400m of the indicative location on the Land Use Plan (Figure 3), and on public transport routes (collector roads or Sub-arterial Roads).

- LU4 Connect ridgelines to watercourses through linear streets that maintain and enhance visual connections, integrate canopy cover, deep soil, landscaping and water management.
- LU5 Ensure built form is appropriate for its use and ensure natural cross ventilation, improved internal thermal comfort and reduced reliance on air conditioning.
- LU6 Provide for high quality architectural and design outcomes which respond to topography and site characteristics.
- LU7 Residential development in the Mixed Use Zone is to be located:
- a. Within 1 kilometre walking distance of Metro stations; or
 - b. Within 400 metres of a bus stop or a Collector Street; and
 - c. Within 200 metres of open space.

Figure 3: Land Use and Structure Plan



4.2 Subdivision and Block Structure

A sustainable walkable precinct structure requires subdivision patterns and block sizes that facilitate active transport. The subdivision pattern has to facilitate efficient public and active transport routes between destinations. A 'finer grain' block pattern is required in areas of high pedestrian activity in particular areas close to mass transit hubs, such as centres, and high-density employment and mixed-use areas. Larger block patterns are required in the Enterprise and Agribusiness Zone to accommodate larger format employment generating and industrial uses.

Objectives

- SU01 Integrate natural landscaping and urban development in the subdivision of land to achieve high land use efficiency, co-location of uses, required perviousness/ permeability, tree canopy and open space areas.
- SU02 Design lots that respond to the natural topography and existing street pattern of the Precinct.
- SU03 In the Sydney Science Park residential development is balanced between low density and mixed use.
- SU04 Ensure block sizes facilitate good pedestrian and active transport connectivity.

Requirements

- SU1 Block structure is designed to enable the delivery of efficient and accessible public transport routes.
- SU2 Block structures and the road network are designed to respond to the natural topography and the flow of water in the landscape, including measures to appropriately manage overland flow and localised flooding of properties.
- SU3 In the Sydney Science Park the combined number of residential dwellings that can be dwelling houses, semi-detached dwellings or dual occupancy is limited to 750. Areas where these lower density residential uses are permitted are limited to areas outside a 1.2km radius of the Luddenham Metro Station as shown in the *State Environmental Planning Policy (Precincts – Western Parkland City) 2021 Additional Permitted Uses Map – Aerotropolis*.
- SU4 Development consent must not be granted to development on a lot at Sydney Science Park (as identified in the SEPP) for a purpose shown in Column 1 of the following Table unless the area of the lot is as specified opposite in Column 2:

Column 1	Column 2
Dwelling house	Equal to or greater than 120 square metres but not greater than 450 square metres
Dual occupancy	Equal to or greater than 270 square metres but not greater than 650 square metres
Multi dwelling house	Equal to or greater than 800 square metres

Column 1	Column 2
Residential Flat Building	Equal to or greater than 800 square metres

Note: Residential Flat Buildings (RFBs) have been added to the above to ensure the controls for the SSP are grouped together and expressed consistently with the previous Penrith LEP 2010 controls. Inclusion of RFBs in the Precinct Plan residential density table will not change permissibility in Schedule 1 of the Western Parkland City SEPP.

4.3 Aboriginal Culture and Heritage – Recognising Country

The Aerotropolis encompasses cultural landscapes, historical archaeological remains, and places of Aboriginal cultural heritage significance that are a basis for connecting the development of the land to Country. Intangible cultural heritage values exist such as stories, knowledge and practices associated with the land. The cultural framework is varied, with cultural connections and conflict histories. The Precinct Plan embodies design principles that reinforce connections to Country and seek to respect and acknowledge the importance of the area to communities including Aboriginal peoples.

Developments and projects are to promote opportunities to connect with, design with and care for Country. While there are existing legislative requirements and processes for Aboriginal Heritage assessment, other requirements related to 'Recognising Country' are intended to compliment them to embed, enhance and celebrate cultural values and practices within built form and landscape, as well as promoting and revitalising Aboriginal Languages.

Starting with Country and bringing Recognise Country elements to developments and projects will explore the opportunity of seeing Country and culture as part of the building environment, creating places that will deliver long term sustainability and elevate outcomes based on the world's oldest living culture.

Objectives

- RCO1 Facilitate the conservation of Aboriginal heritage items and areas of cultural heritage significance in accordance with the requirements of the *National Parks and Wildlife Act 1974*.
- RCO2 Protect areas of high cultural sensitivity.
- RCO3 Ensure development is designed to care for and connect to Country.

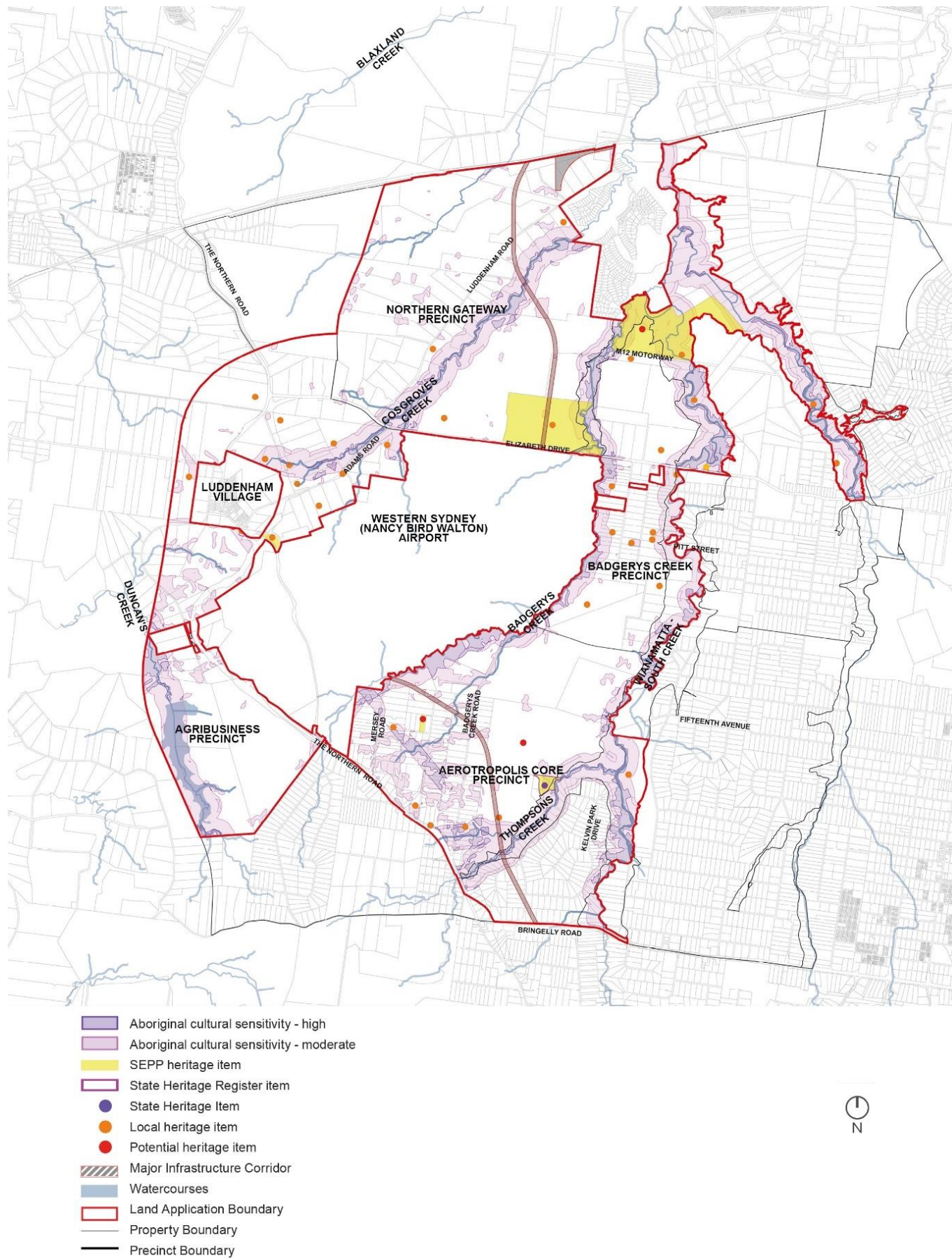
Requirements

- RC1 Development applications are to retain access to and connect significant Aboriginal heritage and areas of cultural value, conservation corridors and other identified areas of significant Aboriginal heritage.
- RC2 Development applications that propose disturbance to the landscape in areas of moderate, high or very high Aboriginal sensitivity on Figure 4, or include known Aboriginal cultural or

archaeological sites, are required to include an assessment of impacts on archaeological and or cultural heritage values and significance. Where specific measures are required to mitigate or avoid impacts, applications are to include a cultural heritage management plan or conservation management plan prior to the issue of a construction certificate.

- RC3 Modified trees (carved or scarred) and grinding grooves are to be protected and preserved in situ, and management plans are to be prepared to demonstrate how these items are to be retained and protected.
- RC4 Interpretation and story-telling required to inform impact assessments, mitigation measures and management plans are to be undertaken in consultation with, and walking on Country with, the traditional custodians and Local Aboriginal Land Councils (LALCs).

Figure 4: Heritage and Cultural Landscapes



4.4 Non-Aboriginal and European Heritage

Listed State and local heritage items help to embody the prevalent themes around agriculture, pastoralism and early 19th century life. The Aerotropolis SEPP includes provisions relating to the protection of listed local and state heritage items. These items are also included in the Precinct Plan so that the conservation status of items and their context relative to the planned outcomes in the Precinct Plan is understood. The objectives and requirements in this section also identify areas of potential heritage significance where additional investigations are required when development is proposed on the relevant land.

Objectives

- NAO1 Retain links to the history and cultural significance of the land through appropriate conservation and management of heritage items.
- NAO2 Design and develop in the vicinity of heritage items to protect the heritage significance of the item and its setting.

Requirements

- NA1 Existing heritage items and their significant elements are to be retained and managed, including implementation of adaptive re-use and land uses which ensure the long term conservation viability of heritage items.
- NA2 Position new development, including the design of subdivision and buildings, to maintain visual links, context and significance of the heritage item and its setting.
- NA3 Investigate the significance of potential heritage items identified on Figure 4. Where investigations identify heritage values, a heritage management plan is to be prepared outlining the required measures to conserve these values.

4.5 Blue-Green Infrastructure Framework

The Blue-Green Infrastructure Framework integrates the blue and green systems of the waterways, riparian areas, bushland, open spaces, tree canopy and private gardens, and includes stormwater and water quality management, public and private recreation opportunities.

