

LAND USE PLANNING

7



LAND USE PLANNING

7.1 Introduction

The Master Plan recognises that Adelaide Airport is the major air transport hub for the State, and is arguably the most significant employment base in the Adelaide metropolitan area.

The airport is a major 'activity centre' within western Adelaide, and has the potential to support a number of uses that make efficient use of its existing infrastructure; particularly its transport connections.

The land use provisions in this Master Plan are refinements on the *Adelaide Airport Master Plan 2009*, taking into account the current Commonwealth Government's aviation strategy and the following documents:

- Commonwealth Government's Aviation White Paper, 2009;
- South Australia's Strategic Plan, 2011;
- The 30 Year Plan for Greater Adelaide, 2010;
- The Strategic Infrastructure Plan for South Australia, 2005, and the associated 2010 Discussion Paper;
- National Airports Safeguarding Framework, 2012;
- Authorised Envisaged and Merit Use applications processed by Adelaide Airport Limited;
- changing development pressures and opportunities associated with Adelaide Airport; and
- State Government Integrated Transport and Land Use Plan (October 2013).

Development at Adelaide Airport should proceed in a manner which is compatible with adjacent land uses and optimum development policies. At the same time, the operational integrity and economic viability of the airport must not be compromised.

In essence, Adelaide Airport lies within major transit corridors, connecting the metropolitan area to international, national and regional air services. It is the tourism gateway for the majority of South Australia's population and a vital infrastructure facility for the State. Direct employment at the airport is currently estimated at 8,726 full-time equivalent jobs, with a further estimated 9,033 jobs created for the South Australian economy. Overall, the operations of Adelaide Airport and its employees contribute to 2.1% of the Gross State Product. The airport functions as an integrated Transport Activity Centre with a focus on employment, tourism and business travel.

This Master Plan incorporates an Airport (Adelaide) Zone which guides development over the entire airport site. The zone is consistent with State Government's approach to providing broad Objectives and Principles of Development Control to guide future development for each of the Council areas in South Australia. The Airport (Adelaide) Zone is further divided into seven precincts as shown in Figure 7.1 and Figure 7.2. These precincts are:

- Runways,
- Torrens,
- West Beach,
- Airport East,
- Terminals & Business,
- Tapleys,
- Morphett, and

In response to changing development pressures, the former Burbridge and Terminals Precincts have been incorporated into one larger Terminals & Business Precinct for simplicity as part of this revision of the Master Plan, and the Holdfast and Morphett Precincts have been incorporated into a larger Morphett Precinct. The expanded Terminals & Business Precinct is divided into five Policy Areas – Terminals & Aviation, Office Park, Export Park, Retail and Burbridge Business Park.

Further, the former Patawalonga Precinct has been renamed West Beach Precinct to reflect its geographic location.

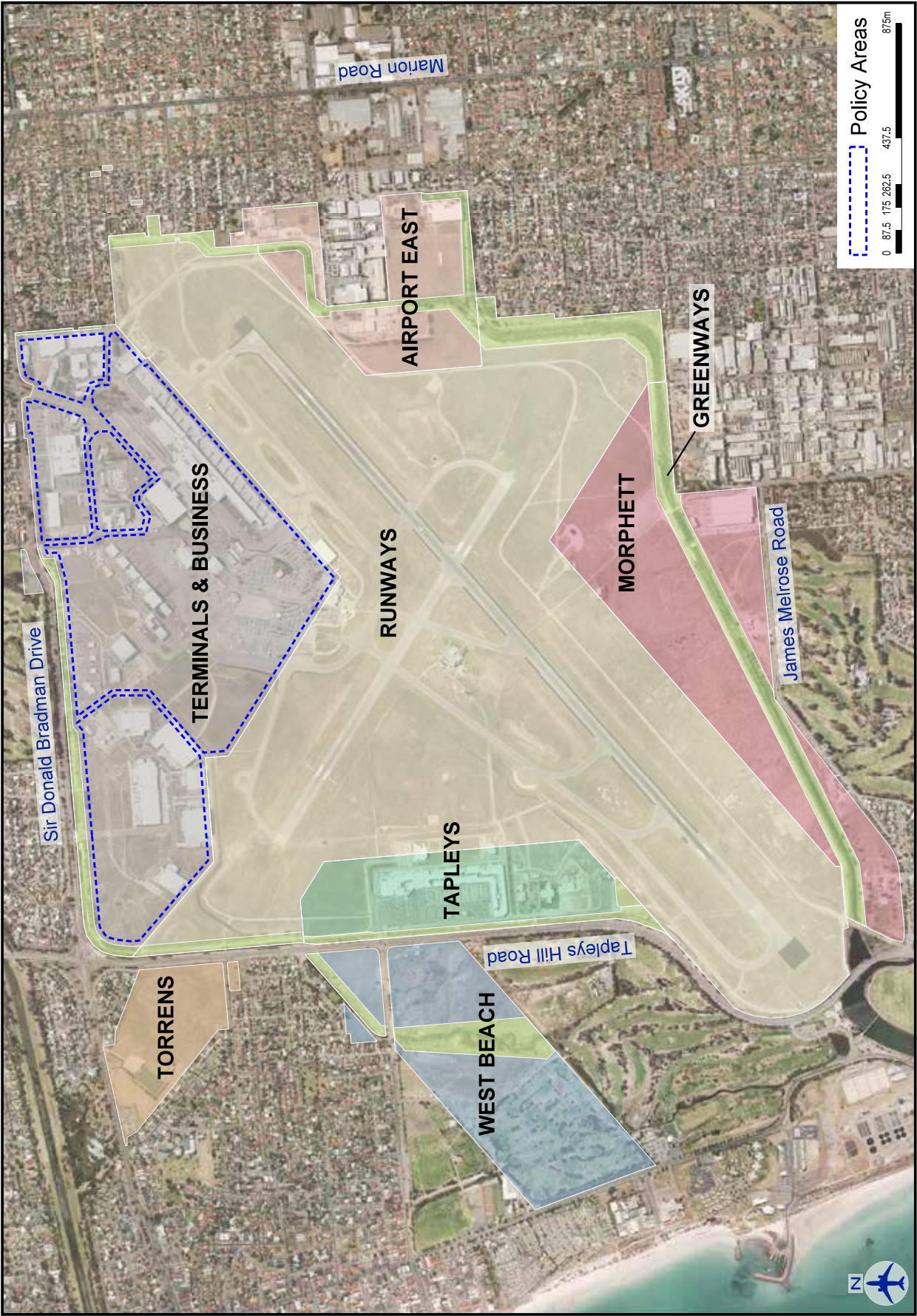
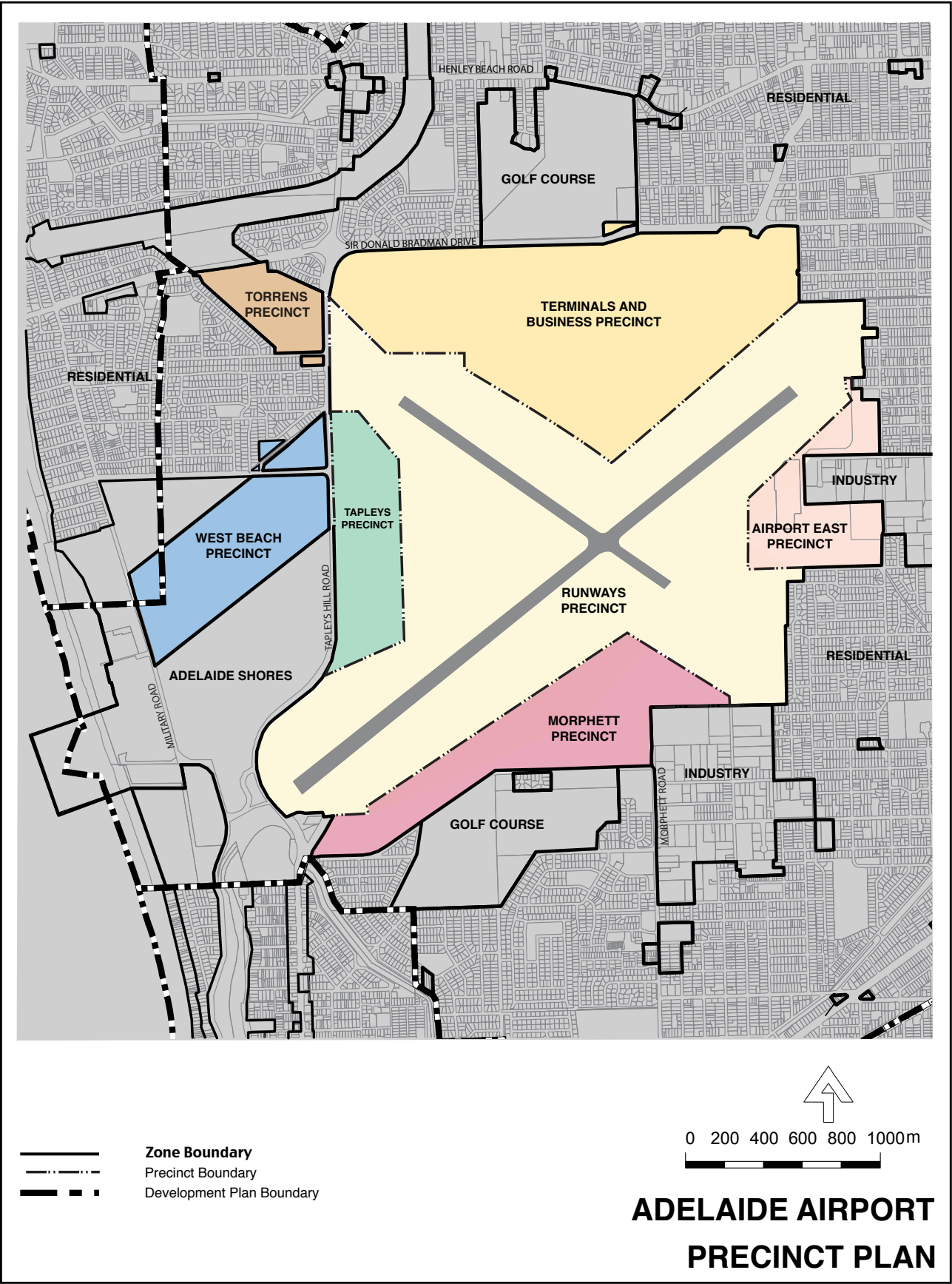


Figure 7.1 Adelaide Airport Precinct Plan



88 Figure 7.2 Adelaide Airport Precinct Structure Plan

Precincts

For each precinct, the Master Plan contains Objectives and Desired Character Statements for future development, along with Principles of Development Control, which include Envisaged and Non-Complying uses in a similar vein to that which is in existence under the State Planning regime. Any uses not listed as Envisaged or Non-Complying are able to be considered on 'Merit', and must undergo an agency referral process and public consultation prior to a decision being made by AAL on whether to approve the proposal. This is detailed in the Development Decision Matrix at Figure 7.5.

The proposed development direction for each precinct is also indicated on individual precinct Structure Plans, showing:

- policy areas within certain Precincts (desired forms of development within specific geographic locations);
- major access/egress arrangements and internal road layouts (aligned with Chapter 9 – Ground Transport Plan); and
- 'Greenways' separating airport development from surrounding community activities or providing watercourses for stormwater; both within the precincts and surrounding the broader airport site (see Figure 7.3).



Figure 7.3 Adelaide Airport Greenways Plan

7.2 Commonwealth Planning Policy

7.2.1 Land Use Planning

The Commonwealth Government, in leasing its airports has retained responsibility for controls over land use planning and development on airport land pursuant to the *Airports Act 1996*. As part of this process, the Commonwealth Minister for Infrastructure and Regional Development must approve the Master Plan, which reflects suitable land use and related development within the Airport (Adelaide) Zone.

The process of approving developments on airport land has been aligned to those processes under the South Australian planning system (see Figure 7.4). The process is comparable in terms of setting strategic direction and establishing planning policy to guide future development (through the Master Plan process).

Land use controls are necessary in areas adjacent to the airport to protect its long-term safe and efficient operations. To this end, the Commonwealth introduced the *Airports (Protection of Airspace) Regulations 1996* to support planning authorities in ensuring that the operational integrity of the airport is maintained. It should be noted that this Master Plan covers only the Airport (Adelaide) Zone. However, greater attention is warranted to ensure a higher consideration of Aviation Standards, as detailed in the *National Airports Safeguarding Framework*.

Prior to the commencement of construction of any development classified as a 'Major Development' under the *Airports Act 1996*, AAL will prepare a Major Development Plan to thoroughly assess the potential impact of the development and outline the management procedures to be undertaken. Any Major Development Plans must be considered by the Minister for Infrastructure and Regional Development following public consultation and comment as prescribed in the *Airports Act 1996*. All developments are subject to formal building approval in accordance with the *Airports (Building Control) Regulations 1996*, taking into account the *Airports (Environment Protection) Regulations 1997*.

It should be noted that proposed development listed as 'Envisaged' within the Master Plan or that has received broad community acceptance is less likely to require any Major Development assessment process in terms of having any 'significant' impact on the community, unless it accords with other Major Development criteria specified in Section 89 of the *Airports Act 1996* (refer to Development Decision Matrix at Figure 7.5).

The National Airports Safeguarding Framework (NASF)

The Commonwealth Government's 2009 *National Aviation Policy White Paper: Flight Path to the Future* proposed the development of a national land use planning framework in order to improve community amenity and improve safety outcomes.

The NASF is part of the agreement by Commonwealth, State and Territory Ministers at the Standing Council on Transport and Infrastructure meeting on 18 May 2012. The NASF is a national land use planning framework that aims to:

- improve community amenity by minimising aircraft noise-sensitive developments near airports including through the use of additional noise metrics and improved noise-disclosure mechanisms; and
- improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning through guidelines being adopted by jurisdictions on various safety-related issues.

The NASF Principles promote a national approach to improving planning outcomes near airports and under flight paths, noting that the responsibility for land use planning (outside of the boundaries of the major Australian airports) primarily rests with State, Territory and Local Governments.

The NASF Guidelines cover the following topics:

- Measures for Managing Impacts of Aircraft Noise.
- Managing the Risk of Building Generated Windshear and Turbulence at Airports.
- Managing the Risk of Wildlife Strikes in the Vicinity of Airports.
- Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation.
- Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports.
- Managing the Risk of Intrusions into Protected Airspace of Airports.

Each of the six Guidelines are discussed in further detail in Appendix C – NASF Guidelines Overview.

The South Australian Government has given a specific commitment to implementing the outcomes of NASF through a future amendment to the *Development Regulations 2008*, and amendments to relevant Council development plans to protect the ongoing operations of the major South Australian airports (including Adelaide, Parafield and Edinburgh Airports). This process has been given a priority as there is currently no recognition of the ANEF/AS2021 system in areas surrounding Adelaide Airport.

It is also noted that the National Airports Safeguarding Advisory Group (NASAG) has sought a review of the Australian Standard AS2021-2000: *Acoustics – Aircraft noise intrusion – Building siting and construction*. The State Government has developed proposals for inclusions in Council development plans based on Ultimate Capacity ANEC/AS2021 recognition and are presently consulting with the Department of Planning, Transport and Infrastructure (DPTI) on these proposals.

The current South Australian Planning System, established under the *Development Act 1993*, provides a framework for addressing some of the elements identified through the NASF process in relation to off-airport development. Key initiatives being considered by the South Australian Government to implement the findings of NASF include:

- mapping for both ANEC and building height criteria for inclusion in the relevant development plans;
- amendments to relevant modules of the DPTI Planning Policy Library to reflect NASF Principles for insertion into development plans;
- amendments to Schedule 8 of *Development Regulations 2008* relating to referral matters associated development that may impact on airport operations (i.e. building heights);
- seeking amendments to the Building Code of Australia for Noise Mitigation associated with construction of 'sensitive developments' with particular mapping noise contours; and
- inclusion of suitable Public Safety Zones (PSZ) at the end of runways to limit development to landscaped buffers (or similar) or other development that does not generate large numbers of people gathering in one place, and taking into account suitable distances and risk criteria.

7.2.2 Societal Issues

The Commonwealth Government has given discretion for the State Government to take responsibility at airports in traditional areas of State jurisdiction. These include certain ‘societal’ issues.

The offer to transfer regulatory responsibilities in these areas was made on the basis that each of the State and Territory Governments were prepared to amend or adapt their current regulations to allow existing activities at airports to continue.

The *Airports Act 1996* allows the Commonwealth to put in place laws at Adelaide Airport to control liquor, commercial trading, gambling, vehicle movements and smoking. These laws and resulting regulations also modify or exclude specific State laws in relation to matters where it is appropriate to do so.

The Commonwealth Regulations control airport activities by:

- ensuring authorisations to sell or supply liquor at premises on the airport that existed prior to privatisation are continued, subject to compliance with State laws (modified by the Commonwealth where necessary);
- modifying the application of liquor laws in the State in their application to the airport;
- where necessary, ensuring any commercial trading authorisations at the airport that existed prior to privatisation are preserved;
- prohibiting or regulating the parking and use of vehicles airside;
- prohibiting gambling except where an authorisation existed prior to privatisation;
- prohibiting smoking in designated non-smoking areas (including terminals); and
- providing a scheme of ‘on-the-spot’ fines for breaches of smoking offences.

Specific aviation functions also come under the jurisdiction of other authorities such as:

- the provision of air traffic services, air navigational facilities, an aeronautical information service, noise monitoring and Airport Rescue and Fire-Fighting services by the Aviation Rescue and Fire-Fighting (ARFF) services divisions AsA;
- the setting of aviation safety standards and associated regulations by CASA; and
- search and rescue services provided by the Australian Maritime Safety Authority.

The Commonwealth Department of Infrastructure and Regional Development (DIRD) is responsible for regulatory aviation security controls, which are set by the Office of Transport Security. It also administers the Commonwealth Government’s domestic and international aviation policies, and administers the Air Navigation Regulations.

Other Commonwealth and State Government Departments that provide services are the State Emergency Services, Australian Federal Police, Australian Customs and Border Protection Service, Immigration and Border Protection, Bureau of Meteorology, Health and Ageing and the Department of Agriculture incorporating the former Australian Quarantine and Inspection Services (AQIS) branch.

7.2.3 Building and Environmental Controls

With the introduction of the *Airports Act 1996*, building activity approvals are obtained from the Airport Building Controller (ABC), who is appointed by the Secretary of DIRD. The consent of Adelaide Airport Limited (AAL) is required before any approval can be given by the ABC. In considering its consent, which may be granted with conditions, AAL must ensure that the proposal is consistent with the approved Adelaide Airport Master Plan and its Principles of Development Control and land use planning Objectives, as well as relevant Development Design Guidelines. AAL will assess the impact of any proposal on infrastructure, the operations of the airport and environmental controls when reviewing an application for consent.

The Commonwealth has also put in place an environmental management regime at Adelaide Airport under the Act. AAL will operate in accordance with the Adelaide Airport Environment Strategy of this Master Plan, and provisions of the *Airports Act 1996* and the *Airports (Environment Protection) Regulations 1997*. An Airport Environment Officer (AEO) has been appointed by DIRD to ensure the airport and its occupiers comply with the Regulations and operate in accordance with good environmental practices mentioned in Chapter 10 – Environment Strategy.

7.3 State and Local Government Planning Policies

There are a number of strategic and statutory documents at both the State and Local Government level that offer a planning perspective on Adelaide Airport and have been considered in the preparation of this Master Plan. Not all perspectives are congruent, with some variation apparent in the timing processes associated with planning policy variations consistent with different enabling legislative situations between the *Airports Act 1996* and Regulations, and the *State Development Act 1993*. Discussion on the key documents is provided below.

7.3.1 Relationships between Airport Planning and State/Local Government Planning

At Figure 7.4, a comparative analysis between Airport Planning and State and Local Government planning. This indicates similar levels of control and consultation between both regimes. In particular, this figure and the following review of State and Local Government Planning Policies as they relate to airports, reveal the importance of Adelaide Airport to the State's economy. Further, there is an increasing emphasis towards achieving economic, social and environmental sustainability.

