

7

Land Use Planning

64

7.1 Introduction

The land use provisions of this Master Plan are based on a revision of the 2012 Master Plan, taking into account:

- the *Airports Act 1996*;
- the *South Australia's Strategic Plan (2011)*;
- the *30-Year Plan for Greater Adelaide (2010 and 2017)*;
- the *Housing and Employment Land Supply Program Report (2012)*;
- the *Salisbury City Plan 2030*;
- changing development pressures and opportunities identified since the 2012 Master Plan;
- input from the PACCC, the Adelaide Airport Consultative Committee Airport Planning Co-ordination Forum (Adelaide and Parafield Airports), the South Australian State Government, the City of Salisbury and the local community and business; and
- consultancy analysis initiated for PAL or proponents.

This Master Plan recognises that Parafield Airport is an important aviation facility for South Australia and a world-class aviation training facility being categorised as a Specialist Centre in the current version of the State Government *30-Year Plan for Greater Adelaide*.

The Master Plan also includes land suitable for industrial development and an established retail bulky goods centre. The Master Plan seeks to ensure that airport development proceeds in a manner which is compatible with existing adjacent land uses and development policies and ensure that the operational integrity and economic viability of the airport is not compromised. It also allows capacity for growth to meet changes in aviation travel and the aviation support industry, including pilot training activities and general aviation.

The Master Plan establishes an Airport (Parafield) Zone for the entire 433 ha site. This zone is consistent with State Government principles that provide broad objectives and principles of development control to guide proposed development on the airport site. The zone is broken down into precincts, as shown in Figure 7.1. These precincts are:

- Runways Precinct—222 ha;
- Airport Business Precinct—68 ha;
- Commercial Precinct—48 ha;
- Bennett Precinct—13 ha; and
- Enterprise Precinct—82 ha.

Since the 2012 Master Plan, a number of the precincts have been merged and had name changes:

- The former Levels Precinct has been merged with the Commercial Estate Precinct to form the Commercial Precinct. These changes to the precinct boundaries have been undertaken given the synergies of commercial development opportunities fronting Main North Road.
- The former Kings Precinct has been combined with the Central Precinct to form the Airport Business Precinct. This also reflects the synergies of aviation, commercial and employment related development of this area.
- the former Cross Keys Precinct has been renamed the Enterprise Precinct, reflecting its potential as a major innovation and employment hub.



Figure 7.1 Zone and Precinct Plan for Parafield Airport

7.1.1 Precincts

For each precinct, the Master Plan contains Objectives, Desired Future Character Statements, along with Principles of Development Control and Procedural Matters that specify Envisaged and Non-Complying uses in a similar vein to that 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 and public consultation process prior to a decision being made on whether to approve the use. The proposed development direction for each precinct is also indicated on the overall Airport (Parafield) Zone Structure Plan, which is included in Figure 7.2. In the development criteria for each precinct,

a Precinct Structure Plan is also provided which outlines the envisaged primary uses including those for commercial (including offices), community or retail purposes, as well as those directed at airport services.

7.1.2 Buffer and Conservation Zones

Surrounding the airport are buffer zones that separate airport development precincts from nearby residential areas and that provide drainage swales, railway corridors and shared-use pathways.

A conservation zone at the southern end of the airport has been established for environmentally significant vernal pools, recognising their biodiversity

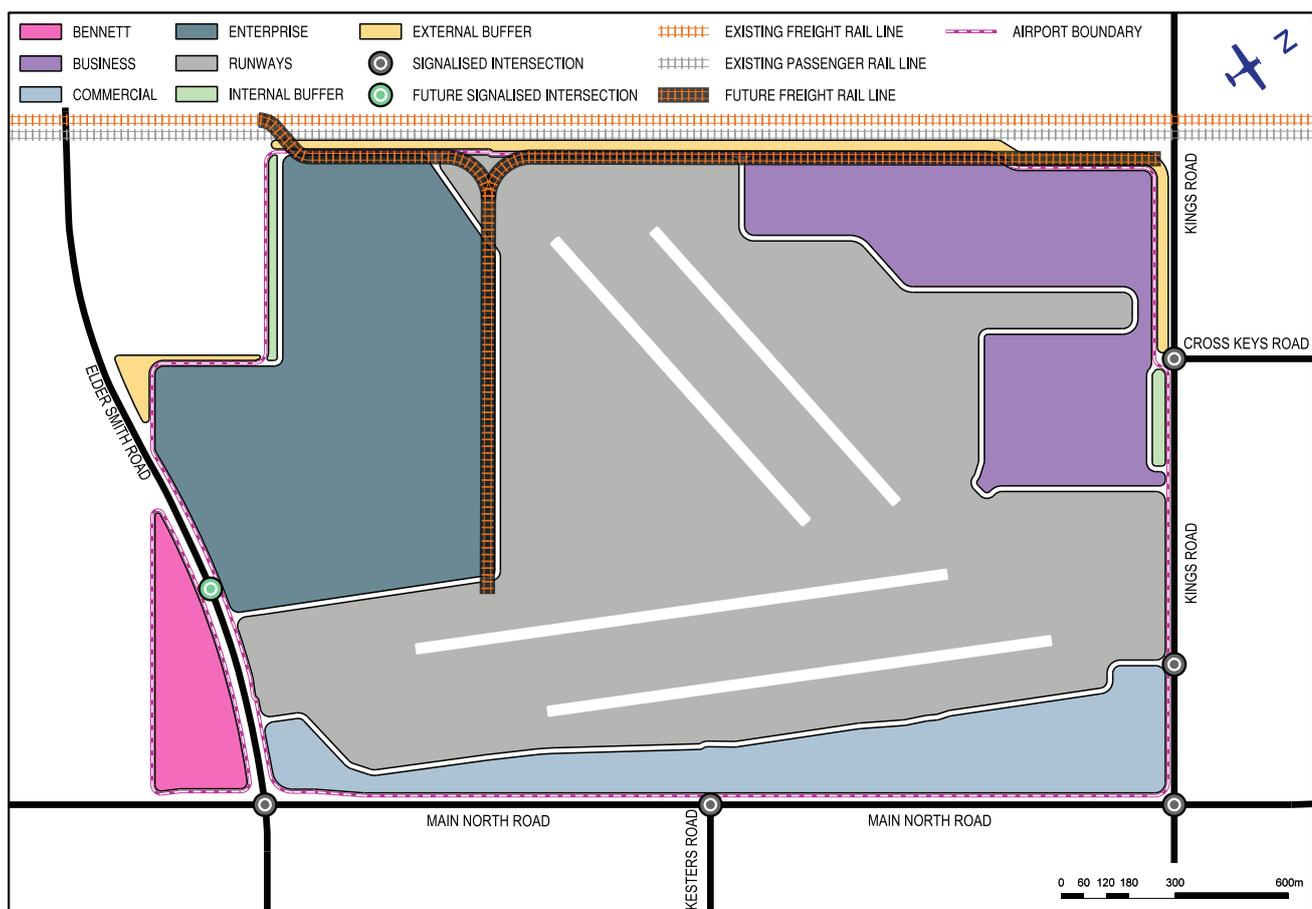


Figure 7.2 Airport (Parafield) Zone Structure Plan

and conservation values. There is a need for strict management control of these ephemeral pools in recognition that similar conservation activities are often classed as an incompatible activity near airports because of their potential to attract birds. This is consistent with International Civil Aviation Authority recommendations on land use and its potential to become a high-risk wildlife attraction.

These conservation areas and buffer areas are shown in Figure 7.3.

A vernal pool that lies within the Runways Precinct is situated at the southern foot of a runway, and its retention can continue, under close management,

pending future runway extension. This particular pool has been independently identified as degraded, having a low biodiversity value, and has been assessed as not being well-suited for remediation. Given its location and the potential future runway extension, it has been classified as a control pool, which can be used for benchmarking the remediation success of vernal pools in the conservation zone, and is well-suited for monitoring purposes for 5 years, pending possible runway expansion. The establishment of a conservation zone within close proximity of the runway would be incompatible with airfield operations due to wildlife attraction and runway end safety area issues.



Figure 7.3 Buffer and Conservation Zones

7.2 Commonwealth Planning Policy

7.2.1 Land Use Planning

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

The process of approving developments by PAL 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 (Parafield) Zone. However, greater attention is warranted to ensure a higher consideration of aviation standards in

surrounding areas, 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*, PAL 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 Plan must be considered by the Minister for Infrastructure and Transport following public consultation and comment as prescribed in the *Airports Act 1996*. All developments are subject to formal building approval in accord with the *Airports (Building Control) Regulations 1996*, taking into account the consideration of 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).

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 Parafield 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 firefighting services by Airservices Australia;
- 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 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 Border Force, Bureau of Meteorology, Health and Ageing and the Department of Agriculture and Water Resources incorporating the former Australian Quarantine and Inspection Services (AQIS) branch.

7.2.3 Building and Environmental Controls

Under the *Airports Act 1996*, building activity approvals are obtained from the Airport Building Controller, who is appointed by the Secretary of the Department of Infrastructure and Regional Development. The consent of PAL is required before

the Airport Building Controller can give any approval. In considering its consent, which may be granted with conditions, PAL must ensure that the proposal is consistent with the approved Parafield Airport Master Plan and its Principles of Development Control and land use planning Objectives, as well as relevant Development Design Guidelines. PAL 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 Parafield Airport under the Act. PAL will operate in accordance with the Parafield 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 has been appointed by the Department of Infrastructure and Regional Development to ensure the airport and its occupiers comply with the Regulations and operate in accordance with good environmental practices detailed 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 Parafield Airport and have been considered in the preparation of this Master Plan. However, the perspectives in these documents differ and planning policy variations and enabling legislative changes differ between the *Airports Act 1996*, and the South Australian planning legislation.

The following sections of this chapter detail the degree to which Parafield Airport aviation and business activities are referenced within the State's planning framework through State and Local Government planning and strategic policy.

7.3.1 Planning System Overview

Figure 7.4 compares the airport planning system (established under the *Airports Act 1996*) and the South Australian planning system. There are similar levels of control and consultation between both regimes.

Under the South Australian planning system, there is a clear emphasis towards balancing social, economic and environmental objectives. In this context, the planning system recognises the important contribution that the State's major airports (including Parafield Airport) make to the State and local economies, and the need to protect their ongoing operations.

Airport Planning Coordination Forum

PAL has established an Airport Planning Coordination Forum (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 PAL 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 Parafield Airport of development in the surrounding areas.

Specifically, the APCF 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 current *30-Year Plan for Greater Adelaide*;
- the steps being taken to develop or implement the Parafield 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 Parafield Airport, including planning measures to safeguard airport operations; and
- government briefings on regulatory and policy developments.

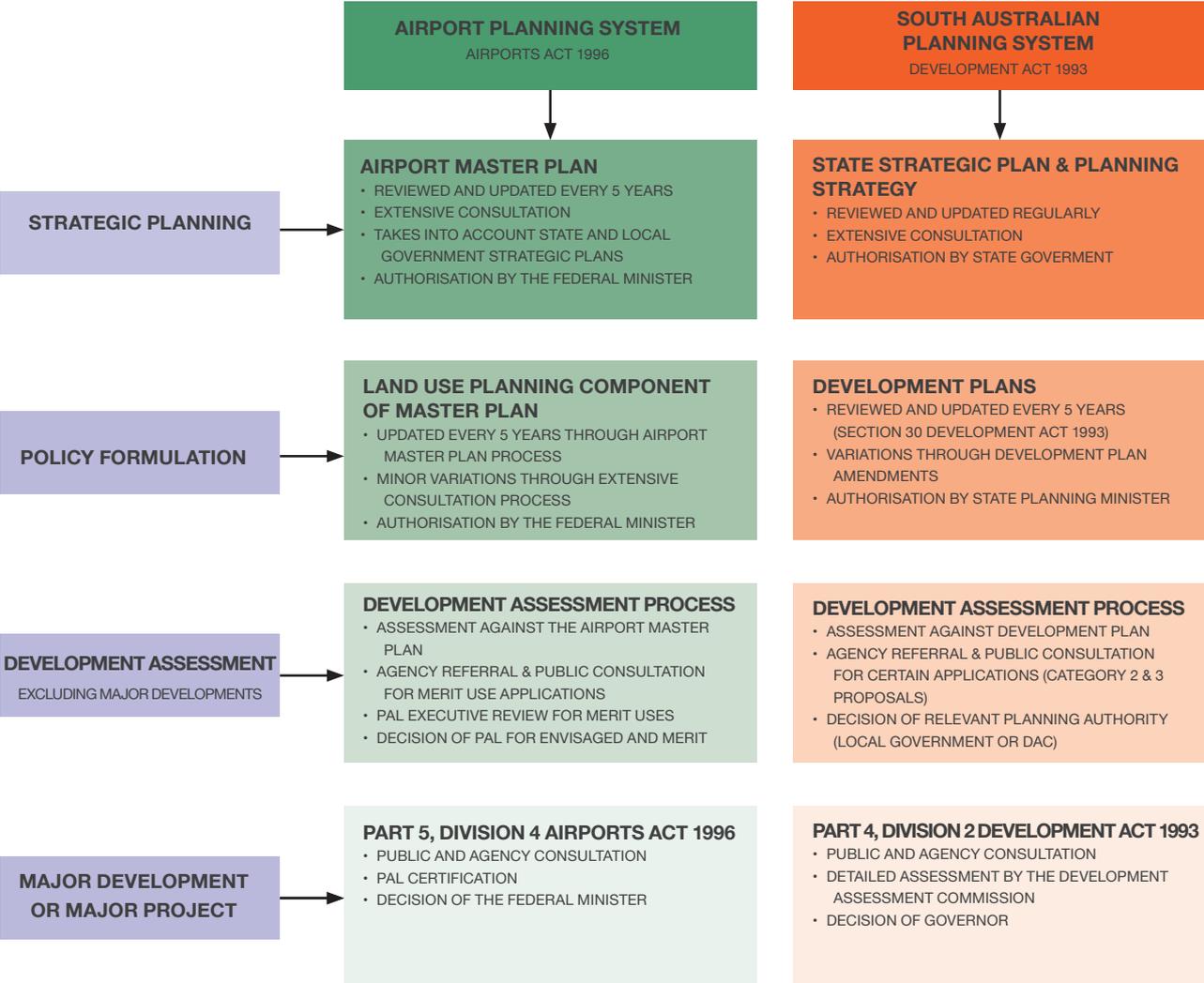


Figure 7.4 Comparison of Airport and State/Local Government Planning

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 was updated in 2011. The Strategic 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 objectives:

- Our Community;
- Our Prosperity;
- Our Environment;
- Our Health;
- Our Education; and
- Our Ideas.