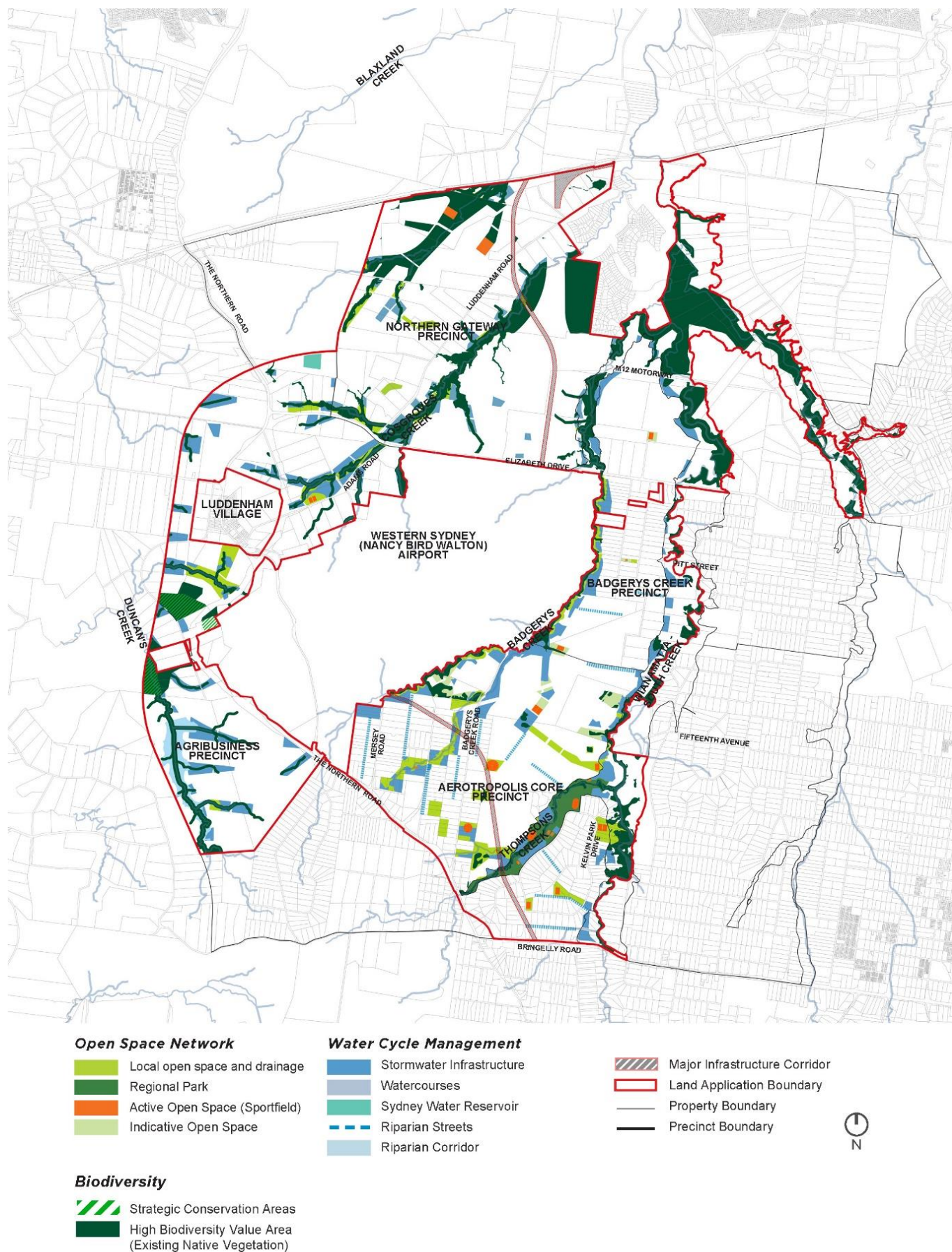
Objectives

- BGO1 To integrate blue and green systems across the Aerotropolis for water quality management, biodiversity and recreation.

Requirements

- BG1 Development is to contribute to the establishment of the blue-green infrastructure framework for the Aerotropolis in accordance with Figure 5.

Figure 5: Blue-Green Infrastructure Framework



4.5.1 Total water cycle management

A total water cycle management outcome has been developed in consultation with Sydney Water as required by the Aerotropolis SEPP and is documented in the *Stormwater and Water Cycle Management Study (Sydney Water 2021)* and is implemented through this Precinct Plan. The Aerotropolis SEPP and Figure 6 below identifies the land required to support a regional stormwater network, to be managed by Sydney Water.

The objective of total water cycle management is to integrate and manage each element of the water cycle and design and deliver infrastructure in a way which supports this integration and management. For this Precinct Plan, it means a shift towards retaining water in the landscape through stormwater harvesting, the movement of water through naturalised water assets and the use of recycled water for open space and streetscape irrigation.

The Wianamatta-South Creek catchment is the most degraded catchment in the Hawkesbury-Nepean River system due to historical vegetation clearing, agriculture and urbanisation. Increased urbanisation will further degrade the waterways if stormwater, wastewater and flooding regimes are not managed upfront through an integrated ecosystem approach. This approach requires the waterways and hydrological cycle to be central considerations in both land use and water infrastructure planning.

Objectives

- BGO1 Protect, maintain and/or restore waterways, riparian corridors, water bodies and other water dependent ecosystems.
- BGO2 Provide a landscape-led approach to integrated stormwater management and water sensitive urban design.
- BGO3 Establish a network of multifunctional stormwater assets that support stormwater management and contribute to broader objectives for waterway health, biodiversity, urban greening and cooling, recreation and amenity.

Requirements

- BG1 Development applications are to demonstrate how the following performance criteria for ambient water quality objectives for waterways and waterbodies are to be met either by:
 - a. On-lot or on-street measures; or
 - b. As part of a regional stormwater approach demonstrating that the development will connect to the stormwater infrastructure shown on Figure 6.

Performance Criteria relating to water quality objectives:

Description	Quantity
*Total Nitrogen (TN, mg/L)	1.72
Dissolved Inorganic Nitrogen (DIN, mg/L)	0.74
Ammonia (NH ₃ -N, mg/L)	0.08

Description	Quantity
Oxidised Nitrogen (NO _x , mg/L)	0.66
*Total Phosphorus (TP, mg/L)	0.14
Dissolved Inorganic Phosphorus (DIP, mg/L)	0.04
Turbidity (NTU)	50
Total Suspended Solids (TSS, mg/L)	37
Conductivity (µS/cm)	1103
pH	6.20 - 7.60
Dissolved Oxygen (DO, %SAT)	43 - 75
Dissolved Oxygen (DO, mg/L)	8

* when showing compliance towards TN and TP through industry models, the DIN and DIP performance criteria should be used to recognise that stormwater discharges of nutrients are mostly in dissolved form.

BG2 Development applications are to demonstrate how the following performance criteria relating to water flow objectives are to be met either by:

- On-lot or on-street measures; or
- As part of a regional stormwater approach demonstrating that the development will connect to stormwater infrastructure shown on Figure 6.

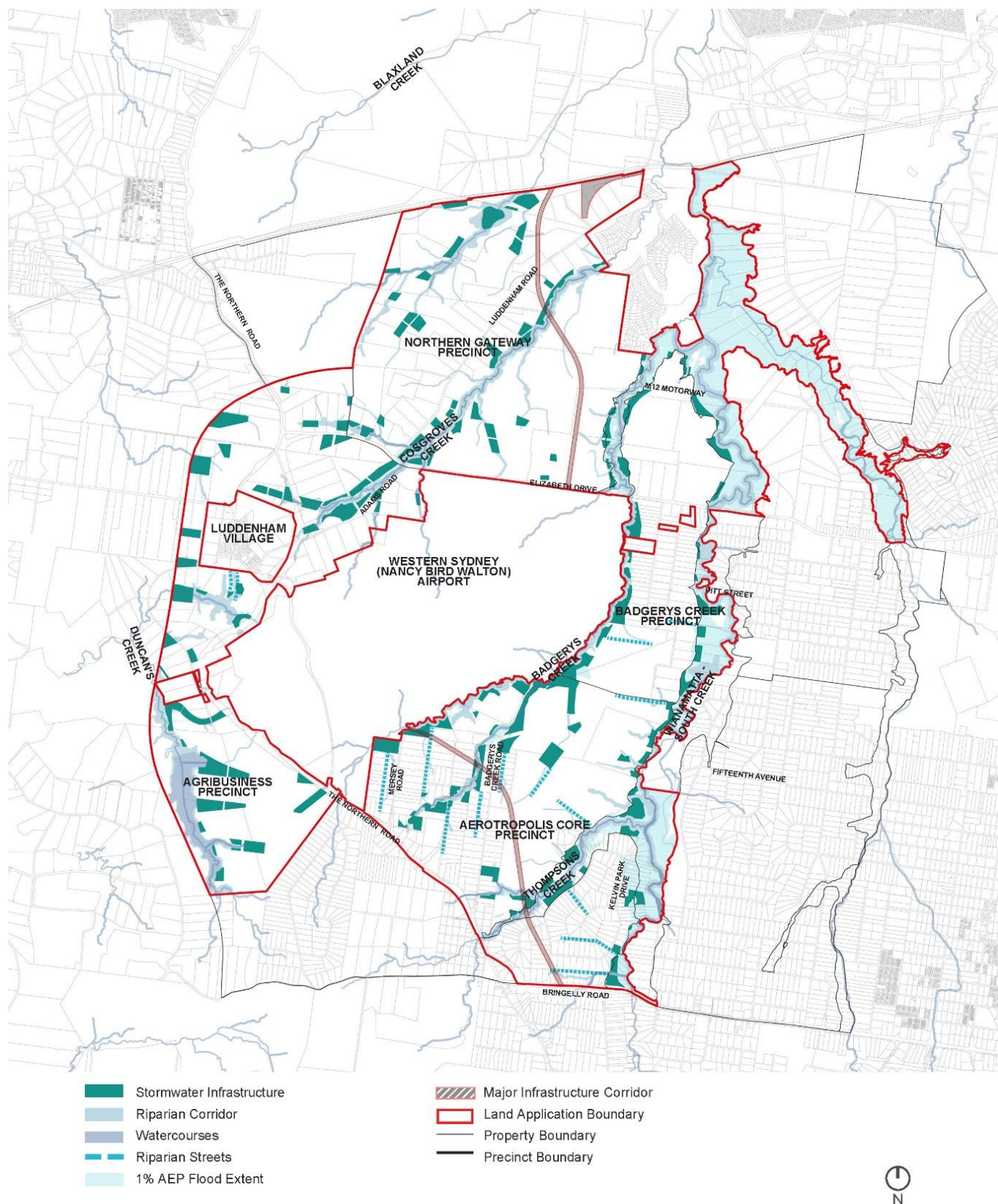
Performance Criteria relating to water quality objectives:

Description	1st – 2nd order streams	≥ 3rd order streams
Median Daily Flow Volume (L/ha/day)	71.8 ± 22.0	1095.0 ± 157.3
Mean Daily Flow Volume (L/ha/day)	2351.1 ± 604.6	5542.2 ± 320.9
High Spell (L/ha/day) ≥ 90th Percentile Daily Flow Volume	2048.4 ± 739.2	10091.7 ± 769.7
Freshes (L/ha/day) ≥ 75th and ≤ 90th Percentile Daily Flow Volume	327.1 to 2048.4	2642.9 to 10091.7
Cease to Flow (proportion of time/y)	0.34 ± 0.05	0.03 ± 0.01
Cease to Flow – Duration (days/y)	39.2 ± 8	3.9 ± 1.2

BG3 Where development uses on-lot or on-street measures to achieve the performance criteria for ambient water quality and the flow objectives, the development application must demonstrate, to the satisfaction of the consent authority, the ability to connect the development to regional stormwater infrastructure when it is available.

- BG4 Compliance with the ambient water quality and flow objectives must be consistent with the NSW Government Technical guidance for achieving Wianamatta-South Creek stormwater management targets (DPIE, 2022).
- BG5 Multifunctional stormwater assets are to be located generally as shown on Figure 6.
- BG6 Multifunctional stormwater assets are to integrate with the Open Space Network to support multifunctional open space areas for recreation, urban cooling and water management.
- BG7 The multifunctional detention basins (as shown on Figure 6) are to be designed in accordance with the regional stormwater management strategy and recycled water network developed by the relevant stormwater authority.

Figure 6: Total Water Cycle Management



4.5.2 Riparian corridors

The protection, restoration and maintenance of riparian corridors, including waterways and water dependent ecosystems is essential in achieving the cultural, social and biodiversity aspirations as well as tree canopy targets of the Western Parkland City.

Objectives

- BG01 Protect, restore and maintain vegetated riparian zones adjacent to creeks and other water bodies in accordance with the *Water Management Act* and related Guidelines.
- BG02 Manage impacts of development on waterways to achieve and maintain established waterway health targets.
- BG03 Enable people to have safe contact with water in the landscape for recreation and access to urban cooling.

Requirements

- BG1 Waterways and riparian corridors of Strahler Order 2 (refer to Figure 5) and higher are to be retained and rehabilitated to a natural state (unless minor realignment can be justified), in accordance with the requirements of the *Guidelines for Riparian Corridors on Waterfront Land* published by the Department of Primary Industries (Office of Water), or other relevant guidelines adopted and in operation at the time.
- BG2 Riparian Streets on [Figure 5](#) are to be adjacent to riparian corridors. The design of Riparian Streets is to be integrated with the retention or naturalisation of the adjacent watercourse and associated riparian zone in accordance with the requirements of the Guidelines for Riparian Corridors on Waterfront Land published by the Department of Primary Industries (Office of Water), or other relevant guidelines adopted and in operation at the time.
- BG3 Consistency with DCP indicative cross-sections to guide the design of Riparian Streets and associated riparian zones.
- BG4 The outer 50% of the Riparian Zone, as defined by the *Guidelines for Riparian Corridors on Waterfront Land* may contain paths, passive recreation facilities and other amenities subject to the appropriate consideration of flood impacts and safety.
- BG5 Where a development application proposes the creation of a Riparian Street in association with a riparian corridor in accordance with Requirement BG2, and one or more lots for development, the area of land that comprises the riparian corridor is taken to be part of the minimum pervious area to be provided as part of the development under the DCP.