There is also clear evidence of a changing direction under State and Local Government planning to consider airports and aviation activity in the planning of urban areas surrounding airports. Accompanying this is a greater awareness of the long-term and unique nature of airport infrastructure and the high level of capital investment necessary for the development and maintenance of aviation infrastructure. This has been demonstrated through the establishment of the NASF as previously discussed.

The following sections of this Chapter detail the degree in which Adelaide Airport aviation and business activities are referenced within the State's planning framework through State Government policy and Local Government planning.

Airport Planning Coordination Forum (APCF)

AAL has established an APCF to develop ongoing strategic partnerships between the airport operator and the Commonwealth Government, the South Australian Government and relevant Local Governments.

Regular meetings of the APCF are held to allow AAL and Commonwealth, State and Local Government, as well as Planning representatives, to discuss issues and exchange information on airport planning, development and operations, and the implications for Adelaide Airport on development in the surrounding areas.

Specifically, the Airport Planning Coordination Forum considers such issues as:

- consistency of on-airport land planning schemes with relevant urban and regional planning schemes; recognising the nature of the Airport as a Specialist Activity Centre and a significant employment node under the State Government's *30 Year Plan for Greater Adelaide*;
- the steps being taken to develop or implement the Adelaide Airport Master Plan, covering development projects and Major or Significant Development initiatives;
- airport ground transport issues including connections to off-airport transport networks, public transport and other road issues;
- environmental issues arising from airport development and operations;
- on-airport commercial developments and their off-airport interrelationships;
- measures to address the impacts of airport operations; including aircraft noise;
- land use planning and development issues in the vicinity of Adelaide Airport, including planning measures to safeguard airport operations; and
- government briefings on regulatory and policy developments.

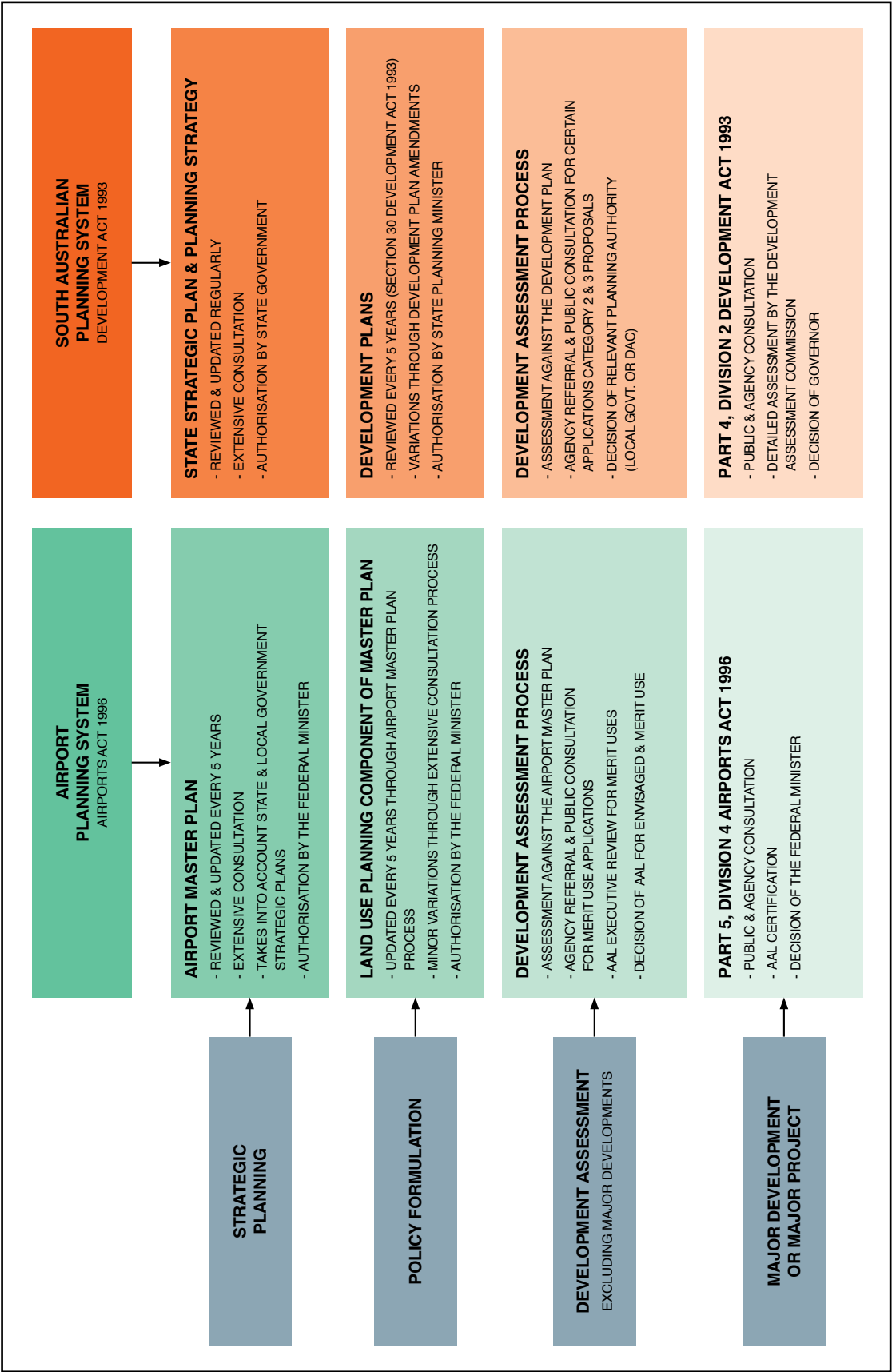


Figure 7.4 Comparison of Airport and State/Local Government Planning

7.3.2 South Australia's Strategic Plan (2011)

South Australia's Strategic Plan was first released by the South Australian Government in March 2004 and has been updated periodically since, with the most recent update in 2011. The Plan's targets reflect South Australia's aspirations for where it wants to be as a State in 2020 and beyond.

Targets are grouped under the following six priorities:

- Our Community
- Our Environment
- Our Education
- Our Prosperity
- Our Health
- Our Ideas

The Goals and Targets relevant to the ongoing operation and development of Adelaide Airport include:

Table 7.1 Extracts from South Australia's Strategic Plan (2011)

Our Prosperity	
Strategic Plan Goal	Target
South Australia has a resilient, innovative economy	<p>Target 35: Economic growth – Exceed the national economic growth rate over the period to 2020 (baseline: 2002-03)</p> <p>Target 38: Business investment – Exceed Australia's ratio of business investment as a percentage of the economy by 2014 and maintain thereafter (baseline: 2002-03)</p>
All South Australians have job opportunities	Target 47: Jobs – Increase employment by 2% each year from 2010 to 2016 (baseline: 2010)
South Australia's transport network enables efficient movement by industry and the community	Target 56: Strategic infrastructure – Ensure the provision of key economic and social infrastructure accommodates population growth (baseline: 2010-11)
Our Environment	
Strategic Plan Goal	Target
South Australia has reliable and sustainable energy sources, where renewable energy powers our homes, transport and workplaces	Target 64: Renewable energy – Support the development of renewable energy so that it comprises 33% of the State's electricity production by 2020 (baseline: 2004-05) Milestone of 20% by 2014
We aim for zero waste – recycling, reusing and reducing consumption all we can	Target 67: Zero waste – Reduce waste to landfill by 35% by 2020 (baseline: 2002-2003) Milestone of 25% by 2014
South Australia has reliable and sustainable water resources and is a leader in wastewater, irrigation, stormwater and groundwater management	<p>Target 73: Recycled stormwater – South Australia has the system capacity to harvest up to 35 GL of stormwater per annum by 2025 (baseline: 2009)</p> <p>Target 74: Recycled wastewater – South Australia has the system capacity to recycle up to 50 GL of wastewater per annum by 2025 (baseline: 2009)</p>
Industry and agriculture are highly efficient and innovative in their use of water	Target 75: Sustainable water use – South Australia's water resources are managed within sustainable limits by 2018 (baseline: 2003)

As noted previously, economic research by Hudson Howells has identified that 8,726 people are directly employed through Adelaide Airport with an additional estimated 9,033 jobs created indirectly through the airport and on-site operators. Additionally, through the direct purchases of on-site Adelaide Airport operators and the on-spend of direct wages of employees, there is an induced contribution to value-added in the State of South Australia of approximately \$1.055 million. These employment and spending estimates demonstrate the important and significant contribution that Adelaide Airport makes to the South Australian economy and job market.

In addition, an emphasis has been placed upon sustainable environmental practices, including the increasing use of recycled water from the Glenelg Wastewater Treatment Plant on airport land, the installation of solar panels on the terminal building, the development of an Aquifer Storage and Recovery system and the on-going re-vegetation plus a Terminal 1 waste recycling program will assist in achieving the State Government's Strategic Plan environmental targets.

7.3.3 Development Act 1993 and Development Regulations 2008

The South Australian planning system is established under the *Development Act 1993* and associated *Development Regulations 2008*. The object of the Act is to provide for proper, orderly and efficient planning and development in the State. Amongst other aims, the *Development Act 1993* provides for:

- the establishment of objectives and principles of planning and development;
- a system of strategic planning governing development;
- the creation of development plans with policies to guide and control development;
- appropriate public participation in the planning process and the assessment of development proposals; and
- the establishment of various decision-making bodies.

Although not utilised in the assessment of development on Adelaide Airport, the *Development Act 1993* and associated *Development Regulations 2008* are relevant to Adelaide Airport for the following reasons:

- The land use planning aspects of the Adelaide Airport Master Plan have been prepared to generally reflect the South Australian planning system – in format, language and approach to assessment of development proposals.
- The airport sits within a planning context established by the State Planning legislative requirements.

- The Planning Strategy for South Australia reflects and gives weight to further development of the airport.
- Development which surrounds the airport can have significant impact on the function, safety and ongoing operations of the airport, and the *Development Act 1993* provides the mechanisms for safeguarding airport operations from inappropriate off-airport development.

It should be noted that the State Government has recently launched a review of the South Australian Planning System. The review is expected to be completed in late 2014.

7.3.4 The Planning Strategy for South Australia

The *Development Act 1993* requires the State Government to prepare the Planning Strategy for South Australia. The Planning Strategy presents the State Government's policy directions for the long-term physical development of the State over the period 2010 to 2036, and is divided into 8 volumes based on geographical area; with 7 of those volumes dedicated to regional South Australia.

7.3.5 The 30-Year Plan for Greater Adelaide

The relevant volume of the Planning Strategy applicable to Adelaide Airport is the *30-Year Plan for Greater Adelaide* (referred to as the *30-Year Plan*) which was released in February 2010. The *30-Year Plan* provides directions for urban and regional development for business, industry, infrastructure provision, utility supply and government agencies.

The *30-Year Plan* shifts the emphasis of urban growth away from expansion of the urban fringe towards a greater proportion of development within existing urban areas. Growth within Adelaide's existing footprint is promoted by increasing housing densities close to selected transport corridors and at new Transit Oriented Developments. The *30-Year Plan* includes population and employment targets for western Adelaide, seeking 42,560 new dwellings (33,060 within corridors and 9,500 outside corridors) and 40,500 new jobs over the 30-year period.

The *30-Year Plan* recognises Adelaide Airport as a 'Specialist Activity Centre' and promotes an increase in the level of economic activity generated on airport land. It signals the importance of Adelaide Airport for a range of economic uses, and gives a clear policy direction towards protecting its ongoing operations from encroachment by incompatible uses.

The policy directions of the 30-Year Plan of promoting urban infill along main roads close to the airport and under flight paths, and further urban regeneration and consolidation within the surrounding suburbs, is anticipated to increase the number of people living near the airport who may be affected

by its ongoing operations. There is some tension between such policy directions and the National Airports Safeguarding Framework, which was discussed previously in section 7.2.1.

The policies relevant to airports in Adelaide are outlined below.

Table 7.2 Extracts from the 30-Year Plan for Greater Adelaide

Chapter D: Policies and Targets
The Economy and Jobs
<p><i>Policy 2: Set specific jobs targets at a regional level, which will: reflect where people are going to live to minimise journey to work times; take advantage of existing infrastructure such as transport; take account of the likely regional growth of key sectors; ensure that sufficient land is available for commercial, industrial, retail, primary production, mining and other activities.</i></p> <p><i>Policy 7: Focus business clusters around key transport infrastructure such as road, air, rail and sea terminals, particularly intermodal facilities to maximise the economic benefits of export infrastructure.</i></p>
Transport
<p><i>Policy 9: Ensure planning policy protects airport sites by restricting incompatible uses of land in surrounding areas. Development Plans should identify areas adjacent to airports and under flight paths where new development is inappropriate due to building height restrictions and aircraft noise impacts.</i></p> <p><i>Policy 10: Require new housing and other noise-sensitive developments permitted in locations adjacent to airports and under flight paths to incorporate appropriate noise attenuation measures to minimize the impact of aircraft noise and airport activities.</i></p> <p><i>Policy 11: Develop, in cooperation with the Australian Government, a clear policy on the definition of public safety zones around airports for incorporation in Development Plans.</i></p>
Western Adelaide Directions (Maps D9, D10 & E3)
<p><i>The Plan establishes new housing and employment targets for western Adelaide. There are implications for Adelaide Airport both as the major employer in Adelaide's west but also for the greater number of residents who will live near Adelaide Airport, and potentially be affected by its operations. Adelaide Airport is shown as an 'existing key industry area' within western Adelaide. The map notation for the airport is to 'Strengthen tourism, transport and economic role of airport'.</i></p> <p><i>There are two activity centres on the airport site.</i></p> <p><i>The Harbour Town precinct on the western edge of the site is identified as a bulky goods centre and the airport terminal is identified as a specialist centre. The map also shows a future intensification of land uses in the urban areas between the airport and the city centre. The main road corridors adjacent to the airport of Marion Road, Sir Donald Bradman Drive, and Richmond Road are identified as such areas (non-corridor).</i></p>
Major Planned Infrastructure Expenditure (Map D17)
<p><i>The map indicates the future development of an 'Adelaide Airport southern road link'. An upgrade to the intersection of Sir Richard Williams Avenue and Sir Donald Bradman Drive is also indicated.</i></p>
Water
<p><i>Committed stormwater harvesting projects, as shown on Map D22</i></p> <p><i>Adelaide Airport Stormwater Scheme: Will source water from the Brownhill/Keswick Creek system. A storage basin will capture flows, which will then be treated using bio-filtration and media filtration to initially harvest about 400 megalitres a year.</i></p>

7.3.6 Housing and Employment Land Supply Program

The *Housing and Employment Land Supply Program (HELSP) Report 2010* supports the implementation of the *30-Year Plan for Greater Adelaide* by guiding the process of rezoning land to ensure there is a sufficient supply of land available to meet housing and employment targets.

The HELSP identifies Adelaide Airport as having a significant supply of industrial land which will contribute 76 hectares to the industrial land supply in Adelaide's western region. Components of Adelaide Airport referenced in the HELSP are detailed below:

- Airport East Precinct – identified as a major industrial site, supported by infrastructure, which contributes 41 hectares to the supply of industrial land;
- Morphett Precinct – identified as contributing 35 hectares to the supply of industrial land; and
- Harbour Town site in the Tapleys Precinct – identified as presenting a new opportunity for a retail centre within the established metropolitan area.

The 2012 HELSP monitoring report emphasises the benefits from locating future stocks of industrial land close to existing infrastructure, including airports. The report indicates that the consumption of industrial land in Western Adelaide over the 2008 to 2012 period was 81 hectares; less than 50 percent of the 164 hectares that was forecast for the region.



7.3.7 Strategic Infrastructure Plan for South Australia

The *Strategic Infrastructure Plan for South Australia 2005/2006 - 2014/2015* is a key document ‘...in developing a more coordinated long-term approach to infrastructure provision throughout the State’. It provides an overarching framework for the planning and delivery of infrastructure by all government and private sector infrastructure providers for the State.

The Strategic Infrastructure Plan incorporates several references to Adelaide Airport and aviation services generally. These references are outlined in the table below:

In 2010, the South Australian Government released the *Strategic Infrastructure Plan for South Australia* Discussion Paper. The Discussion Paper sought to update the 2005/2006 Strategic Infrastructure Plan, taking into consideration the Objectives and Targets of the *30-Year Plan for Greater Adelaide*.

In relation to Adelaide Airport, the Discussion Paper included the following initiatives:

- a light rail (or equivalent mass transit service) that services the Airport, with direct and simple connections to the Adelaide CBD;
- the delivery of an uninterrupted South Road (north-south corridor);
- potential for a southern airport link access road to Adelaide Airport, utilising Richmond Road; and
- continued enhancement of local cycle and pedestrian connections to the Airport and surrounding area.

To date, an updated *Strategic Infrastructure Plan for South Australia* has not been endorsed by the South Australian Government. However, planning for an uninterrupted South Road (north-south corridor) has progressed, with concept designs proposing a major grade-separated intersection at Sir Donald Bradman Drive.

Table 7.3 Extracts from the Strategic Infrastructure Plan for South Australia

Transport
<i>Discussion under the ‘Transport Sector’ section of the plan recognises Adelaide Airport as the “State’s main air freight and passenger gateway” and that “both freight and passenger movements are expected to grow”.</i>
Aviation
<i>Under the heading ‘Aviation’, the plan comments that “...owners of aviation assets are trying to maximise their return by using the large tracts of land for commercial purposes” and that “...increased road traffic in and around airports is being addressed”. The plan also notes that air freight is crucial for the transport of time-critical high-value products and that Adelaide Airport is the State’s only international export airport.</i>
Aviation: Strategic Priorities
<i>Under the ‘Strategic Priorities’ heading for Aviation, the following is identified:</i>
<ul style="list-style-type: none"> • <i>Maintain an efficient transport network to Adelaide Airport to support anticipated passenger and freight movements</i> • <i>Ensure any change in land use on or adjacent to export airports does not preclude future transport development.</i>
Land Sector
<i>Discussion under the ‘Land Sector’ section of the plan under the heading ‘Industrial Land Supply and Development Opportunities’ identifies some 60 hectares at Adelaide Airport in the list of the ‘most significant areas of vacant land’.</i>
Land: Strategic Priorities
<i>Under the ‘Strategic Priorities’ heading, the following is identified:</i>
<ul style="list-style-type: none"> • <i>Identify, protect and facilitate the development of a 15 to 20 year supply of suitable industrial land to meet demand</i> • <i>Planning of industrial estates should encourage sustainable industrial practices.</i>

7.3.8 Draft Integrated Transport and Land Use Plan

In 2013, the South Australian Government formed a working group to prepare a draft Integrated Transport and Land Use Plan (known as the Transport Plan) for the State. The draft Transport Plan was released in October 2013 for public comment.

The Transport Plan identifies six key transport challenges facing South Australia, and identifies a number of solutions to address each. The six key challenges are:

1. Growing the role of public transport in servicing our city and urban and regional centres.
2. Providing efficient connections to export/import gateways.
3. Prioritising transport infrastructure and services to encourage

Table 7.4 Extracts from the draft Integrated Transport and Land Use Plan

Central and Inner Adelaide		
Solution	Action	Timeframe
Public Transport	Action 2. WestLINK and EastLINK – extend trams along the east-west corridor from Henley Square, Henley Beach Road, through the city and along the Parade turning north to Magill Campus, with an extension to Adelaide Airport.	Medium term
Roads	Action 17. Upgrade intersections along Sir Donald Bradman Drive to reduce congestion and improve reliability of travel times to the airport, and provide taxi, commercial vehicle and bus access via Richmond Road.	Short-to-medium term
Cycling and walking	Action 24. Partner with local councils to complete the Airport Bikeway, including crossings of arterial roads.	Short term
Middle Adelaide		
Solution	Action	Timeframe
Public Transport	Action 2. WestLINK and EastLINK – extend trams along the east-west corridor from Henley Square, Henley Beach Road, through the city and along the Parade turning north to Magill Campus, with an extension to Adelaide Airport.	Medium term
Roads	Action 13. Upgrade intersections along Sir Donald Bradman Drive to reduce congestion and improve reliability of travel times to the airport, and provide taxi, commercial vehicle and bus access via Richmond Road.	Short-to-medium term
Ports, rail freight and airports	Action 18. Complete the North-South Corridor – including rail connections to the port.	Medium term
Cycling and walking	Action 28. Partner with West Torrens Council to complete the Airport Bikeway, including crossings of arterial roads	Short term
Local Government	Action: Work with local councils to complete local transport strategies to complement land use directions of local development plans, with a focus on accessible neighbourhoods, integration with public transport networks and state freight/major traffic routes: Work with Local Government to implement the National Airport Safeguarding Framework within council development plans to ensure the future of Adelaide, Edinburgh and Parafield Airports.	Short term

mixed-use development in central and inner Adelaide.