Development of the Parafield Airport land will help to achieve the objectives and targets listed in Table 7.1.

Flight Training Adelaide and other flight training schools at Parafield Airport assist in the achievement of the education and workforce development and training aims of the objectives. With estimated 2016 employment levels at Parafield Airport being over 1,360 employees (primarily on-site employees), Parafield Airport is a major employer and contributor to the Gross Regional Product of the Northern Adelaide Region, and contributes \$262.8 million to the Gross State Product. This 2016 estimate, prepared by Hudson Howell, represents an increase of 43% since 2008.

Parafield Airport’s forecast employment (both direct and indirect jobs) is expected to double in the next 20 years, and the airport’s contribution to Gross State Product is expected to triple in this time. Such growth is primarily due to the establishment of the manufacturing and distribution activities in the Enterprise Precinct.

7.3.3 Seven Strategic Priorities

The State Strategic Plan has been supplemented by the State Government’s Seven Strategic Priorities, which provide a focus on a smaller number of key objectives:

- giving our children every chance to achieve their potential in life;
- keeping our communities safe and our citizens healthy;
- building our reputation for premium food and wine;
- growing advanced manufacturing as the way for the future;
- realising the benefits of the mining boom for all;
- creating a vibrant city that energises and excites; and
- keeping our high quality of life affordable for everyone.

Development of the Parafield Airport land will support the objective of increasing exports of food and wine.

7.3.4 The South Australian Planning System

The South Australian planning system is currently undergoing a transition—from the *Development Act 1993* to the *Planning, Development and Infrastructure Act 2016*. There are transitional arrangements in place to give effect to the new legislation over a five-year period commencing in 2016.

The object of the *Planning, Development and Infrastructure Act 2016* (similar to the *Development Act 1993*) is to support and enhance the State’s liveability and prosperity in ways that are ecologically sustainable and meet the needs and expectations, and reflect the diversity, of the State’s communities by creating an effective, efficient and enabling planning system. Amongst other aims, the *Planning, Development and Infrastructure Act 2016* provides for:

Table 7.1 South Australian Strategic Plan - Objectives and Targets

Objective 2:	Our Prosperity
Target 35	Economic growth: Exceed the national economic growth rate over the period to 2020 (baseline: 2002 – 03).
Target 39	Competitive business climate: Maintain Adelaide’s rating as the least costly place to set up and do business in Australia and continue to improve our position internationally (baseline: 2004).
Target 56	Strategic infrastructure: Ensure that the provision of key economic and social infrastructure accommodates population growth (baseline: 2010 – 2011).

- the establishment of objectives and principles of planning and development;
- a system of strategic planning governing development;
- the creation of policies to guide and control development;
- community participation in relation to the initiation and development of planning policies and strategies; and
- the establishment of a State Planning Commission.

7.3.5 Planning Strategy for South Australia

The *Development Act 1993* and the new planning legislation require the South Australian 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 next 10 to 15 years. The Planning Strategy is divided into a number of volumes covering the geographic areas of the State.

7.3.6 The 30-Year Plan for Greater Adelaide

The relevant volume of the Planning Strategy applicable to Parafield Airport is the 30-Year Plan for Greater Adelaide (2017). The 30-Year Plan provides

directions for urban and regional development for business, including infrastructure provision, utilities supply and government agencies.

The 2017 30-Year Plan revises some assumptions made previously to better reflect contemporary trends and changes, particularly in relation to population growth and the rate in which we consume land. The 30-Year Plan also complements the new planning system established under the *Planning, Development and Infrastructure Act 2016*.

The 30-Year Plan promotes a more efficient, sustainable and liveable urban form. Shifting the emphasis of new growth away from urban expansion towards a concentration of new housing in existing urban areas is a central theme of the Plan. Growth within the existing footprint of metropolitan Adelaide is promoted by increasing housing densities close to selected transport corridors and at new Transit Oriented Developments.

The previous (2010) version of the 30-Year Plan identified Parafield Airport as a 'Major Airport' and a 'Specialist Centre'. The 2017 Plan describes Parafield Airport as a 'Business and Industry Cluster'.

Table 7.2 30-Year Plan for Greater Adelaide– Policies and Targets

The Economy and Jobs	
P57	Maintain and protect primary production and tourism assets in the Environment and Food Production Areas, while allowing for appropriate value-adding activities to increase investment opportunities
P68	Focus business clusters and manufacturing hubs around key transport infrastructure such as road, air, rail, sea terminals and intermodal facilities to maximise the economic benefits of export infrastructure.
P73	Provide sufficient strategic employment land options with direct access to major freight routes to support activities that require separation from housing and other sensitive land uses.
Transport	
P74	Ensure development does not adversely impact the transport function of freight and/or major traffic routes and maintains access to markets.
P77	Ensure that new housing (and other sensitive land uses) permitted in locations adjacent to airports and under flight paths or near major transport routes (road, rail and tram) mitigates the impact of noise and air emissions.
Infrastructure	
P83	Define and protect strategic infrastructure sites and corridors from inappropriate development to ensure the continued functionality of the services they provide.
P84	Protect major economic infrastructure such as airports, ports and intermodals from encroachment by incompatible development and facilitate further economic activity in these locations.

Key references to policies and targets outlined in the 30-Year Plan relevant to the Parafield Airport Master Plan are included in Table 7.2.

7.3.7 Integrated Transport and Land Use Plan 2015

The *Integrated Transport and Land Use Plan* (ITLUP) (DTPI 2015) provides a roadmap for strategic investment in transport infrastructure in South Australia. Its main objectives are to promote economic development through improved freight networks and liveability through investment in public transport, walking and cycling networks.

Under the heading ‘The role of Adelaide’s airports and their location as a competitive advantage’, the ITLUP describes Parafield Airport as one of Australia’s busiest general aviation airports and highlights its role in supporting significant industry and employment in Adelaide’s north.

The ITLUP identifies investment priorities and supporting policies which are described as ‘solutions’ for inner, middle and outer Adelaide. The following solutions are relevant to Parafield Airport:

- freight and port solutions—protecting the freight and port sector, including airports as a priority.
- maintaining and optimising the capacity and efficiency of freight networks—improving the capacity and efficiency of strategic ports and airports, including landside connections.

A key project for northern Adelaide, which has been identified in the ITLUP, is the Northern Connector. This is a new multi-lane expressway forming a critical component of Adelaide’s north-south corridor. Work on the Northern Connector commenced in May 2016. It will link major transport routes, from the north of the State and from Perth and Sydney to the Port of Adelaide, and key employment and manufacturing areas throughout metropolitan Adelaide.

The ITLUP identifies the following specific investment priorities relevant to Parafield Airport:

- Short term (next 5 years):
 - completion of the Northern Connector project; and
 - 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; and

- Long term (5+ years):
 - work with the Australian Government in reviews of Master Plans for Adelaide and Parafield Airports to provide effective access; and
 - facilitate road projects for Parafield Airport industrial and commercial development.

7.3.8 Housing and Employment Land Supply Program Report 2012

The Housing and Employment Land Supply Program (HELSP) Report (DTPI 2012) supports the strategic aims of the Planning Strategy to provide a long-term supply of suitable land to support residential, industrial, retail and commercial development. The HELSP report monitors land supply and provides guidance about future industry trends. It further supports rezoning by councils and government and promotes the coordinated provision of infrastructure aligned with land supply. Relevant features of the HELSP report include:

- adopting a 25-year rolling supply of residential, industrial, commercial and retail land based on projected population and dwellings, and employment growth; and
- ensuring 15 years of zoned land is available for urban development at any given time.

Notwithstanding the commercial and industrial development opportunities at Parafield Airport, the 2012 HELSP report does not identify Parafield Airport land as contributing to future industrial land supply targets in northern Adelaide. The focus of these targets is potential land supply at Greater Edinburgh Parks and Gillman.

7.3.9 Look North – A shared vision for Northern Adelaide

The South Australian Government, local government, industry and community leaders have developed *A Shared Vision for Northern Adelaide* (The Northern Economic Plan), released in January 2016, to ensure the northern Adelaide region continues to prosper, transitioning the region to a diverse and resilient economy.

The Northern Economic Plan includes three strategic directions:

- industry growth;
- thriving communities; and
- responsive governments.

7.3.10 Salisbury City Plan 2030

The Salisbury City Plan 2030 (City Plan) is the Salisbury Council's blueprint for achieving its vision of "... a flourishing City with opportunity for all."

In its previous City Plan (2020), the City of Salisbury indicated a preference for Parafield Airport to be relocated to enable the land to be redeveloped. This position does not form part of the current City Plan.

The City Plan contains the following four key directions:

- Prosperous City—driving economic growth in South Australia, creating more jobs, providing people with skills and knowledge to connect to those jobs and sustainably increasing our population.
- Sustainable City—a place where people actively experience and care for their natural environment, where green industries thrive and our urban and natural spaces are adaptive to future changes in climate.
- Liveable City—a welcoming community that celebrates its diversity, embraces change and where people are able to participate in community life. It's a City with interesting places and experiences.
- Enabling Excellence—a council where people work because they can make a difference, an organisation that anticipates, understands and meets community needs, a Council with a positive attitude.

The City Plan supports the development of land at Parafield Airport for economic uses.

7.3.11 Salisbury (City) Development Plan

Development Plans are key documents in the South Australian planning system. Development Plans are established under the *Development Act 1993* and contain zones, maps and written policies which guide property owners and others as to what can and cannot be done in the future on land in the area covered by the Development Plan.

Under the new planning system established under the *Development, Planning and Infrastructure Act, 2016* Development Plans will be phased out during the transition period, and replaced with a new Planning and Design Code. Until the transition to

the new planning system is complete, Development Plans remain as the detailed criteria against which development proposals will be assessed.

Parafield Airport is located within the Salisbury Council Development Plan (consolidated on 7 July 2016), which covers the entire City of Salisbury. The Development Plan is updated regularly to reflect current policy directions and best practices.

Parafield Airport is located within the Airfield (Parafield) Zone of the Salisbury Council Development Plan. At the time of the previous Master Plan, Parafield Airport was located within a Special Uses Zone. The updated Airfield (Parafield) Zone is based on a generic Airfield Zone.

The primary objective of the 'Airfield (Parafield) Zone' seeks to accommodate aircraft operations, passenger terminals, airport and aviation-related light industrial, service industrial, warehouse and storage purposes.

The Desired Character of the Airfield (Parafield) Zone states:

"Development proposals at the site are not assessed through the statutory development assessment process of the Development Act 1993, and are instead assessed against a Master Plan for the site, pursuant to the Federal Airports Act 1996.

Details of the future envisaged uses within the zone for Parafield Airport are contained within the Parafield Airport Master Plan. The Master Plan includes future land uses, types of permitted development, and noise and environmental impacts, and is reviewed at least every 5 years by Airport management."

Development within the zone also seeks to promote Parafield Airport's role as:

- South Australia's principle general aviation and civilian flight training centre;
- 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; and
- a major business enterprise providing a transport hub, aviation passenger, freight and general aviation facilities, flight training centres, incorporating aviation colleges and academies, employment and commercial, retail and industrial development opportunities for the inner northern

suburbs, broader Metropolitan Adelaide and beyond.

The Principles of Development Control for the zone support these objectives.

The Council-wide policies in the Development Plan seek the maintenance of the long-term operational, safety and commercial aviation requirements of Parafield Airport, and provide guidance on building heights within the vicinity of Parafield Airport. Such planning policies seek to ensure:

- that the height and location of buildings and structures does not adversely affect the long-term operational, safety and commercial requirements of the airport;
- that development does not create a risk to public safety, in particular in relation to such matters as light glare, air emissions and turbulence, storage of flammable liquids, attraction of birds, reflective surfaces, materials that affect aircraft navigational aids, outdoor lighting, etc.; and
- that development takes into consideration the effect of aircraft noise, consistent with Australian Standard *AS2021:2015 Acoustics—Aircraft Noise Intrusion - Building Siting and Construction*.

7.3.12 Recent Development Plan Amendments Relevant to Airport Operations

There have been a number of amendments proposed or authorised for the Salisbury Council Development Plan since the previous Master Plan, which may have an impact in relation to ongoing airport operations.

The Mixed Use (Bulky Goods, Entertainment and Leisure) Zone Development Plan Amendment was authorised on 18 December 2014. The Development Plan Amendment affects land immediately to the north-east of Parafield Airport, fronting Main North and Kings Road. The Zone includes limitations in relation to land use, building height and lighting, to ensure that it does not adversely impact on ongoing airport operations.

The Mawson Lakes Development Plan Amendment (Part 1) was authorised on 7 July 2016, affecting development to the south-west of Parafield Airport, rezoning land to the Urban Core Zone. This is an area that is affected by aircraft building height restrictions and potential noise impacts from aircraft operations.

