



WESTERN SYDNEY
PLANNING
PARTNERSHIP 

Western Sydney Aerotropolis Plan

Draft – for public comment

December 2019



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An aerial photograph of a river winding through a landscape. The river is a vibrant blue, contrasting with the surrounding green and brown fields. A bridge with multiple arches spans the river in the middle ground. To the right, a small cluster of houses with red roofs is visible. The foreground shows a dense line of trees along the riverbank. The overall scene is captured from a high angle, looking down at the river and the surrounding land.

Acknowledgement

Planning for the Western Sydney Aerotropolis acknowledges more than 60,000 years of continuous Aboriginal connection to the land that makes up NSW.

This Plan recognises that, as part of the world's oldest living culture, traditional Aboriginal and Torres Strait Islander owners and custodians of the Australian continent and adjacent islands share a unique bond to Country — a bond forged through thousands of years of travelling across lands and waterways for ceremony, religion, trading and seasonal migration.

Aboriginal peoples maintain a strong belief that if we care for Country, it will care for us. The Aerotropolis area is custodially cared for by three Aboriginal groups: the Darug, Dharawal and Gundungurra. Others, such as the Eora, Darkinjung, Wiradjuri and Yuin maintain trade or other obligatory care relationships with the area. The Deerubbin, Gandangara and Tharawal Local Aboriginal Land Councils also have local land holdings and responsibilities towards Aboriginal peoples living in the area.

This significant connection to Country plays an important part in shaping this Plan.

For Traditional Owners, Country takes in everything within the physical, cultural and spiritual landscape - landforms, waters, air, trees, rocks, plants, animals, foods, medicines, minerals, stories and special places. It includes cultural practice, kinship, knowledge, songs, stories and art, as well as spiritual beings, and people: past, present and future.

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Executive summary

The Western Sydney Aerotropolis Plan sets a vision for the Western Sydney Aerotropolis as Australia's next global gateway, built around the world-class Western Sydney International (Nancy-Bird Walton) Airport.

The Aerotropolis will be a centre of employment for:



Defence and aerospace



Advanced manufacturing



Technology



Agribusiness



Education and research



Health



Tourism

An aerotropolis is a metropolitan area with infrastructure, land uses and the economy centred on an airport. The Western Sydney Aerotropolis is a once-in-a-lifetime opportunity to drive transformational change in the emerging Western Parkland City, a vision for Western Sydney that will improve opportunity, amenity and sustainability for workers and residents.

In setting its vision through the *Greater Sydney Region Plan*, the NSW Government has committed to a 30-minute city, where people live within 30 minutes by public transport of their nearest strategic or metropolitan centre. The Aerotropolis is essential to this vision.

It will be an accessible, innovative and connected city. Its evolution will catalyse a jobs dense environment nurturing industry of the future. It will help to boost productivity and contribute to significant jobs growth in Western Sydney. As an employment centre for the Western Parkland City it will include jobs in defence and aerospace, advanced manufacturing, technology, agribusiness, health, education, research and tourism.

The Aerotropolis will be framed around a landscape-led approach, where Wianamatta-South Creek, large regional parks and an expansive network of green and blue corridors shape the city's structure and building. Noise sensitive uses in appropriate locations will protect the community from the 24/7 airport operations. People will live and work in vibrant urban centres with a mix of uses, walking and cycling paths, and social and cultural infrastructure.

Planning on this scale will build resilience and adaptability to the effects of a changing climate and draw on circular economy principles to better use resources and reduce waste on an Aerotropolis-wide scale. Integrated transport and digital networks will

prioritise more sustainable connections and make it easier for people to navigate their way around the Aerotropolis. Essential freight connections to and from the Airport and other areas like the Agribusiness Precinct will be focused on main roads away from local areas.

Given the many elements, stakeholders and ambitions for creating this 21st century city, the Plan sets out 10 objectives to shape decision-making across the four themes of the *Greater Sydney Region Plan*: productivity, sustainability, infrastructure and collaboration, and liveability. These objectives are supported by landscape, urban design and planning principles.

Importantly, all work will be guided by a single, overarching objective to Recognise Country: Acknowledge Traditional Owners and provide opportunities to Connect with Country, Design for Country and Care for Country when planning for the Aerotropolis.

This draft Plan builds on the unprecedented collaboration across all levels of government that commenced with the Western Sydney City Deal. It was developed by the Western Sydney Planning Partnership, a key commitment of the Western Sydney City Deal and strategic, innovative approach that includes Western Sydney councils and State agencies. It builds on the *Stage 1 Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan* (LUIIP).

The Plan sets out a sequenced approach to precinct planning that will optimise planned investment in major infrastructure and create the impetus for the early activation of the Aerotropolis. It establishes 10 precincts, of which six will be planned for early. These are described in more detail on pages 6-7.

This timing represents a shift from that set out in the Stage 1 LUIIP, in response to

feedback to the public exhibition, create early employment opportunities and better coordinate infrastructure planning.

Detailed precinct planning will aim to stage and sequence development within and between precincts to optimise infrastructure provision. This will be informed by the Place-based Infrastructure Compact for the Aerotropolis.

Infrastructure funding will be refined through work on an Aerotropolis Special Infrastructure Contribution, local infrastructure planning and funding mechanisms by Liverpool and Penrith City councils, and possible value capture mechanisms.

The Plan will be implemented through a statutory planning framework that includes a new Aerotropolis *State*

Environmental Planning Policy (SEPP) and *Development Control Plan* (DCP). This framework will guide more detailed precinct planning and master planning, promoting exemplary design outcomes and implementing detailed development controls to achieve the vision for the Aerotropolis.

More detailed precinct plans for the initial precincts will be on exhibition by mid-2020. Infrastructure planning, and work on major transport corridors, airport operations and environmental considerations are continuing. Traditional Owners are helping to shape the Aerotropolis and its rich cultural values, as the community, businesses, landowners and developers also participate in the development of Australia's newest global gateway.

Next steps:



Community consultation



Finalisation of *Western Sydney Aerotropolis Plan*, Aerotropolis SEPP and Phase 1 DCP



Precinct Planning – initial precincts

Figure 1: Artist's Impression of the Aerotropolis Core centre
Source: Cox



Introduction

The *Western Sydney Aerotropolis Plan* sets the planning framework for the Western Sydney Aerotropolis, Australia's next global gateway focused on the Western Sydney International (Nancy-Bird Walton) Airport (the Airport).

The Aerotropolis will be a game-changer for Western Sydney, NSW and Australia. As it evolves it will become home to global industries that will provide jobs of the future within a cool, green and connected Western Parkland City.

The success of the Aerotropolis requires strategic, integrated planning across different levels of government and collaboration with business and the community. This Plan will help to drive this process.

The Plan was developed by the Western Sydney Planning Partnership, a local government-led initiative that brings Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly councils together with key State agencies. It builds on the *Stage 1 Land Use and Infrastructure Implementation Plan* (LUIIP) for the Aerotropolis, released in 2018.

The Planning Partnership was established as part of the Western Sydney City Deal, a shared commitment of the Australian, NSW and local councils in the Western Parkland City to create a fully-realised 21st century city.

1.1 The Aerotropolis

The 11,200 hectare Western Sydney Aerotropolis surrounds the site of the Airport in Badgerys Creek (without including the Airport site itself). It sits within the Penrith and Liverpool local government areas (LGAs).

The Aerotropolis contains 10 precincts (see page 7), six of which will be the focus of initial precinct planning. Following feedback on the Stage 1 LUIIP, the Agribusiness, Badgerys Creek and Mamre Road precincts have been brought forward as initial precincts to help create early employment opportunities and better coordinate infrastructure planning.

Initial precincts

- Aerotropolis Core
- Agribusiness
- Badgerys Creek
- Mamre Road
- Northern Gateway
- Wianamatta-South Creek

Remaining precincts

- Dwyer Road
- Kemps Creek
- North Luddenham
- Rossmore

Next steps

- Rezone initial precincts by mid-2020*
- Exhibit precinct plans by mid-2020 and finalised by late 2020
- Commence master planning of large sites, subject to statutory requirements.
- Retain existing zoning under *Liverpool LEP 2008* or *Penrith LEP 2010* until precincts are rezoned under Aerotropolis State Environmental Planning Policy (see 3.2.1)
- Sequence precinct planning and rezoning to match infrastructure provision and the rate and nature of development in initial precincts and adjoining areas.

* Except for Mamre Road Precinct (zoned under WSEA SEPP)

The Western Sydney City Deal spans

3

Levels of government:



8 local councils



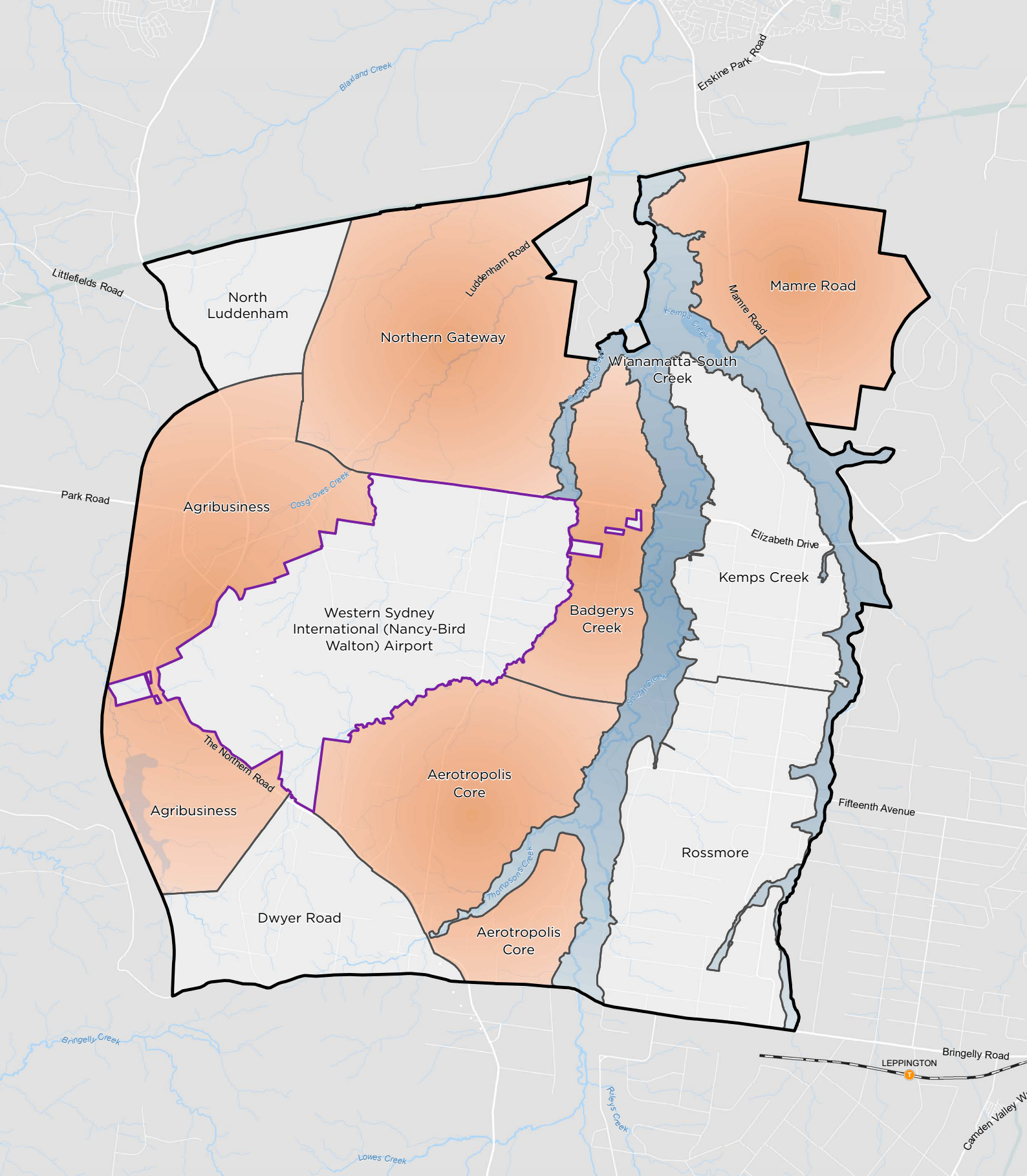
NSW Government



Australian Government





What is an Aerotropolis?

An Aerotropolis is a metropolitan area whose infrastructure, land-use and economy are centred on the airport and includes the outlying corridors, and aviation orientated business and residential development that benefit from each other and their accessibility to the Airport.



Initial Precincts

Western Sydney Aerotropolis

-  Western Sydney Aerotropolis
-  Western Sydney International (Nancy-Bird Walton) Airport
-  Initial Precincts
-  Wianamatta-South Creek

1.2 Purpose of the Plan

As the planning framework for the Aerotropolis, this Plan acknowledges the area's Traditional Owners. It recognises the rich cultural history of the land on which the Aerotropolis is located and the continuous and deep connection to Country for Aboriginal people.

This Plan embraces the transformational potential of the Aerotropolis and airport. It aspires to share the benefits of population and economic growth and create employment, develop skills and boost productivity, providing jobs closer to home and towards achieving a 30-minute city.

It balances this with an ambitious 'landscape-led' planning approach, where the structure and places of the Aerotropolis are defined by the Blue-Green Grid – a network of blue and green spaces and assets such as waterways, open spaces and the tree canopy.

The Plan begins by establishing a vision, objectives and principles to give effect to these objectives. It identifies the intended land use planning outcomes for each of the 10 precincts and a sequenced approach to precinct planning that optimises investment in major infrastructure and creates the impetus to activate the Aerotropolis early.

This Plan defines how the broader region's environment, waterways, strategic transport network, infrastructure and economy will combine to transform the Aerotropolis into a contemporary metropolitan city. Complementing Liverpool, Penrith and Campbelltown, the Aerotropolis will be part of the metropolitan city cluster at the heart of the Western Parkland City.

This Plan introduces statutory mechanisms to implement the vision and objectives. Alongside future precinct plans and site-specific development control plans (DCPs), it gives effect to the *Greater Sydney Region Plan: A Metropolis of Three Cities* and the *Western City District Plan*.

The Plan represents a collaborative approach led by the Planning Partnership and continued cooperation with the Australian Government, Western Sydney Airport, the Western City and Aerotropolis Authority (WCAA), Infrastructure NSW, Sydney Metro and other State agencies.

The Planning Partnership considered more than 600 submissions to the Stage 1 LUIIP when developing this Plan. It will continue to engage broadly during precinct planning, commencing with the initial precincts.

Planning for Aerotropolis also opens opportunities for new design approaches to landscape management and urban design. This Plan includes 47 landscape, urban design and planning principles that give effect to the objectives. These are detailed in the Appendix.

This plan gives effect to:

4

Themes

10

Objectives

47

Principles

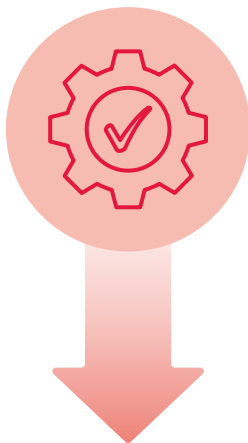
1.2.1 Aerotropolis-shaping objectives and principles

A single, overarching objective underpins this Plan and will be integrated into all planning:

Recognise Country

Acknowledge Traditional Owners and provide opportunities to Connect with Country, Design for Country and Care for Country when planning for the Aerotropolis.

Productivity



Objective 1

An accessible and well connected Aerotropolis

Objective 2

High-value jobs growth is enabled, and existing employment enhanced

Objective 3

Safeguarded airport operations

Sustainability



Objective 4

A landscape-led approach to urban design and planning

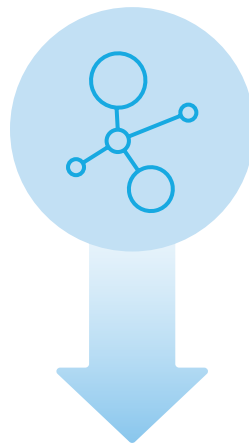
Objective 5

A sustainable, low carbon Aerotropolis that embeds the circular economy

Objective 6

A resilient and adaptable Aerotropolis

Infrastructure and Collaboration



Objective 7

Infrastructure that connects and services the Western Parkland City as it grows

Objective 8

A collaborative approach to planning and delivery

Liveability



Objective 9

Diverse, affordable and well located housing

Objective 10

Social and cultural infrastructure that strengthens communities

1.3 Strategic context

The Region Plan sets a 40-year vision and 20-year plan for Greater Sydney. It seeks to meet the needs of a growing and changing population by transforming Greater Sydney into a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. The Aerotropolis is at the heart of the Western Parkland City.

1.3.1 The Aerotropolis within the Western Parkland City

The Western Parkland City will be home to 1.1 million people by 2036 and will experience a significant increase in jobs. Planning for the Aerotropolis is integral to ambitions for the Western Parkland City in areas such as:

- significant investment that will help to bring a greater diversity of jobs closer to where people live across the entire Western Parkland City including Penrith, Liverpool and Campbelltown–Macarthur.
- early planning for the Wianamatta–South Creek green spine
- jobs and housing supported by the proposed Sydney Metro Greater West (Stage 1) rail spine

The Aerotropolis will connect to Greater Parramatta and the Harbour CBD to realise the vision for Greater Sydney as a metropolis of three cities (see Figure 3). Beyond the metropolitan area, connections to NSW regional and rural areas, Australia and the world will create opportunities in advanced manufacturing, agribusiness, aerospace and defence, as well as freight, tourism and more.

Figure 2: Strategic planning context



Figure 3: Sydney as Three Cities
 Source: Greater Sydney Commission



1.3.2 The Aerotropolis and Wianamatta-South Creek catchment

Wianamatta-South Creek is the longest freshwater stream in Greater Sydney and a defining element of the Western Parkland City and the Aerotropolis. Its catchment includes most of Western Sydney's Cumberland Plain.

As the Aerotropolis transforms, the catchment will be renewed and improved using a risk-based approach to manage the cumulative effects of development on the health of catchments, as defined in Action 69 of the *Western City District Plan*.

This approach will identify waterway targets to mitigate impacts from stormwater and wastewater discharge to the creeks in the catchment.



Water resources have important cultural, spiritual and practical values for First Peoples.

Figure 4: Wianamatta-South Creek
Source: Greater Sydney Commission



Waterway Health in the Wianamatta-South Creek Catchment

There are many waterway dependant species that are highly valued by the community living in the catchment. Not the least of these are important native fish which are valued by recreational anglers. Iconic species like the Australian Bass can only remain in the creeks and streams if the health of the ecosystem continues to support them. Both the flow and the cleanliness of the water in the creek must be considered.

What does Wianamatta mean?

Wianamatta-South Creek holds special significance to the Traditional Owners, who know the waterway as Wianamatta, or 'the Mother Place'. The name, Wianamatta, implies a matricentric landscape as in Dharug language wiana or wiyanga relates to mother and matta refers to a place of water. Wianamatta is understood as being part of an extraordinary wider cultural landscape extending from beyond the Blue Mountains through Emu Plains and east to the coast.

Wianamatta begins its journey near Narellan flowing north until its confluence with the Hawkesbury-Nepean River system near Windsor, creating a unique hydro-networked cultural landscape.

This cultural landscape has been shaped by a filigree of water systems that form and define the Cumberland Plain. Water resources have important cultural, spiritual and practical values for Aboriginal peoples. Waterways are used for cultural practices, including knowledge transfers as part of a healthy, flowing connected system.



Wianamatta-South Creek Catchment

Western Sydney Aerotropolis

- | | |
|------------------------------------|-------------------------------|
| Western Sydney Aerotropolis | Railway |
| Wianamatta-South Creek Catchment | Waterways |
| National Parks and Nature Reserves | South Creek System (Strahler) |
| Environmental Conservation | |

0 1 2 4 6
Kilometres



1.3.3 The Aerotropolis and adjoining areas

Planning for the Aerotropolis will complement that of other focus areas in Western Sydney (see page 15).

Western Sydney Employment Area (WSEA)

- Thousands of new jobs and synergies with the Aerotropolis in supporting economic and employment growth.
- Mamre Road Precinct in the north of Aerotropolis will be planned for under WSEA planning controls.

Greater Penrith to Eastern Creek Investigation Area

- Potential new growth area being planned for across government. Future public consultation will inform this work.

South West Growth Area

- New housing and jobs, with Leppington and Oran Park key destinations and access via the proposed South West Rail Link extension between Leppington and the Aerotropolis.

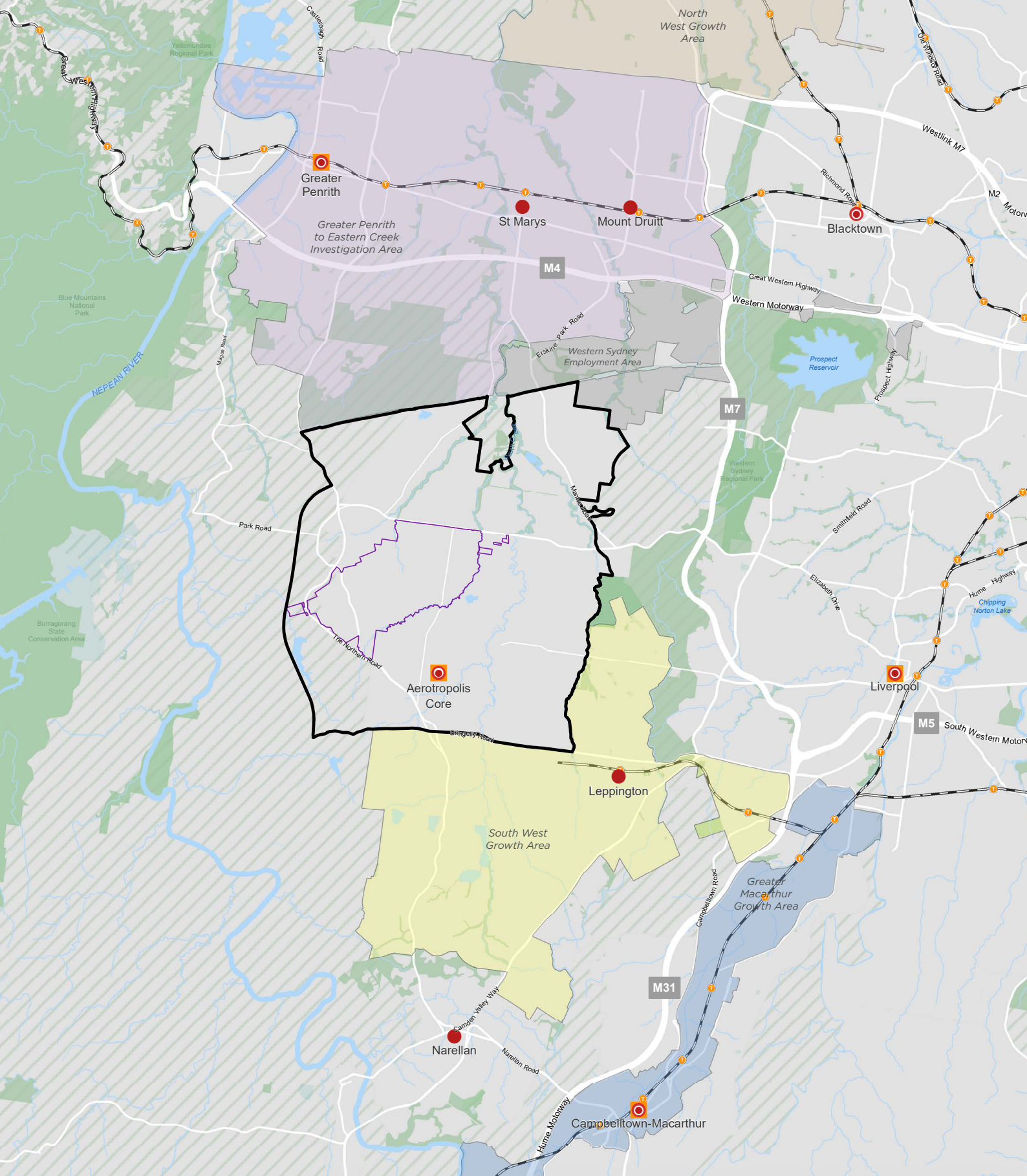
- Wianamatta–South Creek will allow recreational connections to the Aerotropolis.
- The proposed Fifteenth Avenue Smart Transit (FAST) Corridor will run east-west through Austral, and connect to the Airport, Aerotropolis and Liverpool.

Metropolitan Rural Area

- Outside the established and planned urban area to the west of the Aerotropolis.
- Includes public land protected for conservation, peri-urban land for rural uses and rural towns and villages.
- Maintained or enhanced through place-based planning.
- Economic viability of agricultural industries supported and enhanced as the Aerotropolis evolves, including through the Agribusiness Precinct.

Figure 5: Oran Park is in the South West Growth Area
Source: Department of Planning, Industry and Environment



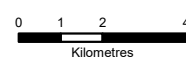


Adjoining Areas

Western Sydney Aerotropolis

- | | |
|----------------------------------------------------------|-----------------------------------------------------|
| Western Sydney Aerotropolis | Greater Penrith to Eastern Creek Investigation Area |
| Western Sydney International (Nancy-Bird Walton) Airport | South West Growth Area |
| National Parks and Nature Reserves | Greater Macarthur Growth Area |
| Environmental Conservation | North West Growth Area |
| Western Sydney Employment Area | Metropolitan Rural Area |

- | |
|-------------------------------|
| Metropolitan Cluster |
| Health and Education Precinct |
| Strategic Centre |



1.3.4 The Aerotropolis and local planning

The Aerotropolis is within the local government areas (LGAs) of Liverpool and Penrith. As with all Greater Sydney councils, Penrith and Liverpool councils have developed draft Local Strategic Planning Statements (LSPS) for their LGAs.

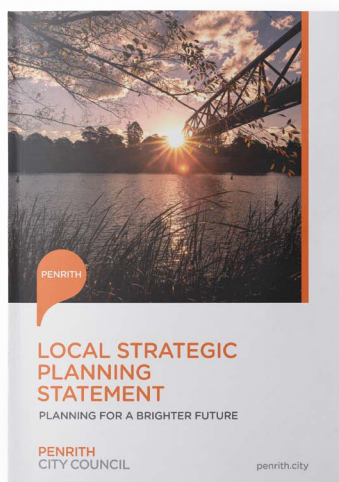
The draft documents require the councils to work with the NSW and Australian governments to implement this Plan and prepare precinct plans through the Western Sydney Planning Partnership. Planning for the Aerotropolis will align with these LSPSs.



Liverpool

Relevant priorities

- **Planning Priority 2**
A rapid smart transit link between Liverpool and Western Sydney International Airport – the FAST Corridor will connect Liverpool to the Aerotropolis and Airport.
- **Planning Priority 13**
A 24-hour Western Sydney International Airport growing to reach its potential – through the Planning Partnership, Council will ensure the Airport's curfew-free status is protected.
- **Planning Priority 16**
Rural lands are protected and enhanced – an updated Rural Lands Study and protected agricultural land will support the rural economy, ecosystem services and natural landscapes.



Penrith

Relevant priorities

- **Planning Priority 9**
Support the North South Rail Link and emerging structure plan – Council will work across government to maximise the benefits of the North South Rail Link (Sydney Metro Greater West).
- **Planning Priority 11**
Support the planning of the Western Sydney Aerotropolis – Council will work to minimise impacts and maximise benefits.
- **Planning Priority 12**
Enhance and grow Penrith's economic triangle – the economic triangle builds on the Western Economic Corridor between the Aerotropolis, Penrith and St Marys.



Figure 6: Artist's impression of interface between Aerotropolis Core, Wianamatta-South Creek and Fifteenth Avenue
Source: Cox



A vision for the Aerotropolis



The Aerotropolis is Australia's newest global gateway, built around the world-class Western Sydney International (Nancy-Bird Walton) Airport. Its evolution has driven transformational change in the Western Parkland City. Development is framed around Wianamatta-South Creek and an expansive network of parklands and green and blue corridors to realise the cool and connected Western Parkland City. Above all, it respects and connects Country. It creates opportunity, amenity and sustainability for workers and residents in Western Sydney.

The Aerotropolis accommodates high value jobs closer to where people live. It is an accessible, innovative 24-hour metropolitan centre, connected globally, nationally, locally and digitally.

It nurtures the industry of the future. It contributes to greater productivity and a significant increase in jobs for Western Sydney in areas such as defence and aerospace, advanced manufacturing, technology, agribusiness, health, education, research and tourism.

A diversity of housing in parts of the Aerotropolis Core, Northern Gateway and Rossmore precincts provide a vibrant and living city, protected from the 24/7 operations of the Airport. Centres are easy to walk around, with quality public areas and a mix of social and cultural infrastructure.

