Mildura AIRPORT

# MILDURA AIRPORT MASTER PLAN 2025

## Connecting People and Places

June 2025

We acknowledge First Nations Peoples and recognise their continuing connection to land, waters, and community. We pay our respect to them and their cultures and to Elders past and present.

## **Connecting people and places** – this our primary purpose in servicing the local Mildura community and the Sunraysia Region.

Mildura Airport is Victoria's largest regional airport accommodating major airlines and multiple destinations. The airport is the principal transport gateway for north-western Victoria, eastern parts of South Australia and the south-western region of New South Wales.

As a key enabler of economic and social growth in the Sunraysia region, the airport drives local investment, business activity and the visitor economy. It facilitates and supports a diverse range of key industries including dryland farming, irrigated horticulture, tourism, food and beverage manufacturing, transport and logistics, retail, health, and community services.

With 50 people directly employed by Mildura Airport Pty Ltd ('**MAPL**'), the airport is a major employment centre. An additional 100 jobs are also provided in the various aviation and non-aviation businesses operating at the airport.

The 2025 Master Plan outlines our vision, strategic directions, and development aspirations for Mildura Airport over the next 20 years. At its core, the master plan is focussed on meeting the future aviation demands and needs of the community.

As the long-term airport manager, MAPL remains committed to planning, developing, and investing in Mildura Airport. Across the planning horizon, the timing of proposed developments at the airport will depend on an assessment of aircraft movements and passenger forecasts, market conditions as well as stakeholder engagement and approval processes.

We value our positive relationship with the local community and will continually strive to improve our service offering to cater to the needs of the region.

On behalf of the MAPL Board and staff, we would like to take this opportunity to acknowledge the valued, ongoing contribution and support of Mildura Rural City Council ('**Council**').

We look forward to the next 20 years in the growth and evolution of the airport as a vital community asset. We commend this master plan to you.

**Andrew Elliott**
**Chief Executive Officer**
Mildura Airport Pty Ltd

**Marcus Guthrie**
**Board Chairperson**
Mildura Airport Pty Ltd

# ABBREVIATIONS AND DEFINITIONS OF TERMS

**AAM** means advanced air mobility.

**AGP** means Aviation Green Paper.

**AWP** means Aviation White Paper.

**Aircraft** means fixed wing aircraft, helicopters, and machines capable of flight together with their parts and accessories, equipment, and stores.

**Airport** means the physical site known as Mildura Airport, and includes all hangars, buildings, roads and other areas and facilities within the boundaries of the airport and beyond as varied from time to time.

**Airservices Australia** means Australia's air navigation service provider to the aviation industry including air navigation and aviation rescue fire-fighting services.

**Airside** means the movement area of an aerodrome, adjacent terrain and buildings or portions thereof access to which is controlled as described in Annex 17 to the *Convention on International Civil Aviation*.

**ANEF** means Australian Noise Exposure Forecast.

**ARFFS** means Aviation Rescue and Fire Fighting Services.

**ATC** means Air Traffic Control.

**AWP** means Aviaton White Paper.

**BME** aircraft means business, military, emergency aircraft.

**CASA** means the Civil Aviation Safety Authority.

**CBD** means Central Business District.

**CEO** means Chief Executive Officer.

**Charter Operations** means any charter operations for transporting people and/or goods, which are not available to the general public without prior arrangement.

**Commercial Operations** means all aircraft above 5,700 kg MTOW, all twin-engine aircraft and all aircraft of which the registered owner is a corporation or business entity of any description.

**Common Traffic Advisory Frequency (CTAF)** means an air traffic frequency at which a mandatory aircraft radio call is made to pilots of other adjacent aircraft in uncontrolled airspace advising of the pilot's intentions.

**CEMP** means Construction Environmental Management Plan.

**dBA** means a weighted decibel scale.

**EMS** means Environmental Management System.

**ESG** means environmental, social and governance.

**ERSA** means En Route Supplement Australia.

**eVTOL** means electric vertical take-off and landing aircraft.

**General Aviation** means any aircraft operations, other than RPT and military operations.

**GSE** means ground services equipment.

**IATA** means International Air Transport Association.

**Landside** means publicly accessible areas of the airport not designated as airside.

**Legislation** includes all Commonwealth and Victorian Acts of Parliament, regulations, rules, orders, by-laws, and ordinances of any government or statutory body.

**MRO** means maintenance, repair, and overhaul.

**MAPL** means Mildura Airport Pty Ltd.

**MNES** means matters of national environmental significance.

**MOS** means Manual of Standards.

**MRO** means maintenance, repair, and overhaul.

**NASF** means National Airports Safeguarding Framework.

**NASAG** means the National Airports Safeguarding Advisory Group

**OLS** means Obstacle Limitation Surfaces.

**PANS-OPS** means Procedures for Air Navigation Services – Aircraft Operations.

**Passenger** means all persons on an aircraft except non-revenue travellers such as crew and infants.

**Regular Public Transport (RPT)** means air service operations where, for a fee, the aircraft is operated according to fixed schedules and routes and is available to the public on a regular basis.

**RESA** means runway end safety area. It is an area at the end of a runway to protect aircraft from undershooting or over-running the runway.

**RFDS** means Royal Flying Doctor Service.

**Runway** means a rectangular area at an aerodrome for the landing and take-off of aircraft.

**Runway strip** means an area incorporating the runway and stopway to reduce the risk from aircraft running off a runway and to protect aircraft flying over it during take-off or landing.

**Taxiway/taxilane** means a marked path along which aircraft taxi to or from a runway.

# ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations apply to the Mildura Airport Master Plan 2025.

**Acknowledgement**

This master plan has been prepared in consultation with the airline industry, airport businesses and tenants, Commonwealth, State and Local Government agencies and departments as well as the local Mildura community.

Mildura Airport Pty Ltd ('**MAPL**') gratefully acknowledges the cooperation and input from all organisations and individuals who participated in the development of the Mildura Airport Master Plan.

**Disclaimer**

Whilst every care has been taken in preparing this document, MAPL does not make any representation to any party and will not accept responsibility or liability to any person or corporation seeking to rely on any information, advice or opinion provided in this report or otherwise given in any manner by the officers, servants, or agents of MAPL for any loss or damage of whatever nature suffered by any such person or corporation.

Precinct development intent and key projects in this master plan are based on certain assumptions and forecasts that have been prepared by MAPL to inform the strategic planning process. Assumptions and forecasts should not be used or relied upon by any person for any other purpose.

This master plan is MAPL's statement of intent for the aerodrome over the next 20 years, based on current data and insights, and is subject to change.

**Copyright**



# EXECUTIVE SUMMARY

## Overview

### Mildura Airport connects people, and it connects places.

It is an essential community infrastructure asset for the community, and it acts as the principal transport gateway for north-western Victoria, eastern parts of South Australia and south-western New South Wales.


**Figure ES1 – Mildura Airport Site Plan**

The airport has a rich history with its early origins tracing back to the 1920s. From 1942 until 1946, Mildura Airport was a RAAF Base and accommodated the No 2 Operational Training Unit. Regular commercial passenger flights were introduced in the 1960s, connecting Mildura to major Australian cities. Subsequent decades has witnessed the continued development of airport facilities and infrastructure to meet the aviation demands of the region.

The airport is a major employment centre with 50 people employed by Mildura Airport Pty Ltd ('**MAPL**'). Over 100 jobs are also provided in various aviation and non-aviation businesses that operate at the airport.

Mildura Airport provides frequent regular passenger transport ('**RPT**') services to and from key destinations including Melbourne and Sydney. It is approaching 270,000 passengers per year with a projected 3% growth rate. The airport also accommodates a range of general aviation (GA) activity including flying training, aviation medical services such as the air ambulance, private and commercial operators.

In the next 20 years, Mildura Airport is forecast to grow to over 450,000 passengers per year.

Aircraft movements encompassing both arriving and departing flights are also predicted to increase to more than 80,000 movements over this period. Planning activities are underway to ensure the airport has the facilities, infrastructure, and services to accommodate the projected growth.

The previous master plan was adopted in 2017. Since then, MAPL has completed a range of capital works and improvements at the airport including installation of the instrument landing system, Runway 18/36 resealing, airfield lighting upgrades and new security screening equipment.

## The Master Plan

The Mildura Airport Master Plan 2025 is a strategic plan detailing a range of initiatives for the growth, development, and safeguarding of the airport over the next 20 years. It incorporates feedback and input from various stakeholders including the local community, business and industry, and government representatives.

The vision, objectives and strategic directions for the airport provide a planning framework for the development of aviation facilities, ground transport, utilities infrastructure, non-aviation land uses and the environment. The master plan identifies three land-use precincts for the airport that each have a different role and function.

These land-use precincts are:

- Airside Precinct
- Terminal Precinct
- Landside Precinct.

The land-use precincts set out the preferred location of land uses and infrastructure to guide future development at Mildura Airport. Concept plans identify a development intent and outline possible land-uses within each of the precincts. Collectively, the concept plans represent the Airport Land Use Plan.

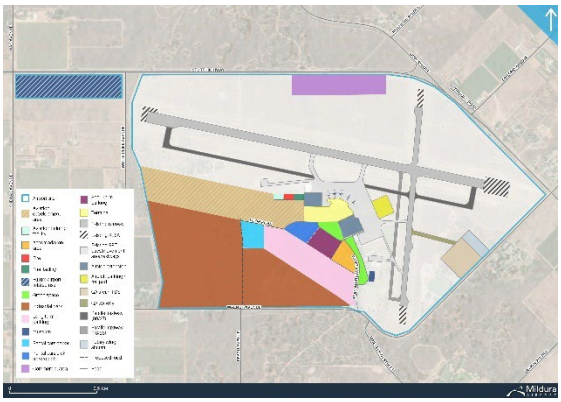


**Figure ES2 – Mildura Airport Land Use Plan**

## Airside Precinct

Located in the northern half of the aerodrome, the Airside Precinct incorporates the movement area of aircraft including runways, taxiways, aprons, hangars, and support services.

Planned facilities and infrastructure in the Airside Precinct include:

- Plan for the next Runway 09/27 upgrade.
- Runway 27 turning node.
- A staged, parallel Code C taxiway to service Runway 09/27.
- Additional runway exits and entries to reduce the runway occupancy time.
- Additional aircraft parking bays.
- A dedicated general aviation area in the south-eastern corner of the airport fronting onto Walnut Avenue.

The Airside Precinct Concept Plan seeks to deliver timely, cost-efficient, airside infrastructure to accommodate existing and planned future aviation activities at the airport.

## Terminal Precinct

The role of the Terminal Precinct is to facilitate passenger and baggage processing in a safe, secure, efficient, and cost effective manner. The existing terminal building was opened in 2012. Significant airline and passenger growth since then has resulted in the need to grow and add terminal capacity and improve passenger experience.

Aligned to future passenger movements and airline scheduling, the logical plan is to remove the northern sections of the building and develop the terminal in a southwards direction progressively creating both a deeper and wider terminal building. Reconfiguration of existing ground transport access and parking will be an enabling step for a terminal expansion.

## Landside Precinct

Located predominantly in the southern half of the airport site, the landside precinct comprises an area of 80 hectares. Expansion of the Landside Precinct provides MAPL with an opportunity to draw additional income from non-aeronautical commercial development. In providing an opportunity to diversity the airport's revenue base, development in the Landside Precinct will enable further investment in aviation infrastructure.

Planned facilities and infrastructure in the Landside Precinct include:

- Creation of a loop road to improve traffic flow and facilitate Terminal Precinct development.
- Establishment of an aviation development area at the western end of the aerodrome.
- Provision of an accommodation area near the long-term car parking area.
- An industrial park on underutilised land in the south-western area of the airport.
- Relocation of the existing RAAF Museum to a new, purpose-built, independently operated facility.
- Utilising highway frontage land for commercial purposes compatible with the surrounding airport environs.

Maintaining flexibility for MAPL to explore potential future commercial opportunities - some of which are aspirational at this stage, such as leveraging the highway frontage - will be important, while continuing to prioritise and protect the airport's core aviation activities.

## Airport safeguarding

The safety, efficiency and operational integrity of Mildura Airport is to be safeguarded and protected in accordance with the National Airport Safeguarding Framework ('**NASF**').

Sensitive land uses and new development that encroach upon the environs of Mildura Airport

have the potential to restrict ongoing operational activity.

As part of this master plan, ANEF and N contours have been prepared based on the 20-year (2045) forecast growth in aircraft movements.

Design and Development Overlay Schedules 6, 7 and 8 contained in the Mildura Planning Scheme continue to provide valuable assistance in safeguarding and protecting the airport's airspace and operational activity.

## Community

Mildura Airport is operated, managed, and developed by MAPL on behalf of the local community. The airport provides the community with connectivity and economic opportunity. It is a major contributor to the local economy with tangible socio-economic benefits for the community.

As a major employment hub, the airport provides a range of aviation and non-aviation jobs including entry level and industry gateway jobs with associated social benefits.

In acknowledging the planned future growth and development at Mildura Airport, MAPL will continue to engage with the local community, customers, government, business and other stakeholders in the planning, design, and delivery of new projects.

> Our charter is to operate, manage and develop the Airport on behalf of the community.

MAPL acknowledges its responsibility as the custodian of the airport land and the need to limit the impact of operations on the environment.

## Environment

Environmental management is a key element of ongoing operations. In the planning and design of new projects, MAPL strives to limit adverse environmental impacts and wherever possible, opportunities for environmental enhancement underpinned by a net gain philosophy.

Embedding ESG in all functions of the business and incorporating it into business values and the day-to-day culture is an ongoing priority for MAPL.

## Ground transport

Based on forecast growth, the existing ground transport infrastructure will need to be augmented and improved to accommodate the future accessibility and mobility needs of passengers, airport visitors and staff.

Key ground transport initiatives include the provision of a one-way loop reconfiguration of Alan Mathews Drive, repositioning the car parking area to less strategic land and enabling public transport connectivity.

## Implementation

Capital works improvements across the airport will align with the development and infrastructure priorities outlined in the 2025 Master Plan.

A total of 10 key projects have been identified for delivery over the next 20 years. Across the planning horizon, the timing of proposed developments at the airport including the key projects will depend on an assessment of aircraft movement and passenger forecasts, market conditions, stakeholder engagement and approval processes.

## Conclusion

The 2025 Master Plan expresses MAPL's ongoing commitment to develop and grow Mildura Airport as Victoria's leading regional airport. Access to affordable air services is a key contributor to the livability and economic vitality of regional communities and it is essential that services remain viable.

MAPL will continue planning, developing, and investing in the airport to meet the ongoing aviation needs for the region including airlines, passengers, business and industry, and the community.

In continuing to connect people and places, MAPL is committed to working with Council, the local community, and all stakeholders in the delivery and implementation of the Mildura Airport Master Plan 2025.

# Contents

# 1 INTRODUCTION

## 1.1 Overview

Mildura Airport connects people and places. The airport is the principal transport gateway for north-western Victoria, eastern parts of South Australia and the south-western region of New South Wales.

As the primary commercial airport in the region, Mildura Airport is a highly valued community asset and an important enabler of regional growth. It delivers significant and ongoing socio-economic benefits for the Sunraysia region.

The airport continues to operate under the long-term guidance and management of Mildura Airport Pty Ltd ('**MAPL**'). MAPL successfully maintained operations and essential services for the local community during the global pandemic. With operational activity now exceeding pre-pandemic levels, the time is right to prepare the next planning blueprint for the future growth and development of the airport.

As the cornerstone of future asset planning, the 2025 Master Plan will set the foundations for the sustainable, long-term growth and development of the airport through to 2045.

With ongoing growth in the rural city of Mildura and the Sunraysia region more broadly, the demand for air transport will continue to increase. Over the next two decades, Mildura Airport will serve more passengers, additional destinations, newer aircraft types and extra flights. At the heart of this growth will be the airport's core purpose to facilitate connections for visiting friends and relatives, business, tourism, education, and trade.

## 1.2 A regional asset

Situated in the heart of the Sunraysia region in northern Victoria, Mildura Airport is the region's key economic and transport gateway. It is also Victoria's largest regional airport.

Mildura Airport (**IATA: MQL, ICAO: YMIA**) is located four nautical miles southwest of the centre of Mildura. The airport site comprises 273 hectares overall with 173 hectares of this security controlled airside land and the remaining 100 hectares designated as landside including the terminal precinct. A separate allotment on the western side of the airport is owned by MAPL.

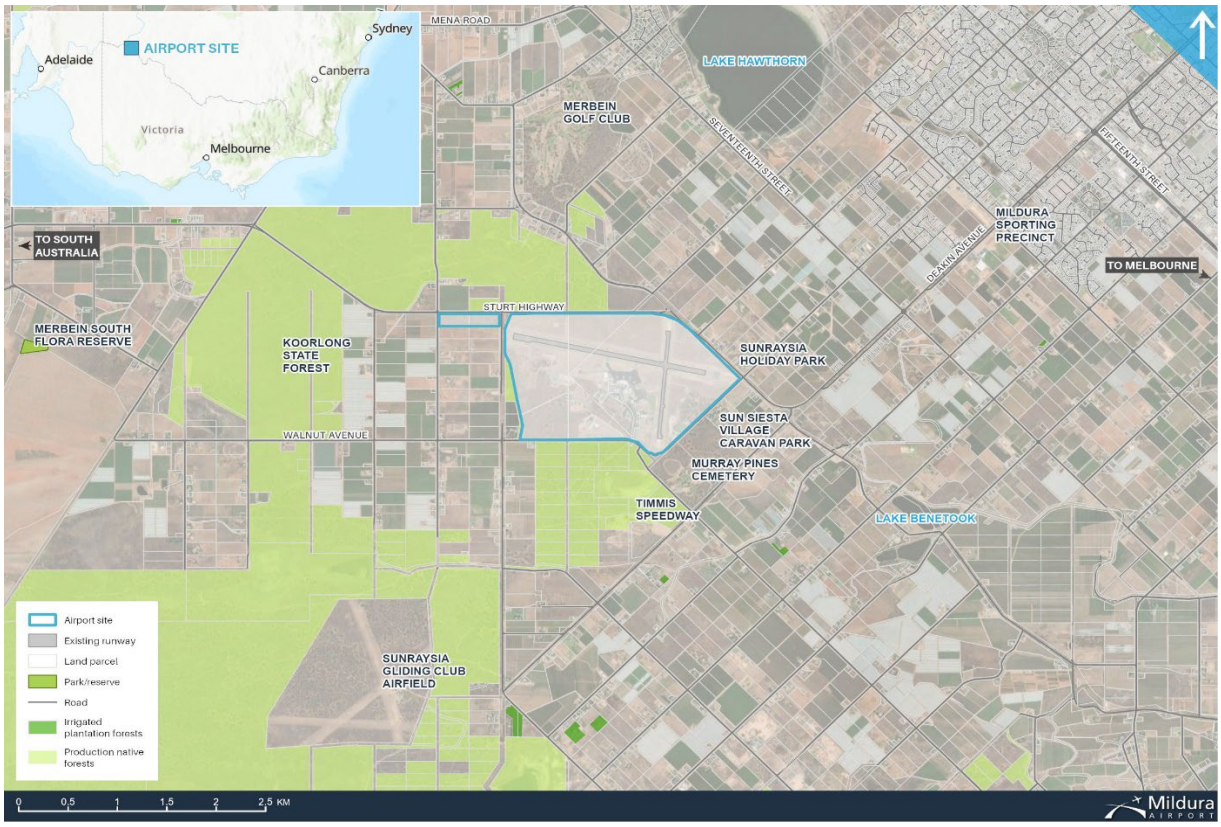



**Figure 1 - Mildura Airport Site Locality Plan**

Mildura Airport provides frequent regular passenger transport ('**RPT**') services to and from key destinations including Melbourne and Sydney. It is approaching 270,000 passengers per year with a projected 3% growth rate. The airport accommodates a range of general aviation (GA) activity including flying training, aviation medical services such as the air ambulance, private and commercial operators.

Current facilities available for aircraft operations consist of a primary east-west runway (09/27) and a secondary north-south runway (18/36). Neither runway has a full-length taxiway.

The existing airport comprises five domestic aircraft stands with multiple GA stands also available.

The terminal building is single level with a check-in hall, security controlled departures lounge, arrivals hall, and a single gate lounge and departure gate. Mildura Airport is approaching 270,000 passengers per year with a projected 3% growth rate.

## 1.3 Independent, experienced management

MAPL is a Council owned corporate entity that was established to manage and operate the airport, on behalf of the Council. This innovative, award winning airport management model commenced in 2009. MAPL holds a 35-year lease of the airport. Under MAPL's management, Mildura Airport has twice been named Australia's Regional Airport of the Year.

The Board of Management comprises independent members with significant experience in the aviation sector both internationally and domestically. With an independent Board structure, MAPL has direct access to industry leading aviation knowledge and expertise.

As a corporatised management entity, MAPL operates independently and with the necessary flexibility to respond to changing market conditions in the aviation sector. Both of these are essential elements in maintaining the airport as a viable, well managed community asset.

Well planned commercial land use and development at the airport by MAPL has been, and will be, essential to ongoing operational and financial viability. As long term custodians of the airport, MAPL is committed to growing the infrastructure and facilities to promote positive outcomes for airport businesses, customers, and the local community. MAPL's philosophy is one of constant improvement.

## 1.4 Regional economic benefits

The airport is a significant driver and contributor to the regional economy. With a diverse range of infrastructure, facilities, amenity, services and operations, the airport provides the community with a hub where people can connect.

As an enabler of economic activity, the airport facilitates and supports a diverse range of economic benefits across the Sunraysia Region. Key industries include dryland farming, irrigated horticulture, tourism, food and beverage manufacturing, transport and logistics, commercial, health, and community services. With a regional population over 50,000, air services are a critical enabler of economic growth. The economic value of Mildura Airport can be measured via direct and indirect economic activity and access to national and international markets for tourism and business.

As a major employment centre, the airport directly employs 50 people. An additional 100 jobs are provided in various aviation and non-aviation businesses that operate at Mildura Airport. As one of the largest employers in the region, the airport provides residents of Mildura and surrounding towns with a diverse range of employment opportunities including gateway jobs.

The airport is an enabler and driver of local investment, business activity and the visitor economy. Expenditure at the airport delivers social-economic benefits for the local community.

## 1.5 Key achievements

The previous master plan for Mildura Airport was adopted by the MAPL Board in 2017.

The following key achievements and outcomes have been delivered by MAPL in the intervening period:

- Appointment of a new Chief Executive Officer.
- Introduction of Bonza 737 Max flights to Melbourne, Sunshine Coast and Gold Coast services (Note: services have recently ceased).
- Commencement of the international flying school at the airport.
- Design, construction and implementation of the instrument landing system ('**ILS**').
- Runway 18/36 resealing.
- Airfield lighting systems upgraded to LED (i.e. runways, taxiways, aprons).
- New security screening equipment including a body scanner installed in the passenger screening lane.
- Upgrades to the GA area and various airside infrastructure improvements.
- Installation of an upgraded fuel storage system.
- Opening of the Mildura Airport Garden Café.
- Opening of the Mildura Airport Wine Bar.
- Landside road network and car parks re-sealed.
- Amenity and landscaping improvements.

MAPL has invested significant capital in expanding, redeveloping, and maintaining the airport facilities and infrastructure for the ongoing benefit of the local community.

## 1.6 Purpose of the Master Plan

The Mildura Airport Master Plan 2025 is an aspirational, strategic document that details MAPL's planning and development initiatives for the airport over the next 20 years.

The master plan has encompassed an extensive review and update of the previous master plan including aircraft movements and passenger growth.

At its core, the master plan seeks to:

- Support the efficient and economic development of the airport.
- Identify future aircraft and passenger growth as the basis for planning new facilities and infrastructure.
- Safeguard airport operations and airspace and minimise future land use conflicts.
- Implement ongoing measures to work collaboratively with the local community and maximise benefits.
- Promote continued improvement of environmental management practices.