4.5.3 Public domain and canopy cover

A high quality public domain will contribute to the creation of an attractive city that stimulates and supports investment in jobs, infrastructure and the economy of the Western Parkland City. Providing canopy cover, landscaping and using water as part of the urban environment will also assist with managing climate extremes, in particular urban heat. An integrated network of open space will connect places, assist with managing water through naturalised systems, retain and re-establish the natural ecology of the Cumberland Plain. This part of the Precinct Plan includes a range of

mechanisms to encourage the delivery of open space and conservation of heritage and biodiversity values in association with development.

Objectives

- BGO1 Achieve an interconnected and accessible network of open space that meet the recreational and amenity needs of residents and workers.
- BGO2 Achieve the targets in the Region Plan of 40% tree canopy cover across the Aerotropolis by 2036.
- BGO3 Use the green and blue framework to form connected networks of open space.
- BGO4 Provide equitable access to open space for people living or working in the Aerotropolis.
- BGO5 The design of streets and other public places contributes to management of urban heat and provides for the comfort and amenity of residents and workers.

Requirements

- BG1 Open space is to be provided to cater for local, district and regional requirements as shown in the Open Space Network at [Figure 5](#).
- BG2 Where development generates demand for open space as a result of resident or worker population densities exceeding those for land uses as specified in the WSAP, the development application is to include or be accompanied by proposed measures to meet that additional demand through:
 - a. Delivery of additional open space as part of the development; and/or
 - b. Establishment of appropriate arrangements for payment of monetary contributions to the relevant authority for the provision of open space in another suitable location.
- BG3 Tree canopy is to be provided on Sub-arterial Roads and Collector Streets shown on Figure 9 to achieve a minimum of 40% tree canopy cover at maturity, measured as a percentage of the area of the road reserve.
- BG4 Park Edge Streets are to be provided generally in accordance with the locations shown on [Figure 5](#), and development is to be oriented towards the street and provide for surveillance of the public domain.
- BG4 In the Enterprise Zone and Agribusiness Zone an urban park is to be integrated into the design of any local centre or neighbourhood centre that contains any combination of retail premises, commercial premises or food and drink premises with a total minimum Gross Floor Area of 10,000 square metres.

Urban Parks:

- a. are to be a minimum of 5,000 square metres and up to 10,000 square metres,
- b. Contribute to achievement of the total pervious area for the development under the DCP (where the development application includes subdivision into one or more lots for development and/or buildings in addition to the proposed urban park),

- c. Are to demonstrate achievement of a minimum 50% tree canopy cover at maturity and a minimum of 70% of the area as deep soil or landscaped area, and
- d. Are to include landscaping, amenities, active transport provision and furniture to facilitate recreational uses.

BG5 In the Enterprise Zone and Agribusiness Zone, Indicative Open Space has been shown in Figure 5. If Indicative Open Space is set aside for the purpose of biodiversity conservation or additional open space as part of a development application it:

- a. Can contribute to achievement of the total pervious area for the development under the DCP (where the development application includes subdivision into one or more lots for development and/or buildings in addition to the proposed urban park),
- b. Must be subject to any relevant measures relating to the protection of Existing Native Vegetation or areas of high biodiversity value (refer to Figure 5), and
- c. Is to be subject to management and maintenance arrangements to the satisfaction of the consent authority or arrangements to dedicate the land to a public authority.

BG6 Within the Mixed Use Zone, Indicative Open Space is shown on Figure 5. Where the Indicative Open Space is identified as part of a development application that also proposes one or more buildings:

- a. the site area, for the purposes of calculating Floor Space Ratio under the Requirements in [section 5.3](#) of this Precinct Plan is taken to include the area of land proposed to be used as open space, despite the maximum Floor Space Ratio applying to the land on which the building or buildings are sited under;
- b. The area of land identified for open space is taken to be part of the minimum pervious area to be provided as part of the development under the DCP, and
- c. Is to be subject to management and maintenance arrangements to the satisfaction of the consent authority or arrangements to dedicate the land to a public authority.

BG7 Where land is partly zoned Mixed Use and partly zoned Environment and Recreation, and a maximum Floor Space Ratio is specified for the land zoned Environment and Recreation under [section 5.3](#) of this Precinct Plan:

- a. The maximum Floor Space Ratio for that portion of the land zoned Mixed Use may be exceeded by the maximum Floor Space Ratio that applies to that portion of the land zoned Environment and Recreation; and
- b. Where the maximum Floor Space Ratio on land zoned Mixed Use is exceeded in accordance with sub-clause a) the portion of land that is zoned Environment and Recreation is to be maintained as common property under a strata title scheme or Community Land under a Community Title Scheme, or dedicated to a public authority.

This requirement applies to a lot that was in existence prior to the date this Precinct Plan first came into effect.

BG8 Where Gross Floor Area is transferred in accordance with Requirement BG6 or BG7, the maximum Height Requirements in [section 5.2](#) of this Precinct Plan may be exceeded:

- a. Only to the extent necessary to accommodate the transferred Gross Floor Area and to enable compliance with other relevant requirements of this Precinct Plan;
- b. Up to a maximum of three storeys or 10 metres, whichever is the greater; and
- c. Providing the proposed building does not result in any non-compliance with aviation safety and airport operations requirements as set out in the Aerotropolis SEPP.

4.5.4 Biodiversity and vegetation corridors

Cumberland Plain Woodland is present across the Aerotropolis, which is a Critically Endangered Ecological Community under the *Biodiversity Conservation Act 2016* (NSW) and *Critically Endangered under the Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth).

Land to the south of Elizabeth Drive in the Badgerys Creek and Wianamatta-South Creek Precincts and all the Aerotropolis Core Precinct is subject to precinct planning requirements of the Order to confer biodiversity certification on the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006*. The Relevant Biodiversity Measures include a requirement to protect 2,000 hectares of Existing Native Vegetation (ENV) in the Growth Centres. 67.31 hectares of ENV Validated land needs to be protected within land subject to this Precinct Plan.

Objectives

- BGO1 Achieve the objectives of, and implement, the Cumberland Plain Conservation Plan.
- BGO2 Achieve the vision of a Western Parkland City and maintain Wianamatta-South Creek Corridor as a regionally significant ecological corridor.
- BGO3 Protect areas of high biodiversity value including watercourses and riparian zones, Existing Native Vegetation and remnant vegetation and habitat of the Cumberland Plain.
- BGO4 Increase and improve landscape connectivity through conservation and restoration of native vegetation to enable plant and animal communities to survive in the long term.
- BGO5 Support long-term viability and ecological connectivity by ensuring development does not encroach on protected land and any ecological restoration program selects species that are resilient to a changing climate.

Requirements

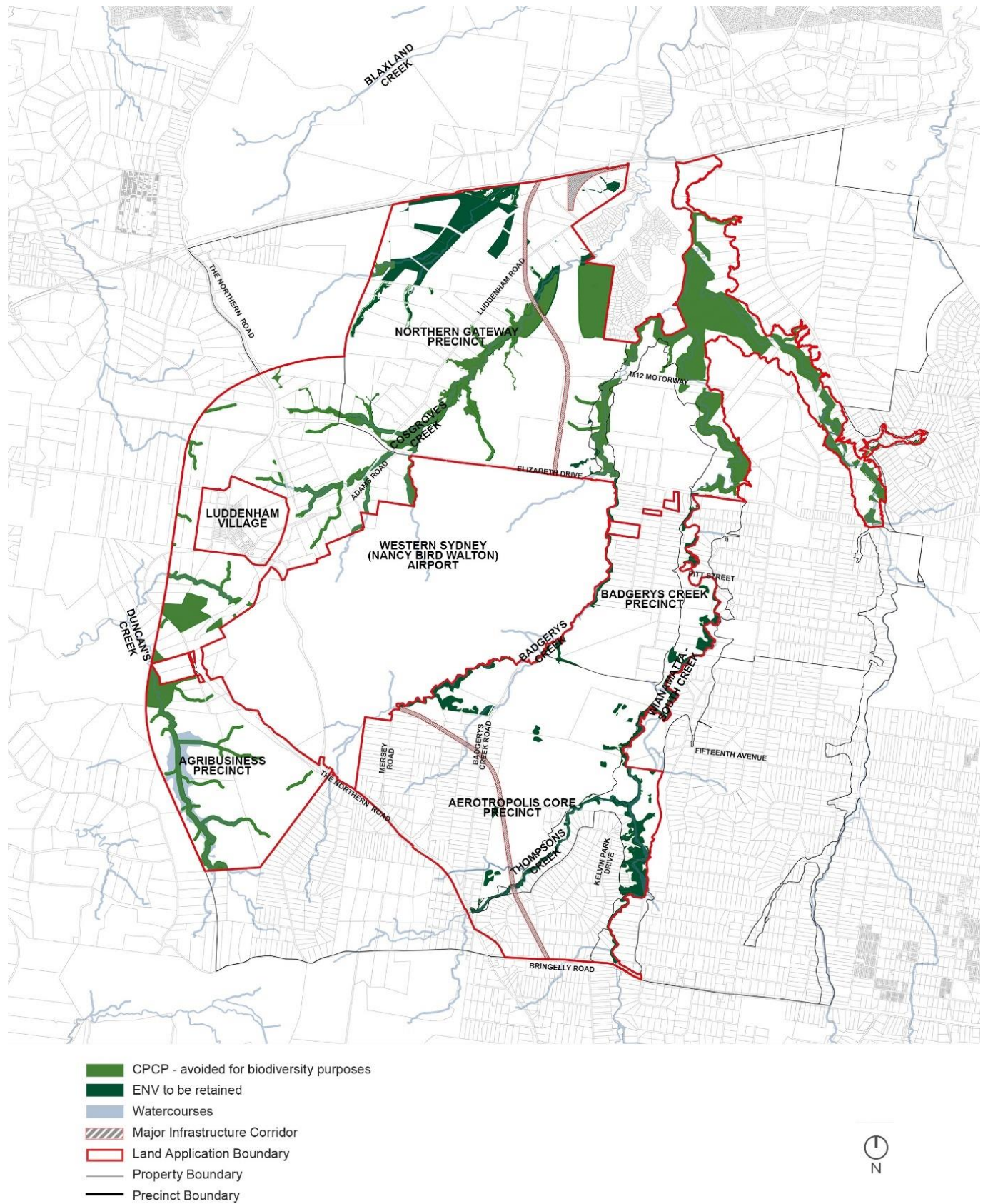
- BG1 Existing Native Vegetation and other vegetation under the Cumberland Plain Conservation Plan (refer to Figure 7) is to be protected as required by the Aerotropolis SEPP. Development applications are to demonstrate, to the satisfaction of the consent authority, that measures are in place to protect and provide for the long term management of the vegetation to achieve biodiversity conservation outcomes under the Growth Centres Biodiversity Certification Order or the Cumberland Plain Conservation Plan as relevant.
- BG2 Recreation facilities, pathways and other infrastructure are not to be located on land referred to in Requirement BG1.
- BG3 Revegetation and landscaping are designed and managed to account for future climatic conditions and include climate ready species. Resources relating to climate-ready species

are available at https://www.mq.edu.au/__data/assets/pdf_file/0006/807666/Climate-Reveg-Guide-v2-2018.pdf

BG4 Development applications are to demonstrate:

- a. reuse of native plants (including but not limited to seed collection) and top soil from development sites that contain known or potential native seed bank. Appropriate uses may include, but are not limited to, application in re-vegetation or restoration works and landscaping in the precincts,
- b. the relocation of native animals from development sites, prior to development commencing.

Figure 7: Protected Existing Native Vegetation and Protected areas under the Cumberland Plain Conservation Plan



4.5.5 Scenic and cultural connection

Objectives

- SCO1 Ridgeline and hilltop vegetation is preserved or reinstated.
- SCO2 Creek lines, ridgelines and hilltops are connected through green streets that create a network of tree canopy.

Requirements

- SC1 Subdivision design is to orient streets to align with ridgelines.
- SC2 Any required onsite provision of open space is to incorporate high points and retain existing trees.
- SC3 Creek to creek and creek to ridgeline landscape connections are established through the design of public domain elements including streets and open space. Landscape connections on Sub-arterial Roads and Collector Streets shown on Figure 9 (refer to the Requirements in [section 4.5.3](#)) are to be continuously accessible by the public and active transport is prioritised on these connections.
- SC4 Streets are to be designed to follow natural drainage lines and overland flow paths to minimise the need for drainage easements or reserves through private land.