The Aerotropolis is low carbon, featuring next-generation energy, waste and water infrastructure. Circular economy principles minimise waste and pollution, retain water in the environment, reuse energy and regenerate natural systems to increase the tree canopy and urban cooling. Sustainable food production in the Agribusiness Precinct minimises food miles and reduces food wastage.

Sustainable urban connections include efficient and accessible public transport links, walking and cycling facilities, smart technologies and an efficient road network. Efficient freight movements are mainly by rail. People and business can access key centres in the Western Parkland City and Greater Sydney.





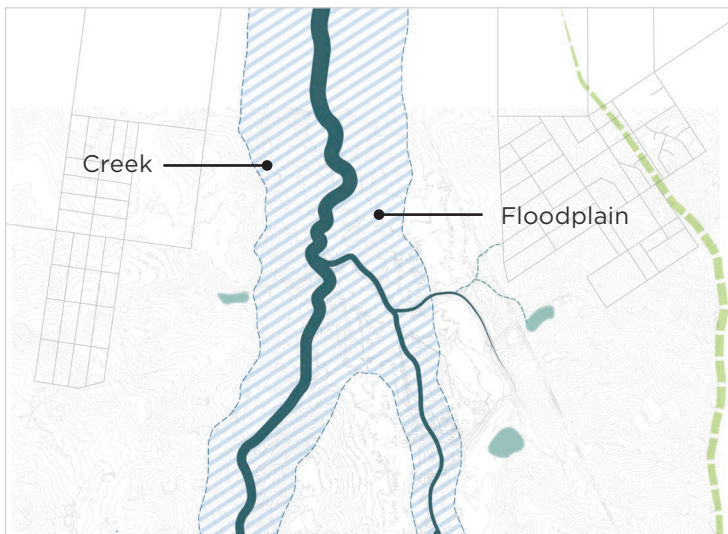
Figure 7: Artist's impression of an employment centre within the Aerotropolis
Source: Urbis

Figure 8: Artist's impression of the town centre
Source: Urbis

2.1 Achieving the vision – a landscape-led approach

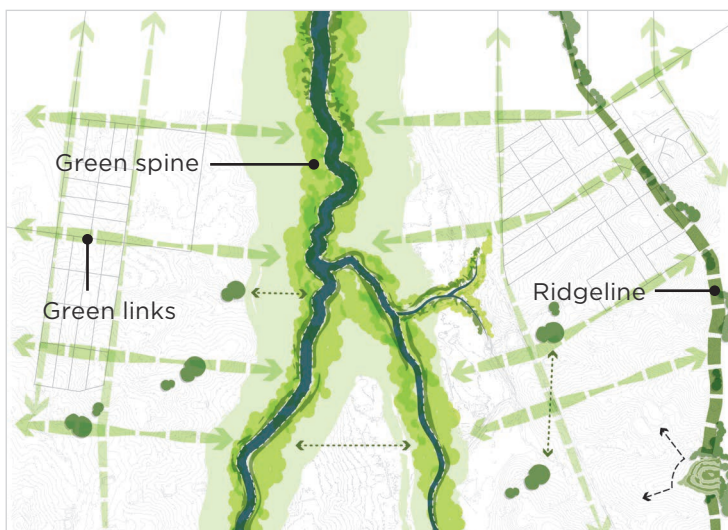
To achieve the vision for the Aerotropolis, an innovative landscape-led approach is proposed that interweaves urban planning, landscape and urban design. This approach brings new thinking to land use and transport patterns and focuses on the structural elements required to create a cool and green Western Parkland City. It recognises blue and green infrastructure – major waterways, parks or green spaces – as the kind of elements that should shape the future of a city, just as major roads, rail lines, universities or hospitals have done traditionally.

The landscape-led approach to planning and urban design is illustrated in the series of maps below. The process starts with recognising Country to identify and build the city's structure and places from the landform and water system.



Retain water in the landscape

- retain water in the landscape
- manage health of the Wianamatta-South Creek Catchment
- create a functional Blue-Green city structure that contributes to flood management and human safety



Preserve, extend and restore the green

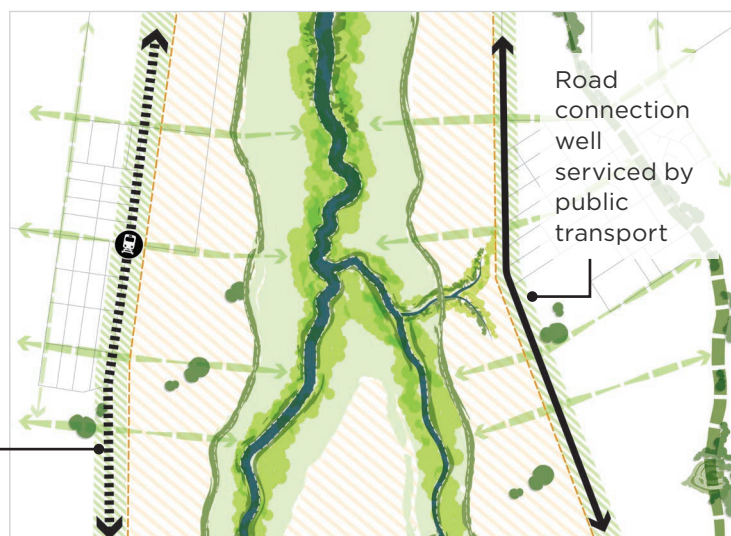
- preserve, extend and restore the green around the Wianamatta-South Creek corridor and tributaries
- conserve biodiversity land, remnant vegetation, water features, habitat links, cultural values and view lines



Locate transit corridors within walking distance to landscape amenity

- locate transport within a walk of attractive landscapes
- use Green Grid as basis of pedestrian connectivity and cycling network
- enhance edge of creek corridor and provide accessible local streets to encourage active transport

Mass transit corridor supported with green infrastructure

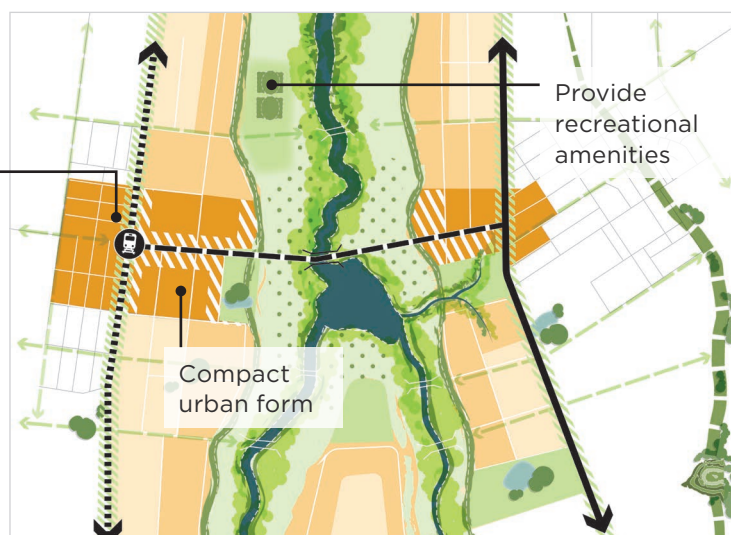


Orientate urban development towards landscape amenity, connected to transit corridors

- create places around amenity of creek corridor and open space close to public and active transport connections

Adopt urban typologies

- adopt urban typologies that ensure urban development retains water in the landscape with public space and private landscape spaces including streets used to provide a high level of liveability.



2.1.1 Starting with Country

Traditional understandings of Country will shape the Aerotropolis, influencing planning, urban design and landscape management. Aboriginal peoples understand that they originated from Country; it is at the centre of their ways of knowing and being. An appreciation of Country ensures Country is cared for throughout the process of design and development.

Connecting with Country is an approach being championed by the NSW Government to give effect to the objectives of the *Environmental Planning & Assessment Act 1979 (EP&A Act)* which states that Aboriginal culture and heritage are to be sustainably managed in the built environment. Using comprehensive and respectful approaches, planning for the Aerotropolis can build capacity and pathways for knowledge sharing between Aboriginal and non-Aboriginal communities.



Wianamatta–South Creek runs like a spine through the area, providing fresh water and fertile soils, with abundant ironbark and Sydney black wattle. This landscape has changed, with human modification and ecological processes, yet it remains significant as part of a system of relationships that depend on and interconnect with each other.

Country cannot be reduced to individual places disconnected from this system. Even when Country changes, the narratives of Country remain, told through storytelling, singing and language. The stories adapt to new events, technologies, information and the many people who today share Country.

Guided by Cultural Design Principals and leaders in the Aboriginal community, planning for the Aerotropolis will be informed and shaped by these narratives. Future natural, economic or cultural landscapes will preserve and embody Aboriginal values and identities.

The Country that the Aerotropolis sits within is a landscape of undulating shale plains and low hills, with open woodland and areas of denser vegetation.

Figure 9: Natural landscape
Source: Greater Sydney Commission





The area is to be driven by placemaking to attract the best and brightest to invest and work in the Aerotropolis.

2.2 Creating a global gateway

The Aerotropolis will be a regionally and nationally significant employment area for the entire Western Parkland City. It will contribute to national productivity. The landscape-led approach, coupled with collaborative place-making, will create a global gateway that attracts the best and brightest to invest and work in the Aerotropolis.

The Aerotropolis Core will be a new urban centre connected to fast and reliable transport as well as digital infrastructure. It will be a place for collaborating within and beyond the Aerotropolis. A mix of uses will support and enliven the city; employment, civic, retail, hotel, recreation, residential, education and cultural.

2.3 Designing a cool, green new city

The Aerotropolis will have compact urban form – a place where centres or work communities are connected by walking, cycling, interaction and collaboration. A compact urban form minimises the urban footprint and leaves more land for open spaces, waterways and recreation areas. It allows people to access a diversity of uses within walking distance of centres, open space or transport.

Urban typologies will be developed, contributing to the delivery of a cool, green, safe and sustainable Aerotropolis. They will ensure water is retained in the landscape, increase the tree canopy and reduce building reflectivity. These typologies are broader in scale than individual buildings and could include several different buildings, streets and open spaces.

Retaining water in the catchment will improve creek flow, reduce flooding risk, and irrigate open spaces and vegetation. It helps to provide a cooler, more attractive green environment for residents, workers and visitors.

Development in the Aerotropolis will incorporate cost-effective, efficient and low-maintenance solutions that ensure urban form and stormwater are considered in an integrated way with other infrastructure. Performance criteria will be developed to ensure that urban development:

- provides sufficient pervious areas to retain water to optimise stormwater management, flood protection and waterway health;
- improves/optimises water cycle management;
- maximises links and access to open space;
- increases tree canopy cover and shade; and
- mitigates urban heat through landscape, water and building reflectivity.

The typologies will be subject to refinement through the precinct planning process in the context of liveability and feasibility considerations and environmental and water management outcomes. Ultimately, a series of final urban typologies will be reflected in precinct plans, master planning and development controls.

The Aerotropolis will contain vibrant urban centres supported by a mix of uses



Employment



Civic



Retail



Hotel



Recreation



Residential



Education



Cultural

2.3.1 Public domain

The public domain is the shared and publicly accessible places in a city, suburb, or neighbourhood: open spaces, parks, bushland, plazas, public buildings, roads, streets and pathways.

The landscape-led approach integrates the many elements of the public domain as a landscape, connectivity and social infrastructure framework with quality public spaces. This creates:

- environmental parkland areas of diverse landscapes and vegetation where ecological and human benefits overlap
- a significant tree canopy that cools the air and, provides shade and urban cooling
- many high quality open spaces that offer different uses for residents, workers, students or visitors, and community and cultural facilities that integrate with the urban environment
- a local street and block structure that complements the topography, prioritises walking, cycling and attractive places and can be adapted over time.

2.4 Transitioning to an Aerotropolis

Land uses and urban forms will evolve as the Aerotropolis changes. Sequencing will ensure development takes place as infrastructure is provided to avoid dispersed development. This will require flexibility given the uncertain nature of future land uses, especially in non-residential areas. While this transition to from rural to non-rural land uses will occur over several decades, the important agricultural lands of today can be retained.

Land uses, buildings and structures may be temporal in nature in the short to medium term and transition to more intensive and higher order technology, advanced manufacturing and creative industry uses in the longer term. New enabling industries such as building materials production to facilitate construction of the Aerotropolis may be permitted subject to interface mitigation treatments and an ability for the site to transition to higher order uses compatible with airport operations over time.

Regardless, compact, walkable precincts will be planned for and developed upfront to meet the sustainability, liveability and connectivity objectives of the Region Plan. Careful planning of precincts that may initially accommodate larger building footprints within a walkable block structure will be required to allow for future land use intensification.

2.5 Retaining a green, biodiverse landscape

The Aerotropolis requires land for its many native plants and animals. This requires biodiversity to be assessed upfront in the planning for such large-scale development to identify urban capable land and areas with biodiversity values within the Aerotropolis. Regenerating natural landscapes will reduce impacts as the Aerotropolis develops and embed a circular economy approach.



A strategic conservation planning process is occurring which will identify and protect biodiversity values and also seek strategic biodiversity certification to confirm areas suitable for urban development.



Figure 10: Lake Burragorang Warragamba Catchment is rich in biodiversity and is located to the west of the Aerotropolis. Source: Department of Planning, Industry and Environment



3.1 Structure Plan

The Structure Plan is a spatial representation of high-level land uses, environmental assets and transport infrastructure within the Aerotropolis. It will be reviewed and updated alongside precinct planning and infrastructure provision.

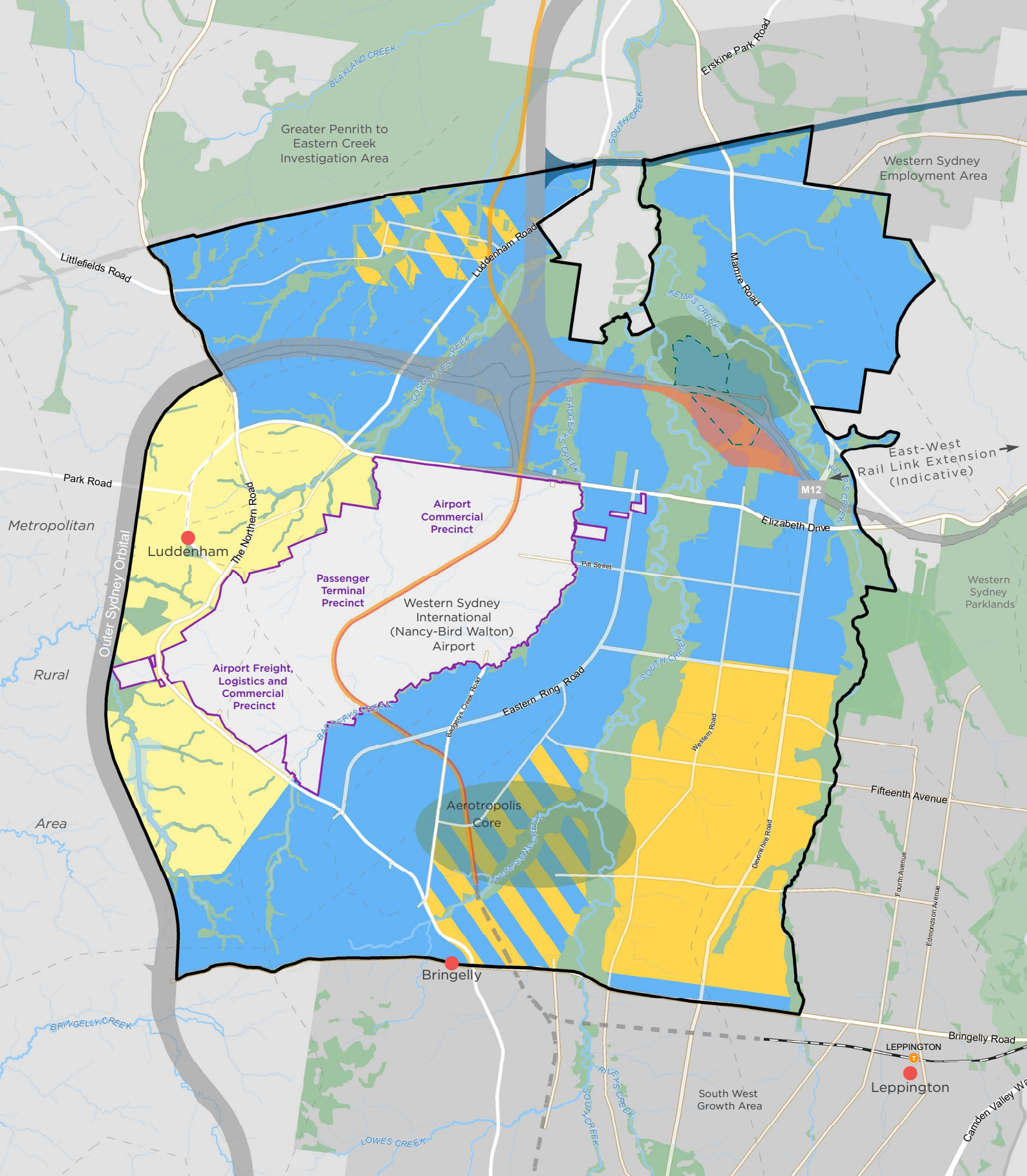
A network of new and existing centres will emerge from the precinct planning process and as Sydney Metro Greater West stations are confirmed together with rail, bus, walking, cycling and freight connections.

3.2 Planning framework

A comprehensive planning framework provides clarity for more detailed planning, implementation and delivery and ensures development meets with the objectives and principles of this Plan, the Region Plan and the District Plan.

Figure 11: Planning framework





Structure Plan

Western Sydney Aerotropolis

- | | | |
|----------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------|
| Western Sydney Aerotropolis | Proposed Sydney Metro Greater West | Centre |
| Western Sydney International (Nancy-Bird Walton) Airport | Potential East-West Rail Link, Stabling and Critical Infrastructure | Agribusiness |
| Topographic Ridgeline | Proposed Future Rail Links (Investigation) | Environment and Recreation |
| Key Network Upgrades | Proposed Transport Corridor | Flexible Employment |
| Regional Parkland (Investigation) | Potential Western Sydney Freight Line Corridor | Urban Land |
| Critical Utility / Infrastructure (Investigation) | | Mixed Flexible Employment & Urban Land |



3.2.1 Aerotropolis State Environmental Planning Policy

A new Aerotropolis SEPP will apply to the 11,200-hectare area surrounding the Airport except for the Mamre Road Precinct, which will be zoned under *State Environmental Planning Policy* (Western Sydney Employment Area) 2009 (WSEA SEPP). The SEPP will also protect airport operations beyond the Aerotropolis.



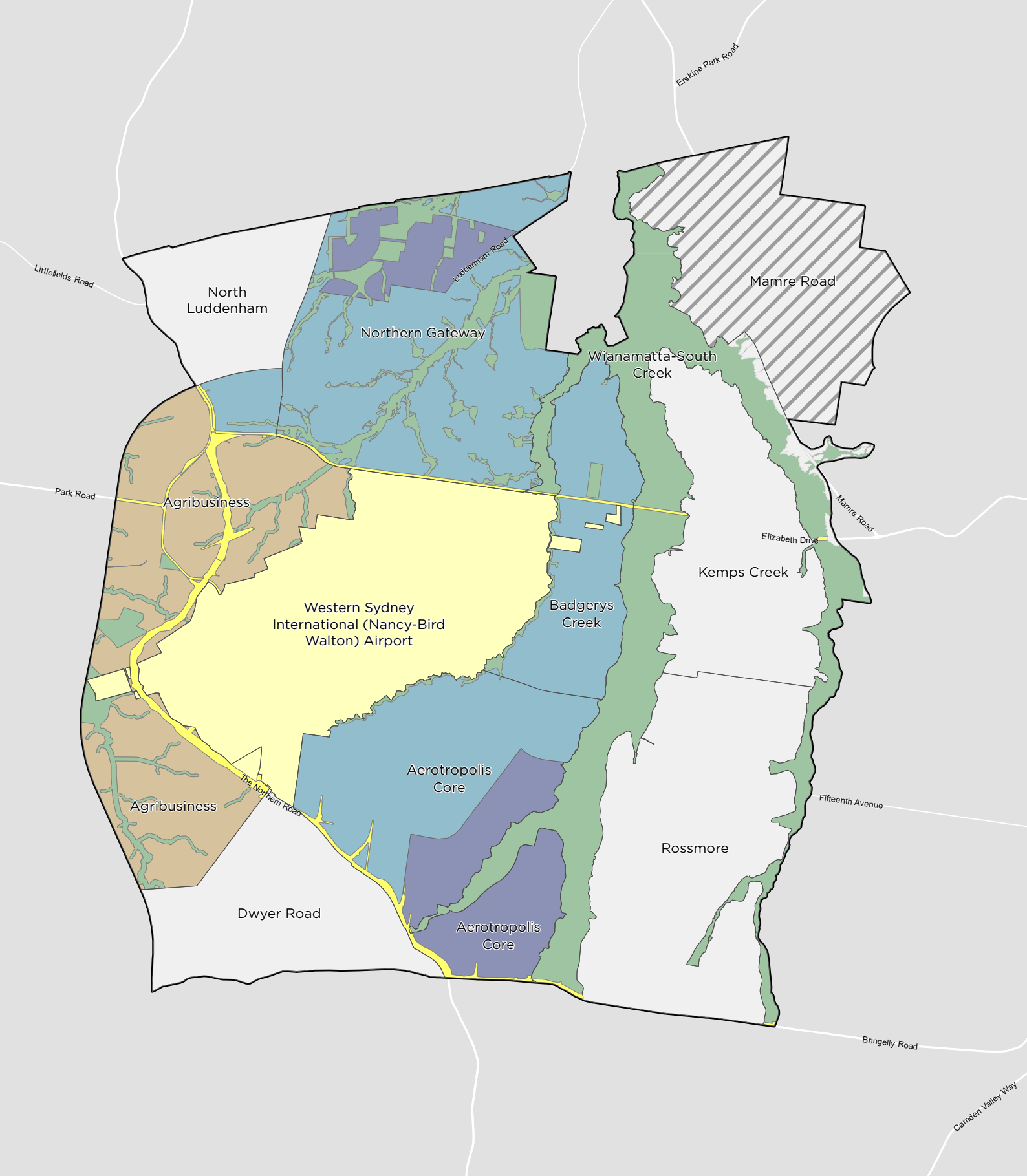
The Aerotropolis SEPP will encourage and support the orderly and economic use and development of land in the Aerotropolis.

It will provide statutory weight to the planning and development of land around the Airport and will implement this Plan by:

- establishing boundaries for applicable land
- defining all precincts and their boundaries
- establishing strategic objectives for all precincts
- applying land use zones to the initial precincts
- implementing various clauses and maps
- protecting transport corridors and utility sites
- providing performance criteria for the master planning process
- identifying the types of development applications that are to be referred to Western Sydney Airport and/or relevant Commonwealth department
- ensuring there is no increase in noise sensitive uses within the Australian Noise Exposure Concept (ANEC)/ Australian Noise Exposure Forecast (ANEF) 20 and above contours.

A combination of new and existing zones will be applied in the SEPP to enable the unique development opportunities that the Aerotropolis provides. These have been defined for the initial precincts, with zoning for the remaining precincts to occur at precinct planning stage:

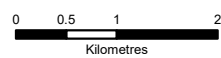
- **Enterprise Zone:**
land where enterprise uses are supported while mitigating impacts of airport operations. Residential development and other noise sensitive uses not permitted.
- **Mixed Use Zone:**
mixed flexible employment, residential and noise sensitive uses on land not affected by the ANEC/ANEF 20 and above contours in high amenity areas and areas well connected to public transport.
- **Environment and Recreation Zone:**
most of the Wianamatta–South Creek Precinct and other areas identified for conservation and biodiversity.
- **SP1 Special Activities Zone:**
the Airport and associated land in Commonwealth ownership to support airport operations and other special uses to support the Aerotropolis.
- **SP2 Infrastructure Zone:**
new and existing road and rail corridors, transport facilities, and land required for utilities. The SEPP will need to be amended to accommodate infrastructure as it is planned and as corridor and site boundaries are further refined.
- **Agribusiness Zone:**
to support high-tech agribusiness uses, including freight, logistics and horticulture in the Agribusiness Precinct.



Land Zone

Western Sydney Aerotropolis

- | | | |
|-----------------------------|-------------------|------------------------------|
| Western Sydney Aerotropolis | Agribusiness | Special Purpose 1 |
| Precinct Boundary | Enterprise | Special Purpose 2 |
| Environment and Recreation | Relevant LEP Zone | Mamre Road (under WSEA SEPP) |
| Mixed Use | | |



Referral of development applications to Western Sydney Airport

The Aerotropolis SEPP will identify the triggers for development applications (DAs) that are to be referred to Western Sydney Airport and/or the appropriate Commonwealth department or agency, depending on their potential impact on the safe operation of the Airport. This will include development or activities that could impact on operational airspace, development that has the potential to attract wildlife within three kilometres of the Airport and development that could result in windshear or turbulence and development or construction activities that include the use of cranes that extend into prescribed airspace.

3.2.2 Aerotropolis Development Control Plan

The Aerotropolis DCP will guide precinct planning and master planning and promote exemplary design:

- Phase 1 will identify precinct planning principles to achieve the vision for the Aerotropolis and set objectives and some performance outcomes for development.
- Phase 2 will identify additional performance outcomes and specific development controls to satisfy required objectives, performance outcomes and acceptable design solutions for all development permitted within the Aerotropolis.

3.2.3 Section 9.1 Direction

This Plan is accompanied by a proposed amendment to *Ministerial Direction 7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan* under section 9.1 of the *EP&A Act*.

This reflects the new title and status of the Plan and requires that all planning proposals seeking to amend land zoned under the Aerotropolis SEPP or the respective LEP be consistent with this Plan.

Figure 12: Artist's impression of a transport hub in the Aerotropolis
Source: Cox





This Plan identifies high-level infrastructure that will shape and support the Aerotropolis including their interdependencies, while precinct planning will identify the infrastructure required for each precinct. Because of the size of the Aerotropolis and the time over which it will develop, infrastructure provision will be staged. Precinct plans will indicate the likely sequencing for infrastructure in each precinct, informed by the Place-based Infrastructure Compact and local infrastructure needs.

4.1 Blue-Green Grid

The Blue-Green Grid is the network of blue and green spaces including waterways, riparian areas, bushland, parks and open spaces, tree canopy (including street trees) and private gardens.



These elements of a Blue-Green Grid are strategically planned, designed and managed to support a good quality of life in an urban environment.

4.1.1 Wianamatta-South Creek as Blue-Green infrastructure

This Plan and the District Plan embrace the Wianamatta-South Creek Catchment's natural blue and green systems as valuable assets. The landscape-led approach will incorporate these into urban activity and form, while improving and preserving environmental, cultural and spiritual values.

4.1.2 Parkland elements

Four parkland elements are included as investigation areas: Wianamatta-South Creek corridor, regional parks, ridgeline parks and multi-functional linear parks. Their potential and/or location will be determined during precinct planning.

Wianamatta-South Creek corridor

The Wianamatta-South Creek corridor is the central element of the urban design and water management of the Western Parkland City. Within the Aerotropolis it connects the potential southern and northern regional parks and provides the foundation of a city physically balanced with nature. The southern regional park will protect and improve the ecology of the northern regional park through the restoration of the creek and improved waterway health.

Regional parks

Regional parks will provide the immediate and recognisable identity of the Western Parkland City and Aerotropolis, connecting with the Western Sydney Parklands. The regional park investigation areas in the north and south of the Aerotropolis sit along the Wianamatta-South Creek corridor.

- The southern regional park will connect the environmental setting of the Wianamatta-South Creek corridor to urban areas in the Aerotropolis Core.
- The northern regional park located north of the proposed M12 Motorway at the confluence of South, Badgerys and Kemps creeks is an area of high environmental and Aboriginal cultural value. It could create an iconic parkland gateway visible from the air and on the ground.

Ridgeline parks

The ridges help to frame the Western Parkland City setting and can reduce the visual dominance of urban areas across a vast expanse of land with subtle elevational shifts. Existing trees will be retained, and tree planting will focus on riparian areas and ridgelines. Local parks and sporting grounds will be distributed along ridgelines and incorporate existing vegetation. Ridgetop parks will catch the breeze on hot days while also offering views to the Blue Mountains and facilities for stormwater management. Siting taller buildings in the valleys around the large



Figure 13: An example of a ridgeline park looking towards the Blue Mountains from Western Sydney Parklands
Source: Tyrrellstudio Pty Ltd

park system and situating lower buildings towards the ridgelines will integrate landscape and built form to retain views and the green setting.