The land-use strategy for the airport contained in the master plan designates three land-use precincts that each have a distinct focus and operational purpose.

These land use precincts are:

- Airside Precinct.
- Terminal Precinct.
- Landside Precinct.

The land-use precincts set out the preferred location of land uses and infrastructure to guide development at Mildura Airport. Concept plans for each precinct identify a development intent and outline possible land-uses within each of the precincts.

*Airports like Mildura Airport can generate significant social and economic benefits to communities, but they need to be properly planned and protected over the long term to realise these benefits and ensure their safe and efficient operation.*

## 1.7 Changes since the last Master Plan

The following list indicates the primary differences between the 2017 and the 2025 Master Plans for the Mildura Airport:

- Preparation and endorsement of an updated ANEF and N-Contours.
- Planning for the medium – long term relocation of the GA precinct including flight training to a new dedicated area in the south-east area of the airport.
- Redevelopment and expansion of the terminal complex.
- Expansion of RPT aircraft bays and facilities.
- Incorporation of an aviation development area to the west of the Terminal Precinct.
- Relocation of a future Aviation Rescue and Fire Fighting Services ('**ARFFS**') facility from the north-eastern corner of the airport to a centralised position on the aerodrome.
- Designation of an accommodation area near the new long-term car parking facility for customers of the airport.
- Reclassification of the southern and south-western area of the airport from aviation support/non-aviation development to an Industrial Park including the potential for an intermodal freight hub.
- Relocation of the existing RAAF museum to a new dedicated facility adjacent to the Bureau of Meteorology facilities.

# 2 MILDURA AIRPORT TODAY

Mildura Airport is a certified aerodrome, located on the south-western side of the city of Mildura. The airport is approximately eight kilometres from the central business district and bounded by the Sturt Highway to the north and north-east.

## 2.1 Existing airside infrastructure

The airport landholding is 273 hectares and comprises two sealed illuminated runways with capacity for night landings. The main east-west runway (09/27) can accommodate larger aircraft such as Boeing 737 and Airbus 320, with weight restricted departures.

Runway 09/27 is 45 metres wide, 1,830 metres long and has additional sealed stop ways and runway end safety areas. The second runway (18/36) at Mildura Airport is a north-south runway is 30 metres wide and 1,139 metres long. It also has runway end safety areas.

Mildura Airport has four existing taxiways, Alpha and Bravo which connect to the secondary runway (18/36) and taxiways Charlie and Delta that connect to main runway (09/27).

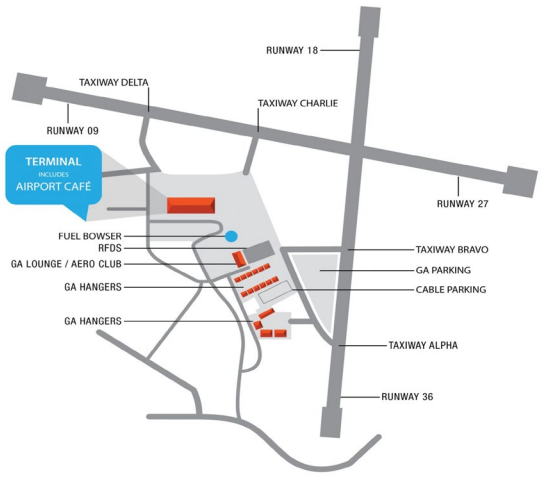



**Figure 2 - Runway and Taxiway Information**

The distribution of runway activity for regular passenger transport (‘**RPT**’), helicopters, GA, flying training and business, medical, emergency (‘**BME**’) aircraft is shown in Figure 3.

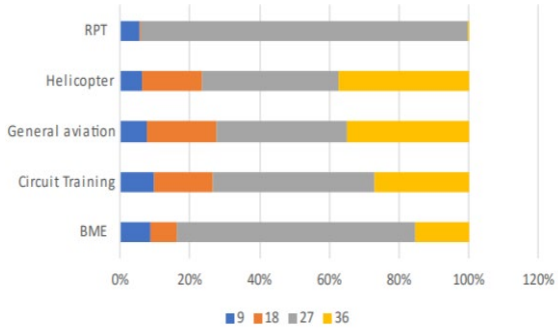



**Figure 3 - Runway Usage**

The apron layout at the airport is designed to accommodate five narrow body jets simultaneously (e.g. Code C aircraft such as the B737-800, A320 and A321). The RPT bays provide self-powered operations and are adequate for all operational permutations. Increasingly with capital city diversions, or aircraft mechanical problems there is an ongoing RPT bay supply risk.

GA at the airport is accommodated to the north-east of the Bellman Hangar. GA aircraft often park overnight and utilise refuelling and terminal services.


## 2.2 Airspace

Mildura Airport is a non-controlled aerodrome in Class G airspace with a dedicated Common Traffic Advisory Frequency (‘**CTAF**’). Airspace above and surrounding the airport is Class G airspace and a Class E airspace corridor extends from Mildura to 90 nautical miles from Melbourne.

MAPL recently installed a Category 1 Instrument Landing System (‘**ILS**’) which enables aircraft to land if the pilots are unable to establish visual contact with the runway. The ILS provides horizontal and vertical guidance to pilots, with a minimum decision altitude of 280 feet and improves landing in low visibility conditions.

## 2.3 Aviation activity

Mildura Airport plays a critical role in the north-west region of Victoria, moving people and goods. RPT services are provided to Melbourne and Sydney with Adelaide scheduled to be re-introduced. Airlines that currently service Mildura Airport are QantasLink and Regional Express ('**Rex**').

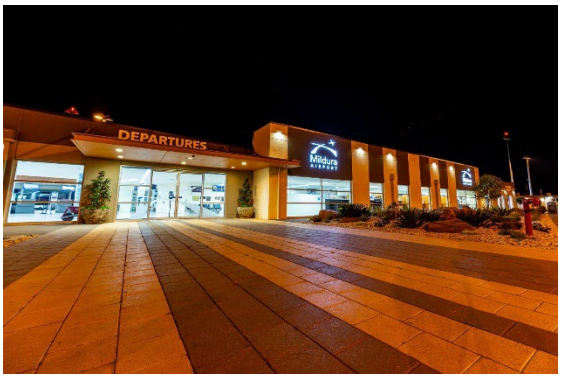
Charter and general aviation movements contribute to the air traffic profile at Mildura Airport. These movements include:

- Air ambulance services – a crucial link for the transfer of patients to and from capital cities for vital medical treatment from the region.
- The Royal Flying Doctor Service – provide life-saving services for the Sunraysia region.
- Angel flights – special flights for children with terminal illnesses.
- Air freight services – provision of daily freight services to and from Melbourne.
- Bank charter services – a daily link between head offices and regional areas.
- Flight training - both local and externally based flight schools use the local airspace to develop and train the required skills for private and commercial pilots.
- Charter operations – most of the activity is for government and business travel with some tourism related movements.
- Military aircraft – the airport is frequently used as a refuelling and stopover point by the Department of Defence.
- Recreational aviation – the airport is a popular lay over and refuelling point for aviation enthusiasts travelling within the south-eastern parts of Australia or heading to the rural Australia.
- Firefighting – a northwestern base for the large, contracted firefighting aircraft services.
- Police and emergency services.
- Aerial agriculture.
- V.I.P flights.

Mildura Airport presents a convenient destination for aircraft requiring an alternate destination due to adverse weather conditions or an on-board emergency.

## 2.4 Terminal

The existing terminal building opened in 2012 and comprises a single level building. The terminal includes food and beverage outlets with the recent opening of the Mildura Airport Garden Café, and Mildura Airport Wine Bar.




The terminal building comprises multiple airline check in desks, with passengers processed through one security lane, a single gate lounge and several departure gates. Arriving passengers collect checked baggage from one baggage reclaim carousel.

The terminal building has outlets for a number of the hire car companies that operate at Mildura Airport.

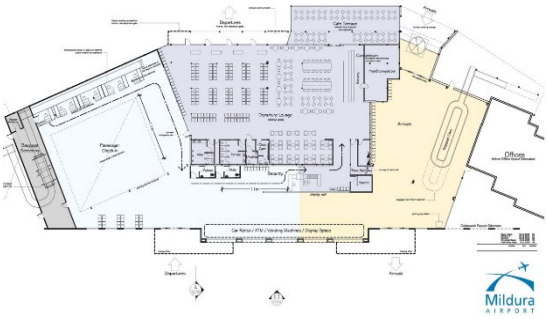


**Figure 4 - Mildura Airport Terminal layout**

## 2.5 Landside infrastructure and facilities

An administration building for MAPL staff is located in proximity to the terminal and general car parking area.

Ground transport access to the airport is via Walnut Avenue, extending along the eastern and southern boundaries of the airport site. Whitecliff Avenue, an unsealed road, is located to the west of

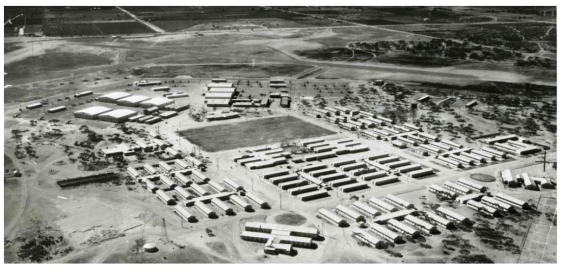
the airport and provides access to several private landholdings.

There are number of car parking areas at Mildura Airport, comprising short, long-term, and premium parking options. The car rental car park, providing easy pick up and drop off of vehicles, is located adjacent to the terminal arrivals area.

## 2.6 History

Mildura Airport has a rich operational history that spans several decades. The airport's early origins can be traced back to the 1920s when Mildura became a focal point for the emerging aviation industry in the Sunraysia region.

The airport's early days were characterised by relatively humble facilities and basic infrastructure that serviced local flying enthusiasts and limited commercial operations.



**Photograph 1 – RAAF Base at Mildura Airport**

In the 1940s, during World War II, Mildura Airport played a crucial role in the defence efforts of Australia. From 1942 until 1946, Mildura Airport was used as a RAAF Base. The airport was the home of the No 2 Operational Training Unit ('**20TU**'). The role of 20TU was to provide operational fighter conversion and training to pilots before they were posted to their operational squadrons.

Over 1,200 pilots flew Wirraway, Boomerang, Spitfire, Kittyhawk and Mustang aircraft at the base. The RAAF utilised the airport for training purposes, and the facility underwent significant expansions and improvements to accommodate the wartime needs. This period marked a turning point for Mildura Airport, as it transitioned from a small local airfield into a strategically important aviation hub.

Many famous airmen trained or instructed at the Mildura base, including former Prime Minister John Gorton, SQNLDR "Bluey" Truscott DFC & Bar, WGCDR Bobby Gibbes DSO DFC & Bar and GPCAPT Clive "Killer" Caldwell DSO DFC.


**Photograph 2 – Fighter Aircraft used at Mildura Airport during WW2**

Post-war, Mildura Airport continued to grow and evolve in response to the increasing demand for air travel and freight services in the region. In the 1960s, regular commercial flights were introduced, connecting Mildura to major Australian cities. Subsequent decades witnessed further upgrades to airport infrastructure including the lengthening of the main runway and the modernisation of terminal facilities, to meet the demands of a growing aviation sector.

Now established at Mildura Airport is Aero Dynamic Academy, one of Australia's leading providers of flight training services. Aero Dynamic Academy has a fleet of modern Cessna (172s and 182T) and Diamond (DA42) aircraft for flight training and two simulators.

Today, Mildura Airport stands as a vital transportation hub, serving the needs of both passengers and cargo. It has become an integral part of the regional economy, facilitating tourism, trade, and business activities. The airport's history reflects not only the evolution of aviation technology and infrastructure but also its role in supporting the development and connectivity of the Mildura region over the years.

A new purpose-built facility at the airport is proposed to house the historically significant aircraft and memorabilia. There is a desire to protect as much as possible of Mildura's last remaining Bellman Hangar (doors) and to move the RAAF Memorial and Museum to this new purpose built location. In collaboration with other stakeholders, 20TU Heritage Inc. proposes to educate, celebrate and commemorate the significant aviation history of Mildura Airport.

# 3 PLANNING CONTEXT

## 3.1 Master Plan process

Planning requirements for the Mildura Airport site are primarily administered under the Victorian planning laws. The process for preparing a master plan is not subject to the legislative requirements of the *Airports Act 1996.*

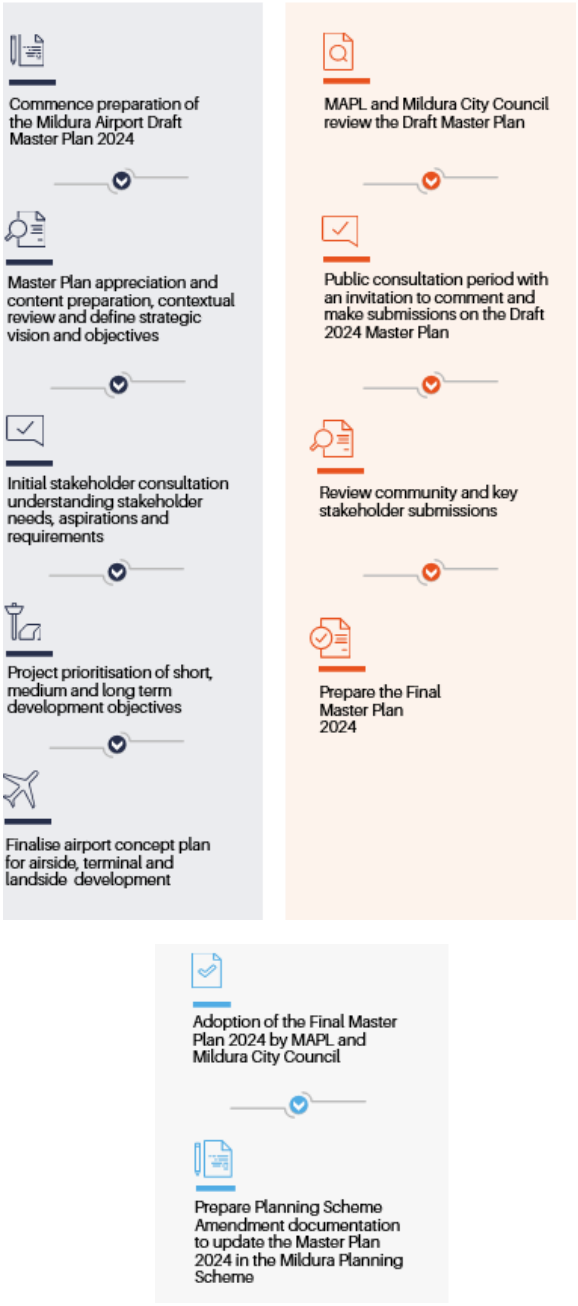



**Figure 5 - Master Plan Process**

The master planning process incorporates an opportunity for the local community and stakeholders to identify their specific needs and provide feedback on MAPL's planned growth for Mildura Airport over the next 20 years.

## 3.2 Legislation and regulations

Mildura Airport has a responsibility to comply with all relevant Commonwealth and Victorian legislation as it relates to the airport. Relevant legislative and regulatory considerations are summarised in this section.

### Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The *Environment Protection and Biodiversity Conservation Act 1999* ('**EBPC Act**') provides a legal framework to protect and manage nationally and internationally significant flora, fauna ecological communities and heritage places in Australia.

Nine protected matters are listed in the EPBC Act that need protecting as *'matters of national environmental significance'*. Under the EPBC Act, it is an offence to take an action that has, will have or is likely to have a significant impact on Matters of National Environmental Significance ('**MNES'**), unless approval has been granted or the Minister has determined that the action can proceed without approval.

Projects that will, or are likely to have, a significant impact on MNES are currently required to submit an EPBC Act Referral for a determination on whether further assessment and approvals are required.

### Planning and Environment Act 1987

The *Planning and Environment Act 1987* ('**P&E Act**') establishes a framework for planning the use, development, and protection of land in Victoria in the long-term interests of all in Victoria.

The P&E Act is administered across Victoria via planning schemes, which are created as subordinate instruments under the Act. Planning schemes detail the types of land uses and development that are permitted within each local government area. Mildura Airport is subject to the planning policies, controls, and provisions of the Mildura Planning Scheme.

## 3.3 Mildura Planning Scheme

The Mildura Planning Scheme sets out the vision and the strategic directions for the municipality in terms of the use, development, and conservation of land. It comprises a range of State, regional and local planning policies, planning controls (i.e. zones and overlays), and particular provisions.

The following sections of the Mildura Planning Scheme are applicable to the airport.

### Clause 18.02-7S: Airports and Airfields

Clause 18.02-7S of the Mildura Planning Scheme provides general planning policy objectives and strategies for airports and airfields in Victoria. The Statewide policy seeks to guide the siting and expansion of airports, and safeguard their ongoing, safe and efficient operations.

Specific strategies for airports and airfields in Victoria include:

- Protect airports and airfields from incompatible land use and development.
- Prevent land use or development that poses risks to the safety or efficiency of an airport or airfield, including any of the following risks:
  - Building-generated windshear and turbulence.
  - Increased risk of wildlife strike.
  - Pilot distraction from lighting.
  - Intrusion into protected airspace.
  - Interference with communication, navigation, and surveillance facilities.
  - Increased risk to public safety at the end of runways.
- Minimise the detrimental effects of aircraft noise when planning for areas around airports and airfields.
- Limit the intensification of noise-sensitive land uses.
- Ensure land use and development at airports and airfields contributes to the aviation needs of the state and the efficient and functional operation of the airport or airfield.
- Ensure land use and development at airports complements the role of the airport.
- Plan for areas around airports and airfields so that land use or development does not prejudice future airport or airfield operations or expansions in accordance with an approved strategy or master plan for that airport or airfield.
- Ensure that in the planning of airports and airfields, land use decisions are integrated, appropriate land use buffers are in place and provision is made for associated businesses that service airports.
- Plan the visual amenity and impact of any land use or development on the approaches to an airport or airfield to be consistent with the status of the airport or airfield.

The policy is used to guide planning decision making in and around airports in Victoria.


### Clause 18.02-7L: Mildura Airport and Environs

Clause 18.02-7L of the Mildura Planning Scheme identifies a range of policy objectives and strategies for the airport.

This policy applies to land in the Mildura Airport Special Use Precinct and Design and Development Overlays (DDO6, DDO7 and DDO8).

Strategies in this local planning policy seek to:

- Encourage the Mildura Airport Special Use Precinct to operate as an efficient transport interchange catering for increased air traffic.
- Discourage development that is inconsistent with the Mildura Airport Master Plan (2017), particularly in relation to noise and height restrictions.

- Support the development of a technology/business park at the Mildura Airport Special Use Zone Precinct.
- Encourage land use and development that is compatible with the function and operation of the precinct.
- Minimise impacts on the operations of the airport by inappropriate use, development, or subdivision within or around the airport site.

## Special Use Zone – Schedule 7 (SUZ7)

The airport is located within a Special Use Zone ('**SUZ7**') in the Mildura Planning Scheme, refer Figure 1.

The purpose of the SUZ7 is to:

- Provide for the use of the land for the purpose of an airport and complementary uses.
- Ensure that the use and development of the land does not prejudice or interfere with the operation of the airport.
- Ensure that use and development of these facilities takes place in an orderly and proper manner and does not cause loss of amenity to the surrounding area or neighbourhood.

The SUZ7 specifies planning permit requirements for the use, development, and subdivision of land at Mildura Airport. The following decision guidelines apply to a permit application under the SUZ7 and must be considered, as appropriate, by the responsible authority ('**Council**'):

- The existing and likely future use of the airport.
- The movement of traffic and provision of car parking.
- The interface with adjoining land, especially the relationship with the airport.
- The appearance of the proposed buildings and works.
- The effect that the proposed buildings and works may have on the amenity of the area.
- The *Mildura Airport Master Plan* (2017).
- The Mildura Aerodrome Obstacle Limitation Surfaces ('**OLS**') Contours incorporated in the scheme.

## Airport Environs Overlay – Schedules 1 and 2 (AEO1 and AEO2)

The Airport Environs Overlay - Schedules 1 and 2 in the Mildura Planning Scheme apply to the airport site and surrounding land, as shown in Figure 2.

The outer boundary of the AEO1 corresponds to the ANEF 25 contour, and the outer boundary of the AEO2 corresponds to the ANEF 20 contour.

The purpose of the Airport Environs Overlay ('**AEO**') is to:

- Implement the Municipal Planning Strategy and the Planning Policy Framework.
- Identify areas which are or will be subject to high levels of aircraft noise.
- Ensure that land use and development are compatible with the operation of airports in accordance with the appropriate airport strategy or master plan.
- Assist in shielding people from the impact of aircraft noise.
- Limit the number of people residing in the area or likely to be subject to significant levels of aircraft noise.

Inside the overlay areas, any new building must be constructed so as to comply with any noise attenuation measures required by Section 3 of *Australian Standard AS 2021-2015, Acoustics - Aircraft Noise Intrusion - Building Siting and Construction*.

For planning permit applications subject to the AEO, the views of the airport operator (i.e. MAPL) must be sought.