4. Supporting lively communities by encouraging active travel modes.
5. Fine-tuning, maintaining and better utilising our existing transport assets.
6. Developing and maintaining a planning system that ensures integrated transport and land use.

With respect to airport operations in the State, the main focus is on improvements to the transport networks to assist freight movement and provide greater support for regional aviation. Reference is also made to working with local council Planners to improve planning policies to prevent inappropriate land uses surrounding airports to provide greater protection to airport operations.

The draft Transport Plan identifies a number of Solutions and Actions for nine regions of the State including: Central and Inner Adelaide, Middle Adelaide, Outer Adelaide, and each of the six regions in line with the Planning Strategy.

It should be noted that the suggested timeframes in the Transport Plan have not been specified beyond the broad 'short/medium/long term'. The Transport Plan is expected to be finalised in 2015.

The most relevant Solutions and Actions to the airport are listed in Section 5.8 solutions for the Central and Inner Adelaide Region, and the Middle Adelaide Region; and are identified in the table below:

7.3.9 Local Government Development Plans

Development Plans are key documents in the South Australian planning and development system. They are established under the Development Act 1993 and contain zones, maps and written policies that guide property owners and others as to what can and cannot be done in the future on any land in the area covered by the development plan. Development Plans may set out the desired character for different parts of an area, the types of development envisaged and whether public notification of a development application is required. Development Plans provide the detailed criteria against which development applications are assessed by the relevant Councils.

West Torrens Council Development Plan

Adelaide Airport is located within the West Torrens Council Development Plan (Consolidated 25 September 2014) which covers the entire City of West Torrens. The development plan is updated regularly to reflect current policy directions and best planning practices. Adelaide Airport is currently identified in an 'Airfield Zone'.

Prior to the amendments made to the West Torrens Council Development Plan in August 2011, the Adelaide Airport was contained within the 'Adelaide Airport Zone'; a specific zone containing planning policies which strongly correlated with the land use policy directions expressed in the Adelaide Airport Master Plan 2009. However, the changes made to the West Torrens Development Plan at that time are based on a generic 'Airfield Zone', which does not recognise the strategic importance of Adelaide Airport to the State, or provide a finer grain planning policy framework of dividing the Airport into various precincts (as was previously the situation).

Notwithstanding this, the following overview of the current Airfield Zone is provided below.

The primary Objective of the Airfield Zone is:

"A zone primarily accommodating aircraft operations, passenger terminals, airport and aviation-related light industrial, service industrial, warehouse and storage purposes".

The Objectives are supported by a 'Desired Character Statement' for the zone which seeks:

- a range of services and facilities necessary for the safe, convenient and efficient operation of aviation activities at the Adelaide Airport;
- to continue to accommodate a range of airport and export related industrial and commercial uses, and recreational activities of an open character on land reserved for long-term aviation needs;
- development compatible with the principle aviation function of the airport and maintaining the long-term operational and safety needs of the airport;
- development promoting the economic improvement of the State and the City of West Torrens by maintaining the airport as the international, national and regional gateway to South Australia, enhancing the airport as a major element of public infrastructure and facilitating the movement of time sensitive freight and passengers by infrastructure improvements;
- the adoption of adequate separation distances between non-aviation and aviation development on airport land, and between development on airport land and off-airport uses; and
- recognition of the on-going commitment for stormwater harvesting on the Adelaide Airport site.

The zone provisions also contain a number of Principles of Development Control that support the attainment of the Objectives and Desired Character Statement, recognising the long-term operational, safety and commercial aviation requirements of Adelaide Airport and providing guidance for building heights within the airspace surrounding the airport (through the 'Building Near Airfields' General Section module).

The overall planning policy provisions of the Airfield Zone, although generic in nature, remain generally compatible with the land use directions sought in this Master Plan.

Surrounding Council Development Plans

As previously mentioned, Adelaide Airport is located primarily within the City of West Torrens, with a small portion of the airport site located within the City of Charles Sturt to the west. The City of Holdfast Bay is located immediately adjacent the site to the south-west.

AAL continues to monitor policy changes to the Development Plans undertaken by the three Councils to ensure that the proposed policies do not negatively impact upon the operations of the airport. Additionally, the potential impact of airport operations and future development of Adelaide Airport on the Holdfast Bay and Charles Sturt Council areas is given consideration by AAL in the preparation of the Master Plan and also discussed at APCF meetings with Council

representatives.

An overview of the Development Plan Zones immediately adjacent to the airport site for the two Council areas is provided below:

City of Charles Sturt (consolidated 25 September 2014):

the Adelaide Airport site is located directly to the west of the Charles Sturt Council, with a small portion of the West Beach Precinct located within the Airfield Zone. The Development Plan is in Better Development Plan format and the adjoining zones include the Coastal Open Space and Adelaide Shores Zones, with areas of the Residential Zone north of the Adelaide Shores complex.

AAL prepared a submission on the Adelaide Shores DPA seeking to exclude the airport from the proposed zone, however this was not adopted. The recently created Adelaide Shores Zone sets out the guiding policies for new development at the Adelaide Shores complex, with a focus on short-term tourist accommodation, sporting facilities and recreational activities, with some commercial activities envisaged along Tapleys Hill Road.

The zoning surrounding the airport site is generally compatible with the Master Plan policies.

City of Holdfast Bay (consolidated 13 February 2014):

the Adelaide Airport site is located directly to the south-west of the Holdfast Bay Council area. The Development Plan is not in the Better Development Plan format and adjoining zones include Residential and Residential Activity Node Zones. These zones are located some distance south of the Runways Precinct, and south-west of the Morphett Precinct.

The zoning surrounding the airport site is generally compatible with the Master Plan policies. "

7.3.10 Recent Development Plan Amendments affecting Airport Operations

There have been a number of Development Plan Amendments (DPA's) proposed by the State Planning Minister and Councils surrounding Adelaide Airport since the 2009 Master Plan which may have an impact in relation to ongoing airport operations.

Whilst recognising the need to update planning policy to reflect current strategic directions for the State (i.e. the *30-Year Plan for Greater Adelaide*), due consideration must be given to protecting the ongoing operations of Adelaide Airport and to ensuring that the NASF guidelines are being achieved.

Adelaide Airport Limited has recently provided submissions in relation to a number of Development Plan Amendments, including those listed on the following page:

Table 7.5 List of Recent Development Plan Amendment Submissions

Council	Development Plan Amendment Title	Council or Ministerial DPA	Summary of Adelaide Airport Limited Comments
Adelaide (City)	Riverbank Health and Entertainment Areas	Ministerial	Response to DPA forwarded by AAL on 6 September 2013. DPA approved by the Minister for Planning on 11 October 2013.
Adelaide (City)	Capital City	Ministerial	Identified concerns with proposed building heights throughout.
Norwood, Payneham and St Peters	Residential Development (Zones and Policy Areas)	Council	Reviewed building heights but no issues as proposed building heights do not penetrate OLS.
Norwood, Payneham and St Peters	Kent Town and the Parade Strategic Growth	Council	Reviewed building heights but no issues as proposed building heights do not penetrate OLS. Note that policy recognises importance of protecting the airport.
Burnside	Inner Rim	Ministerial	Reviewed building heights but no issues as proposed building heights do not penetrate OLS. DPA approved and gazetted by the Minister for Planning on 29 October 2013.
Prospect	Inner Rim	Ministerial	Reviewed building heights but no issues as proposed building heights do not penetrate OLS. DPA approved and gazetted by the Minister for Planning on 29 October 2013.
Unley	Village Living and Desirable Neighbourhoods – Main Road Corridors and Mixed Use and Residential Vitalisation (Greenhill and Unley Roads)	Council	Identified concerns with proposed building heights along Greenhill Road (7 storeys/25.5 metres). Concern for minimal reference to protecting ongoing operations of airport within the proposed planning policies. The Minister has authorised the DPA on 29 October 2013.
West Torrens	Housing Diversity	Council	Concern for maximum building heights (5-8 storeys) penetrating OLS with reference to airport arrival/ departure maps. Lack of detail on noise impacts for new development.
West Torrens and Charles Sturt	Adelaide Shores	Ministerial	Concern that long-term development has been identified for the Adelaide Shores site on airport land and its potential to conflict with the Adelaide Airport Master Plan. Submission has been prepared on DPA seeking that any Airport land be excluded from this DPA in favour of the Adelaide Airport Master Plan.

Section 7.3.11 City of West Torrens Draft Strategic Directions Report (not yet endorsed)

The City of West Torrens has recently undertaken a review of the 2008 Strategic Directions Report, and prepared a draft Report in August 2014, which has been endorsed by Council on 2 September and submitted to DPTI for endorsement.

Essentially, the updated Strategic Directions Report follows relatively the same overarching themes, reducing the number from six to four themes. Additionally, the DPAs that have been earmarked in the 2014 Strategic Directions Report were previously identified in the 2008 Report.

The draft document proposes a number of amendments to Council's Development Plan that may have implications for Adelaide Airport. A number of references to Adelaide Airport are contained within the document, both at the discussion stage and the recommendation stage of identified Development Plan Amendments.

The *City of West Torrens Strategic Directions Report* acknowledges the need for ongoing collaboration between the airport and council, and identifies a number of issues relating to the impact of emissions, non-aviation uses, and ongoing stormwater management for consideration by council.

A review of the current Master Plan is provided, recognising the economic importance of Adelaide Airport and projected growth in passenger numbers. Land use planning on airport land is also discussed, with reference to the need for new development to consider the impacts on airport operations and the surrounding residents and businesses.

Issues and Challenges

Under section 4.3 'Issues and Challenges', Council identified a number of issues that were raised by the community during the consultation process, and also through a review of current State and Local Government strategic documents. The following are considered of relevance to the Adelaide Airport:

- Anticipated increase in residential development through infill opportunities.
- The current and future increase in traffic travelling through the Council area, and the need to develop a city-wide traffic management plan.
- The need to address and mitigate the impacts of climate change.

Future Directions

To meet the vision set out in the *Strategic Directions Report*, the West Torrens Council has adopted four overarching themes to be achieved by a series of key priorities. Those that may impact upon the airport include the following:

- **Theme: Community Life**
 - Provision of access to new housing, services and transport networks at activity centres
 - Identify locations and opportunities for land banking and urban infill opportunities
- **Theme: Natural Environment**
 - Water quality management and efficient use and reuse of water resources having regard for whole of catchment area (Water Sensitive City)
 - Continue to work diligently in developing appropriate and innovative stormwater management measures, that can address future increases in run-off from urban development and rising sea levels
 - *Note: accompanying Natural Environment Plan for Council identifies parts of the airport as being at risk of sea level rise*
 - Promotion of more environmentally friendly modes of transport, such as cycling, walking and public transport.
- **Theme: Built Environment**
 - To implement innovative measures and regulatory controls to manage interface issues where residential land and less sensitive land uses such as industrial land, abut each other.
 - Recognising issues and concerns relating to the impact of the Adelaide Airport on neighbouring land use, transport and infrastructure
 - The ongoing implementation of an integrated city-wide traffic management plan to address traffic flows and speeds, local traffic issues and parking needs.
 - The continued prioritisation of structural and non-structural mitigation measures for flood prone affected land, including measures to enhance stormwater storage and reuse.
 - Continue work on the following key transit corridors identified within the City: Adelaide-Glenelg tram line, Sir Donald Bradman Drive, Marion Road and Richmond Road.
- **Theme: City Prosperity**
 - Enabling mixed use development along key corridors throughout the City, and key nodal points in local areas.

- Support the key employment sectors already within the City which include manufacturing, transport, retail and health care and social assistance.
- The protection of key employment zones, which includes industrial precincts and activities.

Proposed Work Program

From the overarching themes, key directions and issues discussed in the Strategic Directions Report, the West Torrens Council has prepared a Proposed Work Program to undertake a series of Development Plan Amendments to enable policy changes to address these issues. The proposed DPA's that may have the greatest impact on the airport are briefly discussed below:

- **Employment** (to commence in 2015) – provide a range of employment options within the Council area in response to market demand and provision of appropriate land supply.
- **Activity Centres** (to commence in 2015) – undertake an economic and retail analysis to better align the existing activity centres with the Planning Strategy definitions.

Section 7.3.12 City of West Torrens Towards 2025 Community Plan

Under Section 122 of the *Local Government Act 1999*, Councils are required to prepare 'strategic management plans' that establish the future direction of the Council area. Since the development of the 'Towards 2025' strategic planning process in 2007, Council has undertaken extensive consultation with the local community and has prepared the *Towards 2025 Community Plan in 2014*.

The Community Plan adopts four community aspirations as established through the engagement process entitled 'Our Place'. Under these themes, a number of community aspirations with long-term and five-year strategies, which are measured by success indicators for Council to monitor over the term of the Community Plan being five years.

Whilst there are no community aspirations or strategies that relate to the airport specifically, several strategies are aligned to AAL's own aspirations for the airport:

Natural Environment

- **Community Aspiration: Environmentally sustainable development**
 - Long-term strategy: Encourage new and existing development to incorporate environmentally sustainable designs and practices.
 - Community aspiration: Reduction of our ecological impact
 - Long-term strategy: Facilitate the minimisation of waste production and disposal to landfill and productive utilisation of waste.
 - Long-term strategy: Create a water-sensitive city.
 - Long-term strategy: Manage current water resources efficiently.
 - Long-term strategy: Respond to the challenges of a changing climate.

Built Environment

- Community Aspiration: A well-designed built environment
- Long-term strategy: Promote retail, commercial and industrial activity that is compatible with neighbouring land uses.
- Community aspiration: Effective stormwater infrastructure
- Long-term strategy: Manage the quantity and quality of stormwater flows.
- Long-term strategy: Minimise the risk of flooding to existing communities and future developments.

City Prosperity

- Community Aspiration: A thriving business environment
- Long-term strategy: Support the development and growth of local business and jobs
- Long-term strategy: Encourage economic growth and productivity.

7.4 Development and Building Assessment Process

7.4.1 Development Assessment

AAL uses a development assessment process that closely aligns with the current South Australian Development Assessment process, in the context of the Commonwealth arrangements as described in the *Airports Act 1996*.

As mentioned in Section 7.2, under the *Airports Act 1996*, controls over land use planning and development on the airport remain with the Commonwealth Minister for Infrastructure and Regional Development, with AAL to make decisions on development proposals that are consistent with the approved Master Plan.

Figure 7.5 indicates the Development Decision Matrix for the specific forms and types of airport development at Adelaide Airport. There are a number of decision-making steps in this process which include:

- The decision of AAL to lease land for particular forms of development.
- The decision of airport authority regulators (such as DIRD and CASA) to accept development which will not unduly impact upon airport and aviation activities.
- The decision of AAL as to the appropriateness (or otherwise) of the development against the approved Master Plan. This discretionary decision takes into account:
 - The Airport (Adelaide) Zone Objectives and Principles of Development Control;
 - The relevant precinct Objectives and Principles of Development Control;
 - The general consistency with the desirable Structure Plans for the relevant precinct; and
 - Any comments from owners of abutting and facing adjacent property within 60 metres of the specific airport development site, separated only by a road, watercourse reserve or open space where an acoustic barrier is not already in place.
- Consideration of the development in the context of any classification toward sensitive or significant impact to the community, or Major Development under the *Airports Act 1996*.

If a development proposal is not identified within the relevant precinct as Envisaged or Non-Complying, it can be considered on 'Merit' and triggers two processes – Agency Referral and Public Notification. The Public Notification process entails notification in a newspaper circulating within the region and advice to the members of the Adelaide Airport Consultative Committee and the associated Airport Planning Coordination Forum. Such a process will assist in informing key groups/affected persons of the proposal, and allow written submission within 15 business days, which will be considered by AAL prior to any decision being made on the proposal.

If a development proposal is identified as being Non-Complying within the relevant precinct, and the proposal is considered by AAL to have Merit, such an application could trigger a Minor Variation to the Adelaide Airport Master Plan under Section 84A of the *Airports Act 1996* for decision by the Minister.

7.4.2 Building Assessment Process

All development on-airport is subject to building approvals consistent with the provisions of the *Airports (Building Control) Regulations 1996* under a process commensurate with the Local Government building approval process or private certification under State legislation.

Figure 7.6 as follows is an outline of the processes in terms of Development and Building Approvals, and Construction and Operational Controls.

7.5 Commonly Used Planning Definitions

Included within the Glossary of this Master Plan are definitions for varying airport activities consistent with airport needs or existing airport uses. Where a particular land use is not defined, regard should be given to the definitions contained in the *South Australian Development Regulations 2008* and *South Australian Planning Policy Library Terminology List 2011* prepared by DPTI. AAL will be the appropriate adjudicator in any anomaly instances.