7.4 Development and Building Assessment Process

PAL 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 Act, controls over land use planning and development on the airport remain with the Commonwealth Minister for Infrastructure and Transport, with PAL 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 Parafield Airport. There are a number of decision-making steps in this process, which include:

- the decision of PAL to lease land for particular forms of development.
- the decision of airport authority regulators (such as Department of Infrastructure and Regional Development and CASA) to accept development that will not unduly impact upon airport and aviation activities.
- the decision of PAL as to the appropriateness (or otherwise) of the development against the approved Master Plan, taking into account:
 - the Airport (Parafield) 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;
 - any comments from owners of abutting and facing adjacent property within 60 m 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; and
 - consideration of the development being classified as potentially having sensitive or significant impact to the community, or as a Major Development under the Act.

If a development proposal is not identified within the relevant precinct as 'Envisaged' or 'Non-complying', it can be considered as 'Merit' form of

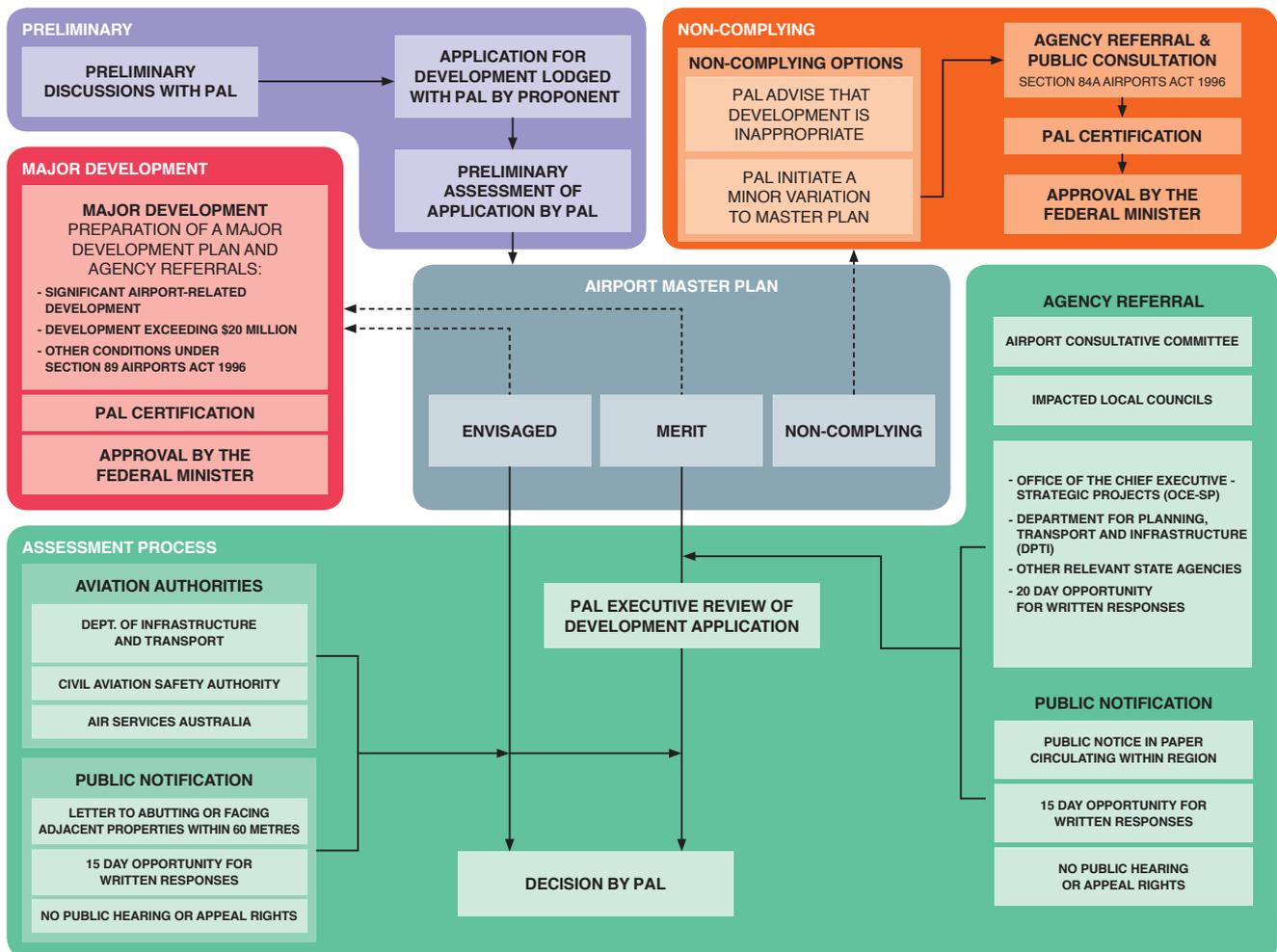


Figure 7.5 Development Decision Matrix

development and triggers two processes – Council and 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 Parafield Airport Consultative Committee and Planning Coordination Forum. Such a process will assist in informing key groups/affected persons of the proposal, and allow written submissions within 15 business days, which can be tabled with the Consultative Committee, Planning Coordination Forum, the State Government and the City of Salisbury prior to any decision on the proposal being made by PAL.

The Merit Use assessment process aligns with the South Australian Planning System and is clearly described in Figure 7.5.

If a development proposal is identified as being ‘Non-complying’ within the relevant precinct and the proposal is considered by PAL to have ‘Merit’, such an application could trigger a Minor Variation to the Parafield Airport Master Plan under Section 84A of the Act, for a decision by the Commonwealth Minister.

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

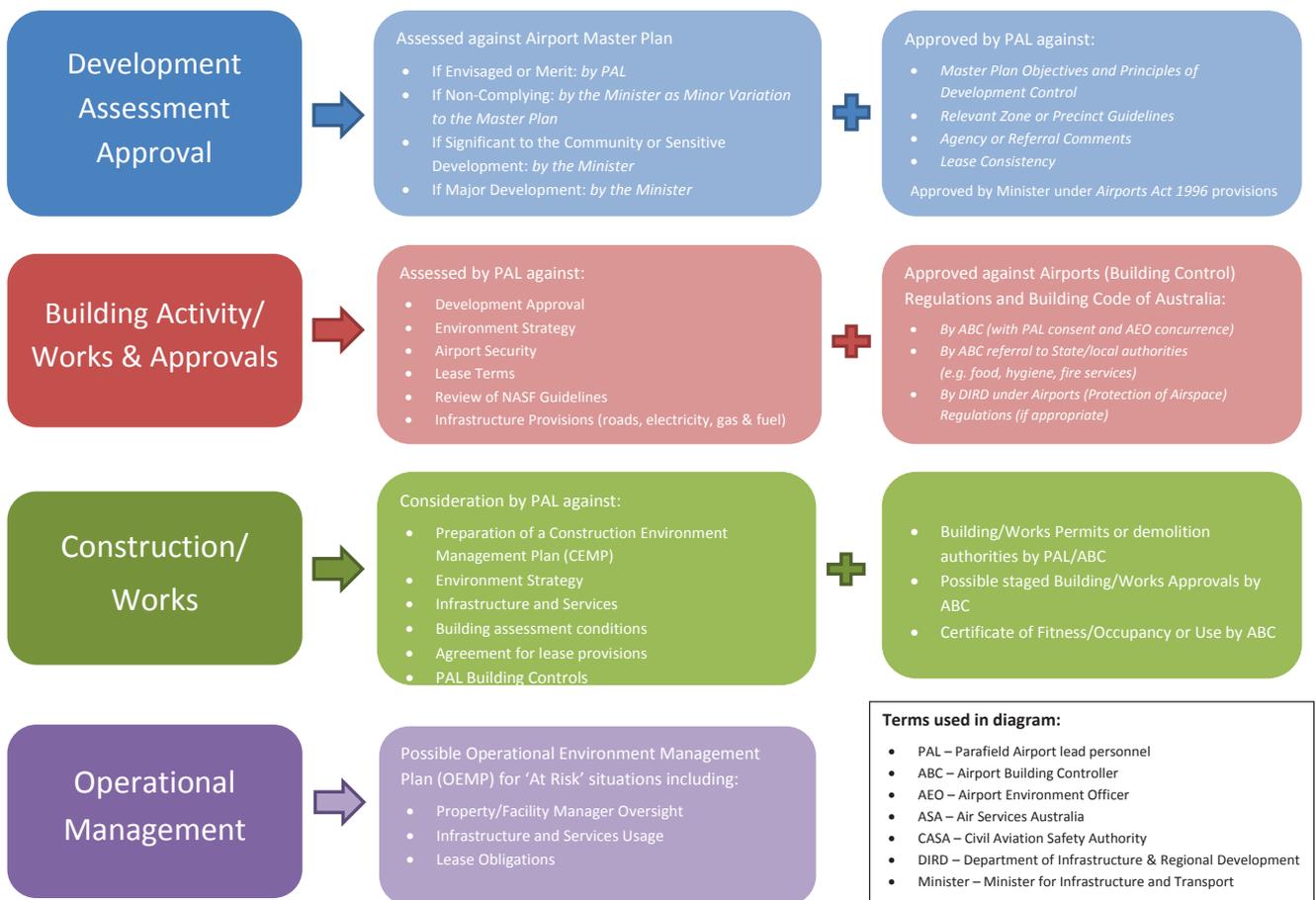


Figure 7.6 Development and Building Approvals Process Diagram

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 prepared by DPTI. PAL will be the appropriate adjudicator in any anomaly instances.

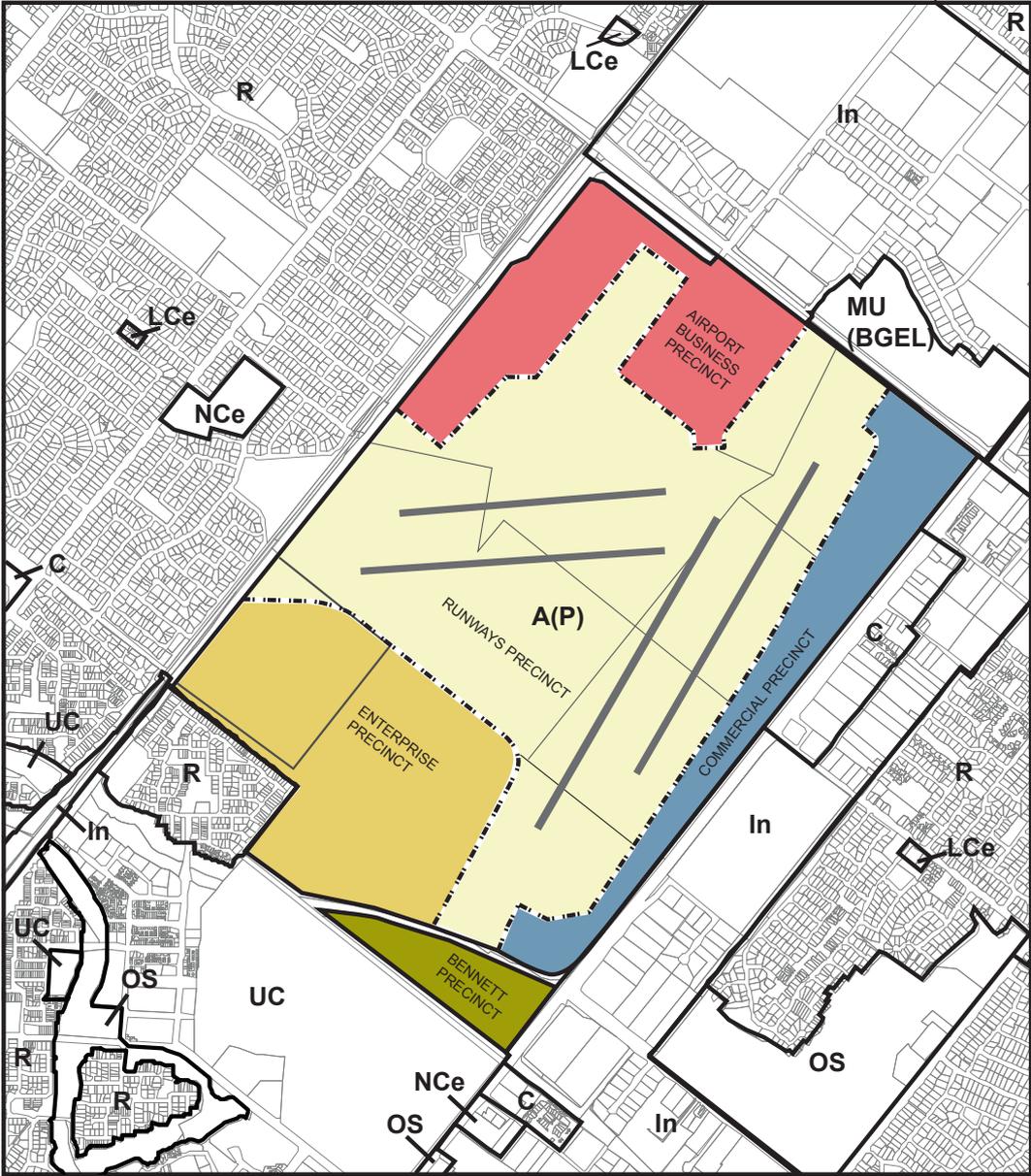
7.6 Airport (Parafield) Zone

The Airport (Parafield) Zone is one that defines the area within which the following Land Use Planning

policies apply. These policies consist of Objectives, Desired Character Statements and Principles of Development Control, together with Procedural Matters. They provide general guidance as to the forms of development envisaged within the overall zone and provisions to guide such matters as the design and scale of development.

The zone is divided into various precincts (a smaller sub-area of the zone), which contain additional policies specific to each precinct. 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 (Parafield) Zone is shown in Figure 7.7.