Multi-functional linear parks

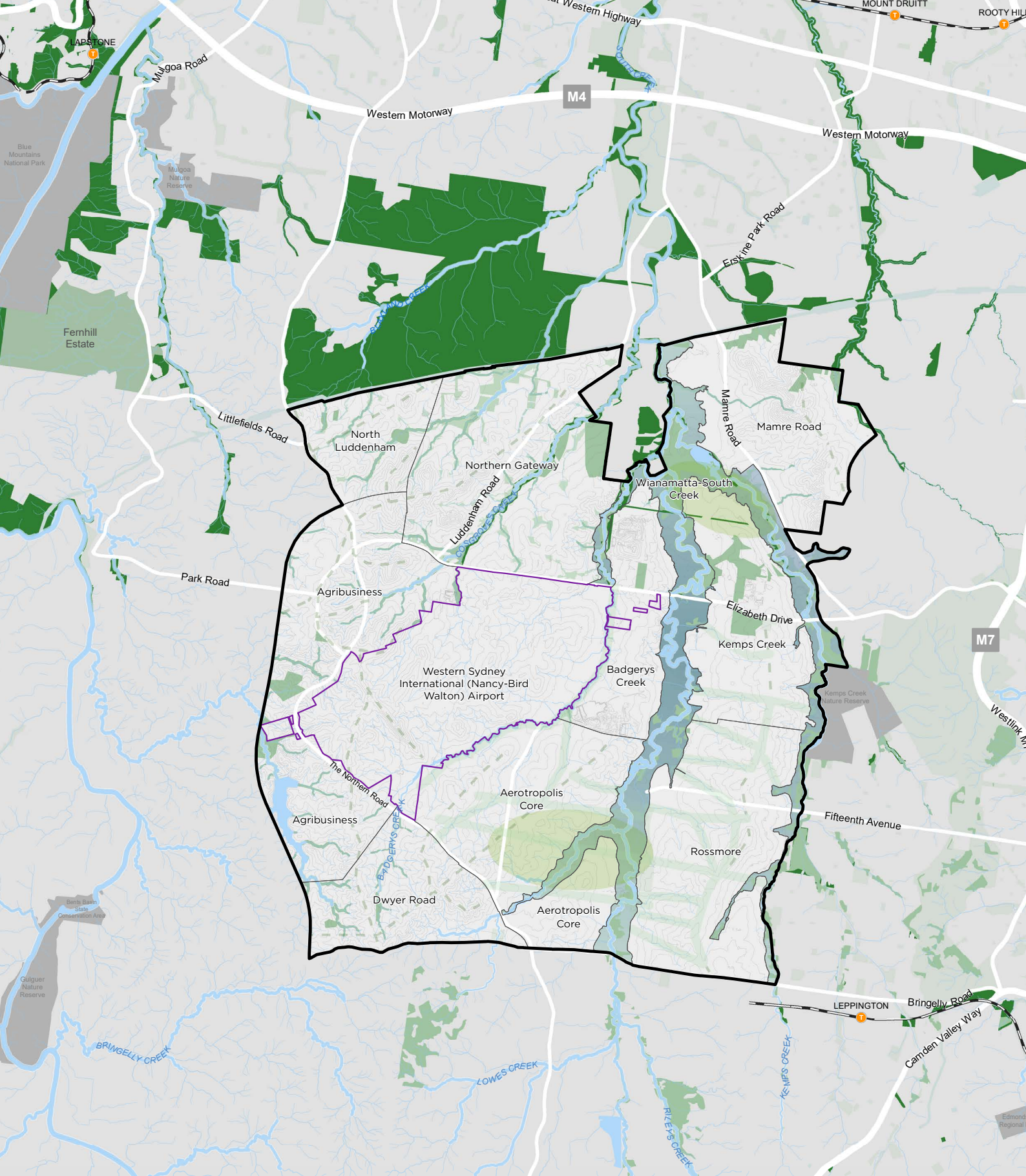
Multi-functional linear parks created alongside infrastructure corridors and minor creeks will offer quality local open spaces along creeks and between ridges and the floodplain. They will be places for walking and cycling connections as well as recreation. The geographic nature of the area's many creek systems means their spacing creates opportunities for green and connected walking, cycling and ecological systems. These will be the logical location of local shops and density that matches these attractive areas.

Streets

A walkable, fine grain street layout is to be provided that meets the needs of all uses and relates to the urban landform, the creation of quality public spaces and connects with other parkland elements. Retaining and planting trees along streets provides green connecting corridors that provide shade and support amenity and urban cooling. Raingardens at the end of streets near Wianamatta-South Creek and its tributaries will support management of stormwater.



Figure 14: The Goods Line in Sydney is an example of a multi-functional linear park
Source: Destination NSW



Blue Green Infrastructure Western Sydney Aerotropolis

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Public Recreation | Topographic Contour 5m |
| Potential for Conservation | Waterways |
| Environmental Conservation | Topographic Ridgeline |
| National Parks and Nature Reserves | Linear Parks (Investigation) |
| Wianamatta-South Creek | Regional Parkland (Investigation) |

0 0.5 1 2
Kilometres



4.1.3 Biodiversity conservation

Strategic conservation planning for the Aerotropolis will avoid, minimise or mitigate the impact of development on biodiversity values.

Biodiversity certification under the *NSW Biodiversity Conservation Act 2016* and the strategic assessment under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) apply to part of the Aerotropolis.

The Department of Planning, Industry and Environment will exhibit the *Cumberland Plain Conservation Plan* in 2020. It will aim to protect threatened plants and animals in Western Sydney while supporting the delivery of housing, infrastructure, open and green spaces. It will enable land to be certified for development and ensure areas of biodiversity value are avoided from development and conserved.

In general, areas to the east of the Airport site and south of Elizabeth Drive sit within the South West Growth Centre under *State Environmental Planning Policy* (Sydney Region Growth Centres) 2006 (Growth Centres SEPP). In December 2007 that land was conferred a biodiversity certification in accordance with Section 126G of the *Threatened Species Conservation Act 1995* (now the *Biodiversity Conservation Act 2016*).

In addition, the strategic assessment under the *Commonwealth EPBC Act* also applies to the part of the Aerotropolis that is subject to the Growth Centres SEPP. These commitments will continue to apply.

4.2 Future transport network

The future transport network will not only link the Aerotropolis to the world, it will help realise the aspirations of community and industry. Transport networks and services will be coordinated with investment plans and land use planning. The streets and places of the Western Parkland City will be smarter, healthier and more focused on people.

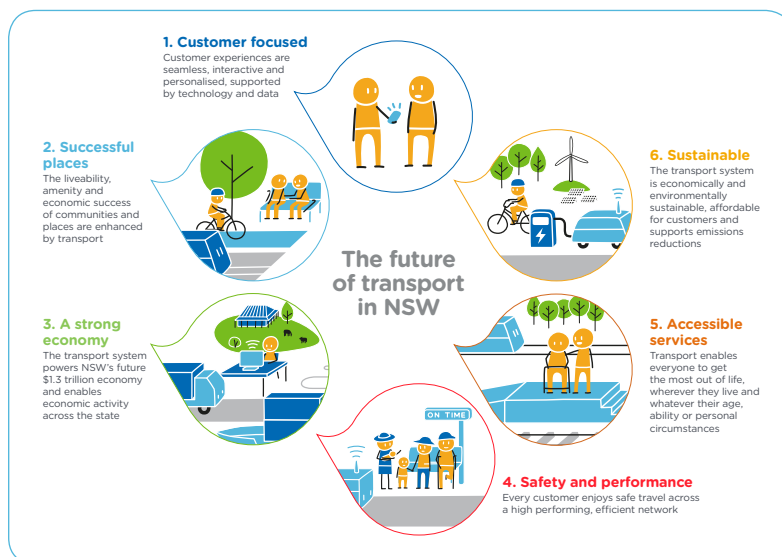


Figure 15: Future Transport's six state-wide outcomes
Source: Transport for NSW

"In broadening our thinking about our roads, rail and streets beyond movement; places can better deliver social, environmental and economic improvements for the entire community.

Likewise, in broadening our thinking about movement to both mobility and access, we can promote the right mode for each trip purpose, and plan places that serve local areas and minimise the need to travel long distances"

Better Placed
(Government Architect NSW, 2018)



Figure 16 (top): Proposed Sydney Metro Greater West will provide city-shaping services

Source: Transport for NSW

4.2.1 Transport services

The Aerotropolis's transport network will reflect the service hierarchy adopted in *Future Transport 2056*:

- **city-shaping services** – mass transit public transport services of higher frequency, speed and volume linkages between cities and centres that shape locational decisions of residents and businesses
- **city-serving services** – high to medium capacity, high frequency services, with more frequent stopping patterns
- **centre-serving services** – medium to low capacity, high frequency or on-demand services that provide customers with access to their nearest centres and transport node.

Public transport services will be staged with development. Initial services on the proposed Sydney Metro Greater West (Stage 1) and rapid bus services linking Liverpool, Penrith and Campbelltown with the Airport and Aerotropolis Core will be supported by local services delivered in line with demand.

Interconnected mass transit city-shaping services that support the evolving needs of the Aerotropolis include the proposed Sydney Metro Greater West as part of a broader North South Rail Link corridor, and other connections such as the proposed Outer Sydney Orbital.

The proposed network includes a number of major city and centre serving connections. City-serving networks such as Elizabeth Drive and The Northern Road will provide high capacity and frequency, while centre-serving networks such as Luddenham Road, Western Road and Ramsey Road offer lower capacity but more closely spaced stops connecting to centres. Local centre-serving bus services will be complemented by smaller on-demand vehicles and 'mobility as a service' offerings, such as ride sharing. Connected urban sensor networks and artificial intelligence will allow on-demand services to anticipate and respond to changes in demand. In conjunction with mass transit and a comprehensive cycle network, these 'last mile' services will enable limits to be placed on private parking supply, further reducing congestion.



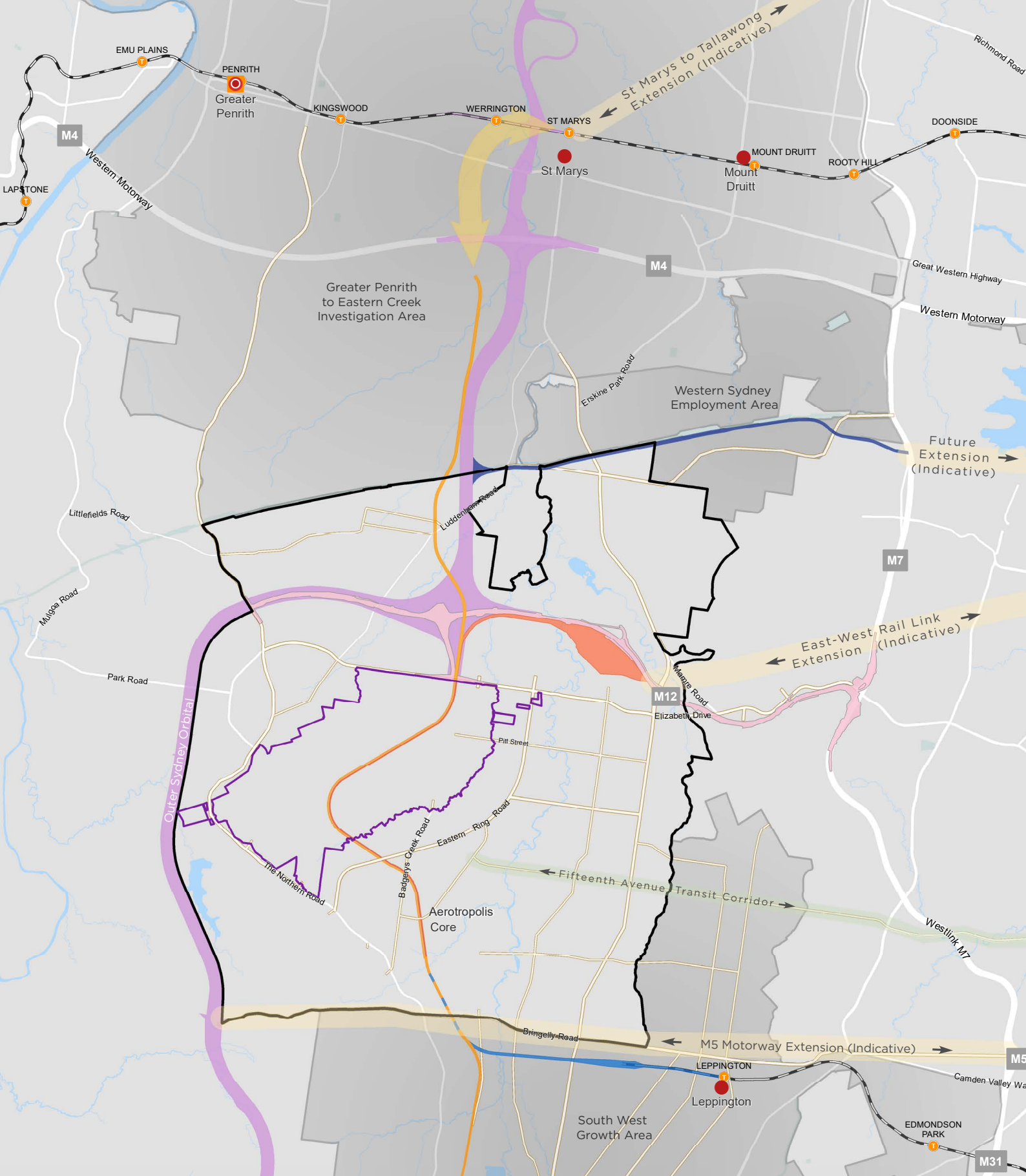
Figure 17 (bottom): Example of a Metro station
Source: Transport for NSW

The *Western Sydney Infrastructure Plan* works include major upgrades of The Northern Road, while construction of the M12 motorway is imminent. Along with the crucial Sydney Metro Greater West, these links will tie the Aerotropolis to the opportunities and markets of Greater Sydney.

People in the Aerotropolis will be able to walk to the Metro on safe and shaded streets, enjoy frequent and direct bus services, have convenient access to schools and shops, and benefit from a comprehensive network of cycleways. To realise this vision and support the functions of the Airport and high-tech sector, a network of smart motorways and arterial roads will efficiently accommodate time sensitive freight and private vehicle trips.

New technology will make the Aerotropolis smarter and safer. For the logistics and aerospace sector, connected and autonomous vehicle (CAV) technology can reduce freight and handling costs. On large logistics and technology campuses, autonomous buses will provide connections to bus stops and transit hubs. New technologies allow more responsive transport services that will evolve as the Aerotropolis matures.

Planning for different movements will consider local networks that pass through centres and link places where people want to go, as well as freight and bypass networks to bypass centres and directly link people and goods to the wider network.

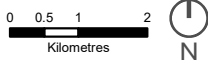


Proposed Transport Corridors Western Sydney Aerotropolis

- Western Sydney Aerotropolis
- Western Sydney International (Nancy-Bird Walton) Airport
- Metropolitan Cluster
- Strategic Centre
- Key Network Upgrades

- M12 Motorway Corridor
- Outer Sydney Orbital Corridor
- Potential South West Rail Link Extension Corridor
- Potential Western Sydney Freight Line Corridor

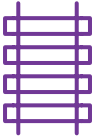
- Sydney Metro Greater West
- Tunnel Connection to T1 (Subject to further investigation)
- North South Rail Line Corridor
- Potential East-West Rail Link, Stabling and Critical Infrastructure



4.2.2 Network development

Transport network planning for the Aerotropolis and broader Western Parkland City will maximise the use of the existing roads. New connections will respond to proposed urban development through precinct planning.

The proposed network includes local and transit-focused streets that will connect to key centres including the Aerotropolis Core and the Airport. The Fifteenth Avenue corridor will provide a direct connection to these centres from Liverpool. Similarly, the Pitt Street Extension Corridor will provide an east-west connection for public transport, walking, cycling local traffic between Devonshire Road and the Airport Commercial Precinct via Pitt Street.



Planning for the Aerotropolis will accommodate a new freight infrastructure corridor between key freight centres and the Aerotropolis, as well as freight and logistics development in precincts identified for flexible employment and agribusiness.



The proposed transport network servicing the Aerotropolis will accommodate freight on connections that maximise effective and reliable movements while protecting local amenity.

Key freight links will serve the Airport and the Airport Commercial Precinct to support economic activities along Eastern (Airport) Ring Road. The upgrade of The Northern Road is designed to serve the Agribusiness Precinct and the Airport Freight and Logistic Precinct. The proposed M12 Motorway will be the major access route to the Airport and connect to Sydney's motorway network.

The proposed Outer Sydney Orbital Corridor will be the major north-south transport corridor between Richmond Road in the north and the Hume Motorway near Menangle in the south with a motorway interchange with the M4 Western Motorway. It will include dedicated freight rail infrastructure, providing a regional connection between Port Botany, Western Sydney and regional NSW.

The potential Western Sydney Freight Line would link the Southern Sydney Freight Line with potential intermodal terminals in the Western Parkland City. It would serve freight, logistics and related industries, and consolidate WSEA as a key freight and logistics hub. This line would also divert freight from the Main West Rail Line, unlocking passenger capacity.

Following landowner and community input, a final transport network will be determined through precinct planning, based on detailed investigations and analysis that focus on integrating land use and transport. This work will be underpinned by investigations to identify infrastructure priorities for the Aerotropolis within the broader Western Parkland City.

Figure 18: Artist's impression of the M12 linking the Aerotropolis to Greater Sydney. Source: Transport for NSW



4.3 Digital infrastructure – smart cities

Smart cities use technology to improve quality of life. Whilst the scale of initiatives can vary, most solutions use embedded, connected and interoperable technology tools and platforms that take advantage of smart devices working across infrastructure assets, services and sectors. A smart city:

- embeds sensors and communications technology in infrastructure as it is built or when it is being upgraded
- captures, exchanges and uses data securely from sensors
- communicates information, insights and actions, including through the infrastructure itself.

Investing in appropriately scalable and adaptable communications and digital infrastructure is fundamental to enabling a city that can respond to the sustainability objectives of the Aerotropolis, deliver a liveable city, and enable development of industry and jobs.

To create a smart city, the Aerotropolis will incorporate the following built infrastructure:

4.3.1 Connectivity infrastructure

- 4G and 5G (or other future technology) radio cells integrated into buildings, public transport, smart poles or other infrastructure
- Gateway devices for low power wide area networks that collect data from sensors
- Wi-Fi nodes and mesh networks for public access and sensor connection

- Fibre optic network to buildings and homes and data transfer from gateway devices
- Fibre network for high capacity links to commercial buildings, centres and management hubs
- Vehicle to Infrastructure (V2I) to communicate between road signs, traffic lights and connected autonomous vehicles (CAVs).

4.3.2 Sensor infrastructure

- Water, environmental, weather, soil or energy meters
- Traffic, transport and people movement sensors in road surfaces and buildings integrated with parking and traffic management infrastructure
- CCTV for smart transport, safety and law enforcement
- Smart lighting, remote controllable and event configurable
- Road marking for connected and autonomous vehicles.

4.3.3 Communications infrastructure

- Digital signage and interactive smart screens in public spaces and transport
- Smart poles that combine lighting, sensors, connectivity and signage
- Smart benches with many functions such as cooling or heating, device charging, lighting, sensors, connectivity and smart screens
- Coordinated and adaptive traffic signals
- Smart road marking to facilitate traffic management.

Figures 19-20:
Examples of digital infrastructure

4.4 Energy infrastructure

The Aerotropolis will be powered through sustainable, next-generation energy infrastructure consistent with the NSW Government's 2050 Net Zero Emissions commitment. Locally produced clean energy, energy storage solutions, smart grid and real time usage optimisation technology and innovative power purchasing options will be a focus for energy providers.

The NSW Government will work with energy infrastructure providers to deliver energy infrastructure that meets the objectives for a world's best practice energy system. This will seek to combine local generation, such as small and medium scale solar, and storage, with advanced electricity network management systems.



Figure 21: The Aerotropolis will be powered by sustainable, next-generation energy infrastructure

The development of energy supplies will draw on Australian and international experience to combine locally generated electricity with the existing large-scale electricity network. Using circular economy principles, this includes:

- installing solar rooftops and solar gardens models for new residences
- using smart grid technologies, with onsite battery storage
- considering electric vehicle charging stations during precinct planning
- if green infrastructure such as rooftop solar cannot be built upfront, incorporating the ability for future provision.

4.5 Integrated water, wastewater and recycled water services

The *South Creek Sector Review* detailed the need for water to be managed holistically under integrated water management. The release of Sydney Water's *Western Sydney Regional Master Plan* in 2020 will set out an integrated water management servicing direction to 2056. The Master Plan sets direction for doing water differently, it considers the total water cycle in Western Sydney and promotes a sustainable water future delivered via integrated water services. The Master Plan's principles will be incorporated into the Aerotropolis.

Sydney Water's adaptive, flexible planning approach for Western Sydney allows for a combination of actions to be assessed and taken immediately, if required, to support growth demands while preserving flexibility to meet future commitments and initiatives.

Sydney Water is finalising the site selection, financing and delivery options of the Upper South Creek Water Factory with associated Resource Recovery Plant and corresponding network location requirements. Once development has reached an appropriate scale the plant will produce recycled water appropriate for agricultural, industrial, open space irrigation and residential dual reticulation.

4.5.1 Warragamba Pipeline

The Warragamba Pipeline along the northern boundary of the Aerotropolis transfers water from Warragamba Dam to the Prospect water filtration plant. The Pipeline's safety, integrity and operation is essential. Precinct planning will consider WaterNSW's *Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines* to ensure this important infrastructure is safeguarded.

4.6 Social and cultural infrastructure

4.6.1 Community

Planning for the Aerotropolis will ensure that employment and residential development is within 10 minutes' walk of public open space as per the Premier's Priority. People working or living in mixed use residential areas or higher intensity employment areas will have access to a range of open spaces. District-scale open space such as playing fields and regional parks will be provided towards the edge of centres to maximise catchment areas. Sporting fields will be shared with educational institutions wherever possible.

High quality facilities and services that are attractive, flexible and address the needs of the general community will be provided, including community centres, multi-purpose hubs, libraries and aquatic centres.

4.6.2 Health and education

The Aerotropolis will support internationally competitive health education, research and innovation jobs and services at a diverse range of scales, such as:

- an internationally significant research/innovation, science, training and education area (including tertiary and VET institutions and secondary school level) within the Aerotropolis Core
- a cluster of leading science-based businesses, tertiary institutions and research facilities at the Sydney Science Park within the Northern Gateway
- strategic centres that integrate primary and tertiary education, with health facilities and the landscape to create places of learning and wellbeing
- local centres where schools and community facilities are integrated into the parklands shared with the broader community

- nearby access to upgrades at Nepean Hospital, Liverpool Hospital and Campbelltown Hospital
- private sector healthcare, where feasible.

4.6.3 Arts and creativity

Cultural and creative spaces can build character and a unique sense of place, identity and belonging. Public art, public spaces such as art galleries, museums and libraries and the new cultural infrastructure will support the ambition for the Aerotropolis to be a home for science and education. Co-locating artistic and creative organisations in science and education precincts will encourage collaboration, drive enterprise and innovation, and support the development of creative industries.



Culture and creativity will drive social, environmental and educational cohesion and innovation. Jobs will be created and the Aerotropolis will be a place that offers a high amenity, high experience urban life.

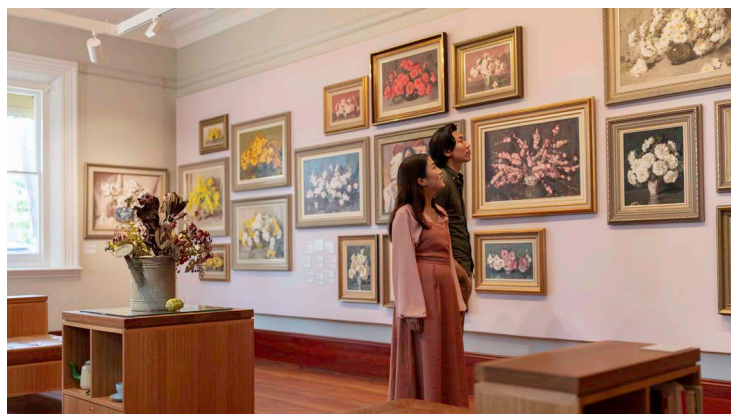


Figure 22: Camden Fine Art Gallery in Sydney's south-west
Source: Destination NSW

Precinct planning for the Aerotropolis will investigate cultural infrastructure to support a tourism and leisure economy and a night-time economy around the Airport that attracts locals and visitors.

4.6.4 Aboriginal cultural strategy

Western Sydney is rich in Aboriginal history and heritage significance and is also home to the largest Aboriginal population in Australia. The Aerotropolis will embrace opportunities to connect with Country and include cultural infrastructure for Aboriginal people to practice and share culture and for the wider community to visit to interact with and understand the Aboriginal culture, history and heritage of Western Sydney.

Connecting with Country

Connecting with Country is more than just a policy or an idea. First Peoples' connection with Country is related to the origins of the landscapes within which they/we inhabit and therefore their own origins. Connecting with Country occurs through every sense, movement and stories. It is related to knowledge, actions and experiences, so happens best through corporeal activities, and being in spaces on Country. Several practices or methodologies can be engaged to build these connections. While guidance from knowledge holders is recommended, some of these methods are part of everyday life, such as walking Country, storytelling on Country, making on Country, listening to Country, dialogue with Country, singing up Country, and sensing Country.

Aboriginal people have always walked Country as both a means of knowing and caring for Country. Culture is a map across the landscape in which not only are the individual places important, but the routes between them, and the whole of the landscape is a cohesive narrative. Indigenous cultural knowledge is spatialised and placed, so in walking Country, a sort of mapping occurs that involves all the senses and does not simply rely upon sight.

4.6.5 Heritage

Key heritage sites and items will be preserved, and where appropriate, activated and integrated with new development. The history of the area will be embraced to contribute to a distinct identity.

Heritage forms part of the wider cultural infrastructure framework and specific heritage conservation strategies and controls will be considered in precinct planning and DCPs as part of a requirement to address the *Heritage Act 1977*. During precinct planning, detailed site investigations will occur to identify and protect Aboriginal and non-Aboriginal heritage. The outcomes of these investigations will then inform master planning and will be considered in DAs.

Planning, urban design and development will activate and integrate heritage items into new developments in a sensitive way in accordance with:

- *Australia ICOMOS Charter for Places of Cultural Significance*, The Burra Charter, 2013
- *Better Placed: Design Guide for Heritage* by Government Architect NSW
- *Design in Context: Guidelines for Infill Development in the Historic Environment* by NSW Heritage Office & Royal Australian Institute of Architects NSW Chapter
- *New Uses for Heritage Places: Guidelines for the adaption of Historic Buildings and Sites* by NSW Heritage Office & Royal Australian Institute of Architects NSW Chapter.

Aboriginal heritage

All landscapes have Aboriginal cultural heritage values, which includes both tangible and intangible elements containing places and values relating to traditional, historical and contemporary periods. There are points of significance for Aboriginal peoples within the Aerotropolis including scarred trees, carved trees, white clay, shell middens, camp sites, stone resources and scatterings of artefacts.



Figure 23: White clay being used in Aboriginal ceremonies
Source: Destination NSW

The floodplains of Ropes Creek and Wianamatta-South Creek were an important meeting place and source of nutrition for Aboriginal communities. South, Badgerys and Thompsons creeks provided food and recreation over thousands of generations. Local plant species including tea tree, paperbark trees, geebung, wattles and ferns, as well as fish and shellfish provided food for Aboriginal peoples.

Non-Aboriginal heritage

European settlement began in the area in the early 1800s with the first land grant given to James Badgery in 1809. The next settlers established large rural estates and set up local agricultural and pastoral economies. Some large estates were subdivided from the 1850s and this attracted small-scale farmers and led to the formation of village centres, including Luddenham and Bringelly. While land continued to be subdivided and developed, the rural character and agricultural uses remained, as do some early buildings and structures.

The Aerotropolis contains 18 non-Aboriginal heritage items of local significance. Three items of State significance include Kelvin Park Homestead (Group) in the Aerotropolis Core Precinct, Church of the Holy Innocents (Group) in the Rossmore Precinct and Belfield Farm (Group) in the Rossmore Precinct. These items will be mapped in the Aerotropolis SEPP and considered at the precinct planning stage.