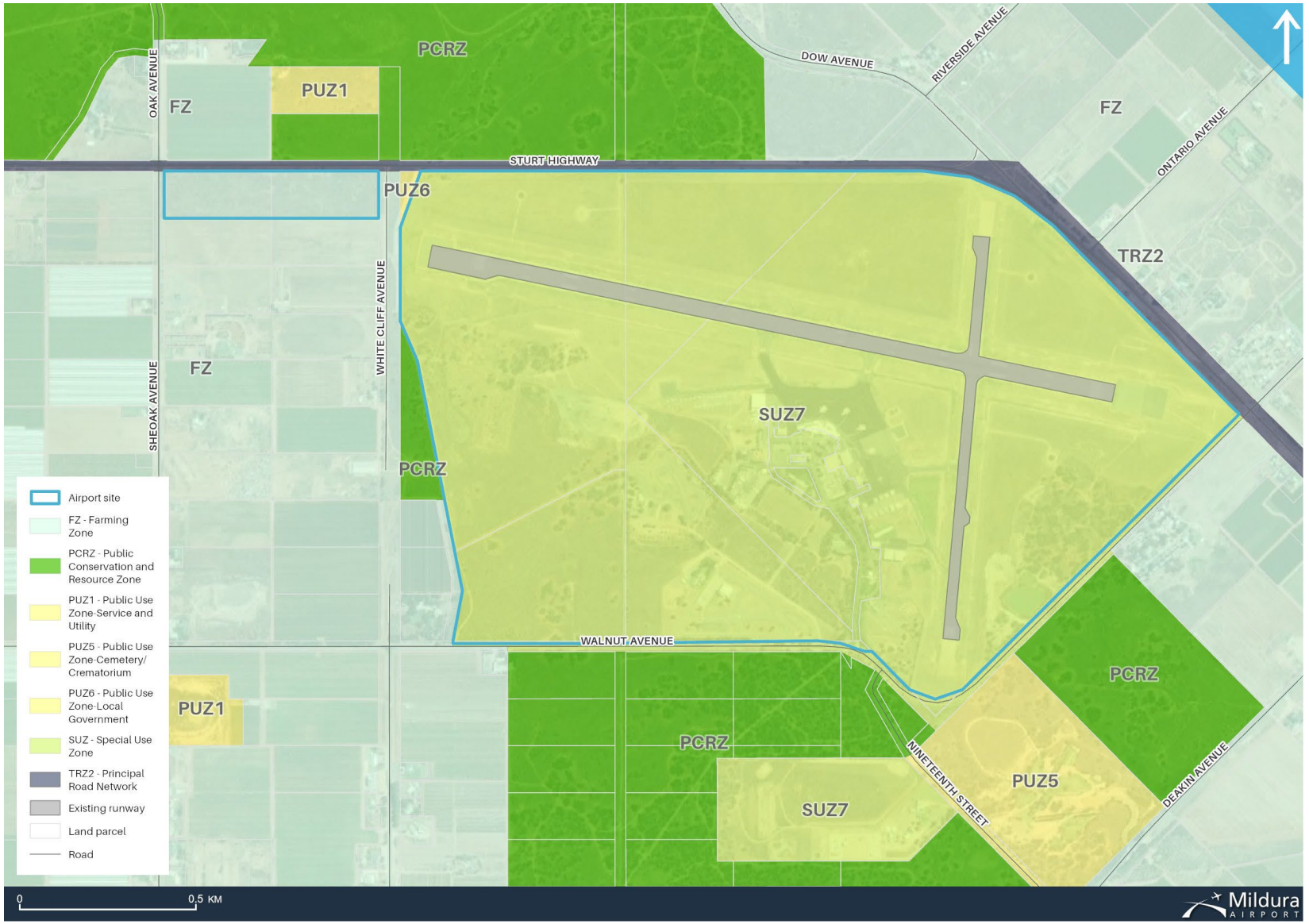



**Figure 6 - Mildura Airport Special Use Zone 7 (SUZ7) and Farming Zone**

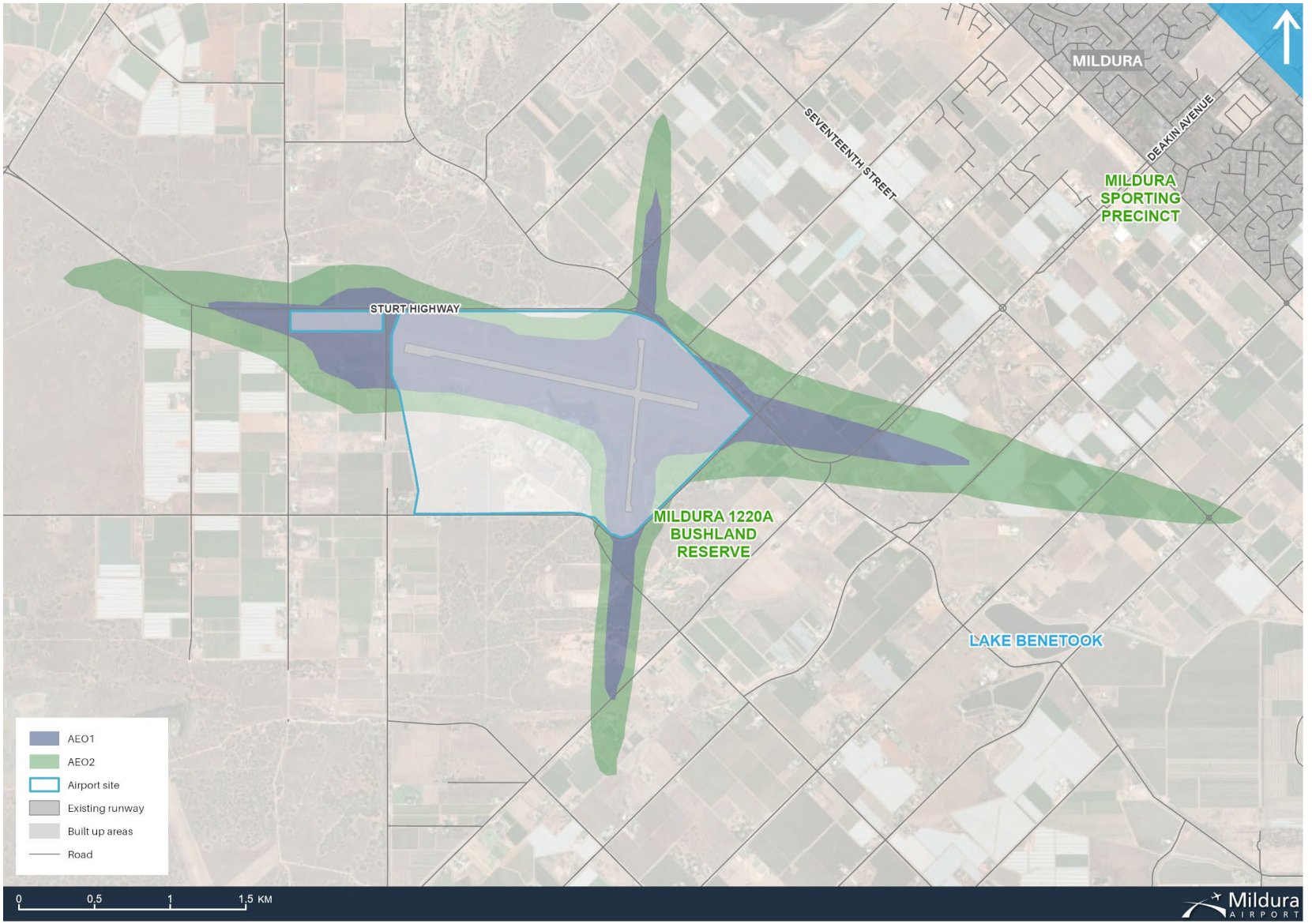



**Figure 7 - Mildura Airport Airport Environs Overlay – Schedules 1 and 2 (AEO1 and AEO2)**

# 4 MASTER PLAN VISION AND OBJECTIVES

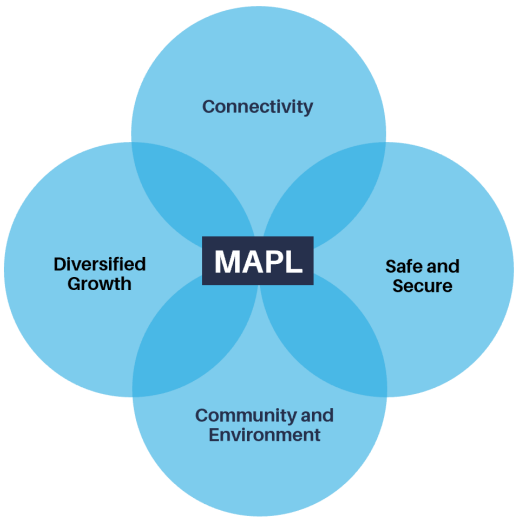
Aligned to the current aviation context and MAPL's corporate planning processes, this section outlines the vision, development objectives and future directions for Mildura Airport over the next 20 years. It presents a clear strategic framework for the growth of the airport including the development of new and expanded airport facilities and infrastructure. Ultimately, it seeks to ensure the ongoing, seamless connection of people and places.

## 4.1 Vision

The master plan's vision for Mildura Airport over the next 20 years is:

> *To deliver a commercially resilient, safe, and sustainable future for Mildura Airport, as a principal transport gateway with ongoing economic, social and community benefits.*

As the long-term airport operator, MAPL is committed to planning, developing, and investing in Mildura Airport to meet the ongoing aviation needs for the region including airlines, passengers, business and industry, and the community. As a central element of all airside, landside and off airport planning and development, aviation safety will continue to be the highest priority for MAPL.



## 4.2 Key objectives

Key objectives of the 2025 Master Plan for Mildura Airport are:

| OBJECTIVES | |
|---|---|
| **Aviation**  | To plan and maintain a compliant, safe, and future ready operating environment for all airport users |
| **Airport infrastructure**  | To deliver timely and cost-efficient airport facilities and infrastructure for airlines, businesses, passengers, and staff with new projects such as the terminal expansion aligned with demand |
| **Landside development**  | To deliver complementary non-aviation land uses and development |
| **Airport safeguarding**  | To protect and safeguard airport operations and minimise future external land planning conflicts |

| OBJECTIVES | |
|---|---|
| **Economic growth and resilience**  | To support the efficient and sustainable economic growth of the airport |
| **Connectivity**  | To enhance ground transport accessibility and services for all airport users |
| **Customer experience**  | To deliver all airport users an authentic, interactive and seamless customer experience |
| **Community**  | To operate with a social licence, contribute to community wellbeing and maximise benefits for the local community |
| **Environmental sustainability**  | To minimise environmental impacts at the airport and foster continued improvement in environmental management practices |

## 4.3 Future Strategic Directions

Future strategic directions of the 2025 Master Plan for Mildura Airport are:

| FUTURE STRATEGIC DIRECTIONS | |
|---|---|
| **Asset and infrastructure upgrades** | Plan for key aerodrome assets and infrastructure - main runway rejuvenation with 27 turning node, taxiway enhancement program, aircraft parking areas including RPT bays, expanded terminal, etc. |
| **Streamline development approval processes** | Identify planning policies and controls in the Mildura Planning Scheme to reference and safeguard future land use and development at the airport. |
| **Community and environment** | Ensure ongoing ESG focused corporate governance, financial resiliency, social licence, community participation and events, environmental enhancements program etc. |
| **Safeguard airport operations and compliance** | Ensure CASA compliance, implement a new endorsed ANEF and N-contours, review safeguarding policies and controls and implement NASF guidelines. |
| **Address emerging aviation technologies** | Plan for future aviation trends and opportunities e.g. advanced air mobility, drones, new propulsion methods such as electric, hybrid-electric and hydrogen fuel cell systems etc. |

## 4.4 Airport Management

### Operational Context

Australia's regional airports are fundamentally community assets. An airport is not a "set it and forget it" business. An instructive reference on regional airport management and operations in Australia is the AAA report '*Australia's Regional Airports Facts, Myths & Challenges*', (November 2012). As part of the report, the AAA found as follows:

> *The overwhelming majority of Australian Airports (other than Commonwealth airports) are owned and operated by the local government authority for the community they serve.*
>
> *The risks to a council and its community if an airport is not operated at the requisite standard could be catastrophic not only financially, but also in terms of loss of life. These factors make airports somewhat unique among local government operations.*

Airports are not passive infrastructure assets - they must be proactively and expertly managed and operated.

### Community focused aerodrome management

The Board of Directors and the Executive team of MAPL operate, manage, and develop the airport on behalf of the community. Unparalleled in a remote regional context, MAPL offers significant experience in airport management, regulatory compliance and planning the development of the aerodrome.

With an independent, skills-based Board, MAPL has extensive aviation sector experience and an industry capability which most local government entities are unable to attract for the day-to-day management of their airports.

Unlike a fully privatised, for-profit airport management model, the current corporatised structure underpinning MAPL effectively retains the local Mildura community at the heart of its operations and decision making. The community rather than shareholder interest remains paramount.

Importantly, the current management model also ensures regulatory compliance and maintains aerodrome operational risk to as low as reasonably practicable.

Benefits of the current MAPL structure and a corporatised operating model include:

- Proactive, specialist planning of the aerodrome and its future development.
- Long term experience and track record in operating and maintaining the aerodrome.
- A collaborative approach in managing the aerodrome asset with Council.
- A more agile, independent approach to harnessing new aviation opportunities and development.

A comparison of airport management models in Australia is attached at **Appendix A**.

Comprising a total of 50 staff, MAPL seeks to maximise direct employment opportunities for the local Mildura community.

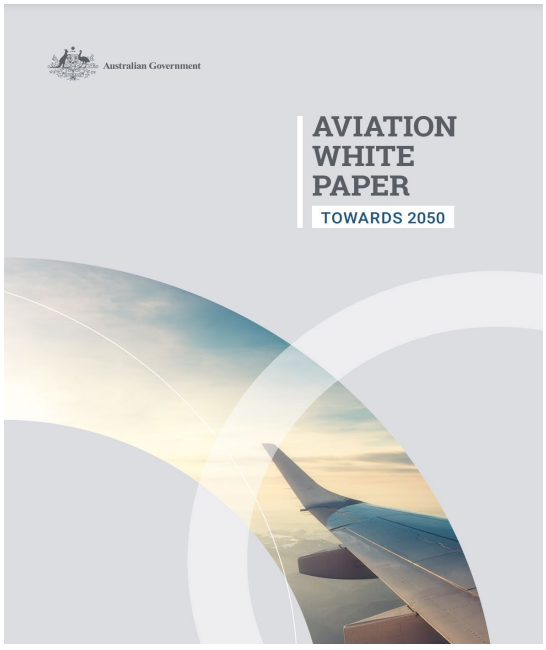
A significant level of aviation sector skill and expertise resides within MAPL. If, in the future, there are opportunities to oversee and manage other airports, MAPL would assess these on a case by case basis. This would represent a natural evolution of the existing, highly successful operational model.

# 5 FUTURE AIRPORT CONTEXT

## 5.1 Aviation White Paper

The aviation sector is continually evolving and responding to new challenges and opportunities at global, national and local levels.

The Aviation White Paper ('**AWP**') released in August 2024, sets out the Australian Government's vision for Australia's aviation sector towards 2050 to ensure it remains safe, competitive, productive and sustainable. The AWP builds on the Aviation Green Paper released in 2023.




The AWP outlines key policy approaches, directions and innovations in the aviation sector with a total of 56 policy initiatives across 10 key areas. These key areas are:

- A better passenger experience
- A competitive and efficient aviation sector
- A skilled, secure and productive workforce
- Maximising aviation's contribution to net zero
- Connecting regional Australia
- Regenerating General Aviation
- A balanced approach to airport planning and noise
- World leading safety, security and airspace regulation
- Enabling new aviation technologies
- Connecting Australia to the world.

Of relevance to Mildura Airport and the 2025 Master Plan, the AWP recognises the critical role of aviation for regional and remote communities in supporting essential services such as healthcare, education and freight, and that improving connectivity between regional and remote communities and larger centres will help promote the growth and prosperity of Australia's regions to 2050.

The AWP seeks to ensure that airports maintain a balance of commercial development to promote the sound development of civil aviation and to promote the efficient and economic development and operation of airports.

## 5.2 Aviation Green Paper

As the precursor to the AWP, the Aviation Green Paper ('**AGP**') identifies drivers of change and future industry scenarios for the aviation sector over the short-term (to 2030), medium-term (2030-2040) and long-term (2040-2050).

Of relevance to this master plan, the AGP states that regional aviation demand for passengers and freight is likely to continue in line with historical trends.

A key challenge for regional airports such as Mildura Airport will be the need to replace parts of Australia's ageing regional turboprop fleet in the medium-term, which may lead to changes in regional market dynamics.

Fleet replacement could involve aircraft upscaling, the use of more efficient aircraft or the uptake of electric-powered aircraft. These changes may also require regional airport infrastructure upgrades to accommodate newer, aircraft.

Airport infrastructure, for example, may in future need to support battery powered aircraft requiring consideration of grid connections, onsite electric infrastructure and charging and battery storage infrastructure. They may also need to support arrangements for the distribution of sustainable aviation fuel ('**SAF**').

The need to create sustainable, long term revenue streams from non-aviation development as well as aviation development is recognised within the AGP as follows:

> *Expansion of commercially operated airports is underpinned by their ability to draw income from non-aeronautical commercial development. This development further enables investment in aviation infrastructure and provides a necessary return on investment for the airports. It is important that a balanced approach between aviation and non-aviation development is undertaken to sustain the growth and development of the aviation sector over the long term.*

## 5.2 Asset and business resilience

The airport is an expensive, long term infrastructure asset to operate and maintain. Mildura Airport, like the global aviation industry, was subject to significant operational hardship due to the impacts of the Covid 19 pandemic. Ineligible to receive government assistance during this period, MAPL maintained an operational airport as essential infrastructure for services such as air ambulance and limited RPT flights.

In addition to having adequate financial reserves, a key lesson from the pandemic was that business and revenue diversification is vital in sustaining airport operations.

To date non-aviation development at the airport has been largely restricted to a small number of commercial tenancies, a cafe in the terminal building, car rental facilities and utilisation of disused hangars for storage or light industrial use. The supply of vacant, relatively flat land at Mildura Airport presents a significant and somewhat untapped opportunity to meet demand for local employment and future development including commercial and industrial land uses.

Provision of accommodation is one of a number of opportunities that could be developed to diversify the on-airport land use mix.

## 5.4 Advanced air mobility

Emerging aviation technologies are evolving constantly and are expected to transform conventional aviation and transportation systems more broadly. A significant degree of uncertainty exists over the modalities and timeframes of deployment. Advanced air mobility ('**AAM**') is expected to transform urban mobility, freight transportation and potentially, regional connectivity.

AAM systems could find applications in different transportation areas like freight movement (both long-distance and localised services), urban passenger mobility and regional connectivity in the long run. Some of these systems may require dedicated infrastructure to enable safe operations and co-existence with conventional aviation facilities. This may present a good opportunity for regional airports such as Mildura Airport. CASA, through '*The Remotely Piloted Aircraft Systems and Advanced Air Mobility Strategic Regulatory Roadmap*' has identified "infrastructure" among five other areas to be critical in enabling AAM systems within Australia.

AAM are often connected to drones and electric vertical take-off and landing ('**eVTOL**') aircraft, with larger payload capabilities generally, above 50 kgs payload than the smaller drones used for other purposes. In the future, these aircraft and their sub class, vertical take-off capable machines and drones, will have significant impacts on global freight and logistics and potentially also impact passenger business models in the longer term.

## 5.5 Sustainable aviation fuel

Aviation industry faces unique challenges in reaching decarbonisation goals as per Australia's *Climate Change Act 2022*. There will be a range of measures that will help maximise aviation's contribution to net zero including development and uptake of SAF.

SAF is an existing technology which will support aviation's transition to net zero, with synthetic SAFs, electric and hydrogen technologies likely to play important roles in the future. SAF is blended with conventional jet fuel in ratios of up to 50 percent to ensure compatibility with aircraft

fuelling systems. Across globe, the industry is working towards ratios of 100 per cent. Currently, there is no SAF incorporated into Australia's jet fuel supply. However, Qantas, has publicly committed to using 10% SAF in aircraft fuel by 2030 and other airlines and operators are expected to follow suit or even exceed that target.

SAF is expected to play a key role in helping meet carbon emissions reduction targets as they have a great potential to reduce the most carbon emissions when compared to other new propulsion technologies. SAF can be integrated into the fuel storage infrastructure and fuel delivery systems. Therefore, it has the potential to require minimal infrastructure upgrades to enable its supply.

## 5.5 Air freight

In Australia, air freight is generally low volume but high value. In the financial year 2022, the air freight volume of international flights handled in Australia was around 977 thousand tons. In the previous fiscal year, around one million tons of air freight volume was handled in Australia.

Most air freight capacity is provided by passenger airlines in the bellies of passenger aircraft on major passenger routes. The capacity available on an individual flight varies according to the number of passengers and their luggage being carried. The sale of freight capacity is essentially at a low marginal cost to passenger airlines.

Given available supply of land at Mildura Airport and air freight trends, a base level of potential exists for a dedicated freight and logistics facility to service the Sunraysia Region. Air freight generally requires cold stores and warehouse/distribution centers as well as associated security and customs facilities.

Mildura and the surrounding region have significant freight transportation needs to service the agricultural sector including fruit, wine, grain, and peas. The Murray Basin Rail Project has provided significant investment in freight rail including track upgrades and an expanded siding facility at Merbein. As a potential longer-term opportunity, scope exists to augment regional heavy rail freight movements with high value, air freight services at the airport.

## 5.6 Regional aviation and RPT

The importance and vitality of regional aviation and airports including their impact on communities and regional economies is highlighted in the AGP.

The introduction of newer airlines can have a significant and disruptive impact on regional aviation in Australia. New operators have led to improved regional services connecting regional tourism destinations and capital cities.

Over time, potential exists for AAM to balance the increasing costs of air travel while also introducing point-to-point networks and on-demand services.

Mildura Airport has a significant and expanding presence in the Australian aviation network. Up gauging of aircraft and increasing the number of destinations serviced by RPT at the airport will both be key future opportunities. It will be important not to diminish existing RPT service offerings as new routes are developed.

## 5.7 General aviation

GA is a diverse sector that plays a variety of important roles including servicing regional communities, delivering education and health services, regional freight and transport, tourism, recreation, agricultural mustering and spraying, instructional flying, sport, and pleasure flying, and emergency services. New technologies like AAM and drones are emerging into GA landscape.

Several sections of the GA sector are expanding and forecasted to grow positively in the coming years including growth in sectors like instructional flying, agricultural operations, business travel. Counterbalancing this, a general decline is envisaged in areas like aerial photography, recreational and sport flying activities, etc.

There is the potential for Mildura Airport to continue the current growth trajectory in instructional flying and agricultural flying. The climate of Mildura and the Sunraysia Region is a competitive advantage for GA flying at the airport.

Additional growth in pilot education and training with students sourced from both domestic and international origins is anticipated over the short – medium term.

## 5.8 Skill shortages in Australia

Skill shortages in the aviation sector globally are mirrored in Australia. As a cyclical industry, expansion and contraction in the aviation sector is closely connected to domestic and international economic conditions and trends.

The global pandemic had a substantial impact on the aviation industry with many workers including pilots permanently departing the sector. As the sector seeks to 'regrow' beyond pre-pandemic levels, there is a significant skill shortage, particularly in relation to commercial pilots.

Recent investments to address the pilot shortage in Australia include:

- Qantas Group's new purpose-built flight training centre in Sydney.
- Regional Express' buy-out of a flying training school at Ballarat Airport.
- RMIT university's new aviation academy in 2023, in addition to their existing pilot training programs at Point Cook and Bendigo airports.

As identified, the climate of Mildura provides excellent weather conditions for the training of the next generation of pilots.

## 5.9 Customer experience

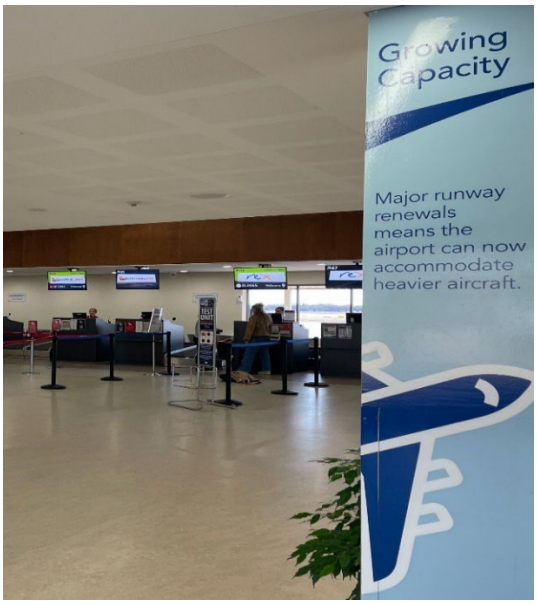
In the future, regional airports will need to provide authentic, unique, and seamless customer experiences. In this respect, Mildura Airport has an opportunity to move beyond point-to-point passenger movement to an interactive, inspiring, and personalised experience.

Enhancing customer experience through the implementation of newer technologies at airports will be critical.

Potential medium - longer term improvements in passenger facilitation at Mildura Airport include:

- Scanning process at check-in counters.
- Real time passengers' checked luggage tracking.
- Off-site processing of passenger information (before arriving at the airport).
- Use of biometric information for passenger identification.
- Real time luggage screening using AI.

In the future, all of these technological changes may have substantial impacts on airport operations, its facilities and customer experience.




# 6 AIRPORT GROWTH FORECASTS

The long-term capacity analysis will be used by MAPL to indicate the planning, development, and operational timing of new and upgraded airport infrastructure. Historically, capacity analysis and asset planning at the airport has been based on passenger rather than aircraft movements.

Understanding passenger movements is particularly important in forward planning the terminal and the landside area. Aircraft movements are however critical in the planning of core aviation infrastructure including runway upgrades, taxiway improvements and provision of RPT bays. It is therefore important to understand both passenger demand and aircraft movements to forward plan infrastructure and facilities for the airside and landside areas of Mildura Airport.

This master plan documents the strategic directions and development to meet the planned passenger and aircraft movement growth and, importantly to maintain an ongoing, sustainable revenue base for MAPL.

## 6.1 Passenger growth

Two major airlines, Qantas Link and Rex service a number of different routes including Melbourne, Sydney, Adelaide (subject to reintroduction).