- A(P) Airport (Parafield)
- C Commercial
- In Industry
- LB Landscape Buffer
- LCe Local Centre
- MU(BGEL) Mixed Use (Bulky Goods, Entertainment and Leisure)
- UC Urban Core
- NCe Neighbourhood Centre
- OS Open Space
- R Residential
- Zone Boundary
- - - - - Precinct Boundary

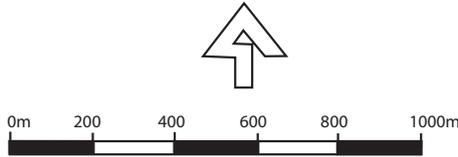


Figure 7.7 Airport (Parafield) Zone

7.6.1 Objectives

1. Development within the zone which promotes Parafield Airport's role as:
 - an aviation training centre of excellence and vibrant economic hub, recognised as a positive influence on the community and economy;
 - South Australia's principal general aviation and civilian flight training centre;
 - 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; and
 - a major business enterprise providing a transport hub, aviation passenger, freight and general aviation facilities, flight training centres, incorporating aviation colleges and academies, employment and commercial, retail and industrial development opportunities for the inner northern suburbs, broader Metropolitan Adelaide and beyond.
2. Development that ensures the long-term operational, safety, commercial, training and general aviation requirements and fixed based operations of the airport continue to be met.
3. Development of community services, aviation attractions and some possible active and passive recreation, together with other appropriate commercial 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 general aviation passengers and fixed base operations and freight by infrastructure improvements;
 - providing flight training services; and
 - contributing to the viability of the airport as a business enterprise through diversification of investment opportunities.
5. Development that is consistent with broad industrial activities of an enterprise nature or servicing freight, logistics and storage, consistent with employment lands for the northern Adelaide metropolitan area.
6. Retail development within the zone that includes 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, in recognition of its status as a Bulky Goods Centre under State Planning. Community facilities within the zone, such as aviation attractions, consulting and health care facilities to service employees and visitors to the airport and the surrounding community.

Amenity

7. Development that is compatible with AS2021:2015 relative to noise from aircraft operations.
8. Enhancement of the visual and environmental quality of Parafield Airport through:
 - quality buildings of contemporary, sustainable design;
 - the provision of appropriate landscaping, both for aesthetic and screening purposes; and
 - the continuation of landscaped and grassed swales for on-site stormwater management or linkages to the existing network of council drains under easement on airport land, or that abut airport land, to enable interconnection to the existing City of Salisbury Aquifer Storage and Recovery facility within the Runways Precinct.
9. Development designed and sited to conserve energy and minimise waste.
10. Development located and designed to minimise adverse impact and conflict between land uses, both on the airport and on surrounding areas.
11. The amenity of land and development enhanced with appropriate planting and other landscaping works, using locally indigenous drought resistant plant species where possible, consistent with the Parafield Airport landscaping guidelines.
12. Development consistent with the principles of water sensitive urban design.
13. 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 the Buffer and Conservation Zone Plan (Figure 7.3), to accord with noise tolerances included in the *Airports (Environment Protection) Regulations 1997*.
14. A safe, secure, and crime-resistant environment.

Access and Parking

15. Development that provides for safe and efficient access, movement of traffic, and off-street parking.
16. Access to safe, pleasant, accessible, integrated bike and pedestrian pathways.

7.6.2 Desired Character

Parafield Airport is recognised as a key element of transport infrastructure, 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 South Australia's principal general aviation and civilian flight training centre;
- enhancing the airport as a key element of transport infrastructure;
- facilitating the movement of general aviation passengers and fixed base operations, flight training activities and freight movement 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 and employment land for the northern suburbs of Adelaide and beyond.

Enhanced amenity and environmental values for the airport are desired through the provision of:

- sustainable development activities including re-use of recycled water from the established aquifer storage and recovery system; and
- energy conservation measures such as the use of solar energy and possible suitable on-site generation of renewable energy.

External access to the airport will be improved and internal traffic movements will be enhanced by:

- improvements to the linkages to the external road system, accessibility between the Commercial Precinct and Enterprise Precinct, with the latter arranged by and at the cost of the State Government when traffic warrants are met;
- the provision of internal roads providing convenient access to the external road system; and
- the possible provision of a rail corridor connecting the airport to the adjoining rail system and access to external bike and pedestrian paths, where practical.

7.6.3 Principles of Development Control

In determining appropriate development within the Airport (Parafield) Zone, consideration will be given toward airport sustainability and development principles that successfully meet the economic, social and environmental goals of PAL. The principles of development control for the Airport (Parafield) Zone are listed below.

Land Use

1. Development of the Parafield Airport shall accommodate the primary aircraft operations and airport and aviation-related support activities necessary to support its role as the principal general aviation and civilian flight training centre for 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 shall ensure that the long-term operational, safety and flight training and general aviation and fixed base operation requirements of the airport continue to be met.
4. The zone should accommodate:
 - a range of airport and aviation-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 northern Adelaide and the State.
5. Development of community services such as aviation attractions and active and passive recreation and other appropriate activities may occur.
6. Development should not adversely impact on suitable areas set aside for conservation purposes.

Form of Development

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

Retail Development

9. Retail development should be of a size and type, and be located, to reflect its status as a bulky goods retailing location along a major transport corridor.

10. Smaller scale retail facilities may be appropriate in some areas, servicing the day-to-day needs of employees and/or the travelling public.
11. 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 placement along major roads.
12. Larger scale retail facilities, including bulky goods and brand direct 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 clearly identifiable signage.
13. Bulky goods retailing should provide for pick-up areas to avoid the necessity for customers to carry large items to vehicles.

Commercial and Office Development

14. Commercial and office development should provide suitable services and be of a size and scale commensurate to the airport's major business enterprise and employment role.

Industrial Development

15. Industrial development should be directed at transport and distribution activities, road transport terminals, freight and logistics services along with warehousing and storage, and employ suitable sustainable initiatives such as the use of solar energy, natural light and sun shading as appropriate.

Community Facilities

16. An appropriate range of community facilities, such as aviation attractions, child care, consulting and health care and clubrooms, should be provided to service aviation training activities, visitors and employees at the airport. Passive and active recreation is suited in areas restricted by aviation height constraints, and may be possible in conservation zones if environmental impacts are effectively managed.

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 constructed 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, ephemeral wetlands (vernal pools), waste management and construction activities shall not increase the attraction of wildlife and birds to the airport.
20. Lighting associated with buildings and internal roads should not result in a hazard to aviation operations and shall be constructed in accordance with the airport's requirements.

Building Height

21. Buildings should be sited and be of a height that will not result in a breach of the Obstacle Limitation Surfaces and navigational clearance zones.

Amenity

22. Suitable noise attenuation/amelioration measures, such as separation distances, building siting and design, earthen mounds and fencing should be incorporated into any design to ameliorate potential noise impacts to adjacent residential areas.
23. Airport buildings should be designed and constructed to protect occupants from aircraft noise in accordance with AS 2021-2015.
24. Accommodation facilities, particularly for students or other persons requiring short term accommodation, may be undertaken in appropriate precincts, but should:
 - be located outside the 25 ANEF contour; and
 - where located between the 20 to 25 ANEF contour, be sited, designed and constructed in accordance with *AS2021:2015—Aircraft Noise –Building Siting and Construction*.
25. Development should be located and designed to prevent adverse impact and conflict between land uses, particularly residential activities.
26. Development and the amenity of land should be enhanced with appropriate planting and other landscaping works, consistent with the Parafield Airport Landscaping Guidelines.

Energy

27. Buildings should be designed and sited taking into account energy efficiency measures as outlined in the Building Code of Australia, for the relevant building classification and consider the building fabric, glazing, sealing, air-conditioning, artificial lighting and power, hot water supply and

accessibility. Aspects to be taken into account can encompass the following:

- suitable insulation, door and window seals and internal/external blinds where suitable sun shading is not practical;
 - hot water efficiency through insulation of pipes and fittings and use of timers and thermostats;
 - energy efficient heating and cooling selection, and where practical time/occupancy controls;
 - energy efficient lighting such as compact fluorescent bulbs or LEDs and maximising the use of natural light where possible;
 - alternative energy supplies including installation of solar panels, or for larger facilities on-site co-generation plant;
 - thermal building performance improvements on new buildings where feasible;
 - building management systems at the design phase of new developments; and
 - metered electricity consumption where feasible, as monitored by building area and by smart meters.
28. Development should provide for efficient solar access to buildings and open space all year round.
29. 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
 - designing roof orientation and pitches on a manner not creating a hazard (glare)

Building Appearance

30. Building development should be of a quality, standard and visual appearance, and present an attractive facade to public roads and any internal roads, consistent with building use and corporate images.
31. Buildings and associated elements, including landscaping, paving and advertising displays, should present a clear and coordinated appearance and exhibit a standard of design which will enhance the visual attractiveness and amenity of the zone.
32. The design of a building may be of a contemporary nature and exhibit an innovative style provided the overall form is consistent with the scale of the development and with the context of its setting with regard to shape, size, materials and colour.
33. Development should have a horizontal emphasis incorporating design elements that achieve visual articulation and relief.

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

- windows;
 - canopies;
 - porticos and verandahs;
 - 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 background, but can also include stronger colour schemes to provide visual interest if appropriate to the form of development and location.
- ### Access and Parking
36. Development should provide for appropriate vehicular and pedestrian linkages, with particular attention to the accessibility between commercial and retail developments fronting Main North Road.
37. On-site parking should be provided to meet the anticipated demand of development, with flexibility for further increases and taking into account linkages to public transport.
38. Development should be provided with safe and convenient access 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 and convenient traffic circulation;
 - result in minimal conflict between customer, employee and service vehicles;
 - where reasonably 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
 - enable landscaping that will provide 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.
43. Storage areas should be suitably screened to present an attractive facade 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 extent of construction waste going to landfill and post-occupancy allow for segregated waste recycling.
45. Putrescibles and food wastes should be contained securely at all times to prevent the attraction of wildlife that may compromise aircraft operational safety.

Landscaping

46. Landscaping should be provided as a part of all developments 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 birds and compromise aircraft operational safety;
 - use locally indigenous plant species where possible, consistent with the Parafield Airport Landscaping Guidelines;
 - employ plantings that are drought tolerant; and
 - ensure adequate sight lines at access points.

Water Sensitive Urban Design

47. Development should be designed to maximise conservation and minimise consumption through:
- implementation of automated leak detection devices;
 - use of water-saving devices and fittings, such as dual flush toilets and water saving showerheads;

- use of water efficient appliances such as suitably rated dishwashers;
- water consumption metered and monitored; and
- use of recycled water from available network supply points around the airport.

Materials

48. Design, development and construction activities will consider materials selection and use strategies to:
- encourage recycling or rejuvenation of materials where feasible (e.g. steel for non-structural members, recycled structural concrete, recycled bitumen, recycled timber);
 - consider local or regional supply of materials;
 - employ materials low in volatile organic compounds; and
 - encourage selection of building materials that are recyclable.

Stormwater Management

49. Design, development and construction activities should incorporate stormwater management strategies to:
- 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 possibly in conjunction with the existing stormwater harvesting activity at Parafield Airport, managed by the City of Salisbury.
50. 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 detention areas where possible.
51. Stormwater drainage swales should be designed according to function and space, be grassed and allow passive and active recreation facilities in suitable locations.
52. Internal roads and car parking areas should be designed to direct stormwater to adjacent stormwater easements. Where possible, an appropriate porous paving (or pipe drainage to tree root levels) might be considered, as well as 'soft shoulders'.

53. 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.
54. Stormwater management systems should:
- maximise the potential for stormwater harvesting and re-use, as close as practicable to the source;
 - utilise, but not be limited to, one or more of the following harvesting methods:
 - the collection of roof run-off water in tanks;
 - the discharge to open space, landscaping or garden areas, including strips adjacent to car parks; and
 - the incorporation of detention and retention facilities, in conjunction with the existing stormwater harvesting activity managed by the City of Salisbury, through use of the existing airport stormwater drainage easements.

Recreation

55. Recreation areas should provide pleasant, functional and accessible open spaces for formal and informal recreation activities.
56. Bike and pedestrian paths should service recreation areas or be located in close proximity to enable ease of access.
57. Development in recreation areas should not compromise the operational or safety requirements of the airport.
58. 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 of users.
59. Recreation areas should be sited and designed to minimise negative impacts on the amenity of the locality.

Signage

60. Outdoor signage, 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
 - clearly identify retailing activity where appropriate.
61. The number of signs associated with a development should take into account the nature of the use and consider:
- clutter;
 - disorder; and
 - untidiness of buildings and their surrounds.
62. Free standing and illuminated signs should be located to be clearly visible from nearby roadways and impart instruction or advertising messages succinctly, and be of a form with clear structural lines. Presentation should be arranged to clearly impart the message content, but not create excessive distraction to traffic. Tree and shrub growth should be maintained around the signage so as not to detract from the message portrayal.

Crime Prevention

63. 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, including along dedicated bike and pedestrian paths and around public facilities such as toilets, telephones, bus stops and car parks;
 - use landscaping to discourage crime;
 - avoid pedestrian entrapment spots and movement predictors; and
 - take into account the secure restricted nature of the Runways Precinct of the Airport Zone.

Site Contamination

64. Development, including land division, should not occur unless the site has been assessed and remediated as necessary to ensure that it is suitable and safe for the proposed use.

7.7 Runways Precinct

This section addresses land use planning for the Runways Precinct, which is shown in Figure 7.8.

7.7.1 Objectives

The objectives of the Runways Precinct are to provide:

1. An area accommodating:
 - safe aircraft landing, take off and taxiing operations, both for fixed wing, rotary and remotely piloted aircraft services;
 - aircraft navigation aids, radar and communications equipment;
 - air traffic control, aviation rescue and firefighting and meteorological services; and
 - aviation-related support industry.
2. Safe and efficient access and operation of all movement area infrastructure recognising aircraft type, number of aircraft movements and surrounding development on airport land.
3. A safe and enhanced environment for the precinct provided through:
 - controlled access and secure movement and operational areas; and
 - landscaped buffers between the movement area and Kings Road, along railway spur lines and adjacent to other precincts where screening is required.
4. Management of the environmental vernal pool, at the southern end of the precinct adjacent to Elder Smith Road, so that bird attraction is minimised pending runway extension.