4.6 Movement Framework

Planning for land uses needs to be balanced against different customer requirements to develop a cohesive transport framework, across all modes, that caters for all users. This balance of strategic and local travel demands will facilitate sustainable patterns of movement and mobility.

4.6.1 Transport strategy

Objectives

- MFO1 Use the Transport Network to move people and goods safely and efficiently and create connections between places.
- MFO2 Integrate land and prioritise public transport to support the 30-minute city and meet current and future demand.
- MFO3 Create a road network for private vehicles and freight which can provide efficient links and integration to the broader regional network while also supporting local accessibility in centres and between places.
- MFO4 Provide safe, direct and interconnected pedestrian and cycling links to a variety of destinations and transport nodes.
- MFO5 Encourage active transport through cycle and pedestrian network integrated with the road network and the Blue-Green Infrastructure Framework.

M06 The transport network contributes to achievement of the following modal split targets:

Precinct	Target mode share		
	Active transport	Public transport	Private Vehicle
2026			
Aerotropolis Core	4%	20%	76%
Northern Gateway	3%	16%	81%
Agribusiness	2%	16%	82%
Badgerys Creek	2%	18%	80%
Aerotropolis wide (average)	3%	18%	79%
2036			
Aerotropolis Core	6%	34%	60%
Northern Gateway	5%	31%	64%
Agribusiness	2%	16%	82%
Badgerys Creek	2%	18%	80%
Aerotropolis wide (average)	5%	30%	65%
2056			
Aerotropolis Core	9%	52%	39%
Northern Gateway	7%	43%	50%
Agribusiness	2%	16%	82%
Badgerys Creek	2%	18%	80%
Aerotropolis wide (average)	7%	43%	50%

Requirements

- MF1 The Transport Network is to be designed generally in accordance with Figure 7.
- MF2 The Transport Network is designed to accommodate bus corridors and the Indicative Local Bus Network generally as shown on Figure 7, so that:
- 90% of businesses are within a 400 metre walk of a street that is capable of carrying public transport in the Enterprise Zone and Agribusiness Zone.

- b. All businesses and residents in the Mixed Use Zone are within a 400 metre walk of a street that is capable of carrying public transport or a Metro station.

MF3 Active transport is integrated with the Blue Green Infrastructure Framework in Figure 5 and provided generally in accordance with the Active Transport Network in [Figure 8](#).

Figure 8: Transport Network

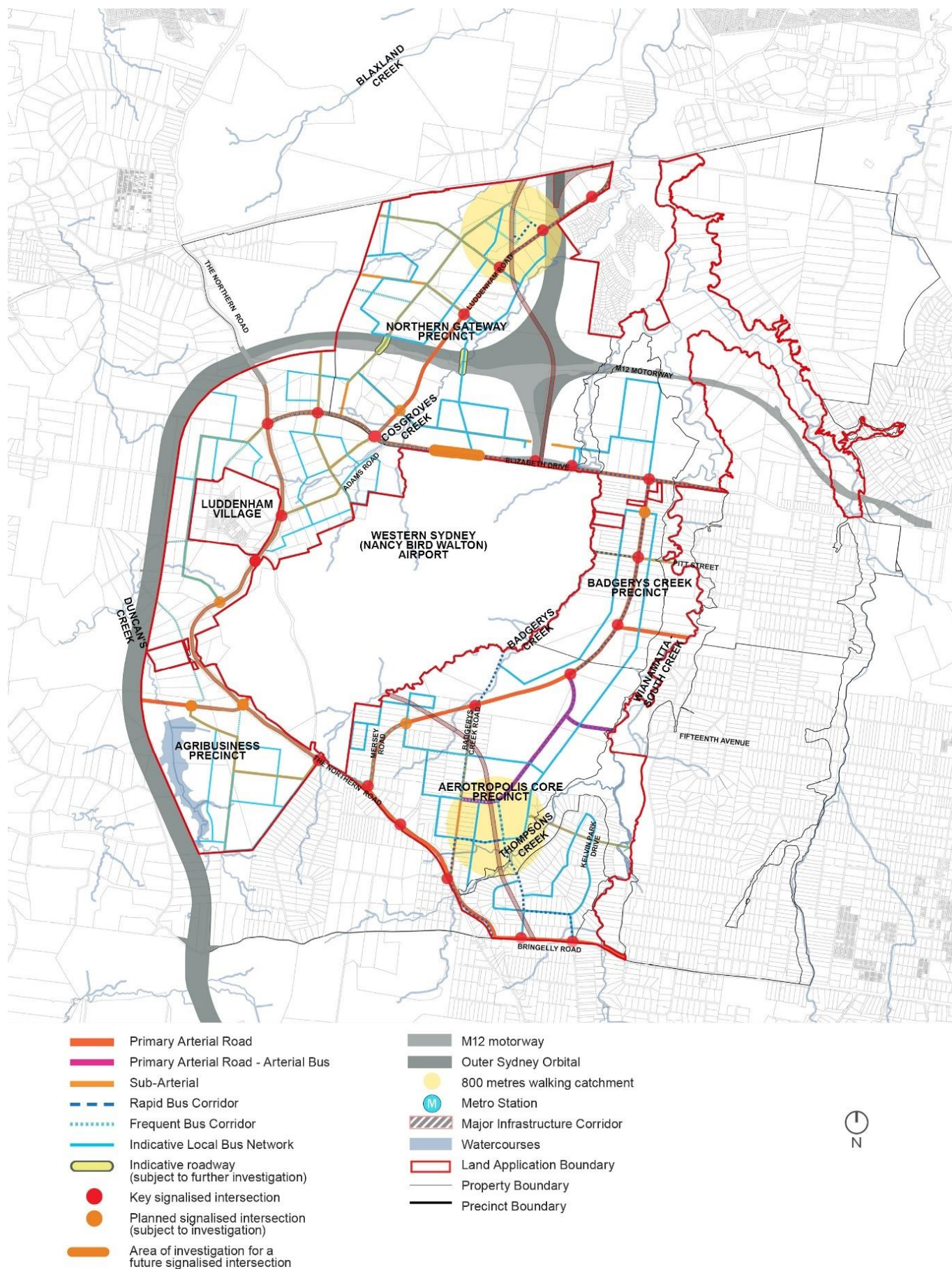
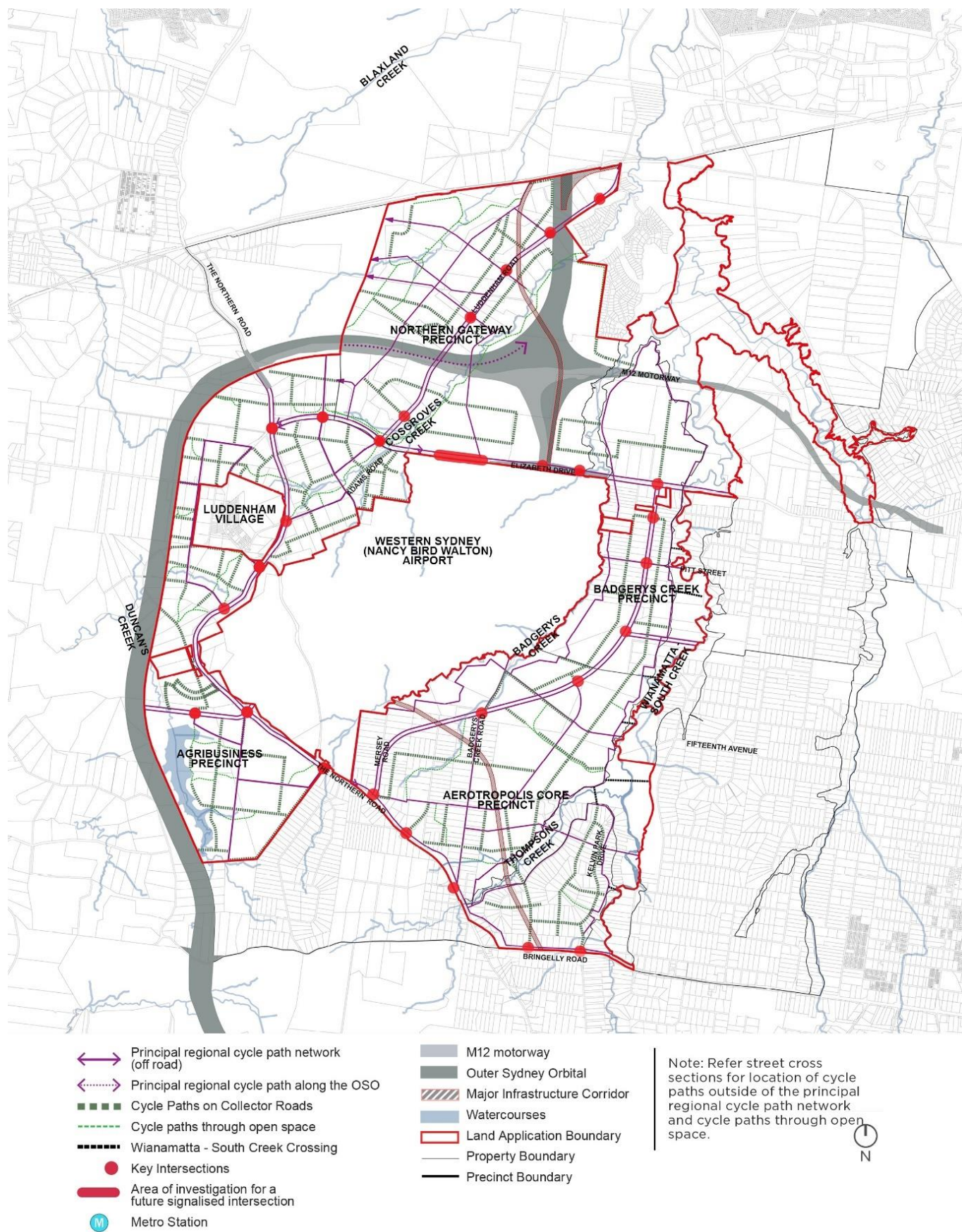


Figure 9: Active Transport Network



4.6.2 Street hierarchy and typology

The classification of main roads, main streets and local streets considers the Access and Movement Framework of the WSAP and the Western Sydney Councils Street Guidelines.

High order roads, such as priority public transport corridors, motorways, and primary arterial roads are to be located as shown on the Transport Network (Figure 8), and will be designed in more detail taking into account intersections and utility needs. The alignments of lower order streets are shown indicatively, and the alignment of these roads will be subject to more detailed design as part of development applications. The requirements below set out matters to be addressed in designing the local and collector streets.

Objectives

- SHO1 Establish a hierarchy of streets that supports the development of the Aerotropolis and provides streets for safe and efficient movement of freight and people, and that is connected to other parts of Greater Sydney and NSW.
- SHO2 Create streets that are attractive, green, sustainable, safe, functional, adaptable and integrated with topography and the natural environment.
- SHO3 Minimise lot severance and maximise the efficiency of the road network to facilitate development across multiple properties.
- SHO4 Reflect the varied role of streets in urban environments such as public spaces, places for social interaction, service provision, movement connections, water and stormwater management, biodiversity and environmental functions.
- SHO5 Design the public transport network to achieve operational integrity and permeability for buses, both local and rapid, so that as the needs of the network change, bus routes and bus priority can easily adapt.