**Figure 8 - RPT routes serviced by Mildura Airport**

Mildura Airport is approaching 270,000 passengers per year with a projected 3% growth rate. Currently, there are 25 RPT flights per day which represents approximately 7,500 movements per annum. Historically, the long-term passenger growth rate at the airport has been approximately 5% year on year.

Passenger movements over the last three years are shown below in Figure 9. It is noted that the first two years were heavily impacted by the Covid 19 global pandemic.

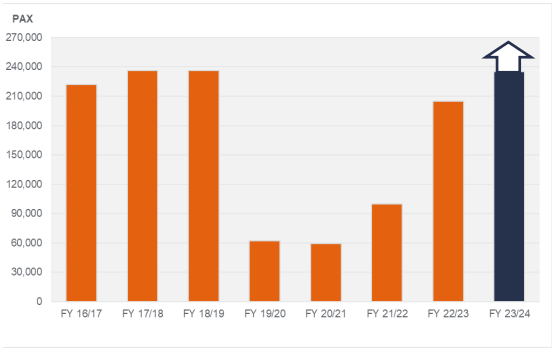



**Figure 9 - Number of PAX since 2017**

The 3% forecast level of passenger growth to be adopted in the 2025 Master Plan generally aligns with the historical long-term average. This will require the expansion of the existing airport facilities and infrastructure at Mildura Airport (e.g. terminal) to cater for increasing demand.

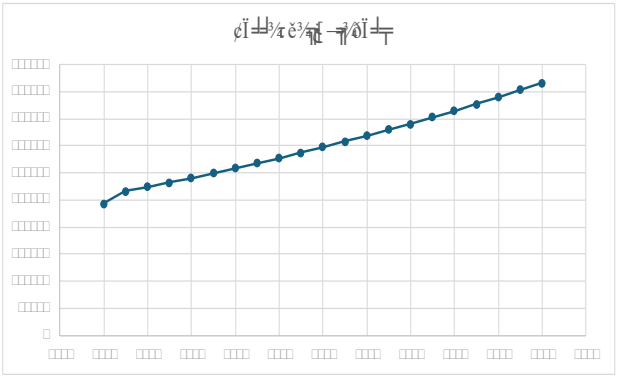


**Figure 10 - RPT routes serviced by Mildura Airport**

## 6.2 Aircraft movement growth

The overall growth in aircraft movements serving the passenger market at Mildura Airport is expected to be slower than that of passenger growth. It is generally assumed that the average number of passengers per movement will increase over time with some up gauging of aircraft by the airlines.

Primary aircraft movement growth at Mildura Airport over the planning horizon of this master plan will be associated with the operational activity of the flying school.

Prior to the Covid pandemic, aircraft movements for the year ending March 2020, were 56,096. During the pandemic this significantly decreased but has gradually been returning to pre-Covid levels. The predicted number of movements in 2024, based on pre-Covid activity and stakeholder consultation, is 55,000.

Applying a Compound Annual Growth Rate (CAGR) of 2% to the predicted 2024 number of movements, which is considered a reasonable growth rate having regard to local circumstances and industry trends, it is expected that Mildura Airport will increase to 81,727 movements per annum over the next 20 years.

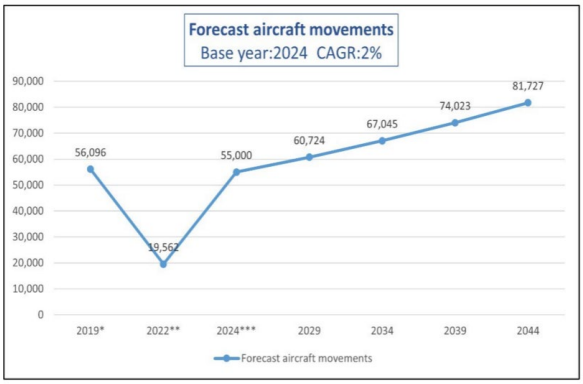



**Figure 11 - Forecast Aircraft Movements**

This forecast number of movements is well within the capacity of the existing runway system. The expected return to larger aircraft will however trigger the need for strengthening of the main runway.

# 7 AIRPORT LAND USE PLANS

## 7.1 Mildura Airport Land Use Plan

The land-use strategy for Mildura Airport designates three land-use precincts that each have a different focus or function.

These land use precincts are:

- Airside Precinct
- Terminal Precinct
- Landside Precinct.

The land-use precincts are the primary basis of future land-use and development planning for the airport. The associated concept plans identify a development intent and outline potential land-uses within each of the precincts.

Proposed land-uses may however vary from those shown on the concept plans to ensure that MAPL has a degree of flexibility to respond to new market opportunities and meet business performance expectations. Alignment with the development intent of each precinct will remain paramount.

The combined Airport Land Use Plan is shown in Figure 12. This plan presents the planned future development of the overall aerodrome site by MAPL, as reflected in the three precinct concept plans.

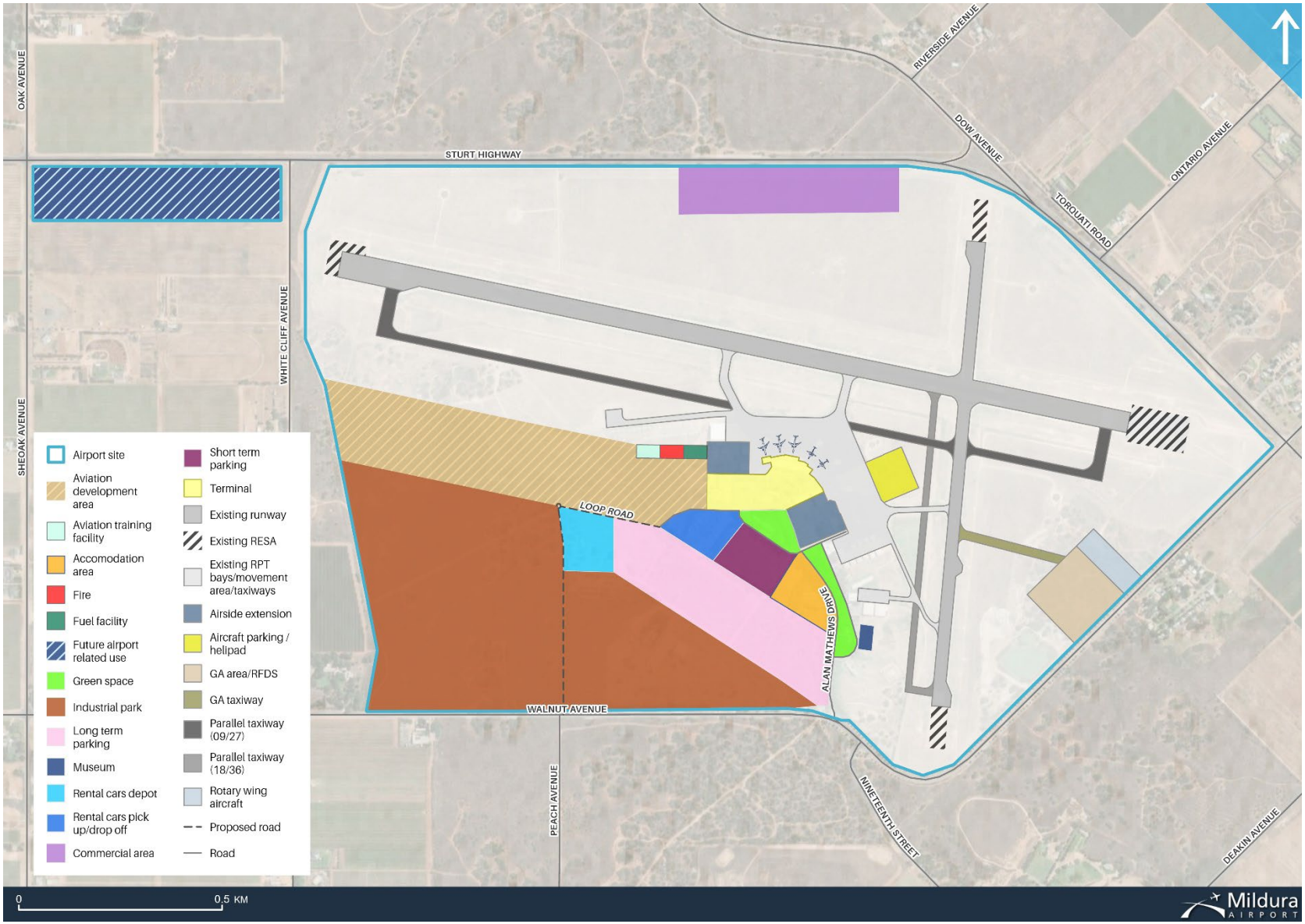



**Figure 12 - Mildura Airport Land Use Plan**

## 7.2 Airside Precinct Plan

Located in the northern half of the airport site, the Airside Precinct incorporates the movement area of aircraft including runways, taxiways, aprons, hangars, and support services.

The role of the Airside Precinct is to:

- Provide for safe, secure and efficient airfield activities, including aircraft landing, take-off, taxiing, handling and parking.
- Accommodate the provision of aircraft navigation aids, aviation rescue and other facilities essential for safe and efficient aircraft operations.
- Provide for 24-hours-a-day, seven-days-a-week aircraft operations.
- The Airside Precinct Concept Plan seeks to deliver timely, cost-efficient, airside infrastructure to accommodate existing and planned future aviation activities at the airport. As part of the core business of the airport, the focus for this precinct will be on aligning new infrastructure development with future demand and enhancing the overall customer experience for airlines, businesses and passengers.

Planned future airside facilities and infrastructure for the Airside Precinct are summarised as follows.

| Airside Land Use | Proposed Development | Strategic Justification |
|---|---|---|
| **Runway infrastructure** | • Plan for the next Runway 09/27 upgrade<br>• Runway 27 turning node<br>• Identify and protect land for the extension of Runway 09/27 | • A main runway overlay and extension project was undertaken by MAPL in 2017. The overlay project included the removal and replacement of the runway surface and strengthening of areas of the runway substrate. For various reasons including the expected increase and use of larger aircraft, the runway will require a further upgrade in coming years. As the centrepiece of the airport's infrastructure and to ensure ongoing safe, compliant operations, the upgrade of Runway 09/27 represents a priority project at the airport.<br>• Runway 09 has a turning node that enhances the efficiency of aircraft runway movements. As the predominantly used runway, a turning node at the Runway 27 end would enhance runway operational efficiency in the absence of a parallel taxiway system.<br>• The main runway extension constructed in 2017 represents the maximum length achievable within the confines of the existing aerodrome boundary. Historically, a long term Code E extension of the main runway has been envisaged at the 09 or western end of the aerodrome. Based on land assembly considerations and potentially less township impacts, a western extension option has been maintained as part of this master plan. Relative to an easterly extension of the main runway, significant earthworks are likely to be required for a westerly runway extension. A detailed analysis of the main runway extension options will be undertaken at the appropriate stage by MAPL. |
| **Taxiway improvements (capex)** | • Undertake general taxiway improvements to optimise aircraft movements and avoid backtracking. This includes a staged, parallel Code C taxiway to service Runway 09/27. A parallel taxiway for Runway 18/36 is a longer term improvement of the taxiway system.<br>Improve runway capacity through additional runway exits and entries to reduce the runway occupancy time. | • Without a full length parallel Code C taxiway for the main runway, aircraft backtracking is required for the majority of movements at the airport. Consistent with previous master plans, the 2025 Master Plan provides for a staged parallel taxiway to Runway 09/27. Stage 1 incorporates a parallel taxiway extending eastwards from Taxiway Charlie through to Runway 27. Stage 2 would involve a westerly extension from Taxiway Delta through to the Runway 09 threshold.<br>• With two closely separated main runway entry and exit points, runway occupancy is excessive. This will only be exacerbated by the planned future increase in aircraft movements at the airport. A parallel taxiway for the main runway provides scope for additional entry and exit points.<br>With a projected increase in flight training and GA movements over the planning horizon, a parallel taxiway located on the western side of Runway 18/36 is a longer term improvement of the taxiway system. |

| Airside Land Use | Proposed Development | Strategic Justification |
|---|---|---|
| **RPT bays** | • Establish additional RPT bay(s) to service commercial passenger aircraft in association with the future terminal expansion. | • With three major airlines now servicing five different routes (assuming the reactivation of an Adelaide service), RPT bay occupancy is increasing. The five existing power in – power out bays can become congested due to aircraft serviceability issues and adverse weather.<br>• One of the key physical constraints at Mildura Regional Airport is the close proximity of the terminal to the main runway (i.e. 250m). As a consequence of this setback, the available RPT apron depth is relatively shallow, (i.e. 100m). The natural flow of RPT activity is generally in a south-easterly direction towards the apron area adjacent to the Bellman Hangar. Subject to further structural investigations, this master plan identifies the relocation of the Bellman Hangar to the new RAAF museum area.<br>• Additional RPT bays are required in the medium to longer term to accommodate airline growth. |
| **General aprons** | • Expand aircraft parking apron capacity for aircraft movement and parking. | • As the number of permanent and itinerant aircraft increase at the airport, particularly with the remobilisation and growth of the flight school, there is a demonstrable need to expand aircraft parking apron capacity in order to support this growth. The planned terminal development provides scope for an expansion of the airside area and aircraft parking apron capacity. |
| **General aviation area including flight training facilities** | • Create, subject to technical investigations, a dedicated general aviation area in the south-eastern corner of the airport with dedicated landside access/entry and taxiway. | • The GA sector is made up of all non-scheduled flying activity in VH registered aircraft and RA-Aus registered recreational aircraft. Additional hangarage and formal/informal tie down parking is required for both permanent and itinerant GA aircraft. A new, standalone GA area would provide a degree of functional separation from RPT operations and improve movement area safety.<br>• The spatial demands and operational requirements of emerging AAV technologies is challenging to forecast. The new GA area, separated from RPT services, would present a suitable location for AAV technologies. |
| **Aircraft parking area** | • Plan, design, and construct a new aircraft parking area adjacent to the existing midfield windsock. | • Aircraft, particularly Code B aircraft, are regularly required to park on the grassed midfield area. This area can become unusable in major rain events. A sealed midfield parking area would have the added benefit of freeing up the primary aircraft movement area. |

| Airside Land Use | Proposed Development | Strategic Justification |
|---|---|---|
| **Rotary aircraft parking** | • Plan, design, and construct a new rotary aircraft parking area adjacent to the existing midfield windsock. | • There is currently no dedicated apron area or associated infrastructure for helicopters (i.e. a heliport) at the airport. Emergency services and the Police Air Wing regularly visit. Increasingly, military, and commercial helicopters stopover due to the strategic location of the airport.<br>• The establishment of a small, dedicated rotary wing area is identified to the north of Taxiway Bravo in this master plan. The provision of rotary aircraft parking is proposed as a short to medium term development project. |
| **Rescue/firefighting facility** | • Subject to aviation demand and regulatory requirements, develop a rescue and fire facility in a dedicated aviation support and emergency services precinct. | • The current criteria for the establishment of Aerodrome Rescue and Fire Fighting Services ('**ARFFS**') are: 1. An aerodrome which an international passenger air service operates and 2. A domestic aerodrome, which more than 350,000 passengers passed through on air transport flights during the previous financial year.<br>• An operational objective of the ARFFS is to achieve a two minute response time to the end of each runway. A central site location adjacent to the aviation development area is proposed to meet this criterion. |
| **Aviation fuel** | • Develop and implement a multi-node fuel strategy to service various aviation needs including the future supply of sustainable aviation fuels. | • AVGAS and AVTUR (Jet A1) are available from a contracted fuel provider. Both fuel types are distributed by tanker vehicles, and self-serve AVGAS dispensers are also provided. |
| **Visual surveillance system for aerodrome control services** | • Future proof the introduction of a visual surveillance system for the provision of aerodrome control services. | • Air to air communication at Mildura Airport is currently provided through the Common Traffic Advisory Frequency ('**CTAF**'). Based on the projected growth and mix of aircraft movements at the airport, air traffic control services are expected to be required by 2045.<br>• A facility for the provision of aerodrome control service must be designed and equipped to enable a controller to maintain visual observation. Historically, this was achieved through direct out-of-the-window observation (i.e. control tower). The modern alternative comprises indirect observation by air traffic controllers using a visual surveillance system that meets the air traffic management requirements of Part 172 of the Manual of Standards. |

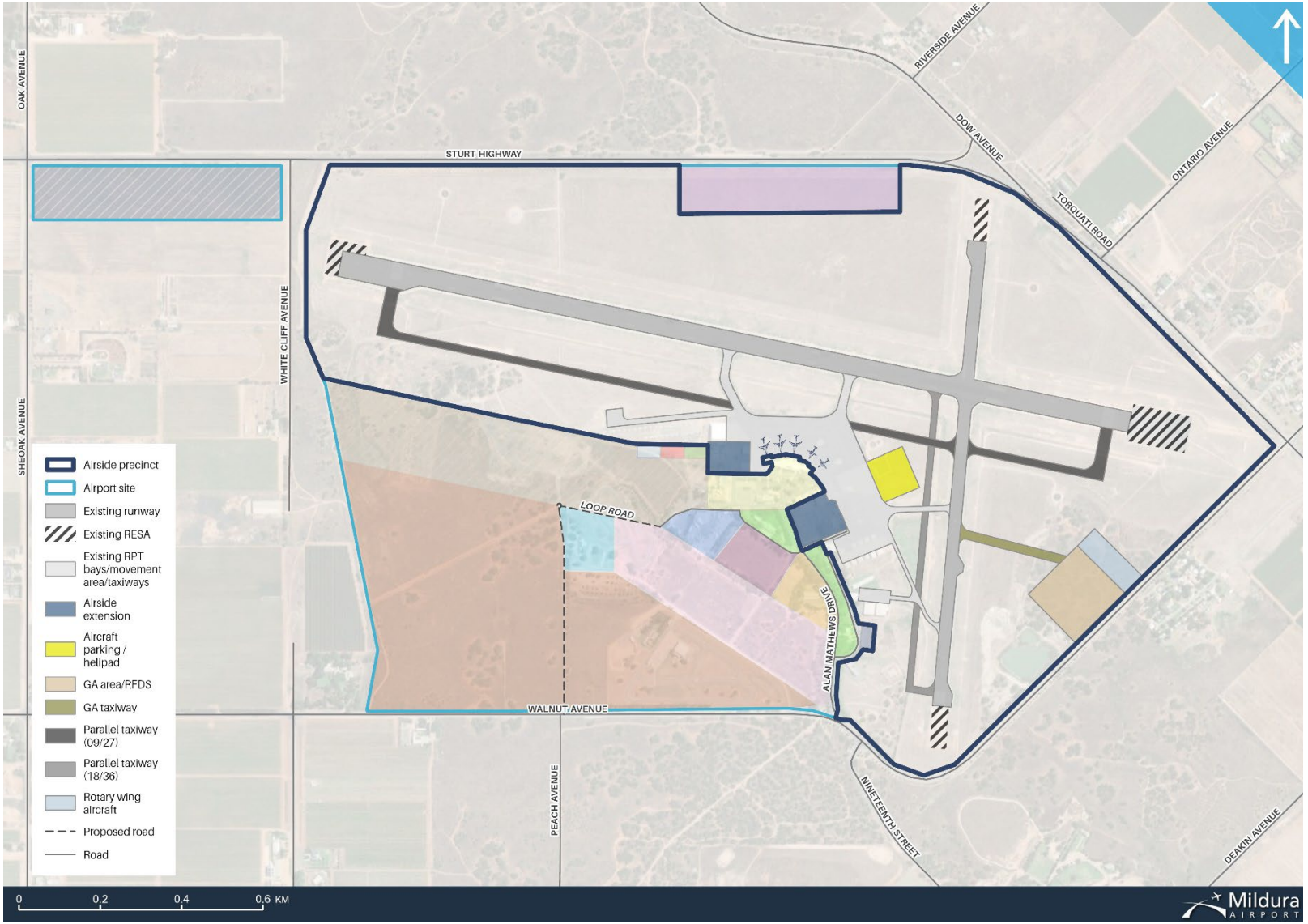



**Figure 13 – Mildura Airport Airside Precinct Concept Plan**

## 7.3 Terminal Precinct Plan

The role of the Terminal Precinct is to:

- Provide for the operation, use and development of land for passenger and baggage processing, enabling the terminal facilities to operate safely, securely, efficiently and cost-effectively.
- Provide appropriate facilities for airlines and passengers, including efficient terminal facilities with adequately located and sized commercial areas.
- Provide a facility with ample space for a range of commercial land uses.
- Provide for flexible expansion to meet forecast demand.

The Terminal Precinct Plan has been developed to protect and future proof the expansion of the existing terminal building at Mildura Airport.

The existing terminal building was opened in 2012. Significant airline and passenger growth since then has resulted in the need to grow and add terminal capacity and improve passenger experience. The terminal building has a below standard setback and positioning relative to Runway 09/27 and taxiway infrastructure.

The critical measure of the terminal's ability to cope with demand is the number of passengers presenting for departure in a single hour period, known as the 'busy hour'.

Aligned to future passenger movements and airline scheduling, the logical plan is to remove the northern sections of the building and develop the terminal in a southwards direction progressively creating both a deeper and wider terminal building. Reconfiguration of existing ground transport access and parking arrangements is an enabling step for the terminal expansion.