Figure 7.8 Runways Precinct Plan

7.7.2 Desired Character

The Runways Precinct occupies the major portion of the airport and is essentially bounded by the other precincts. The precinct is an area of the airport set aside to be protected for the operation and movement of aircraft and associated activities. Development within the precinct should focus on the aviation needs of the airport, with ancillary and related support facilities enhancing the airport's operation.

Activities of an environmental nature, or that assist in sustainable development in the nature of water harvesting are appropriate in the precinct, provided they do not result in an adverse impact on the airport's aviation operations.

Railway spur lines, linking to the lines to the west of the airport, may also be appropriate in the precinct.

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. Development should be primarily associated with the operational aspect of the precinct and aviation related support industry.
3. 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;

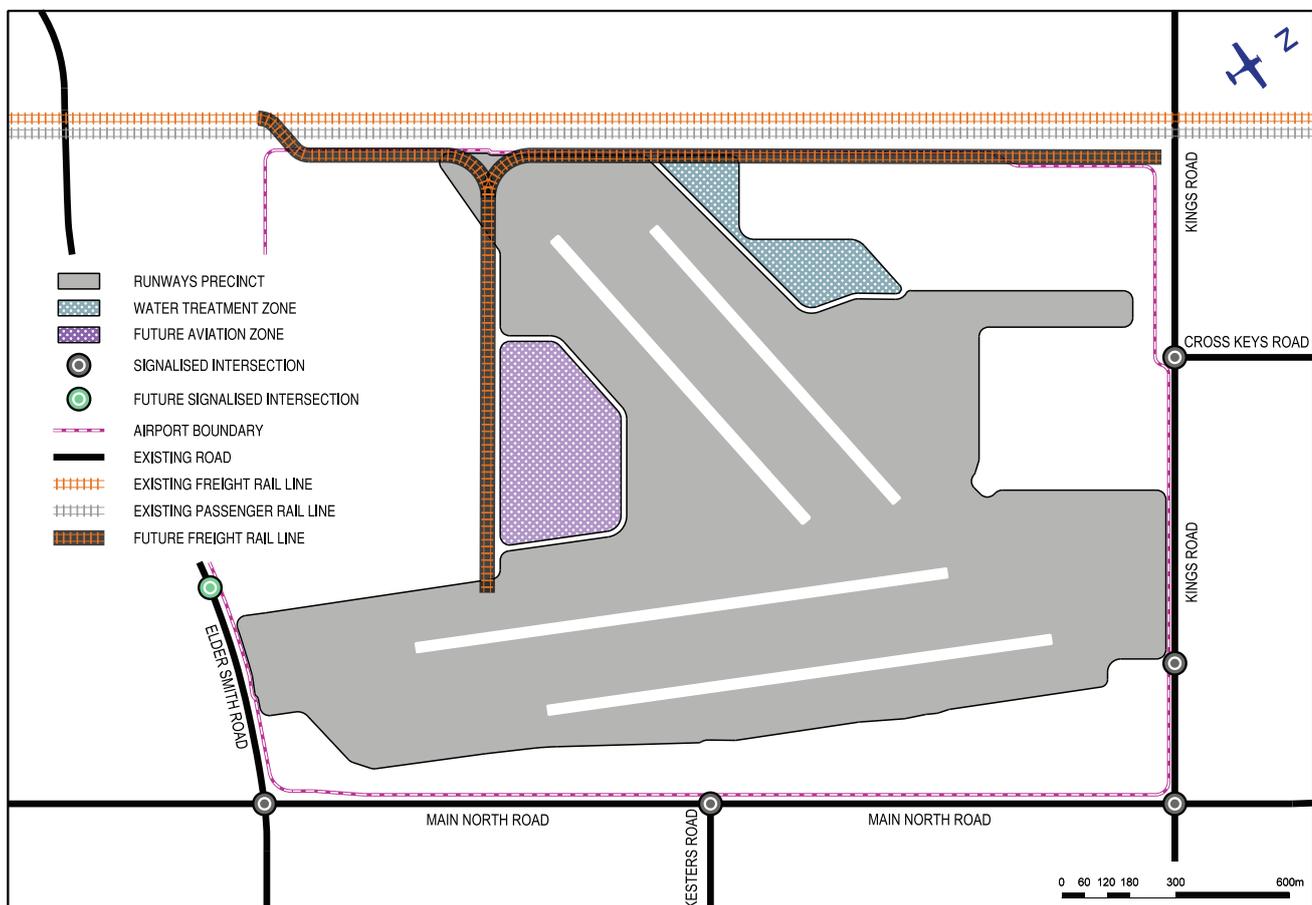


Figure 7.9 Runways Precinct Structure Plan

- to minimise aircraft noise impacts and environmental impacts generally;
 - in a cost effective manner; and
 - to comply with national and international mandates and standards.
4. Activities of an environmental nature, such as stormwater harvesting and the maintenance of existing vernal pools may be appropriate in the precinct but should not result in an adverse impact on the aviation operations.
 5. Landscaped buffers should provide an enhanced environment:
 - between aircraft movement areas and Kings Road;
 - along railway spur lines; and
 - adjacent to other precincts where screening is required.

Viewing Area

6. Any public viewing area and open space should:
 - be aesthetically pleasing;
 - be restricted to designated areas; and
 - provide for safe and efficient vehicular and pedestrian movement.

Access

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

7.7.4 Procedural Matters

Envisaged Development	
Air traffic control tower/area approach control centre	Fuel depot
Aircraft parking	General aviation landing & parking
Aquifer storage and recovery/stormwater detention and harvesting	Helicopter operations, training and maintenance
Aviation attractions	Rail transport terminal and rail lines
Aviation-related support industry	Remotely piloted aircraft services
Communication facility (aviation-related)	Renewable energy generation facility
Emergency services facility	Runway related activities/facilities
Emergency staging area	Soil treatment facility
Farming (as defined in the glossary)	Weather and atmospheric testing facility
Fixed base operations	
Non-Complying Development	
Brand outlet centre and associated support retailing	Motor repair station
Bulky goods retailing	Industry
Child care centre	Office
Community health centre	Residential Accommodation (for students involved in aviation education/training)
Dwelling	Restaurant
Fast food outlet	Service trade premises
Hotel, tavern and liquor outlet	Shop
Motel	Waste transfer station
Merit	
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.	

7.8 Airport Business Precinct

This section addresses land use planning for the Airport Business Precinct, which is shown in Figure 7.10.

7.8.1 Objectives

The objectives of the Airport Business Precinct are to provide:

1. An area primarily accommodating a range of commercial, industrial and aviation-related activities, including aviation attractions and museums.
2. An area accommodating aviation-related training facilities and associated infrastructure, including residential accommodation for students.

3. Enhancement of the amenity of the precinct, including maintenance of a landscaped buffer along the frontage to Kings Road.

7.8.2 Desired Character

The Airport Business Precinct is located with a frontage to Kings Road and is bounded to the east and south by the Runways Precinct, and to the west by the Adelaide to Darwin rail line and commuter train lines.

The Airport Control Tower in the southeastern corner of the precinct forms the strong focal point of aviation activity, in recognition of its past relationship to airport history.

The precinct encompasses the main terminal and aviation engineering facilities, aviation training

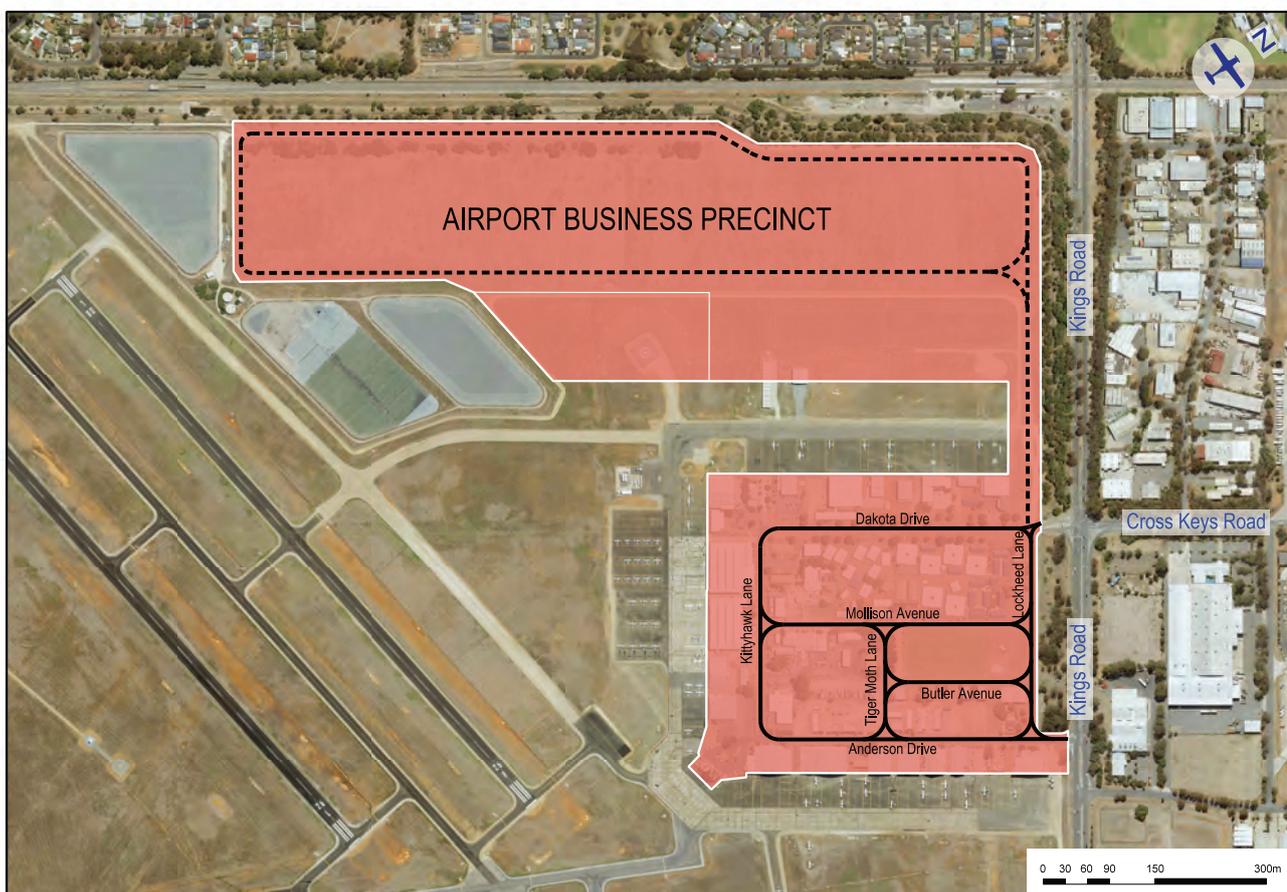


Figure 7.10 Airport Business Precinct Plan

facilities, aviation museum activities and associated infrastructure, along with the land to the east of the Parafield Railway Station.

Land use within the eastern section of the precinct is predominantly aviation-related with some commercial and industrial uses interspersed with community activities, such as aviation museums and clubs.

The western section of the precinct is currently used for interim helicopter parking and landing, and would revert to aviation-related support industry once helicopters are relocated to the Runways Precinct. The western section of the Precinct provides a logical area for expansion of aviation-related industry, along with a possibility to establish and expand a park and

ride car park associated with the Parafield Railway Station.

A rail spur line, linking to the lines to the west of the airport, may also be appropriate in the precinct.

A landscaped frontage to Kings Road is to be maintained to complement proposed expanded aviation attractions and museums.