Requirements

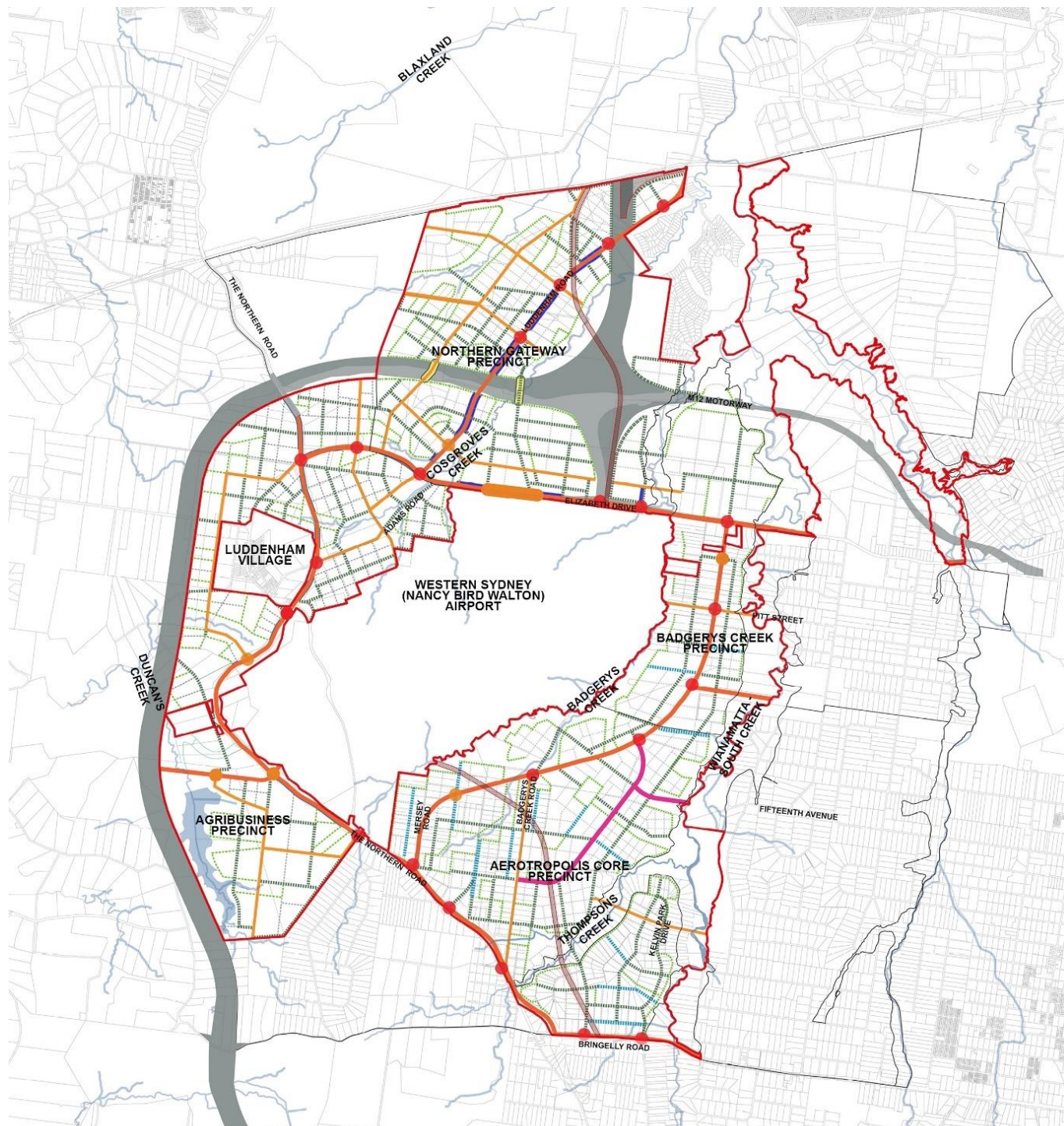
- SH1 The Road Network within the Transport Network is to be generally consistent with the alignment and connections of roads shown in Figures 8-10.

Major roads (Sub-arterial and Arterial and Rapid Bus Routes) are to be designed to:

- a. Respond to topography;
- b. Enable the efficient movement of water, replicating natural flow patterns as closely as possible;
- c. Intersect with arterial or classified roads at locations and using intersection treatments nominated or agreed by the road authority;
- d. Accommodate buses generally consistent with the alignments and connections shown in Figure 8;
- e. Accommodate separated cycleways generally consistent with the alignment and connections of cycleways shown in Figure 9; and
- f. Connect with centres and metro stations.

- SH2 Local and Collector streets are to be designed to:
- a. Connect to other streets in the hierarchy in a logical sequence, so that Local Streets connect to other Local Streets or to Collector Streets;
 - b. Incorporate priority-controlled intersection treatments;
 - c. Minimise 4-way intersections and avoid intersections with more than 4 streets;
 - d. Provide interfaces between urban land and land identified for open space, conservation, or stormwater management;
 - e. Enable land in different ownerships to be developed independently and ensure that legal and physical access to properties is maintained at all stages in the development process;
 - f. Convey stormwater within the Total Water Cycle Management network as shown on Figure 6;
 - g. Contribute to tree canopy and the Blue Green Infrastructure Framework shown on Figure 5; and
 - h. Maximise opportunities for the energy efficient design of buildings.
- SH3 The layout and location of Local Streets and Collector Streets on Figure 10 is indicative. Where a development application proposes a variation to the Local Street or Collector Street, the applicant must demonstrate that in addition to the requirements in SH2, that the variation:
- a. Achieves a permeable street network;
 - b. Encourages walking and cycling and minimises travel distances;
 - c. Maximises connectivity to community facilities, open space and centres;
 - d. Takes into account topography and the flow of water in the landscape;
 - e. Will not detrimentally impact on access to adjoining properties or result in isolation of properties; and
 - f. Will not impede the orderly development of adjoining properties.
- SH4 Roads and streets are to be designed in accordance with the Western Sydney Street Design Guidelines, except where specific street cross sections are provided in the DCP for streets as shown on the street hierarchy map at Figure 10.
- SH5 Roads and streets are aligned to follow property boundaries where possible to reduce lot severance.

Figure 10: Street Hierarchy



Major Roads

- Primary arterial road
- Primary arterial road (rapid bus)
- Sub-arterial road
- - - Collector
- - - Local Street
- - - Park Edge Street
- - - Riparian Street
- M12 motorway
- Outer Sydney Orbital
- Indicative roadway (subject to further investigation)

Laneways and Service Roads

- Service Street
- Park Edge Active Path
- Key signalised intersection
- Planned signalised intersection (subject to investigation)
- Area of investigation for a future signalised intersection
- Major Infrastructure Corridor
- Watercourses
- Land Application Boundary
- Property Boundary
- Precinct Boundary



4.6.3 Development adjacent to protected transport corridors

State Environment Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP), protects land for future infrastructure corridors that will be critical in supporting the passenger and freight network for a growing Western Sydney. The Aerotropolis SEPP identifies and expands on the protected Major Infrastructure Corridors by requiring consideration of key components of the transport network in the Aerotropolis.

Objectives

PCO1 Ensure development adjacent to protected transport corridors considers the future operational impacts of the infrastructure.

Requirements

PC1 Development adjacent to corridors identified on the Transport and Infrastructure SEPP and the Aerotropolis SEPP is to be designed to orient noise sensitive elements (for example habitable rooms) away from the noise source.

4.7 Sustainability and Resilience

Objectives

- SR01 Development is to support the transitioning to a net zero or net positive outcome over the medium to long term. This will be measured around performance regarding waste management, water management and carbon consumption benchmarks that are provided in the DCP or other relevant legislation.
- SR02 Development should seek to exceed the water and energy requirements of BASIX.
- SR03 Green infrastructure is effectively used through the provision of water treatment and retention, urban cooling, ecosystem services and amenity and integrated into built, landscaped and natural environments.
- SR04 Buildings, infrastructure and public domain elements maximise the recycling and reuse of materials.
- SR05 Facilitate the design, construction and operation of environmentally sustainable buildings and precincts, including energy efficiency, renewable energy, efficient resource and energy use and reduced emissions and waste.
- SR06 Effectively uses waste as a resource through its collection, transport and recycling in a manner that is safe, efficient, cost effective and does provide a positive impact on liveability and the environment.
- SR07 Measures to mitigate urban heat island effects are integrated in the design of the built form and public domain, for example the use of light-coloured roofs.
- SR08 Planning is to provide sustainable and resilient approaches to development and is to incorporate circular economic principles found in the *NSW Circular Economy Policy Statement*.

Requirements

- SR1 Energy, water and waste systems are to use a circular economy approach to improve efficiency and result in low-carbon developments.
- SR2 Effectively use renewable energy supply including solar, wind, green hydrogen, and bio-energy.
- SR3 Plan for, and achieve, leading industry targets by 2025 and from 2026 beyond to achieve sustainable regenerative targets:

Description	Leading industry practice	Sustainable regenerative
	Target 2020 and 2025	Target 2026 and beyond
BASIX	BASIX (Energy) – 45-60 BASIX (Water) – 60	BASIX (Energy) – 45-60 BASIX (Water) – 60
Non-residential uses (subject to final modelling)	Green Star Communities – 5+ stars Green Star – 5+ stars NatHERS – 7 star	Green Star Communities – 6+ stars Green Star – 6+ stars NatHERS – 8+ star/ Passive home
Circular economy targets	10% reduction of waste generation 85% reduction in construction waste	100% recovery and re-use of organic waste 90% reduction in construction waste

- SR4 Circular economy activities must be located with consideration of:
- nearby land uses, considering the likely construction and operational impacts of the proposed development
 - proximity of the proposed development in relation to the Western Sydney Airport, and associated risks to airport and aircraft operations (in reference to the proposed development's risk assessment)
 - proximity to land in the Environment and Recreation Zone and impacts on the environmental values of that land
 - potential impacts on the amenity and use of open space
 - proximity to major transportation routes, considering safe transportation of extractive and waste materials
- SR5 Incorporate accessible Circular Economy Infrastructure into mixed use developments to ensure adequate opportunity for people to participate in reuse and recycling schemes.
- SR6 In deciding whether to grant development consent for the purposes of commercial premises, industrial premises or residential accommodation, the consent authority must consider whether:
- the façade and roof of the proposed buildings and paved surfaces are designed to reduce adverse effects of solar heat on the surrounding land, including open space and the public domain, including a requirement for light-coloured roofs, and

- b. the awnings and eaves of the building are designed to provide shelter from the sun and improve public comfort at street level, and
- c. building plant and equipment is designed to minimise the release of heat in the direction of open space and the public domain, and
- d. the development accommodates tree canopy, pervious surfaces and landscaped areas to minimise solar heat absorption and reflection by hard surfaces.

5 Land Use and Built Form

5.1 Hierarchy of Centres

The *Western City District Plan* identifies the Aerotropolis as part of a metropolitan cluster which also includes Liverpool, Greater Penrith and Campbelltown-Macarthur. The *Western City District Plan* identifies Leppington as a Strategic Centre.

The Western Sydney Aerotropolis Plan identifies three main centres. The **Aerotropolis Core** is the primary centre of the Aerotropolis and will be the metropolitan centre. The centre within the **Northern Gateway** is zoned mixed use with a focus on innovation, science and technology. The Sydney Science Park is proposed to be a 'specialised centre' within the Northern gateway.

Other centres in the Aerotropolis will be 'local' centres or neighbourhood business hubs/centres. Local centres provide the goods and services for where people live and work, but only a few centres in the Aerotropolis will be suitable for residential uses because of aircraft noise and Airport operational constraints.

Objectives

- LU01 Develop and support a hierarchy of centres to create a 30-minute Western Parkland City with metropolitan, specialised, local and neighbourhood centres.
- LU02 Identify the Aerotropolis Core and the specialised centre in the Northern Gateway as higher order centres with social infrastructure and higher employment and residential densities.
- LU03 Locate Local and Neighbourhood Centres in areas of high amenity linked to public transport.
- LU04 Link all centres to, and prioritise, active and public transport access over private vehicles.
- LU05 Suitably space local centres to provide sufficient services to enable walkable residential and working communities.
- LU06 Ensure sufficient distance between existing and proposed centres to ensure economic viability.

Requirements

- LU1 The indicative locations of local and neighbourhood centres in the Enterprise Zone and Agribusiness Zone are identified in Figure 11. Where a centre is proposed in an alternative location the development application is to demonstrate that the location achieves the role, intent, uses, transport connectivity and locational criteria outlined in Table 2 below.
- LU2 Local and Neighbourhood Centres are to be located on or adjacent to bus routes.
- LU3 Local and Neighbourhood Centres are not to be located on arterial roads.

- LU4 Retail and social infrastructure in the Agribusiness and Enterprise Zones is to be concentrated in the Local and Neighbourhood Centres.
- LU5 Bulky goods and specialised retail that requires larger floor plates are to be located outside of the identified centres.