Figure 24: Kelvin Park Homestead in the Aerotropolis Core Precinct
Source: Heritage NSW, Department of Premier & Cabinet

Women, white clay and Wianamatta

Aboriginal women in Greater Sydney are guardians of reserves of white clay. Prior to non-Indigenous appropriation, it was traded far and wide as an important resource and dietary supplement, particularly for pregnant women. These movements of trade and custodial care occurred throughout the cultural calendar, often involving travel for many days along songlines or trade routes. White clay, as found at Wianamatta, was so valued that women carried it with them in a djuguma, or net bag, slung around her neck or head along with other essential items such as kangaroo bone chisels, shells used as spear sharpeners, balls of red ochre, lumps of resin from the Xanthorrhoea, or grass tree and fishing implements. Clay is also valued for body adornments, which when used in ceremonies distinguishes groups through the differing designs in their body painting.

Safeguarding the 24-hour airport

The Airport represents a \$5.3 billion investment for Stage 1 alone. It will be a catalyst for economic growth and will operate without a curfew.

The Airport's 24/7 operations will be safeguarded in future precinct planning, and within the context of development (including ancillary commercial areas and business park) being subject to the planning and approval framework of the *Commonwealth Airports Act 1996*.

Planning to safeguard the 24/7 operations includes:

- preventing the encroachment of noise-sensitive land uses into areas affected by aircraft noise and operational airspace
- locating buildings to avoid wind shear and turbulence
- managing wildlife attraction
- locating wind turbines appropriately
- ensuring lighting does not distract/confuse pilots
- maintaining an obstacle free operational airspace
- ensuring off-airport development does not impact the communication, navigation and surveillance (CNS) equipment
- managing land uses in public safety areas.

All levels of government will work together to integrate the planning for the Aerotropolis with the planning undertaken by Western Sydney Airport for the Airport site.

Definition of Australian Noise Exposure concept (ANEC)

Anticipated forecasts of future noise exposure patterns based on indicative flight paths around an airport that constitute the contours.

Definition of Australian Noise Exposure Forecast (ANEF)

Approved forecasts of future noise exposure patterns around an airport that constitute the contours on which land use planning authorities base their controls.

5.1 National Airports Safeguarding Framework

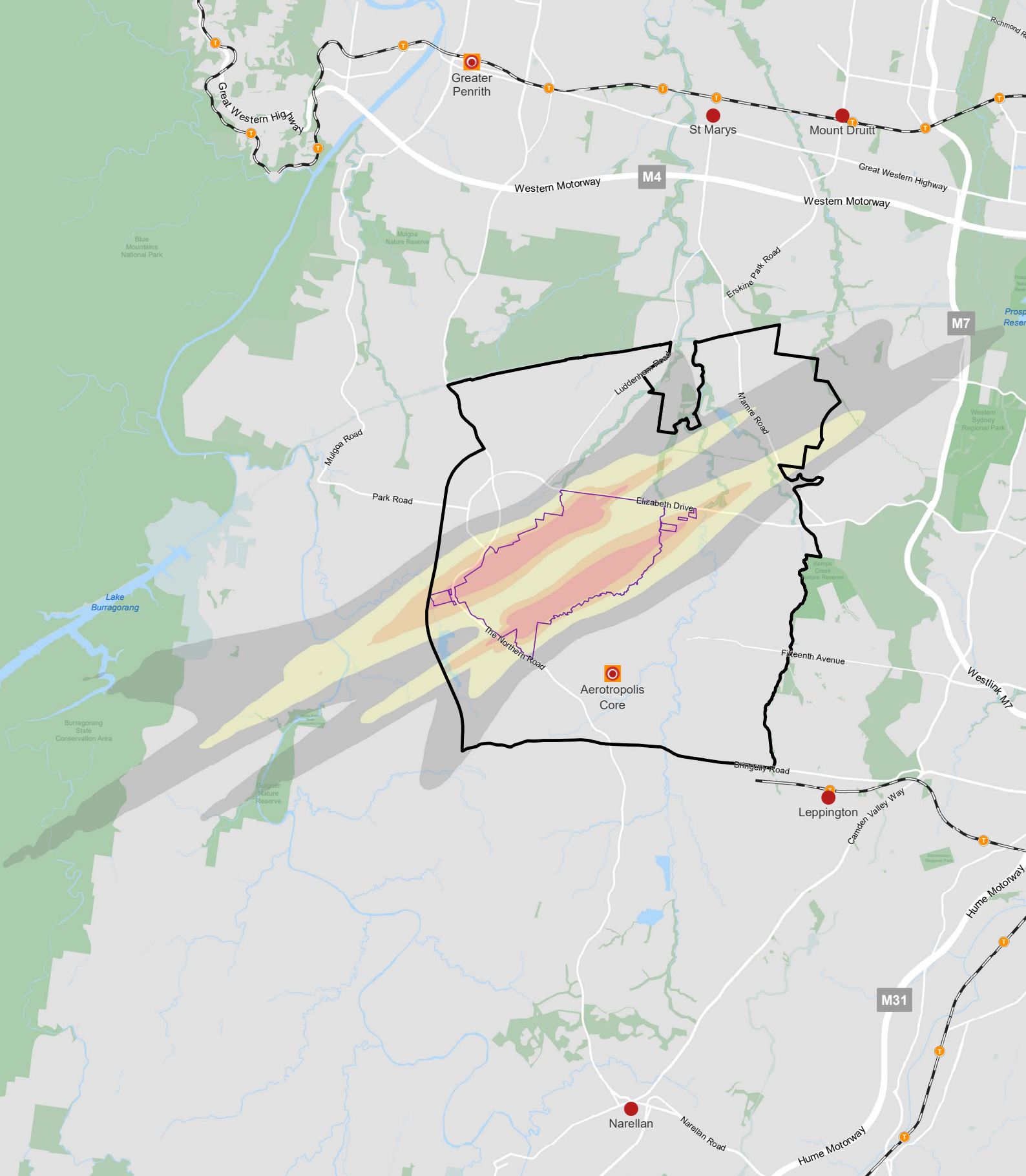
The National Airports Safeguarding Advisory Group (NASAG) developed the National Airports Safeguarding Framework (NASF) as a national land use planning framework at strategic Australian airports. The Framework requires consideration of aircraft noise, operational airspace, wildlife strike, wind shear, public safety zones, lighting, wind turbines, communication, navigation and surveillance systems and helicopter landing sites.

5.1.1 Aircraft noise and development

Development that will impact upon the aviation operations of the Airport will not be supported. New residential and other noise sensitive development will not be located within the ANEC/ANEF 20 and above contours (see page 45). Locating residential development in high amenity areas of Wianamatta-South Creek will create further separation from the Airport. More noise tolerant land uses (such as industry) will be located in louder areas. New residential development will also only be permitted in areas with high amenity and should not front major roads or public transport routes. Additionally, for the Aerotropolis Core, new residential development will be limited to being within walking distance of public transport (800m or 10 minutes) and the creek system to create a compact, walkable and vibrant centre whilst achieving the vision for the Western Parkland City.

Development within the ANEC/ANEF 20 and above contour will adopt appropriate design and construction standards to reduce aircraft noise impacts.

In existing residential areas or land approved for development, the ability to construct dwellings will not be removed and renovations to existing houses or minor extensions will still be allowed, subject to appropriate noise mitigation management measures.



ANEC Contours

Western Sydney Aerotropolis

Western Sydney Aerotropolis

Western Sydney International (Nancy-Bird Walton) Airport

Environmental Conservation

National Parks and Nature Reserves

ANEC = 20-25

ANEC = 25-30

ANEC = 30-35

ANEC = 35+

Metropolitan Cluster

Strategic Centre

Railway

Waterways

0 0.5 1 2 3
Kilometres





Over time, the noise exposure contours will be reviewed and recalibrated in accordance with the requirements of the Airports Act 1996.

As the contours may change in the future, or the ANEF chart developed during the airspace design process may differ from the current ANEC contours, a precautionary approach to residential development and other noise sensitive development within the 20 ANEC/ANEF and above contour will be taken.

5.1.2 Operational airspace

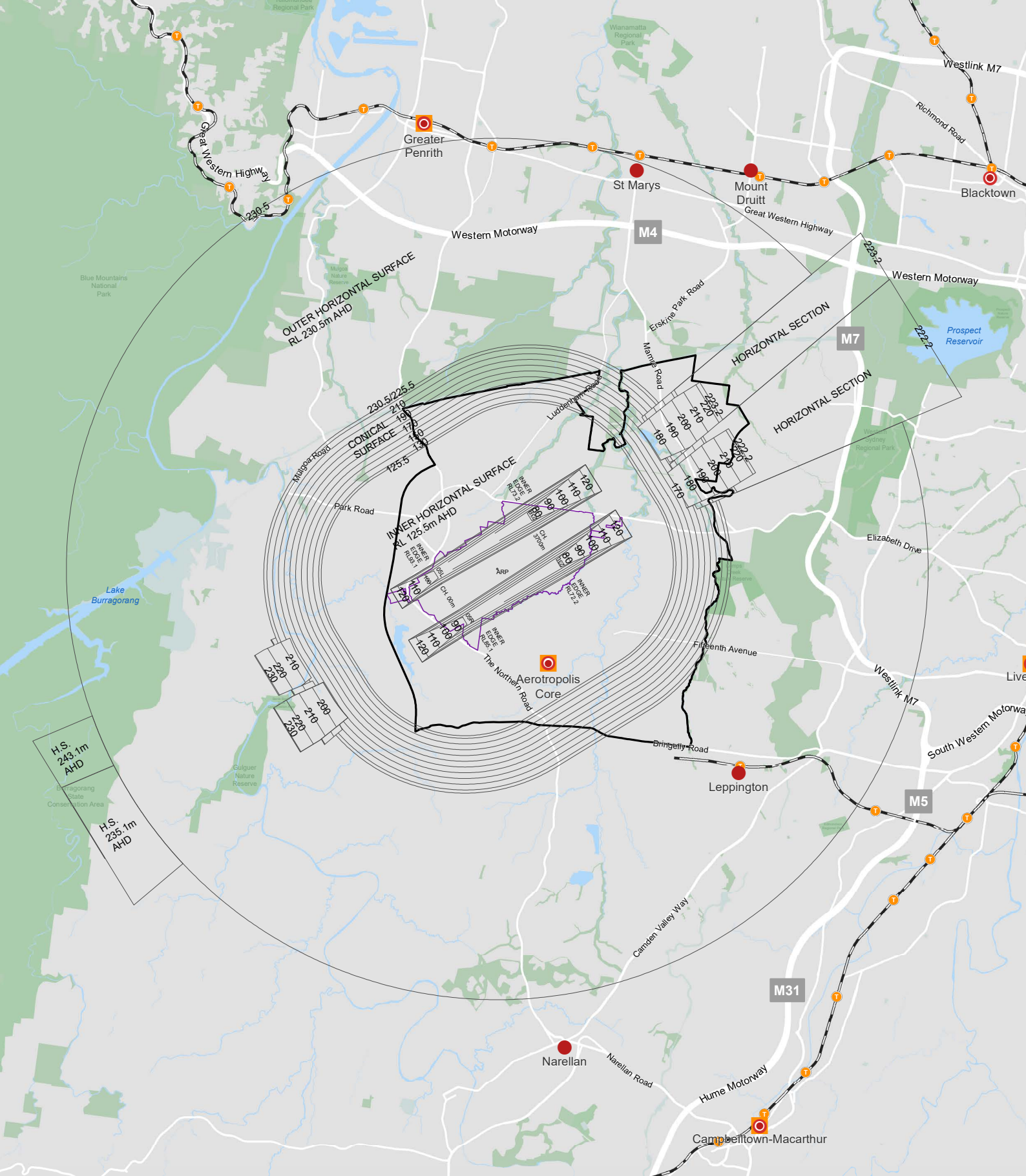
An airport's operational airspace is the volume of airspace above a set of imaginary surfaces, established to protect

aircraft from obstacles or activities. One of these, the Obstacle Limitation Surface (OLS), recognises that tall structures or obstructions such as cranes, plumes, lighting and glare could create air safety hazards. The Western Sydney Airport Plan identified an OLS for the Airport (see page 47). As the Airport gets closer to operations additional airspace surfaces such as Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) will be mapped.

The Aerotropolis SEPP and Aerotropolis DCP will include controls to protect airspace. In addition, encroachments into operational airspace for the Airport may require approval under Part 12 of the *Airports Act 1996* and *Airports (Protection of Airspace) Regulations 1996*.

Figure 25: Controls will ensure that airspace is protected from obstructions.





OLS Chart

Western Sydney Aerotropolis

- OLS Chart
- ▭ Western Sydney Aerotropolis
- ▭ Western Sydney International (Nancy-Bird Walton) Airport
- ▭ National Parks and Nature Reserves
- ▭ Environmental Conservation

- ◻ Metropolitan Cluster
- ◻ Health and Education Precinct
- Strategic Centre

- Railway
- Waterways



5.1.3 Wildlife strike

Birds and other wildlife can impact aircraft, particularly during take-off and landing. Land uses or certain plant species and/or embellishments that could attract wildlife must be considered in the context of aircraft safety. This may influence where dams, waterbodies, wastewater treatment facilities, parks or biodiversity conservation sites are located. This will be addressed in precinct planning.

5.1.4 Wind shear and turbulence

Building-generated windshear/turbulence becomes a critical safety issue when a building is in the path of a crosswind to an operational runway. The wind flow around and over buildings can vary crosswind speed along the runway.

Any building within the assessment trigger area that will penetrate the 1:35 surface must consider windshear and turbulence. This means that if a building exceeds 10 metres and is 350 metres from the runway, it will penetrate the 1:35 surface. Buildings fitting these criteria will be referred to Western Sydney Airport and the Commonwealth for development approval. Typically, only buildings within airport sites need to be designed to address windshear and turbulence. However, any other buildings within proximity to the airport that are located within the assessment trigger area and penetrate the 1:35 surface, will need to consider windshear and turbulence.

Precinct planning will address windshear and turbulence.

5.1.5 Public safety areas

The risk of aircraft incidents is highest at the ends of runways. Planning within these areas - public safety areas - will exclude land uses that attract large numbers of people or include the storage, use or manufacture of certain dangerous goods.

Whilst the unmodelled trapezoidal area was applied to identify the public safety area for the airport in its EIS, *NASF Guideline I Managing the Risk in Public Safety Areas at the Ends of Runways* was subsequently released in November 2018. Guideline I provides an opportunity to apply a public safety area based on the UK Public Safety Area model, which models anticipated aviation activity at the airport. This approach will be applied to land use planning decisions around the Airport. Consultation with Western Sydney Airport in relation to that model is ongoing.

Precinct plans will address public safety areas in greater detail.

5.1.6 Lighting and reflectivity

Lighting will be required within six kilometres of the Airport to be installed and configured to avoid distraction or confusion for pilots who could mistake it for aeronautical ground lights that are used during inclement weather and outside of daylight hours.

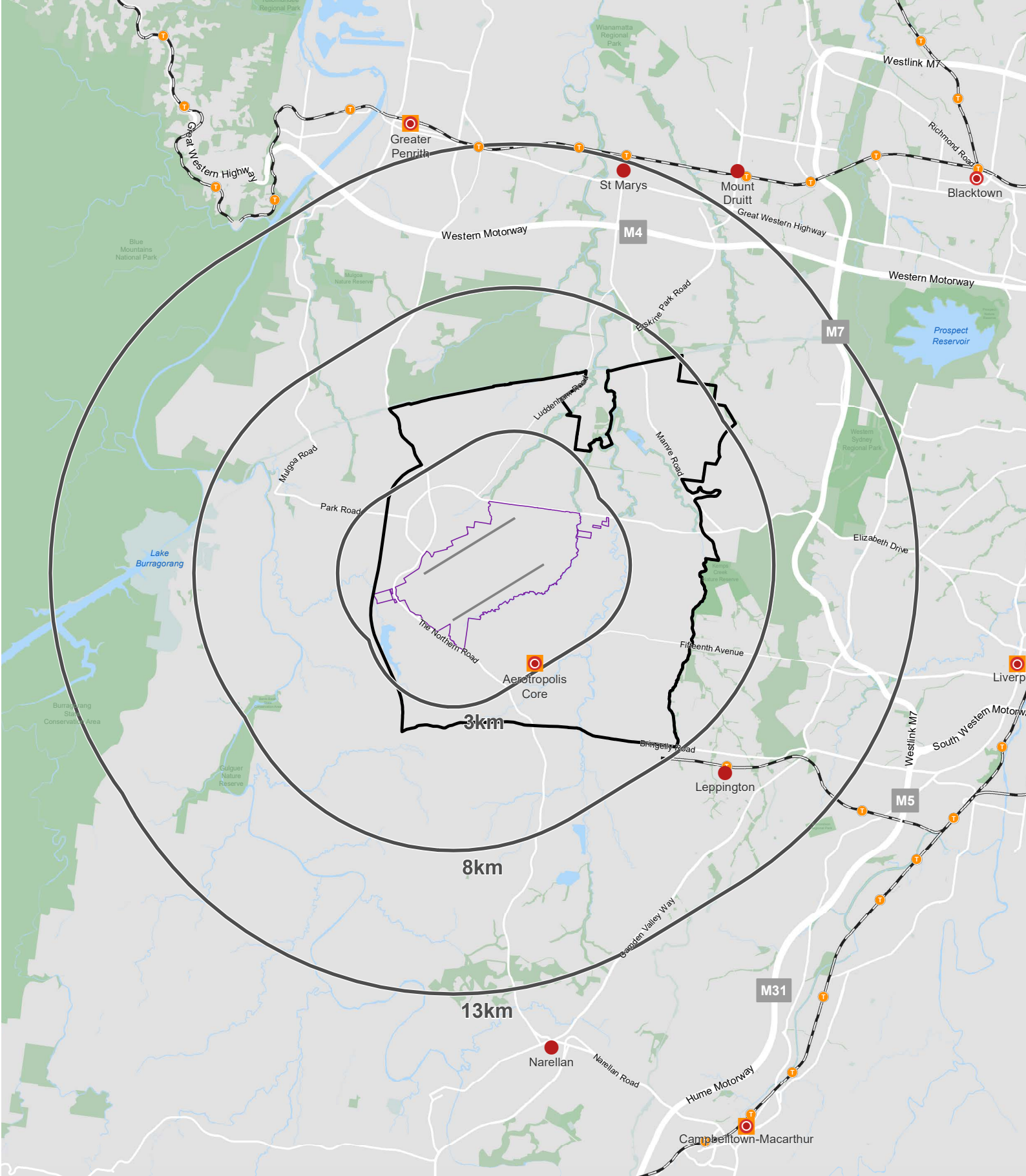
Additionally, the design of buildings and structures should consider how their design could reduce distraction to pilots resulting from reflected sunlight.

5.1.7 Wind turbines

Wind turbines can be hazardous to aviation as their height creates potential conflict with low flying aircraft. They can also create turbulence and affect the performance of CNS equipment. Wind turbines will be avoided in the vicinity of the Airport.

5.1.8 Helicopter landing sites associated with hospitals

To ensure continued operations of helicopter landing sites at hospitals, associated flight paths must be free from encroachments. Any proposed hospitals in or adjacent to the Aerotropolis must consider flight path protection.



Wildlife Buffer Zones

Western Sydney Aerotropolis

- Wildlife Buffer Zones
- Western Sydney Aerotropolis
- Western Sydney International (Nancy-Bird Walton) Airport
- National Parks and Nature Reserves
- Environmental Conservation

- Metropolitan Cluster
- Health and Education Precinct
- Strategic Centre

- Railway
- Waterways

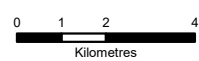


Figure 26: Example of airport operations

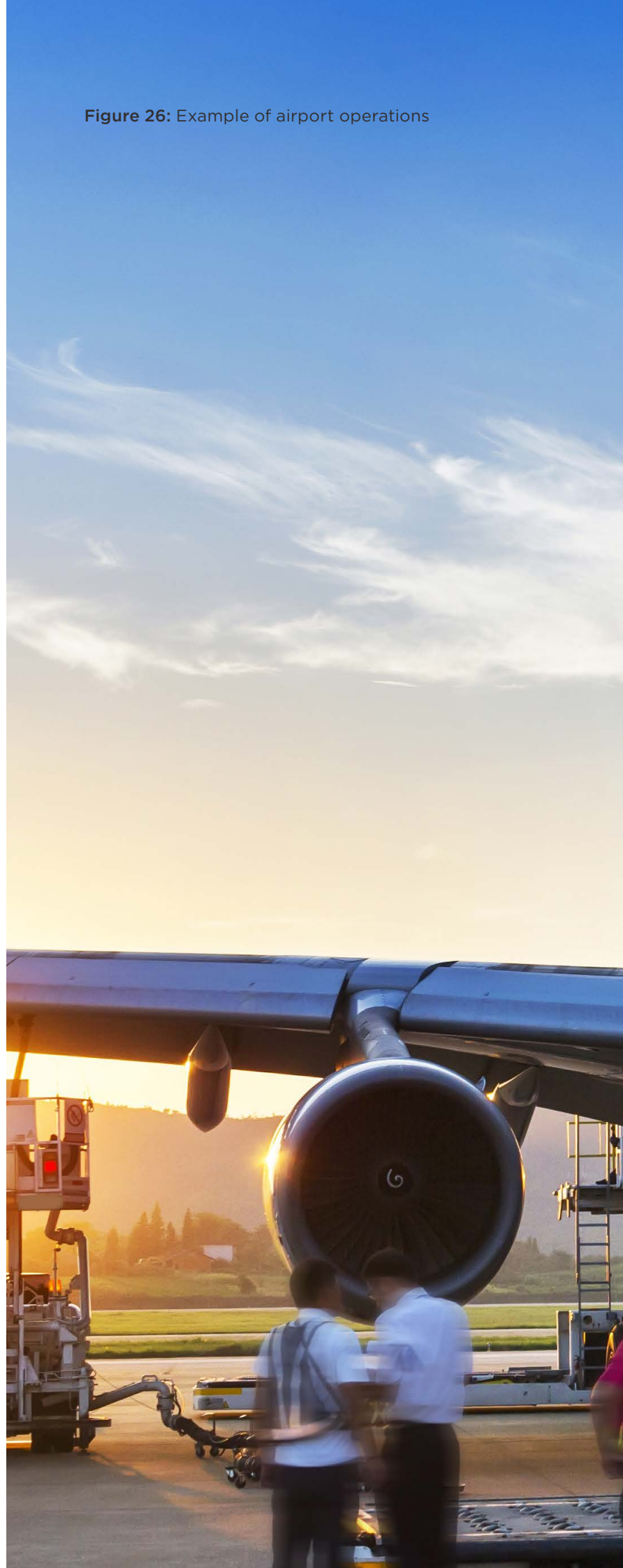
5.2 Implementing the NASF

Principles to safeguard the aviation operations of Western Sydney Airport will be implemented through:

- the Aerotropolis SEPP
- the Aerotropolis DCP
- Section 9.1 directions 3.5 *Development Near Regulated Airports and Defence Airfields* and 7.8 *Western Sydney Aerotropolis Plan*
- precinct planning
- master planning.

Master plans will not be approved unless they satisfy all principles, including aviation safeguarding principles, identified in the Aerotropolis SEPP.

DAs must demonstrate how they satisfy performance outcomes of the DCP, either through identified acceptable solutions or proposed alternative solutions. Some development will trigger referral to Western Sydney Airport and the relevant Commonwealth agency.





Resilience and adaptability

Planning for resilience addresses several economic and social issues. Adapting to climate change will build resilience to higher temperatures, higher evaporation, changes to intensity and distribution of rainfall, and more frequent heatwaves.

6.1 Circular economy

The circular economy gradually decouples economic activity from the consumption of finite resources. It is an approach that designs out waste and changes how goods are produced and sold to minimise waste and environmental impact. Circular economy is based on three key principles:

- design out waste and pollution
- keep products and materials in use
- regenerate natural systems.

The *NSW Circular Economy Policy Statement* and the Circular Economy Innovation Network (referred to as NSW Circular) guide NSW Government decision-making to transition to a circular economy. The Statement sets the ambition and approach for a circular economy in NSW and guides resource use and management. Decision-making and planning for the Aerotropolis will be governed by these principles.

Considering utility provision across all four domains of water, energy, waste and digital networks allows for new business models and technology solutions to be delivered in the Aerotropolis and the Western Parkland City more broadly.



The NSW Government, with councils, will look to innovative utilities solutions and technologies to drive a circular economy, build resilience and optimise the sustainable management of resources.

6.1.1 Waste and resource recovery and management

The NSW Environment Protection Authority's latest *Waste Avoidance and Resource Recovery (WARR) Strategy* establishes priorities for the next seven years. Drawing from this, planning for the Aerotropolis will integrate sustainable energy, waste and circular economy design principles into development and operations. Requirements will be determined at the precinct planning and master planning stages.

6.1.2 Low carbon precincts

The Low Carbon Precincts Program, developed by the CRC for Low Carbon Living, aims to reduce the carbon footprint of urban systems. It will develop new knowledge and tools to enable the design of, and a market for, low-carbon, precinct-scale infrastructure.

Development requirements to ensure low carbon living and to meet the NSW Government target of net zero carbon emissions by 2050 will be established for the Aerotropolis at the precinct planning and master planning stages.

6.2 Urban cooling

Western Sydney is hotter and drier than other parts of Greater Sydney. To cool the Aerotropolis, planning will need to consider that:

- Water retained in the landscape requires a high level of pervious surfaces and better means to absorb rain and use water efficiently to increase transpiration.
- When water and the tree canopy are combined, the benefit is higher than if each is provided in isolation.
- In growing areas like the Aerotropolis, building mass can create significant urban heat island effects. Building reflectivity may provide a higher degree of urban cooling than canopy and water alone.

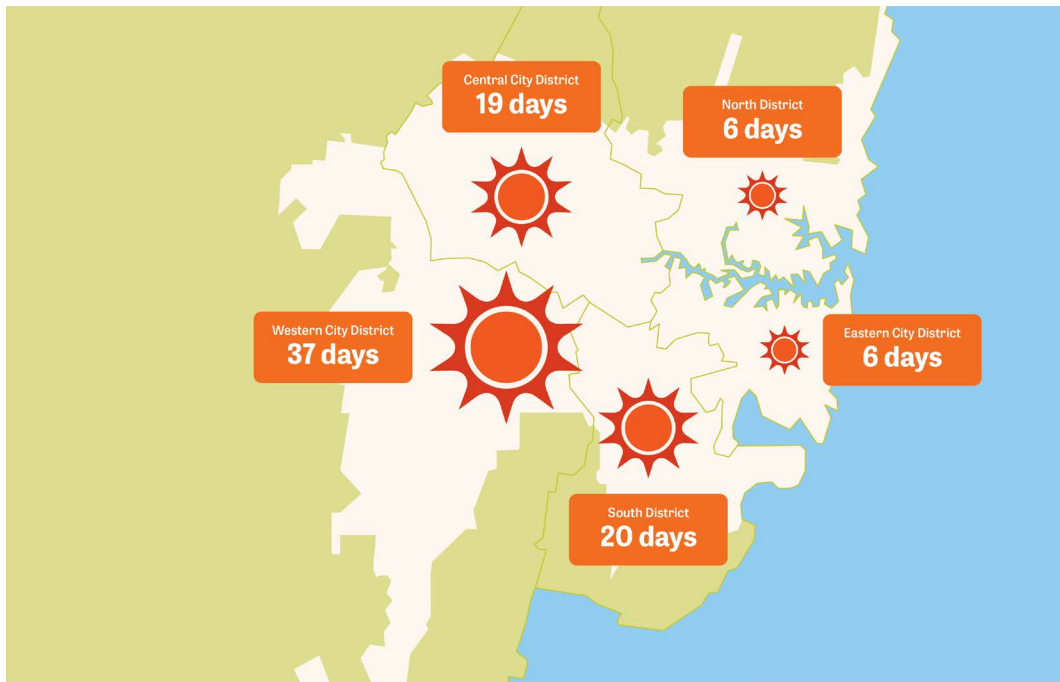


Figure 27: Hot days (over 35 degrees Celsius) in Greater Sydney in 2018-19
Source: Greater Sydney Commission

The optimum solution is to integrate tree canopy cover, water retention, permeable surfaces and high solar reflecting building materials into urban design. These requirements will be enforced at the precinct planning stage and controls included in the DCP.

6.3 Waterway health and management

Most of the small creeks that join Wianamatta-South Creek are characterised by ephemeral creeks with little flow between rainstorms. These pools and larger creek sections have deep pools of water year-round that water-based animals rely on.