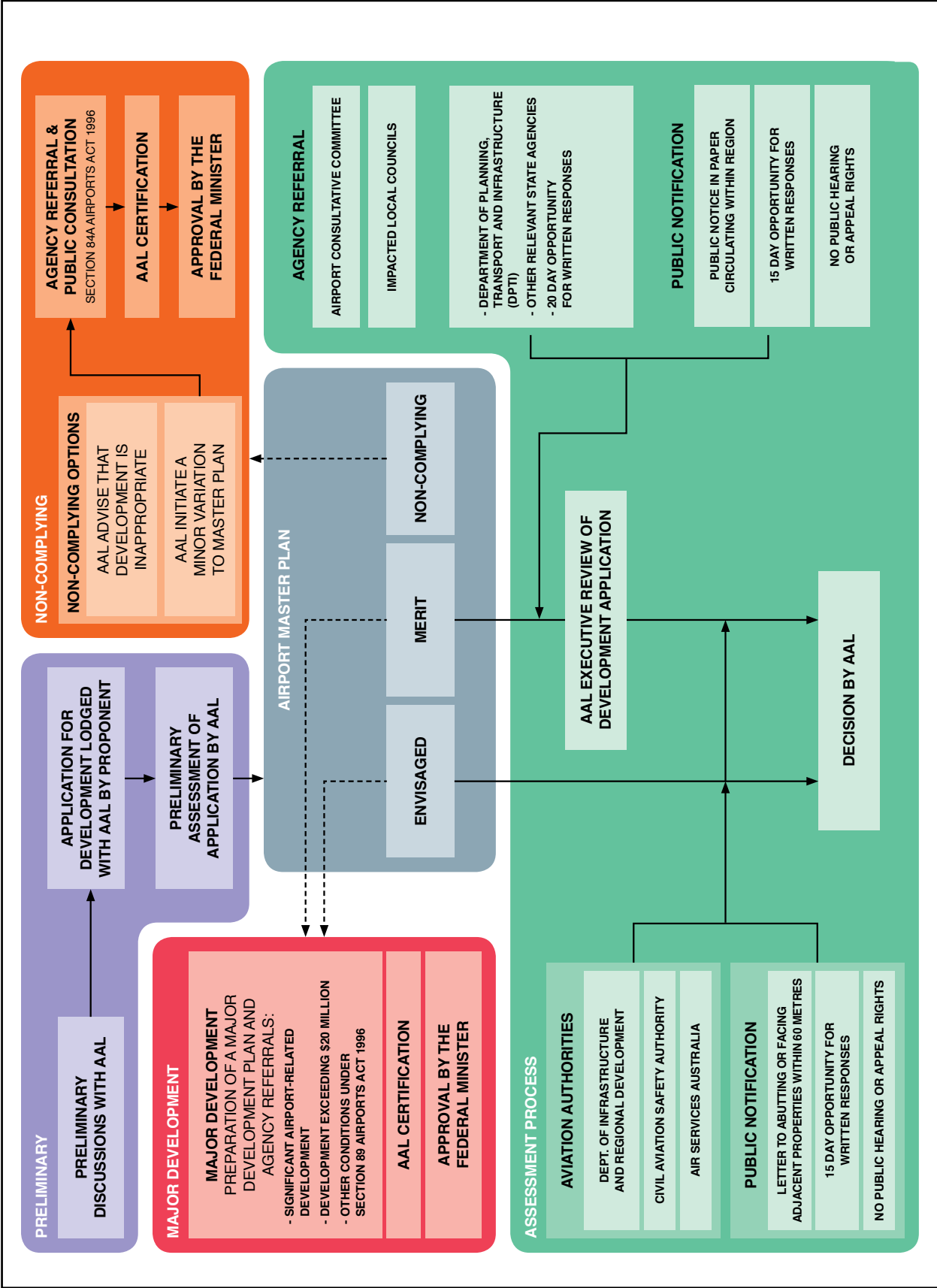


Figure 7.5 Development Decision Matrix

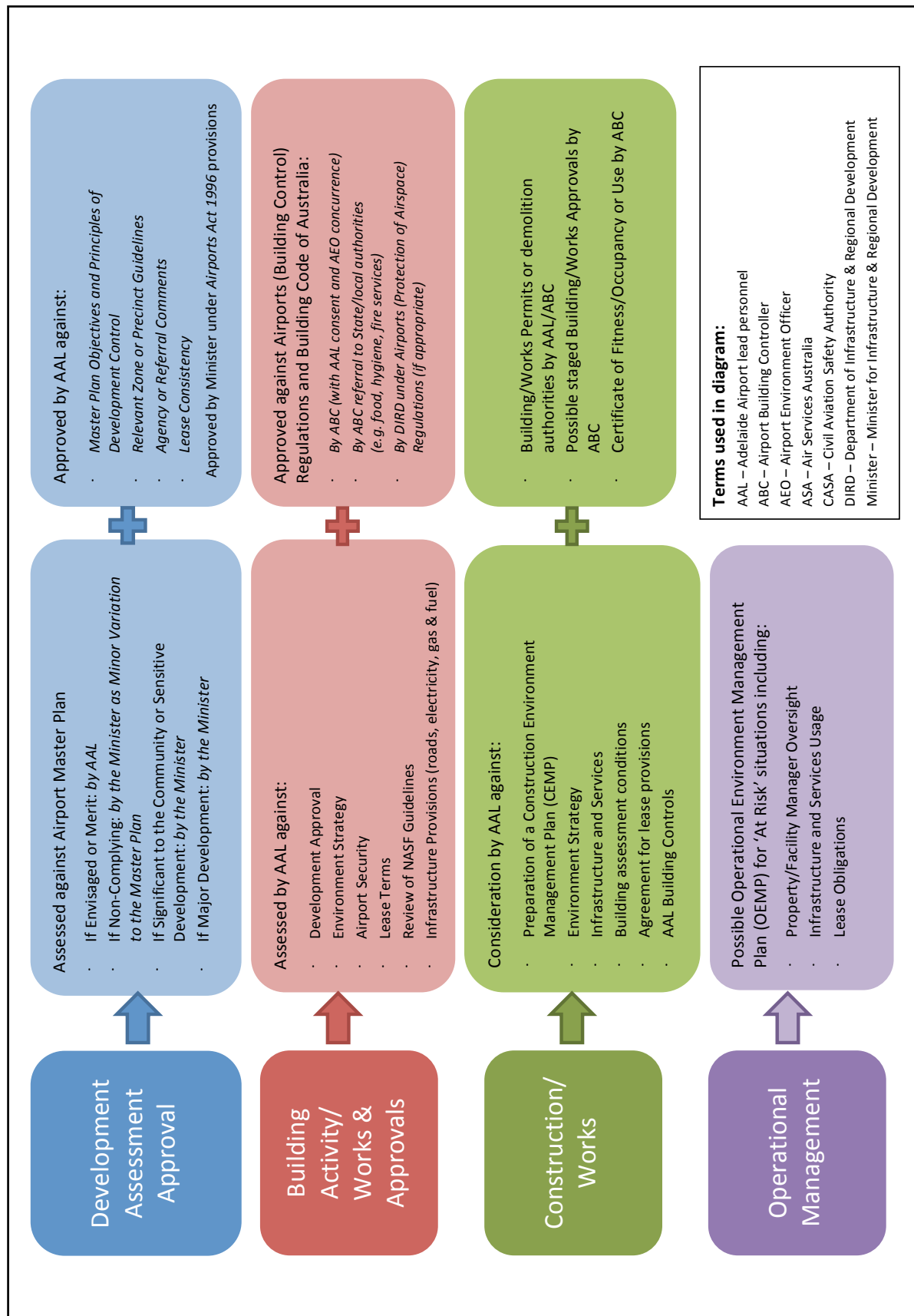


Figure 7.6 Development and Building Approvals Process Diagram

7.6 Airport (Adelaide) Zone

7.6.1 Introduction

The Airport (Adelaide) Zone is an AAL planning zone that defines the 785-hectare area within which the following land use planning policies apply. These policies consist of Objectives, a Desired Character Statement and Principles of Development Control. These policies provide general guidance as to the forms of development envisaged within the overall zone and provisions to further guide such matters as the design and scale of development.

The zone is further divided into various precincts (a smaller sub-area of the zone) and policy areas, which contain additional specific policies relevant to each identified area. Regard will be given to both the overall zone policies and the more specific precinct policies when assessing whether or not to approve a development proposal.

The Airport (Adelaide) Zone is shown in Figure 7.7.

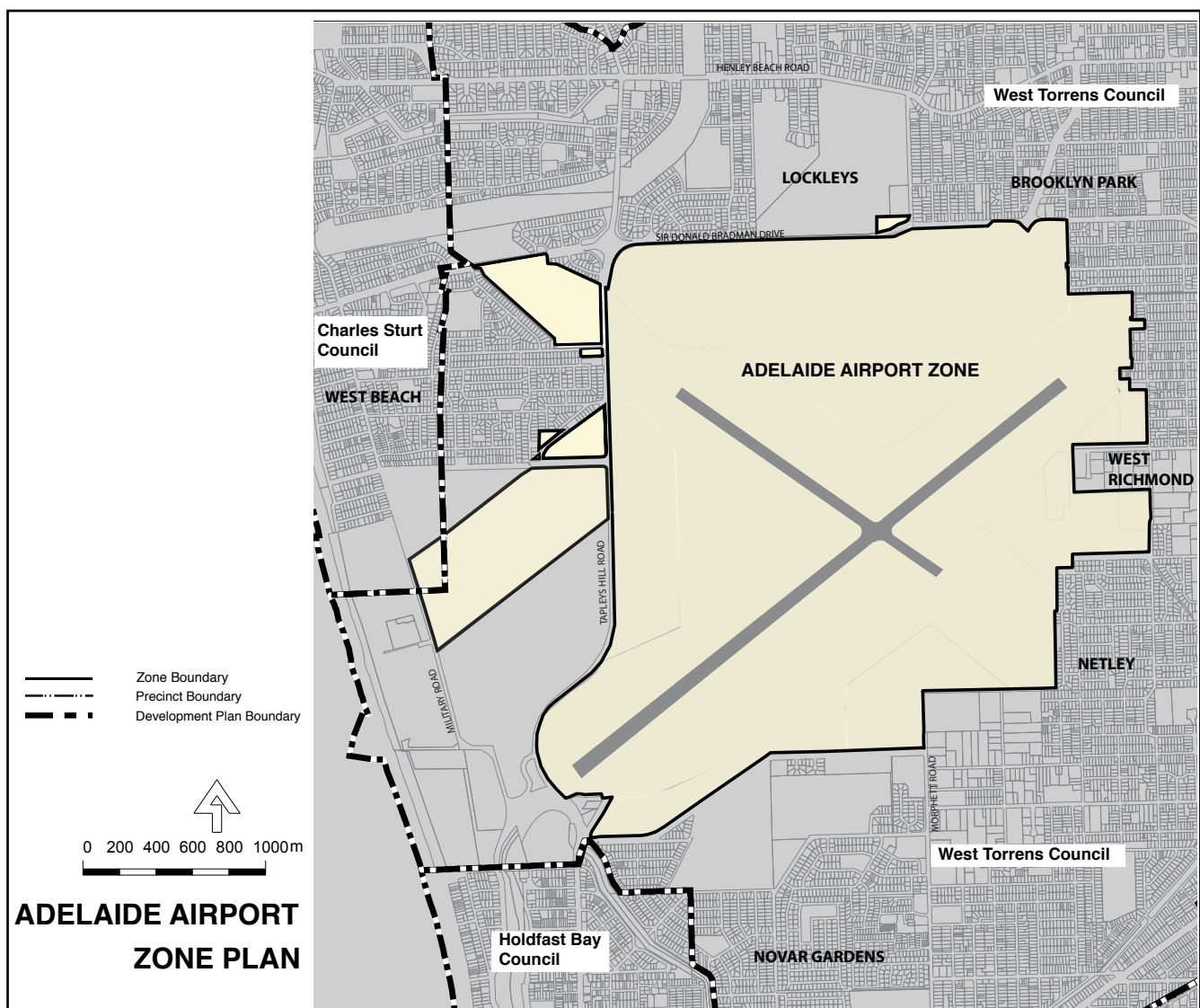


Figure 7.7 Airport (Adelaide) Zone Plan

7.6.2 Objectives

The following Objectives apply within the Airport (Adelaide) Zone.

1. Development within the zone which promotes Adelaide Airport's role as:
 - the international, national and regional gateway to South Australia for commuters and tourists;
 - the primary aircraft operations, passenger terminals and airport and aviation related support activities for Metropolitan Adelaide and South Australia;
 - a key element of transport infrastructure for the State, accommodating a range of services and facilities necessary for the safe, convenient, and efficient operation of aviation activities;
 - a major business enterprise providing a transport hub, export facilities, employment and commercial, retail and industrial development opportunities for the western suburbs, Metropolitan Adelaide and South Australia.
2. Development that ensures the long-term operational, safety and commercial aviation requirements of the airport continue to be met.
3. Development of active and passive recreation and other appropriate activities on land restricted by aviation needs.

Economic Development

4. Development that promotes the economic improvement of Metropolitan Adelaide and the State by:
 - facilitating the movement of passengers and time sensitive freight by infrastructure improvements; and
 - contributing to the viability of the airport as a business enterprise.
5. A zone accommodating a range of airport and export-related industrial and commercial uses, including hotel and ancillary services.
6. Retail development within the zone to include retail shopping facilities that provide a range of convenience and comparison goods to service tourists, visitors and employees of the airport and the surrounding community and other large scale retail facilities with a Metropolitan-wide catchment. Bulky goods retailing is appropriate in parts of the zone.
7. Community facilities within the zone, such as child care, consulting and health care facilities, to service tourists, visitors and employees at the airport and the surrounding community.

Amenity

8. Development will be acoustically treated to suit forecast noise levels from aircraft operations.
9. Enhancement of the visual and environmental quality of Adelaide Airport through:
 - quality buildings of contemporary design;
 - the provision of aesthetic and screening landscaping;
 - the establishment of landscaped and grassed swales or detention basins
 - where appropriate on-site stormwater management; and
 - sustainable development practices.
10. Development designed and sited to conserve energy and minimise waste.
11. Development located, designed and operated to minimise adverse impact and conflict between land uses, both on the airport and on surrounding areas.
12. The amenity of land and development enhanced with appropriate planting and other landscaping works, using locally indigenous plant species where possible.
13. Development incorporating the principles of water sensitive urban design.
14. Adoption of adequate separation distances between non-aviation and aviation development on airport land, and between development on airport land and off-airport uses, consistent with *Airports (Environment Protection) Regulations 1997*.
15. A safe, secure, crime resistant environment.

Access and Parking

16. Development that provides for safe and efficient access, movement of traffic, and off street parking.
17. Provision of safe, pleasant, accessible, integrated bike and pedestrian paths.

7.6.3 Desired Character

Adelaide Airport is recognised as a gateway to Adelaide and South Australia, providing a significant service of benefit to Metropolitan Adelaide and to South Australia.

Future development will continue to provide economic improvement to Metropolitan Adelaide and the State by:

- maintaining the airport as the international, national and regional gateway to South Australia;
- enhancing the airport as a key element of transport infrastructure;
- facilitating the movement of passengers and time sensitive freight by infrastructure improvements;
- contributing to the viability of the airport as a business enterprise through the provision of commercial, retail and industrial activities; and
- provision of an economic core for the western suburbs of Adelaide and beyond.

Enhanced amenity and environment for the airport is desired through the provision of:

- quality buildings of contemporary, sustainable design; and
- sustainable development activities including, where practical, re-use of recycled water, possible aquifer storage and recovery, improvement of stormwater quality, energy conservation, alternative transport options and the on-site generation of renewable energy.

State and Local authorities control, improve and extend external access to the airport, with internal airport traffic movements generally arranged by AAL unless airport land is licenced to the respective authorities for transport infrastructure purposes. Enhancements include:

- the provision of internal airport roads providing convenient access to the external road system;
- improvements to the surrounding external road system, including the provision of signalised access improvements to and around the airport at key locations;
- the provision of a State public light rail system connecting the airport to the Adelaide CBD; and
- bike and pedestrian paths being provided along some road frontages to the airport, in buffer areas adjacent to creek and drainage lines and in conservation/recreation areas.

7.6.4 Principles of Development Control

In determining appropriate development within the Airport (Adelaide) Zone, consideration will be given toward airport sustainability and development principles that successfully meet the economic, social and environmental goals of AAL. These goals are contained within AAL's Sustainability Policy, which is included in the Environment Strategy (Chapter 10) of this Master Plan.

The Principles of Development Control for the Airport (Adelaide) Zone are listed below.

Land Use

1. Development of the Adelaide Airport site will accommodate the primary aircraft operations, passenger terminals and airport and aviation-related support activities necessary to support Metropolitan Adelaide and South Australia.
2. A range of services and facilities necessary for the safe, convenient and efficient operation of aviation activities and passenger services at the airport will be provided.
3. Development will ensure that the long-term operational, safety and commercial aviation requirements of the airport continue to be met.
4. The zone should accommodate:
 - a range of airport and export-related industrial and commercial uses; and
 - employment and commercial, retail and industrial opportunities commensurate with the airport's role as a major business enterprise serving metropolitan Adelaide and the State.
5. Development of active and passive recreation and other appropriate greenway activities may occur on land restricted by aviation needs.

Form of Development

6. Development should not be undertaken unless it is consistent with the desired character for the zone.
7. Development may be staged, having regard to infrastructure requirements.

Retail Development

8. Retail development should be of a size and type, and be located, to reflect its role within the airport's business environment and its standing as a specialised Activity Precinct in the western metropolitan area.

9. Smaller scale retail facilities may be appropriate in some areas, servicing the day-to-day needs of employees and/or the travelling public.
10. Larger scale retail facilities, servicing the needs of the surrounding community or wider regional or metropolitan-wide catchments, should be located to take advantage of the airport's central location and accessibility to major roads.
11. Larger scale retail facilities, including bulky goods, convenience and comparison retailing should:
 - provide choice in the range of goods and services available to the community and visitors;
 - expand retail employment opportunities within the region;
 - provide a competitive environment for the benefit of customers; and
 - have appropriate signage.
12. Bulky goods retailing should provide for pick-up areas to avoid the necessity for customers to carry large items to vehicles.

Office Development

13. Office development should provide suitable services and be of a size and scale commensurate to the airport's major business enterprise role, and employ sustainable initiatives suited for the age, scale, size and operational efficiency of the facility.

Industrial Development

14. Industrial development should have an emphasis toward transport and distribution activities, warehousing and storage in appropriate areas, with a focus on interrelationship with aviation, freight, engineering and transport networks, and employ suitable sustainable initiatives such as solar energy, natural light and sun shading as appropriate.
15. Industrial development should be compatible with other industrial developments in adjoining zones or precincts and occur without adverse effects on the health and amenity of occupiers of those adjoining zones or precincts.

Community Facilities

16. An appropriate range of community facilities, such as childcare, consulting and health care facilities, should be provided to service tourists, visitors and employees at the airport and the surrounding community in appropriate localities.

Hazards

17. All development will incorporate measures to ensure that the operational integrity of adjacent navigation and communication systems is maintained at all times.
18. Buildings are to be designed and built of external materials that will not result in interference with aircraft navigational facilities located within the airport and not contribute to excessive glare and reflections externally.
19. Landscaping, stormwater management, waste management and construction activities should not increase the attraction of wildlife and birdlife to the airport.
20. Lighting associated with buildings and internal roads should not result in a hazard to aviation operations and should be constructed in accordance with the airport's requirements.

Building Height

21. Buildings are to be sited and be of a height that will not result in a breach of the OLS and navigational clearance zones (PANS-OPS) associated with airport runways.

Public Safety Zone

22. Within suitable distance parameters or at the end of runway locations, development should be restricted to those uses that do not result in intense human activities and be left as open space or low-intensity storage facilities.

Amenity

23. Development should provide clear separation distances from adjoining residential zones and incorporate landscape treatments, and consider building orientation to maintain and enhance residential amenity.
24. Suitable noise attenuation/amelioration measures should be provided to minimise noise impacts on the adjacent off-airport residential areas (noting that some residential areas in sensitive zones have already undergone noise insulation and that any nearby new residential development within these ANEF zones would be expected to have been constructed to Australian Standard – AS2021-2000).
25. Airport buildings should be sited, designed and constructed to protect occupants from aircraft noise in accordance with Australian Standard – AS2021-2000.
26. Development should be located, designed and operated to prevent adverse impact and conflict between land uses, including service/delivery facilities and lighting to be oriented away from facing residential zones.

27. Development and the amenity of land should be enhanced with appropriate acoustic screening, planting and other landscaping works.

Energy Efficiency

28. Development should be designed and sited to conserve energy by incorporating the following measures:
- suitable insulation, doors and window seals and internal/external blinds;
 - insulation of hot water pipes and fittings and the utilisation of timers and thermostats;
 - selection of heating and cooling including time/occupancy controls;
 - energy efficient lighting and maximising the use of natural light where possible;
 - alternative energy supplies including installation of solar panels, or for larger facilities – on-site cogeneration plant;
 - thermal building performance improvements on new buildings; and
 - metered electricity consumption which is monitored by building area and through smart meters.
29. Development should provide for efficient solar access to buildings and open space all year round.
30. Development should facilitate the efficient use of photovoltaic cells and solar hot water systems by:
- taking into account overshadowing from neighbouring buildings; and
 - designing roof orientation and pitches to maximise exposure to direct sunlight.

Building Appearance

31. Buildings should be of a high quality standard and visual appearance, and present an attractive façade to adjacent public roads and any internal roads, consistent with building use and corporate images.
32. The design of a building may be of a contemporary nature and exhibit an innovative style provided the overall form is sympathetic to the scale of development in the area and with the context of its setting with regard to shape, size, materials and colour.
33. Development should have a horizontal emphasis incorporating interesting design elements.

34. Buildings should be of solid construction and appearance with façades visible to the public incorporating design elements that achieve visual articulation and relief such as:

- windows;
- canopies;
- porticos and verandas;
- parapet detailing and modelling; and
- sun protection.

35. The external walls of buildings should integrate earthen colours and tones, as well as blues and greys in lighter tones that match the skyline, varying with the size and scale of the development and the locality. Stronger colour schemes may occur to provide visual interest if appropriate to the form of development.

Access and Parking

36. Access to development should be provided in accordance with the Ground Transport Plan and should take into account the need to accommodate future airport development.
37. On-site parking should be provided that:
- meets the anticipated demand of development, supported by appropriate parking studies;
 - provides flexibility for further increases and taking into account public transport availability;
 - incorporates appropriate bicycle parking;
 - considers opportunities for shared parking arrangements within the airport site.
38. Development should be provided with safe and convenient access to AustRoads criteria, supported by appropriate traffic studies, that:
- avoids unreasonable interference with the flow of traffic on adjoining roads;
 - accommodates the type and volume of traffic likely to be generated by the development or land use; and
 - is sited and designed to minimise any adverse impacts on the occupants of and visitors to neighbouring properties.

