July 2017

West Sale Airport Master Plan Update 2017

West Sale Airport (WSA)

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Wellington Shire Council

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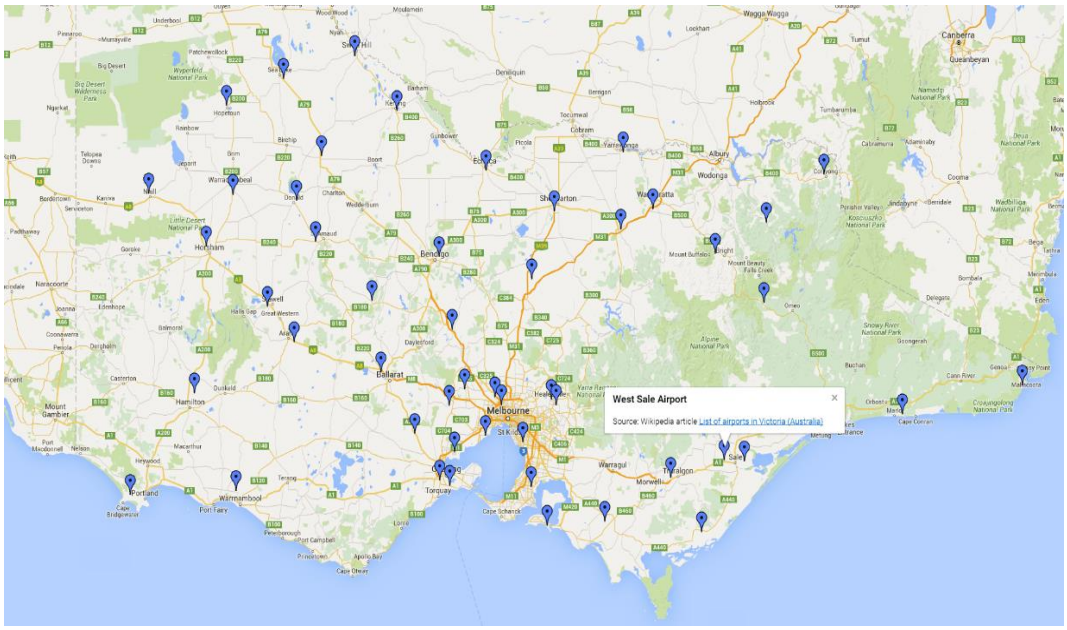
1 Introduction

1.1 Overview of the Airport

West Sale Airport (**WSA**) is located on 200 hectares of land, 10 kilometres west of the city of Sale in Victoria and is owned and operated by Wellington Shire Council (**Council**). The airport is a key economic and community asset providing employment activities, emergency services functions, business and community services.

Wellington Shire is the third largest municipality in Victoria covering an area of 10,924 square kilometres with a stable population of 42,000. It has a vibrant and diverse economy with mining (primarily offshore oil and gas) the major generator of wealth and 13.5% of jobs in agriculture and forestry, reflecting a strong dairy sector and the increasing growth of vegetable farming. Agricultural activity is supported by a reliable water supply, provided through the Macalister Irrigation District (MID). There is also a growing Health Care and Social assistance sector.



Sale is located 215 kilometres East of Melbourne in Gippsland with a flying time to Melbourne of under one hour or a two and half hour drive. It is the largest township in Wellington Shire having a direct population of over 14,000.

RAAF Base East Sale (YMES) is located 12 kilometres to the east of WSA and is an important aviation training facility for the Australian Defence Force.

Figure 1: West Sale Aerial View

1.2 Purpose and Objectives of the Master Plan

The WSA Master Plan Update 2017 is the key strategic document which underpins all activities and decisions of Council in relation to WSA. It communicates Council's long-term future development intentions and projects future development opportunities.

The Master Plan Update also needs to ensure compatibility with the local community and airport users, as well as environmental and regulatory obligations.

Council expects WSA's future role is as a high standard facility benefiting the region through business investment and job creation.

The West Sale Airport Master Plan has been reviewed several times since it was originally developed to capture significant changes in the economic outlook for Sale and the wider Shire.

The latest review of the WSA Master Plan had the core objectives of providing:

- An achievable Master Plan Update guiding the development of the Airport in the short term;
- A strategic framework which underpins the sustainable and structured development of the Airport to support investment, economic growth, employment and the achievement of long-term Council objectives;
- A model to ensure that the airport does not place any burden on the governance, finances and resources of Council; and
- A strong linkage between future airport plans and future development and planning controls in the region.

This Master Plan Update identifies key strategies to ensuring future growth and development of WSA, notably:

- Requirements addressed in the AIR5428 Pilot System West Sale Airfield Concept of Operations and the actions required to meet them.
- A new strategic vision for the Eastern Recreational Aviation Precinct (ERAP).

Figure 2: West Sale Airport

1.3 Methodology and Consultation

The Master Plan Update 2017 has been completed utilising internal Council resources as well as external expertise. This approach was driven by the need to incorporate developments including the freeholding of the Eastern Recreational Aviation Precinct and Air Force pilot training requirements (runway extension and overlay).

Previous Master Plans and key strategic documents were reviewed and the Regional Airport Master Planning Guideline developed by the Australian Airports Association has been used as the framework for the Master Plan Update.

To achieve the short-term planning objectives of the Master Plan Update within the necessary timeframe the following four stage approach has been taken.

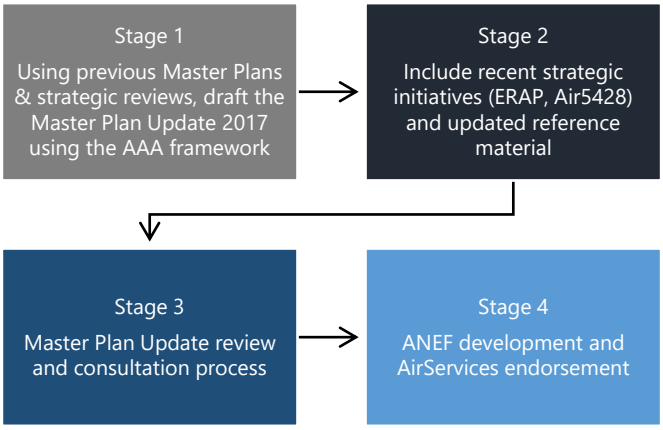


Figure 3: Master Plan Update Stages

As part of Council's Community Engagement Strategy, a variety of stakeholders were consulted to identify key issues and opportunities as part of the development of this plan. Consultation included key internal and external stakeholders, landowners in the surrounding area, existing airport lessees and freehold owners and other interested organisations.

In late 2015, an on-line survey was emailed to stakeholders within the WSA aviation community. They were also encouraged to extend the invitation to other interested parties.

A summary of responses can be found at 2.1.7.

Responses following consultation regarding this Master Plan Update are shown in Appendix B – Stakeholder Feedback.

1.4 Report Structure

This report has been structured to provide a clear description of the current situation and future development at WSA. The Master Plan Update format is based on the Australian Airport Association (AAA) Master Planning Guideline. The first part (chapter 1 and 2) describes current issues and it sets the scene for the Master Plan. The second part develops the Master Plan and outlines the key elements and strategies at WSA. The table below summarises the report structure.

	Section	Description
Part 1: Background Information	**Section 1 – Master Plan context**	Historical background, regional, socio-economic and policy context
	Section 2 –Current Situation	WSA's ownership and management; Existing activities; Land use; Environmental and Heritage values.
	Section 3 – SWOT Analysis	Internal strengths and weaknesses; External opportunities and threats
	Section 4 – Strategic Vision and Objectives	Future direction for WSA
	Section 5 – Critical Airport Planning Parameters	Forecast of future operations; Aerodrome Reference Code; Selected Design Aircraft
Part 2: Airport Master Plan	**Section 1 – Land Use Plan**	Land use precincts; Land use precinct guidelines
	Section 2 – Facilities Development Plan	Movement area; Aviation support facilities
	Section 3 – Environmental Management Plan	Previous site analysis; Future environmental strategy
	Section 4 – Airport Safeguarding Plan	Commonwealth, State and Local safeguarding plan
	Section 5 – Implementation Plan	Trigger points; Estimated timings

Table 1: Report Structure

2 Background Information

2.1 Master Plan Context

Council is the owner and responsible authority for the operation and management of WSA. The Airport is a mix of aviation industry, training and recreational aviation. Tracking of aircraft movement data commenced in early 2016. The ongoing capture of this data will be essential in obtaining a better understanding as to what the airport provides as well as several other issues.