Urban development could increase the volume and duration of flows entering waterways and increase pollution. Impacts could include erosion of creek banks and reduced aquatic and terrestrial ecosystems.

The *Western City District Plan* requires the application of a risk-based approach to manage the cumulative effects of development on the health of catchments. The NSW Government is using this approach to determine waterway health values for Wianamatta-South Creek in consultation with the catchment community. The values will be translated into appropriate water quality and flow targets. Further, an effective regulatory and policy framework will be

developed to protect the waterway's community environmental values. This will be detailed in precinct planning.

6.4 Hazard management and recovery

6.4.1 Climate change resilience

The effects of climate change pose challenges to ecosystems, communities and economy. All three levels of government have adopted mitigation and adaptation policies that acknowledge the need to plan for climate change.

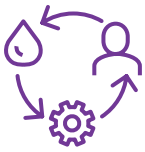
The extent and severity of impacts will vary and includes more days of extreme heat, longer bushfire seasons, more regular drought, increases to flooding depths and extent, sea level rise (inundation, storm surge and erosion) and more intense storms and cyclones. These are likely to impact biodiversity, food security, human settlements, wellbeing and economies.

Adaptation minimises vulnerability to climate and other hazards. Adaptation responses can vary depending on the type and severity of the hazard and the capacity of the community to adapt.

The Aerotropolis DCP, precinct planning, master planning and the ongoing review of these documents will guide the planning for a resilient and adaptable Aerotropolis.

6.4.2 Floodplain management

The NSW Government's Flood Prone Land Policy aims to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone land. The *NSW Floodplain Development Manual* (2005) guides the process of floodplain risk management. Floodplain risk management studies and plans identify and prioritise ways to reduce risk of damage from flooding.



Flood management should be integrated with urban and water system planning to leverage efficiencies and maximise community benefit.

The Blue-Green Grid provides an ideal opportunity to accommodate and manage flooding through innovative stormwater retention strategies without unnecessarily sterilising land.

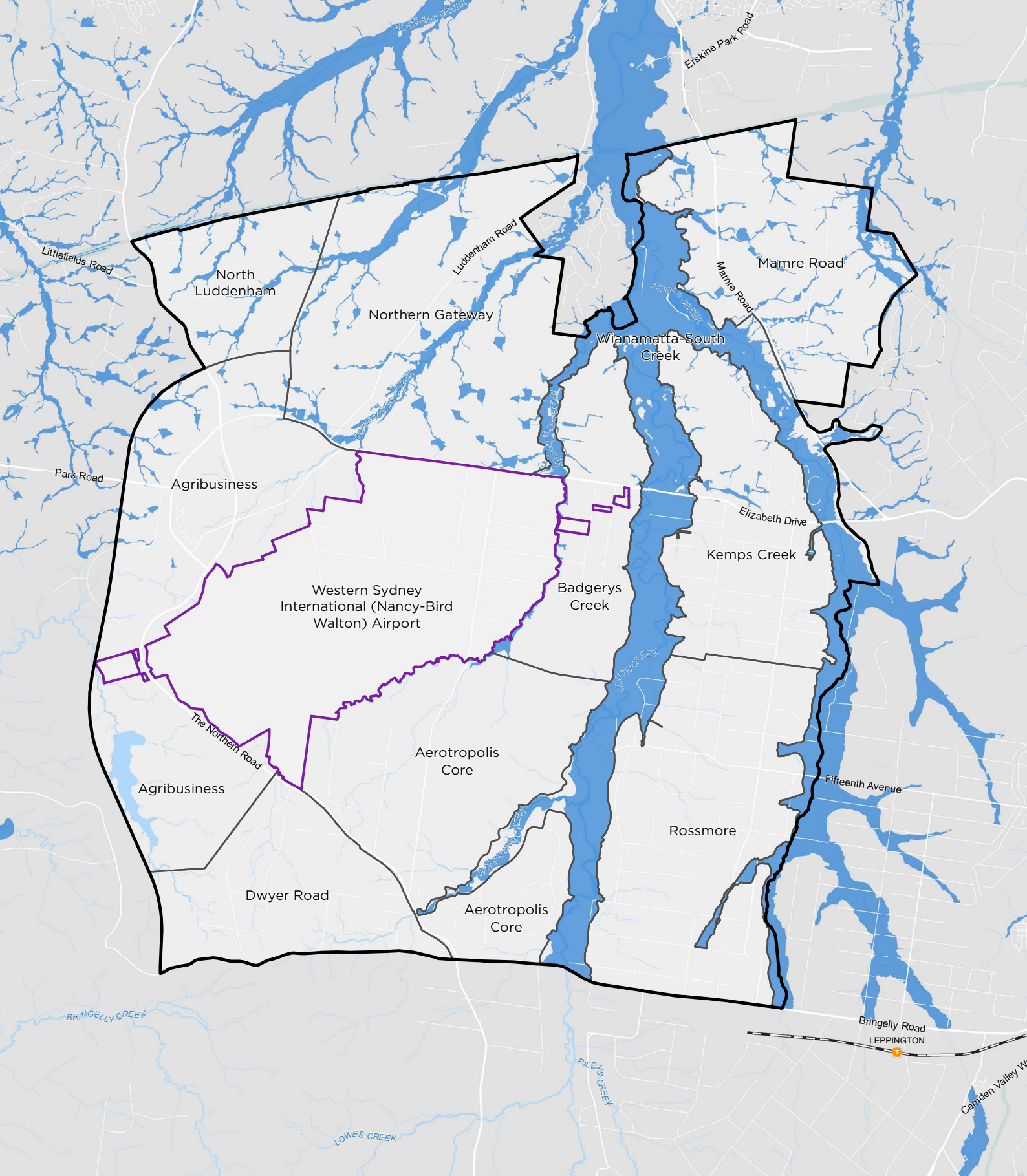
Flood management infrastructure and planning should account for climate change and the reforestation of the Blue-Green Grid as part of the landscape-led approach.

Precinct planning will need to consider floodplain risk management measures such as safe evacuation routes, cut and fill and development issues for the entire floodplain. Development controls will apply to land within the 1 in 100-year flood area in line with each Council's relevant policy.

The map on page 55 shows the flood extents for the Aerotropolis based on the 1 in 100-year flood area and are subject to future detailed precinct planning.





Figure 28: Example of naturalised creek edge
Source: Sydney Water



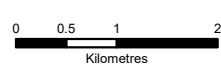


Flood Extent

Western Sydney Aerotropolis

-  Western Sydney Aerotropolis
-  Western Sydney International (Nancy-Bird Walton) Airport
-  Precinct Boundary
-  1 in 100 year Flood Area

**Flood extents are subject to detailed precinct planning*



Precinct planning

This Plan identifies 10 precincts based on opportunities and constraints as well as likely future character and connectivity.

Initial precincts

- Aerotropolis Core
- Northern Gateway
- Wianamatta-South Creek
- Badgerys Creek
- Agribusiness
- Mamre Road

Remaining precincts

- Dwyer Road
- Kemps Creek
- North Luddenham
- Rossmore

Submissions to the Stage 1 LUIIP, further investigations, and infrastructure timeframes have resulted in the following changes:

- **Wianamatta-South Creek Precinct**
The precinct boundary has generally been defined using 1 in 100 chance per year flood level data from Liverpool City Council and Penrith City Council, including areas containing protected existing native vegetation. In some areas, such as Thompson's Creek, the precinct is wider than the 1 in 100 chance per year flood to ensure a functional green area. Land no longer in this precinct is now included in the relevant adjoining precinct. The precinct name reflects the official dual name of Wianamatta-South Creek.
- **Badgerys Creek Precinct**
This is an initial precinct as investigations indicate its early release will support efficient infrastructure delivery. Additionally, most of this precinct will be affected by aircraft noise once the Airport begins operations.
- **Mamre Road Precinct**
The precinct boundary now includes additional land east of the former boundary and aligns the western boundary with the 1 in 100 chance per year flood extent. This precinct is now an initial precinct to help meet the demand for industrial land.

• Kemps Creek Precinct

The precinct boundary now excludes land to the east of Kemps Creek beyond the eastern boundary of Wianamatta-South Creek. This provides a clearly defined boundary for the Aerotropolis. Planning for this area will be progressed by Liverpool City Council.

• Agribusiness Precinct

The precinct boundary has been amended to remove 748 hectares of land in the south to create the Dwyer Road Precinct. It is now an initial precinct to reflect the opportunities of the Airport.

• Dwyer Road Precinct

This new precinct, formerly in the Agribusiness Precinct, reflects that the entire precinct is not needed for agribusiness activity. This also provides opportunities for this area to better relate to adjoining areas.

7.1 Common strategic outcomes and implementation strategies

7.1.1 Common strategic outcomes

While the Plan identifies expected planning outcomes and infrastructure strategies for each precinct, several strategic outcomes will generally apply to all precincts.

Productivity

- Provide well-designed employment precincts with active street frontages and a well-considered landscape and built form.
- Create buildings and landscaping of exemplary design and world-class energy efficiency.
- Plan for building heights to meet airport operation requirements.
- Adopt appropriate design and construction standards to reduce aircraft noise impacts in development up to the ANEC/ANEF 20 and above contours.

- Prohibit intensification of residential development within the ANEC/ANEF 20 and above contours.
- Embrace new and emerging technologies and support innovation in sustainable and resilient precincts.
- Support the transition of existing agricultural industries.
- Create places that support the right ecosystem for technology and innovation.
- Design that encourages engagement and collaboration.
- Appropriately stage and sequence development to align with infrastructure.

Sustainability

- Provide an urban tree canopy along open space corridors, major roads and streets to contribute to the 5 million trees for Greater Sydney by 2030 program.
- Provide blue and green corridors of private and public open space with active and passive recreation and community facilities.
- Maximise connections to the Wianamatta–South Creek corridor, Blue–Green Grid and regional parks.
- Enable innovative approaches to resource recovery and waste management, including appropriate urban design for collection facilities.
- Protect and restore and health of the Western Parkland City’s waterways.
- Integrate natural water retention processes into development.
- Leverage underlying topography and scenic values in development.
- Enhance the efficient use of energy, water and other resources, and renewable energy generate to achieve net zero emissions for the Aerotropolis.

Connectivity

- Adopt a finer grain layout to support movement and place outcomes for public transport, cycling, walking, local traffic and freight.

- Identify and protect transport corridors and adjacent areas.
- Provide well-integrated and accessible public transport hubs, interchanges and stops.
- Meet broader transport network outcomes for the Western Parkland City (refer to 3.2).
- Investigate how to achieve a high active and public transport mode share that balances car uses with public transport and amenity for cyclists and pedestrians.
- Avoid encroachment of urban development so that future infrastructure does not limit development opportunities or incorporate upfront measures to mitigate noise and visual impacts.
- Create active transport networks wherever possible to move away from private vehicle dependence.
- Place 4G and 5G (or other future technology) radio cells on buildings, smart poles or other infrastructure, including public transport infrastructure.

Liveability

- Create compact residential development that takes advantage of creek lines and other selected high amenity locations outside the 1 in 100 chance per year flood planning levels.
- Provide affordable housing consistent with the Region Plan.
- Integrate residential development with local services, public open and green space, retail and compatible commercial development.
- Provide safe, activated, stimulating and healthy, green landscaped and shaded streets and prioritise pedestrian, cycle and public transport movements.
- Create vibrant and liveable communities with public art and civic, community and cultural facilities that leverage high frequency public transport connections to the Airport and other centres in Greater Sydney.



The Aerotropolis Core will be a diverse, dynamic and sustainable global airport city

- Position local centres to maximise exposure to riparian lands, encouraging green public open space, human activity with passive surveillance and public safety.
- Plan for flexible employment hubs with supporting uses that create and enhance a sense of place.
- Ensure exemplary design quality and energy efficiency in all buildings, including requirements for articulation, visual interest and, where appropriate, street interaction.

7.1.2 Common implementation strategies

In addition to these common objectives, common implementation strategies will be undertaken.

Planning Partnership

- prepare detailed precinct plans (with relevant agencies)
- prepare a DCP to guide built form and public domain treatment, servicing strategies and the Wianamatta–South Creek interface (with relevant agencies)
- collaborate with utility providers and industry on best practice circular economy possibilities including energy generation, water recycling and liquid and solid waste solutions (with WCAA and relevant agencies).
- Plan for an increase in the proportion of homes within a 10-minute walk of quality public green and open space (with Department of Planning, Industry and Environment, WCAA and relevant agencies).
- establish an appropriate interface to Wianamatta–South Creek and maintain access to promote green open space and recreation uses (with Department of Planning, Industry and Environment, WCAA, local government and relevant agencies)

Department of Planning, Industry and Environment

- manage the 5 Million Trees program to increase urban canopy cover
- create development and conservation

areas consistent with strategic biocertification and strategic assessment and with biodiversity conservation measures and commitments in strategic biodiversity approvals

- plan for State and local infrastructure funding (with Planning Partnership, WCAA and Penrith and Liverpool councils).

7.2 Initial precincts – vision and land uses

7.2.1 Aerotropolis Core Precinct

The Aerotropolis Core will be a diverse, dynamic and sustainable global airport city with attractive places for workers, residents and visitors. It will be a place of choice to do business, a new employment-focused metropolitan centre with an industry focus on advanced manufacturing, research and development and industry led educational facilities. The Aerotropolis Core will also take advantage of its proximity to the airside and facilitate development of a cutting-edge aerospace and defence industries.

The Precinct will be centred around a new Sydney Metro station and be supported by retail, creative industries, civil and cultural facilities, and world-class public open spaces. Residential communities and other noise sensitive land uses will be located outside the ANEC/ANEF 20 and above contours, within 800 metres or a 10-minute walk of the Metro station. The Wianamatta–South Creek corridor will be a shaded, central lifestyle feature. Housing will be integrated with local services, retail and compatible commercial development that activates the ground plane.

Desirable land uses

Advanced manufacturing, defence and aerospace, research and development activity, high technology industry and infrastructure, education (including vocational and tertiary education); professional services, business incubator hubs, creative industries including ‘pop-up installations’ and festivals/events,

commercial offices, food and beverage, indoor and outdoor recreation and sports facilities, medium to high density residential near the Metro station; retail, community; civic, entertainment, cultural facilities; green open and public space on public and private lands; public and private medical services, visitor accommodation.*

Refer to page 62 for more detail.

7.2.2 Northern Gateway Precinct

The Northern Gateway will be a major airport interface, serving as a key strategic centre within the Western Economic Corridor – linking the Airport with the Western Parkland City Metropolitan Cluster through high frequency public transport, freight, road and rail connections. The Northern Gateway will harness existing and emerging economic opportunities catalysed by the Airport and build on the approved Sydney Science Park development to provide a variety of employment generating uses. Residential development will be located close to public transport and outside ANEC/ANEF 20 and above contours to ensure that airport operations are safeguarded, and residents have the opportunity to live in a 30-minute city. The Precinct will complement the Aerotropolis Core and will evolve as a centre focused on high technology incorporating health, education, knowledge and research.

Desirable land uses

High technology commercial enterprise/industry, warehousing and logistics, education, offices, retail, residential, health services, entertainment, tourism facilities, cultural and creative industries, green public and private open spaces, recreation and visitor accommodation.*

Refer to page 64 for more detail.

7.2.3 Wianamatta–South Creek Precinct

The Wianamatta–South Creek Precinct boundary has generally defined using 1 in 100 chance per year flood level data from Liverpool City Council and Penrith City Council which includes areas containing protected existing native vegetation. In some areas the precinct is wider than the 1 in 100 chance per year flood to ensure a functional green area. Land that was previously within this precinct outside the 1 in 100 flood extent is now included in the relevant adjoining precinct.

The Precinct is an important part of the broader Wianamatta–South Creek corridor, defined in the Region Plan vision for the corridor as the defining spatial element of the Western Parkland City. Protection of the Wianamatta–South Creek Precinct allows planning for the Aerotropolis to be structured around the landscape. The retention of water in the landscape, protection of significant remnant vegetation, and other Blue–Green Grid elements such regional parks will enable the greening of the Aerotropolis. The creation of a Blue–Green Grid will provide multiple opportunities for residents, workers and visitors to the area to benefit from improved amenity and liveability outcomes. Connectivity from Wianamatta–South Creek and its tributaries into the adjacent precincts will be landscaped to create extended green corridors, whilst noting the need to limit wildlife attraction within the vicinity of the Airport.

Desirable land uses

Water management, Open space, Recreation facilities, Pedestrian and cycle connectivity, Community and cultural facilities, environment protection, water management and restaurants or cafes.*

Refer to page 66 for more detail.

**Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.*

7.2.4 Badgerys Creek Precinct

Directly adjoining the Airport to the east, the Badgerys Creek Precinct will support airport operations, the new urban centre in the Aerotropolis Core to the south and the Northern Gateway to the west. The precinct will meet demand for a range of employment generating uses that benefit from its proximity to airport operations and the new urban centre, but do not require direct access to high capacity public transport. The precinct is not suitable for noise sensitive land uses such as residential, schools and hospitals. Defence and aerospace and technology-based industry which complements and supports the Aerotropolis Core may also locate here.

This precinct may initially support the infrastructure that enables the construction of the Airport and Aerotropolis. Some land uses, buildings and structures may be temporary in the short to medium term and transition to higher order uses in the longer term. New enabling industries to facilitate construction of the Aerotropolis may be permitted subject to interface treatments and an ability for the site to transition to higher order uses. Interface treatments may be required between existing rural industries and new land uses until they either transition to other uses or are modernised to co-exist with adjoining land uses. The precinct will be in a green setting with new green linkages and active transport opportunities between Badgerys Creek to the west and Wianamatta-South Creek to the east. Development should take advantages of views to these creek lines surrounding the precinct.

Desirable land uses

Defence and aerospace, advanced manufacturing activity, high technology industry, airport supporting development, local retail, Aerotropolis enabling industries, modernised resource recovery industries, light industrial, social infrastructure.*

Refer to page 68 for more detail.

7.2.5 Mamre Road Precinct

The Mamre Road Precinct is part of the WSEA and will be connected to the potential Western Sydney Freight Line. Its proximity to the M4 Motorway and Elizabeth Drive as well as its generally flat terrain makes it suitable for large floor plate employment and logistics uses. The Mamre Road Precinct is largely affected by aircraft noise and those parts within the ANEC/ANEF 20 and above contours are not suitable for noise sensitive land uses. Therefore, the precinct will be planned as an industrial warehousing and logistics precinct. The precinct could also present potential opportunities for an intermodal terminal serviced by the potential Western Sydney Freight Line.

The Mamre Road precinct will be zoned under the WSEA SEPP and have its own Development Control Plan but will remain within the boundaries of the Aerotropolis.

Desirable land uses

Warehousing and logistics, High technology industry, Manufacturing, Intermodal facilities, Circular economy uses.*

Refer to page 70 for more detail.

7.2.6 Agribusiness Precinct

The Agribusiness Precinct will skirt the western edge of the Airport and support the long-term retention and growth of agriculture and agribusiness in the Aerotropolis. The Precinct will build on existing agricultural operations and natural landscape character, acting as a catalyst for agricultural export from the region. The Precinct will retain significant peri-urban agricultural lands for production and enabling connections to a 24/7 international airport that will service an increasing demand nationally and internationally for high-quality fresh food, value-added pre-prepared meals and flowers. This high-technology precinct will drive opportunities for education and tourism. Being located within the Sydney

**Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.*



basin and close to an international airport will also enable visitors locally, domestically and globally to come and learn some of the cutting-edge processes occurring in the agriculture and agribusiness industry across Western Sydney. Design-led place-based planning at the precinct planning stage will help support existing rural landscapes and ensure biodiversity protection for remnant bushland vegetation. Part of the Agribusiness Precinct to the north of Elizabeth Drive and to the east of The Northern Road will provide opportunities for flexible employment uses given its proximity to the Northern Gateway Precinct.

Development within the Agribusiness Precinct will include uses that will benefit from opportunities for national and international trade. These uses may include:

- A world-leading integrated intensive production hub enabling the intensive production and value-adding of sustainable, high-quality fresh produce and pre-prepared meals.
- A fresh food hub bringing a diversified and expanded fresh food marketplace to the Aerotropolis, becoming a major distribution centre for fresh produce to domestic and export markets.
- A state-of-the-art integrated logistics hub creating land/air side linkages and a fully digital supply chain solution that will provide safe, secure and seamless connectivity for freight movements.
- A value-added food and pharma hub to enable processing and manufacturing businesses to uplift value by shifting from a commodity-focused to a value-added sector approach.
- A proposed Australian Centre of Excellence in food innovation creating an industry-led national powerhouse in food science, technology, engineering and mathematics (Food-STEM).
- Commercial and retail development ancillary to agriculture and agribusiness.

Desirable land uses

Agribusiness, Agriculture, Intensive fresh and value-added food production, Food innovation technology and research, Food production and processing, Fresh food produce markets, Warehousing and logistics, High technology Industry, Ancillary rural residential, Complementary offices and retail, Education, Circular economy enabling infrastructure, Biosecurity enabling infrastructure, Integrated logistics hub.*

Refer to page 71 for more detail.

7.3 Expected planning outcomes – initial precincts

Key considerations, strategic outcomes and implementation strategies for the initial precincts are detailed on pages 62-75.

Figure 29: An example of what the agribusiness could look like.

**Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.*

7.3.1 Aerotropolis Core Precinct

Liverpool LGA



Total area
1,382
hectares



Potential jobs
50,000
to
60,000



Potential residents
20,000
to
24,000

Key considerations

- Aircraft noise and its impact on land uses.
- Connections across Thompsons and Wianamatta–South Creek.
- Safeguarding Airport operations.
- Gradual residential development to support the vibrancy, social cohesion and night-time economy of the centre.
- Transition from initial development types to higher order commercial development.
- Infrastructure servicing and phasing to optimise investment and delivery.
- Early activation.
- Opportunities to protect and create urban tree canopy.
- Business attraction and ecosystems.
- Higher mode share of public and active transport.
- Innovative and adaptable housing stock.
- Integrated land use and transport planning, as well as movement and place outcomes that activate the ground plane.

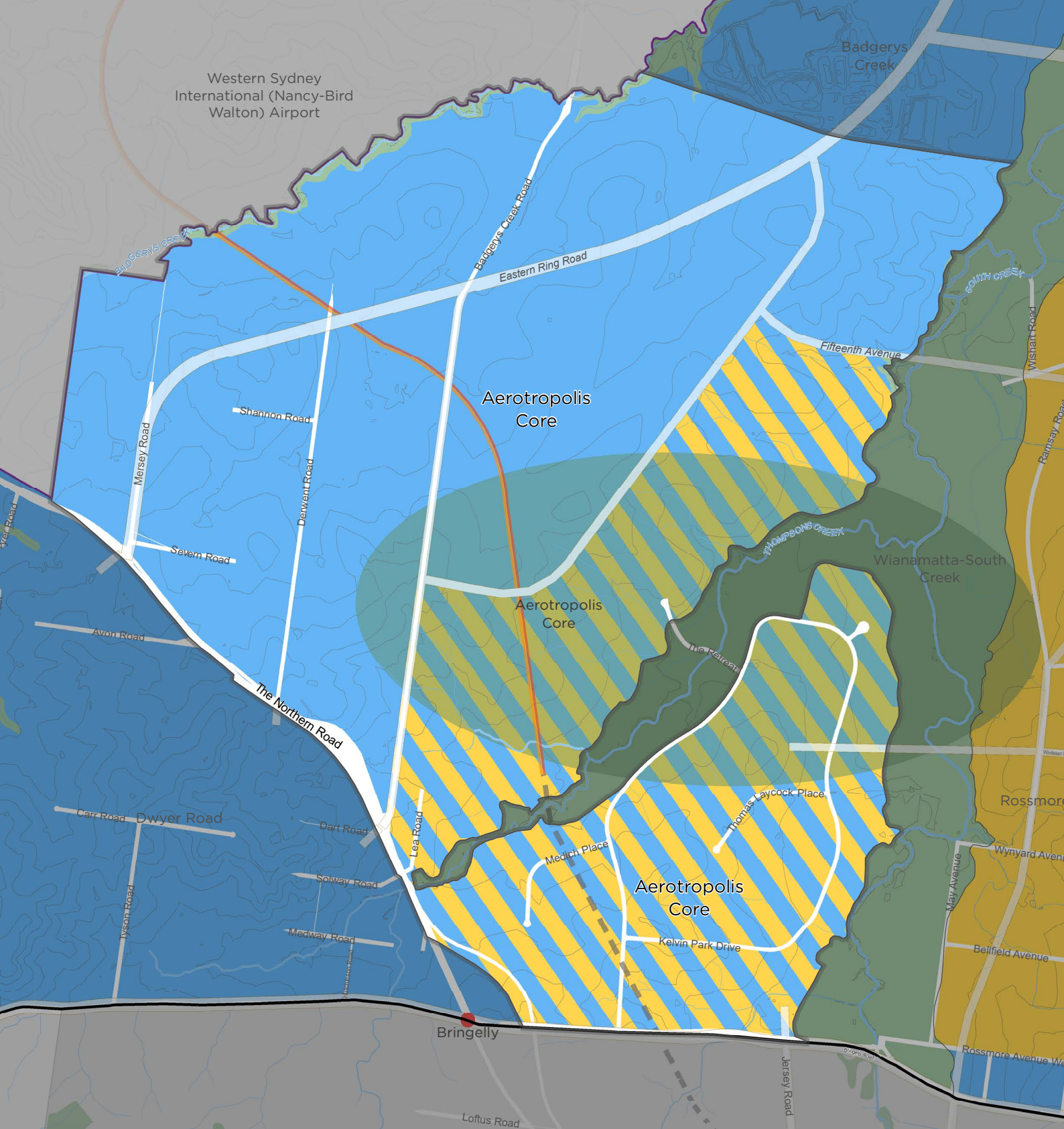
Strategic Outcomes

- Create a major metropolitan 24-hour, vibrant, global centre and robust local economy built around professional services, high technology advanced manufacturing, research, training, education and creative industries.
- Contribute to urban canopy and maximise connections to the Wianamatta–South Creek corridor and Blue–Green Grid.
- Weave digital technologies into all facets of the working, social and residential environment.
- Create an aerospace and defence research and development industry cluster in the fringe of the Airport
- Provide high frequency public transport and efficient movement corridors to other centres in Greater Sydney.
- Plan for a centre for excellence in STEM-based education including secondary, vocational (VET) and tertiary education facilities.
- Include aviation industries supporting the Airport.
- Provide an entertainment quarter with opportunities to interface with the Wianamatta–South Creek corridor.
- Create opportunities for tourism and conference uses and facilities.
- Protect transport corridors early to minimise possible land use conflicts and allow the orderly and timely provision of infrastructure.

- Create public spaces with civic, community and cultural facilities, public art, pop-up installations and creative placemaking.
- Activate the station precincts and respond to and leverage the high frequency public transport connections (including Sydney Metro) to the Airport and other centres in Greater Sydney.

Implementation Strategies

- Prepare detailed city centre master plan and transport corridor protection (Planning Partnership and Western City and Aerotropolis Authority).
- Further investigation into potential station locations to service the centre (Sydney Metro, Transport for NSW).
- Completion of investigations to confirm transport networks servicing the Aerotropolis (Sydney Metro, Transport for NSW).
- Investigate transport networks servicing the Airport and Aerotropolis Core including rapid bus connections to Liverpool, Greater Penrith, Blacktown and Campbelltown–Macarthur as well as rail connections to St Marys, Parramatta, Leppington and Macarthur (Transport for NSW).
- Investigate incentives for business investment (Western City and Aerotropolis Authority and Department of Planning, Industry and Environment).
- Use flexible land use zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Develop and prepare a public art strategy and public domain strategy (Western City and Aerotropolis Authority and Department of Planning, Industry and Environment).
- Coordinated infrastructure and services plan (Department of Planning, Infrastructure and Environment and Western City and Aerotropolis Authority).
- Investigate best practice housing stock suitable for innovation and commercial districts (Planning Partnership, Western City and Aerotropolis Authority and Transport for NSW).
- Develop Affordable Housing Scheme to deliver affordable housing as part of all residential development (Planning Partnership).