Planned future development for the Terminal Precinct is summarised as follows.

| Terminal land use | Proposed development | Strategic justification |
|---|---|---|
| **Terminal building expansion** | • Undertake a terminal expansion to create a deeper and wider terminal footprint.<br>• Increase terminal setback distance from Runway 09/27. | • Consistent with the 2017 Master Plan, the current terminal asset will form the basis of the long-term future planning of both the airside and landside areas. As dictated by passenger movements and RPT scheduling, the logical plan will be to develop the terminal in a southerly direction progressively creating a deeper and wider terminal footprint. This reconfiguration would importantly increase the setback distance of the terminal from Runway 09/27 is a necessary outcome.<br>• A southward expansion of the terminal would have consequential impacts on the forecourt, existing car parking and access arrangements as well as existing building assets such as the airport administration building.<br>• In the short-medium term, land located to the south-east of the existing car rental area will need to be converted into car parking.<br>• An expanded terminal building will require a new forecourt area including a gateway and sufficient space for passenger pick up and drop offs.<br>• All future landside development should have regard to the planned increased terminal footprint. |
| **Car park redevelopment** | • Reconfigure car park in conjunction with the terminal expansion. Car parking to be repositioned to less strategic land and segmented for customers.<br>• Public transport provision at the airport to be future proofed in conjunction with CDC Victoria. | • The warm climate at Mildura dictates the need for the provision of covered car parking spaces.<br>• Car parking currently occupies valuable, strategic land. Relocation to surplus land with a greater offset from the terminal building is warranted.<br>• Capacity exists to expand on existing car parking customer segments similar to capital city airport parking management systems.<br>• Increase public transport mode share and provide additional transport optionality for passengers by expanding the existing 250/300 bus route to include a stop at Mildura Airport where currently no public transport exists. |

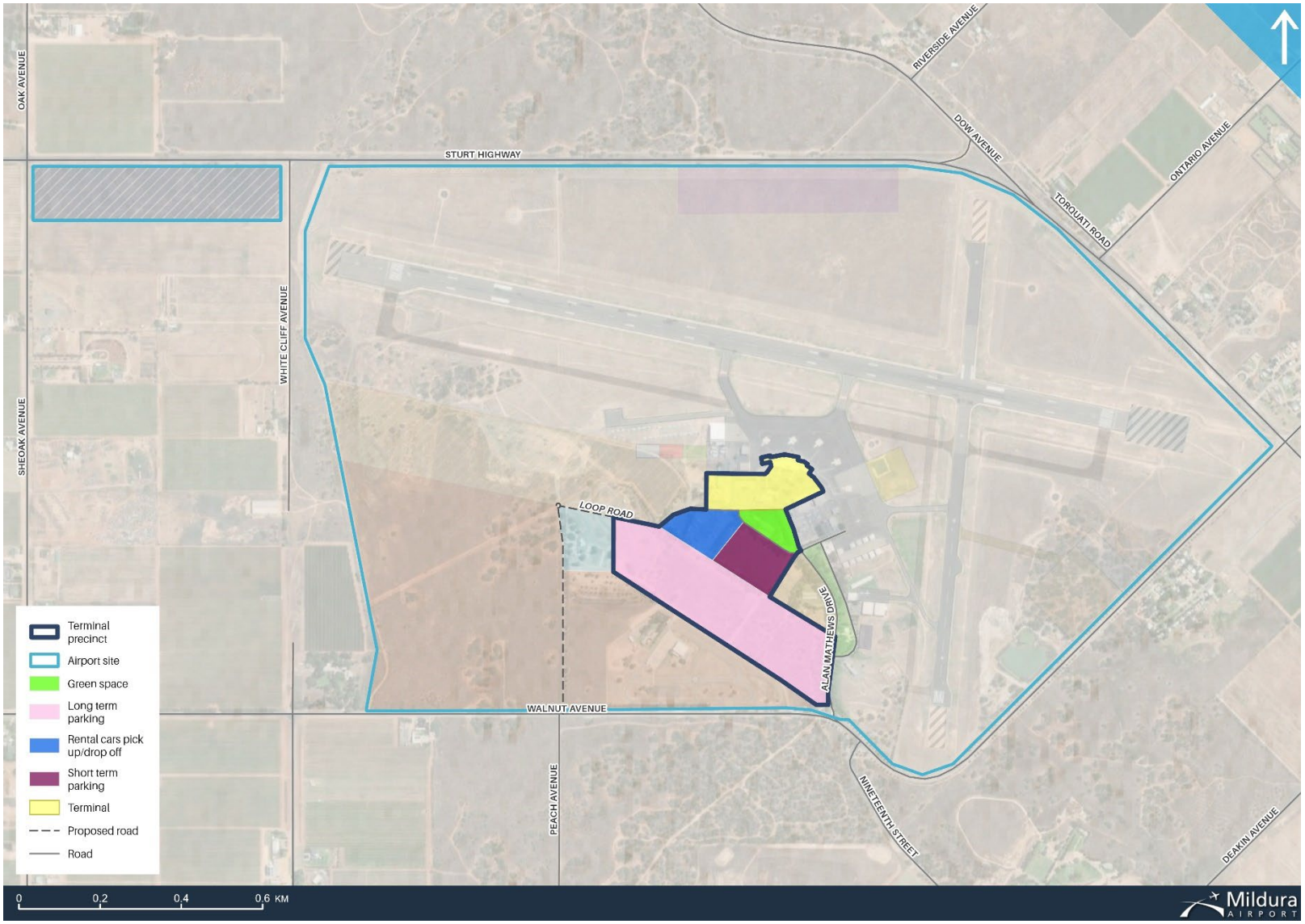



**Figure 14 – Mildura Airport Terminal Precinct Concept Plan**

## 7.4 Landside Precinct Plan

The Landside Precinct comprises an area of 75 hectares and is located predominantly in the southern half of the airport site.

The role of the Landside Precinct is to:

- Provide associated facilities and services that support the core aviation activities of the airport including integrated parking and ground transport infrastructure.
- Encourage developments that complement the airport's key functions, support aeronautical activities and enhance the passenger experience.
- Diversify the overall revenue base and contribute to the overall financial sustainability of the airport.

Non-aviation development plays an important role in the overall financial sustainability and viability of the airport. Complementary to key aeronautical business functions, it has a vital role in supporting the airport's growth and development. Flexibility to respond to new commercial opportunities is critical as is the need to protect and safeguard the airport's core aviation activities.

*Expansion of commercially operated airports is underpinned by their ability to draw income from non-aeronautical commercial development. This development further enables investment in aviation infrastructure and provides a necessary return on investment for the airports. It is important that a balanced approach between aviation and non-aviation development is undertaken to sustain the growth and development of the aviation sector over the long-term.*

*(Aviation Green Paper, 2023)*

This master plan outlines MAPL's aspirations and development intent for the future growth and expansion of the Landside Precinct. The landside area presents a major opportunity to deliver compatible aviation support and non-aviation land uses and development in a strategically planned and integrated manner.

Potential land use and development opportunities for the Landside Precinct at the airport are summarised below, with several identified through an aspirational lens to guide long-term planning and vision.

| Landside area | Proposed development | Strategic Justification |
|---|---|---|
| **Internal road network** | • Reconfiguration of Alan Mathews Drive in conjunction with the terminal development to establish a one-way loop arrangement to enhance traffic efficiency and safety. | • In conjunction with the terminal expansion project, a one-way loop road arrangement is proposed to enable more efficient flow of traffic into the terminal. |
| **Aviation development area** | • Creation of an aviation development area at the western end of the aerodrome to accommodate freight and logistics facilities together with aviation support activities such as maintenance, repair, and overhaul ('**MRO**') businesses. | • The existing RPT bays are used for the transfer of belly freight. Based on the predominance of turboprop aircraft, freight movement is minimal. Limited scale freight transfers occur, as required, on the existing western apron.<br>• In the longer term, there is potential for a dedicated air freight service to operate into and out of Mildura. The south-western section of the airport landholding presents the logical location for associated freight warehousing and cold storage facilities. The proposed industrial park would have a direct interface with the aviation development area.<br>• Aircraft MRO businesses, particularly those displaced or relocating from capital city airports could be accommodated in this area of the landside precinct.<br>• There is currently no demonstrable demand for the provision of dedicated facilities for business aviation purposes. The aviation development area provides scope to accommodate business aviation infrastructure and services, should market demand arise in the future. |

| Landside area | Proposed development | Strategic Justification |
|---|---|---|
| **Accommodation area** | • Establishment of an accommodation area near the long-term car parking area. Accommodation types could include short stay rooms, serviced and non-serviced apartments, and backpacker lodging. | • Major airports across Australia typically contain some form of convenient accommodation for airport customers and/or flight training students. As a key feature of this master plan, MAPL is proposing an integrated accommodation and parking area as part of the Landside Precinct.<br>• There is a major opportunity to provide additional, quality accommodation in Mildura. On airport accommodation for passengers would help create a more seamless travel experience. The existing flying school at the airport has international students and the capacity to live and learn in an airport environment provides an immersive offer and competitive advantage relative to other locations. |
| **RAAF Museum** | • Construction of a new RAAF Museum on airport land, incorporating salvageable and relocated building features such as original windows and awnings to help preserve the history and heritage of the site. | • Subject to finalisation of the current business case under development, a short – medium project is the relocation of the existing RAAF Museum to a new, purpose-built, independently operated facility in a dedicated aerodrome heritage precinct near the existing BOM facility. |
| **Bellman Hangar** | • Relocation of the Bellman Hangar adjacent to a proposed new museum in an aerodrome heritage area. | • The existing Bellman Hangar is used for premium, undercover, customer car parking. It occupies a strategic, highly valuable location that has been earmarked for the expansion of the Airside Precinct.<br>• The Kittyhawk business case outlines the relocation of key structural elements of the Bellman Hangar — including its original doors and selected industrial materials — to the proposed museum location, helping to preserve the history and heritage of this important aviation asset for future generations while allowing for the existing space to be utilised for the precinct extensions. |

| Landside area | Proposed development | Strategic Justification |
|---|---|---|
| **Go-kart track** | • The Go-kart track, is a highly valued community asset that occupies a strategic landside area at the airport. | • The 2017 Master Plan identified the repurposing of the Go-kart track for aviation support and car parking purposes.<br>• As a commitment in this master plan, MAPL will work collaboratively with the Go-kart track committee to better understand their facility needs and spatial requirements in order to define a suitable long term option for both parties. |
| **Industrial park** | • Repurpose underutilised land in the south-western area of the airport for the purposes of an industrial park. The industrial park would accommodate a range of industrial uses with a general preference for freight and logistics businesses that derive a benefit from airport proximity.<br>• Create flexible and accessible super lots for industrial development by the private sector. | • An industrial park area provides a significant opportunity to activate long-term underutilised land and diversify MAPL's revenue base. Given the relatively flat, unencumbered land, a major opportunity that could be facilitated in the industrial park is the establishment of an intermodal freight hub.<br>• It has suitable attributes to accommodate the development of future small – medium sized transport and logistics facilities as and when the market has sufficient demand. Scope also exists for manufacturing (light/advanced technologies), as well as agricultural and food processing and storage facilities aligned to the local region. |
| **Highway commercial area** | • Subject to MOS requirements, optimise highway frontage land for commercial land use purposes compatible with the surrounding airport environs. | • An area of potential non-aviation (commercial) development has been identified in the northern section of the aerodrome. This area adjoins Sturt Highway and is particularly well suited to commercial land uses that would derive benefit from a highway frontage. A service station would be a potential land use option for this location.<br>• The development of this high exposure area of the airport for a range of non-aeronautical activities would be subject to further investigation by MAPL and market demand. |

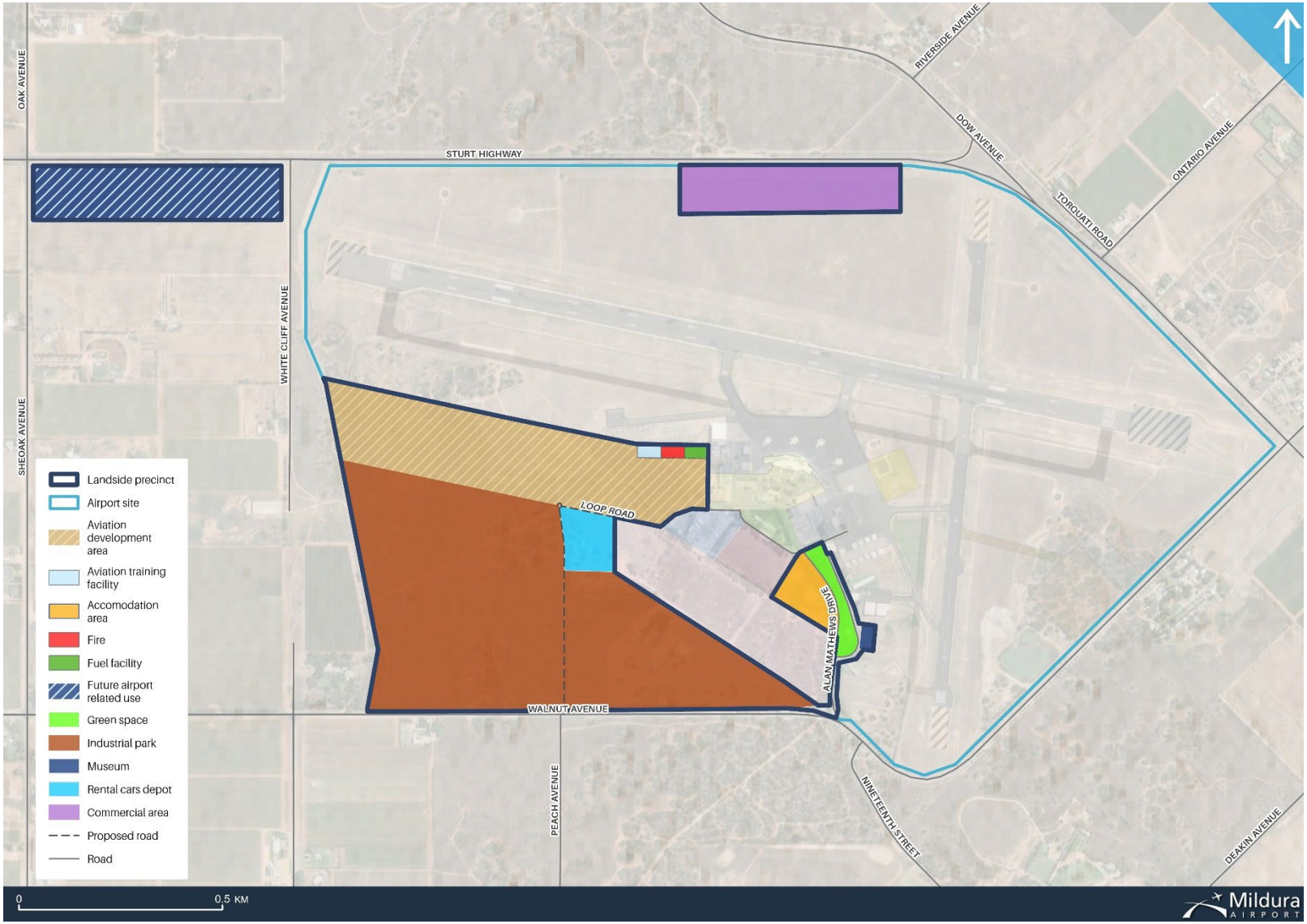



**Figure 15 – Mildura Airport Landside Precinct Concept Plan**

# 8 AIRPORT SAFEGUARDING STRATEGY

New developments that encroach on the environs of Mildura Airport have the potential to restrict ongoing operational activity.

An open and transparent approach to future planning and development by Council and MAPL will enable the airport to operate without compromising the needs of the wider community.

To better protect communities from incompatible developments around airports, the Australian Government plans to work with other levels of government to strengthen the adoption and application of the National Airport Safeguarding Framework (NASF) in state and territory government planning frameworks.

## 8.1 National Airport Safeguarding Framework

The NASF is a national land use planning framework that aims to:

- Improve community amenity by minimising aircraft noise-sensitive developments near airports; and
- Improve safety outcomes by ensuring recognition of aviation safety requirements in land use planning decisions.

NASF was developed by the National Airports Safeguarding Advisory Group ('**NASAG**'), comprising Commonwealth, State and Territory Government planning and transport officials, the Australian Government Department of Defence, the Civil Aviation Safety Authority, Airservices Australia and the Australian Local Government Association.

NASF is comprised of a set of seven principles and nine guidelines. The NASF principles are:

- Principle 1 – The safety, efficiency and operational integrity of airports should be protected by all governments, recognising their economic, defence and social significance
- Principle 2 – Airports, governments and local communities should share responsibility to ensure that airport planning is integrated with local and regional planning
- Principle 3 – Governments at all levels should align land use planning and building requirements in the vicinity of airports
- Principle 4 – Land use planning processes should balance and protect both airport/aviation operations and community safety and amenity expectations
- Principle 5 – Governments will protect operational airspace around airports in the interests of both aviation and community safety
- Principle 6 – Strategic and statutory planning frameworks should address aircraft noise by applying a comprehensive suite of noise measures
- Principle 7 – Airports should work with governments to provide comprehensive and understandable information to local communities on their operations concerning noise impacts and airspace requirements.

The nine 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
- Guideline G – Protecting Aviation Facilities – Communication, Navigation and Surveillance
- Guideline H – Protecting Strategically Important Helicopter Landing Sites
- Guideline I – Managing the Risk in Public Safety Areas at the Ends of Runways.

NASF is referenced in the Planning Policy Framework of all Victorian planning schemes in Clause 18.02-7S: Airports and Airfields.

## 8.2 Managing aircraft noise

The consideration of aircraft noise effects is an important airport safeguarding matter, as outlined in *NASF Guideline A: Measures for Managing Impacts of Aircraft Noise*.

This element of the safeguarding framework seeks to ensure that:

- Sensitive land uses are not located in areas of unacceptable aircraft noise
- The amenity of surrounding developments is not adversely affected by aircraft noise
- Airport operations are protected long term from conflicts due to the encroachment of inappropriate development into noise affected areas.

### Australian Noise Exposure Forecast

An integral part of managing aircraft noise is the preparation of an Australian Noise Exposure Forecast ('**ANEF**'). An ANEF is a contour map showing the forecast of aircraft noise levels that are expected to exist around an airport in the future.

An ANEF chart, once endorsed by Airservices, is the official forecast of future noise exposure around an airport. It constitutes the contours on which planning authorities base their land use controls and is the approved metric across all Australian jurisdictions for statutory land use planning in noise-affected areas around airports.

Recommendations relating to land use within the ANEF contours are contained in Australian Standard AS2021-2015: Acoustics – Aircraft Noise Intrusion – Building Siting and Construction.

The Mildura Planning Scheme contains Airport Environs Overlay Schedules 1 and 2 (AEO1 and AEO2) which assist in the implementation of the AS2021 land use recommendations.

### N contours

The NASF Guideline A contains further information and recommendations regarding aircraft noise contours which should be considered by airport operators. This includes the use of the 'Number Above' noise metric (commonly referred to as 'N contours') to supplement the ANEF.

One of the principles of NASF is:

*"Strategic and statutory planning frameworks should address aircraft noise by applying a comprehensive suite of noise measures."*

The N-contour system is a complementary aircraft noise metric that shows the potential number of aircraft noise events above 60dB(A), 65dB(A) or 70dB(A) per day. It has some advantages over the ANEF system because it shows noise in a way that a person perceives it – as a number of single events per day above a certain decibel level.

NASF Guideline A recommends the use of N-contours for strategic planning purposes. This is particularly important for the consideration of any proposals for zoning changes for residential purposes near the airport and its flight corridors.

In relation to N contours, Clause 18.02-7S: Airports and Airfields states:

*"Avoid zoning or overlay changes that allow noise-sensitive land uses outside the Urban Growth Boundary, and encourage measures to reduce the impact of aircraft noise in planning for areas within the Urban Growth Boundary, where ultimate capacity or long-range noise modelling indicates an area is within 'number above' contours (N Contours) representing:*

- *20 or more daily events greater than 70 dB(A).*
- *50 or more daily events of greater than 65 dB(A).*
- *100 or more daily events greater than 60 dB(A).*
- *6 events or more between the hours of 11pm to 6am greater than 60 dB(A)."*

### Noise Modelling Study

ANEF and N contours have been prepared for Mildura Airport in association with this master plan. Copies of the contour charts produced are contained in **Appendix B**.

These contours are based on the 20-year (2045) forecast growth in aircraft movements at the airport. Refer Section 6.2 of this master plan.

## 8.3 Protection of airspace

The protection of airspace surfaces is another critical airport safeguarding matter, as outlined in *NASF Guideline F: Managing the Risk of Intrusions into the Protected Airspace of Airports*.

The airspace protection surfaces comprise the Obstacle Limitation Surfaces ('**OLS**') and the Procedures for Air Navigation Services – Aircraft Operations ('**PANS-OPS**') surfaces.

### Obstacle Limitation Surfaces

An airport's OLS define the operational airspace that should be kept free of obstacles for aircraft operations being conducted under the visual flight rules. Both current and future (ultimate) OLS should be considered in the design of developments on and within the vicinity of the airport. An OLS chart is required for all certified airports.

Within the airport site, the OLS are particularly relevant for the development of landside facilities and will influence the location and height of future development on the site. Limiting the height of development close to runway is critical. Future development areas on the airport, particularly close to the runways, should have a maximum building height restriction applied, as per the airport OLS chart, to ensure that buildings and other structures do not intrude into the applicable airspace surfaces.

The Design and Development Overlay Schedules 6, 7 and 8 (DDO6, DDO7 and DDO8) in the Mildura Planning Scheme assist in protecting the OLS.

### Procedures for Air Navigation Services – Aircraft Operations

PANS-OPS surfaces define the operational airspace a pilot is required to use when flying an aircraft under the instrument flight rules - that is, when relying on instruments for navigation. Development should seek to avoid any permanent encroachments into current and future PANS-OPS airspace.

## 8.4 Other NASF matters

Whilst aircraft noise and airspace protection are the two most critical matters to safeguard the aerodrome, as outlined above, the assessment of land use and development proposals around Mildura Airport must consider all of the NASF guideline matters, in accordance with Clause 18.02-7S: Airports and Airfields of the Mildura Planning Scheme.

The following guidelines (in addition to Guidelines A and F discussed above) are considered particularly relevant:

- 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 E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports
- Guideline I: Managing the Risk in Public Safety Areas at the Ends of Runways.

To assist in the consideration of these guidelines in future off airport land use and development planning, diagrams showing the different areas of land to which these NASF guidelines apply are provided in **Appendix C**.

## 8.5 Planning Scheme updates

Planning policies and controls in the Mildura Planning Scheme that assist in safeguarding the airport. These include:

- Clause 18.02-7S: Airports and Airfields
- Clause 18.02-7L: Mildura Airport and Environs
- Airport Environs Overlay – Schedules 1 and 2 (AEO1 and AEO2)
- Design and Development Overlay – Schedules 6, 7 and 8 (DDO6, DDO7 and DDO8).

These planning policies and controls generally provide an appropriate level of protection for the airport having regard to NASF.

Following adoption of the Mildura Airport Master Plan 2025, a planning scheme amendment is recommended to:

- Update Clause 18.02-7L to refer to the 2025 Master Plan
- Update the extent of the Airport Environs Overlay having regard to the new ANEF.

# 9 COMMUNITY

## 9.1 Community focus

> Our charter is to operate, manage and develop the Airport on behalf of the community.

Mildura Airport connects people, and it connects places – it is an essential community infrastructure asset.

In addition to servicing aviation demands and needs for Mildura and the surrounding region, the airport provides community connectivity and economic opportunity. The airport is a major contributor to the local economy with tangible socio-economic benefits for the community. As a major employment hub, aviation and non-aviation jobs at the airport provide tangible social benefits. Employees of MAPL live and work in the local community.

MAPL greatly values a positive relationship with the local community and continually strives to improve its service offering to cater to the needs of the region.

### Local contributions

MAPL values being part of and contributing to the Mildura community. A range of activities, events and open days are regularly held at Mildura Airport.

Key local contributions include:

- Hosting local school visits and providing airport tours.
- Conducting children's activities including holiday programs and competitions.
- Supporting various charitable institutions and events including:
  - RAAF Museum
  - RSPCA appeal
  - White Ribbon Program
  - Jeans for Genes Day
  - R U Ok Day
  - National Tree Day.

Various communication and engagement activities are undertaken by MAPL on an ongoing basis to inform, consult and involve participants across the local community. In implementing the key projects and initiatives outlined in this master plan, MAPL will continue to communicate and engage with the local community to maximise benefits and opportunities for the community.

## 9.2 Engagement

In the planning, design and delivery of new projects and initiatives, MAPL communicates and engages with the local community, customers, various tiers of government and other stakeholders.

In delivering the planned growth and development of Mildura Airport over the next 20 years, MAPL, similar to other major airports throughout Australia will continue to engage with the local community.

## 9.3 Fly Friendly Program

MAPL encourages its aviation tenants and operators to follow a "Fly Friendly Program". The program is voluntarily participation initiative to reduce the impact of aircraft operations on the surrounding Mildura community. It is designed to promote the safe and environmentally responsible behaviour of pilots and includes practical measures to decrease noise.

Scheduled RPT operations predominantly use the main runway (i.e. Runway 09/27). Movements for other aircraft operators such as circuit training, GA and helicopters are dispersed across all four runways.

With flying schools being a strategic opportunity for the airport, a strengthened fly friendly program ensures that any noise related matters for the local community are dealt with safely and efficiently.

# 10 ENVIRONMENT

MAPL acknowledges its responsibility as the custodian of the airport land and assets as well as the need to limit the impact of operations on the natural environment.

## 10.1 Environmental management

Environmental management is a key element of ongoing operations. Identifying and controlling airport activities with a potential environmental impact is standard business practice for MAPL. This includes monitoring of stormwater, storage tanks, fuel facilities and development sites on the aerodrome.

In the planning and design of new projects, MAPL strives to limit adverse environmental impacts. Wherever possible, opportunities for environmental enhancement will be identified based on a net gain philosophy.

In the implementation and delivery phase of projects, a Construction Environmental Management Plan ('**CEMP**') is required from the appointed contractor. Measures to prevent, control and reduce environmental impacts are key elements. Independent auditing and monitoring is a standard delivery phase requirement.