39. Development should make sufficient provision on each individual site for the loading, unloading and turning of all traffic likely to be generated.
40. Vehicle parking areas should be sited and designed in a manner that will:
 - not inhibit safe, secure and convenient traffic circulation;
 - result in minimal conflict between customer, employee and service vehicles;
 - minimise the number of vehicle access points to public and internal roads;
 - where possible, provide the opportunity for shared use of car parking and integration of car parking areas with adjoining development to reduce the total extent of vehicle parking areas and the requirement for access points; and
 - enable extensive landscaping that will shade and enhance the appearance of such areas.
41. Bike and pedestrian paths should:
 - be designed to facilitate efficient links to neighbouring paths and facilities; and
 - be designed and provided in accordance with relevant provisions of the Australian Standards and AustRoads *Guide to Traffic Engineering Practice*.

Service Areas

42. Mechanical plant, storage and service areas required for buildings and structures should be suitably located, designed and screened from public view with noise amelioration measures included to protect adjacent sensitive uses.
43. Storage areas should be suitably screened to present an attractive façade to adjoining development and from public and internal roads, and be of a suitable structure not susceptible to wind damage.

Waste

44. New developments should aim to reduce the amounts of construction waste going to landfill by preparation of a construction waste minimisation plan for use during construction and suitable waste recycling arrangements post occupancy.

Landscaping

45. Landscaping should be provided as a part of all development to complement land set aside for buffers and greenways, and should:
 - enhance the visual amenity of the zone;
 - be of a high standard of design and visual appearance;
 - facilitate stormwater management strategies;
 - be undertaken in a manner that will not attract bird life and compromise aircraft operational safety;
 - use locally indigenous plant species where possible;
 - employ plantings that are drought tolerant; and
 - ensure adequate sightlines at access points.

Water Conservation

46. Development should be designed to maximise conservation and minimise consumption of water through:
 - implementation of automated leak detection devices;
 - use of water saving devices and fittings, such as dual flush toilets and water-saving shower heads;
 - use of water efficient appliances such as suitably rated dishwashers;
 - water consumption metered and monitored by building area; and
 - recycled or treated stormwater utilised from available network supply points around the airport.

Materials

47. Design, development and construction activities will consider materials selection and use strategies to:
 - encourage recycling or rejuvenation of materials where feasible;
 - use materials low in volatile organic compounds; and
 - encourage selection of building materials that are 100-per-cent recyclable.

Stormwater Management

48. Development, construction and operational activities will consider stormwater management strategies to:
 - reduce the risk of impacts associated with flooding;
 - improve the quality of stormwater run-off;
 - minimise pollutant transfer to waterways and drainage channels; and
 - provide opportunities for re-use of stormwater and treated waste waters.

49. Development should provide stormwater management strategies that can be adopted for each land parcel, either individually or collectively for groups of buildings, and should incorporate grassed swales, gross pollutant traps and flow retention areas where possible.
50. Stormwater drainage systems should be designed according to function, space and risk of wildlife attraction, be appropriately vegetated, and allow passive and active recreation facilities in suitable locations.
51. Internal roads and car parking areas should be designed to direct stormwater to adjacent landscaping and vegetated stormwater swales, where appropriate. Where possible, porous paving (or pipe drainage to tree root levels) can be considered, as well as 'soft shoulders'.
52. Stormwater runoff from roofing should be separated and treated in a separate manner to ground surface flows where possible, and opportunities for re-use optimised.
53. Stormwater management systems should:
 - maximise the potential for stormwater harvesting and re-use, either on-site or as close as practicable to the source; and
 - utilise, but not be limited to, one or more of the following harvesting methods:
 - the collection of roof water in tanks;
 - the discharge to open space, landscaping or garden areas, including strips adjacent to car parks;
 - the incorporation of retention facilities; and
 - aquifer storage and recovery.

Recreation and Greenways

54. Recreation areas should provide pleasant, functional and accessible formal and informal open spaces.
55. Bike and pedestrian paths should service recreation areas or be located in close proximity to enable ease of access.
56. Development in recreation areas should not compromise the operational or safety requirements of the airport.
57. Development in recreation areas should:
 - be clustered, where practical, to ensure that the majority of the site remains open;
 - where practical, be developed for multi-purpose use; and
 - be located and designed to maximise safety and security.

58. Recreation areas should be sited and designed to minimise negative impacts on the amenity of the locality.

Signage

59. Outdoor signage, both free-standing and attached to buildings, should be located, sited, designed, constructed of such materials and be of a size and shape so as to:
 - be in scale and proportion with the development as a whole, the buildings therein and the desired character of the area;
 - be coordinated with and complement the architectural form and design of the building it is to be located on or adjacent to;
 - not distract attention from traffic control information and other directional signage; and
 - clearly identify retailing activity where appropriate.
60. The number of signs associated with a development should be minimised to avoid clutter, disorder and untidiness of buildings and their surrounds.

Crime Prevention

61. Development should:
 - be designed to provide a safe, secure, crime resistant environment;
 - provide a robust environment that is resistant to vandalism and graffiti;
 - provide lighting in frequently used public spaces and around public facilities such as toilets, telephones, bus stops and car parks;
 - use landscaping to discourage crime; and
 - avoid pedestrian entrapment spots and movement predictors.

7.7 Runways Precinct



Figure 7.8 Runways Precinct Plan

7.7.1 Objective

The Objective of the Runways Precinct is to provide an area accommodating:

- safe aircraft landing, take off and taxiing operations; both for fixed wing and rotary services;
- aircraft navigation aids, radar and communications equipment;
- air traffic control, aviation rescue and fire-fighting and meteorological services;
- aviation related support industry and training and emergency response services; and
- aquifer storage and recovery, and water harvesting activities in suitable locations.

7.7.2 Desired Character

The Runways Precinct occupies 391 hectares (50%) of the airport site, is the major portion of the airport and is bounded by all other precincts. This precinct is an area of the airport to be protected for the operation and movement of aircraft and associated activities.

Development within the Runways Precinct should focus on aviation needs with related ancillary and support facilities enhancing the airport's operation, while also catering for appropriate mechanisms to enhance environmental sustainability.

7.7 Runways Precinct

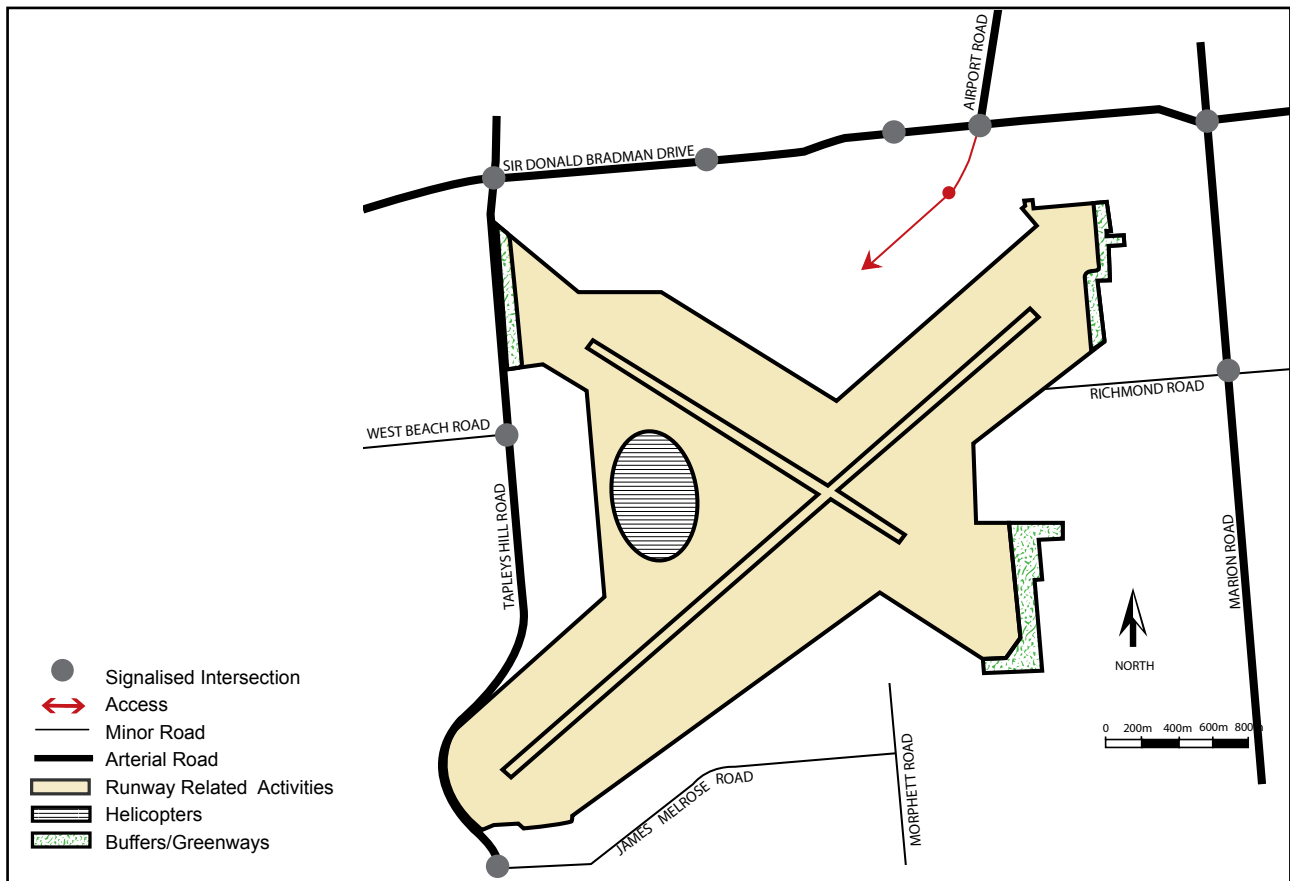


Figure 7.9 Runways Precinct Structure Plan

7.7.3 Principles of Development Control

Structure Plan

1. Development should be generally in accordance with the Runways Precinct Structure Plan (Figure 7.9) and the forms of development listed as Envisaged Development.

General

2. Runways, taxiways and aircraft movement areas should be designed and developed:
 - to maximise the capacity of the existing infrastructure;
 - to ensure safe and efficient movement of aircraft operations;
 - to minimise aircraft noise impacts and environmental impacts generally;

- in a cost effective manner; and
- to comply with national and international mandates and standards.

Access

3. Access to the precinct should be strictly controlled and the area suitably secured from adjacent precincts with appropriate security perimeter fencing incorporating access control and surveillance monitoring as necessary.

7.7 Runways Precinct

7.7.4 Procedural Matters

Outlined below is detail on the types of activities considered suitable for the Precinct, along with the identification of uses deemed inappropriate.

Runways Precinct Uses	
Envisaged Development	Non-Complying Development
Aircraft washdown	Brand outlet centre and associated support retailing
Animal agistment for export purposes	Bulky goods retailing
Area approach control centre	Childcare centre
Aviation-related support industry	Dwelling
Aviation fuel pipeline	Hotel
Car parking	Motel
Communication facilities	Restaurant
Emergency staging area	Retail showroom
Fire-fighting and rescue facilities	Service trade premises
Helicopter landing and parking	Shop
Horticulture	Waste transfer station
Renewable Energy Installations	
Runway-related activities/ facilities	
Soil treatment facility	
Taxi holding area, amenities and fuel depot	

Agency Referral and Public Notification

Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accordance with Figure 7.5 Development Decision Matrix in Section 7.3.1.

7.8 Terminals & Business Precinct



Figure 7.10 Terminals & Business Precinct Plan

7.8.1 Objectives

The Objectives of the Terminals & Business Precinct are to provide:

- an area primarily accommodating facilities for the safe, efficient and economic handling of aircraft, passengers and freight, and related services and support activities such as car parking and storage, hotel, retailing and offices;
- development of office, commercial, retail and industrial facilities that contribute to the viability of the airport as a major business enterprise, and provide a business core for the western suburbs of Adelaide; and
- an area accommodating business, education, technology and research facilities in an office park-like setting, allowing suitable mixes with warehouse and storage activities and aviation-related support industry.

7.8.2 Desired Character

The Terminals & Business Precinct occupies 165 hectares (21%) of the airport site. It is located immediately to the south of Sir Donald Bradman Drive and Tapleys Hill Road to the west. The precinct incorporates the primary road access to the Airport Terminals, being Sir Richard Williams Avenue.

The Terminals & Business Precinct is the area of the airport primarily set aside for the safe, efficient and economic facilitation of passengers and support infrastructure associated with the arrival and departure of persons and freight by air. Future development will be located, designed and operated to enhance this environment, whilst also allowing areas for research, innovation and business development in science, technology and education incorporating complementary freight and distribution services within the precinct.

As the precinct primarily represents the gateway of Adelaide Airport, it is important that development is of a high standard of design that enhances the amenity of the airport environment; particularly where it is in a high exposure location or adjacent the public road network, and should incorporate appropriate landscaping.

A small portion of this precinct is located on the northern side of Sir Donald Bradman Drive adjoining May Terrace. This site is currently used for recreational purposes associated with Kooyonga Golf Course and horticultural activities (such as Trees for Life).

The precinct is divided into five policy areas:

- Terminals & Aviation
- Office Park
- Export Park
- Retail
- Burbridge Business Park

The development intent for each of the policy areas is briefly described below.

Terminals & Aviation

The Terminals & Aviation Policy Area is the major gateway to Adelaide Airport and is the 'heart' of the major and specialised activity centre for transportation, employment and commercial development for metropolitan Adelaide and the State. The policy area accommodates terminals and related access infrastructure, car parking, retailing activities, hotel, and taxi/bus drop-off and collection services. It also provides ancillary activities such as aviation freight handling facilities including aircraft maintenance buildings, hangars, catering services, commercial/light industrial activities, car rental storage, valet operations and car parking.

Office Park

The Office Park Policy Area envisages the centralisation of offices that can service the aviation services related to the airport and business with an affinity of travel on a locality central to Metropolitan Adelaide.

Export Park

The Export Park Policy Area is a multi-purpose commercial park covering approximately seven hectares in area and is located immediately east of the Airport entrance at the intersection of Sir Donald Bradman Drive and Sir Richard Williams Avenue. New and existing development can incorporate commercial offices, office/warehousing, purpose-built aviation freight, engineering, and airport servicing activities that would benefit from the nearby airside accessibility.

Retail

The Retail Policy Area is directed at bulky goods developments in close proximity to the existing IKEA store so as to establish a pocket of bulky goods retailing that capitalises on the main road frontage.

Burbridge Business Park

This policy area is being developed as a 'business park' to cater for high technology office, commercial and warehouse developments of varying sizes and ancillary activities to the Terminals and Aviation Support Policy Area such as car parking and storage. It also includes the aviation fuel storage complex.

Development should have regard to, and capitalise on, the adjoining greenway area that fronts Sir Donald Bradman Drive in the form of a landscaped linear park incorporating a bicycle/pedestrian path.

7.8 Terminals & Business Precinct

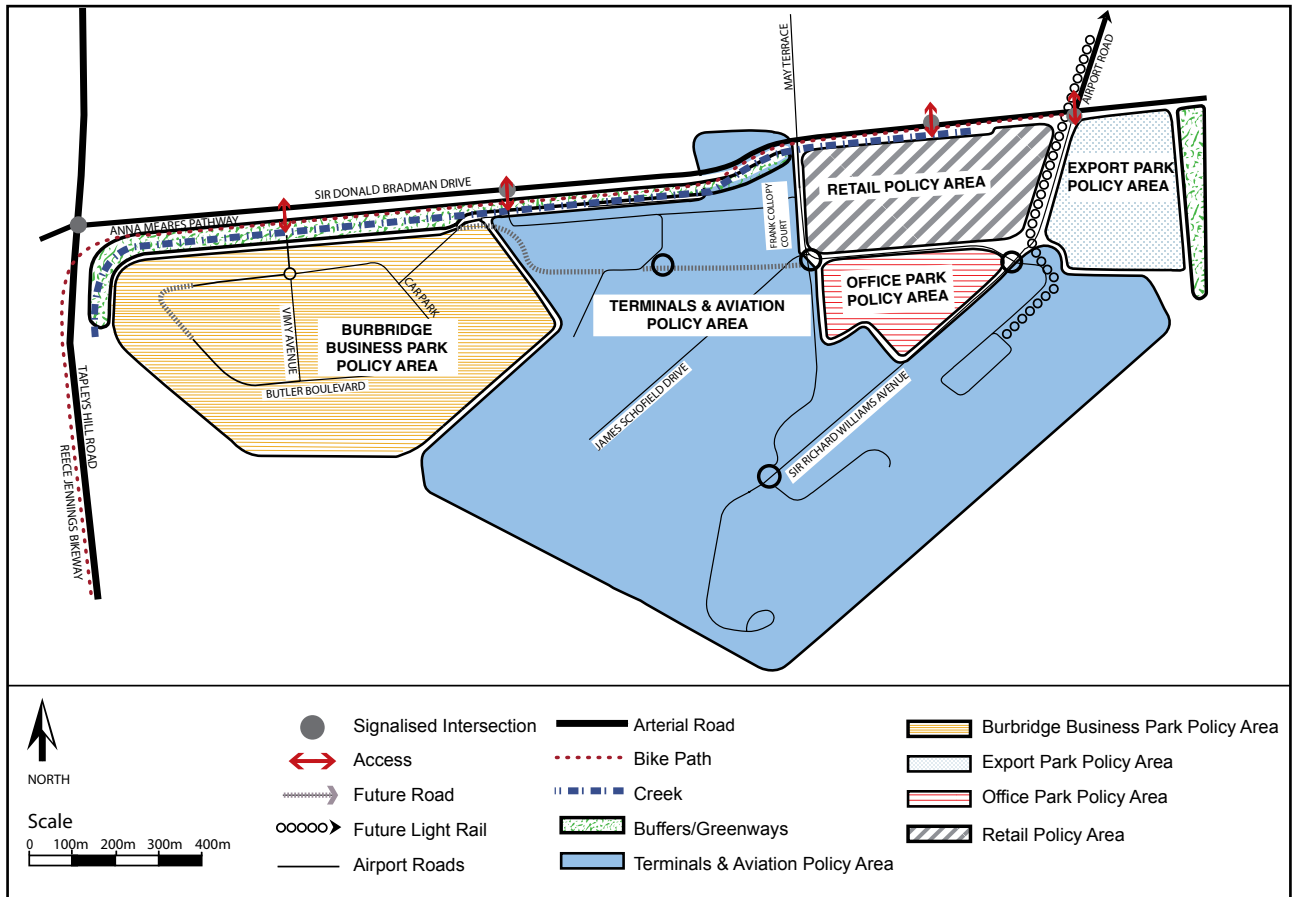


Figure 7.11 Terminals & Business Precinct Structure Plan

7.8.3 Principles of Development Control

Structure Plan

1. Development should be generally in accordance with the Terminals & Business Precinct Structure Plan (Figure 7.11) and the form of development listed as Envisaged Development.

Form of Development

2. Development should take into account the need to minimise disruption to ongoing airport operations and incorporate:
 - concepts that will accommodate future expansion;
 - new technologies; and
 - changes in operations.

3. Development should not compromise aeronautical equipment on-airport, airport operations and aviation-related support activities.
4. Development should be user-orientated and sensitive to the needs of the industry, passengers, employees and the community in general and should consider the following:
 - efficiency of the operation;
 - convenience;
 - safety;
 - security;
 - impact on the environment; and
 - the need for several ingress and egress traffic access routes for passengers.

5. Development of the precinct should minimise the potential for adverse impact on residential areas by:
 - providing landscaping along the frontage of Sir Donald Bradman Drive, resulting in an enhanced amenity and screening for buildings;
 - establishing a park-like setting incorporating integrated and shared landscaping;
 - providing quality buildings of contemporary design, resulting in an attractive appearance;
 - establishing on-site car parking;
 - providing appropriate access to Sir Donald Bradman Drive and an internal road layout catering for the volume and type of traffic generated;
 - providing appropriate stormwater management and drainage systems to minimise flooding risk; and
 - enclose any noise-generating equipment where there is any prospect of the equipment causing a detrimental effect on residential areas.

Terminals

6. Terminals should be:
 - worthy as gateways to Metropolitan Adelaide and South Australia;
 - a catalyst to the airport's development and economy; and
 - provide a premier service to international, domestic and regional travellers, supporting these groups as appropriate.