The original Master Plan was developed in 1987. In 1995, a full review was undertaken after significant changes at the airport including change of ownership and council amalgamation.

There have been two subsequent reviews and updates undertaken in 2003 and 2011. At the time of the 2011 review the plan was for a 3-5-year time horizon due to a number of uncertainties that would directly impact the direction and investment in the airport. Some of these issues remain outstanding, whilst others have only recently been given some clarity.

There are three recent decisions which have a significant impact on the review of the current Master Plan Update:

West Sale Airport, Eastern (Recreational Aviation) Precinct (ERAP)

In February 2014 Council resolved to progress a 39-lot freehold subdivision within the WSA Eastern Precinct for recreational aviation purposes.

This followed the commissioning and consideration of several reports including:

- Initial Freehold Development Concept plan – The Airport Group (2013).
- Report on Land Tenure – The Airport Group (Oct 2013).
- Vegetation Overview and Habitat Hectares Assessment – Ethos NRM (November 2014).
- Review of Wastewater Treatment and Disposal Options – The SMEC Group (March 2015).
- Valuation report – WSA Eastern Precinct - Valuer-General Victoria (January 2015).
- WSA ERAP Staged Planning Permit (2016)

A resolution in May 2015 directed council officers to complete the required planning permit and statutory processes for land to be sold to existing lessees within the ERAP. Other sites will then be sold as part of a staged release.

Note whilst the airport was transferred to Council under the federal government Aerodrome Local Ownership Plan (ALOP) under a deed arrangement which restricted certain dealings with the land, Council was granted permission to enter negotiations for the sale and lease of Airport land from the Department of

Transport and Regional Services on 13 January 2004 – see **Appendix D**

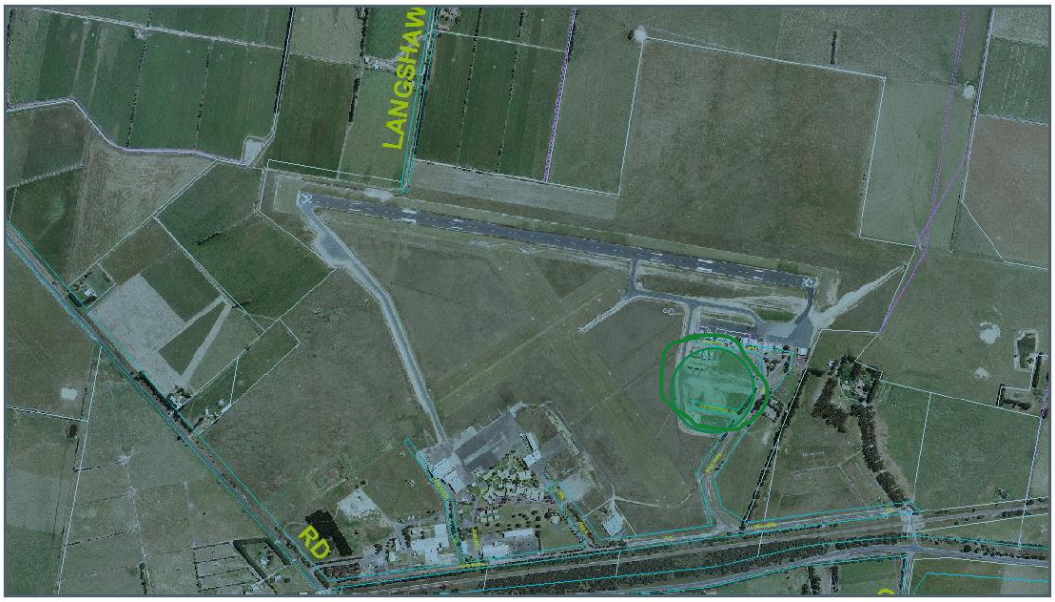


Figure 4: ERAP at WSA

Defence Project AIR 5428 – Basic Flying Training System (BFTS) RAAF Base East Sale

On 6 September 2015, the Federal Government announced that RAAF Base East Sale will host the Basic Flying Training School (BFTS) for the Airforce, Army and Navy from 2019 for 25 years. This will see Pilatus PC-21 aircraft being based at East Sale and an annual intake of up to 165 trainee pilots per year.

The impacts on WSA as an auxiliary airport have been outlined in a brief provided by defence regarding the BFTS concept of operations. This confirms that WSA will be used by the PC-21 and by early 2020 RAAF expects a significant flight rate increase. Specifically, WSA will be used for circuit flying training, such as targeted training, emergency landing training, and instrument approach procedures training flight profiles.

To accommodate the PC-21, improvements to WSA will be required, notably an extension to and resurfacing of the main runway. The Victorian State Government has committed $5.0M to ensure the essential infrastructure required at WSA is delivered.

For Wellington, the basic flight training school means:

- More than 500 new jobs which could add up to $28M per annum to our local economy in wages and salaries (combining defence and indirect flow on employment).
- Construction and development at the RAAF Base East Sale, which will generate local demand for goods and services.
- Employment for local contractors through the project's construction phase.
- On base personnel will increase from around 620 to over 900.
- Population growth as increased base personnel bring their families.
- An economic output boost of around $168M per year.

In addition to the likelihood of aviation related activity in the region increasing, there is also the potential for other international flight training facilities to relocate to the region (Singapore, Malaysia, Papua New Guinea).

Figure 5: Pilatus PC-21

Federation Training Relocation

The main campus for Federation Training in Sale is based at the Airport. From this site, occupied since 1991, they offer a range of courses and apprenticeship training.

The location and facilities, a mix of old portable buildings and unused onsite student accommodation, are not considered adequate to meet the expectations of a modern education facility providing a broad range of courses. The limitations of the site have been recognised for some time and in 2010 a new site was purchased in the Port of Sale Precinct with the intent of relocation. Federation Training are continuing to work with Council to explore alternative options for improving education delivery in the Shire.

The medium-term future of Federation Training at the Airport, following the most recent announcements, remains unclear. The relocation of Federation Training, even partial, would free up land with direct airside access to the western apron area.

This Master Plan Update 2017 concerns a short-term planning horizon, considered appropriate to address immediate planning concerns stemming from recent announcements. Other longer term possibilities will be addressed in a subsequent Master Plan that Council expects will sustain development at the airport until 2050.

The Master Plan Update 2017 recommends practical strategies that can be implemented resulting in incremental, but important improvements. It also sets out the triggers for implementation ensuring demands for growth are achievable in a planned and strategic manner.

The key strategies recommended in the plan are:

- Review airport management structure to accommodate the delivery of strategies.
- Continue to monitor and identify any operational, maintenance and capital requirements noting opportunities arising from AIR 5428 activities or any other changes.
- Undertake a comprehensive review of the zoning and planning scheme applicable to the airport precinct and adjacent land to ensure controls are current and allow unconstrained aviation related development.
- Continue to plan for, identify and participate in grant funding opportunities to assist with financing identified infrastructure requirements.
- Complete capital renewal works using a staged approach that will consistently enable airport objectives to be satisfied.

- Encourage development activity within the ERAP by promoting freehold land for new hangars for recreational aircraft.
- Evaluate requirements for other aeronautical related industries operating from WSA.
- Undertake a review of the branding and identity of the Airport.