All operations at the airport are undertaken in accordance with relevant environmental legislation and standards. In addition to these requirements, MAPL will continue to promote best practice environmental management to tenants, contractors and other on-airport businesses.

## 10.2 ESG

MAPL is committed to sustainable outcomes and impacts in all aspects of managing and operating Mildura Airport. A Mildura Airport Environmental, Social and Governance ('**ESG**') Plan has been adopted by the MAPL Board.

Embedding ESG in all functions of the business and incorporate it into business values and the day to day culture is a key priority for MAPL in coming years. Transitioning from words into ESG actions will be paramount.


A critical part of any organisation's ESG performance is its relationships with First Nations communities. MAPL has an ongoing role and commitment in ensuring appropriate consultation and inclusion, ethical practices and support for local First Nations businesses and workers.

## 10.3 Transitioning to net zero

A focus for MAPL in coming years will be maximising the airport's overall contribution to achieving net zero carbon emissions. MAPL may have a role to play in facilitating and supporting the adoption of electric and hydrogen fixed-wing aircraft as tangible ways to achieve decarbonisation.

Direct GHG emissions released under MAPL's control (Scope 1) and indirect GHG emissions (Scope 2) will be a short-medium term focus.

The regional aviation sector has a number of challenges to progress towards the goal of net zero. MAPL commits to reviewing and where possible, implementing the Commonwealth Government's proposed Transport and Infrastructure Net Zero Roadmap and Action Plan.

# 11 GROUND TRANSPORT PLAN

Mildura Airport has experienced a sustained increase in passenger growth over the last decade. The number of passengers is expected to rise to over 450,000 by 2045. As a result of this growth, the existing ground transport infrastructure will need to be augmented and improved to accommodate the future accessibility and mobility needs of passengers, airport visitors and staff.

The Mildura Airport Ground Transport Plan outlines potential actions and strategies for the development of the ground transport facilities and infrastructure to enable safe, efficient and reliable ground transport to, and within, the airport.

## 11.1 Transport Context

### External road network

The airport is connected to the Sturt Highway, a state declared Arterial Road, via Walnut Avenue (Council Road) as shown in Figure 17. Sturt Highway connects the Mildura city centre to the South Australian border and onto Adelaide. Sturt Highway carries approximately 2,000 vehicles per day and comprises a two-lane, two-way carriageway.

Alan Mathews Drive (Council Road) provides direct access to the airport via the unsignalised intersection at Walnut Avenue. Alan Mathews Drive was gazetted as a public road in 2008 and comprises a two-lane, two-way carriageway with a 50km/h posted speed limit. It currently services the existing airport traffic demand adequately. As result of the planned future growth identified in this master plan, the existing road layout will require augmentation and improvement.

### Public transport

Mildura Airport is not currently serviced by a public bus route even though it is situated within 8km of the Mildura city centre. An opportunity exists to connect an existing bus route to the airport to improve connectivity for airport users and thereby reduce the reliance on private vehicles. The existing bus routes operating near the airport are shown in Figure 18 .

### Active transport

Active transport (walking and cycling) connectivity is not currently available on the external road network including Walnut Avenue, Sturt Highway and Deakin Avenue. Except for pedestrian footpaths at the front of the terminal, no walking and cycle facilities are provided on the airport.

The *Mildura CBD Access and Mobility Strategy,* adopted by Council on 24 February 2022, designates Deakin Avenue as a strategic cycling corridor. Improvements along this transport corridor through to Walnut Avenue would enhance connectivity and support the potential for local trips by walking or cycling to the airport.

### Rental vehicles

There are several rental vehicle companies located at Mildura Airport. Service desks are provided in the terminal building and associated maintenance and car washing facilities are in Caldwell Court. Rental car pickups and drop-offs are situated outside the arrivals area of the terminal. Car rental is a key service for visitors to Mildura and the Sunraysia region.

### Internal road network

The airport is serviced by Alan Mathews Drive with a one-way loop arrangement for passenger pickups/drop-offs at the front of the terminal building. Two-way access to the rental and short-term parking areas is shown in Figure 16.

To access short-term and rental car parking areas, the road in front of the terminal includes two zebra pedestrian crossings near the arrivals and departures areas of the terminal.


**Figure 16 - Existing Car Park Layout**

## Car parking

There are currently three sealed at-grade public car parking areas available at the airport including short-term, long-term, and premium (covered) parking spaces. Parking is managed through an automated boom-gate system. Rental cars occupy a dedicated parking area located immediately outside the arrivals area as shown in Figure 16.

## Taxi services

The airport is serviced by taxis with kerbside passenger pickup/drop-off located in front of the terminal building. Taxis are available through an onsite concierge or inflight arrangements are made via the flight attendant for flights arriving at Mildura.

## Ride share services

Ride share services are not currently available in Mildura, but it is understood that there are plans for some on-demand operators to expand into the Sunraysia region.

Introduction of ride share services could be serviced by the existing front of terminal pickup/drop-off area. A dedicated ride share area will be incorporated as part of the future terminal redevelopment.

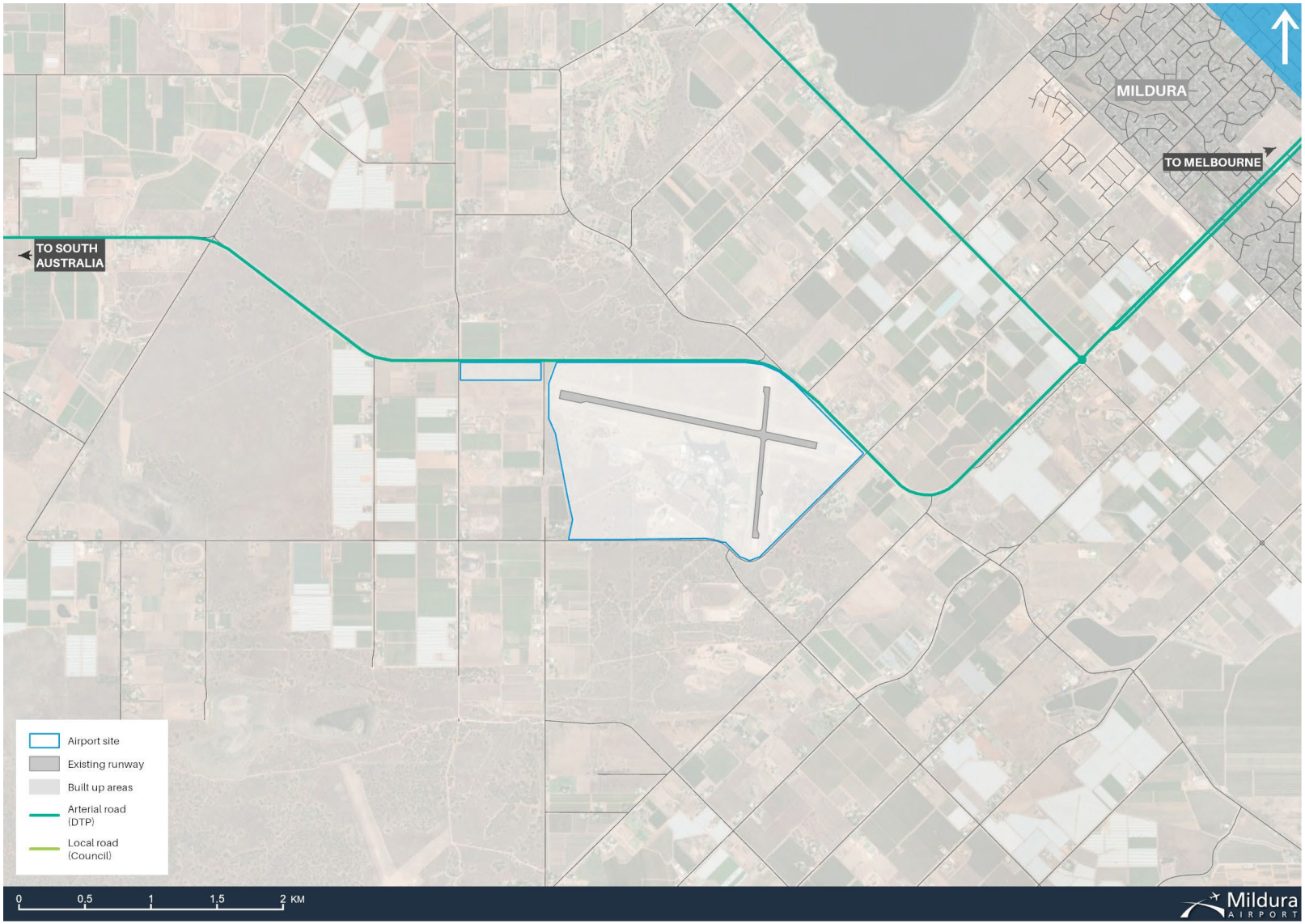



**Figure 17 – Mildura Airport External Road Network**

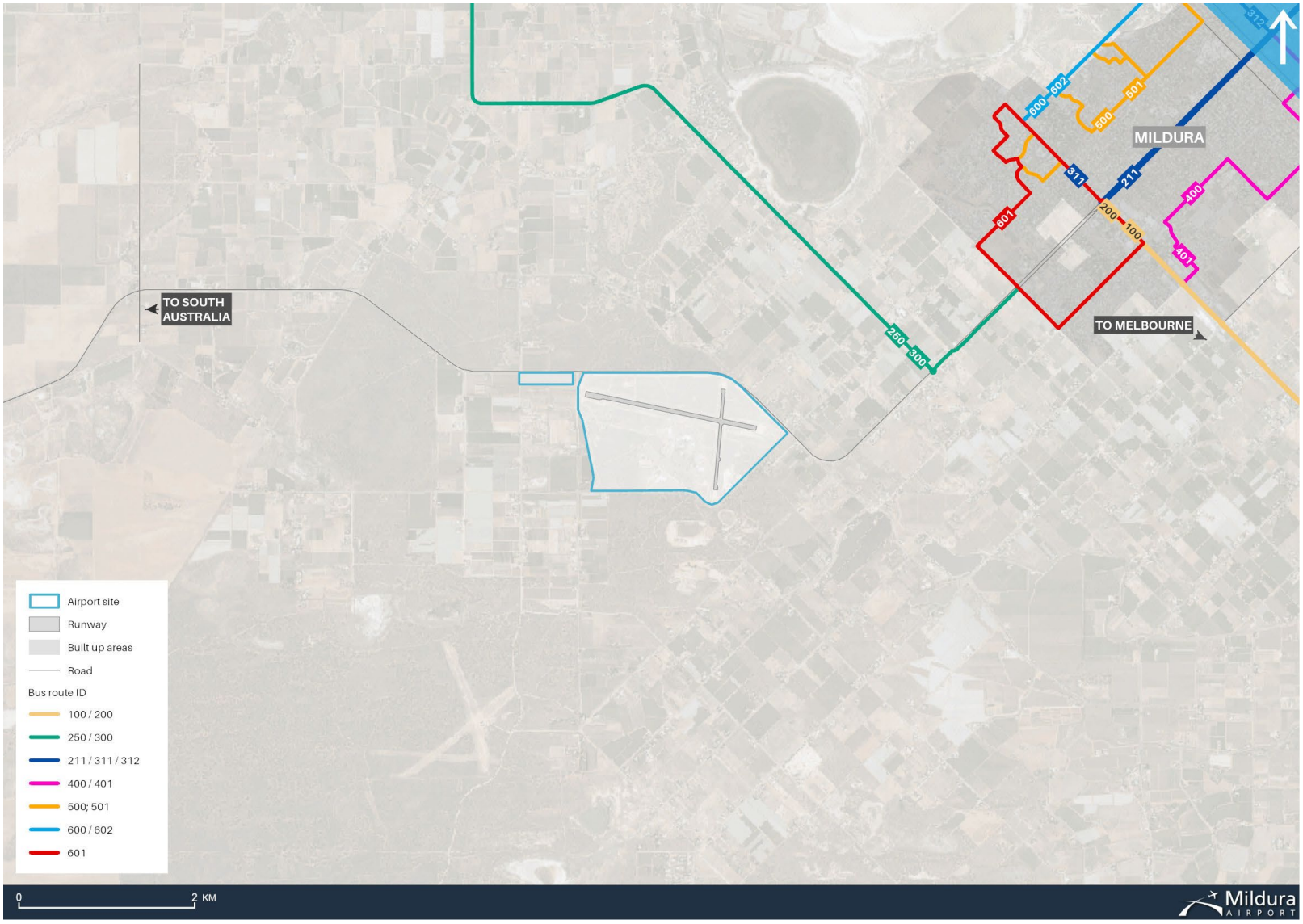



**Figure 18 - Mildura Bus Network**

## 10.2 Planned infrastructure and key projects

Key projects for Mildura Airport are summarised in **Appendix D**. The projects relating to ground transportation are outlined below.

### Car park and road reconfiguration

In conjunction with the planned terminal expansion, car parking is to be repositioned to a less strategic land area. This will also provide greater separation from the terminal and airside areas. In addition to accommodating significantly more car parking spaces, the car parking relocation will free up space for the expansion of the terminal building.

As part of the new car park development, Mathews Drive will be modified into a two-lane, one-way loop road to enhance airport traffic flow efficiency, improve safety and facilitate development within the Landside Precinct.

The internal loop road would circulate and distribute traffic into the Terminal Precinct and a dedicated passenger drop off and pick up zone from the south-west thereby facilitating easier wayfinding. Importantly, it would provide a safer and more efficient and effective ground-based transport network. The internal loop road would connect back into Alan Mathews Drive near the new RAAF Museum to enable vehicles to egress the airport.

### Public transport integration

To provide modal choice and support greater accessibility for airport users to and from the airport, public transport access is essential.

A potential option to deliver public transport access to the airport is to include a new stop on existing bus route 250/300. A bus stop would enable visitors to be connected to the city centre at 30-minute intervals in the PM peak and hourly in the AM peak.

### Taxi amenity improvements

Taxis provide both a convenient and flexible option to get to and from Mildura Airport. As demand for taxi services increase in line with the continued growth of passenger numbers, the associated amenities are planned to be improved including additional shelters with seating and shading. A recent example of is provided below.


### Shade cover for long term parking

In conjunction with the car park relocation, shading is planned as part of the long-term car park to improve amenity and provide UV protection for vehicles.

## 10.3 Short term improvements

In the short term, the Mildura Airport Ground Transport Plan identifies a series of potential upgrades to accommodate future ground transport demands. Table 1 below provides a summary of the potential upgrades for public transport, taxis and ride share services.

**Table 1- Short-term Ground Transport Improvements**

| Airport Area | Potential Upgrade |
|---|---|
| **Car parking shade cover** | Installation of car park shade cover. |
| **Public transport** | Inclusion of bus stop to enable public transport connectivity. |
| **Taxis and ride share services** | Additional shelters for customer comfort and shading while waiting. |

## 10.4 Long-term improvements

Longer term grounds transport improvements at the airport would be centred on facilitating projected transport demands beyond the next 20 years. Table 2 below provides a summary of the potential upgrades.

**Table 2 - Long Term Ground Transport Improvements**

| Airport Area | Potential Upgrade |
|---|---|
| **Access** | One way loop reconfiguration of Alan Mathews Drive. |
| **Car parking** | Reconfiguration of car parking area in conjunction with terminal redevelopment. |

# 11 IMPLEMENTATION

## 11.1 Capital works program

Investment by MAPL in new infrastructure and services is critical for the long-term success and viability of Mildura Airport. Capital works improvements across the airport will align with the development and infrastructure priorities outlined in this master plan. These projects will be funded by MAPL in combination with government funding, where available.

MAPL, and where assistance is required, suitable external expertise, will plan, design and deliver the projects and initiatives in the concept plans.

Appropriate project delivery, safety and environmental management systems practices will be adopted for all of the projects identified in the 2025 Master Plan.

## 11.2 Key projects

The key projects for the airport identified as part of this master plan are attached and marked **Appendix D**. They are:

- Project 1 – Runway 09/27 Rejuvenation
- Project 2 – Aircraft Parking Area
- Project 3 – Rotary Aircraft parking Area
- Project 4 – RPT Bays
- Project 5 – Taxiway Improvements
- Project 6 – Industrial Park
- Project 7 – Car Park Redevelopment
- Project 8 – Terminal Development
- Project 9 – Accommodation Development
- Project 10 – Intermodal Freight Hub

Across the planning horizon, the timing of proposed developments at the airport including these major projects will depend on an assessment of forecasts, market conditions, stakeholder engagement and approval processes. The key project investment gateway will be a Board approved business case as well as planning and commercial considerations of MAPL and its customers.

All major developments in the airside, terminal and landside precincts at Mildura Airport will be planned and developed in consultation with relevant stakeholders and, in compliance with applicable statutory and regulatory requirements.

Further consideration of the airport's heritage places will be undertaken by MAPL as the key projects in the 2025 Master Plan are progressively planned, designed and implemented.

## 11.3 Project environmental monitoring

Environmental monitoring is a critical component of MAPL's approach to environmental management in the design and delivery of projects at this airport. For the identified projects in this master plan, MAPL will require the appointed project contractor to prepare and implement a CEMP that outlines appropriate environmental management measures and contingency plans.

MAPL will evaluate compliance, identify issues and opportunities; obtain information about environmental performance; and encourage continual improvement in the delivery of projects at the airport.

## 11.4 Updating local planning requirements

The airport is subject to the planning policies, controls and provisions of the Mildura Planning Scheme. As identified in the 2017 Master Plan, the need to obtain planning permit approval from Council raises ongoing administrative, time and cost issues for MAPL.

Subject to consistency with this master plan and consultation with Council and other stakeholders (as required), new use and development at Mildura Airport should be exempt, on an ongoing basis, from the need for planning approval.

As a key implementation measure for the master plan, it is recommended that the current SUZ7 zoning be updated, in conjunction with Mildura Rural City Council, to update the Table of Uses (e.g. expand the range of as of right land uses) and reflect the precinct based approach to future airport growth and development.

The updated ANEF and N-contours prepared as part of the master plan will need to be adopted and referenced in the Mildura Planning Scheme.

A mutually agreed offset regime with Council is envisaged for future project related native vegetation impacts on the aerodrome.

Collectively, these planning scheme modifications would help facilitate the timely delivery of ongoing airport improvements for the benefit of the local community.

## 11.5 Periodic reviews

Although not subject to the legislative requirements for master plans in the Commonwealth *Airports Act 1996*, the 2025 Master Plan is anticipated to be effective for the next 8 - 10 years.

MAPL will regularly review the demand and need for aviation infrastructure and non-aviation development projects at Mildura Airport aligned to the vision, objectives, and strategic directions of this master plan.

Regular operational reviews will be undertaken by MAPL in relation to noise contours and airspace surfaces to monitor the ongoing airport safeguarding strategies.

# 12 CONCLUSION

2025 The 2025 Master Plan reflects MAPL's ongoing commitment to the development and growth of Mildura Airport as Victoria's leading regional airport.

As the long-term airport operator, MAPL will continue planning, developing and investing in the airport in a financially reasonable and responsible manner, to meet the ongoing aviation needs for the region including airlines, passengers, business, industry and the community. Throughout this process and wherever possible, MAPL will aim to support the repurpose and/or preservation aspects of heritage-listed buildings, provided it is financially responsible and is consistent with, existing plans or the future growth and expansion of the precinct.

In setting the foundations for a sustainable financial future, this master plan presents a clear statement of intent aligned with forecast growth. While some project stages identified within this plan are aspirational, they are outlined to represent a forward-looking vision that will require ongoing collaboration. MAPL will aspire to improve airport efficiency, safety and customer experience, while also supporting revenue diversification and long-term financial sustainability.

The timing of individual developments across the planning horizon will depend on forecast assessments, market conditions, stakeholder engagement and approval processes. Throughout all operations and development, MAPL will prioritise safe airport operations and an optimal customer experience by implementing the highest industry standards and best practices on behalf of the local community.

MAPL is committed to continued communication and engagement with the Mildura community and the broader region to maximise socio-economic benefits and opportunities. Working collaboratively with our Shareholder, industry partners and the local community, MAPL aims to deliver and implement a precinct that balances growth and provides shared benefits for all.

# Appendix A - Comparison of Airport Management Models

## Airport ownership and management structures

Airport owners and managers are generally subject to a fast-paced, ever-changing operational environment. There are many variables that can directly and indirectly impact the performance of individual airports whichever model of ownership and management structure is in place.

Four primary management models for airports exist in Australia with changeable levels of control, profitability, flexibility, and investment return. The four models are:

1) Local government operated.
2) Lease to private sector investor/operator.
3) Freehold.
4) Corporatised entity.

The corporatised entity structure provides the best overall model for the governance and management of Mildura Airport.

Corporatised entities such as Gladstone and Mildura Airports are essentially separate legal entities with their own board of directors.

The benefits of corporatisation include the ability to achieve a greater commercial focus and planning at the airport through revenue diversification and improved cost control. Other benefits include a dedicated focus by the airport board and management on the airport and retention of asset ownership within the council. The community rather than shareholder interest remains paramount.

The following table has been prepared to provide a high-level comparison of these management options in the context of Mildura Airport.

| Operating model | Local government operated | Lease to private sector | Freehold | Corporatised entity |
|---|---|---|---|---|
| **Aspect** | | | | |
| **Airport operational expertise** | ✗ | ✓ | ✓ | ✓ |
| **Airport growth and development** | ✗ | ✓ | ✓ | ✓ |
| **Community focus** | ✓ | ✗ | ✗ | ✓ |
| **Financial strength** | ✗ | ✓ | ✓ | ✓ |
| **Pricing regime** | ✓ | ✗ | ✗ | ✓ |
| **Risk and liabilities** | ✗ | ✓ | ✓ | ✗ |
| **Service standards maintenance** | ✓ | ✗ | ✗ | ✓ |
| **Transparency** | ✓ | ✗ | ✗ | ✓ |

# Appendix B - New ANEF and N Contours


Table 2.1- ANEF acceptability criteria (as published in AS 2021:2015)

| Building type | ANEF zone of site | | |
|---|---|---|---|
| | Acceptable | Conditionally acceptable | Unacceptable |
| House, home unit, flat, caravan park | Less than 20 ANEF | 20 to 25 ANEF[2] | Greater than 25 ANEF |
| Hotel, motel, hostel | Less than 25 ANEF | 25 to 30 ANEF | Greater than 30 ANEF |
| School, university | Less than 20 ANEF | 20 to 25 ANEF[2] | Greater than 25 ANEF |
| Hospital, nursing home | Less than 20 ANEF | 20 to 25 ANEF | Greater than 25 ANEF |
| Public building | Less than 20 ANEF | 20 to 30 ANEF | Greater than 30 ANEF |
| Commercial building | Less than 25 ANEF | 25 to 35 ANEF | Greater than 35 ANEF |
| Light industrial | Less than 30 ANEF | 30 to 40 ANEF | Greater than 40 ANEF |
| Other industrial | Acceptable in all ANEF zones | | |

**Notes**

1. The actual location of the 20 ANEF contour is difficult to define accurately, mainly because of variation in aircraft flight paths. Because of this, the procedure of Clause 2.3.2 may be followed for building sites outside but near to the 20 ANEF contour.
2. Within 20 ANEF to 25 ANEF, some people may find that the land is not compatible with residential or educational uses. Land use authorities may consider that the incorporation of noise control features in the construction of residences or schools is appropriate
3. There will be cases where a building of a particular type will contain spaces used for activities which would generally be found in a different type of building (e.g. an office in an industrial building). In these cases Table 2.1 should be used to determine site acceptability, but internal design noise levels within the specific spaces should be determined by Table 3.3.
4. This Standard does not recommend development in unacceptable areas. However, where the relevant planning authority determines that any development may be necessary within existing built up areas designated as unacceptable, it is recommended that such development should achieve the required ANR determined according to Clause 3.2. For residences, schools, etc., the effect of aircraft noise on outdoor areas associated with the buildings should be considered.
5. In no case should new development take place in greenfield sites deemed unacceptable because such development may impact airport operations.

airservices australia

**Endorsement for technical accuracy**

**Standard ANEF**

.....