Figure 11: Centres Hierarchy

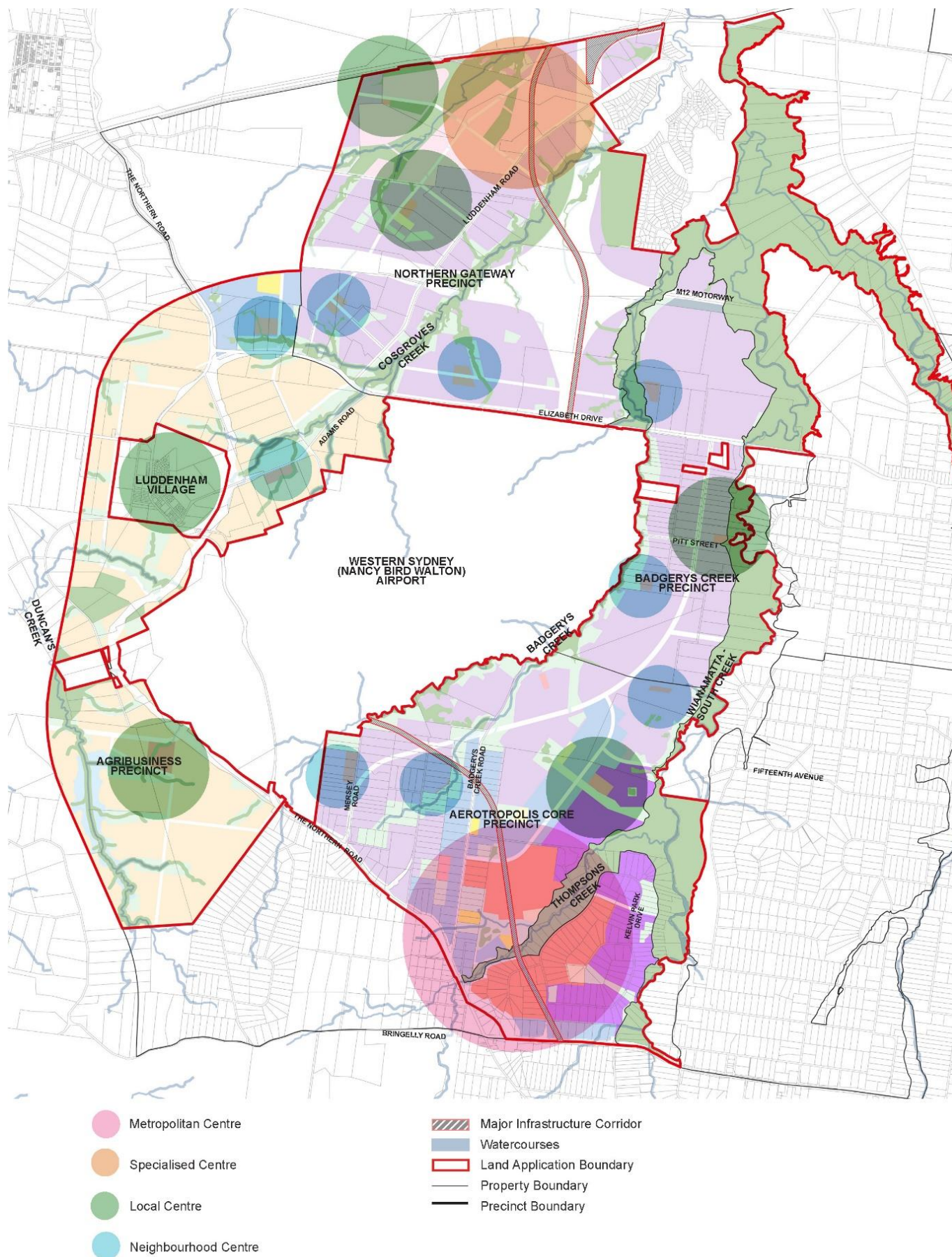


Table 2: Description of hierarchy of centres

Centre type and Precinct	Role and intent	Typical uses	Transport connectivity	Critical locational criteria
Metropolitan centre within the Aerotropolis Core	Part of the metropolitan cluster and includes multi- purpose development to support a diversity of uses including a full range of community uses.	Commercial office development; employment hubs; multiple supermarkets and department stores; higher order services; social infrastructure, including health and education services; creative and cultural uses; residential development that creates residential density but ensures capacity for employment.	Locates central to the Metro train station, and includes a bus interchange. Provides high levels of public and active transport accessibility.	Locates around metro/mass transit nodes and highly accessible areas. Part of a mixed use precinct and contains a regional park. Initially focused around 800m of the Metro to Thompsons Creek, and over time (in stages) will extend east of Thompsons Creek as employment and residential densities increase.
Specialised centre/precinct within the Northern Gateway	Strategic innovation centre focused on an employment generator. A focal point for public transport and interchanges. A diverse mix of land uses and vary in size, with commercial, office development, and innovative employment opportunities.	Business, office, industrial, employment hubs with a specialised focus e.g. agribusiness, defence, aerospace, health and education; specialty retail, supermarkets and bulky goods; social infrastructure; Residential uses such as shop top housing or multiple dwellings to support employment uses.	High levels of public and active transport accessibility and connectivity to open space	Provide a specialised land use focus, whether health and education or aerospace and defence as an agglomeration of uses, supported by other mix of uses, including residential to create a resident population.
Local centres that are located in all Precincts as identified in Figure 11	Smaller retail centres that meet the convenience retailing needs of the community while acting as a local gathering place, particularly for employers/employees. Include a mix of uses, but do not have to include residential uses. Provide fine grain urban form. Protect and expand employment opportunities, and integrate and support creative enterprise. Located in areas of high amenity to help activate parkland corridors and link to public transport.	Retail facilities, specialty shops and a supermarket or large grocery store; personal services; co-location with social infrastructure (community facilities and open space); smaller scale mix of uses supporting industrial, office and employment uses with a diversity of commercial spaces, community and public places.	Active transport infrastructure that supports frequent trips to access goods and services, within and between centres. High level of pedestrian accessibility from surrounding development, provision of bus access, drop off points and car parking between buildings and the street.	Located approximately 1.5km apart and adjacent to areas of open space. Located on a frequent bus route.
Neighbourhood centres or business hubs that are located in all Precincts as identified in Figure 11	Provide daily convenience goods and range of neighbourhood scale services to support workers and residents.	Some retail floor space (not a supermarket, or significant specialised retail); multiple retail premises (not just a petrol station or one standalone store); activity or business hub; community facilities. Does not include residential uses.	High level of pedestrian accessibility from surrounding development, provision of bus access, drop off points.	Located adjacent to areas of open space. Located on a frequent bus route. Location must consider the barrier impacts of major roads and different sizes.

5.2 Height

Objectives

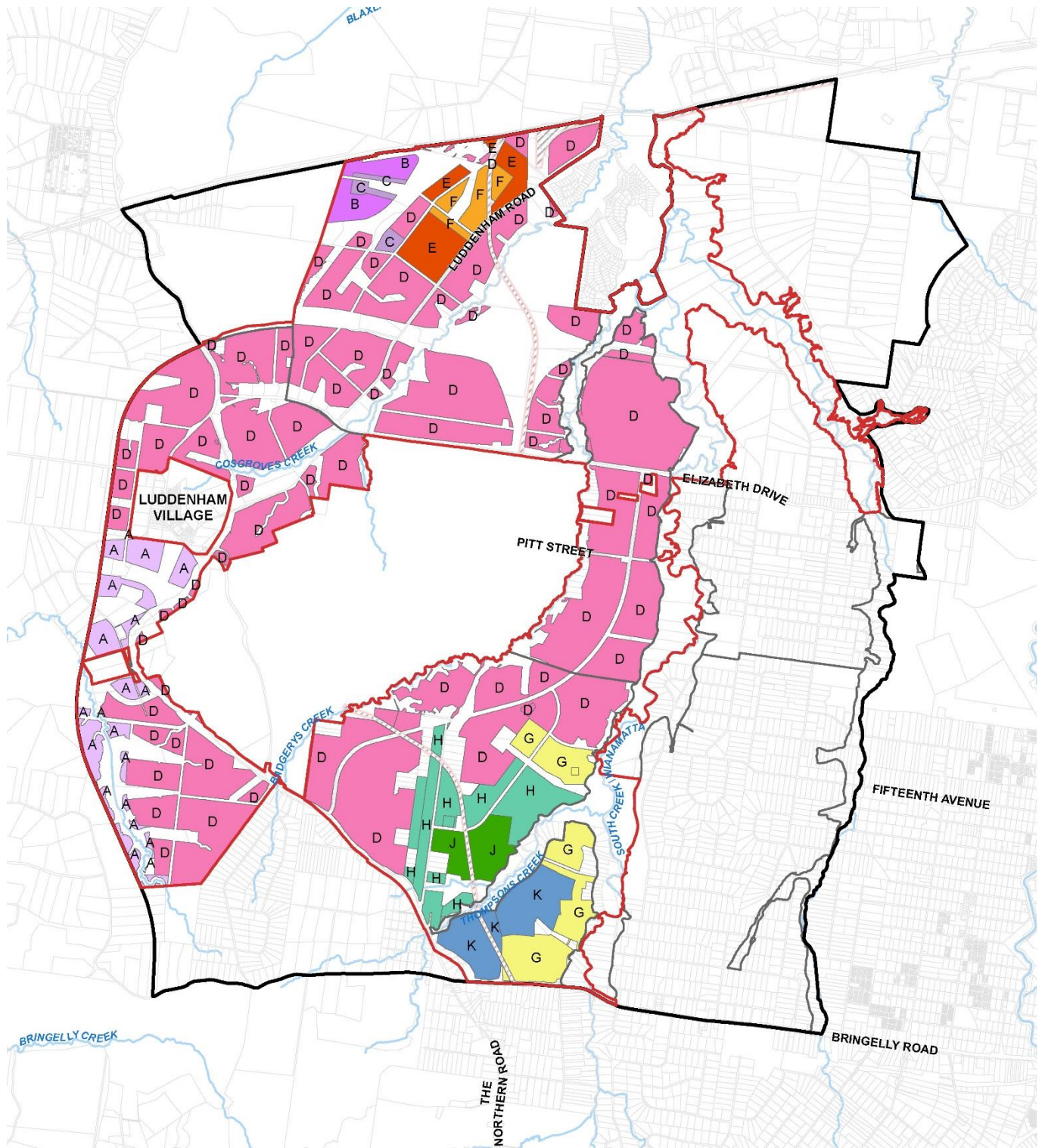
- HO1 To allow building heights that align with the role of each centre, its typology and residential/employment density needs.
- HO2 Facilitate height and urban density in the Aerotropolis Core and Northern Gateway around the Metro stations.

Requirements

- H1 The height of buildings is not to exceed the maximum for the land shown on Figure 12.
- H2 In the Mixed Use Zone, ensure development does not adversely impact on the amenity of the public domain and adjacent residential areas and that site topography, views and landscape character have been considered.

Note: Notwithstanding maximum building height controls, all buildings and structures, including equipment used during construction (such as cranes) are required to be contained within Obstacle Limitation Surface (OLS) limits established under the Aerotropolis SEPP.

Figure 12: Height of Buildings



Maximum Building Height (m)

- A 8.5
- B 9.5
- C 12
- D 24
- E 27
- F 45
- G 52.5

- H 56
- J 62
- K 70

- Aerotropolis Boundary
- Land Application Boundary
- Major Infrastructure Corridor
- Precinct Boundary

Property Boundary

0 1 2 km



Note: Notwithstanding maximum heights, all building and structures, including equipment used during construction (such as cranes) are required to be contained with Obstacle Limitation Surface (OLS) limits established in the Western Sydney Aerotropolis Plan and associated SEPP maps

5.3 Floor Space Ratio

Floor space ratio (FSR) controls apply to development across the Mixed Use Zone and to Centres within the Northern Gateway, Enterprise and Agribusiness zone. They are based on the desired built form outcome, employment and population targets, and the need to ensure appropriate bulk, massing, articulation and separation of development within the Aerotropolis.