Built Form

7. Commercial and retail development should be designed to complement and expand the commercial and retail activities consistent with the form of Export Park and IKEA retailing activities, and may include other retailing and/or tourism initiatives that will benefit from the economic activity at Adelaide Airport.
8. Development within the Burbridge Business Park Policy Area should be set back from the Sir Donald Bradman Drive and Tapleys Hill Road property boundaries to accommodate drainage swales and landscaping treatment.
9. Building structures are to be compatible with the OLS constraints.



7.8.4 Procedural Matters

Outlined below is detail on the types of activities considered suitable for the overall Precinct, along with the identification of uses deemed inappropriate, which takes into account the Desired Character for the specific individual policy areas.

The following table does not apply to new development within the Burbridge Business Park Policy Area. A separate table of Envisaged and Non-Complying uses for the Burbridge Business Park Policy Area follows.

Terminals & Business Precinct Uses (excluding the Burbridge Business Park Policy Area)		
Envisaged Development		Non-Complying Development
Advertisement	Motel	Brand Outlet Centre
Aircraft hangar	Motor Repair Station	Dwelling
Aircraft washdown	Office	Farming
Air traffic control tower/area approach control centre	Office/Warehouse	General Industry
Animal agistment for export purposes	Passenger terminals	Horse keeping and equestrian area
Aviation fuel depot and pipelines	Petrol filling station	Road Transport Terminal
Aviation-related support industry	Police station	Special Industry
Bulky goods retailing	Renewable Energy Installations	Wholesale plant nursery
Bus terminal	Restaurant	
Call centre, or back office	Retail showroom	
Car parking and storage	Runway-related activities/facilities	
Car rental, valet and vehicle storage	Scientific research facility	
Childcare centre	Service trade premises	
Conference facility	Shop	
Consulting room and Medical Centre	Store	
Fire-fighting & rescue facilities	Taxi holding area amenities and fuelling depot	
Freight and distribution centre	Technology and research centre	
Hotel	Telecommunications facility	
Indoor Recreation Centre	Warehouse	

The following table of Envisaged and Non-complying uses relates solely to new development in the Burbridge Business Park Policy Area.

Terminals & Business Precinct Uses (Burbridge Business Park Policy Area only)		
Envisaged Development		Non-Complying Development
Advertisement (except within 40m of Sir Donald Bradman Drive)	Freight and distribution centre	Air traffic control tower/Area approach control centre
Aviation fuel depot and hydrants	Gymnasium/Health centre	Brand outlet centre
Business and Professional Services	Horticulture	Bus terminal
Call Centre, or back office facilities	Office	Community centre
Car parking and vehicle storage	Office/Warehouse	Driver training school
Childcare centre	Recreation	Dwelling
Conference facility	Scientific research facility	General industry
Consulting room and Medical Centre	Shop (to serve the day-to-day needs of the workforce and visitors to the precinct)	Helicopter landing and parking
Educational establishment	Store	Horse keeping and Equestrian area
Fast food outlet (to serve the day-to-day needs of the workforce and visitors to the precinct)	Technology and Research centre	Motor repair station
	Telecommunications tower facility	Passenger terminals
		Petrol filling station
		Place of worship
		Police station
		Road transport terminal
		Service industry
		Special industry

Agency Referral and Public Notification.

Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accordance with Figure 7.5 Development Decision Matrix in Section 7.3.1.

7.9 Torrens Precinct



Figure 7.12 Torrens Precinct Plan

7.9.1 Objectives

The Objectives of the Torrens Precinct are to provide:

- an area primarily accommodating a range of recreation, leisure and sporting opportunities in an open space environment; and
- residential development for the aged, community housing or like activity, in a suitable location.

7.9.2 Desired Character

The Torrens Precinct occupies 19 hectares (2%) of the airport site. It is located to the west of Tapleys Hill Road and to the south of Burbridge Road. Residential development is immediately adjacent the precinct.

In addition to providing a relatively open approach to the runway system to the east of Tapleys Hill Road, the precinct may also be developed with recreation and sporting facilities and accommodation for the aged or community housing. Development will not impact on the continued operations of the airport.

Any development should include sufficient on-site car parking to meet the needs of the development.

7.9 Torrens Precinct

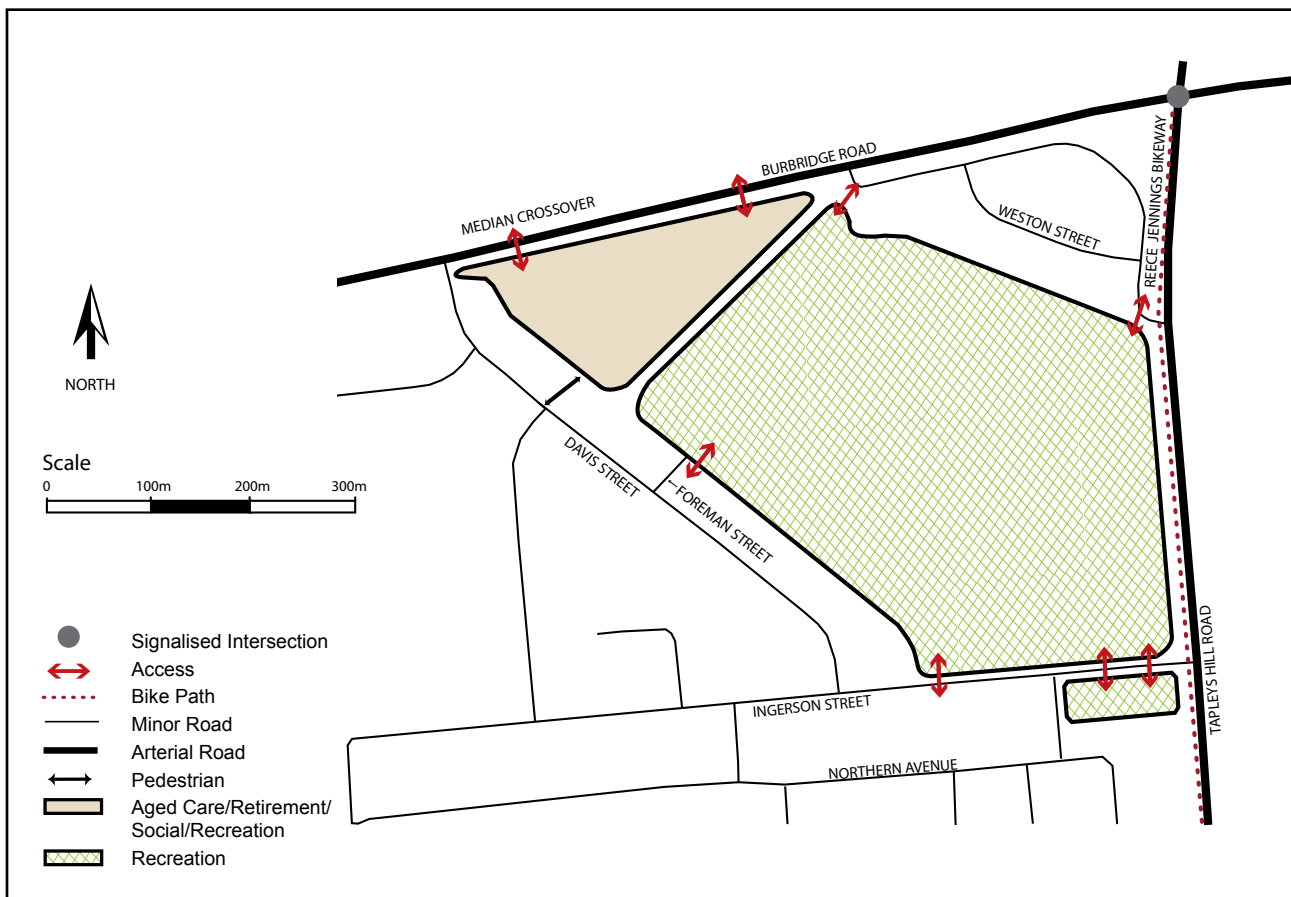


Figure 7.13 Torrens Precinct Structure Plan

7.9.3 Principles of Development Control

Structure Plan

1. Development should be generally in accordance with the Torrens Precinct Structure Plan (Figure 7.13) and the form of development listed as Envisaged Development.

Amenity

2. Any lighting associated with night time usage, including recreation activities and car parking areas, should be located and designed in a manner that promotes the safety of aviation and users of the facilities and avoids excessive light spill beyond the site.

Residential Development

3. Residential development for the aged, or community housing should:
 - be designed to provide safe, attractive, convenient and comfortable living conditions for residents;
 - be provided with pleasant and functional open space and landscaping to meet the needs of residents;
 - be of a form and scale that is residential rather than intensively institutional in character; and
 - incorporate any noise control features, consistent with AS 2021-2000 as appropriate.

Stormwater

4. Where practicable, recreation areas and associated facilities should be irrigated with, or serviced by the re-use of treated stormwater runoff and/or treated effluent from the Glenelg Waste Water Treatment Plant.

7.9 Torrens Precinct

7.9.4 Procedural Matters

Outlined below is detail on the types of activities considered suitable for the Precinct, along with the identification of uses deemed inappropriate.

Torrens Precinct Uses	
Envisaged Development	Non-Complying Development
Advertisement	Air traffic control tower
Aged or Residential care facility or a care facility of a similar nature*	Area approach control centre
Car parking and storage	Brand outlet centre
Clubroom and associated community facility (associated with recreation facilities)	Bus terminal
Conference facilities (associated with recreation facilities)	Caravan park
Consulting rooms and Medical Centre	Dwelling (other than aged care facility or a care facility of a similar nature, retirement village or community housing of a similar nature)
Indoor recreation centre and associated facilities	Fire-fighting and rescue facilities
Outdoor recreation including all sporting pursuits such as tennis, cricket, hockey, soccer fields, athletics etc.	Helicopter landing and parking
Restaurant (associated with recreation facilities)	Industry
Retirement village or group or community housing of a similar nature	Motor repair station
	Petrol filling station
	Restaurant (not associated with recreational facilities)
	Retail showroom
	Service trade premise
	Shop
	Warehouse

*Note: any expansion of the existing aged/residential care facility or creation of a further complex is classified as a Sensitive Development under Section 71A (2) of the *Airports Act 1996*, requiring prior clearance from the Commonwealth Minister on its possible development, and if gained, necessitating a Major Development Plan consultation process.

Agency Referral and Public Notification

Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accordance with Figure 7.5 Development Decision Matrix in Section 7.3.1.

7.10 Tapleys Precinct



Figure 7.14 Tapleys Precinct Plan

7.10.1 Objectives

The Objectives of the Tapleys Precinct are to provide:

- a highway activity centre primarily accommodating large scale retailing facilities such as a Brand Outlet Centre and associated support retail activities, supermarket and liquor store, bulky goods retailing, retail showrooms and other shops and particularly those with a metropolitan-wide catchment, and those which provide services to the western region of Adelaide; and
- accommodation of aviation services such as air traffic control, air approach control centre, meteorological activities and helicopter support activities, including aviation retrieval facilities and emergency services.

7.10.2 Desired Character

The Tapleys Precinct occupies 37 ha (5%) of the airport site. It is located to the east of Tapleys Hill Road, generally opposite the intersection of West Beach and Tapleys Hill Roads.

The precinct has an arterial road location and therefore exposure to a very significant traffic volume along Tapleys Hill Road. Access is gained from the signalised intersection of Tapleys Hill Road and West Beach Road, along with other access points along Tapleys Hill Road.

The Tapleys Precinct can accommodate large-scale retailing facilities of a regional or metropolitan-wide catchment, with supporting shops and services consistent with its highway location. Airport-related activities and emergency services facilities are also located in the precinct, along with associated helicopter support services.

7.10 Tapleys Precinct

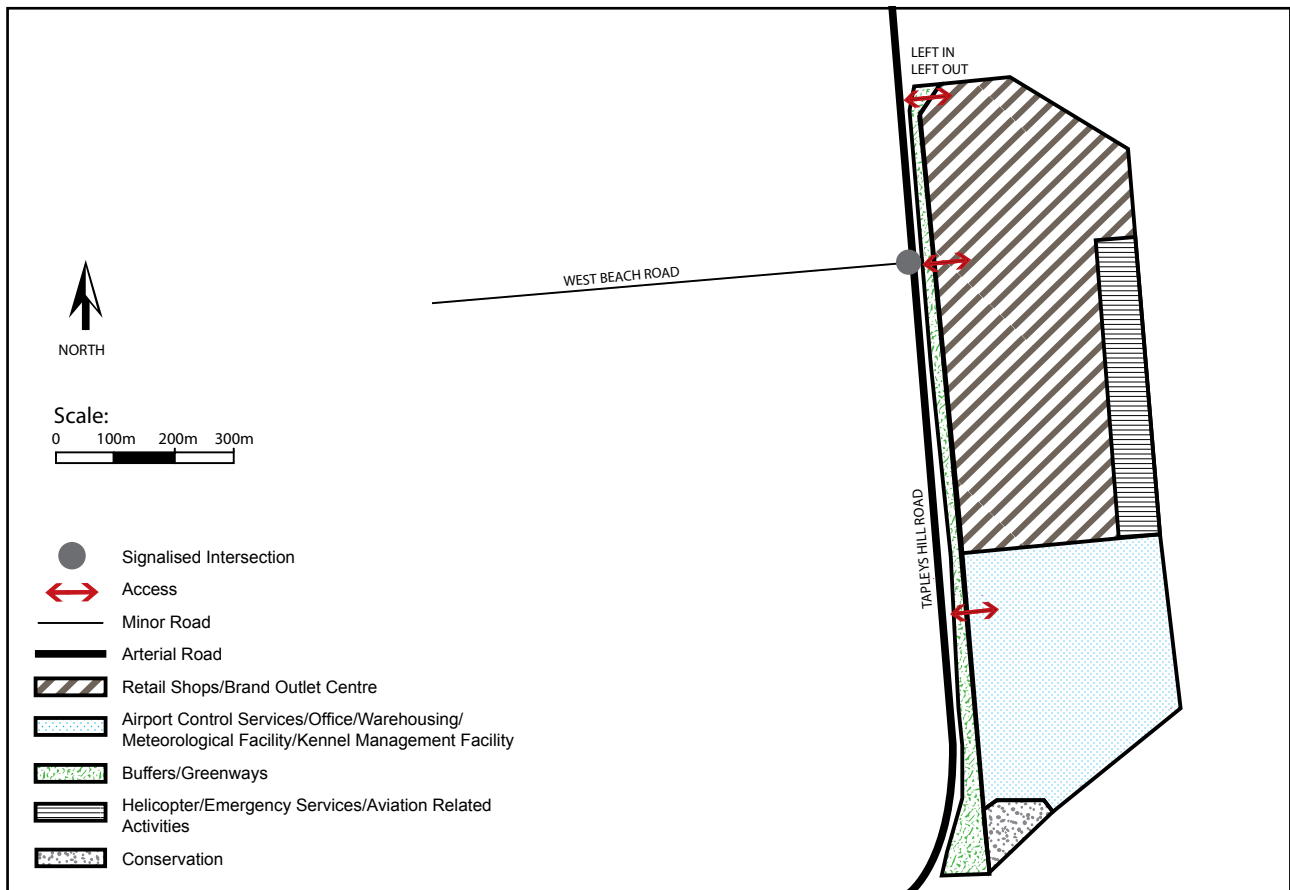


Figure 7.15 Tapleys Precinct Structure Plan

The southern section of the precinct, while currently accommodating aviation services, could allow future retail or commercial expansion, pet kennels and aviation-related support industry and emergency services.

A landscaped buffer is in place along the Tapleys Hill Road frontage, with buildings being of a contemporary design, and with a consistent architectural and signage theme when viewed from Tapleys Hill Road. Buildings are to have a horizontal emphasis and be designed to reduce their visual bulk through design elements such as articulation, colour and detailing and variation to façades.

Car parking areas will be landscaped to enhance amenity and provide screening and shade.

7.10.3 Principles of Development Control

Structure Plan

1. Development should be generally in accordance with the Tapleys Precinct Structure Plan (Figure 7.15) and the forms of development listed as Envisaged Development.

Built Form

2. Development should have a consistent architectural theme and present an attractive and obvious visual appearance particularly when viewed from Tapleys Hill Road.

Retail

3. Building and structures should not generally exceed 50% site coverage and the extent of parking and means of safe and convenient access to AustRoads criteria are to be supported by appropriate parking and traffic studies.
4. Development should be setback from the Tapleys Hill Road boundary to enable the progressive remodelling of the open unlined drain to accommodate drainage swales and to maintain an attractive landscape.

7.10 Tapleys Precinct

7.10.4 Procedural Matters

Outlined below is detail on the types of activities considered suitable for the Precinct, along with the identification of uses deemed inappropriate.

Tapleys Precinct Uses	
Envisaged Development	Non-Complying Development
Advertisement	Dwelling
Area approach control centre	Motel
Aviation-related support industry	Industry
Brand outlet centre and associated support retailing	
Bulky goods retailing	
Car parking and storage	
Conservation activities	
Emergency Services	
Fire-fighting and rescue facilities	
Hotel	
Kennel management facility	
Meteorological services	
Office	
Office/Warehouse	
Petrol filling station and convenience store	
Retail showroom	
Runway-related activities	
Service trade premises	
Shop	
Supermarket and Liquor Store	
Telecommunications facility	
Weather and atmosphere testing facility	

Agency Referral and Public Notification

Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accordance with Figure 7.5 Development Decision Matrix in Section 7.3.1.

7.11 West Beach Precinct



Figure 7.16 West Beach Precinct Plan

7.11.1 Objectives

The West Beach Precinct is an area for commercial development, but is also an area reserved for a future parallel runway. The Objectives of the West Beach Precinct include:

- an area accommodating commercial facilities capitalising on the exposure to Tapleys Hill Road and West Beach Road;
- recreation activities in support of the adjoining sporting and recreation activities of the West Beach Trust (operating as Adelaide Shores);
- linkage of the remnant Patawalonga Creek as a passive recreation area adjoining nearby pedestrian and bike pathways;
- stormwater drainage systems emanating external to the precinct to control flood risk to the airport land east of the Patawalonga Creek, with some allowance for overflow onto parts of recreation land; and
- stormwater detention areas servicing the West Beach residential area.

AAL will include resumption clauses in any lease agreement over land reserved for a parallel runway as specified by the Commonwealth.

7.11 West Beach Precinct



Figure 7.17 West Beach Precinct Structure Plan

7.11.2 Desired Character

The West Beach Precinct occupies 56 ha (7%) of the airport site. It is located to the west of Tapleys Hill Road, opposite the highway activity centre of Harbour Town, and is found to the north and south of West Beach Road, and extends to the west fronting Military Road.

The precinct can accommodate commercial development and service trade premises suitable to the Tapleys Hill Road arterial road status, which has exposure to significant traffic volumes. Given the nature of Tapleys Hill Road, access for these uses will be mainly limited to the existing access points, or from West Beach Road and Military Road.

An aged-care facility or community garden/horticulture, may be considered on the southern side of Mountbatten Grove, forming a logical extension to existing residential development.

The promotion of event activities, passive and active recreation and sporting activities, and car parking within the precinct is desirable, incorporating suitable pedestrian and bike pathways. New development in the recreation area should, where practical, be clustered to minimise impacts and located to accommodate existing and future stormwater drainage arrangements.

7.11 West Beach Precinct

7.11.3 Principles of Development Control

Structure Plan

1. Development should generally be in accordance with the West Beach Precinct Structure Plan (Figure 7.17) and the forms of development listed as Envisaged Development.

Built Form

2. Development should be suitably landscaped and provide landscaped car parking areas.

7.11.4 Procedural Matters

Outlined below is detail on the types of activities considered suitable for the Precinct, along with the identification of uses deemed inappropriate.

West Beach Precinct Uses	
Envisaged Development	Non-Complying Development
Advertisement	Brand outlet centre
Aged or Residential care facility or care facility of a similar nature (Mountbatten Grove locality)*	Bus terminal
Amusement Park	Helicopter landing and parking
Aquifer storage and recovery/Stormwater harvesting	Industry
Aviation fuel pipeline	Passenger terminals
Car parking and storage	
Consulting rooms	
Event activities	
Farming	
Horticulture / Community Gardens	
Indoor recreation centre	
Motor repair station	
Petrol filling station (with associated convenience store and car wash facilities)	
Recreation	
Service trade premises	
Sporting activities and complexes	
Store	
Stormwater detention	
Telecommunications facility	

Agency Referral and Public Notification

Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accordance with Figure 7.5 Development Decision Matrix in Section 7.3.1.