Date: ...../...../.....

**Team Lead - Environmental Assessments**

The aircraft noise contours on this chart have been calculated using an appropriate modelling process. Airservices Australia has, in accordance with the approved manner of endorsement, considered the physical ultimate capacity of the existing or proposed runway/s in its endorsement process.
The data input and assumptions made in that process are derived in part from external sources. Airservices Australia makes no warranty in respect of that information and excludes all liability for any loss arising from reliance on that information.

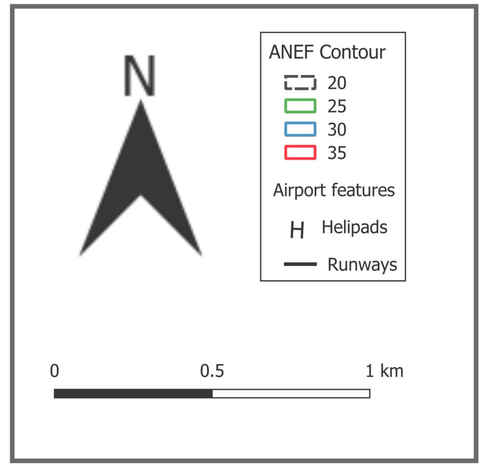
**Notes**

1. Terrain has been included in the calculation of the ANEF contours
2. ANEF contours modelled with AEDT 3e
3. Co-ordinate system: WGS84
4. Where figures have been rounded, there may be discrepancies between the total presented and the sum of the items in that column

**Issue date:** 19th July 2024

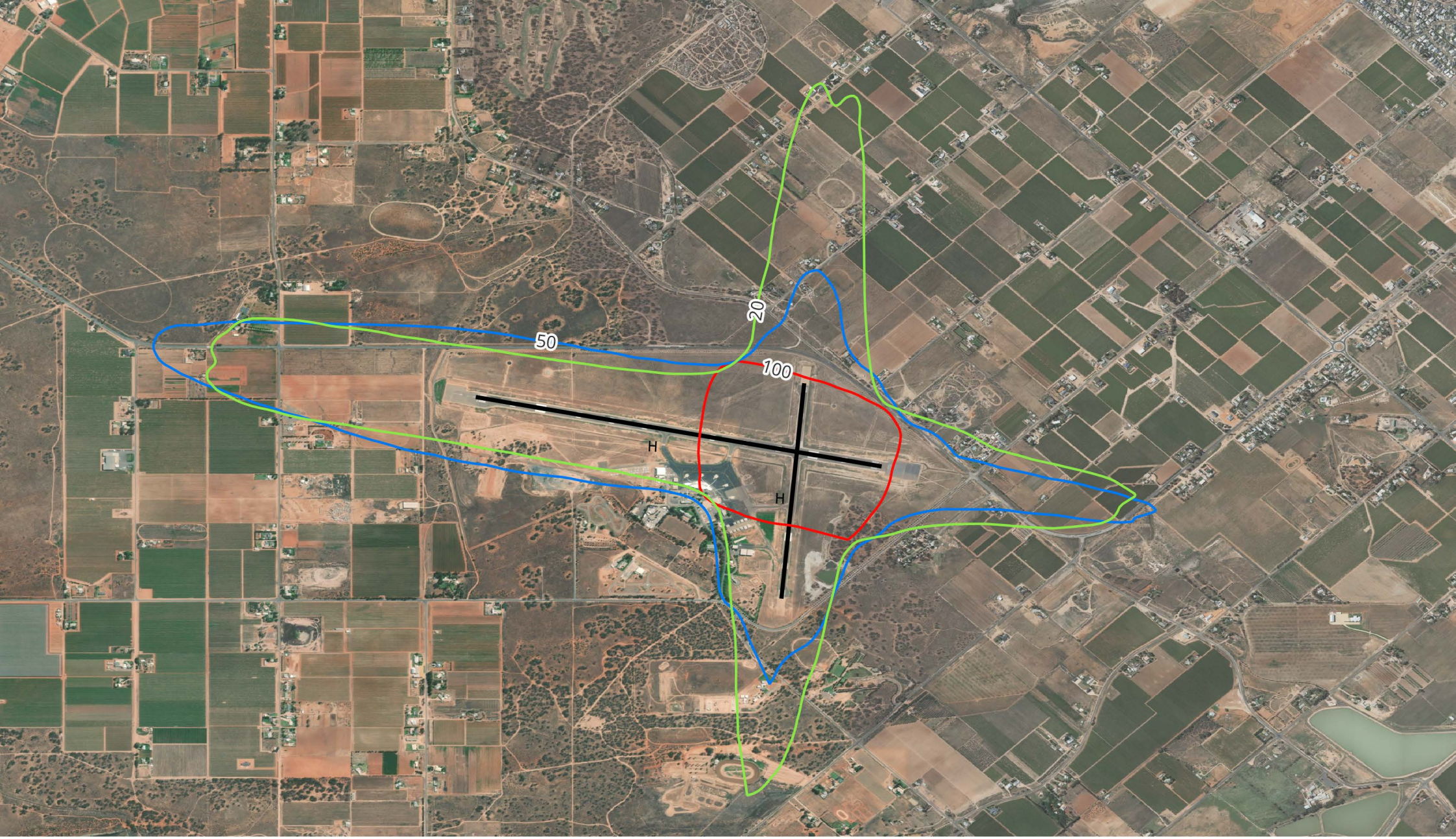
**Drawn by:** To70 Aviation

| Description | Latitude | Longitude |
|---|---|---|
| Runway 18 | -34.2258 | 142.0896 |
| Runway 36 | -34.2360 | 1420885 |
| Runway 09 | -34.22641 | 142.0736 |
| Runway 27 | -34.2297 | 142.0933 |
| Helipad - HP1 | -34.2286 | 142.0823 |
| Helipad - HP2 | -34.2312 | 142.0885 |




| Runway / Helipad | ANP ID | Arrival | | | Departure | | | Circuit | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Day | Night-ANEF | Night N-Contour | Day | Night-ANEF | Night N-Contour | Day | Night-ANEF | Night N-Contour | |
| 09 | 737800 | 0.0896 | 0.0299 | - | 0.0896 | 0.0299 | 0.0060 | - | - | - | 0.2450 |
| | 7378MAX | 0.0896 | 0.0299 | - | 0.0896 | 0.0299 | 0.0060 | - | - | - | 0.2450 |
| | A320-271N | 0.0179 | 0.0060 | - | 0.0179 | 0.0060 | 0.0012 | - | - | - | 0.0490 |
| | BEC58P | 0.1954 | 0.0166 | - | 0.1954 | 0.0166 | 0.0009 | 0.0015 | 0.0003 | - | 0.4266 |
| | CNA172 | 2.3902 | 0.1338 | - | 2.3902 | 0.1338 | 0.0136 | 4.7794 | 0.9104 | - | 10.7514 |
| | CNA208 | 0.0237 | 0.0045 | - | 0.0237 | 0.0045 | - | - | - | - | 0.0564 |
| | CNA209 | 0.0199 | 0.0024 | - | 0.0199 | 0.0024 | 0.0001 | - | - | - | 0.0447 |
| | CNA441 | 0.0122 | 0.0023 | - | 0.0122 | 0.0023 | - | - | - | - | 0.0292 |
| | CNA510 | 0.0033 | 0.0006 | - | 0.0033 | 0.0006 | - | - | - | - | 0.0079 |
| | CNA525C | 0.0026 | 0.0001 | - | 0.0026 | 0.0001 | 0.0000 | - | - | - | 0.0054 |
| | CNA55B | 0.0415 | 0.0079 | - | 0.0415 | 0.0079 | - | - | - | - | 0.0989 |
| | COMSEP | 0.0483 | 0.0092 | - | 0.0483 | 0.0092 | - | - | - | - | 0.1151 |
| | DHC6 | 0.3554 | 0.0677 | - | 0.3554 | 0.0677 | - | - | - | - | 0.8462 |
| | DHC830 | 0.3137 | 0.1046 | - | 0.3137 | 0.1046 | 0.0209 | - | - | - | 0.8575 |
| | DO228 | 0.0073 | 0.0004 | - | 0.0073 | 0.0004 | 0.0000 | - | - | - | 0.0153 |
| | EMB190 | 0.0179 | 0.0060 | - | 0.0179 | 0.0060 | 0.0012 | - | - | - | 0.0490 |
| | F10062 | 0.0090 | 0.0030 | - | 0.0090 | 0.0030 | 0.0006 | - | - | - | 0.0245 |
| | FAL900EX | 0.0017 | 0.0003 | - | 0.0017 | 0.0003 | 0.0001 | - | - | - | 0.0040 |
| | GASEPF | 0.0499 | 0.0026 | - | 0.0499 | 0.0026 | 0.0003 | 0.0431 | 0.0082 | - | 0.1566 |
| | GASEPV | 0.3222 | 0.0255 | - | 0.3222 | 0.0255 | 0.0015 | 0.1382 | 0.0263 | - | 0.8613 |
| | GIV | 0.0178 | 0.0034 | - | 0.0178 | 0.0034 | 0.0007 | - | - | - | 0.0431 |
| | PA30 | 0.1099 | 0.0078 | - | 0.1099 | 0.0078 | 0.0006 | 0.0441 | 0.0084 | - | 0.2883 |
| | SF340 | 0.3585 | 0.1195 | - | 0.3585 | 0.1195 | 0.0239 | - | - | - | 0.9800 |
| | **Grand Total** | **4.4976** | **0.5840** | **0.0000** | **4.4976** | **0.5840** | **0.0775** | **5.0062** | **0.9536** | **-** | **16.2002** |
| 27 | 737800 | 0.8067 | 0.2629 | 0.0060 | 0.8067 | 0.2629 | - | - | - | - | 2.1452 |
| | 7378MAX | 0.8067 | 0.2629 | 0.0060 | 0.8067 | 0.2629 | - | - | - | - | 2.1452 |
| | A320-271N | 0.1613 | 0.0526 | 0.0012 | 0.1613 | 0.0526 | - | - | - | - | 0.4290 |
| | BEC58P | 0.8044 | 0.0699 | 0.0009 | 0.8044 | 0.0699 | - | 0.0069 | 0.0013 | - | 1.7578 |
| | CNA172 | 5.5898 | 0.5269 | 0.0136 | 5.5898 | 0.5269 | - | 21.9852 | 4.1877 | - | 46.4199 |
| | CNA208 | 0.1066 | 0.0203 | - | 0.1066 | 0.0203 | - | - | - | - | 0.2537 |
| | CNA209 | 0.0845 | 0.0105 | 0.0001 | 0.0845 | 0.0105 | - | - | - | - | 0.1900 |
| | CNA441 | 0.0551 | 0.0105 | - | 0.0551 | 0.0105 | - | - | - | - | 0.1312 |
| | CNA510 | 0.0148 | 0.0028 | - | 0.0148 | 0.0028 | - | - | - | - | 0.0353 |
| | CNA525C | 0.0103 | 0.0005 | 0.0000 | 0.0103 | 0.0005 | - | - | - | - | 0.0217 |
| | CNA55B | 0.1869 | 0.0356 | - | 0.1869 | 0.0356 | - | - | - | - | 0.4451 |
| | COMSEP | 0.2176 | 0.0414 | - | 0.2176 | 0.0414 | - | - | - | - | 0.5180 |
| | DHC6 | 1.5994 | 0.3046 | - | 1.5994 | 0.3046 | - | - | - | - | 3.8080 |
| | DHC830 | 2.8234 | 0.9202 | 0.0209 | 2.8234 | 0.9202 | - | - | - | - | 7.5080 |
| | DO228 | 0.0291 | 0.0015 | 0.0000 | 0.0291 | 0.0015 | - | - | - | - | 0.0611 |
| | EMB190 | 0.1613 | 0.0526 | 0.0012 | 0.1613 | 0.0526 | - | - | - | - | 0.4290 |
| | F10062 | 0.0807 | 0.0263 | 0.0006 | 0.0807 | 0.0263 | - | - | - | - | 0.2145 |
| | FAL900EX | 0.0149 | 0.0028 | 0.0001 | 0.0149 | 0.0028 | - | - | - | - | 0.0354 |
| | GASEPF | 0.1996 | 0.0102 | 0.0003 | 0.1996 | 0.0102 | - | 0.1980 | 0.0377 | - | 0.6556 |
| | GASEPV | 1.3196 | 0.1064 | 0.0015 | 1.3196 | 0.1064 | - | 0.6336 | 0.1211 | - | 3.6102 |
| | GIV | 0.1605 | 0.0299 | 0.0007 | 0.1605 | 0.0299 | - | - | - | - | 0.3815 |
| | PA30 | 0.4467 | 0.0320 | 0.0006 | 0.4467 | 0.0320 | - | 0.2026 | 0.0386 | - | 1.1990 |
| | SF340 | 3.2267 | 1.0517 | 0.0239 | 3.2267 | 1.0517 | - | - | - | - | 8.5806 |
| | **Grand Total** | **22.9064** | **3.8350** | **0.0775** | **22.9064** | **3.8350** | **-** | **23.0284** | **4.3864** | **-** | **80.9751** |
| 18 | BEC58P | 0.3584 | 0.0225 | - | 0.3584 | 0.0225 | - | 0.0026 | 0.0005 | - | 0.7647 |
| | CNA172 | 5.2163 | 0.2791 | - | 5.2163 | 0.2791 | - | 8.1250 | 1.5476 | - | 20.6633 |
| | CNA208 | 0.0135 | 0.0026 | - | 0.0135 | 0.0026 | - | - | - | - | 0.0322 |
| | CNA209 | 0.0280 | 0.0023 | - | 0.0280 | 0.0023 | - | - | - | - | 0.0605 |
| | CNA441 | 0.0070 | 0.0013 | - | 0.0070 | 0.0013 | - | - | - | - | 0.0167 |
| | CNA510 | 0.0019 | 0.0004 | - | 0.0019 | 0.0004 | - | - | - | - | 0.0045 |
| | CNA525C | 0.0057 | 0.0003 | - | 0.0057 | 0.0003 | - | - | - | - | 0.0121 |
| | CNA55B | 0.0237 | 0.0045 | - | 0.0237 | 0.0045 | - | - | - | - | 0.0565 |
| | COMSEP | 0.0276 | 0.0053 | - | 0.0276 | 0.0053 | - | - | - | - | 0.0658 |
| | DHC6 | 0.2031 | 0.0387 | - | 0.2031 | 0.0387 | - | - | - | - | 0.4836 |
| | DO228 | 0.0161 | 0.0009 | - | 0.0161 | 0.0009 | - | - | - | - | 0.0340 |
| | FAL900EX | - | - | - | - | - | - | - | - | - | - |
| | GASEPF | 0.1109 | 0.0058 | - | 0.1109 | 0.0058 | - | 0.0732 | 0.0139 | - | 0.3206 |
| | GASEPV | 0.6136 | 0.0372 | - | 0.6136 | 0.0372 | - | 0.2349 | 0.0447 | - | 1.5812 |
| | GIV | - | - | - | - | - | - | - | - | - | - |
| | PA30 | 0.2202 | 0.0127 | - | 0.2202 | 0.0127 | - | 0.0749 | 0.0143 | - | 0.5550 |
| | **Grand Total** | **6.8461** | **0.4135** | **0.0000** | **6.8461** | **0.4135** | **-** | **8.5105** | **1.6210** | **-** | **24.6506** |
| 36 | BEC58P | 0.6304 | 0.0400 | - | 0.6304 | 0.0400 | - | 0.0041 | 0.0008 | - | 1.3455 |
| | CNA172 | 9.1326 | 0.4892 | - | 9.1326 | 0.4892 | - | 12.9044 | 2.4580 | - | 34.6060 |
| | CNA208 | 0.0254 | 0.0048 | - | 0.0254 | 0.0048 | - | - | - | - | 0.0604 |
| | CNA209 | 0.0497 | 0.0041 | - | 0.0497 | 0.0041 | - | - | - | - | 0.1075 |
| | CNA441 | 0.0131 | 0.0025 | - | 0.0131 | 0.0025 | - | - | - | - | 0.0312 |
| | CNA510 | 0.0035 | 0.0007 | - | 0.0035 | 0.0007 | - | - | - | - | 0.0084 |
| | CNA525C | 0.0100 | 0.0005 | - | 0.0100 | 0.0005 | - | - | - | - | 0.0211 |
| | CNA55B | 0.0445 | 0.0085 | - | 0.0445 | 0.0085 | - | - | - | - | 0.1060 |
| | COMSEP | 0.0518 | 0.0099 | - | 0.0518 | 0.0099 | - | - | - | - | 0.1233 |
| | DHC6 | 0.3808 | 0.0725 | - | 0.3808 | 0.0725 | - | - | - | - | 0.9067 |
| | DO228 | 0.0282 | 0.0015 | - | 0.0282 | 0.0015 | - | - | - | - | 0.0595 |
| | FAL900EX | - | - | - | - | - | - | - | - | - | - |
| | GASEPF | 0.1940 | 0.0102 | - | 0.1940 | 0.0102 | - | 0.1162 | 0.0221 | - | 0.5469 |
| | GASEPV | 1.0783 | 0.0659 | - | 1.0783 | 0.0659 | - | 0.3731 | 0.0711 | - | 2.7325 |
| | GIV | - | - | - | - | - | - | - | - | - | - |
| | PA30 | 0.3864 | 0.0225 | - | 0.3864 | 0.0225 | - | 0.1189 | 0.0227 | - | 0.9593 |
| | **Grand Total** | **12.0288** | **0.7327** | **12.0288** | **12.0288** | **0.7327** | **-** | **13.5167** | **2.5746** | **-** | **41.6142** |
| 09 | R44 | 0.0082 | 0.0004 | - | 0.0082 | 0.0004 | - | - | - | - | 0.0173 |
| | SA350D | 0.0089 | 0.0005 | - | 0.0089 | 0.0005 | - | - | - | - | 0.0187 |
| | H500 | 0.0009 | 0.0001 | - | 0.0009 | 0.0001 | - | - | - | - | 0.0019 |
| | B429 | 0.0011 | 0.0001 | - | 0.0011 | 0.0001 | - | - | - | - | 0.0024 |
| | B430 | 0.0041 | 0.0002 | - | 0.0041 | 0.0002 | - | - | - | - | 0.0086 |
| | A109 | 0.0016 | 0.0001 | - | 0.0016 | 0.0001 | - | - | - | - | 0.0033 |
| | **Total** | **0.0248** | **0.0013** | **0.0000** | **0.0248** | **0.0013** | **-** | **-** | **-** | **-** | **0.0523** |
| 27 | R44 | 0.0533 | 0.0028 | - | 0.0533 | 0.0028 | - | - | - | - | 0.1122 |
| | SA350D | 0.0578 | 0.0030 | - | 0.0578 | 0.0030 | - | - | - | - | 0.1216 |
| | H500 | 0.0059 | 0.0003 | - | 0.0059 | 0.0003 | - | - | - | - | 0.0125 |
| | B429 | 0.0074 | 0.0004 | - | 0.0074 | 0.0004 | - | - | - | - | 0.0156 |
| | B430 | 0.0267 | 0.0014 | - | 0.0267 | 0.0014 | - | - | - | - | 0.0561 |
| | A109 | 0.0104 | 0.0006 | - | 0.0104 | 0.0006 | - | - | - | - | 0.0218 |
| | **Total** | **0.1614** | **0.0085** | **0.0000** | **0.1614** | **0.0085** | **-** | **-** | **-** | **-** | **0.3398** |
| 18 | R44 | 0.0232 | 0.0012 | - | 0.0232 | 0.0012 | - | - | - | - | 0.0489 |
| | SA350D | 0.0252 | 0.0013 | - | 0.0252 | 0.0013 | - | - | - | - | 0.0530 |
| | H500 | 0.0026 | 0.0001 | - | 0.0026 | 0.0001 | - | - | - | - | 0.0054 |
| | B429 | 0.0032 | 0.0002 | - | 0.0032 | 0.0002 | - | - | - | - | 0.0068 |
| | B430 | 0.0116 | 0.0006 | - | 0.0116 | 0.0006 | - | - | - | - | 0.0245 |
| | A109 | 0.0045 | 0.0002 | - | 0.0045 | 0.0002 | - | - | - | - | 0.0095 |
| | **Total** | **0.0704** | **0.0037** | **0.0000** | **0.0704** | **0.0037** | **-** | **-** | **-** | **-** | **0.1481** |
| 36 | R44 | 0.0519 | 0.0027 | - | 0.0519 | 0.0027 | - | - | - | - | 0.1093 |
| | SA350D | 0.0563 | 0.0030 | - | 0.0563 | 0.0030 | - | - | - | - | 0.1185 |
| | H500 | 0.0058 | 0.0003 | - | 0.0058 | 0.0003 | - | - | - | - | 0.0121 |
| | B429 | 0.0072 | 0.0004 | - | 0.0072 | 0.0004 | - | - | - | - | 0.0152 |
| | B430 | 0.0260 | 0.0014 | - | 0.0260 | 0.0014 | - | - | - | - | 0.0547 |
| | A109 | 0.0101 | 0.0005 | - | 0.0101 | 0.0005 | - | - | - | - | 0.0213 |
| | **Total** | **0.1573** | **0.0083** | **0.0000** | **0.1573** | **0.0083** | **-** | **-** | **-** | **-** | **0.3311** |
| **Grand Total** | | | | | | | | | | | **164.3113** |

# Mildura Airport Australian Noise Exposure Forecast (ANEF) 2044



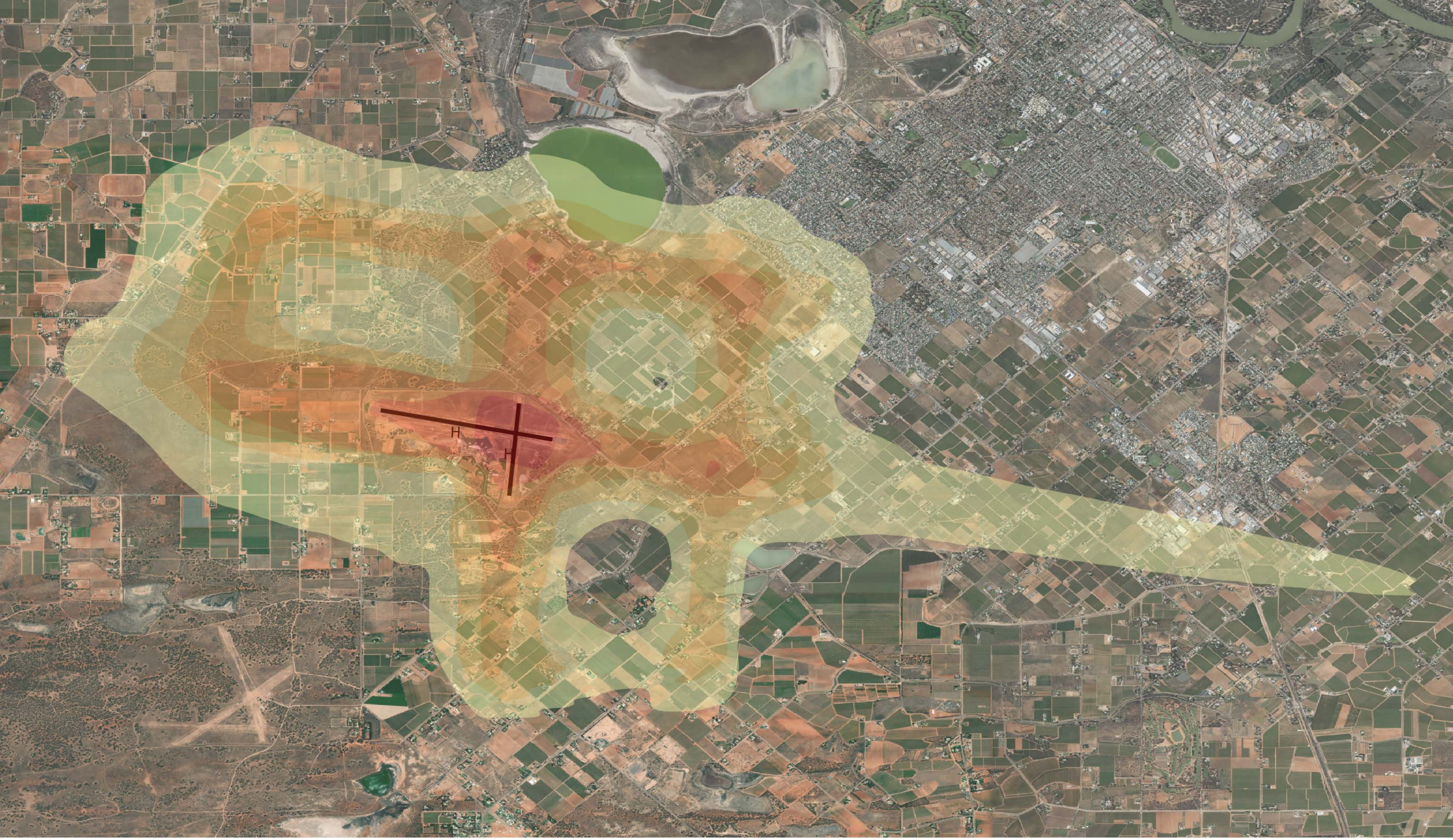

**Mildura Airport**
**N-Contour 2044**
**(24hrs)**

to70

20 or more daily events greater than 70 dB(A)
50 or more daily events greater than 65 dB(A)
100 or more daily events greater than 60 dB(A)
Runways
H Helipad