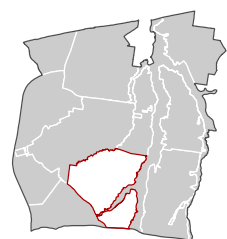
Structure Plan - Aerotropolis Core

Western Sydney Aerotropolis

0 0.2 0.4 0.8
Kilometres



- | | |
|---------------------------------------------------------------------|--------------------------------------------|
| Western Sydney Aerotropolis | Proposed Future Rail Links (Investigation) |
| Western Sydney International (Nancy-Bird Walton) Airport | Proposed Transport Corridor |
| Topographic Contour 5m | Agribusiness |
| Regional Parkland (Investigation) | Environment and Recreation |
| Key Network Upgrades | Flexible Employment |
| Proposed Sydney Metro Greater West | Urban Land |
| Potential East-West Rail Link, Stabling and Critical Infrastructure | Mixed Flexible Employment & Urban Land |



7.3.2 Northern Gateway Precinct

Penrith LGA



Total area
1,616
hectares



Potential jobs
19,000
to
21,000



Potential residents
8,000
to
10,000

Key considerations

- Creation of a permeable network of connected spaces
- Early identification and protection of transport corridors
- Treatment of major infrastructure corridors to complement the landscape and topography
- Aircraft Noise – ANEC/ANEF restrictions
- Safeguarding for Airport operations
- Flood management
- Interface with creeks and riparian corridors.
- Supporting Metro investment with potential station focused developments and public places.
- Address the interface with Twin Creeks.

Strategic Outcomes

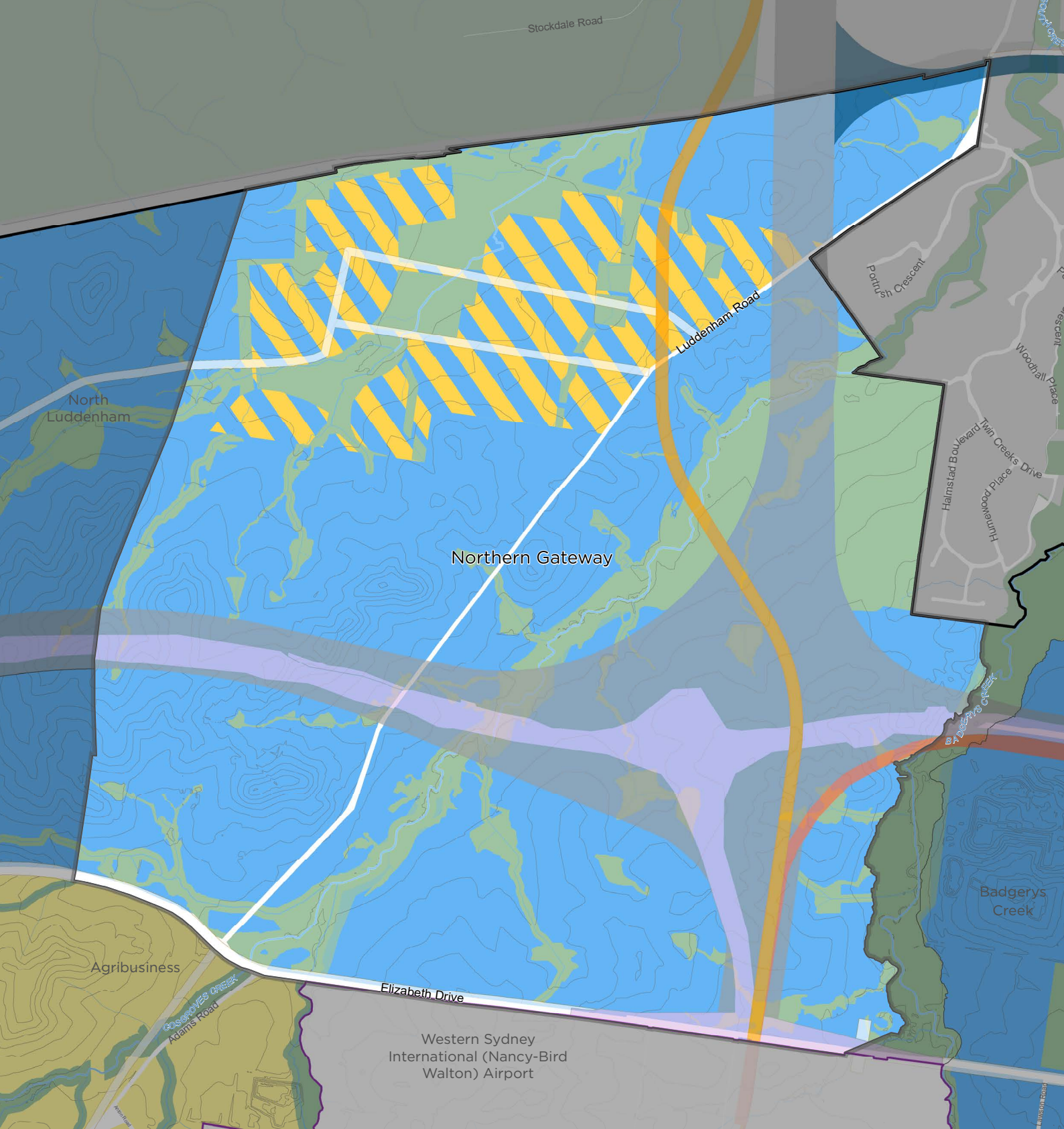
- Plan for and develop a major airport interface with attractive entry points to reflect the gateway to the Airport, and the first presentation to those leaving the Airport's main entrance/exit point.
- Support the Western Economic Corridor linking St Marys, the Airport and Aerotropolis Core.
- A higher order centre that focusses on education research and development and high technology.
- Minimise conflict between airport operations and land use/development outcomes.
- Limit private access points from Elizabeth Drive, The Northern Road and Luddenham Road.
- Configure road layout and subdivision pattern to support Elizabeth Drive and as an east-west city-serving corridor for moving people and goods. Transport for NSW to lead and collaborate on Elizabeth Drive upgrade, function and configuration.
- Limit residential development to the centre and locate near public transport in locations outside ANEC/ANEF 20 and above contours.
- Provide for medium density housing in walking distance to public transport with appropriate amenity to support the centre and integrate with commercial and employment opportunities.
- Locate educational establishments in close proximity to public transport and having regard to noise considerations. Where possible, educational

establishments should be located away from major movement corridors and arterial connections.

- Provide safe, activated, stimulating and healthy, landscaped and shaded streets and urban canopy.

Implementation Strategies

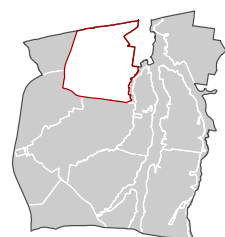
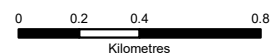
- Use flexible land use zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Protection of transport corridors and prevent possible conflict with adjoining land use, including, but not limited to, the proposed Sydney Metro Greater West Stage 1, proposed M12 Motorway, Elizabeth Drive and potential East-West rail link (Transport for NSW and Department of Planning, Industry and Environment).
- All stages of development and sub-precincts are set in a grid layout to support public transport, cycling and pedestrians (Planning Partnership and Transport for NSW).
- Further investigation into potential station location/s to service the precinct (Sydney Metro, Transport for NSW)
- Develop a public domain strategy along Elizabeth Drive (Department of Planning, Industry and Environment and Transport for NSW).
- Landscaping along major transport corridors, contributing to urban tree canopy and amenity, including mature trees retained along Elizabeth Drive, subject to road safety considerations and airport safeguarding (Planning Partnership and Department of Planning, Industry and Environment).
- Access points rationalised to connect via the new local street network to service private development. Minimise direct development site access from Elizabeth Drive, The Northern Road and Luddenham Road (Planning Partnership).
- Road layout and subdivision pattern supports Elizabeth Drive as an east-west city-serving corridor for moving people and goods (Planning Partnership).
- Collaborate with Transport for NSW (lead) on the Elizabeth Drive upgrade, function and configuration (Planning Partnership).



Structure Plan - Northern Gateway

Western Sydney Aerotropolis

- | | |
|---------------------------------------------------------------------|------------------------------------------------|
| Western Sydney Aerotropolis | Potential Western Sydney Freight Line Corridor |
| Western Sydney International (Nancy-Bird Walton) Airport | Agribusiness |
| Topographic Contour 5m | Environment and Recreation |
| Key Network Upgrades | Flexible Employment |
| Proposed Sydney Metro Greater West | Mixed Flexible Employment & Urban Land |
| Potential East-West Rail Link, Stabling and Critical Infrastructure | |
| Proposed M12 Motorway Corridor | |
| Proposed Transport Corridor | |



7.3.3 Wianamatta–South Creek Precinct

Liverpool and Penrith LGA



Total area
1,392
hectares



Potential jobs
Minimal



Potential residents
No additional dwellings – lawfully commenced uses (e.g. approved dwellings) are protected under existing use rights under the *EP&A Act 1979*.

Key considerations

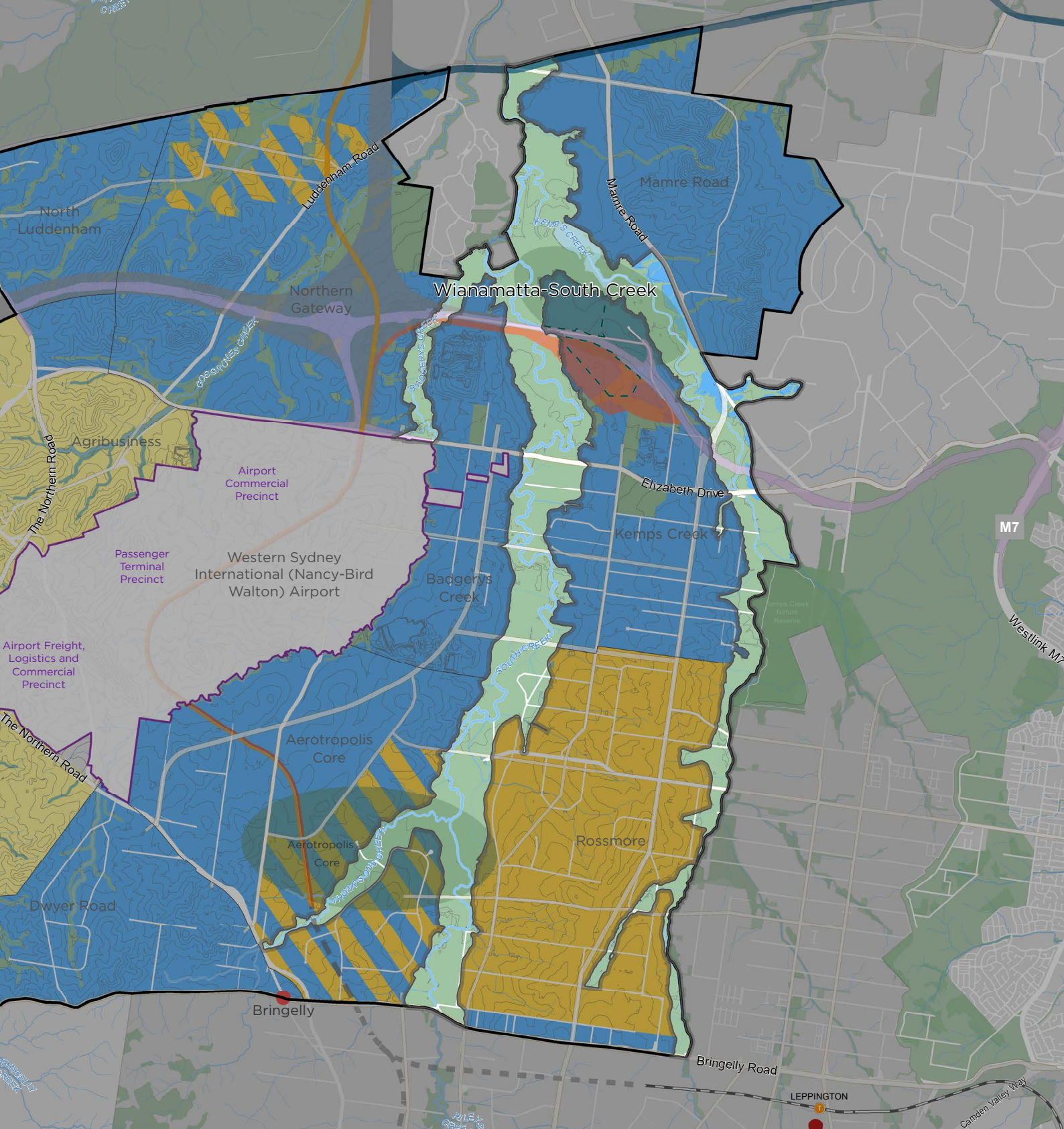
- Aircraft noise
- Flood management
- Interface with proposed M12 Motorway, proposed Sydney Metro Greater West Stage 1, the proposed Outer Sydney Orbital and potential Western Sydney Freight Line.
- Opportunity for public acquisition to support the open space needs of the Aerotropolis.
- Providing amenity whilst in private ownership.
- Viable management regime.
- Safeguarding Airport operations.
- Infrastructure operation and maintenance access requirements.

Strategic Outcomes

- Establish the Wianamatta–South Creek corridor as the structuring blue and green infrastructure spine of the Aerotropolis and broader Western Parkland City.
- Establish a landscape buffer on the western boundary utilising the Badgerys Creek corridor.
- Manage the health of the waterway to gain iconic ecological outcomes as detailed by the risk-based framework.
- Protect existing mature trees and enhance urban tree canopy.
- Improve waterway health.
- Provide high quality public green and open space with a particular focus on Elizabeth Drive to reflect the main approach to the Airport and Fifteenth Avenue to be upgraded to an attractive landscaped boulevard.
- Reforestation of riparian lands.

Implementation Strategies

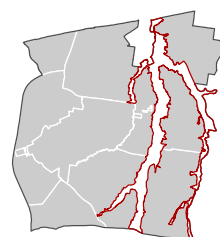
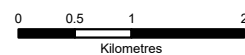
- Address interface with and activate Wianamatta–South Creek open space corridor through precinct planning (Planning Partnership).
- Identify appropriate east-west crossings of Wianamatta–South Creek, particularly active and public transport connections (Planning Partnership and Transport for NSW).
- Prepare a public domain strategy for Elizabeth Drive (Department of Planning, Industry and Environment and Transport for NSW).
- Retain appropriate landscaping along existing streets (Transport for NSW).
- Develop stormwater management and floodplain management strategy for Blue–Green Grid that contemplates new crossings, additional trees and vegetation, climate change, water in the landscape, waterway health and biodiversity conservation and stormwater retention strategies (Planning Partnership).



Structure Plan - Wianamatta-South Creek

Western Sydney Aerotropolis

- | | |
|---------------------------------------------------------------------|------------------------------------------------|
| Western Sydney Aerotropolis | Proposed Future Rail Links (Investigation) |
| Western Sydney International (Nancy-Bird Walton) Airport | Proposed M12 Motorway Corridor |
| Topographic Contour 5m | Proposed Transport Corridor |
| Regional Parkland (Investigation) | Potential Western Sydney Freight Line Corridor |
| Key Network Upgrades | Agribusiness |
| Critical Utility / Infrastructure (Investigation) | Environment and Recreation |
| Proposed Sydney Metro Greater West | Flexible Employment |
| Potential East-West Rail Link, Stabling and Critical Infrastructure | Urban Land |
| | Mixed Flexible Employment & Urban Land |



7.3.4 Badgerys Creek Precinct

Liverpool and Penrith LGA



Total area
612
hectares



Potential jobs
9,000
to
11,000



Potential
residents
No additional
dwellings

Key considerations

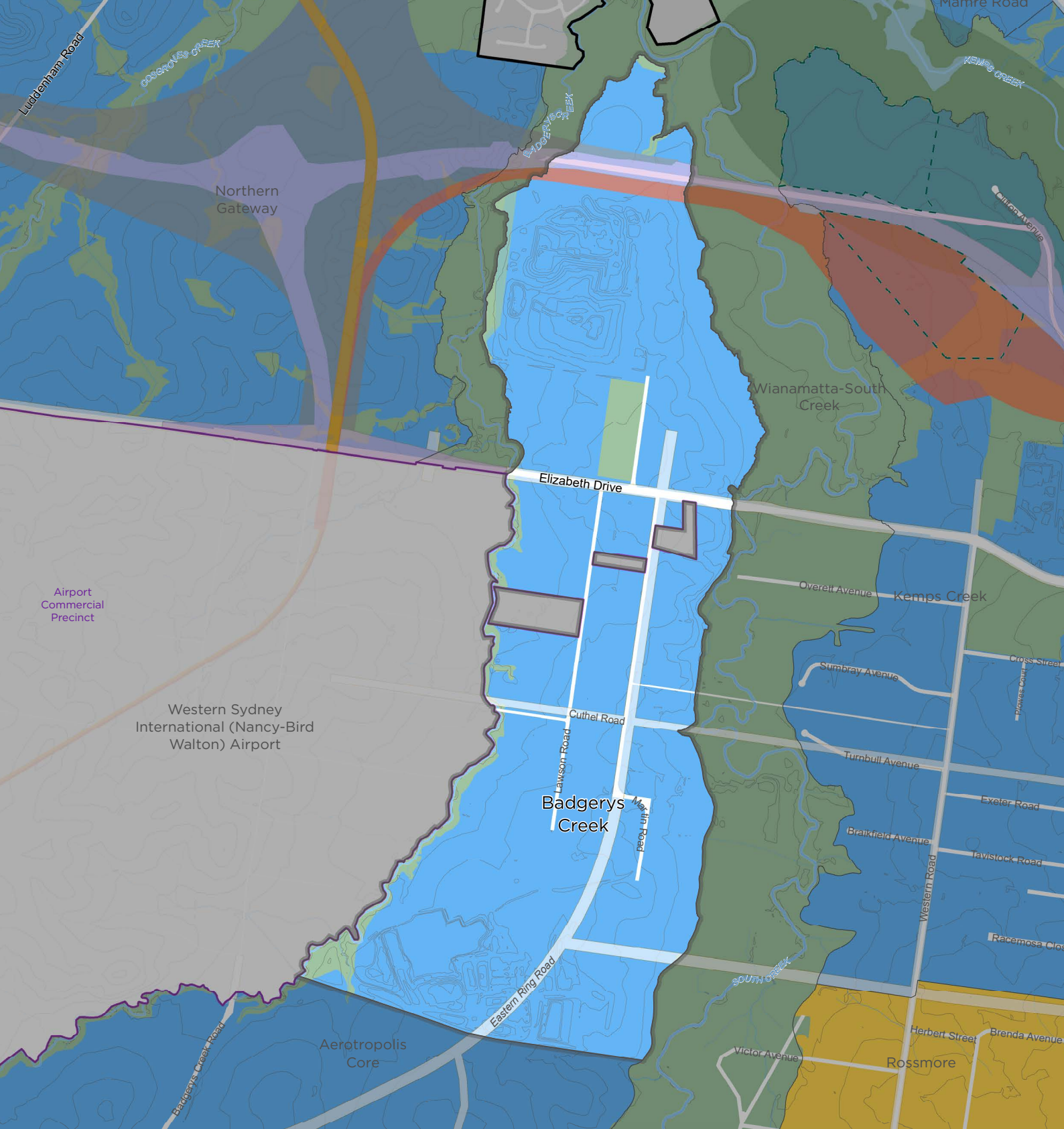
- Aircraft noise
- Interface with Badgerys Creek and Wianamatta-South Creek.
- Aboriginal cultural significance of the convergence of the creek and tributary.
- Supporting existing rural industry during the gradual transition to other employment uses.
- Safeguarding Airport operations.
- Opportunity for heavier industries that require larger buffers and to more sensitive uses.

Strategic Outcomes

- Provide an appropriate and activated interface with Wianamatta-South Creek.
- Airport Ring Road(s) and access to Airport Commercial Precinct.
- Consider interface treatments between existing quarrying operations and adjoining development.
- Allow enabling industries to facilitate construction of Aerotropolis to locate here with appropriate interface treatments to adjoining development.
- Provide a mix of commercial and light industrial activities to support the Airport which can adapt to higher order uses over time
- Facilitate high technology industrial development which may include defence and aerospace to support the operations in the Aerotropolis Core.
- Provide appropriate landscaping along Elizabeth Drive to reflect a major entry to the Aerotropolis, subject to Airport safeguarding requirements.
- Rationalise access points on Elizabeth Drive and connect to the local road network to service private development
- Support Elizabeth Drive as a city serving road corridor through an appropriate road layout and subdivision pattern.

Implementation Strategies

- Deliver development and conservation areas in accordance with the approved strategic biocertification and strategic assessment consistent with the biodiversity conservation measures and commitments identified in the Strategic Biodiversity approvals (Department of Planning, Industry and Environment).
- Protect transport corridors and prevent possible conflict with adjoining land uses, including the proposed M12 Motorway and potential East-West rail link (Planning Partnership and Transport for NSW).
- Investigate economic incentives for business investment (Department of Planning, Industry and Environment and Western City and Aerotropolis Authority).
- Use flexible land use zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).

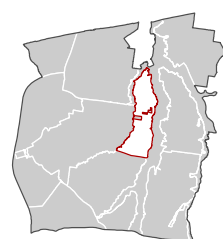


Structure Plan - Badgerys Creek

Western Sydney Aerotropolis

- | | |
|----------------------------------------------------------|---------------------------------------------------------------------|
| Western Sydney Aerotropolis | Potential East-West Rail Link, Stabling and Critical Infrastructure |
| Western Sydney International (Nancy-Bird Walton) Airport | Proposed M12 Motorway Corridor |
| Topographic Contour 5m | Proposed Transport Corridor |
| Regional Parkland (Investigation) | Environment and Recreation |
| Key Network Upgrades | Flexible Employment |
| Critical Utility / Infrastructure (Investigation) | Urban Land |
| Proposed Sydney Metro Greater West | |

0 0.2 0.4 0.8
Kilometres



7.3.5 Mamre Road Precinct

Penrith LGA



Total area
1,002
hectares



Potential jobs
17,000



Potential residents
No additional dwellings

Key considerations

- Aircraft noise
- Safeguarding for Airport operations
- Interface with sensitive land uses to north, east and west.
- Interface with rural residential development in Mount Vernon.
- Interface with Wianamatta–South Creek.
- Appropriate staging of development to align with infrastructure provision.
- Implementation of WSEA uses.
- Management of vehicle movements.

Strategic Outcomes

- Opportunities for logistics and distribution, connecting Western Sydney to the broader freight network.
- Support the future operations of the Airport through enabling export freight and logistics.
- Protect the 24-hour operation of the airport by enabling industrial uses and prohibiting noise sensitive uses only to locations outside the ANEC/ANEF 20 and above contours.
- Zoning to prioritise warehousing and distribution to support freight and logistics movements.
- Investigate the potential for a new Western Sydney Intermodal Terminal, with direct connections to potential Western Sydney Freight Line and quality connections to the motorway network.
- Protect a Western Sydney Freight Line corridor to preserve freight and distribution opportunities.
- Protect the future operations of the proposed intermodal terminal from encroachment by incompatible land uses
- Promote connectivity between the WSEA and other precincts in the Aerotropolis.

Implementation Strategies

- Minimise potential for land use conflict by restricting incompatible land uses (Department of Planning, Industry and Environment).
- Establish a buffer on eastern boundary with rural-residential development to ensure an appropriate interface (Department of Planning, Industry and Environment).
- Ensure delivery of warehouse development to support the proposed intermodal terminal through timely rezoning (Department of Planning, Industry and Environment).
- Planning for the Intermodal Terminal will provide for the operational requirements of a viable terminal site, including a minimum site area of approximately 100 hectares (measuring up to 2 km in length and at least 500 metres in width) (Department of Planning, Industry and Environment).
- Maximise flexibility in operating conditions for future development. (Department of Planning, Industry and Environment).
- Continue planning for the Southern Link Road Network (Department of Planning, Industry and Environment).

The Department of Planning, Industry and Environment is responsible for planning the Mamre Road Precinct, which will be zoned under the WSEA SEPP. A draft Structure Plan for the Precinct was placed on public exhibition in November 2019.

7.3.6 Agribusiness Precinct

Liverpool and Penrith LGA



Total area
1,572
hectares



Potential jobs
8,000
to
10,000



Potential residents
Minimal,
subject to
detailed
precinct
planning

Key considerations

- Aircraft noise
- Safeguarding for Airport operations
- Supporting existing rural industry to minimise land use conflicts
- Incorporating existing rural landscape, sustainability and biodiversity values
- Recognition of existing communities, such as Luddenham
- Wildlife attraction
- Biosecurity

Strategic Outcomes

- Provide a world-class agriculture and agribusiness precinct that will deliver fresh and value-added Australian food production from farm gate to the global market.
- Provide an integrated intensive production hub and state of the art integrated logistics hub to deliver a multi-modal supply chain solution for agricultural products to Greater Sydney, NSW and Australia.
- Enable smart city and digital integration into research, education and logistics.
- Protect the character and history of the Luddenham Village.
- Accommodate agricultural value-added industries and freight and logistics facilities that benefit from access to the proposed Outer Sydney Orbital and air-side access to the Airport.
- Integrate sustainable energy, waste and water as well as circular economy design principles into development and operations.
- Support and add value to the effective ongoing agricultural industry operations and viability across the Western Parkland City and beyond (across NSW).
- Provide for the movement and storage of agricultural commodities that should be connected to the commercial entrance of the Airport.
- Allow for the development of integrated food supply chain related industries particularly those that rely on the skills of and proximity to a growing population in the Western Parkland City.
- Facilitate education, research and development and high technology land uses associated with food production and processing.
- Capitalise on the increasing domestic and international demand for high-quality fresh food and value-added pre-prepared meals.
- Enable a road layout and subdivision pattern that supports the movement, storage and processing of agricultural goods and produce into and out of the Western Parkland City.
- Allow for limited residential development that is ancillary to Agricultural and Agribusiness operations outside of the ANEC/ ANEF 20 and above contours.
- Address any potential for land use conflict between adjoining land uses as a result of future development, including airport operations.
- Deliver an urban tree canopy along important corridors to contribute to the amenity of the area.
- Enable innovative approaches to sustainability outcomes including water sensitive design, resource and liquid and solid waste management and adaptable and durable credentials as a key driver for the design and function of the precinct.
- Allow for the sustainable and holistic development of agritourism product and experiences within the precinct.
- Early protection of transport corridors to minimise possible land use conflict with adjacent areas and ensure the orderly and timely provision of infrastructure.

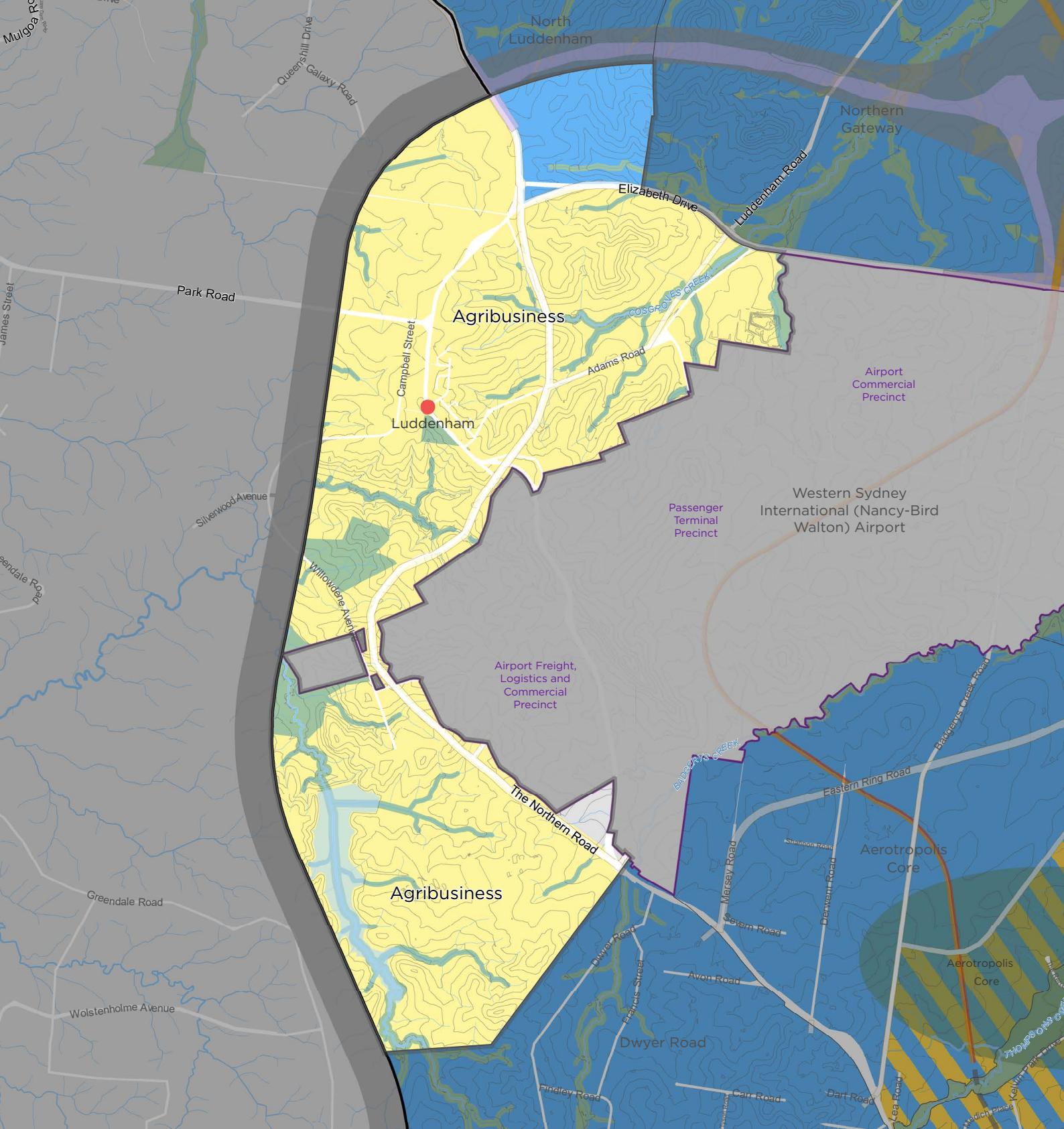


Figure 30:

The Agribusiness precinct will service an increasing demand nationally and internationally for high-quality fresh food.