2.1.1 Historical Background

WSA has a long and interesting history. Key points of note include:

- During World War II (1941 to 1945) it was requisitioned by the Air Force and was known as RAAF Base West Sale / RAAF Station West Sale. During this time, it was home to a bombing and gunnery school focused on training and coastal defence purposes. One original Bellman Hangar from the period remains on site.
- Some years later it became the home of the National Safety Council of Australia (NSCA) Victorian Division. The NSCA was the key tenant on the site until It's sudden and unexpected financial collapse in 1989 and a significant amount of infrastructure from that period remains and is currently occupied by Federation Training.
- Council assumed ownership and operational management of the Airport from the Federal Government on 9 July 1992.
- Significant infrastructure upgrades occurred in 2012-13 as Council completed works following receipt of a $3.0 million grant from Regional Development Victoria (RDV) in 2011, aimed at supporting a Defence Department contract tender initiative for the interim Basic Flying Training System. This included taxiway works, pavement rehabilitation, enlargement of the eastern apron, airport lighting and fuel handling facilities.
- The Gippsland Armed Forces Museum (GAFM) relocated to WSA in 2009.

Figure 6: West Sale Airport entrance

2.1.2 Regional Context

Wellington Shire is defined by a hinterland to its north and a coastal strip to the south which forms part of the Ninety Mile Beach. Latrobe Regional Airport (LRA) is a nearby provider of airport and aviation services.

It is located between Morwell and Traralgon, 60 kilometres west of WSA. It is owned by Latrobe City Council (LCC) and operates under the management of the Latrobe Regional Airport Board. Latrobe City Council is a major regional city servicing over 70,000 people in its catchment area which includes the towns of Moe, Morwell Traralgon and Churchill. Of similar land size as WSA, LRA comprises two runways and associated taxiways and apron, terminal buildings and other support structures. LRA has a range of tenants including Mahindra Aerospace, Emergency Services, an Aero Club, Department of Sustainability and Environment (Vic Government), flying training, private hangars and commercial operators. It is within close proximity to the Australian Paper Mill, Gippsland Water storage facility and power station coal mines. It is also surrounded by expanding rural living developments, pine plantations, Latrobe Regional Hospital and retirement villages.

Bairnsdale Airport is another small regional airport that lies 70 kilometres to the east of WSA and is located in the East Gippsland Shire. East Gippsland is known for its world class tourist attractions and wilderness areas. The Airports facilities support a number of commercial enterprises including aerial firefighting, corporate charters, aircraft support services, medical transport and a courier service.

Figure 7: Council Snapshot

2.1.3 Socio-Economic Context

Sale is the largest town in the Shire with a population of over 14,000 people (2011 Census). The top 5 employment industries and occupations are:

Employment Sectors	Occupations
Agriculture 13.5%	Managers 19.4%
Health care 12.8%	Professionals 16.7%
Retail trade 11.8%	Technicians and Trade workers 14.9%
Public administration and safety 9.7%	Clerical and Administrative workers 11.6%
Education 9.1%	Community and Personal Services workers 10.8%

Table 2: Sale Employment Sector and Occupation Statistics

The Basic Flying Training Schools relocation to RAAF Base East Sale from 2019, as described in Section 2.1, is expected to boost local economic output and drive jobs growth.

There are other large commercial and industrial projects at various stages of development and implementation in the region which support future growth and liveability:

- $14.5M Port of Sale Cultural Hub Precinct Redevelopment.
- $7.6M to develop the new Sale Specialist School (Greenfield site).
- Construction of a new $1B Gas Conditioning Plant at Longford by ExxonMobil.
- $400M commitment by Esso Australia to replace the 187-kilometre pipeline from Longford to Hastings (subject to regulatory approval).
- $185M RAAF Base East Sale redevelopment works completed. Further $209M underway due for completion 2018.
- $260M Princes Highway East duplication - Traralgon to Sale – 9 sections estimated for completion mid-2019.
- A $3.3 M refurbishment of the Gippsland Regional Livestock Exchange (GRLE) was completed in 2016.

WSA is adjacent to the Melbourne-Bairnsdale railway line and Princes Highway directly to its south.

The Airport has not been impacted by residential development. It is primarily surrounded by agricultural land with Fulham Correctional Facility and the Municipal Pound being located 500 metres to the south of the site.

The Princes Highway between the western outskirts of Sale to the junction of the Airport is currently being duplicated. There is also a push to secure funding to fully duplicate the highway between Traralgon and Sale.

The Gippsland Aviation Industries Policies and Opportunities Paper (WSA and Latrobe Regional Airport), The Airport Group (2014) estimated that WSA contributes $11.8M in output and supports approximately $12.4M in gross value-added activity. This translates to the employment of roughly 90 FTE of which one third are directly employed.

2.1.4 Regulatory Context

Civil Aviation Safety Authority (CASA)

CASA is the authority responsible for the implementation and enforcement of safety regulations for civil aviation operations in Australia. Their authority is derived under the *Civil Aviation Act 1988* and promulgated through Civil Aviation Regulations 1988 (CARs). CASA has powers to protect operational airspace or to curtail aircraft operations if they believe safety is compromised.

CARs are gradually being replaced by the Civil Aviation Safety Regulations 1988 (CASRs). CASR Part 139 prescribes the requirements for aerodromes used in air transport operations.

The Manual of Standards (MOS) Part 139 Aerodromes is made pursuant to CASR Part 139 and sets out the detailed standards and operating procedures for aerodromes used in air transport. The manual provides the rules, mandatory standards, procedures and guidance information relating to the planning, design and operation of Airports.

CASA conducts periodic inspections (surveillances) to ensure airport and aircraft operators meet their responsibilities under MOS 139. Aspects of aerodrome safety relevant to WSA include;

- Aerodrome operation and maintenance
- Protection and use of runways, taxiways, and other movement areas

- Protection of airfield airspace
- Hazard and wildlife control
- Administration

The MOS139 is currently under review to ensure that it aligns with current regulatory policy (including ICAO), industry developments and technology changes.

Airservices Australia (Airservices)

Airservices has responsibility for the management of airspace and air traffic, and to provide Australia's network of aviation facilities used in aircraft navigations, communication and surveillance.

Local governments are encouraged to seek advice from Airservices on any development that has the potential to impact an aviation facility's sensitive areas such as landing and navigational areas.

In 2018, Australia will commence using air traffic control services with an advanced and integrated air traffic control called OneSKY. This will replace the aging The Australian Advanced Air Traffic System (TAAATS) system built and implemented in the 1990's.

OneSKY will integrate both the Department of Defence, and civilian Air Traffic Control management and systems into one system. This will realise cost efficiencies and improve safety, with the ability to cater for future air traffic growth.

The implementation of the OneSKY system will increase information availability for air traffic controllers, and help minimise noise and travelling delays for the public.

Military Base and Airspace Management

RAAF Base East Sale is located 12 kilometres east of WSA, an aviation training facility of increasing importance for the Australian Defence Force. Controlled airspace extends to 50 nautical miles and the RAAF Base has responsibility for Air Traffic Control services to the immediate flying area, including WSA. Control is transferred to Melbourne International Airport when the centre is not manned.

At times, military aircraft movements have priority over civil aircraft activities. They can also activate designated Restricted Airspace(RA1) which requires aircraft to have a clearance to enter the airspace that will not unreasonably be with-held.

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) (EBPC Act)

The EBPC Act provides a legal framework to protect and manage nationally and internationally significant flora, fauna ecological communities and heritage places.

The Airport contains large areas of significant remnant native grassland. A 2014 study identified 6 Plains Grassy Woodland Habitat zones which contained 84 terrestrial flora species including 49 native and 35 weed species.

Notably, the area contains a rare flora species called the Rough-grain Love Grass and the critically endangered Central Gippsland Plains Grassland (also known as the Gippsland Red Gum Grassy Woodland and Associated Native Grass Land).