*Note: any creation of an aged/residential care facility is classified as a Sensitive Development under Section 71A (2) of the *Airports Act 1996*, requiring prior clearance from the Commonwealth Minister on its possible development, and if gained, necessitating a Major Development Plan consultation process.

7.12 Morphett Precinct

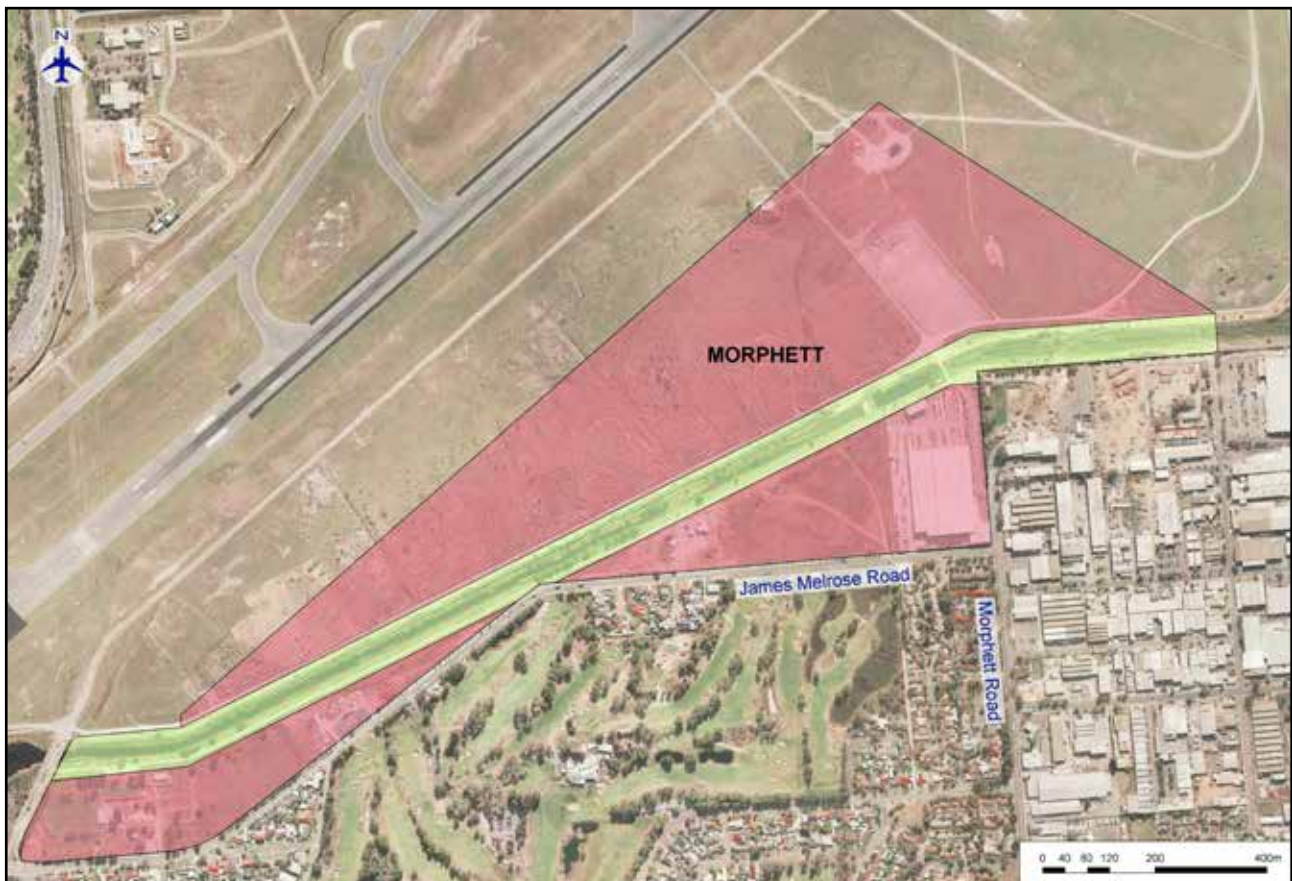


Figure 7.18 Morphett Precinct Plan

7.12.1 Objectives

The Objectives for the Morphett Precinct are:

- an area accommodating a mix of activities, including industry, office/warehouse, commercial and aviation-related support industries; and
- an area accommodating a small portion of interim uses of recreation, leisure and sporting activities; and
- future development directed to commercial services, stormwater harvesting opportunities and a linear park, including a shared use pedestrian/bike path linking Tapleys Hill Road and Watson Avenue in Netley.

7.12 Morphett Precinct

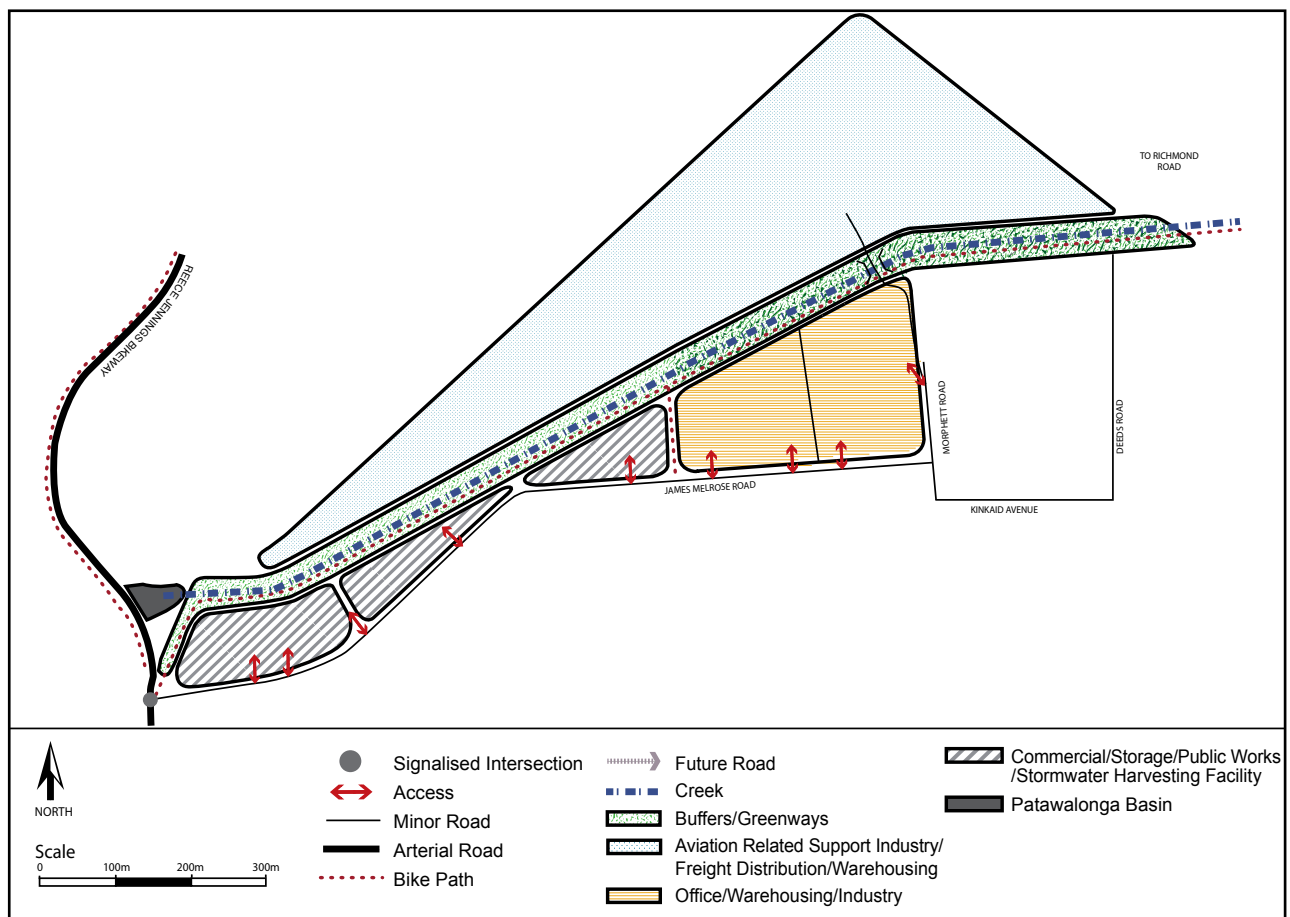


Figure 7.19 Morphett Precinct Structure Plan

7.12.2 Desired Character

The Morphett Precinct occupies 81 hectares (10%) of the airport site. It is located to the east of Tapleys Hill Road, with a frontage to Warren Avenue and James Melrose Road at the end of Morphet Road. The precinct is in proximity to the City of West Torrens Waste Transfer Station and the industrial areas of North Plympton and Camden Park.

The Morphett Precinct will include a mix of industrial and aviation-related support industries, bisected by the buffer/linear park adjacent to the drainage channel of the Brownhill and Keswick Creeks. The linear park provides for passive recreation and also accommodates a bike and pedestrian path linking Tapleys Hill Road to the west and Watson Avenue to the east.

Additionally, interim activities within the precinct will be for recreation, leisure, sport and horse keeping, with future development to comprise commercial activities such as plant nurseries, service trade premises and recreation activities.

The land also provides stormwater harvesting associated with aquifer storage and recovery systems and the enhancement of the buffer/linear park located along the drainage channel of the Brownhill and Keswick Creeks.

Development will take into account potential impacts on residential areas located to the south of the precinct. Allowance is made for a possible future road link between Morphet Road and Richmond Road through the edge of the West Torrens Council Waste Transfer Station or via Deeds Road. This road link is consistent with the draft Integrated Transport and Land Use Plan prepared by the South Australian Government (DPTI).

7.12 Morphett Precinct

7.12.3 Principles of Development Control

Structure Plan

1. Development should be generally in accordance with the Morphett Precinct Structure Plan (Figure 7.19) and the forms of development listed as Envisaged Development.
2. Development having a frontage to James Melrose Road should incorporate landscaping to enhance the amenity of the area and to provide a screening effect when viewed from the road or the residential area to the south.
3. Development should be designed and operated and/or incorporate acoustic treatments and equipment to minimise potential noise and air quality impacts on adjoining developments and residential areas.
4. Development should be compatible with and enhance the establishment of a park-like setting within the buffer/linear park adjacent to the drainage channel of the Brownhill and Keswick Creeks.
5. Where possible, development should provide access to the buffer/linear park and the shared use bike and pedestrian path.

Access and Movement

6. Development to the northern side of the buffer/ linear park should not restrict a possible future road link between Morphett Road and Richmond Road.

Built Form

7. Buildings should be constructed of materials compatible with aeronautical equipment facilities and operations.

Form of Development

8. Commercial activities, including such uses as plant nurseries and service trade premises, should generally be located in the western end of the precinct, closer to Tapleys Hill Road.
9. Where possible, development should provide an outlook and access to the buffer/linear park adjacent to the drainage channel of the Brownhill and Keswick Creeks and the shared use bike/pedestrian paths.
10. Development should consider the proximity of aviation runways and the associated need for noise attenuation and satisfy AS 2021-2000.
11. Existing sporting and recreation activities and horse keeping may continue, provided they comply with relevant Standards and Codes, but further intensification of these activities should be limited.
12. Aquifer storage and recovery systems are provided, adjacent to the Brownhill Creek easement and opposite the Glenelg Golf Club, and designed and operated to avoid any increase in bird populations.

Appearance

13. Development should have an attractive appearance when viewed from Warren Avenue and James Melrose Drive and should be sited and designed to minimise the potential for adverse impact on adjoining residential areas.

7.12 Morphett Precinct

7.12.4 Procedural Matters

Outlined below is detail on the types of activities considered suitable for the Precinct, along with the identification of uses deemed inappropriate.

Morphett Precinct Uses	
Envisaged Development	Non-Complying Development
Advertisement	Brand outlet centre
Aircraft washdown	Bus terminal
Aquifer storage and recovery/Stormwater harvesting	Caravan park
Aviation-related support industry	Dwelling
Car parking and storage	Educational establishment
Clubrooms and associated sporting facilities	Hotel
Emergency staging area	Industry on Commercial/Storage/Public Works/Stormwater Harvesting Facility area shown on Figure 7.19
Equestrian area	Place of worship
Fire-fighting and rescue facilities	Shop (other than to service the day-to-day needs of the workforce and visitors to the Precinct)
Freight and distribution centre	Special industry
Horse keeping	
Horticulture	
Industry (except Special Industry or industry within the Commercial/Storage/Public Works/Stormwater Harvesting Facility area shown on Figure 7.9)	
Office/Warehouse	
Plant nursery (including Wholesale plant nursery)	
Recreation	
Service trade premises	
Telecommunications facility	
Warehouse	

Agency Referral and Public Notification.

Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accordance with Figure 7.5 Development Decision Matrix in Section 7.3.1.

7.13 Airport East Precinct



Figure 7.20 Airport East Precinct Plan

7.13.1 Objectives

The Objectives for the Airport East Precinct are to provide:

- an area accommodating aviation maintenance and freight capacity to meet future demand from the aviation industry, along with other freight distribution and storage activities; and
- management of industrial and aviation activities on the airport, taking into consideration the proximity of surrounding residential development, consistent with the *Airports (Environment Protection) Regulations 1997*.

7.13.2 Desired Character

The Airport East Precinct occupies 37 hectares (5%) of the airport site. It is within the eastern sector of the airport and is surrounded largely by industrial development of a freight and distribution or public service depot nature. Office/warehousing and storage activities also occur.

The area can accommodate aircraft maintenance facilities, aircraft hangars, and ancillary aviation-support activities such as avionics/equipment maintenance and air freight.

The Airport East Precinct presents a logical expansion to the adjoining off-airport industrial, warehouse, distribution and logistics operations and general transport related uses and will provide for uses that have a relationship to the airport or would benefit from an airport location.

In addition to the landscaped buffers proposed, development with minimal impacts will be located to also act as a buffer to nearby residential areas to the north, east and south of the precinct.

7.13 Airport East Precinct

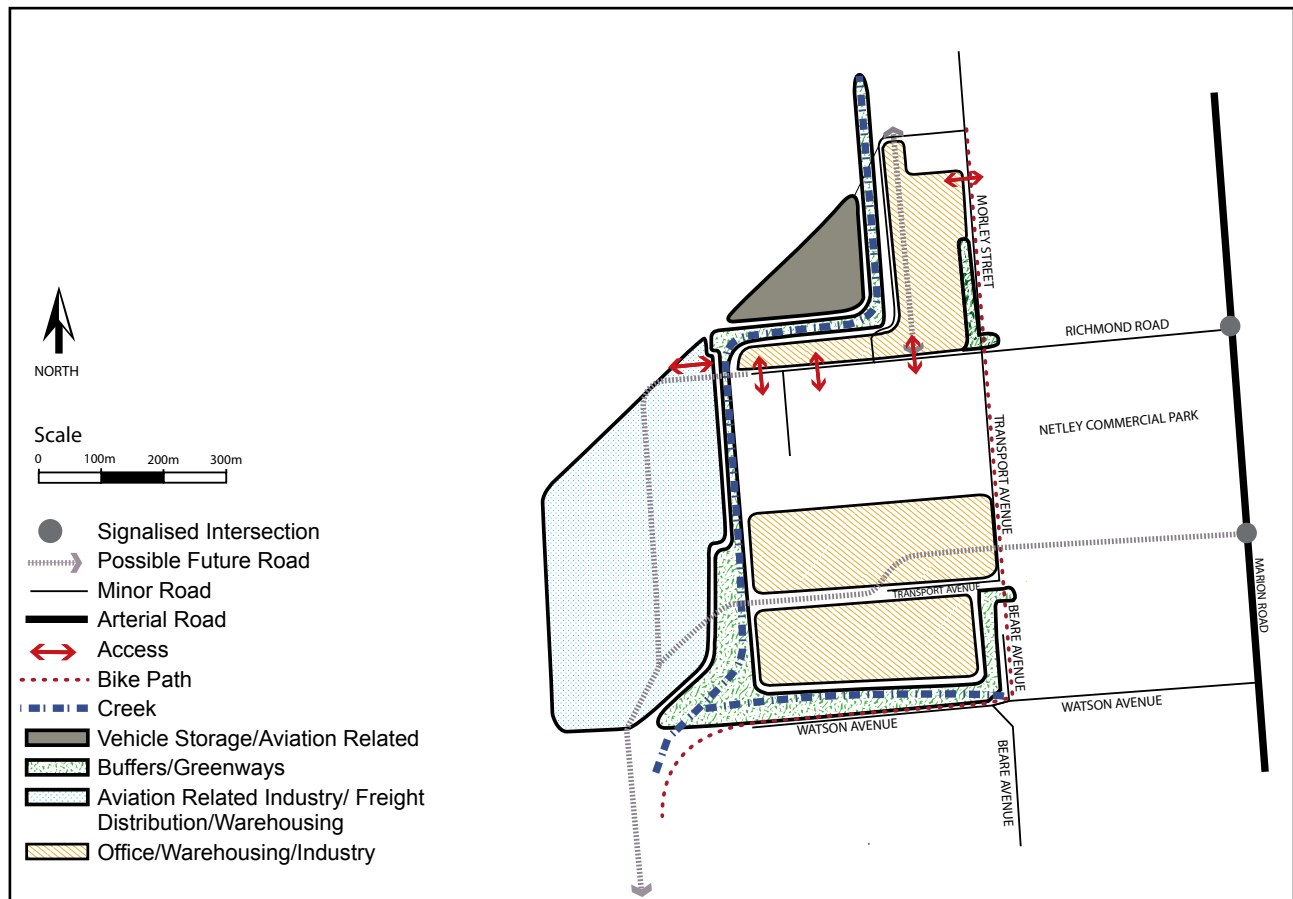


Figure 7.21 Airport East Precinct Structure Plan

7.13.3 Principles of Development Control

Structure Plan

1. Development should be generally in accordance with the Airport East Precinct Structure Plan (Figure 7.21) and the forms of development listed as Envisaged Development.

Amenity

2. Development should minimise its impact on adjacent residential areas by appropriate means, including:
 - the design and style of buildings and the layout of vehicle parking areas;
 - the provision of landscaped earthen mounds in buffer areas facing Watson Avenue and landscaped parks fronting Beare Avenue;

- the provision of landscaped acoustic treatments facing Morley Street; and
- the orientation of loading bays to be positioned away from residential areas.

3. Lighting servicing industrial facilities should be positioned so as to minimise any impact on surrounding residential development and to be compatible with aviation services.

Access and Movement

4. Development of the precinct should provide for a possible future road link between Richmond and Morphett/Deeds Roads, and also between Richmond Road and the Terminals & Business Precinct.

7.13 Airport East Precinct

Built Form

5. Buildings should be compatible with aeronautical equipment or facilities, and be of a height that does not infringe the OLS as detailed in Section 7.16.2.
6. Industrial buildings, including associated activities such as forklift services, freight loading vehicles or aircraft engine testing, are to be constructed to prevent any noise emissions external to the premises or from the airport site that exceed relevant acoustic standards and controls, consistent with the *Airports (Environment Protection) Regulations 1997*.

7.13.4 Procedural Matters

Outlined below is detail on the types of activities considered suitable for the Precinct, along with the identification of uses deemed inappropriate.

Airport East Precinct Uses	
Envisaged Development	Non-Complying Development
Aircraft hangar	Brand outlet centre
Animal agistment for export purposes	Caravan park
Aviation-related support industry	Clubrooms
Bus terminal	Community centre
Car parking and vehicle storage/holding and servicing	Dwelling
Fire-fighting and rescue facilities	Helicopter landing and parking
Freight and distribution centre	Hotel
Industry	Motel
Motor repair station	Shop (other than to service the day-to-day needs of the workforce and visitors to the precinct)
Office/Warehouse	Special Industry (except existing Concrete Batching facility)
Runway-related activities and facility	
Shop (to service the day-to-day needs of the workforce and visitors to the precinct)	
Store	
Technology facilities	
Telecommunications facility	
Warehouse	

Agency Referral and Public Notification

Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accordance with Figure 7.5 Development Decision Matrix in Section 7.3.1.