0 1 2 km

N




**Mildura Airport**
**N60 2044 (24hrs)**

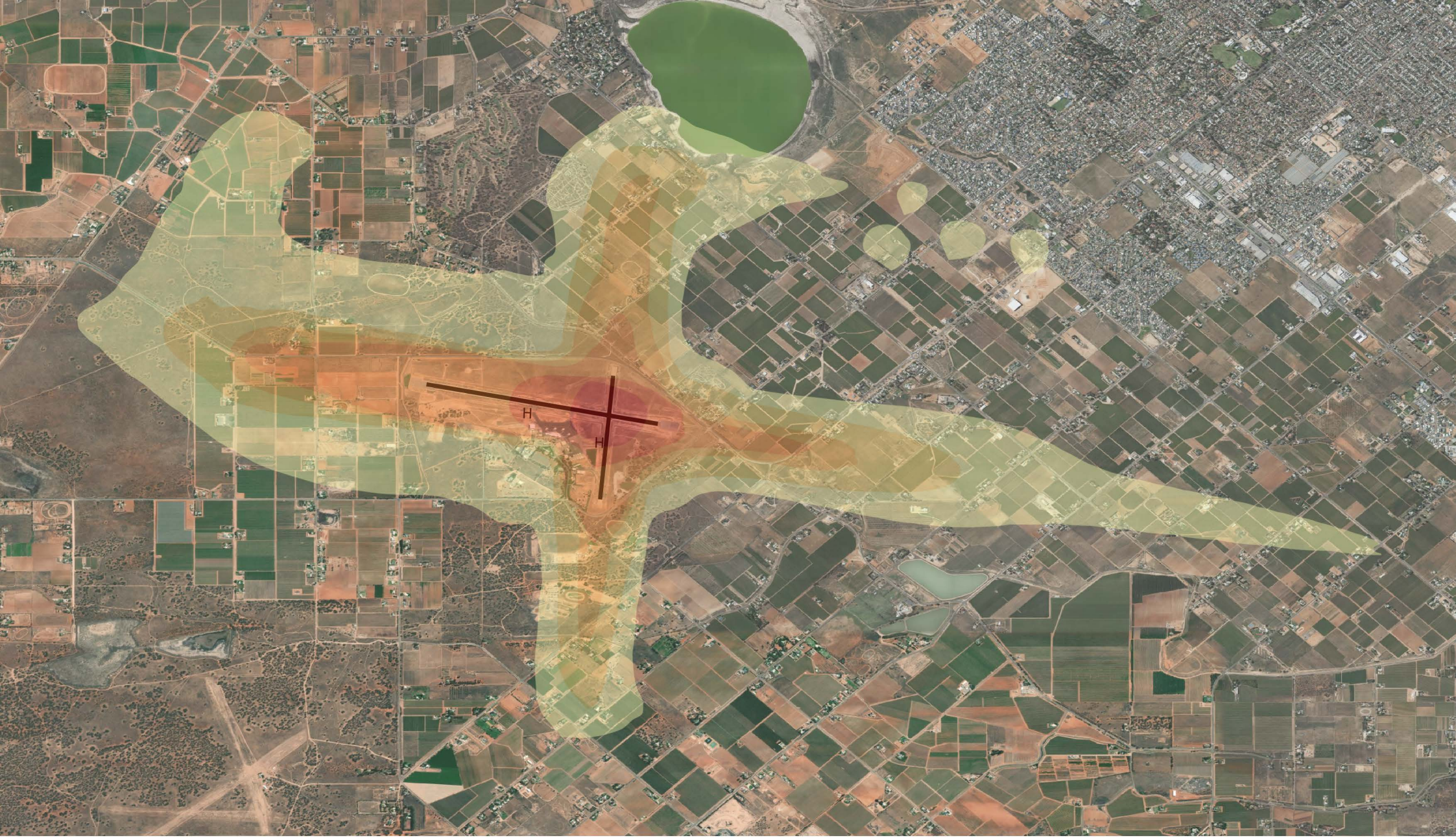
to70

Number of Events

- 10
- 20
- 35
- 50
- 75
- 100
- Runways
- H Helipad

0 1 2 km

N




**Mildura Airport**
**N65 2044 (24hrs)**

to70

Number of Events
10
20
35
50
75
100
Runways
H Helipad

0 1 2 km

N


**Mildura Airport**
**N70 2044 (24hrs)**

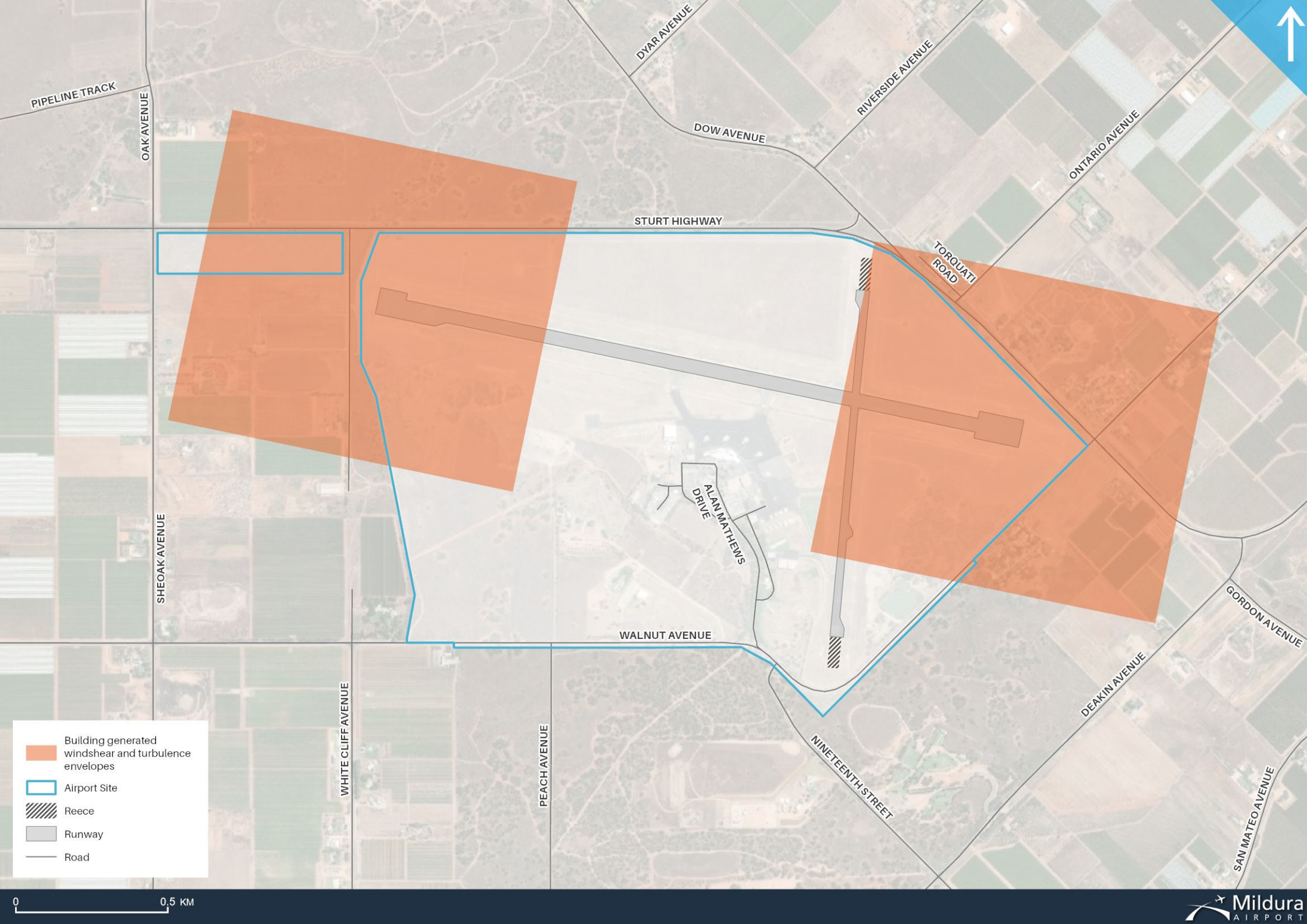
to70

Number of Events
10
20
35
50
75
100
Runways
H Helipad

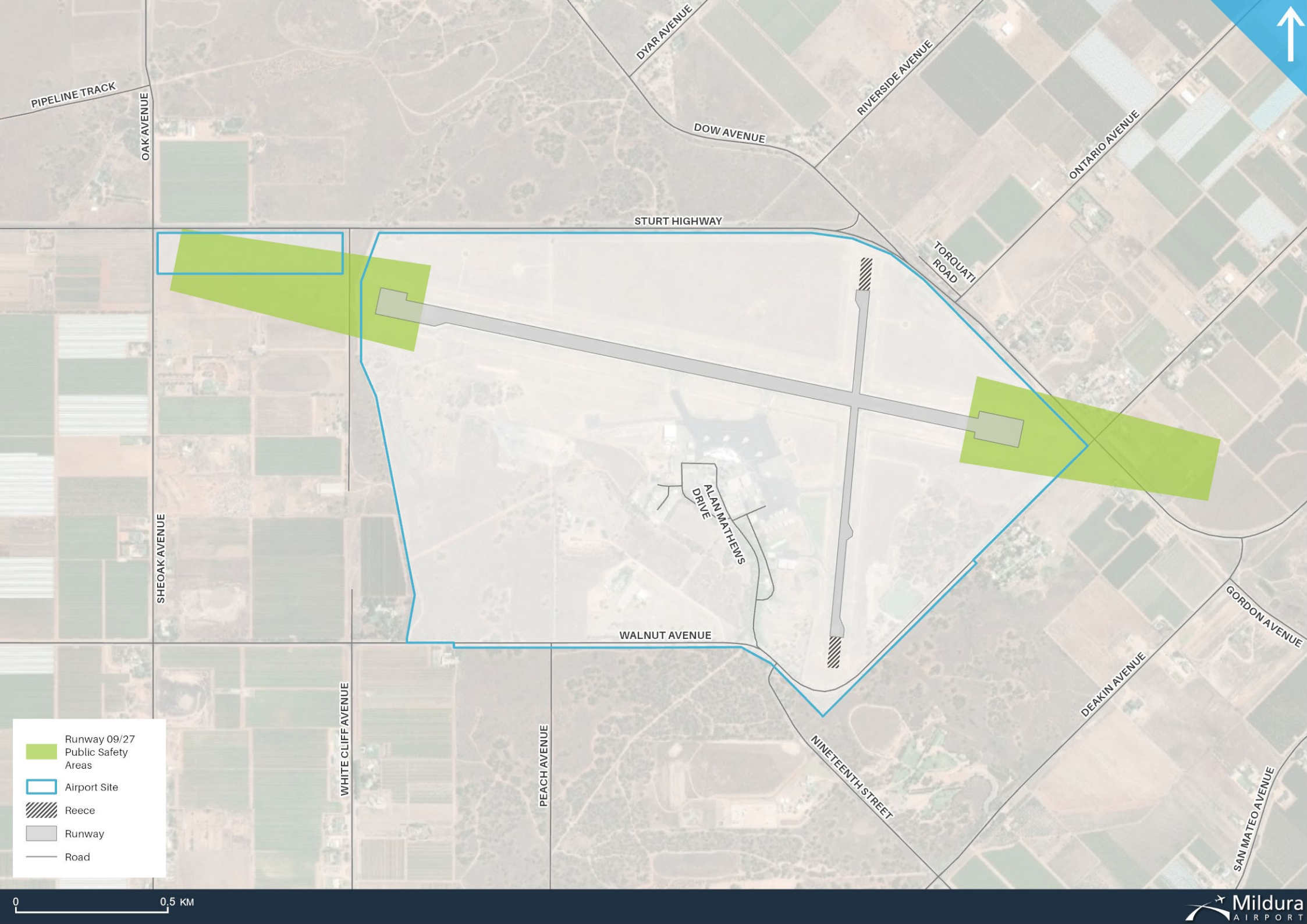
0 1 2 km

N

# Appendix C - NASF Safeguarding Plans


PIPELINE TRACK
OAK AVENUE
DYAR AVENUE
DOW AVENUE
RIVERSIDE AVENUE
ONTARIO AVENUE
STURT HIGHWAY
TORQUATI ROAD
ALAN MATHEWS DRIVE
SHEOAK AVENUE
WALNUT AVENUE
GORDON AVENUE
DEAKIN AVENUE
WHITE CLIFF AVENUE
PEACH AVENUE
NINETEENTH STREET
SAN MATEO AVENUE
Building generated windshear and turbulence envelopes
Airport Site
Reece
Runway
Road
0
0.5 KM
Mildura AIRPORT


TO NEW SOUTH WALES
WENTWORTH
SILVER CITY HIGHWAY
DARETON
13km
8km
3km
MERBEIN
MILDURA
GOL GOL
STURT HIGHWAY
CALDER HIGHWAY
RED CLIFFS
TO MELBOURNE
TO SOUTH AUSTRALIA
3km wildlife buffer
8km wildlife buffer
13km wildlife buffer
Airport Site
Built Up Areas
State/National Highway
Runway
0
5
10 KM
Mildura AIRPORT


PIPELINE TRACK
OAK AVENUE
DYAR AVENUE
DOW AVENUE
RIVERSIDE AVENUE
ONTARIO AVENUE
STURT HIGHWAY
TORQUATI ROAD
ALAN MATHEWS DRIVE
SHEOAK AVENUE
WALNUT AVENUE
GORDON AVENUE
DEAKIN AVENUE
WHITE CLIFF AVENUE
PEACH AVENUE
NINETEENTH STREET
SAN MATEO AVENUE
Runway 09/27 Public Safety Areas
Airport Site
Reece
Runway
Road
0
0.5 KM
Mildura AIRPORT

# Appendix D - Key Projects

# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Runway 09/27 Rejuvenation Project**<br>A key short-term project for MAPL given the asset deterioration will be the rejuvenation of the main runway (09/27) and construction of a turning node at the runway 27 end to maintain a safe operating environment for both existing and potential commercial airlines, passengers and general aviation users. | **$$$$**<br>*Cost and timing are indictive only |  | • Nighttime resurfacing of the 1,830 metre long runway.<br>• Provision of a turning node at the 27 runway end.<br>• The existing pavement would be strengthened by laying of 150mm of bitumen over the current surface. |

# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Aircraft Parking Area**<br>Plan, design and construct a new aircraft parking area adjacent to the existing midfield windsock to free up the primary aircraft movement area and allow for aircraft parking in all weather conditions (unlike current grassed area which is unusable during heavy rain events). | $$$<br>*Cost and timing are indictive only |  | • Planning, design, survey and construction of sealed parking area adjacent to the existing midfield windsock at the airport.<br>• Construction of suitable taxiway to access parking area. |


# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Rotary Aircraft Parking Area**<br>Plan, design and construct a new helicopter parking area to the north of Taxiway Bravo to provide facilities for increasing numbers of military, emergency services and commercial helicopters visiting the airport. | **$$$**<br>*Cost and timing are indictive only |  | • Planning, design, survey and construction of sealed parking area adjacent to the north of Taxiway Bravo. |

# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Additional RPT Bays**<br>Establishment of an additional two RPT bays adjacent to RPT Bay 1 to accommodate airline growth and address congestion issues of existing parking due to adverse weather or mechanical issues. | $$$ |  | • Planning, design and construction of two new RPT bays adjacent to RPT bay 1. |

*Cost and timing are indictive only

# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Taxiway Improvements**<br>Provide a staged, parallel Code C taxiway to service runway 09/27 to improve runway capacity and remove the requirement for aircraft backtracking. | $$$$<br>*Cost and timing are indictive only | | • Stage 1 is for the construction of a parallel taxiway extending eastward from Taxiway Charlie through to Runway 27.<br>• Stage 2 would involve a westerly extension from Taxiway Delta through to the Runway 09 threshold.<br>• Incorporate addition runway exits and entries to reduce the runway occupancy time. |


# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Industrial Park/Freight Precinct Development**<br>Development of an industrial park/freight precinct in the underutilised land in the south-western area of the airport. Preference for freight and logistics land uses that derive a benefit from airport proximity. | $$$$ |  | • Staged construction of an industrial park/freight precinct in the underutilised land in the south-western area of the airport. |

*Cost and timing are indictive only

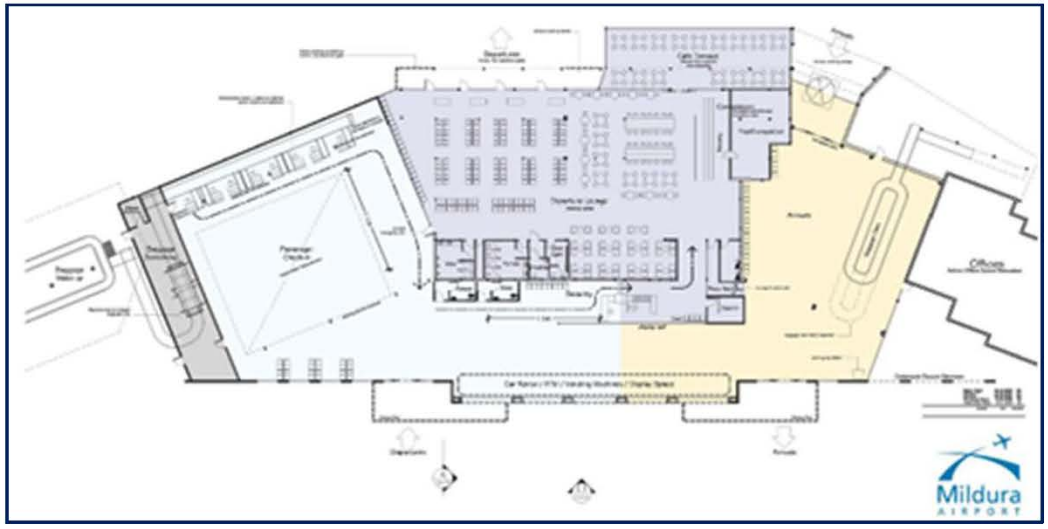
# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Car Park Redevelopment**<br>In conjunction with the terminal expansion, car parking to be reconfigured to less strategic land area further from the terminal and airside areas. Include provision of car park shade cover for the long-term parking area to provide additional amenity to airport users and protect vehicles from UV.<br>Reconfiguration of Alan Matthews Road to create a loop road arrangement to service front of terminal drop-offs and pickups and improve car park access/egress efficiencies and safety. | $$$<br>*Cost and timing are indictive only |  | • Design and construction of a reconfigured car park in an area of surplus land with a greater offset from the terminal building.<br>• Include public transport (bus stop) provision in redevelopment of car parking area.<br>• Design, procurement and construction of a shade cover for the long-term airport car park.<br>• Design and construction of a one-way loop arrangement in conjunction with a car park redevelopment and terminal expansion. |



# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Terminal Development**<br>A key long-term project involving the expansion and redevelopment of the terminal building to create a deeper and wider terminal footprint and increase terminal setback distance from Runway 09/27. | $$$$<br>*Cost and timing are indictive only |  | • Design and construction of an expanded terminal building in conjunction with a car park redevelopment internal road network reconfiguration.<br>• Planning of future landside development to consider footpath of expanded terminal building. |

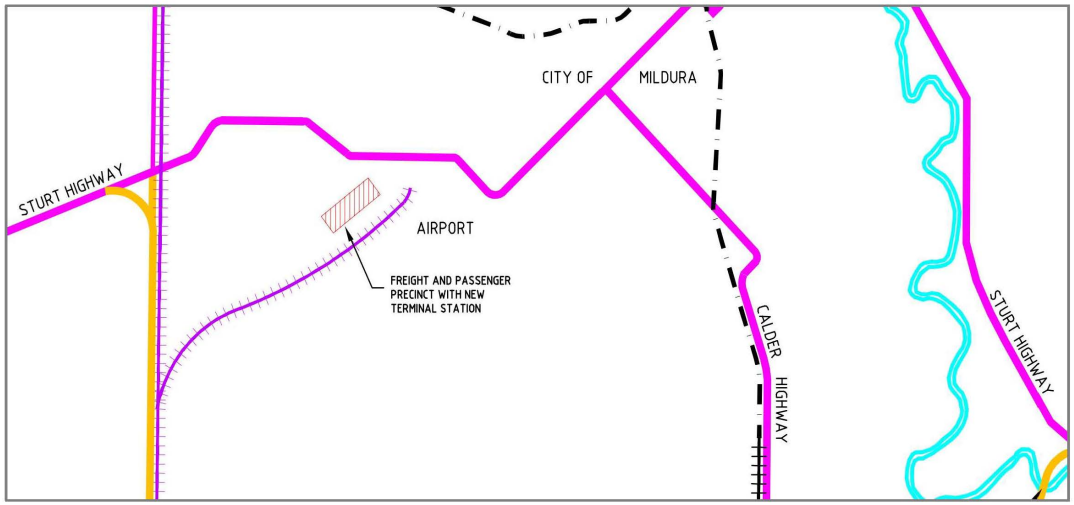



# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Accommodation Precinct Development**<br>A key long-term project to establish an accommodation area including hotel rooms, serviced-apartments and backpacker style lodging to address limited quality short-term accommodation options in the Mildura region. | $$$$<br>*Cost and timing are indictive only |  | • Planning, design and staged construction of an accommodation precinct near the long-term parking area.<br>• Accommodation types include hotel rooms, serviced apartments and backpacked style lodging. |

# Key projects

| Key projects | Cost | Timing | Activity |
|---|---|---|---|
| **Intermodal Freight Hub**<br>There is a long-term opportunity to develop a rail link to Mildura Airport to establish an intermodal freight and passenger terminal. This potential long-term project was supported in the Panel Report for Amendment C28 to the Mildura Planning Scheme. | $$$$<br>*Cost and timing are indictive only |  | • Planning, design and staged construction of an intermodal freight hub. |

Mildura AIRPORT

Prepared by RPS in association with
To70 Aviation