The site is described as a key site in both the *Flora and Fauna Guarantee Act 1988* (FFG Act) and EPBC Act as requiring controlled management to ensure conservation of the endangered ecological community.

Any proposed development requires consideration of the impacts on the grasslands.

Environment Protection Act 1970 (Victoria)

Wastewater treatment and disposal at the Airport is managed onsite.

The CFA has its own system and the other allotments have onsite septic tanks and discharge effluent is pumped to an onsite evaporation pond.

Whilst the evaporation pond is not currently required to be licensed, if an upgrade is required due to significant volume increases a works approval or licence will be required from the Environmental Protection Authority.

Local Government Act 1989 (Victoria)

As a Council, owned asset, the Airport is subject to the requirements of the Local Government Act 1989. This applies to the sale, lease, transfer exchange and use of land. Council must operate in accordance with the Local Government Act.

2.1.5 Policy Context

National Airports Safeguarding Framework (NASF)

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 aviation safety requirements are recognised in land use planning decisions.

NASF developed by the National Airports Safeguarding Advisory Group (NASAG), comprising of 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 was agreed to by Commonwealth, State and Territory Ministers at the Standing Council on Transport and Infrastructure (SCOTI) meeting on 18 May 2012. The agreement represents a collective commitment from Governments to ensure that an appropriate balance is maintained between the social, economic and environmental needs of the community and the effective use of airport sites. The Framework applies at all airports in Australia and affects planning and development around airports, including development activity that might penetrate operational airspace and/or affect navigational procedures for aircraft. Pursuant to the SCOTI agreement, it is the responsibility of each jurisdiction to implement the Framework into their respective planning systems.

NASF is comprised of a set of seven principles and seven 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 seven 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 (approved Nov. 2016)

It is understood that additional guidelines relating to Public Safety Zones and helicopter operations are proposed to be released by NASAG in the near future.

Copies of the full set of current guidelines can be found on the Department of Infrastructure and Regional Development's website at the following address: www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/.

State Planning Policy Framework

The State Planning Policy Framework (SPPF) aims to ensure that appropriate land use and development policies and practices are implemented in the planning objectives in Victoria, ensuring a balance between community benefits, in terms of environmental, social and economic aspects, and a sustainable development.

The following SPPF policies apply to airport use and development:

Clause 18.04-2Planning for Airports

In order to reinforce and protect the economic and infrastructure value in Victoria, this clause includes the following strategies:

- Protecting airports from incompatible land-uses.
- Ensuring that in the planning of airports, land-use decisions are integrated, appropriate land-use buffers are in place and provision is made for associated businesses that service airports.
- Ensuring the planning of airports identifies and encourages activities that complement the role of the airport and enables the operator to effectively develop the airport to be efficient and functional and contributes to the aviation needs of the State.

Clause 18.04-3 Planning for airfields

This clause reinforces the role of airfields as key centres of the State's economic and transport infrastructure. In order to facilitate the siting and extension of airfields and restrict incompatible land use and development in their proximity, this clause includes the following key approaches:

- Avoid the construction of new airfield in areas that could have a greater long-term value for other purposes.

- Integrate the location planning, nearby existing and potential development and the ground transportation system within the airfield operations.
- Avoid that existing and potential development prejudice the safety or efficiency of the airfield operations.
- Regulations take into negative effects from aircraft operations (such as aircraft noise) on the land in the proximity of the airfields.
- Avoid that existing and potential development prejudice any future extension or development of an airfield in accordance with an approved strategy or master plan.

Wellington Shire Council Strategic Guidance

Wellington 2030 Strategic Vision

The Wellington 2030 Strategic Vision describes what is important to our community under five theme areas as we progress towards 2030:

Theme
• Services and Infrastructure
• Natural Environment
• Community
• Economy
• Lifelong Education and Development

Table 3: Wellington 2030 Strategic Vision

Wellington 2030 has recently been renewed through a significant public consultation process and a revised version is expected to be adopted in 2017.

Council Lease and Land Transactions Policy

Council has adopted policy regarding Lease and Land Transactions and these have relevance to WSA. Polices ratify Council's interest and ability to establish leases of up to 50 years in the Eastern (Recreational Aviation) Precinct. These policies are available from council's website.

Wellington Planning Scheme -Municipal Strategic Statement

The Wellington Planning Scheme (WPS) is the instrument by which the current and future development of the Shire is guided and controlled. Land use is governed by the identification of planning zones, designating land uses as acceptable, not acceptable or requiring approval.

Overlays which identify special considerations or constraints, are provided in addition to zones and are to be applied to any proposed development within the affected location. The land use zonings and overlays that apply to the WSA are identified below in **Figure 8** and **Figure 9**.

The WPS Municipal Strategic Statement (MSS) recognises that WSA delivers significant employment,

transport, and economic development opportunities.

Clause 21.17-4 of the Municipal Strategic Statement states:

"Aviation related companies are based around the RAAF Base at East Sale and the West Sale Aerodrome. The airfields are important assets and provide opportunities for the establishment of a range of aviation related businesses and value-added industries in the region."

To capitalise on the opportunities afforded by these aviation facilities, clause 21.17-4 includes the following strategies:

- *Support the development of aviation related industries on, or in close proximity to, aerodromes.*
- *Ensure that land use or development around aerodromes does not impact upon their existing and future use*