7.8.3 Principles of Development Control Structure Plan

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

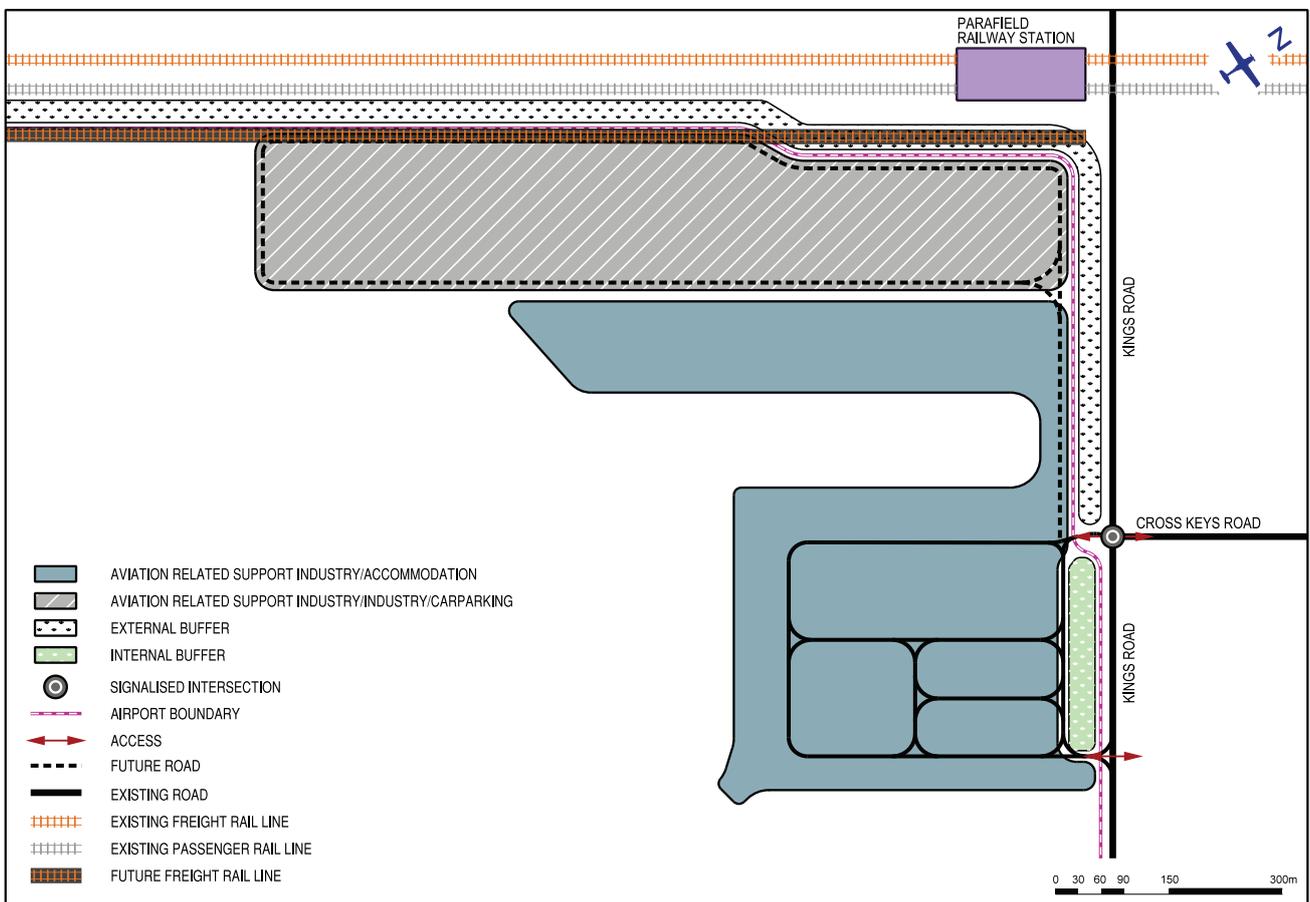


Figure 7.11 Airport Business Precinct Structure Plan

General

- Residential accommodation, for students or other persons involved in flight training or aviation services is appropriate in the precinct, with development constructed to *AS 2021:2015 Aircraft Noise—Building Siting and Construction*.

Amenity

- Development should not adversely impact on the character, amenity, function and operation of the airport and nearby land by way of:
 - excessive noise, smoke, smell, dust or other nuisance; and
 - character and scale of buildings.

7.8.4 Procedural Matters

Envisaged Development

Advertising	Indoor recreation centre
Air traffic control tower/area approach control centre	Industry (except Special Industry)
Aircraft Parking	Kennel management facility
Aviation attractions	Office
Aviation education establishment or academy	Office/warehouse
Aviation-related support industry	Park and Ride car parking
Car parking	Petrol filling station
Child care centre	Public service depot
Club rooms	Recreation and sporting area
Cold storage facilities	Remotely piloted aircraft services (as defined in the glossary)
Community health centre	Renewable energy generation facility
Consulting rooms	Research and development facility
Courier/freight terminal	Restaurant
Electricity substation	Residential accommodation (for students involved in aviation education/training)
Emergency services facility	Service industry
Fast food outlet	Shop (to service the day-to-day needs of the workforce, visitors, students and those residents in the precinct including local supermarket convenience store)
Fixed base operations	Store
Freight and distribution centre	Telecommunications facility
Fuel depot	Warehouse
General aviation landing and parking	
Helicopter operations, training and maintenance	
Helicopter landing and parking	

Non-Complying Development

Shop (other than to service the day-to-day needs of the workforce, visitors, students and those residents in the precinct)	Special industry
	Waste transfer station

Merit

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.

Notes:

- In regard to future uses/activities within the Airport Business Precinct, consideration was given to the role and function of this precinct, its main road frontage (Kings Road), and complimentary uses to the airport operations.*
- To ensure that there was no significant change from the previous and current Master Plans, the above uses have been listed as 'Envisaged Development'. This is also reflective of development enquiries that PAL has received within such Precincts, and to meet the recreation needs of the flight training school.*
- 'Petrol filling station' is a compatible and desirable use with any future expansion of the 'Park and Ride' facilities associated with the Parafield Railway Station (adjacent north-western corner of the Airport, fronting Kings Road).*

7.9 Commercial Precinct

This section addresses land use planning for the Commercial Precinct, which is shown in Figure 7.12.

7.9.1 Objectives

The objectives of the Commercial Precinct are to provide:

1. An area primarily operating as a centre for accommodating a range of commercial, service trade and retailing facilities, such as a brand outlet centre and associated support retail activities, bulky goods retailing, retail showrooms and other shops, capitalising on the highway nature of Main North Road.
2. Safe and convenient pedestrian access and car parking throughout the precinct.
3. An integrated landscape theme throughout the precinct.

7.9.2 Desired Character

The Commercial Precinct is located in the northeast corner of the airport with frontage to Main North Road (a primary arterial road), Kings Road and Elder Smith Road. The precinct therefore has a prime location and exposure to significant traffic volumes. Access is to be gained from various entrances/exits along Main North Road and signalised intersections, and other similar crossovers along Kings Road.

The precinct will accommodate a range of commercial, service, trade and large scale retailing facilities, with supporting shops and services.

Within the southeastern corner of the precinct, development opportunities are more restricted due to constraints imposed by the proximity of the 03/21 Runways. Thus, active recreation uses and associated facilities are encouraged in this area, with commercial activities in the southeastern corner of the Precinct being more limited. Access off Elder Smith Road is limited to a left in, left out slip roadway.

Built form will be of a contemporary design, with a consistent architectural theme when viewed from adjacent roads. Buildings will have a horizontal emphasis and be designed to reduce their visual bulk through design elements such as articulation, colour and detailing and variations to facades. Car parking areas will be integrated and landscaped to enhance amenity and provide screening and shade. Pedestrian paths will provide for safe movements and be clearly delineated.

7.9.3 Principles of Development Control

Structure Plan

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

Amenity

2. Development should not create any excessive noise, smoke, smell, dust or other nuisance.

Land Division

3. Allotments created by land division should generally have:



Figure 7.12 Commercial Precinct Plan

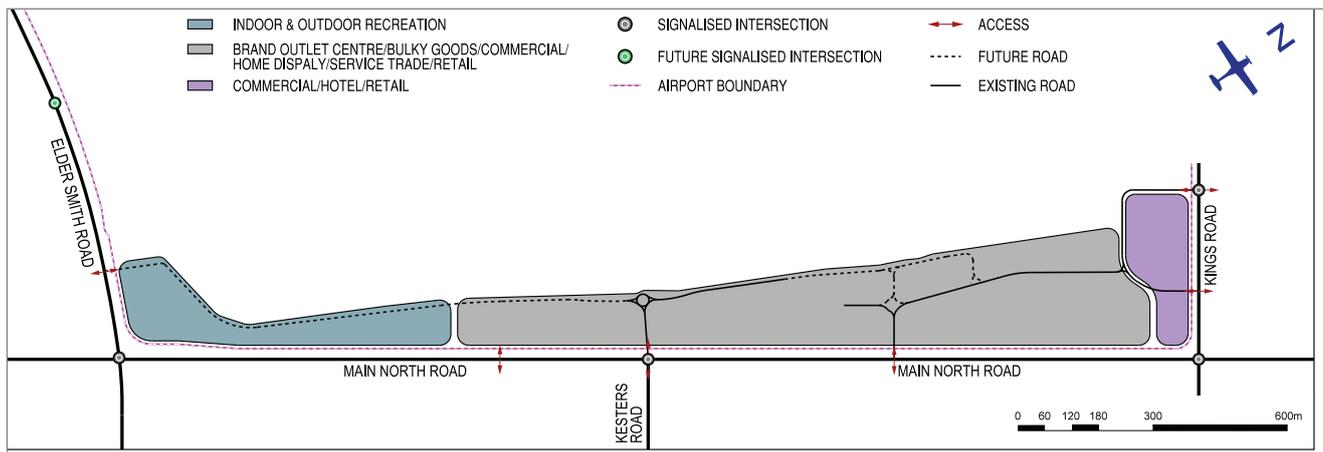


Figure 7.13 Commercial Precinct Structure Plan

- a minimum allotment size of 2000 m²; and
- a minimum frontage width of 30 m.

Appearance and Design

4. Development should be undertaken in accordance with the Commercial Estate Precinct Design Guidelines 2011. The purpose of the Design Guidelines is to clearly set out the primary design objectives for all existing and new developments to ensure a coordinated, cohesive and legible image is created for the Parafield Airport Commercial Precinct. The Guidelines are used as a reference document:

- to describe the design intent and desired character for the overall precinct;
- to guide applicants through the design requirements for all new developments as well as for alterations to existing developments;
- to control certain elements of built form, car parking, landscaping and signage; and
- to inform applicants about the airport’s commitment to improve and continually enhance the precincts shared spaces, identity and exposure to ensure its success as a commercial destination.

7.9.4 Procedural Matters

Envisaged Development

- | | |
|--|---|
| Advertising | Motor repair station |
| Brand outlet centre and associated support retailing | Motor vehicle auction/storage/showrooms |
| Building and/or landscaping materials | Office |
| Bulky goods retailing | Petrol filling station |
| Club rooms | Recreation and sporting area |
| Consulting rooms | Retail showroom |
| Emergency services facility | Renewable energy generation facility |
| Fast food outlet | Restaurant |
| Golf driving range and mini golf | Service trade premises |
| Home display and building centres | Shop |
| Hotel, tavern and liquor outlet | Store |
| Kennel management facility | Telecommunications facility |
| Motel | Warehouse |

Non-Complying Development

- | | |
|-------------------------|------------------------|
| Dwelling | Special industry |
| General industry | Waste transfer station |
| Road transport terminal | |

Merit

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

7.10 Bennett Precinct

This section addresses land use planning for the Bennett Precinct which is shown in Figure 7.14.

7.10.1 Objectives

The objectives of the Bennett Precinct are to provide:

1. An area providing protection for sites of conservation significance and development of compatible uses such as education and interpretive facilities, and limited ancillary uses such as retail kiosks, amenities and car parking. Sporting activity may be suitable if compatible within conservation areas.
2. Limited access from the Bennett Road alignment and also restricted service access from Elder Smith Road.
3. Development exhibiting an appropriate standard of building design with elements, features, services and infrastructure compatible with the primary conservation focus of the precinct.
4. Possible establishment and maintenance of sporting and environmental linkages with the University of South Australia land to the south.
5. Free-standing advertising signage is appropriate, suitably placed external to the individual vernal pool catchments, as is renewable energy generations such as field solar arrays.

7.10.2 Desired Character

The Bennett Precinct is located at the southern end of the airport to the south of Elder Smith Road, which provides an east-west link between Main North Road and Salisbury Highway.



Figure 7.14 Bennett Precinct Plan

The precinct provides conservation and rehabilitation opportunities for vernal pool communities and several sites of aboriginal significance (Refer Figure 7.3). Compatible uses such as sporting and recreation, education and interpretive facilities and aeronautical equipment may be appropriate, along with an ancillary kiosk and amenities and solar arrays. Vehicular access to the precinct will be limited to that required in association with conservation/interpretive facilities and to service any associated kiosk and amenities.

7.10.3 Principles of Development Control

Structure Plan

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

General

2. Development should be compatible with conservation and rehabilitation opportunities for vernal pool communities and should be sited, designed and operated to minimise adverse impacts on the management of flora, fauna or archaeological sites.

Amenity

3. Development should not adversely impact on the character, amenity, function and operation of the airport and nearby land by way of:
 - excessive noise, smoke, smell, dust, stormwater run-off or other nuisance;
 - hours of operation; and
 - character and scale of buildings.



Figure 7.15 Bennett Precinct Structure Plan

Access

4. Access to the precinct should be limited to that required:
 - for conservation initiatives, including associated education/interpretive facilities;
 - for possible sporting and recreation activities;
- maintenance of aeronautical equipment or advertising signs; and
- for linkage between the airport and the University of South Australia land to the south.
5. The main access point is to be from the Bennett Road alignment plus restricted service access to Elder Smith Road.

7.10.4 Procedural Matters

Envisaged Development	
Advertising Conservation initiatives	Recreation and sporting area (compatible with conservation initiatives) and associated car parking Renewable energy generation facility Shop or kiosk with gross leasable area of 50 m ² or less
Non-Complying Development	
Bulky goods retailing /retail showroom Dwelling Industry Motor repair station	Shop with a gross leasable floor area greater than 50 m ² Special industry Warehouse Waste transfer station
Merit	
Agency Referral and Public Notification is undertaken for all forms of development that are not listed as Envisaged Development in accord with Figure 7.5 Development Decision Matrix.	

Note: While existing conservation initiatives are classified as Envisaged Development, the existing vernal pools can be classified as an activity often considered incompatible to aviation services due to the potential for bird attraction. Careful maintenance and management of these areas is essential to minimise bird attraction and the risk of aircraft bird strikes.



7.11 Enterprise Precinct

This section addresses land use planning for the Enterprise Precinct, which is shown in Figure 7.16.

7.11.1 Objectives

The objectives of the Enterprise Precinct are to provide:

1. An area primarily accommodating a range of commercial, industrial, warehousing and possible aviation related support industries in the form of an 'enterprise park', with possible links to the nearby railway network.
2. An area accommodating development which caters for a range of innovative and technology-based activities relative to an industrial base or to clean technology activities.
3. A limited area providing protection for sites of conservation significance fronting Elder Smith Road by way of vernal pools (refer Figure 7.3).

7.11.2 Desired Character

The Enterprise Precinct is located on the southern side of the airport and has a boundary with Elder Smith Road to the south and also with a section of Mawson Lakes residential area in the southwestern corner. It comprises the majority of the developable land on this side of the airport.