7.14 Surrounding Land Uses

7.14.1 Introduction

AAL will continue to monitor off-airport development, including the preparation of planning policies and master plans affecting the ongoing airport operations. Specific issues for consideration relate to the location of sensitive land uses, along with height and scale of development which may negatively impact upon such airport operations.

7.14.2 Land Use near the Airport

The main land use zones surrounding the broader Adelaide Airport site are Residential, Industry, Community and Recreation Uses. The airport site is surrounded by several large areas of open space incorporating the Adelaide Shores Complex to the west, Kooyonga Golf Club to the north and the Glenelg Golf Club to the south.

The Adelaide Shores complex is one of the largest community uses within the vicinity of the airport and is located to the west and south-west of the airport in the suburb of West Beach. This is discussed in further detail below.

The next largest community use is the Kooyonga Golf Club measuring approximately 58 hectares in size located directly to the north of the airport site within the suburb of Lockleys. The golf course is privately owned and operated, and is surrounded by residential development to the north, east and west. A second golf course, the Glenelg Golf Club, is located to the south of the airport site within the suburb of Novar Gardens. The Glenelg Golf Club is 49 hectares in size and is also privately owned and operated.

The two key industrial precincts surrounding the airport are the Netley Commercial Precinct located directly to the east adjoining the Airport East Precinct, and a pocket of industrial development to the south-east within the suburb of North Plympton.

The remaining land surrounding the airport site is zoned residential and includes the suburbs of West Beach, Lockleys, Mile End, West Richmond, Kurralta Park, Plympton, North Plympton and Glenelg North. These residential areas are all within the three Council areas of West Torrens, Charles Sturt and Holdfast Bay.

Adelaide Shores Complex

The Adelaide Shores complex totals 228 hectares in size and is composed of a caravan park, function rooms, Adelaide Shores Golf Course and Adelaide Shores Resort. There are also sporting and recreation facilities within the site.

Adelaide Shores is administered by the West Beach Trust which is the statutory authority that was continued under the latest *West Beach Recreation Reserve Act 1987*. Approximately 30 hectares of the land forms part of the broader Adelaide Airport site and is currently leased to the West Beach Trust pending any resumption for future long-term aviation usage. The 1987 Act confirmed the continuance of the West Beach Trust and established the associated Board to manage the reserve and facilities on-site, and develop the site in recognition of the presence of the airport and its future expansion, and in accordance with the Adelaide Shores strategic plan.

The State Government Minister for Planning has recently undertaken a Development Plan Amendment for the site to update the zone policies in line with the Adelaide Shores Master Plan. The three affected Development Plans include: West Torrens Council, Charles Sturt Council and Land Not Within a Council Area (Metropolitan). The proposed policy changes seek to facilitate further development of the site and introduce a new Concept Plan for future development to allow further recreation, conference and tourist facilities. In addition, the land leased to Adelaide Shores by AAL is subject to the Adelaide Airport Master Plan policies, but while leased is to accord with State Government planning and development principles and controls.

Netley Commercial Park

The Netley Commercial Park precinct is located directly to the east of the airport and measures approximately 13.5 hectares in size. The area is currently developed with industrial, office, warehousing and storage uses, with a large focus on freight-related industries. This is complementary to the adjacent Airport East Precinct within the Master Plan.

Waste Transfer Station

A commercial waste transfer station, designed for temporary storage and handling of general, organic and recyclable wastes, is located immediately adjacent the southern airport boundary. The site is owned by West Torrens Council and supports a land use that is generally incompatible with aviation activity and development due to safety risk relating to litter and wildlife attraction. However, AAL actively engages with the site operator on management strategies to minimise the risks.

7.14.3 Adelaide Central Business District

The Adelaide Central Business District is located around eight kilometres to the east of Adelaide Airport and is the capital of South Australia. The CBD is the centre for business, administration, retail and commercial uses within the State. Adelaide Airport is located within an existing urban city context, and therefore the links between the airport, CBD and freight logistics facilities are crucial to the economy of the State. Furthermore, Adelaide Airport is the only international airport for South Australia and provides the international gateway for tourism.

7.14.4 Building Heights and Aviation Safety

Obstacles in the vicinity of an airport, whether they are natural or constructed, may seriously limit the scope of its operations. Whilst it is generally appreciated that tall structures can impact upon airport operations, this is often only considered within the immediate approach and take-off areas, and of structures that are located a short distance away from the airport. While this is of primary concern, it is equally true that objects up to 15 kilometres from the airport and apparently unrelated to the runway alignment can impact upon aircraft approaching or departing an airport; particularly in poor weather conditions or in instances of engine malfunctions.

There are a set of invisible surfaces used to define these airspace requirements and to assess the significance of an existing or proposed object to the Obstacle Limitation Surfaces which are shown in Figure 7.22. This is discussed further below.

Obstacle Limitation Surfaces (OLS)

The OLS are a number of reference surfaces in airspace, which determine when an object may become an obstacle to aircraft manoeuvring in the vicinity of an airport, during approach or departure or during circuit flying. The OLS defines protection requirements for the initial and final stages of a flight. During these manoeuvres, appropriate visibility must be maintained in order for the pilot to see and maintain visual reference to the airport and take responsibility for obstacle avoidance and separation from other aircraft.

The objective of the OLS is to define a volume of airspace, in proximity to an airport, which is to be kept free of obstacles that may endanger aircraft in visual operations or during the visual stages of an instrument flight. The intention is not to restrict or prohibit all obstacles but to ensure that either existing or potential obstacles are examined for their impact on aircraft operations and that their presence is properly taken into account.

As the OLS is relevant only to visual operations, in exceptional instances it may be sufficient to ensure that the obstacle is conspicuous to pilots, and this may allow it to be marked and/or lit with a beacon. Each new obstacle will in some way inhibit the freedom of aircraft operations and inevitably contribute to air traffic congestion and delays. If an obstacle is located in the approach and take-off areas, pilots will be forced to make adjustments to their normal take-off and landing to make sure of obstacle clearance. This may restrict use to less than the full runway length available, and thereby may impose significant operational penalties such as fewer passengers, less cargo and fuel uplift and economic restraints, and also impact upon public safety.

The most stringent requirements apply on the extended centre line of a runway in the approach and take-off areas. Depending on the type of aircraft able to use the runway, the approach and take-off surfaces may extend for as little as 2.5 kilometres or as much as 15 kilometres from the runway strip end. At either side of the runway strip and the approach surface are two OLS components called the transitional surfaces. These are intended to protect an aircraft that encounters severe cross winds during the final phase of the approach to land and may then drift sideways as the pilot decides to 'go around' for another attempt.

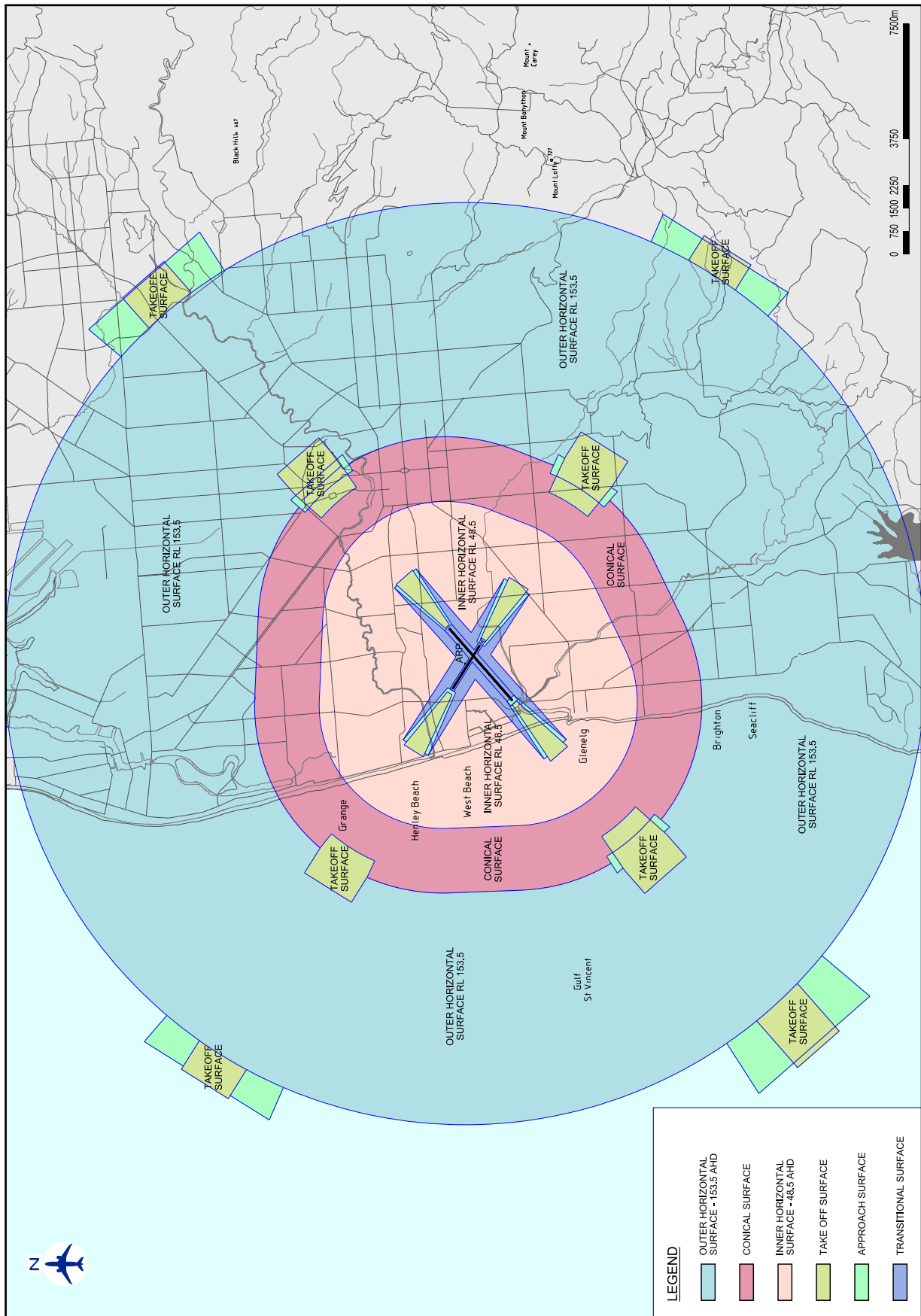
There are two, or in some cases three, other surfaces that provide obstacle protection for aircraft circling to land: the inner horizontal surface, the conical surface and the outer horizontal surface. Depending on aircraft size and the type of activities catered for by the airport, their combined effect may extend up to a 15-kilometre radius of the airport.

Figure 7.22 displays the OLS Plan for Adelaide Airport under the current runway configuration. An OLS Plan representing the reservation of a third runway will eventually be developed.

Civil Aviation Safety Regulations (CASR)

Consistent with aviation safety on and around Adelaide Airport, it is necessary for new development to accord with the following CASR Parts, and the associated Manual of Standards:

- CASR 139 (Aerodromes);
- CASR 171 (Aeronautical Telecommunication Service and Radio Navigation Service Providers); and
- CASR 172 (Air Traffic Service Providers).



Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS)

Adelaide Airport's OLS was declared as prescribed Airspace in January 2009 by the Department of Infrastructure and Regional Development. Since that time, AAL has prepared a PANS-OPS surface for the airport based on the Departure and Approach Procedures Charts. These are procedures for instrument flight rules which depend on having ground based instrument landing and departing equipment at the airport, and this PANS-OPS surface is included in this Master Plan (Figure 7.23). These surfaces are also taken into account in the assessment of short-term OLS penetrations by mobile cranes to verify that the possible PANS-OPS is not infringed in any way.

In contrast to the OLS, which defines when objects are to be considered as obstacles and assessed for their impact on aircraft operations, PANS-OPS surfaces cannot generally be infringed in any circumstances.

The height of the tallest structure or natural feature underneath a PANS-OPS surface determines its altitude or elevation and forms an envelope over the existing obstacle environment. This is because instrument procedure designers have to be able to guarantee that an aircraft will have a specified minimum clearance above any accountable obstacle in situations where the pilot is relying on the information derived from cockpit instruments and may have no external visual reference to the ground, to obstacles or to other aircraft.

The minimum obstacle clearance requirement is simply added to the height of the tallest object under the PANS-OPS surface to determine the minimum or lowest safe altitude to which a pilot may descend in attempting to establish visual reference to the airport. The landing cannot be made unless the pilot 'is visual' at or before reaching this minimum descent altitude. If the minimum for an instrument procedure has to be raised to account for new buildings or other structures, there may be direct impact on airport useability. The higher this altitude needs to be, the less likely it becomes that a pilot will be able to land during low visibility conditions.

There are no changes to PANS-OPS surfaces attributable to this Master Plan timing horizon.

7.14.5 Airspace Protection

The Minister for Infrastructure and Regional Development can protect the airspace surrounding an airport in accordance with the directions provided in the *Airports Act 1996* and *Airports (Protection of Airspace) Regulations 1996*. In addition, the Civil Aviation Safety Regulations Part 139 also apply. These regulations set the standards for the establishment of OLS at an airport, and regulate the development of instrument procedure designs (subject to which PANS-OPS surfaces are determined) by CASA and approved entities, including AsA.

An airport operator can make an application to DIRD for the Minister to protect future airport operations by managing the airspace around the airport.

Air Traffic Services

Airservices Australia is responsible for the airspace surrounding Adelaide Airport. Within this airspace, it provides aerodrome and approach control services to arriving and departing aircraft, as well as ground control for taxiways and runways. Airservices Australia also provides services to aircraft transiting the designated control zone in which Adelaide Airport is situated.

These operations are conducted in accordance with published procedures, requirements and air traffic control clearances and instructions.

Monitoring

Adelaide Airport Limited conducts regular consultative meetings with the airline industry and AsA to maximise the use of these facilities and minimise arrival, departure and circuit impacts on the community.

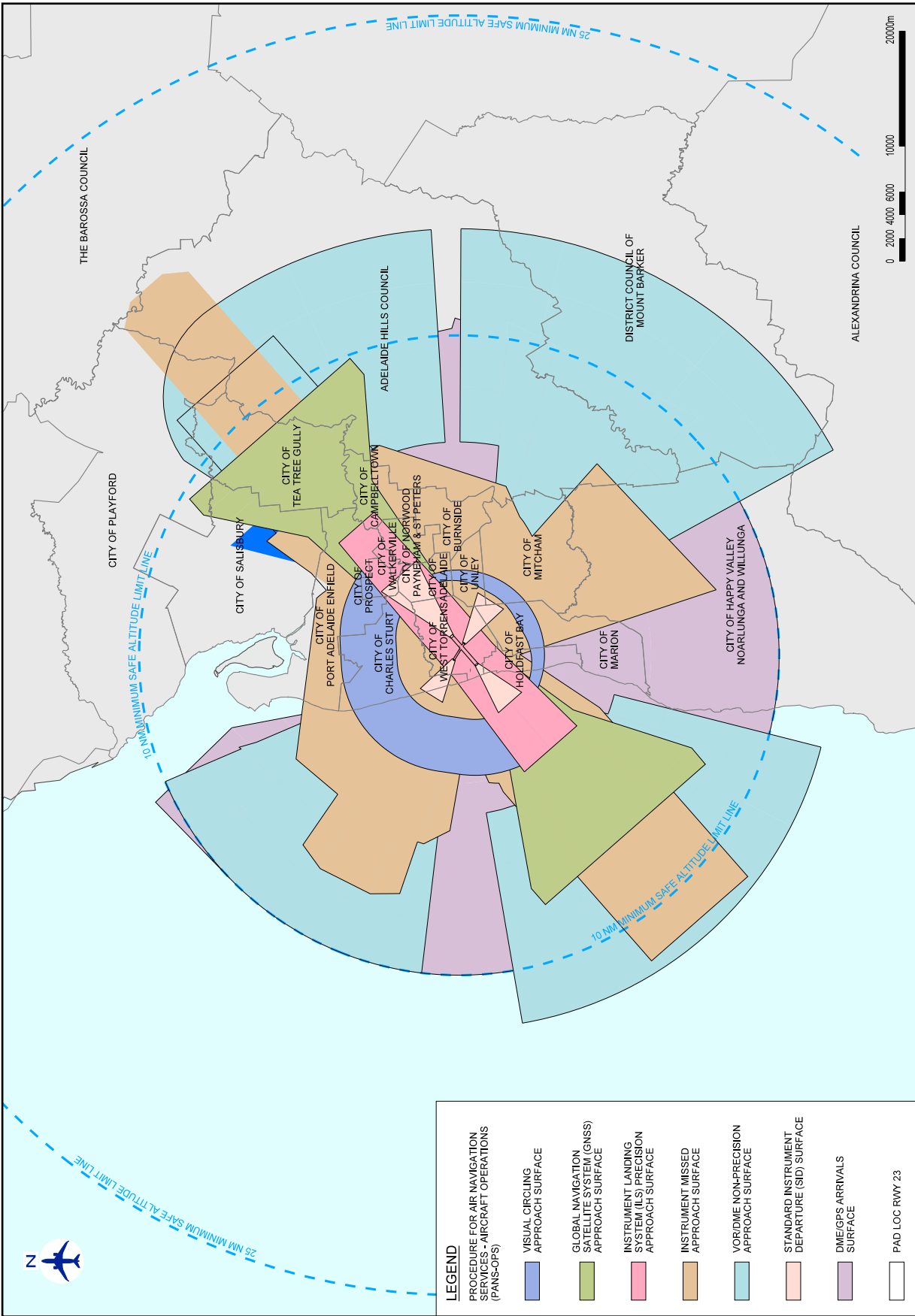


Figure 7.23 Procedures for Air Navigation Services Aircraft Operations (PANS-OPS)

7.14.6 Hazardous Lighting

Local authorities' planning policies should recognise the potential hazard of inappropriate lighting by specifying appropriate performance standards for lighting installations in proximity to airports.

Developers and designers of lighting within a six-kilometre radius of Adelaide Airport are required to comply with lighting guidelines to ensure ground lighting does not interfere with pilot vision on landing approach. Advice is available in the Civil Aviation Authority, *Manual of Standards*, Part 139 – Aerodromes, Chapter 9, Section 9.21 which can be made available on request. The CASA manual also applies to on-airport developments including aeronautical infrastructure and facilities. This is further stipulated in the NASF guidelines discussed below.

State and Local Government, developers and any stakeholders can obtain relevant maps and information about restrictions on lighting around Adelaide Airport from the relevant authorities or AAL. The prescribed zones are identified in the *Civil Aviation Authority, Manual of Standards Part 139 – Aerodromes, Chapter 9, Section 9.21*.

7.14.7 National Airports Safeguarding Framework Guidelines

The National Airports Safeguarding Advisory Group (NASAG) has produced the National Airports Safeguarding Framework (NASF) that includes a statement of over-arching principles and a suite of six guidelines for land use planning measures associated with airports. The intent is to manage the impact of noise disturbance from airports and to preserve the ongoing safety of the community and aircraft by ensuring that aviation safety requirements are recognised in land use planning decisions. These principles and guidelines were formally agreed by all jurisdictions on 18 May 2012 with the intention of their subsequent endorsement by the Council of Australian Governments.

NASAG has yet to finally settle the issue of the Public Safety Zones as well as the protection of off-airport communications, navigation and surveillance infrastructure.

The NASF Guidelines are aimed at safeguarding airports and surrounding communities through implementing appropriate planning schemes around airports by providing guidance to decision-makers in all levels of Government.

The six overarching guidelines are:

- Guideline A: Measures for Managing Impacts of Aircraft Noise
- Guideline B: Managing the Risk of Building Generated Windshear and Turbulence at Airports
- Guideline C: Managing the Risk of Wildlife Strikes in the Vicinity of Airports
- Guideline D: Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation
- Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports
- Guideline F: Managing the Risk of Intrusions into the Protected Airspace of Airports

A detailed overview of each of the NASF Guidelines is provided in Appendix C – NASF Guidelines Overview.