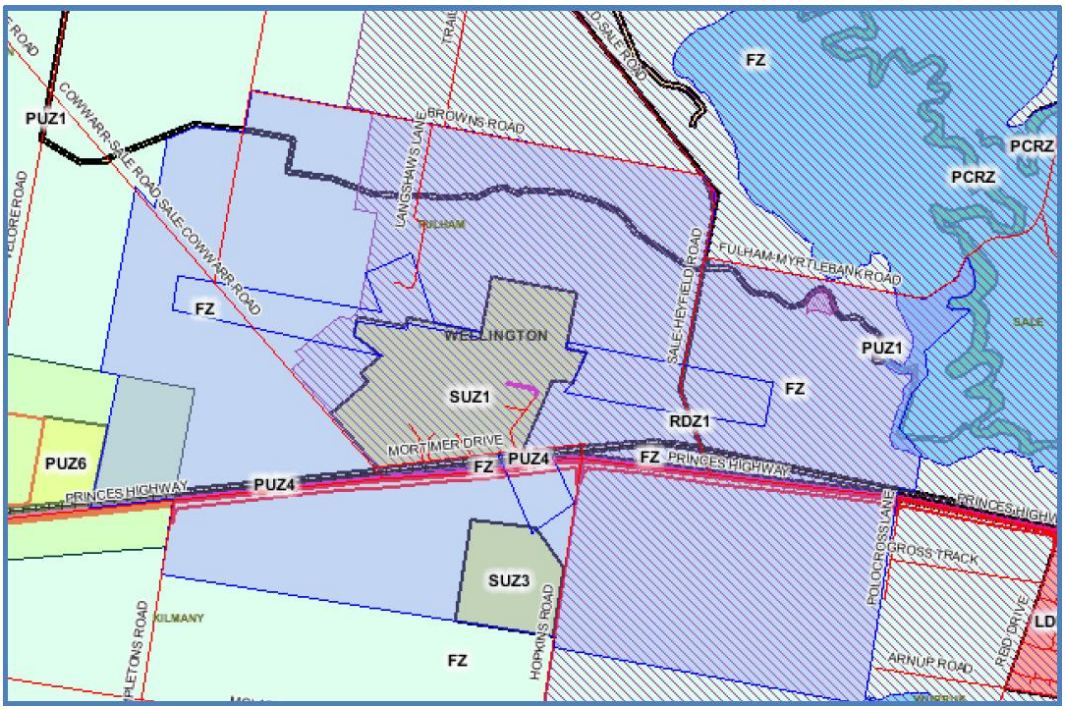


Figure 8: Special Uses zone

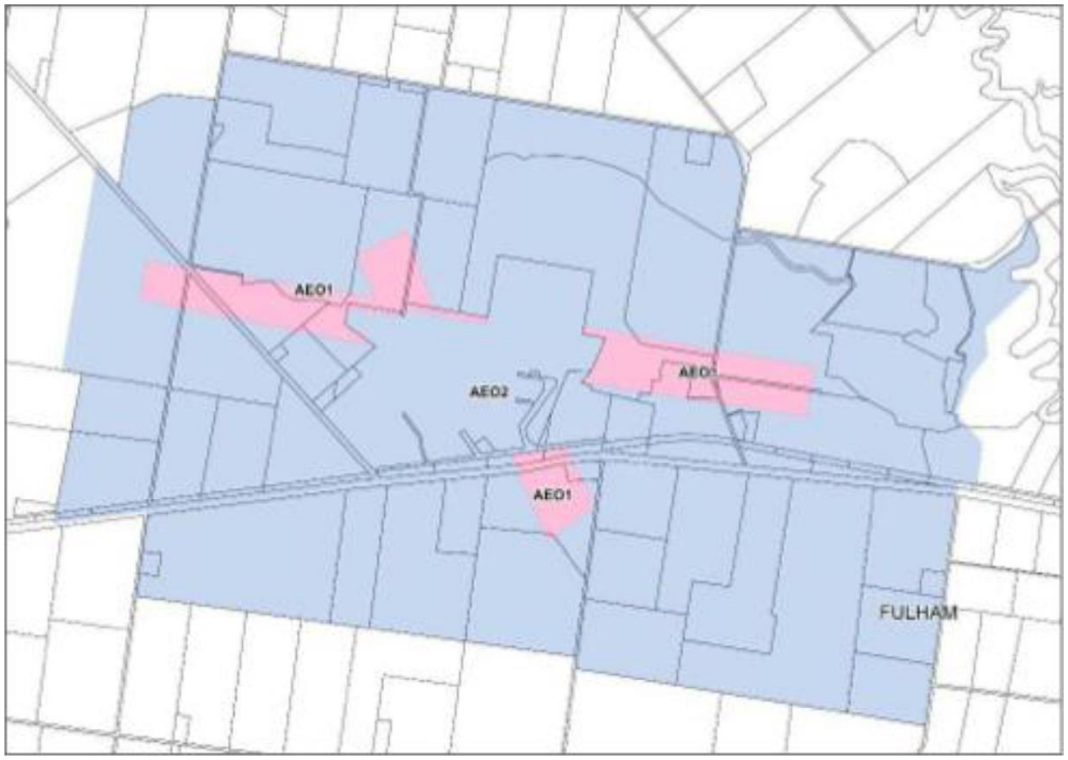


Figure 9: West Sale Airport Environs Overlay - Schedules 1 & 2

Local Planning Policy Clause 22.05: Aerodrome and Environs Policy

This clause has been developed for the East Sale RAAF Base and West Sale Aerodrome in order to ensure that:

- The safety and the efficiency of aerodromes operations is not prejudiced by any new use or development of land nearby
- Any detrimental effects of aircraft operations are taken into account in planning the use or development of and nearby
- A range of education and industry opportunities in association with aeronautical activities.

In order to satisfy these key objectives, the clause states:

- The effect of the proposal on the amenity area.
- The need to co-ordinate the planning of areas close to the aerodrome.
- The suitability of building design and external building materials.
- The height of the proposed development.
- Whether the grant of a permit would detrimentally affect the operational safety of aircraft or the opportunity for the reasonable future expansion of the aerodrome.
- Buildings within a designated Australian Noise Exposure Forecast (ANEF) area should be considered in accordance with the provisions of the Standards Association of Australia, AS 2021-1994.

Finally, the clause specifically addresses that applications to use or develop land within and around WSA

should consider the above requirements whether:

- The site relevant to the application is located within the designated area for development as shown on the West Sale Aerodrome Master Plan, November 2002 or any superseding document, including this Master Plan Updates.
- The application will adversely affect the functionality of West Sale Aerodrome.
- The application will adversely impact sites specified as having significant flora and fauna values as outlined in the West Sale Aerodrome Master Plan, November 2002 (or any superseding document, including this Master Plan Updates) and the West Sale Aerodrome Public Authority Management Agreement, June 2003 or any superseding document.

Aerodrome Business Plan 2000 – 2004

Whilst the West Sale Aerodrome Business Plan is long standing, there are key points that remain relevant today.

Notably, the Business Plan identifies the need to calculate the real costs of operating the aerodrome and a formula developed for the recovery of a fair proportion of the costs from users. Implementation of actions relating to cost recovery from the 2000 business plan have not been implemented.

Regional Strategic Direction

2016 – 2022 Economic Development Strategy

Two of strategic objectives of the 2016-22 Economic Development Strategy are:

- Economic Diversity – Ensuring we can leverage from our existing industries and assets to diversify the economy through value-adding activity.
- Amenity and Infrastructure – Ensuring sufficient investment in critical infrastructure to support current activity. Attract new investment and attract and service residents.

It was recognised that Wellington's economy is stable because of its 'specialised diversity' with agribusiness, Defence, oil and gas, and public administration, which together employ around 60

% of the workforce.

The Strategy highlights Defence and Aviation as both significant local competitive strengths and with greater industry growth potential.

An opportunity recognised by the Strategy was to leverage from major expansion of RAAF Base East Sale from the commencement of basic flying training in 2019. Additionally, the co-location of all initial aviation training at the Base may become an attractor to other aviation training and business opportunities.

To capitalise on this, Council can find opportunities for complementary business activity, starting with research into the type of economic activity that can leverage from a major Defence presence. The strategy noted that Council had already started these efforts with growth and development opportunities at West Sale airport the subject of detailed analysis. Important partnerships had been formed to assist, with the main enterprises and entities involved with Defence.

The 2016-18 Economic Development Strategy Action Plan has as an action to continue to investigate options for developing aviation related activity at West Sale Airport and states that West Sale represents a significant asset that has yet to reach its potential.

Sale, Wurruk and Longford Structure Plan

The Plan was formally adopted by Council on 7 September 2010 and was incorporated into the Wellington

Planning Scheme via Planning Scheme Amendment C67 on 8 November 2012. A further update was adopted on 16 October 2014 via Planning Scheme Amendment C89.

The Plan provides a planning tool that sets out a long-term vision for the future growth and development of the district with the aim of improving the physical settings within which people live, work and engage in recreation.

Of the seven themes contained in the plan, Industry and Transport and Movement are relevant to the review of this Master Plan.

The Industrial Theme identifies three directly relevant objectives:

- IT#2 – to provide economic development and local employment opportunities in industrial activity by ensuring that adequate zoned land is available to facilitate future industrial development in areas that are easily accessible from major transport routes.
- IT#4 – to protect and enhance the capacity for RAAF Base East Sale and the WSA to operate and develop as a major employment and technology base for the area.
- IT#5 – to provide for a multi modal freight exchange area for freight and logistics operators that capitalises on strategic locations with good road, rail and air connections.

The plan identifies:

- an area to the east of the airport as current and future industrial zoned land to encourage freight and logistics uses that are supported by the road, rail and aviation infrastructure (multi modal freight exchange);
- an area to the immediate west of the airport for specialised light industrial uses associated with the airport; and
- a large area (105 hectares) to the south east of the airport for future long term industrial development which is partly affected by airspace protection constraints.

Figure 10: Overall Structure Plan

The Movement theme focuses on road, pedestrian and public transport. It identifies a potential road bypass route for heavy vehicles to avoid the Sale CBD (via Myrtlebank) to the east of the Airport and proposed multi modal freight exchange. The stretch of road between Sale and the Airport is currently being duplicated and a roundabout is being built at the intersection with the Sale-Heyfield Road to facilitate such a future bypass.

Gippsland Regional Plan 2015-2020

The Gippsland Regional Plan 2015-2020 (GRP) is a long term strategic plan for improving economic, social and environmental outcomes for the Gippsland region and is the result of the combined vision and efforts of the six local Governments (including Wellington), Regional Development Australia, committee for Gippsland and the GRP Leadership Group also comprising on the Gippsland Regional Management Forum.