It is proposed that a range of commercial, industrial, warehousing and possible aviation-related support industries be established in the precinct. A railway spur link, which may be established in the adjoining Runways Precinct, could provide additional

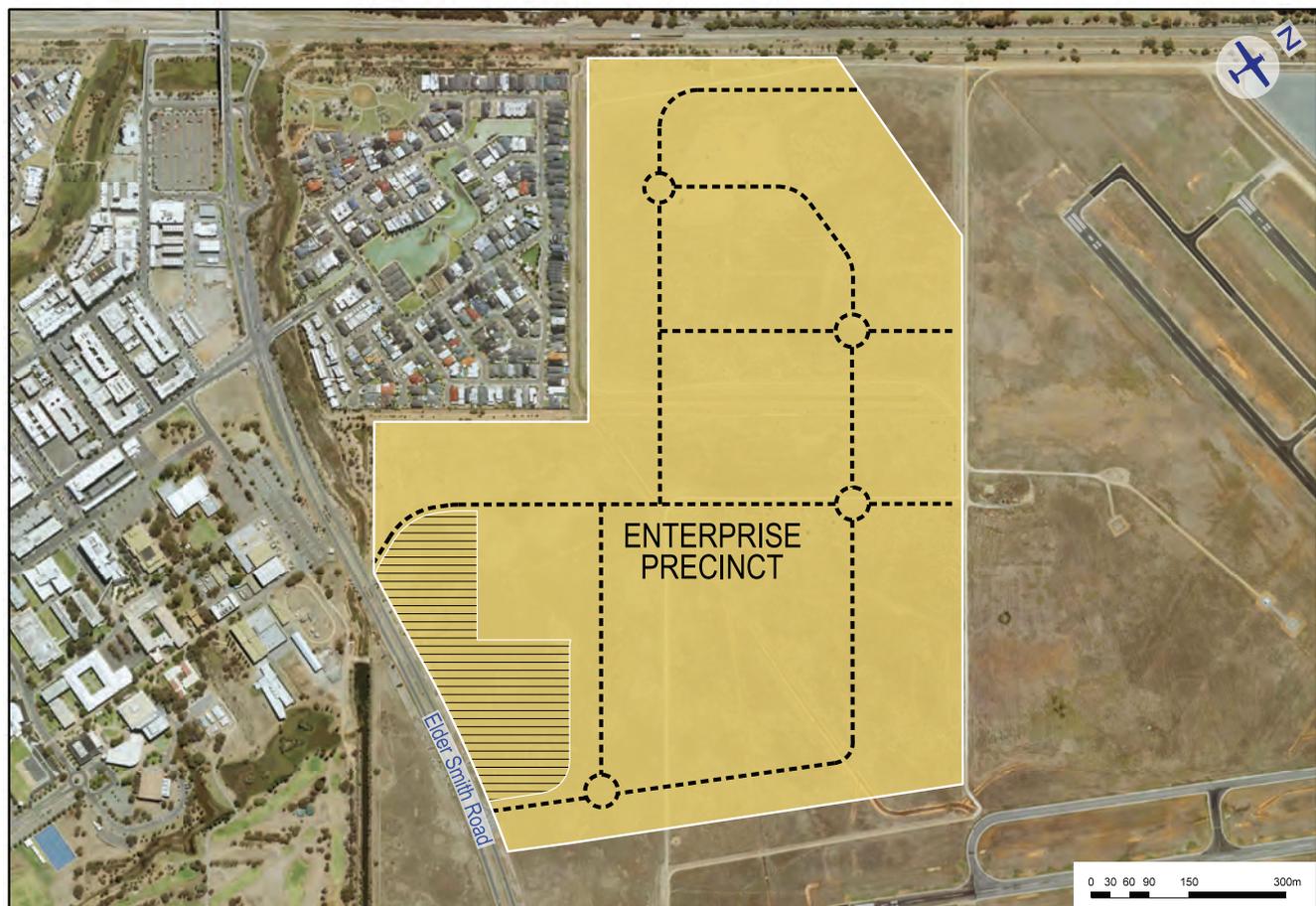


Figure 7.16 Enterprise Precinct Plan

opportunities for the movement of materials and products into, or out of, the Enterprise Precinct.

The southeastern portion of the precinct, being retained for conservation purposes accommodating vernal pools, will allow for a suitable setback of development facing Elder Smith Road.

The adjoining Mawson Lakes residential area has been developed with suitable acoustic mounds and fencing to limit potential adverse impacts from development in the Enterprise Precinct.

Primary vehicle access to the precinct is to be gained through a constructed, designated point on Elder Smith Road, through a feeder road leading into the eastern portion of the precinct. A secondary vehicle

access/egress point to Elder Smith Road is provided to the west as a left in, left out access point only.

7.11.3 Principles of Development Control

Structure Plan

1. Development should be generally in accordance with the Enterprise Precinct Structure Plan (Figure 7.17) and the forms of development listed as Envisaged Development.
2. Development should be undertaken in the following manner to contain similar land uses to specified localities:
 - commercial/educational, office/warehouse and light industry uses should be primarily located in the southern portion of the precinct; and

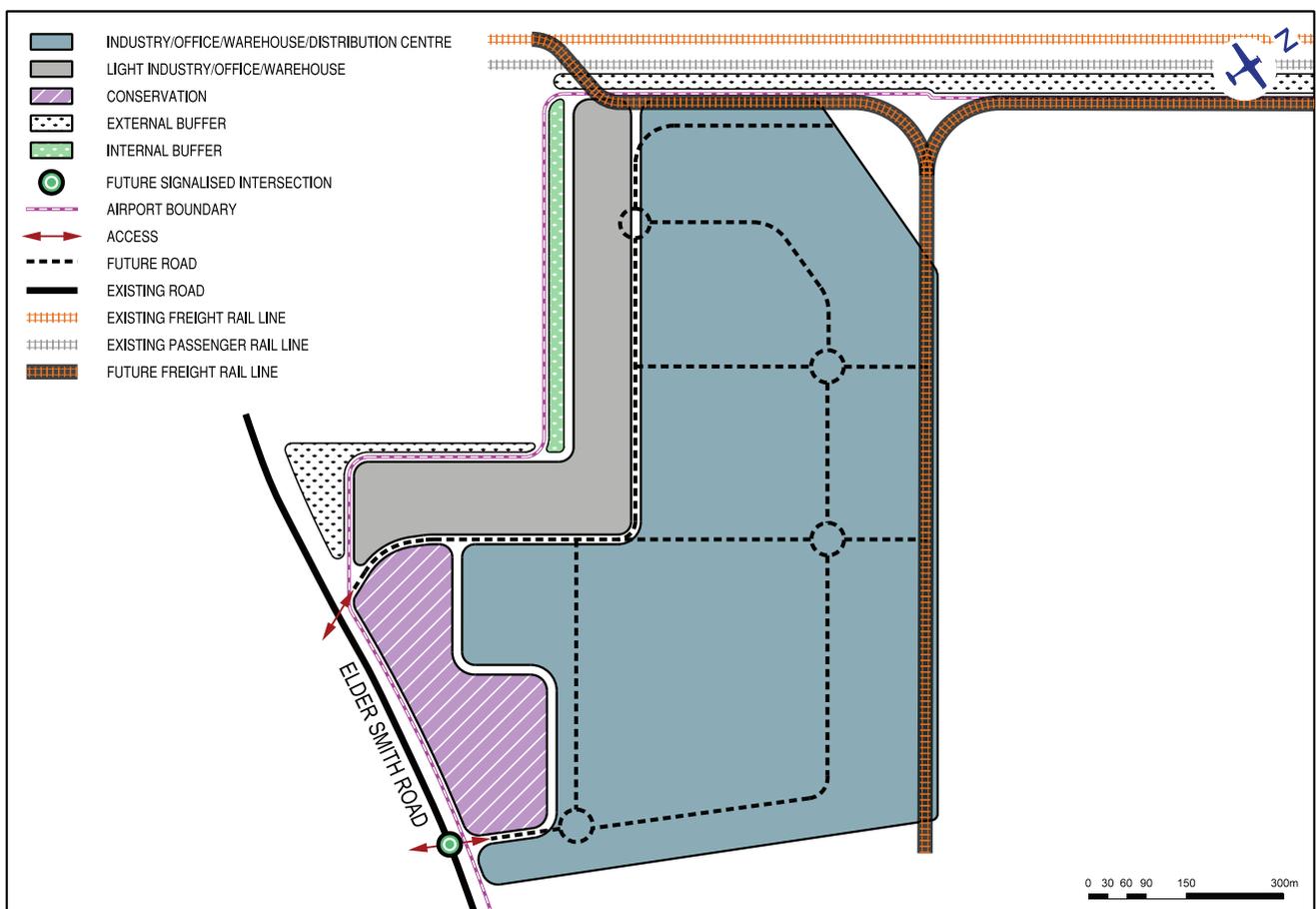


Figure 7.17 Enterprise Precinct Structure Plan

- industrial development, such as road transport terminals, freight and logistics and manufacturing and processing should be primarily located in the central and northern portions of the precinct, adjacent to possible railway spur lines.

Amenity

3. Development should not adversely impact on the character, amenity, function and operation of the airport and nearby land by way of excessive noise, smoke, smell, dust or other nuisance.

7.11.4 Procedural Matters

Envisaged Development

Advertising	Office
Aviation related support industry	Office/warehouse
Building and/or landscaping materials	Public service depot
Cold storage facilities	Rail transport terminal and rail lines
Conservation initiatives (adjacent to Elder Smith Road only)	Remotely piloted aircraft services
Courier/freight terminal	Renewable energy generation facility
Electricity substation	Research, Innovation and Incubation facility
Farming	Road transport terminal
Freight and distribution centre	Service industry
Industry (except special industry)	Service trade premises
General industry (manufacturing and processing)	Shop (to service the day-to-day needs of the workforce and visitors to the precinct)
Kennel management facility	Store
Light industry	Telecommunications facility
Motor repair station	Warehouse and distribution
Motor vehicle auction/storage/showrooms	

Non-Complying Development

Dwelling	Special industry
Shop (other than to service the day-to-day needs of the workforce and visitors to the precinct)	Waste transfer station

Merit

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

Note: While existing conservation initiatives are classified as Envisaged Development, the existing vernal pools can be classified as an activity often considered incompatible to aviation services due to the potential for bird attraction. Careful maintenance and management of these areas is essential to minimise bird attraction and the risk of aircraft bird strikes.

7.12 Surrounding Land Uses

The Salisbury South Area, directly north of the airport, is primarily zoned Industry, with the exception of land fronting the corner of Kings Road and Main North Road, which is a Mixed Use (Bulky Goods, Entertainment and Leisure) Zone. This 20-hectare site is currently utilised primarily for agricultural use, but the recent planning policy changes envisage entertainment and leisure activities, bulky goods outlets, larger floorplan retail (selling predominantly non-foodstuffs) and service trade premises. The zone planning policies recognise the proximity of Parafield Airport's main runways, and include building height limitations, and the need to consider lighting intensity.

There are established Residential Zones further north in the suburbs of Brahma Lodge and Salisbury to the west and east of the airport, residential zoning predominates in the suburbs of Parafield Gardens and Salisbury Downs with commercial and industrial zoning on the eastern side adjacent to the Main North Road.

To the south of the airport, the land is zoned Urban Core. This area is part of the Mawson Lakes development, incorporating the University of South Australia (Mawson Lakes Campus), Technology Park (including Defence SA facilities) and Mawson Lakes Town Centre and residential area. The zone envisages mixed-use activity, accommodating a mix of employment generating land uses and medium- to high-density residential development.

7.12.1 Planning Commentary

Parafield Airport Ltd will continue to monitor off-airport development, including the future development of the Mixed-Use Zone to the north of the airport and updated planning policies and new development within Mawson Lakes and surrounding areas. Consideration will be given to the location of sensitive land uses, along with height and scale of development which may impinge on airport activities, and the need to consider future public safety zones on the development potential of such areas, along with suitable traffic integration aligned with existing or proposed additions within the Commercial Precinct.

All new purchasers of land or existing residences in the Mawson Lakes area adjacent the airport are forwarded formal written notice from the City

of Salisbury advising that the "property is located adjacent to the Parafield Airport and is subject to frequent overflight and aircraft noise".

Land uses on-airport are generally remote from, and acoustically screened from, nearby residential developments.

7.13 National Airports Safeguarding Framework

The National Airports Safeguarding Advisory Group has produced the National Airports Safeguarding Framework, which includes a statement of overarching principles and a suite of seven guidelines for land use planning measures associated with airports. The intent of the National Airports Safeguarding Framework 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 agreed by all jurisdictions and formally endorsed by the Standing Council on Infrastructure and Transport on 18 May 2012.

The seven endorsed 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; and
- Guideline G: Protecting Aviation Facilities – Communication, Navigation and Surveillance.

The National Airports Safeguarding Advisory Group is presently considering amendments to Guideline B and is considering the adoption of two new guidelines:

- Draft Guideline H: Public Safety Zones; and
- Draft Guideline I: Helicopter Landing Facilities.

These draft guidelines are still under development.