Implementation Strategies

- Collaborate with the Luddenham Village community as part of precinct planning to understand and manage expectations of village character and the rate/extent of change (Planning Partnership).
- Use flexible zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Encourage fresh food markets in appropriate locations with direct access to the Airport and associated tourism opportunities. (Planning Partnership and Western City and Aerotropolis Authority).
- Establish a transport network layout that facilitates the timely movement and processing of goods and produce, as well as supporting public transport, cycling and pedestrians with appropriate amenity (Planning Partnership, Western City and Aerotropolis Authority and Transport for NSW).
- Address the interface between the proposed Outer Sydney Orbital and The Northern Road through precinct planning to ensure the Agribusiness Precinct retains connection with the rural land and Biostrategic Agricultural Land to the west (Planning Partnership and Transport for NSW).
- Address the interface and relationship with the Western Sydney Airport freight services and airport logistics through precinct planning (Planning Partnership and Western City and Aerotropolis Authority).
- Enable an interconnected relationship between the Agribusiness Precinct and MRA and their planning requirements (Planning Partnership, Western City and Aerotropolis Authority and Department of Planning, Industry and Environment).
- Provide a public domain strategy for the entire precinct (Planning Partnership and Western City and Aerotropolis Authority).
- Put in place measures to prevent conflict with adjoining land uses as a result of future development, including aircraft noise and airport operations, by restricting incompatible land uses (Planning Partnership and Department of Planning, Industry and Environment).
- Investigate the development of an agritourism strategy for the precinct (Planning Partnership and Western City and Aerotropolis Authority).

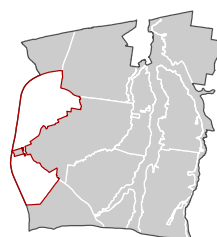


Structure Plan - Agribusiness

Western Sydney Aerotropolis

- | | |
|---------------------------------------------------------------------|--------------------------------------------|
| Western Sydney Aerotropolis | Proposed Future Rail Links (Investigation) |
| Western Sydney International (Nancy-Bird Walton) Airport | Proposed M12 Motorway Corridor |
| Topographic Contour 5m | Proposed Transport Corridor |
| Regional Parkland (Investigation) | Agribusiness |
| Key Network Upgrades | Environment and Recreation |
| Proposed Sydney Metro Greater West | Flexible Employment |
| Potential East-West Rail Link, Stabling and Critical Infrastructure | Mixed Flexible Employment & Urban Land |

0 0.325 0.65 1.3
Kilometres



7.4 Remaining precincts – vision and land uses

Although not initial precincts, planning for the remaining precincts will continue to be informed based on a series of market and industry studies against their geographic and locational characteristics. The timing of precinct planning for the remaining precincts will be determined by the timing of infrastructure provision and the amount and nature of development in adjoining areas. Existing rural land use zones will be retained until precincts are rezoned but will remain subject to Ministerial Directions 3.5 (Development Near Regulated Airports and Defence Airfields) and 7.8 (Implementation of *Western Sydney Aerotropolis Interim Land Use and Infrastructure Plan*) (as amended from time to time). The vision and desirable land uses for the remaining precincts is provided below.

7.4.1 Dwyer Road Precinct

The Dwyer Road Precinct is located south of the Agribusiness Precinct, west of the Aerotropolis Core and north of the Bringelly local centre. It is anticipated that the Dwyer Road Precinct will be a flexible employment precinct adjacent to the major economic centre of the Aerotropolis Core and the Airport. Precinct Planning will acknowledge the existing rural village character of Bringelly and support current agricultural operations with a plan for a sustainable transition to employment uses over time. A pedestrian and cycle network will be provided to the Aerotropolis Core and upgrades to The Northern Road, Bringelly Road and the proposed Outer Sydney Orbital will provide improved vehicle access.

Desirable land uses

High technology Industry, Commercial offices, Small and medium enterprises, Urban services, Warehousing and logistics, Food technology and research, Food production and processing, Agribusiness and Fresh food produce markets.*

Refer to page 76 for more detail.

7.4.2 Kemps Creek Precinct

The Kemps Creek Precinct will create opportunities for flexible employment development connected to residential communities in the south, Aerotropolis Core, the Airport and other centres such as Liverpool CBD. It is anticipated that the precinct will be appropriate for mixed commercial development such as smaller innovative and creative industries that seek more affordable, out of centre accommodation with accessibility and amenity. The regional park investigation areas and the Wianamatta-South Creek corridor will provide opportunities for recreation and amenity and link to the broader Western Sydney Parklands.

Desirable land uses

Small and medium enterprises, Creative industries, High technology industries, Urban services.*

Refer to page 78 for more detail.

7.4.3 North Luddenham Precinct

The North Luddenham Precinct will leverage from its proximity to the proposed Outer Sydney Orbital the Agribusiness and Northern Gateway precincts and the Airport to be an area focused on uses such as high technology, research and development associated with food production and processing.

**Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.*

Desirable land uses

High technology Industry, Commercial offices, Small and medium enterprises, Urban services, Warehousing and logistics, Food technology and research, Food production and processing, Agribusiness and Fresh food produce markets.*

Refer to page 80 for more detail.

7.4.4 Rossmore Precinct

The Rossmore Precinct is located close to the Aerotropolis Core and the expansive open space network of Wianamatta-South Creek. Rossmore will be home to mixed living communities, nestled within a productive peri-urban landscape, with a diversity of housing provided to meet changing needs. Housing and jobs will be provided around key compact mixed-use centres served by high-frequency public transport and open space, creating walkable and amenity-rich communities. There is significant residential development capacity in residential areas adjoining the precinct outside of the Aerotropolis meaning that development in this precinct is unlikely to occur in the short to medium term. There will be a focus on providing smart and sustainable housing with connectivity and green design at the forefront of new developments. Affordable housing will be provided to meet the needs of key workers and those on low-incomes. A generous open space and creek network will create opportunities for walkability and amenity.

Desirable land uses

Residential, Small and medium enterprises, Creative industries, High technology industries, Urban services, Community and cultural facilities, Market gardens, Local health and education, retail, open space, schools*

Refer to page 82 for more detail.

7.5 Expected planning outcomes – remaining precincts

Key considerations, strategic outcomes and implementation strategies for the remaining precincts are detailed on pages 76-83.

Figure 31: The open space and creek network will create opportunities for walkability and amenity.
Source: Sydney Water



**Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.*

7.5.1 Dwyer Road Precinct

Liverpool LGA



Total area
748
hectares

Key considerations

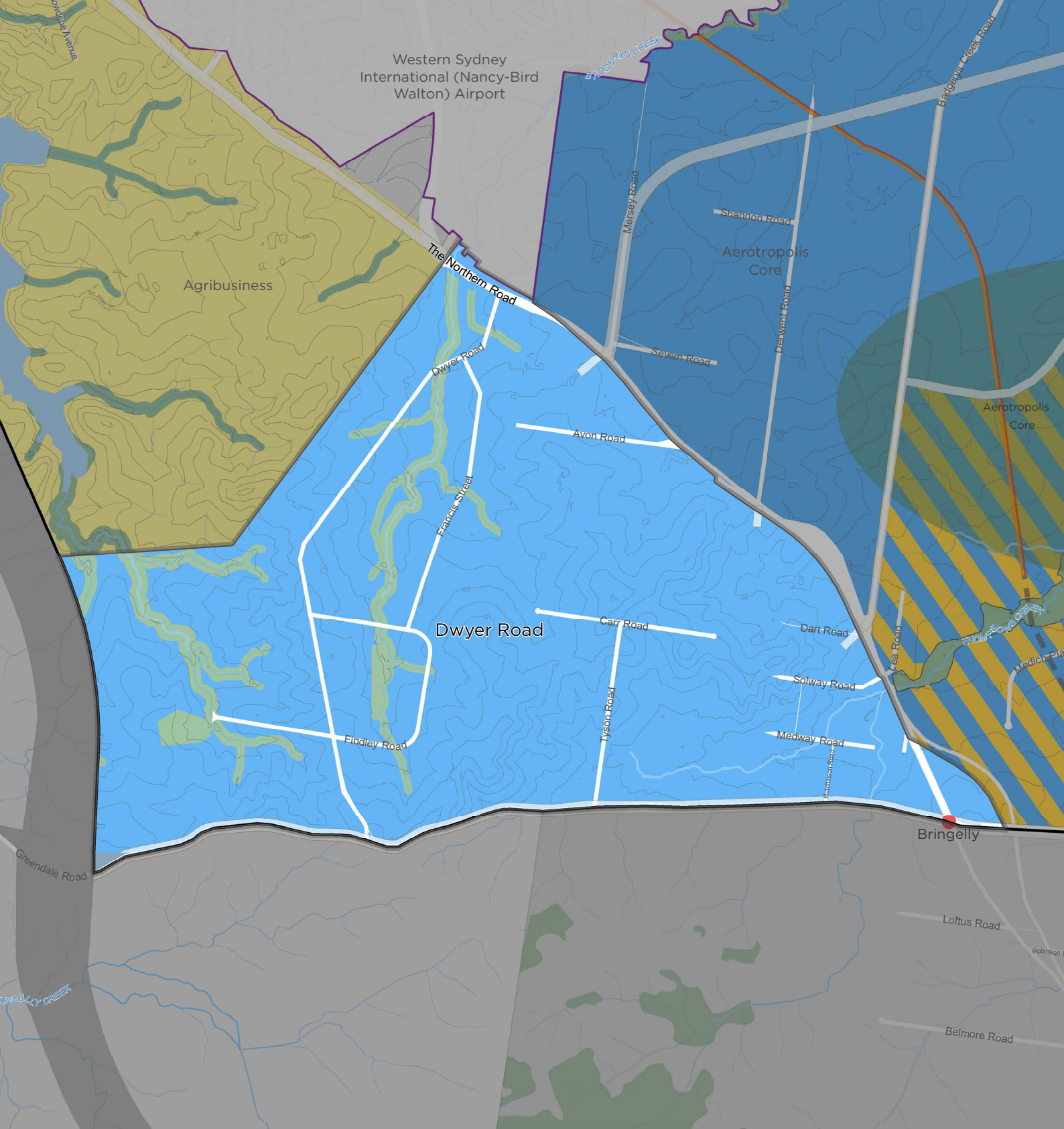
- Interface with the proposed Outer Sydney Orbital and Metropolitan Rural Area
- Fragmented land ownership
- Supporting existing agricultural operations and transition to flexible employment over time
- Aircraft noise
- Safeguarding airport operations

Strategic Outcomes

- Provide employment opportunities close to Aerotropolis Core Precinct
- Encourage Opportunities linking to Agribusiness Precinct
- Acknowledge the existing rural village character of Bringelly
- Utilise and expand the existing social and cultural infrastructure.
- Manage the interface and relationship with South West Growth Area.

Implementation Strategies

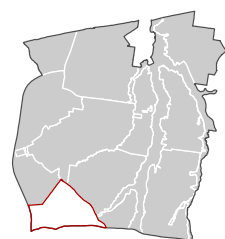
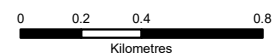
- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Put in place measures to prevent conflict with adjoining land uses as a result of future development, including aircraft noise and airport operations, by restricting incompatible land uses (Department of Planning, Industry and Environment).



Structure Plan - Dwyer Road

Western Sydney Aerotropolis

- | | |
|---------------------------------------------------------------------|--------------------------------------------|
| Western Sydney Aerotropolis | Proposed Future Rail Links (Investigation) |
| Western Sydney International (Nancy-Bird Walton) Airport | Proposed Transport Corridor |
| Topographic Contour 5m | Agribusiness |
| Regional Parkland (Investigation) | Environment and Recreation |
| Key Network Upgrades | Flexible Employment |
| Proposed Sydney Metro Greater West | Mixed Flexible Employment & Urban Land |
| Potential East-West Rail Link, Stabling and Critical Infrastructure | |



7.5.2 Kemps Creek Precinct

Liverpool and Penrith LGA



Total area
906
hectares

Key considerations

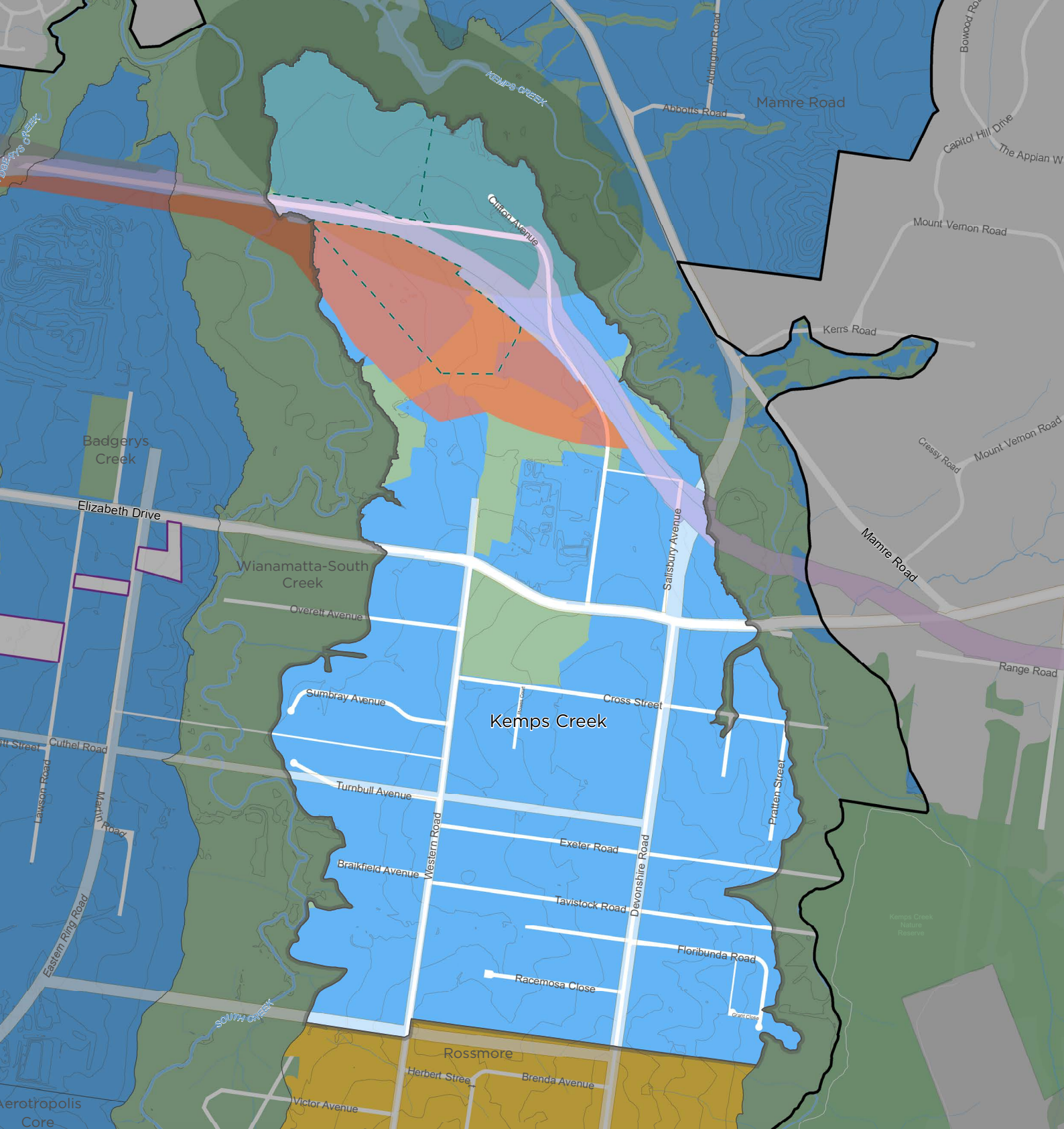
- Aircraft noise
- Safeguarding airport operations
- Upgrade of Elizabeth Drive.
- Connection to proposed M12 Motorway.
- Potential upgrade of Western Road and Devonshire Road.
- Potential road connection to Airport via extension of Pitt Street.
- Cycle networks to the Airport and rest of the Aerotropolis.
- Potential east-west rail link including potential stabling and maintenance facility.
- Water and wastewater infrastructure
- Resource Recovery Facility.

Strategic Outcomes

- Focus on employment generating uses.
- Connect across Wianamatta-South Creek to employment precincts further west.
- Locate noise sensitive uses in appropriate locations.
- Manage an appropriate and activated interface to Wianamatta-South Creek, Kemps Creek and Western Sydney Parklands.
- Plan for high-quality development and public domain with Elizabeth Drive appropriately set back to reflect the main approach to the Airport.
- Rationalise access points on Elizabeth Drive and connect to the local road network to service private development.
- Protect transport corridors to prevent possible conflict with adjoining land and ensure the orderly and timely provision of infrastructure.

Implementation Strategies

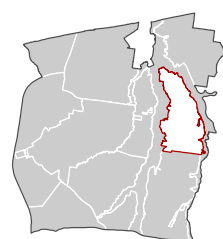
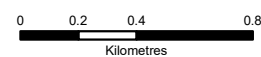
- Reserve road corridors for the Western Road and Devonshire Road upgrades. (Planning Partnership, Transport for NSW and Department of Planning, Industry and Environment).
- Protection of transport corridors and prevent possible conflict with adjoining land use, including the proposed M12 Motorway and potential East-West rail link (Planning Partnership and Department of Planning, Industry and Environment).
- Address interface with and activation of Wianamatta-South Creek and Kemps Creek. (Planning Partnership).
- Identify east-west crossings of Wianamatta-South Creek, particularly active transport connections. (Planning Partnership).
- Explore connections to Western Sydney Parklands. (Planning Partnership and Department of Planning, Industry and Environment).
- Avoid direct access to development from Elizabeth Drive. (Planning Partnership).
- Prepare a public domain strategy for Elizabeth Drive (Department of Planning, Industry and Environment and Transport for NSW).
- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).



Structure Plan - Kems Creek

Western Sydney Aerotropolis

- | | |
|----------------------------------------------------------|---------------------------------------------------------------------|
| Western Sydney Aerotropolis | Potential East-West Rail Link, Stabling and Critical Infrastructure |
| Western Sydney International (Nancy-Bird Walton) Airport | Proposed M12 Motorway Corridor |
| Topographic Contour 5m | Proposed Transport Corridor |
| Regional Parkland (Investigation) | Environment and Recreation |
| Key Network Upgrades | Flexible Employment |
| Critical Utility / Infrastructure (Investigation) | Urban Land |
| Proposed Sydney Metro Greater West | |



7.5.3 North Luddenham Precinct

Penrith LGA



Total area
490
hectares

Key considerations

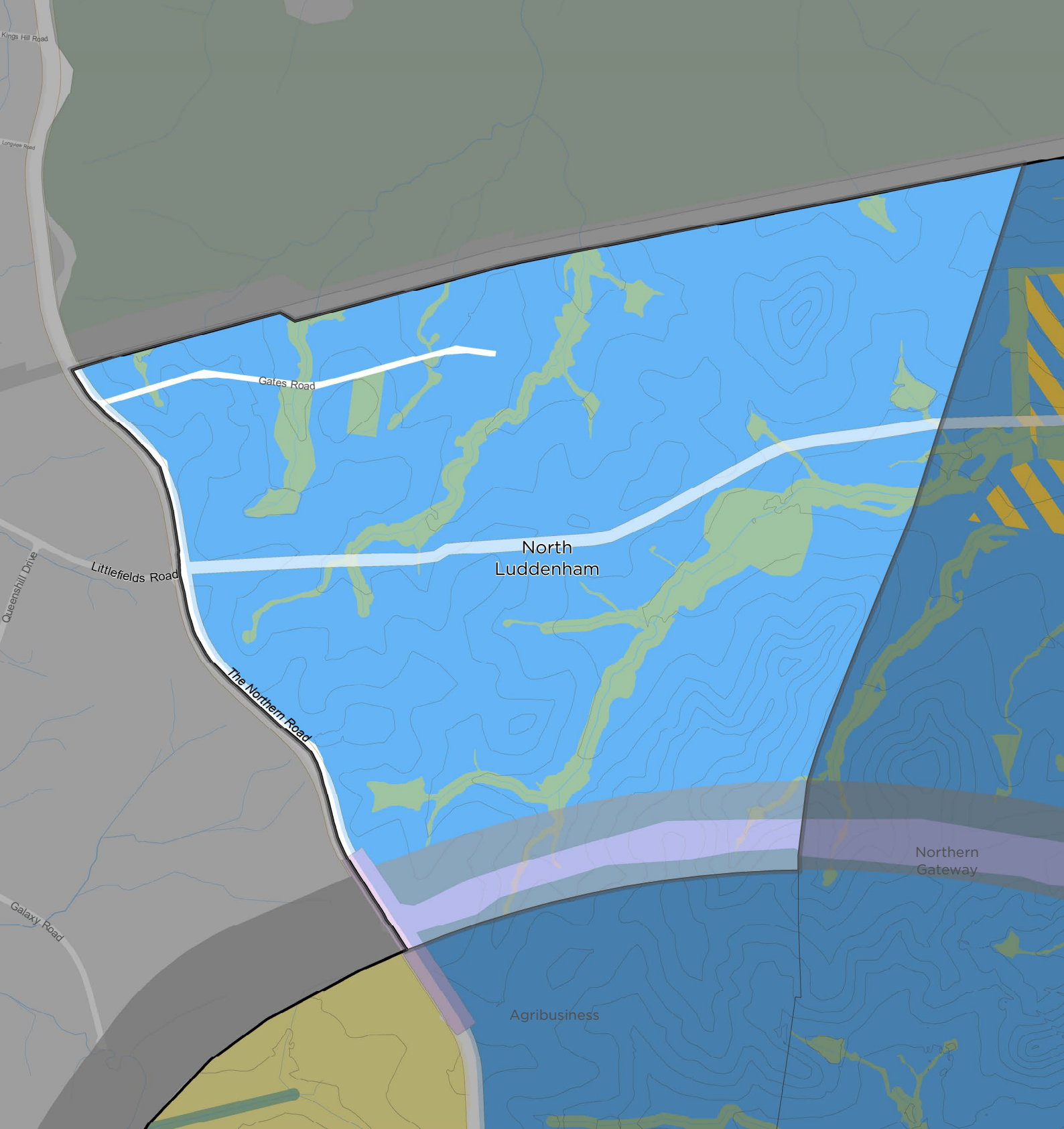
- Aircraft noise
- Safeguarding airport operations
- Interface with sensitive land uses to north and east.

Strategic Outcomes

- Focus on research, development and high technology with links to food production and processing.
- Access the Airport via the Agribusiness Precinct.
- Plan for a fine grain street network to support public transport, cycling and pedestrians.
- Take advantage of underlying topography and scenic values.
- Protect transport corridors to prevent possible conflict with adjoining land and ensure the orderly and timely provision of infrastructure.

Implementation Strategies



- Encourage fresh food markets in appropriate locations. (Planning Partnership).
- Encourage permeability and connectivity to the adjoining Agribusiness Precinct, Northern Gateway Precinct and land to the north and west (Planning Partnership).
- Infrastructure funding – State and Local (Planning Partnership, Department of Planning, Industry and Environment, Penrith and Liverpool Councils).
- Protection of transport corridors and prevent possible conflict with adjoining land use, including the proposed M12 Motorway (Planning Partnership, Department of Planning, Industry and Environment and Transport for NSW).
- Address interface with riparian areas. (Planning Partnership).
- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).

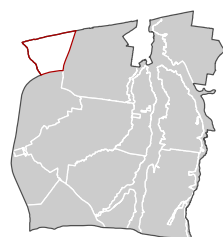


Structure Plan - North Luddenham

Western Sydney Aerotropolis

-  Western Sydney Aerotropolis
-  Topographic Contour 5m
-  Key Network Upgrades
-  Proposed Sydney Metro Greater West
-  Potential East-West Rail Link, Stabling and Critical Infrastructure
-  Proposed M12 Motorway Corridor
-  Proposed Transport Corridor
-  Agribusiness
-  Environment and Recreation

-  Flexible Employment
-  Mixed Flexible Employment & Urban Land



7.5.4 Rossmore Precinct

Liverpool LGA



Total area
1,361
hectares

Key considerations

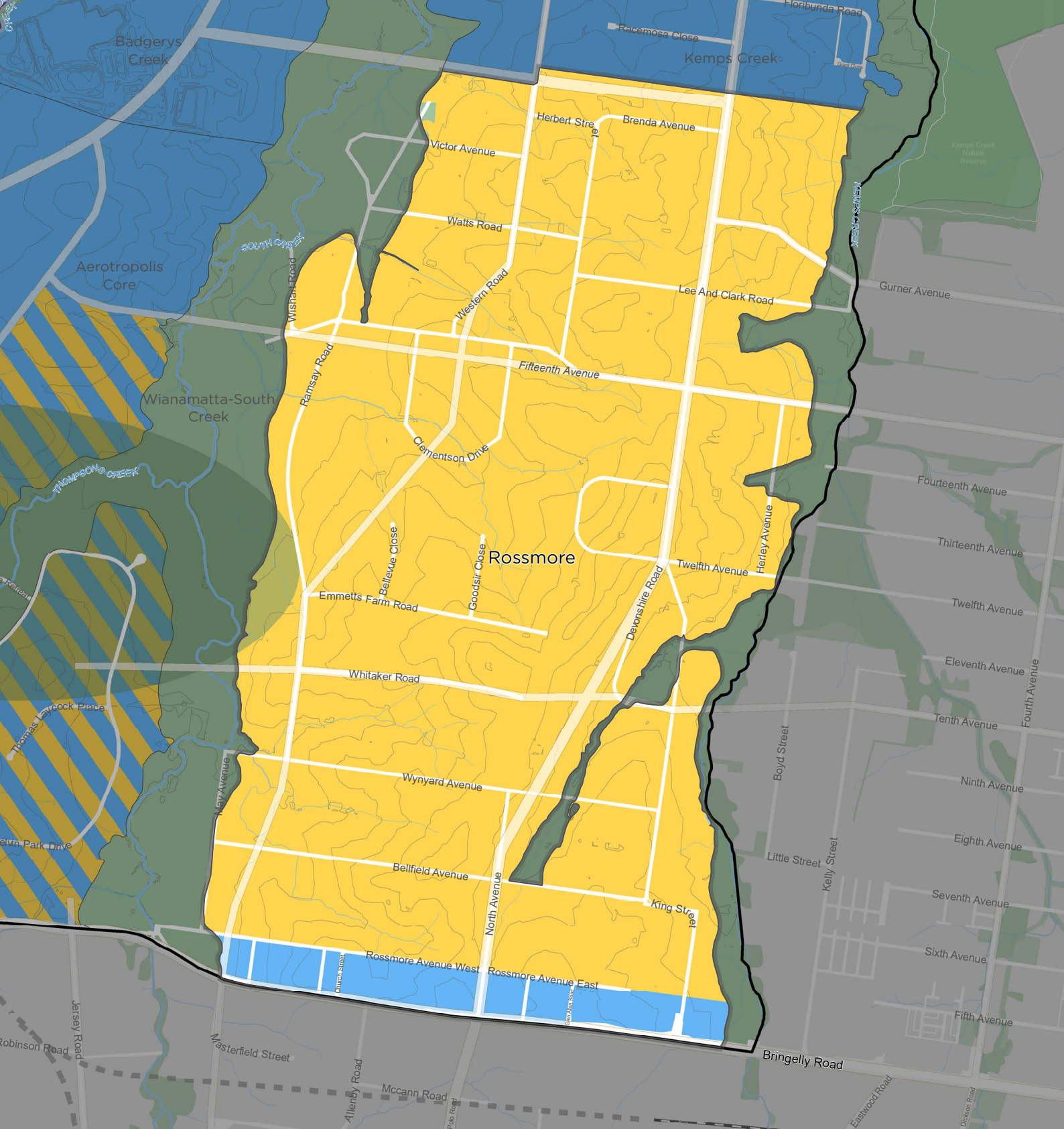
- Aircraft noise
- Safeguarding airport operations
- Land fragmentation
- Supporting existing agricultural operations as interim uses
- Ensuring development density supports transport infrastructure investment.