Key projects and strategies identified relevant to the Airport, in addition to securing the Basic Flying Training School, include:

Continuing advocacy for the development of the Port of Sale Education Precinct to improve vocational training facilities in Sale. This includes:

- Relocation of the Federation Training Facility to Sale
- Gaining policy support for key manufacturing sectors, including aeronautical.
- Maximising urban growth in Sale.

Gippsland Freight Strategy - June 2013

The strategy was developed to help realise the region's opportunities and set out the actions necessary to enable the efficient movement of a growing freight network. The strategy addresses investments in critical infrastructure, regulatory reform, improved access to skills training and job opportunities and strategic and community planning.

Relevant to the airport is:

- The upgrade and duplication of the Princes Highway between Traralgon and Sale to M class standard. Whilst certain sections are currently funded for duplication and works are occurring, it is estimated that a further $100M is required to enable full duplication. The airport is directly accessed via the Princes Highway.
- Developing an alternate truck route for key towns, including Sale.
- Promoting the development of a rail-road intermodal facility at West Sale.
- Investigating the implementation of an air freight service out of Gippsland.
- Consider an extension of the High Productivity Freight Vehicles (HPFV) network to Sale.

2.1.6 Planning Controls

Airport Zoning

The Airport is recognised as being public land and is affected by the Special Use Zone - Schedule 1.

The purpose of the zone is to:

- Provide for the safe and efficient operation of the WSA;
- Provide for the development of aeronautical industries and activities;
- Provide for educational facilities appropriate to the site; and,
- Ensure existing and future activities on the site will not adversely impact areas specified as having significant flora and fauna values.

The Airport is surrounded by Farming Zone ("FZ") land; the south boundary of the SUZ1 is bounded by the railway line (PUZ4) and the Princess Highway (RDZ1).

Airport Environs Overlay

The Airport Environs Overlay applies to the airport site and surrounding land as shown in **Figure 9**.

The purposes of the Airport Environs Overlay (Schedule 1 & Schedule 2) are to:

- Identify areas which are, or will be, subject to high levels of aircraft noise, including areas where the use of land for uses sensitive to aircraft noise will need to be restricted;
- To ensure that land use and development are compatible with the operation of airports in accordance with the appropriate Master Plan and with safe air navigation for aircraft approaching and departing the airfield;
- To assist in shielding people from the impact of aircraft noise by requiring appropriate noise attenuation measures in new dwellings and other noise sensitive buildings;

- To limit the number of people residing in the area or likely to be subject to significant levels of aircraft noise; and buildings are to be constructed to comply with AS2021-2000 *Acoustics – Aircraft Noise Intrusion - Building Siting and Construction.*

The Overlay also trigger the need for a planning permit in order to respond and comply with Clause 22.05 – Aerodrome and Environs Policy.

AEO's are typically based on ANEF contour boundaries, which identifies land subjected to high levels of aircraft noise. This supports appropriate land planning controls to prevent the noise sensitive developments in areas impacted by high levels of aircraft noise. It is important to note that the existing AEO at WSA is currently not based on an established ANEF.

Design and Development Overlay

WSA land is also covered by the Design and Development Overlay – Schedule 6 which addresses building and structure heights (restriction) required to protect safe operations for aircraft operating at RAAF Base East Sale.

There is no DDO protecting the Obstacle Limitation Surfaces of West Sale Airport.

2.1.7 Key Stakeholders

An Engagement Plan was developed specifically for this Master Plan Update. The Engagement Plan outlined the importance of seeking feedback on the Master Plan from a wide range of airport, industry and government/agency stakeholders.

Appendix A – List of stakeholders This presents a list of identified stakeholders. This included internal stakeholders, landowners in the surrounding area, existing airport lessees and freehold owners and other interested organisations.

Workshops were held internally and involved representatives from strategic and statutory planning, Executive Management, Economic Development, Assets and Projects, Built Environment and Airport Management.

In 2015, an on-line survey was emailed to identified external airport stakeholders. The questionnaire response rate was very high. A total of 41 individuals completed the survey. A demographic summary of those completing the questionnaire shows:

- 30% are lessees and 10% owners of land at the Airport.
- 35% had been at the Airport for over 15 years.
- 65% held some level of pilot licence.
- 40% owned or leased aircraft.
- 20-25% were unsure of the condition of the airport.
- In terms of condition, the worst aspect of the Airport was the entrance and the best the apron areas and sealed runway.
- 90% said that an increase in flying activities would create opportunities.
- 80% said that pilot training should be an area of focus and 75% said aircraft maintenance.
- In terms of non-aviation activities, 70% said a museum and 60% said trades, could be developed or expanded.
- 70% said that Council offering 50 year leases in the recreational precinct is a positive outcome.
- In terms of Council offering freehold land within the Eastern Recreational Aviation Precinct, 75% and 80% respectively said it would attract development and be a positive outcome.
- 60% hadn't made contact with Council in the previous year, 35% had participated in airport meetings and 70& were interested in receiving info regarding the outcome of any meeting.
- 60% learn about changes by word of mouth, 45% will not contact Council directly.

2.2 Current Situation

2.2.1 Ownership and Management

Council is the owner, operator and manager of WSA.

After the previous Master Plan review, a fulltime Coordinator Aerodromes has been appointed covering both West Sale and Yarram. Since the appointment in June 2013 significant attention has been placed on building productive relationships with landholders and lessees, resolving longstanding issues and improving the overall amenity.

A casual Aerodrome Reporting Officer (ARO) is also engaged, on average two days a week, to provide maintenance and support services at WSA also carrying out Works Safety Officer (WSO) duties.

2.2.2 Site Description

The primary features of the airport include:

- One sealed runway of 1527m (09/27) which runs east west;

- Two grass runways of 699m (14/32) running NE/SW, and 500m (05/23) running NW/SE; and
- Sealed aprons and taxiways

Figure 11: WSA Aerial view

Key landside areas of the airport include:

- Terminal Precinct.
- Eastern Apron Precinct (lots fronting eastern apron).
- Eastern Recreational Aviation Precinct (area to the south of the above lots).
- Western Industrial / Commercial Precinct.
- Gippsland Armed Forces Museum (GAFM).
- Educational and training precinct – Federation Training and Esso Training Facility.
- Country Fire Authority training ground.