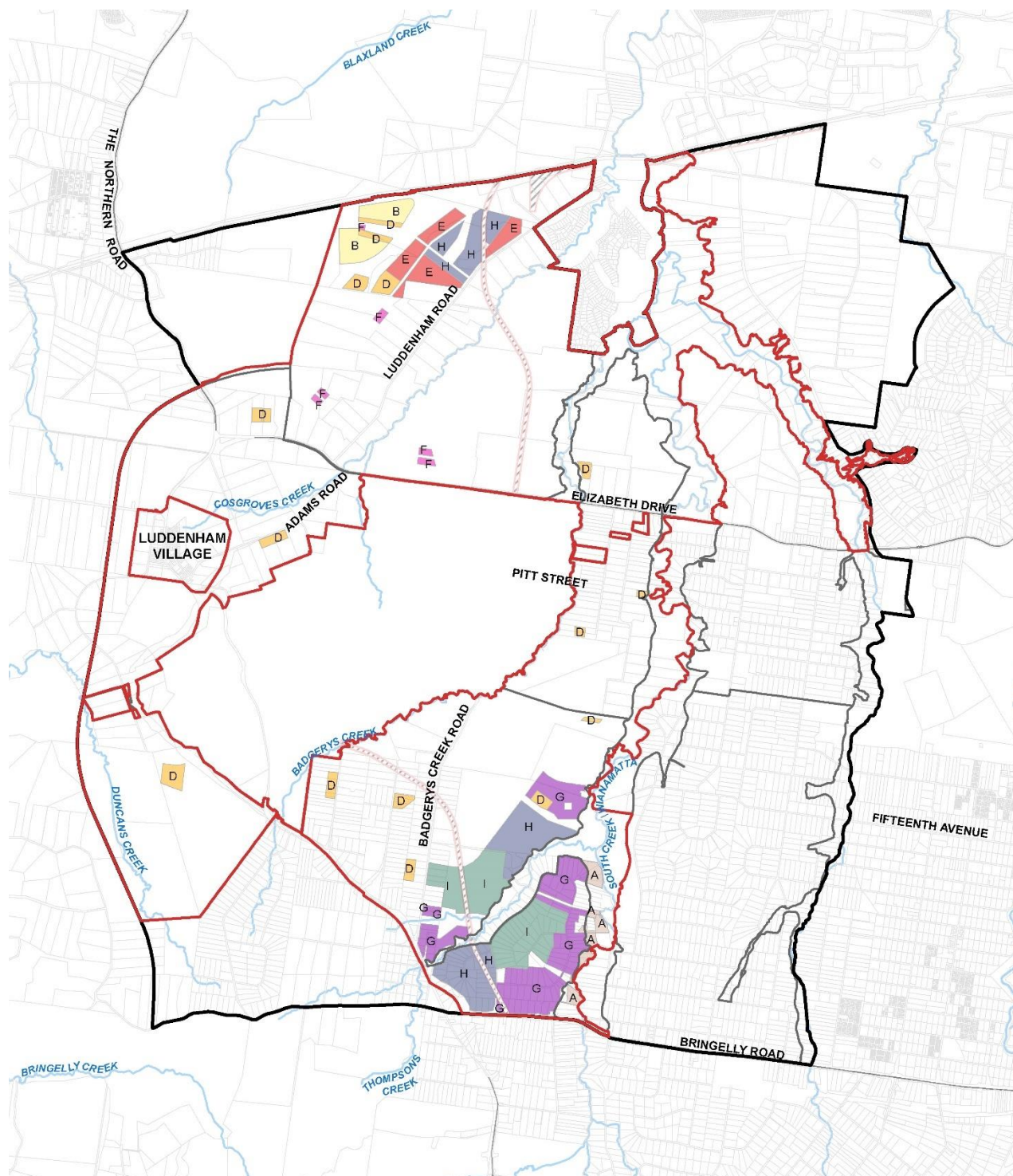
Objectives

- FSO1 FSR controls are to create an appropriate mix of employment, business, social and residential development in the Mixed Use zone, and Local and Neighbourhood Centres (refer to Figure 13)
- FSO2 Achieve a density of employment in mixed use areas to ensure residential uses are not the predominant use (refer to the Yield and Density Targets established in [section 5.4](#)).
- FSO3 Locate higher intensity mixed use employment and residential densities within 800m of the Metro station.

Requirements

- FS1 Buildings are not to exceed the maximum FSR shown on the Floor Space Ratio Map in [Figure 13](#).

Figure 13: Floor Space Ratio



5.4 Yield and Density

Objectives

- YDO1 Provide a mix of uses in the Mixed Use Zone, which supports employment and residential uses, and ensures employment generating development is prioritised while residential development occurs in suitable locations.
- YDO2 Development contributes towards achieving the strategic employment density targets of the Aerotropolis Plan.
- YDO3 Employment generating development in the Aerotropolis contributes to achieving the following indicative employment densities:
- a. City Centre: 130 – 400 jobs/ hectare
 - b. Urban Services: 25 – 35 jobs/ hectare
 - c. Office Park: 130 – 250 jobs/ hectare
 - d. Campus Style Business Park: 75 – 130 jobs/ hectare
 - e. General Industrial: 25 – 30 jobs/ hectare
 - f. Large Logistics: 18 – 25 jobs/ hectare
 - g. Education/ Community: 30 – 50 jobs/ hectare

Requirements

- YD1 Residential development is to be primarily located in those parts of the Mixed Use Zone identified on the Land Use Plan at Figure 3 as Mixed Use Residential.
- YD2 Development applications in the Mixed Use Zone are to demonstrate how they will contribute to achieving the employment densities in YDO3.

5.5 Temporary land uses

The evolution of land uses and development will occur as the Airport matures, development occurs and precincts become more attractive to new workers, businesses and residents.

Objectives

- LUO1 Allow flexibility for development and land uses to evolve as precincts mature and the Airport consolidates within the Aerotropolis.

Requirements

- LU1 Development that is inconsistent with this Precinct Plan is permitted where required to enable temporary or short term uses on land, where it can be demonstrated that the intended use under the Precinct Plan can be achieved in the future.
- LU2 The consent authority may, by condition of consent, impose a sunset date on temporary and short term uses, to ensure that the intended use under the Precinct Plan can be achieved in

the future. The sunset date must not extend beyond 2036, or 10 years from the date of development consent, whichever is the later.

- LU3 Industrial development should provide a plan of management to demonstrate the management of land use conflicts with adjacent uses during the transitional period.

5.6 Design Excellence

One of the objectives of the Aerotropolis SEPP is to deliver the highest standard of architectural, urban and landscape design in the Aerotropolis. This is achieved in part by requiring an architectural design competition to be carried out in certain circumstances. This section of the Precinct Plan compliments the Aerotropolis SEPP by providing guidance on how architectural design competitions should be carried out.

Objectives

- DEO1 Provide guidance to applicants and consent authorities on the carrying out of architectural design competitions.

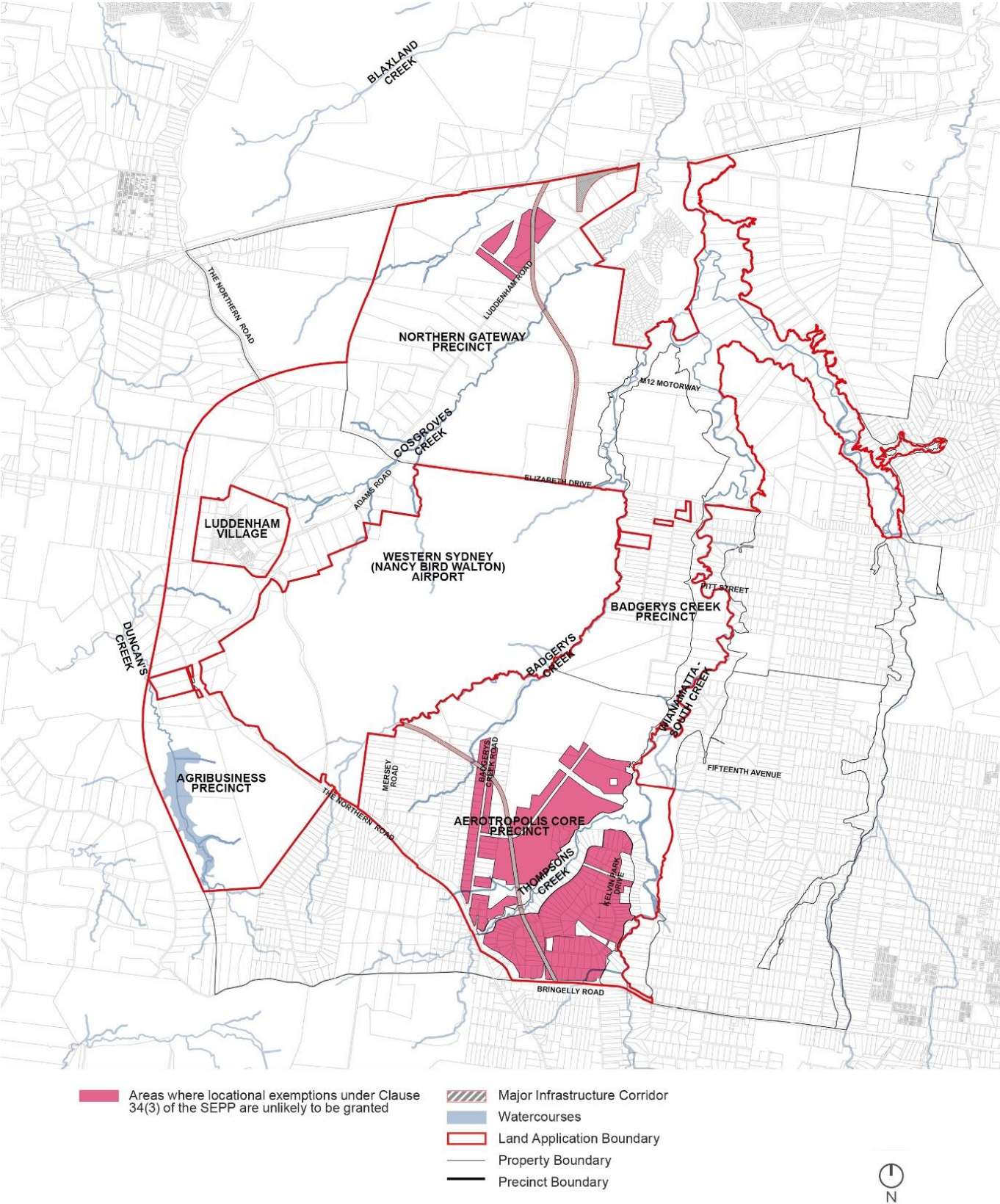
Requirements

- DE1 An architectural design competition is to be undertaken generally in accordance with the NSW Government Architect's *Draft Design Excellence Competition Guidelines* (2018) (the Guidelines), or the relevant guidelines published at the time.
- DE2 Where a design competition is required by the Aerotropolis SEPP:
- A concept development application made under Part 4 Division 4.4 of the EP&A Act must be accompanied by a Design Excellence Strategy.
 - For any development application that is not a concept development application the consent authority must approve a Design Excellence Strategy prior to the lodgement of a development application.
- DE3 A Design Excellence Strategy must define:
- the location, context and extent of the design competition site(s);
 - the objectives of the design competition(s);
 - where there will be multiple development applications for separate buildings following approval of a concept development application, the number of design competitions to be undertaken;
 - the type of design competition(s) to be undertaken;
 - an explanation for the selection of competition type, including how the selected process(es) will meet the objectives of the Guidelines and those of the proponent;
 - the number of designers involved in the process(es);
 - the means for ensuring diversity amongst participating designers;
 - timelines and programme;

- i. where the proposed process differs from that outlined in the Guidelines, a justification for the variation.

DE4 Exemptions to the requirement for a design competition under the Aerotropolis SEPP requires specific consideration of impacts on view corridors, the relationship of development to major roads and visual prominence and are unlikely to be granted in those areas shown on Figure 14.

Figure 14: Design Competitions



6 Glossary

Term	Definition
1:100 flood	A flood that has a 1% chance of occurring in any given year within a 100-year cycle.
30-minute city	A 30-minute city is where most people can travel to their nearest metropolitan centre or cluster by public transport within 30 minutes; and where everyone can travel to their nearest strategic centre by public transport seven days a week to access jobs, shops and services. This is a key objective of <i>A Metropolis of Three Cities: The Greater Sydney Region Plan</i> .
Aerospace	The branch of technology and industry concerned with the research, design, manufacture, operation and maintenance of aircraft, space craft, and their components and supporting services.
Aerotropolis	A metropolitan area where infrastructure, land uses and economy are centred on an airport and includes the outlying corridors, and aviation orientated business and residential development that benefit from each other and their accessibility to the airport.
Aerotropolis Core	This is the city, proposed to be named Bradfield, at the core of the Aerotropolis activity associated with the Western Sydney Airport. The combination of uses, activities, development and places are reliant on and complementary to the operation of a global airport.
Agribusiness	Businesses associated with the production, processing, marketing and distribution of agricultural products, especially at a large and integrated scale.
Agriculture	Generally associated with traditional primary production. It includes the cultivation of land for the growing of crops and breeding of animals.
Agriport	A high-tech food production facility that enables industry collaboration at scale to intensively and sustainably produce fresh value-added high-quality produce and pre-prepared food.
Amenity	The 'liveability' of a place that makes it pleasant and agreeable for individuals and the community. Amenity includes, but is not limited to, the enjoyment of sunlight, views, privacy and quiet.
Articulation	The architectural treatment of the exterior of a building using the different building elements that make up that part of the building. It involves how the building's exterior surfaces, edges, corners and materials unite to give the building its form.
Biodiversity	Biodiversity means plants and animals and the ecosystems in which they live.
Blue-Green Grid	A network of high-quality green areas and waterways, from regional natural assets to local natural assets, that connect to centres, public transport and public spaces.