Strategic Outcomes

- Provide for mixed-use communities with a diversity of housing and maximising access to retail, cultural and community services.
- Connect communities via frequent public transport to the new Airport and surrounding centres including Aerotropolis Core and Liverpool.
- Maintain productive rural and peri-urban activities alongside compact urban centres.
- Plan for an appropriate and activated interface to Wianamatta-South Creek, Kemps Creek and Western Sydney Parklands.
- Connect the Precinct to the Aerotropolis Core via active transport.
- Locate local employment and live/work opportunities in local centres and along key corridors such as Fifteenth Avenue.
- Develop Fifteenth Ave as a shaded landscaped transport boulevard with public transport priority.
- Locate higher-density development along Fifteenth Avenue transport nodes, recognising its role as a centre serving corridor.

Implementation Strategies

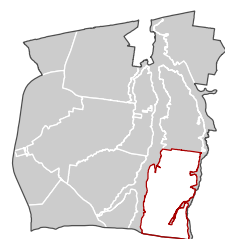
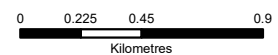
- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Link staging of rezoning and development to the market viability of medium density housing types and infrastructure provision. (Planning Partnership).
- Stage the delivery of frequent public transport services along key corridors including Fifteenth Avenue (Planning Partnership).
- Deliver retail and community/cultural facilities upfront to service residential development early. (Planning Partnership, Transport for NSW and Department of Planning, Industry and Environment).
- Reserve road corridors for Ramsay Road and Devonshire Road upgrades and potential Tenth Avenue link (Planning Partnership, Transport for NSW and Department of Planning, Industry and Environment).
- Address interface with and activation of Kemps Creek and Wianamatta-South Creek (Planning Partnership).
- Investigate connections to Western Sydney Parklands (Planning Partnership and Department of Planning, Industry and Environment).
- Prepare a public domain strategy for the entire precinct (Planning Partnership and Department of Planning, Industry and Environment).
- Develop Affordable Housing Scheme to deliver affordable housing as part of all residential development (Planning Partnership).



Structure Plan - Rossmore

Western Sydney Aerotropolis

- | | |
|---------------------------------------------------------------------|--------------------------------------------|
| Western Sydney Aerotropolis | Proposed Future Rail Links (Investigation) |
| Western Sydney International (Nancy-Bird Walton) Airport | Proposed Transport Corridor |
| Topographic Contour 5m | Environment and Recreation |
| Regional Parkland (Investigation) | Flexible Employment |
| Key Network Upgrades | Urban Land |
| Proposed Sydney Metro Greater West | Mixed Flexible Employment & Urban Land |
| Potential East-West Rail Link, Stabling and Critical Infrastructure | |



Infrastructure funding and provision

8.1 Place-based Infrastructure Compact

Beyond the infrastructure already identified in this Plan, more detailed infrastructure needs will be identified during precinct planning. This will be informed by the Western Sydney Place-based Infrastructure Compact (PIC) process led by the Greater Sydney Commission.

The process will strategically identify and estimate the cost of infrastructure and services that will be required to support growth in the Aerotropolis over time. This will increase understanding of the relative costs and benefits of development across the initial precincts to then inform how to most effectively stage and sequence development.

The process will consider funding sources for the infrastructure and services identified, including from the NSW and Australian Government, State infrastructure and local developer contributions, the customer base of utility providers and other sources.

The Place-based Infrastructure Compact process will inform precinct plans and a Special Infrastructure Contribution (SIC) for the Aerotropolis and combine with local infrastructure needs identified by Liverpool City and Penrith City Council to inform staged servicing and development in each precinct.

The NSW Government is committed to ensuring affordability and value for money when considering infrastructure investments in the Aerotropolis. Identified priority projects would be subject to NSW Government's Infrastructure Investor Assurance Framework prior to investment decisions being made.

8.2 Infrastructure Funding

The system of development contributions allows for the levying of contributions towards state and local infrastructure

under the *EP&A Act*. Broadly, the means for securing development contributions through the planning process are:

- State infrastructure contributions
- local infrastructure contributions
- value capture

When setting development contributions, all levels of government must ensure the cumulative amount of contributions payable does not make development unfeasible.

8.2.1 Special Infrastructure Contributions

A SIC is a financial contribution paid by developers to help fund some key State and regional infrastructure. The Department of Planning, Industry and Environment is developing a SIC for the Aerotropolis.

A SIC considers the cost of infrastructure generated by a development and balances this with development feasibility and the need to achieve desired development outcomes.

The Department of Planning, Industry and Environment will explore whether an Aerotropolis SIC should be set as a land-based charge (for example a \$ rate per net developable hectare) and/or a unit-based charge (such as \$ rate per lot or dwelling, or a percentage of the capital investment value).

The SIC may apply to a range of development types to part-fund infrastructure such as State and regional roads, regional open space, land for schools and some public transport. The SIC will also address broader issues such as affordable housing, green infrastructure and, where applicable, biodiversity offsets.

As the Aerotropolis evolves infrastructure needs will change. The SIC and the outcomes of the Place-based Infrastructure Compact process will need to adapt and align with strategic planning. A future draft SIC and determination will provide further detail.

8.2.2 Local infrastructure contributions

Local infrastructure contribution plans will fund local infrastructure such as local parks, local roads and community facilities. The Planning Partnership, including Penrith and Liverpool councils, will guide each council's local infrastructure contribution plans for the Aerotropolis as precinct plans are finalised. This will likely lead to a consistent approach to the preparation of local infrastructure contributions for both councils.

8.2.3 Value capture

Value sharing mechanisms are being considered in the context of major investments in infrastructure by the NSW and Australian governments. This is consistent with a range of local, national and international experience in drawing on value sharing as a source of major project funding.

Value capture results from the significant land value uplift due to public investment in core infrastructure. Investments such as the Airport and proposed Sydney Metro Greater West create value for landholders by bringing forward planning and zoning changes, which means there can be higher density uses around transport. This increased land value can be utilised via additional value sharing mechanisms such as SICs and voluntary planning agreements, to help fund infrastructure that a growing population and workforce requires.

Value sharing mechanisms will be developed as part of the detailed precinct plans. Any mechanisms require a balance: capturing a fair portion of the value uplift enjoyed by the beneficiaries of development and reducing the burden on taxpayers to provide infrastructure that will benefit more people, such as quality public space.

The cumulative impact of development contributions and other levies on businesses and households will be considered against the expected and realised value uplift from major public investment. Geographic coverage and

timing, as well as the appropriate instruments through which value uplift can be captured and shared, are important considerations.

8.3 Stage 1 Sydney Metro Greater West alignment

Sydney Metro Greater West Stage 1 alignment and station locations are likely to be confirmed in 2020. Precinct planning will appropriately reflect the alignment and the location of stations. Two stations are expected on the Airport site with other potential station locations under investigation.

8.4 Utilities and services

With limited trunk infrastructure in the Aerotropolis, significant planning and investment is required to unlock development and activate precincts. Investigations must consider how utilities and services will be funded, the timing and impacts of any infrastructure maintenance on road corridors, and infrastructure sequencing, optimisation and adaptability.

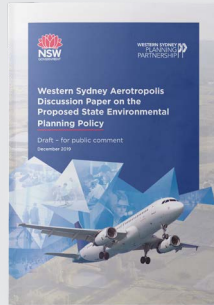
A flexible servicing strategy will ensure certainty of utility supply and allow for alternative servicing solutions as technologies and hybrid servicing methodologies evolve. Precinct planning and master planning will build in low-carbon ambitions and recognise how urban design and smart infrastructure will manage energy, water and liquid and solid waste.

The Aerotropolis presents a unique opportunity to efficiently and collaboratively plan for and explore alternative and innovative servicing solutions. The NSW Government will continue to work with utility providers and consult with stakeholders such as WCAA and Western Sydney Airport to develop an innovative and sustainable servicing strategy that commits to circular economy principles such as smart and zero carbon cities and smart grid systems.

The following documents are on public exhibition:



*Draft
Western
Sydney
Aerotropolis
Plan (this
Plan)*



*Draft
Aerotropolis
SEPP
Discussion
Paper*



*Draft
Phase 1
DCP*

These documents are available from:

www.planning.nsw.gov.au
www.wscd.sydney
www.penrithcity.nsw.gov.au
www.liverpool.nsw.gov.au



The Western Sydney Planning Partnership welcomes feedback from the community, government agencies and other stakeholders during public exhibition. This feedback helps us better understand the opinions and concerns of the community, which will inform the final Plan.

9.1 Monitoring

To provide a valuable evidence base to inform service and infrastructure delivery as precincts redevelop overtime, the Department of Planning, Industry and Environment will monitor and report annually on the rate of development activity such as:

- housing approvals, construction commencements and completions
- pipeline for additional housing
- jobs created in the Aerotropolis
- contribution towards 5 million trees for Greater Sydney by 2030.

The Greater Sydney Commission has a statutory requirement to report on the implementation of the Region Plan. This will be implemented through the annual review of performance indicators drawn from the 10 Directions of the Region Plan and include the areas within the Aerotropolis.

The community will also be able to track progress on the Aerotropolis and Western Parkland City including through annual reports on Western Sydney City Deal implementation.

9.2 Next steps

9.2.1 Finalising the Plan

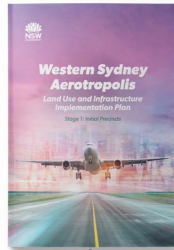
The Planning Partnership will make any required amendments from the public exhibition process prior to finalisation and prepare a Submissions Report that summarises the feedback received. The finalised Plan will be accompanied by:

- a direction under section 9.1 of the *EP&A Act* requiring future rezoning (planning proposals) to be consistent with this Plan
- Aerotropolis SEPP
- Phase 1 DCP.

The finalisation of the Plan is expected to occur at the same time as the rezoning of the initial precincts is published.

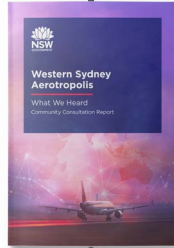
Process for next steps

Released
August 2018



Stage 1 Land Use and
Infrastructure
Implementation Plan

Released
September
2019

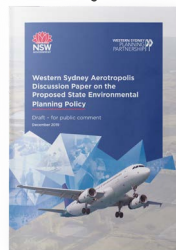


What We Heard
Community
Consultation

Late 2019



Draft Western
Sydney
Aerotropolis
Plan
(We are here)



Draft State
Environmental
Planning Policy
Discussion
Paper



Draft
Aerotropolis
Development
Control Plan
- Phase 1

Early 2020

Community consultation

Mid 2020

Finalisation of Western Sydney Aerotropolis
Plan, Phase 1 DCP and Aerotropolis SEPP
(including rezoning of initial precincts)



Draft Precinct Plans -
initial precincts

Community consultation



Final Precinct Plans -
initial precincts

Adoption of initial precinct plans
(update of Development Control Plan)



State and
local
infrastructure
contribution

Late 2020,
subject to
confirmation
of Metro
Station
locations

9.2.2 Precinct planning in initial precincts

The Planning Partnership will undertake detailed precinct planning, including sequencing within the initial precincts, responding to the timing of infrastructure delivery, with a target of public exhibition by mid-2020 and adopted plans in late 2020. A SIC will also be prepared.

Precinct planning for the remaining precincts will follow as infrastructure and services are planned and delivered.

The Department of Planning, Industry and Environment is responsible for planning the Mamre Road Precinct. This will occur concurrently with precinct planning for the other initial precincts. Exhibition is likely in late 2019.

9.2.3 Development

Development will align with this Plan, the SEPP, precinct plans, master planning and the Aerotropolis DCP together with ministerial directions 3.5 Development Near Regulated Airports and Defence Airfields and 7.8 Implementation of *Western Sydney Aerotropolis Plan* as amended. The speed of development will depend on market forces and the staging of infrastructure provision.

9.3 More information



Contact us at

engagement@ppo.nsw.gov.au



Visit

www.wscd.sydney/planning-partnership



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- Speak and Listen (speech to speech relay users), call 1300 555 727 and ask for 1300 305 695.
- Internet relay users connect to the NRS (relayservice.com.au) and ask for 1300 305 695.



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Glossary

Term	Definition
1 in 100-year flood	A flood that has a one per cent chance of occurring in any given year within a 100-year cycle.
5G	Fifth-generation cellular network technology.
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 central city at the core of the Aerotropolis activity associated with the 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.
Airside	All parts of an airport around aircraft and buildings only accessible to authorised personnel.
Australian Noise Exposure Concept (ANEC)	Anticipated forecasts of future noise exposure patterns based on indicative flight paths around an airport that constitute the contours.

Term	Definition
Australian Noise Exposure Forecast (ANEF)	Approved forecasts of future noise exposure patterns around an airport that constitute the contours on which land use planning authorities base their controls.
Biodiversity offsets	Measures that compensate elsewhere for the adverse impacts of an action, such as clearing for development. Biodiversity offsets protect and manage biodiversity values in one area in exchange for impacts on biodiversity values in another.
Blue-Green Grid	An interconnected network of natural and semi-natural landscape elements (sometimes referred to as blue or green infrastructure), including water bodies, urban canopy and open spaces.
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.
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.
Country	For Aboriginal peoples, 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, knowledges and cultural practices, identity and reciprocal relationships, belonging and wellbeing.

Term	Definition
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 CPCP will enable land to be able to be certified for development and areas avoided from development conserved. The CPCP will enhance a network of green spaces, natural and semi-natural systems in Western Sydney.
Defence	The branch of industry concerned with the research, design, manufacture, operation and maintenance of military equipment, supplies and services.
Development	As per the <i>EP&A Act</i> , any of the following: <ul style="list-style-type: none"> • 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 • 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 <i>EP&A Act</i> 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.
Development Control Plan	Provides detailed planning and design guidelines to support established planning controls.
Floodplain	An area of land which is subject to inundation by floods.
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.

Term	Definition
Growth Area	Identified by the NSW Government as major greenfield development or urban renewal areas.
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.
Local Environmental Plan	Defined in the <i>EP&A Act</i> . Guide planning decisions in local government areas through zoning and development controls.
National Airports Safeguarding Framework	National land use planning framework to improve community amenity by minimising aircraft noise-sensitive developments near airports and improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions on various safety related issues.
Obstacle Limitation Surface (OLS)	Designed to protect aircraft flying in visual conditions close to an airport by defining a volume of airspace to be protected from development, primarily modelled on the layout and configuration of proposed runways.
Peri-urban lands	Land for agriculture undertaken in places on the fringes of urban areas.
Permeable surface	A surface that permits or facilitates the infiltration or penetration of water such as grass, landscaping or porous paving.
Precinct planning	Identifies the development intent and development capacity across a precinct by allocating land uses, densities, housing types, built form, infrastructure and environmental and open space.

Term	Definition
Procedures for Air Navigation Services – Aircraft Operations Surfaces (PANS-OPS)	The primary surface for protecting aircraft operating under non-visual (instrument guided) conditions generally located above the OLS. Separate procedures for each runway and for the type of navigation system being used and the multiple surfaces are combined to form the PANS OPS.
Public domain	Any publicly or privately owned space that can be accessed and used by the public and/or is publicly visible
Public space	Includes parks, green spaces, plazas, libraries, streets, landscapes, museums, and public transport.
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.
Site-specific Development Control Plan	A DCP that provides detailed planning and design guidelines for a specific site that meets the criteria in the Aerotropolis SEPP.
State Environmental Planning Policy (SEPP)	Environmental planning instruments that address planning issues of State significance.
Strategic centre	Characterised by a high proportion of knowledge-intensive jobs, existing or proposed major transport gateways and increased economic activity.
Upper South Creek Water Factory	An advanced sewage treatment plant which will produce recycled water appropriate for a range of different applications, renewable energy and bioresources.
Urban typologies	Precinct-scale snapshots of various forms of urban development incorporating built form, roads and subdivision pattern and open space.

Term	Definition
Value capture	A source of funding that results from the significant land value uplift due to public investment in core infrastructure
Western Economic Corridor	New economic agglomerations around the Airport, including the Aerotropolis
Western Parkland City	Broadly, Penrith, Liverpool, Campbelltown, Hawkesbury, Wollondilly, Camden, Fairfield and Blue Mountains LGAs, anchored around Liverpool, Greater Penrith and Campbelltown–Macarthur, with the new Airport and Aerotropolis geographically at its centre.
Western Parkland City Metropolitan Cluster	Aerotropolis, Liverpool, Greater Penrith and Campbelltown–Macarthur.
Western Sydney Airport	A Commonwealth business enterprise established in August 2017 to build the new Airport.
Western Sydney Planning Partnership	A local government-led initiative comprising of representatives of all eight Western Parkland City councils as well as Blacktown Council, and representatives from the NSW Department of Planning, Industry and Environment, Transport for NSW, Sydney Water and the Greater Sydney Commission.

Appendix – Planning Principles

These principles will apply to all planning for the Aerotropolis.

Overarching objective

Recognise Country

Acknowledge traditional owners and provide opportunities for Connecting with Country, Designing for Country and Caring for Country in all stages of planning for the Aerotropolis.

Productivity

Objective 1

An accessible and well connected Aerotropolis

- | | |
|-----|-------------------------------------------------------------------------------------------------------------------------------|
| PR1 | Ensure walking or cycling is the most convenient option for short trips around centres and local areas. |
| PR2 | Prioritise public and active transport in centres with general through traffic and freight directed outside of these centres. |
| PR3 | Match car parking with the level of public transport access. |
| PR4 | Limit direct property access to classified roads and rationalise or orient to the local street network. |

Objective 2

High-value jobs growth is enabled, and existing employment enhanced

- | | |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PR5 | Develop vibrant centres with high quality public domain, a rich urban tree canopy, and well designed buildings and areas that attract workers and investment. |
| PR6 | Establish a centres hierarchy, including future centres, in line with the Region Plan (Strategy 22.2). |

Objective 3

Safeguard airport operations

- | | |
|-----|----------------------------------------------------------------------------------------------|
| PR7 | Appropriately design, construct and locate development to safeguard 24/7 airport operations. |
|-----|----------------------------------------------------------------------------------------------|

- | | |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PR8 | Require development up to the 20 ANEC/ANEF contour to adopt appropriate design and construction standards to reduce aircraft noise impacts and prohibit intensification of residential development within the ANEC/ANEF 20 and above contours. |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- | | |
|-----|---------------------------------------------------------|
| PR9 | Require development to accord with the NASF Guidelines. |
|-----|---------------------------------------------------------|

Sustainability

Objective 4

A landscape-led approach to urban design and planning

- | | |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| SU1 | Retain and enhance natural features such as waterways, vegetation and landform and culturally significant landscapes. |
| SU2 | Integrate Blue-Green Grid links and public open spaces, maximising opportunities for connections, an urban tree canopy and active use of the floodplain. |
| SU3 | Retain water in the landscape by maximising permeable surfaces and developing appropriate urban typologies. |
| SU4 | Orient urban development towards creeks and integrate into the landscape through quality open space, a high degree of solar access and tree canopy. |

SU5	Develop a connected regional parkland network linking with the Wianamatta-South Creek corridor that shapes the Aerotropolis and provides amenity and ecological value and create a high quality ridgeline and linear parks adjacent to, and integrated with, riparian corridors that retain water.	SU12	Provide open space buffers and asset protection zones to conservation areas wholly within urban capable footprints.
SU6	Retain and increase the urban tree canopy and green cover across the Aerotropolis consistent with the Region Plan target of 40 per cent and the Premier's Priority for Greening our city.	SU13	Plan stormwater and wastewater in the Wianamatta-South Creek Catchment to minimise potential hydrologic and hydraulic impacts on ecology, creek structure, infrastructure, water quality and the natural water cycle. Integrate water sensitive urban design and use stormwater or recycled water to irrigate streets and public open space to support public amenity and urban cooling. Co-locate industrial water users, where appropriate.
SU7	Retain, enhance and co-locate vegetation on ridgelines with active open space and use it to guide building heights.	Objective 5 A sustainable, low carbon Aerotropolis that embeds the circular economy	
SU8	Identify and protect scenic and cultural landscapes and develop a street grid based on landforms, with long north-south blocks in urban areas to attain good solar performance, and east-west streets to capture long views to the Blue Mountains.	SU14	Use low carbon, high efficiency strategies to reduce emissions and energy use in line with NSW net zero emissions target and mitigate urban heat through urban development and building design. Use innovative and integrated approaches to achieve higher standards of resource recovery, waste management, water management and renewable energy.
SU9	Meet the requirements of the biodiversity conservation program in the Cumberland Plain Conservation Plan and approved strategic biodiversity certification and strategic assessment protecting land with biodiversity value, and provide a sensitive urban interface that supports and enhances corridors and reserves.	Objective 6 A resilient and adaptable Aerotropolis	
SU10	<p>Avoid, minimise and mitigate impacts on threatened species and endangered ecological communities, habitat corridors, and riparian and aquatic habitats to prioritise length, connectivity and representativeness to maintain ecological function. Protect the integrity and continuity of wildlife by:</p> <ul style="list-style-type: none"> • protecting priority habitat corridors to support migrating species, birds and arboreal mammals • using public land for biodiversity conservation with an appropriate management regime • expanding vegetation corridors if impacted by utility installations. 	SU15	Plan for compatible land uses within the floodplain, provide safe evacuation and egress from flood events and consider climate change, culvert blockage and floodplain revegetation.
SU11	Retain and protect wetland environments to support plant animal communities and to mitigate wildlife attraction or wildlife strike.	SU16	Prohibit cut and fill to alter the 1% AEP flood extent.
		SU17	Design, build and manage flood management assets to benefit native habitat, aesthetics, public recreation and amenity.
		SU18	Protect, maintain and improve the water quality and flow to meet the NSW Government waterway health targets.
		SU19	Protect high value terrestrial and aquatic ecosystems to enhance biodiversity and protect environmental values.
		SU20	Adopt an integrated water management approach that considers urban form and streetscape, trunk drainage land and assets, waterway health and flood management.

Infrastructure and Collaboration

Objective 7

Infrastructure that connects and services the Western Parkland City as it grows

IC1	Integrate passenger and freight transport with urban design at the Aerotropolis-wide, precinct and local scale to achieve quality movement and place outcomes.
IC2	Locate and stage high quality active and public transport, utility and digital networks to align with projected land uses and secure corridors and sites early.
IC3	Develop the Aerotropolis as a Smart City supported by fast and reliable and adaptable digital connectivity.
IC4	Ensure the interoperability of systems align with NSW Government connected infrastructure and Internet of Things policies.
IC5	Dimension local and town centre networks to allow tree planting, lower vehicle speeds and intuitive and safe walking and cycling infrastructure
IC6	Plan for car parking, setbacks and intersections to allow easy crossing of streets and maintain compact, consistent built form edges.

Objective 8

A collaborative approach to planning and delivery

IC7	Adopt a collaborative approach to precinct planning and master planning with all three levels of government, the community, industry and landowners.
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Liveability

Objective 9

A collaborative approach to planning and delivery

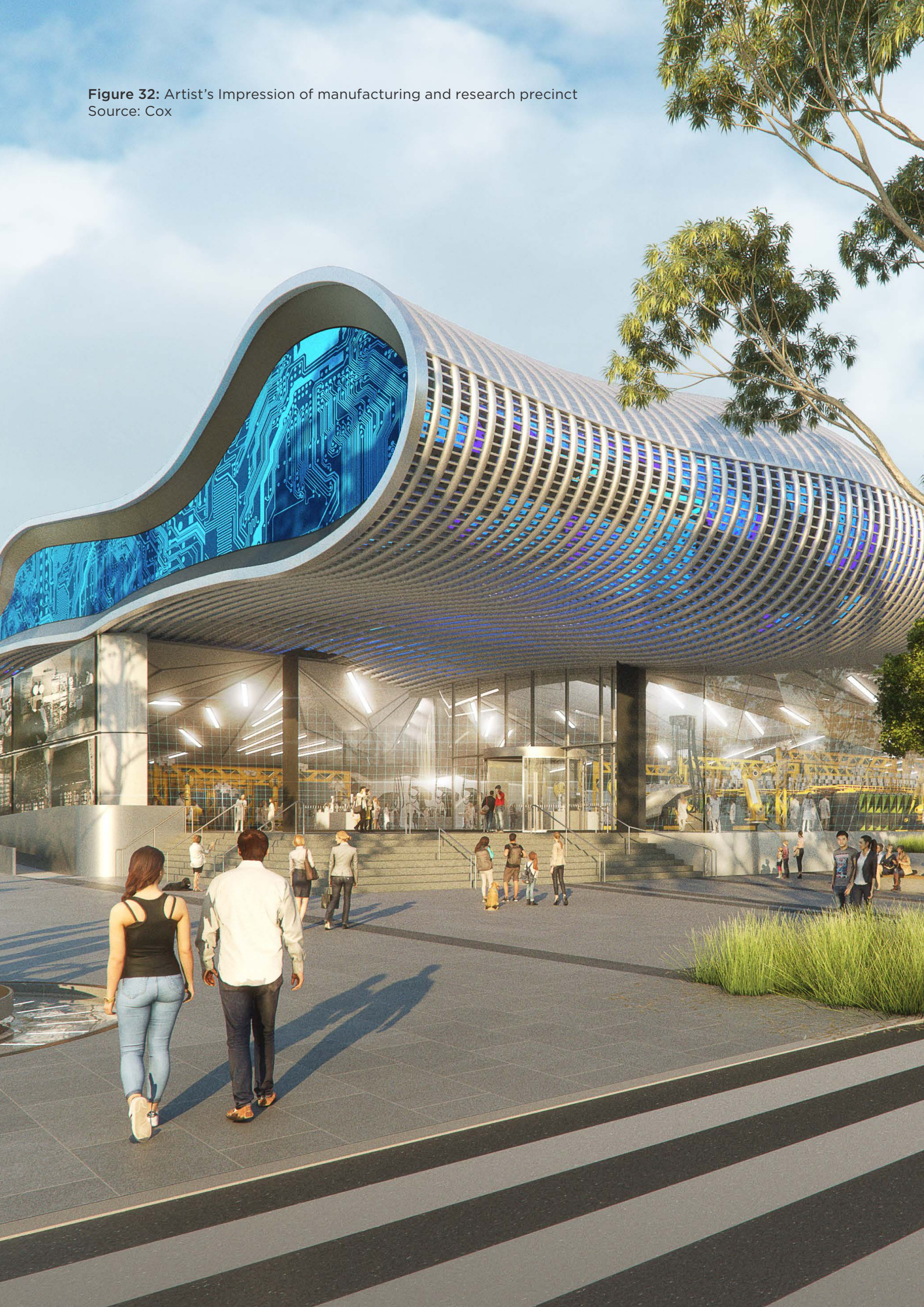
LV1	Create a compact urban form in areas of high accessibility with a rich urban tree canopy and along creeks so that residents live within a 10-minute walk of quality green, open and public space consistent with the Premier's Priority for Greener Public Spaces.
LV2	Provide affordable rental housing in line with the Western City District Plan targets.
LV3	Provide for a diverse range of housing types and price points.
LV4	Avoid residential development on major roads, freight or public transport corridors.

Objective 10

Social and cultural infrastructure that strengthens communities

LV5	Create valued public and private places and activate open spaces in line with Better Placed, Greener Places and the Premier's Priority for Greener Public Spaces.
LV6	Provide multi-purpose and intergenerational community and cultural facilities and services which meet the needs of the community and bring people together.
LV7	Integrate health and education infrastructure into local centres with supporting public transport services.
LV8	Celebrate open space areas as places of shared importance to Aboriginal and non-Aboriginal people and maintain important landscapes and views.
LV9	Acknowledge and celebrate Aboriginal culture, history and heritage, alongside non-Aboriginal heritage
LV10	Locate health, education, residential and other sensitive land uses away from major road, rail and freight movement corridors.
LV11	Design major streets as green active parkways supporting new technology

Figure 32: Artist's Impression of manufacturing and research precinct
Source: Cox



dpie.nsw.gov.au