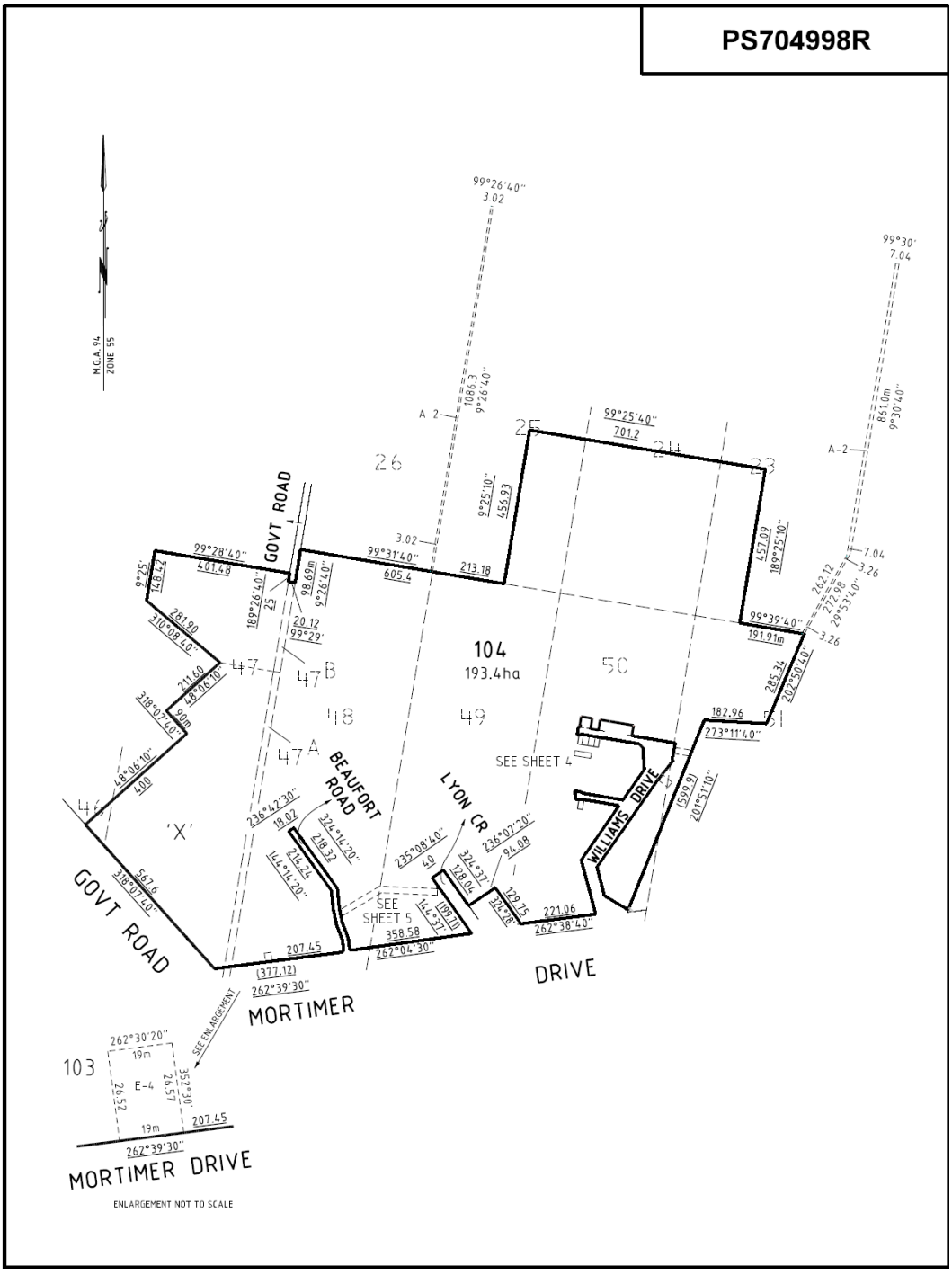


Figure 12: Aerodrome Title Plan 2016 – subject to amendment noting Land Exchange / Runway Extension.

2.2.3 Surrounding Land

The Airport is located on a 200-hectare site and is surrounded by agricultural land. The Melbourne-Bairnsdale railway line and Princes Highway border the southern boundary of the airport.

Fulham Correctional Facility is located approximately 500 metres to the south on Hopkins Road. This is

Victoria's largest medium-security correctional centre which currently houses 845 adult male prisoners. Plans are also underway to add an additional 54 beds bringing the total population to 940. The Municipal Pound is located opposite the correctional facility.

2.2.4 Existing Activities

The current primary activities on the airport include:

- Aircraft repair and maintenance
- Flight training
- Recreational flying
- CFA training
- TAFE training
- Sea Survival Training Centre
- Aviation Museum

2.2.5 Existing Facilities

Movement Area

As shown in Figure 13 below, the movement area comprises the following features:

- Runway (RWY) 09/27: sealed runway; dimensions 1527m x 30m facing east-west. This is suitable for all general aircraft (GA) and most regional RPT and Code 3C aircraft. The flexible asphalt pavement has a PCN of 12 with a maximum allowable tyre pressure of 600 (87 PSI). This allows aircraft up to 21,000kg take-off weight to operate without restriction.
- RWY09/27 strip; dimensions 1650m x 150m.
- RWY14/32: grass; dimensions 699m x 30m in the NE-SW direction serving GA and training aircraft.
- RWY14/32 Strip; dimensions 699m x 90m.
- RWY05/23 Grass; dimensions 500m x 30m in the NW-SE direction serving GA and training aircraft especially in the cross winds to the main strip.
- RWY05/23 Strip; dimensions 500m x 90m.
- Apron; sealed; offset from eastern end of RWY09/27. This area provides charter, Air Ambulance movements and both fixed and rotary wing GA operations.
- Apron; sealed; located south of RWY05/23 (RWY05 approach end).
- Taxiway Alpha; sealed asphalt pavement 15m wide
- Taxiway Bravo; sealed running parallel along part RWY09/27, links also to eastern apron. Code B taxiway which serves the GA hangars to the south of the main apron.
- Taxiway Charlie; sealed linking western end of RWY09/27 with southern apron. Spray sealed pavement 10.5m wide and capable of Code C aircraft operations based on weight; however, is designed Code B due to gradients. Also, has an adjoining pavement area for engine run-ups for up to 3 Class A aircraft.
- Taxiway Echo; sealed running south to eastern lots.
- Taxiway Echo 1; sealed running east off taxiway E (northern); and
- Taxiway Echo 2; sealed running east off taxiway E (southern).

- Helicopter parking and operations also occur on the aprons and runways.
- Compass swing area (class 2) located in the run-up bay on Taxiway Charlie.

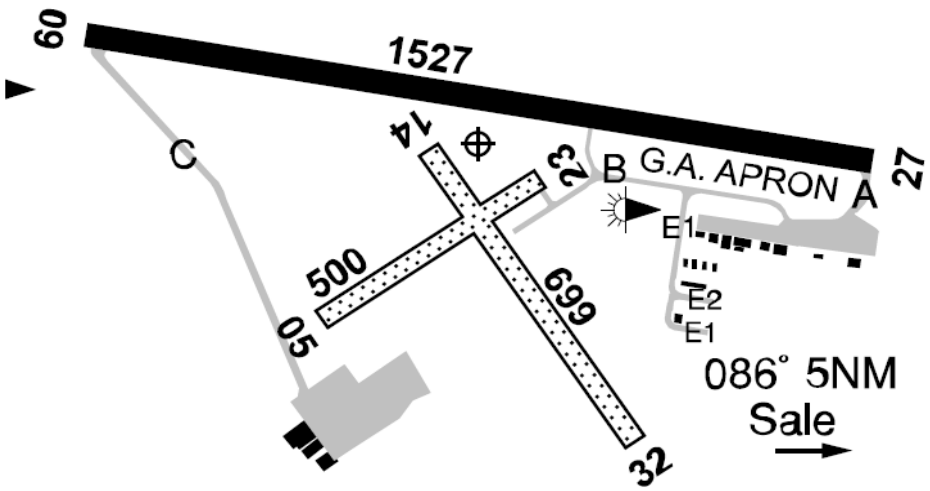


Figure 13: WSA Movement Area

Non-Movement Area

The non-movement area of the airside portion of the airport has the following features:

- Drainage line and sewerage evaporation pond under the approach to RWY05;
- Airfield lighting for RWY09/27;
- Sewer pumping facilities;

Development in these areas is limited due to a range of constraints including height restrictions to protect operational airspace, aviation safety, environmental matters, as well as to support other operational and management requirements.

Landside Area Infrastructure and Features

The airport layout is divided into three distinct areas. The Eastern precinct focused on general aviation and recreational flying related activities, the Education Training precinct and the Western Precinct supporting commercial and industrial related activity.

Eastern Precinct

The precinct contains the following facilities:

- Terminal building: The building was opened in 1983 and measures approximately 185m2. It comprises a lounge area, booking office area, passenger counter, storeroom and baggage office and basic amenities. Toilet facilities are accessible both internally and externally. The Airport does not currently support RPT services and therefore is not required to support large passenger groups or the associated processes / security requirements / management aspects. There is potential to reconfigure the space to improve its versatility;
- Fuel facility – provides 20,000 litres storage capacity of both Jet A1 and Avgas fuel;
- Residences and office accommodation for commercial flying operations;

- Access roads and car parks within terminal area; and
- Utilities related infrastructure.