Term	Definition
Blue-Green Infrastructure Framework	Blue-green infrastructure is the interconnected network of natural and semi-natural landscape elements. For example, blue includes water bodies, creeks and dams. Green includes trees, parks and native vegetation.
Business incubator	A company that helps new and start-up companies to develop by providing services such as management training or office space.
Circular economy	A whole-of-system approach that accounts for the full cost and lifecycle of materials and retains the value of materials in the economy for as long as possible, reducing the unsustainable depletion of natural resources and impacts on the environment.
Circular economy activities	Any activity associated with the operation of Circular Economy infrastructure. Circular economy activities includes the way we produce, assemble, sell and use products to minimise waste, and to reduce our environmental impact and encompass the use of materials produced from Circular Economy Infrastructure, including recovered materials, repaired goods, leased products etc.
Circular Economy Infrastructure	<p>Circular Economy infrastructure can encompass facilities that store, transfer, sort, reprocess or repurpose materials and goods to retain their productive value and prevent their disposal to landfill. Examples of circular economy infrastructure includes reuse and repair facilities, sharing and leasing facilities, reverse vending machines, community recycling centres, collection points for producer responsibility schemes, water reuse schemes, material bulking, sorting, storing facilities, material reprocessing and remanufacturing, washing or pelletising facilities, reverse logistics facilities, energy from waste (thermal), anaerobic digestion and chemical treatment of waste etc.</p> <p>Circular Economy infrastructure also includes the waste and resource recovery facilities as defined in the Standard Instrument such as resource recovery facilities, transfer stations, compost facilities, waste disposal facility.</p>
Climate change	A change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere in addition to natural climate variability.
Commercial centre – mixed use	Mixed use environment focused on employment generating land uses, leveraging off metro/mass transit. Residential land uses provide density but do not undermine employment capacity.
Country	For Aboriginal people, Country relates not only to the cultural group and land to which they belong, it is also their place of origin in cultural, spiritual and literal terms. Country includes not only the land but also waters and skies, and incorporates the tangible and intangible, knowledge and cultural practices, identity and reciprocal relationships, belonging and wellbeing.
Consent Authority	The same meaning as in Section 4.5 of the <i>Environmental Planning and Assessment Act 1979</i> .
Conservation (heritage)	Includes all the processes of looking after a place to retain its cultural significance. This includes preservation, protection, maintenance, restoration, reconstruction and adaptation.

Term	Definition
Conservation (vegetation management)	All the processes and actions of looking after a place to retain its natural significance and includes protection, maintenance and monitoring. Conservation may also include regeneration, restoration, enhancement, reinstatement, preservation or modification, or a combination of more than one of these. Conservation includes conserving natural processes of change (as opposed to artificially accelerated changes).
Cumberland Plain	The Cumberland Plain is a relatively flat, broad geographic basin located within the Cumberland IBRA subregion, identified by dominant older shale and younger alluvial geology.
Cumberland Plain Conservation Plan (CPCP)	The Cumberland Plain Conservation Plan will enhance a network of green spaces, natural and semi-natural systems in Western Sydney. One of the important species protected by the Cumberland Plain Conservation Plan is the Cumberland Plain Woodland. Cumberland Plain Woodland is a critically endangered ecological community found only in the Sydney Basin. It comprises of an open tree canopy, a layer of shrubs and ground cover and is considered functional at low integrity levels. Less than 10% of pre-European settlement levels of the community remain, with most patches of remnant vegetation existing in isolation and alongside other land uses. The Cumberland Plain Conservation Plan will address impacts on biodiversity from urban growth through a conservation program that includes commitments and actions designed to improve ecological resilience and function over the long term. The Cumberland Plain Conservation Plan will enable land to be certified for development and areas avoided from development conserved.
Defense	The branch of industry concerned with the research, design, manufacture, operation and maintenance of military equipment, supplies and services.
Department of Planning, Industry and Environment (DPIE)	Within the Aerotropolis, the Department of Planning, Industry and Environment is responsible for the integration and efficient delivery across key areas such as long-term planning, precincts, infrastructure priorities, open space, and the environment.
Design excellence	The highest level of architectural, urban and landscape design. Design excellence processes can include review panels, competitive design competitions. All processes require a form of design excellence assessment.
Development	As per the EP&A Act, development includes any of the following: the use of land; the subdivision of land; the erection of a building; the carrying out of a work; the demolition of a building or work; or any other act, matter or thing that may be controlled by an environmental planning instrument.
Development application	An application for consent under Part 4 of the EP&A Act to carry out development (not including an application for complying development) such as change of use of land, subdivide land, or building, landscaping and other work.

Term	Definition
Development Control Plan (DCP)	Provides detailed planning and design guidelines to guide the assessment of a development proposal within the Aerotropolis to ensure that development is consistent with the objectives for the Aerotropolis as outlined in the Western Sydney Aerotropolis Plan.
<i>Environmental Planning and Assessment Act 1979</i> (EP&A Act)	The primary planning legislation in NSW and governs matters such as, strategic planning, plan making, development application and assessment, and building certification. A copy of the EP&A Act can be viewed https://legislation.nsw.gov.au/view/html/inforce/current/act-1979-203 .
Environmental planning instrument	An environmental planning instrument (including a state environmental planning policy or local environmental plan but not including a Development Control Plan) made, or taken to have been made, under Part 3 of the EP&A Act and is in force.
Greater Sydney	The local government areas within the boundary shown on the map in the Greater Sydney Region Plan and Schedule 1 of the Greater Sydney Commission Act 2015.
Indicative local/neighbourhood centre	Provides goods and services to support the daily needs of local residents and workers.
Irrigation	The supply of water to land or crops to help growth, typically by means of channels.
Local Environmental Plan	Defined in the EP&A Act. Guides planning decisions in local government areas through zoning and development controls.
Local Centre	Smaller-scale places that vary from a few shops on a corner to a vibrant main street and generally serve a local population.
Mixed-use residential	Mixed use environment focused on establishing predominantly residential neighbourhoods in proximity to metro/mass transit nodes and accessible areas.
Multi-functional stormwater assets	<p>Stormwater infrastructure that has been designed to enhance cultural, ecological and recreational values as well as achieving established stormwater flow and quality objectives and may include:</p> <ul style="list-style-type: none"> • Wetlands for stormwater capture and treatment including GPTs, bioretention, constructed wetland, storage pond and ancillary infrastructure such as access tracks, pipes, pits, pumps and landscaping; • Storage ponds comprising peak flow detention, including online detention located on creek lines as well as ancillary infrastructure as described above; and • Trunk drainage comprising naturalised drainage channels including rehabilitated creeks and waterways, riparian streets and can include ancillary infrastructure/embellishment such as pedestrian pathways/cycleways, seating, lighting and signage.

Term	Definition
NSW Circular Economy Policy Statement	A Statement by the NSW Government that will help guide decision making to support the transition to a circular economy.
Obstacle Limitation Surface (OLS)	This defines the height limits of buildings or objects within the airspace that approaches the runway.
Open space	Land identified for acquisition for public uses such as, sports fields, parks, gardens, areas for passive recreation, play and unstructured activity.
Open Space Network	Land that has been identified for open space including sports fields, parks, gardens, areas for passive recreation, play and unstructured activity, as well as stormwater drainage functions and water quality, creeks and immediate areas adjoining creeks, City Centre and Regional Parkland as well as bushland and environmental conservation. All land identified within the Open Space Network will be acquired.
Outer Sydney Orbital	The Outer Sydney Orbital is a proposed corridor for a motorway and freight rail line in Western Sydney, connecting Box Hill in the north to the Hume Motorway near Menangle in the south.
Private open space	An area external to a building (including an area of land, terrace, balcony or deck) that is used for private outdoor purposes ancillary to the use of the building.
Public domain	Any publicly or privately-owned space that can be accessed and used by the public and/or is publicly visible.
Public utility infrastructure	Infrastructure for any of the following: <ul style="list-style-type: none"> the supply of water the supply of electricity the supply of hydraulic power the supply of gas the disposal and management of sewage or drainage services.
Resilience	The ability of a system, community or society that is exposed to hazards to resist, absorb, accommodate and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.
Riparian corridor	The channel which comprises the bed and banks of a watercourse (to the highest bank) and the vegetated riparian zone adjoining the channel.
Specialised centre – mixed use	Mixed use environment focused on strategic innovation or specialised employment within an accessible area. Non-employment densities support population and critical mass but does not undermine capacity for strategic innovation or specialised employment.

Term	Definition
State Environmental Planning Policy (SEPP)	Environmental planning instruments that address planning issues of State significance.
<i>State Environmental Planning Policy (Precincts – Western Parkland City) 2021</i>	The Aerotropolis SEPP that applies to land in the Western Sydney Aerotropolis (Chapter 4). It aims to facilitate development in the Aerotropolis in accordance with the objectives and principles of the Western Sydney Aerotropolis Plan, and to ensure development is compatible with the long-term growth, development and operation of the Western Sydney Airport.
<i>State Environmental Planning Policy (Sydney Region Growth Centres) 2006</i>	The former environmental planning instrument that sets controls for both the North West and South West growth areas of Sydney.
<i>State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 (Aerotropolis SEPP)</i>	The former Aerotropolis SEPP prior to the SEPP Consolidation on 1 March 2022.
STEM (science, technology, engineering and mathematics)	An approach to learning and development that integrates the areas of science, technology, engineering and mathematics.
Strategic Centre	Characterised by a high proportion of knowledge- intensive jobs, existing or proposed major transport gateways and increased economic activity.
Streetscape	The character of a street and its close surrounds defined by the spatial arrangement and visual appearance of built and landscape features when viewed from the street.
Sydney Metro – Western Sydney Airport	A new 23km railway line that will link St Marys through to the new Western Sydney Airport and Aerotropolis and will have six new Metro stations: <ul style="list-style-type: none"> • St Marys • Orchard Hills • Luddenham • Airport site (two stations) • Western Sydney Aerotropolis
Sydney Science Park	The area of land within the Northern Gateway Precinct as identified by the Aerotropolis SEPP.
Urban heat island effect	An agglomeration of hard and dark-coloured surfaces such as roads and roofs which cause excessive localised warming.

Term	Definition
Waterway	The whole or any part of a watercourse, wetland, waterbody (artificial) or waterbody (natural).
Western Parkland City	Western Parkland City is defined by the Greater Sydney Region Plan and includes the existing city centres of Liverpool, Campbelltown and Penrith, and the new Western Sydney Airport and surrounding Aerotropolis.
Western Sydney Aerotropolis	Encompasses 11,200 hectares of land roughly bounded by the Warragamba pipeline to the north, Kemps Creek to the east, Bringelly Road to the south and the future Outer Sydney Orbital Road to the west.
Western Sydney Aerotropolis Plan	A strategic plan that provides the vision, principles and planning framework for the Western Sydney Aerotropolis.
Western Sydney Airport (WSA) Corporation Limited	WSA Co Limited (WSA) was established by the Australian Government to develop and operate Western Sydney International (Nancy-Bird Walton) Airport (the Western Sydney Airport) at Badgery's Creek. WSA was established in August 2017.
Western Sydney Councils Street Guidelines	Guidelines to deliver liveable and effective pedestrian spaces and thoroughfares in the Western Parkland City through appropriately designed street-types and street components.
Wianamatta-South Creek Catchment	Includes most of the Cumberland Plain of Western Sydney and is a defining central element of the Western Parkland City and the Aerotropolis.
Wianamatta-South Creek corridor	The Creek and its tributaries that form the central element of the Western Parkland City, recognising the role of water in supporting healthy, liveable and sustainable communities.