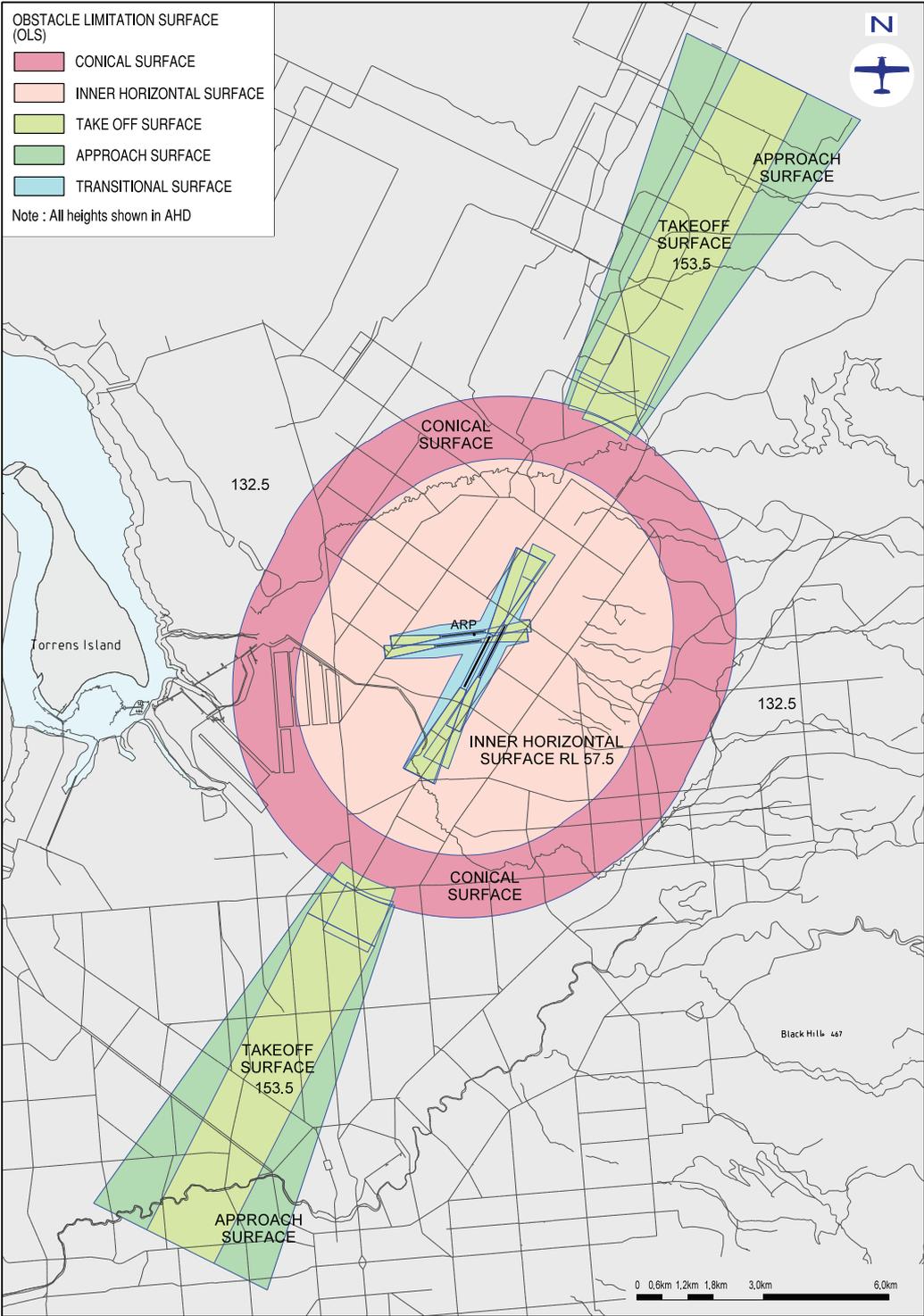


Figure 7.18 Obstacle Limitation Surfaces for Parafield Airport

7.13.1 Building Heights and Aviation Safety

Obstacles in the vicinity of an airport, whether they be natural or constructed may seriously limit the scope of its operations. Most people appreciate that tall structures and airports are basically incompatible, but they tend to think only of the immediate approach and take-off areas and of structures that are a short distance away. While this is of primary concern, it is equally true that objects up to 15 km from the airport and apparently unrelated to the runway alignment can cause problems for pilots approaching or departing an airport, particularly in poor weather conditions or in instances of engine malfunctions.

There are sets of invisible surfaces used to define these airspace requirements and to assess the significance of an existing or proposed object to the Obstacle Limitation Surface, which are shown in Figure 7.18.

7.13.2 Obstacle Limitation Surfaces

Obstacle Limitation Surfaces are a number of reference surfaces in airspace that 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. They define protection requirements for the initial and final stages of a flight. During these manoeuvres, visibility must be good enough 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 Obstacle Limitation Surface is to define a volume of airspace in proximity to an airport that should ideally be kept free of obstacles that may endanger aircraft in visual operations or during the visual stages of an instrument flight. Even so, 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.

Since they are relevant only to visual operations it may be sufficient to ensure that the obstacle is conspicuous to pilots, and this may simply require that it be marked and/or lit with a beacon. Of course, 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

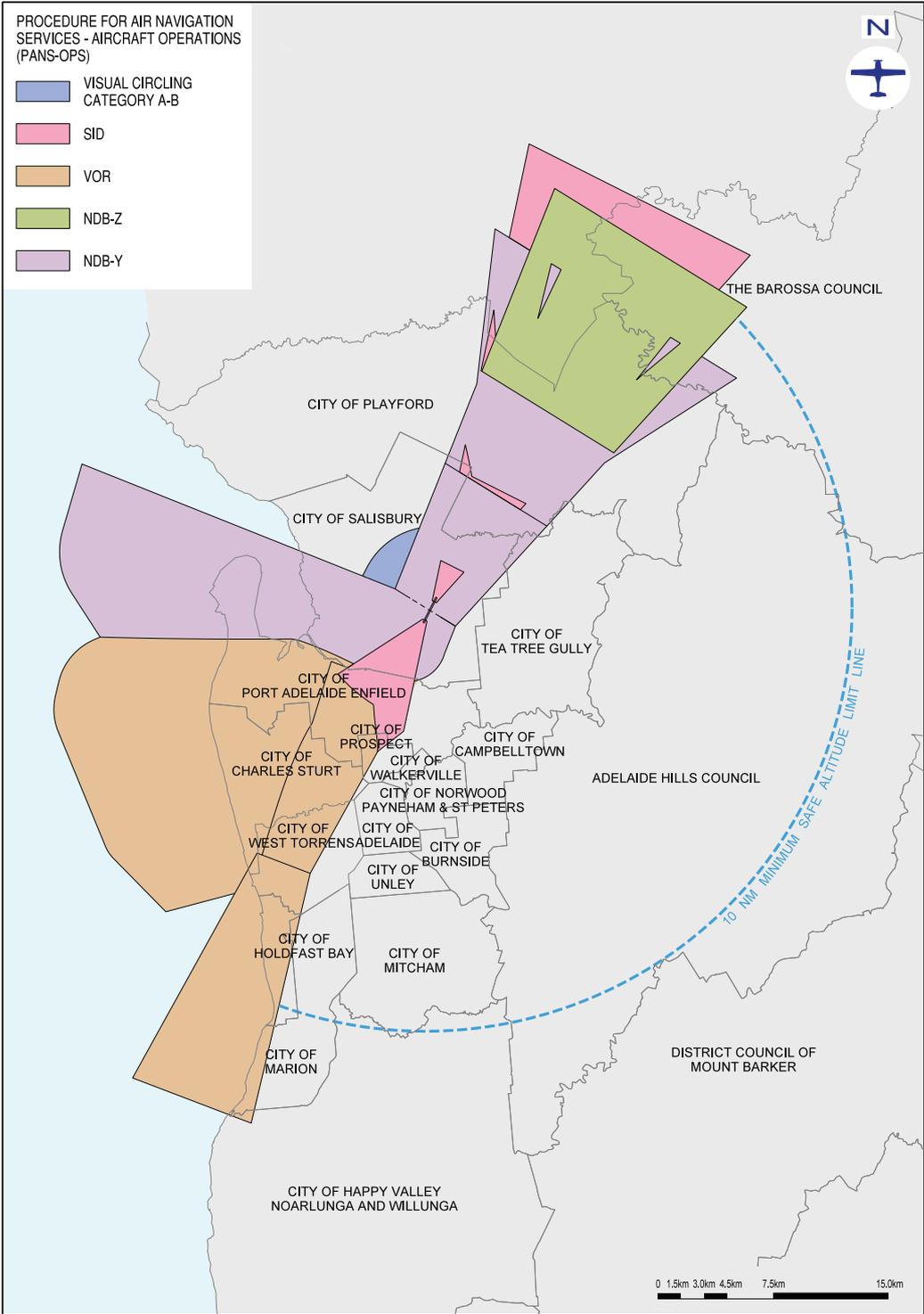
in the approach and take-off areas, pilots will need to make adjustments to their normal take-off and landing to make sure of obstacle clearance. This may mean using less than the full runway length available, which may result in significant operational penalties such as fewer passengers, or less cargo and fuel uplift than normal.

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 km or as much as 15 km from the runway strip end. At either side of the runway strip and the approach surface are two Obstacle Limitation Surface components called the transitional surfaces. These are intended to protect an aircraft which 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 which provide obstacle protection for aircraft circling to land – the inner horizontal surface, the conical surface and/or 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 15 km radius of the airport.

7.13.3 Procedures for Air Navigation Services – Aircraft Operations

Parafield Airport's Obstacle Limitation Surfaces were declared as prescribed airspace in January, 2009 by the then Department of Infrastructure and Regional Development (now the Department of Infrastructure and Regional Development). Since that date, PAL has prepared Procedures for Air Navigation Services—Aircraft Operations (PANS-OPS) surfaces for the airport based on the Departure and Approach Procedures Charts. These are procedures for instrument flight rules that depend on having ground-based Navigational Aids to assist aircraft landing at the airport. The PANS-OPS surfaces are included in the Master Plan (Figure 7.19). These surfaces are taken into account in the assessment of short and long-term Obstacle Limitation Surfaces penetrations by buildings, mobile or tower cranes to verify that the PANS-OPS surfaces are not infringed.



Note: See Abbreviations section for description of zones

Figure 7.19 Procedures for Air Navigation Services—Aircraft Operations (PANS-OPS)

In contrast to the Obstacle Limitation Surfaces, which define when objects are to be considered as obstacles and assessed for their impact on aircraft operations, PANS-OPS surfaces cannot be infringed in any circumstances, although infringement by cranes not intended to continue for longer than three months may be approved under certain circumstances. In fact, the heights of the tallest structure or natural feature underneath are used to design the PANS-OPS surface to ensure a safe clearance is maintained above 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 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.

7.13.4 Airspace Protection

The Minister for Infrastructure and Transport 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*.

It is the understanding of PAL, that the airport operator can make an application to the Department of Infrastructure and Regional Development for the Minister to protect future airport operations by managing the airspace around the airport.

Airservices Australia is responsible for the airspace surrounding Parafield 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 Parafield Airport is situated.

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

When the air traffic control tower is not in operation, Parafield Airport operates under Common Traffic Advisory Frequency where pilots are required to communicate by radio on a broadcast frequency.

PAL conducts regular consultative meetings with the airline industry and Airservices Australia to maximise the use of these facilities and minimise arrival and departure and circuit impacts on the community.

7.13.5 Hazardous Lighting

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

Developers/designers of lighting within a 6 km radius of Parafield 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 guidelines issued by CASA entitled *Lighting in the Vicinity of Aerodromes—Advice to Designers*, which can be made available on request. The CASA Guidelines also apply to on-airport developments including aeronautical infrastructure and facilities.

To assist lighting designers for both on and off airport development the prescribed zones identified in the Civil Aviation Authority Manual of Standards Part 139—Aerodromes, Chapter 9, Section 9.21 will be supplied upon request by PAL.

7.13.6 Navigational Aids and Aircraft Operations

PAL in consultation with the relevant authorities including CASA and Airservices Australia is cognisant of the need to ensure that any development on the airport must be carried out and constructed in a manner that does not compromise the efficiency of navigational aids or the operational capability of aircraft using the airport.

In that regard, all developments will be required to give due and proper consideration where applicable to the following issues:

- navigational aid infrastructure safety zones and signal direction;
- minimising sun glare from reflective surfaces;
- wind turbulence and windshear impacts during construction and of the finished facility;
- height limitations in respect of Obstacle Limitation Surfaces and PANS- OPS;
- height limitations including dishes and aerials in regard to air traffic control line of sight;
- thermal plumes or exhausts from roof vents; and
- lighting that may illuminate above the horizontal.

7.13.7 Wildlife Management

Parafield Airport is surrounded by light industrial and residential developments. Approximately 3 km to the southwest is the Dry Creek Wetlands. In addition, significant man-made lakes exist in the recently constructed Mawson Lakes Development.

The wetlands provide a habitat for a number of bird species that to date has not been a significant problem for aircraft operations, however close monitoring of this activity is warranted to minimise the potential of aircraft bird strike. The Mawson Lakes developers recognised that large tracts of water will attract birds and undertook to construct lakes in the area in such a manner so as to minimise the potential for the attraction of birds. Land use, development, the design of facilities and landscaping whether on-airport or in the immediate environs should not compound the potentially serious risk associated with bird attraction and bird strike, with suitable measures warranted for any activities including rubbish or food waste that could potentially attract birds.

Selection of plant species for on-airport developments is subject to assessment against the PAL Landscaping Guidelines that stipulate the requirement to minimise bird attraction through responsible landscape design. These guidelines are also provided to local government to inform off-airport landscaping activities in close proximity to the boundary.

There is currently no regulatory or planning obligation on the part of local government, developers or service authorities to consult with PAL in relation to off-airport proposals that may attract birds to the airport surrounds such as wetlands, waste handling facilities and landscaping. A voluntary collaborative approach is however fostered between PAL and local government with acceptance by the City of Salisbury of a 3 km Wildlife Risk Management Zone around Parafield Airport as a tool to guide and inform future planning and operational activities.

There have been ongoing difficulties associated with the keeping of domestic pigeons and/or rock doves when local residents train their flocks at times that correspond with higher aviation activity. PAL will continue to liaise with the South Australian Homing Pigeon Association and local government to educate pigeon owners on responsible training methods in the vicinity of Parafield Airport.

A comprehensive Wildlife Hazard Management Plan, regulated by CASA, is incorporated in the Airport Manual.



**HUNGRY
JACK'S**

**FLAME
GRILLED**
TASTES BET