In May 2015 Council approved and is progressing a 39-lot subdivision in the Eastern Precinct. It is intended to be a mix of freehold and leasehold properties focused on recreational aviation and a small number of associated commercial / retail opportunities.

Education Training

The Education precinct comprises the following facilities:

- Federation Training – aviation and non-aviation related education.
- Fire-fighting training facility used by Country Fire Authority (CFA).
- Sea Survival Training Centre (HUET) (ESSO).

Western Precinct

The precinct contains the following uses:

- Bellman hanger – storage.
- Engine Repair workshop (privately operated).
- Utilities related infrastructure.
- Aircraft servicing and repair business
- Armed Forces Museum

2.2.6 Ground Transport Access

Access to the Airport is from the Princes Highway via an access road link and over a railway level crossing entering the Airport from the south-east corner. The approach is not ideal having to cross a railway line shortly after turning off the main road. Redevelopment of the intersection is planned as part of duplication works on the Princes Highway and discussions with VicRoads to improve the entry point are almost completed at the time of writing this document.

An alternative access route at the western end of the Airport via Cowwarr-Sale Road is under consideration subject to demand.

There is adequate maintained carparking provided adjacent to the terminal.

There is an opportunity to improve signage to guide visitors to key facilities and businesses located at the airport.

2.2.7 Utility Services

Water, electricity and telephone are all connected to the Airport. Gas is not available. Specific issues related to infrastructure are outlined in this section.

Water supply

Water, electricity, fibre optic (to CFA site) and telephone are all connected to the Airport. Gas is provided to the HUET Training facility and is used to heat the pool water. Specific issues related to infrastructure are outlined in this section.

Water supply

The water supply is provided the local water authority Gippsland Water. The majority of supply pipework was renewed in 2008/09. This included the provision of fire hydrants.

Waste Water

The Airport is not connected to town sewerage and Airport Lots treat and dispose of sewerage using onsite septic tanks for primary treatment followed by effluent disposal via various dispersion systems:

- The CFA has its own independent onsite treatment and disposal system, as do Lots 1, 2/3, 4, 6 and 7C in the Eastern precinct, and Lots 27 and 29 in the Western Precinct.
- Federation Training's effluent flows to a pump station and is then transferred to an EPA approved evaporation lagoon.
- In 2006 sewer lines and a pump station were installed in the Eastern Precinct to required standards. The pump station receives effluent from connected allotments within the Eastern precinct and also selected Lots from the Western Precinct and transfers wastewater into the evaporation lagoon.

An engineering study conducted in early 2015 by SMEC reviewed the current wastewater treatment system and identified activities that would trigger the need for review and changes to the current system.

Mid 2015, following the completion of the SMEC study, Council installed flow meters to enable accurate measurement of discharge volumes into the evaporation pond to capture the trigger activities more accurately. Preliminary discussions have commenced with the water authority to understand infrastructure requirements and limitations informing future decision making.

The development of the ERAP has triggered the requirement to install a new waste water treatment plan (WWTP). This is scheduled to be completed in 2017/18 following receipt of an EPA Works Approval.

2.2.8 Environmental Values

WSA has been confirmed as the location of a Threatened Ecological Community (TEC) which is protected under the Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999 as* a *Matter of National Environment Significance.* This TEC is the Gippsland Red Gum (Eucalyptus tereticornis subspecies mediana) Grassy Woodland and Associated Native Grassland (Grassland component) which has the status of Critically Endangered.

The airport site contains significant areas of grasslands identified as a Threatened Ecological Community (TEC). The Gippsland Red Gum Grassy Woodland and Associated Native Grass Land was listed as critically endangered in 2009 to help protect, recover and preserve the remaining remnants. The site at WSA is described as a key site in both the Flora and Fauna Guarantee Act 1988 (FFG Act) and EPBC Act, and requires controlled management to ensure conservation of the endangered ecological community. The ongoing protection of these grasslands is addressed in a Council management plan. A Vegetation Overview and Habitat Hectares Assessment was undertaken by ETHOS NRM in November 2014 to inform the future management of the grasslands.

Managed grassland occurs in the quadrants adjoining the two grassed runways. Remnant grasslands are also located to the west of Taxiway C and to the north and south of Runway 09/27 at its eastern end.

Any proposed Airport development requires consideration of the impacts on the TEC and referral to the Federal Environment Minister for assessment and approval. The runway and infrastructure upgrades required for implementation of Defence Project AIR 5428 will require this process to be followed.

Figure 14: Native grassland controlled burning

2.2.9 Heritage Values

No heritage overlays exist on the Airport site, although the eastern portion of the Airport and adjoining privately owned land to the east was home to the West Sale Migrant Holding Centre which was operational from 1949 -1953 and housed approximately 700 refugee families. Moreover, the Heritage Study (2005) identified certain buildings at WSA may have heritage value. It is recommended that further studies to undertaken to identify these buildings.

In 2006, a memorial, designed by international artist Annemieke Mein, was established at the airport to acknowledge those who passed through the centre and their contribution to the social, cultural and economic history of the region.

The memorial is located to the south of the terminal building and requires aesthetic improvements in the surrounding area.

2.3 SWOT Analysis

2.3.1 Strengths and Advantages

The strength and advantages from the SWOT analysis are:

- Airport is classified as a CASA Registered aerodrome and therefore meets strict safety requirements.
- Location is not impacted by encroachment from urban development and it is easily accessible from Sale
- Proximity to Melbourne – less than 1 hr flight, 2.5hr drive
- Central location for emergency services
- Zoning and land use encourages development
- Amenities are of a good quality
- Fuel facilities are available

- Good flying activities
- Positioned to service a large area of users
- Central meeting place in Gippsland

2.3.2 Weaknesses and Constraints

The SWOT Analysis pointed out these weaknesses and constraints:

- Length and surface condition of the main runway 09/27
- Grass runways become wet and unserviceable during winter / wet periods (up to 60 days).
- Lacks major highway or road frontage – remains 'hidden'.
- Protected grasslands constraints development to a certain degree
- Restricted airspace
- Perceptions of high rents and restrictive lease terms
- Mixed land tenure arrangements
- Presence of the Federation Training facility
- Landing fees.
- Native vegetation restricts development in certain areas.

2.3.3 Opportunities and Prospects

Results from the SWOT Analysis identified these opportunities and prospects:

- Available land to facilitate industrial / commercial development.
- A relocation of Federation Training would free up land with direct airside access to the southern apron area.
- Limited development in surrounding area.
- Transport connections
- Funding to support AIR5428 operations.

2.3.4 Threats and Risks

The Risks and Threats described in the SWOT Analysis are:

- Outcome of the review of Victoria's State Environment Protection Policies (SEPP) for Noise.
- Changes to regulations impacting on airport operations where development is restricted or regulations result in increased cost of compliance.
- Inability to accommodate growth and progress aviation related opportunities
- Councils ability to continue to financially support the regulatory, operation, maintenance and capital renewal requirements.
- Release of freehold land with reduced ability of managing land use issues.
- Encroachment of incompatible land uses or development that may prejudice or interfere with airport operations.

2.3.5 Summary of SWOT Analysis

The SWOT analysis underlined many advantageous aspects about WSA location, which is in the proximity of Melbourne and in a central region for flying activities. Moreover, the airport has good facilities and requires few upgrades to completely meet its potential.

RAAF AIR5428 operations in the future would be beneficial to WSA and further opportunities may arise. However, the SWOT analysis also identified certain risks associated with the Airport, regarding changings in regulations and financial difficulties.

2.4 Strategic Vision and Objectives

2.4.1 Strategic Vision

The vision for WSA is:

"To promote the development and expansion of the West Sale Airport as a regionally significant airport providing a hub for aviation services and employment."

2.4.2 Objectives

The objectives for the airport are:

- Facilitate opportunities within aviation–related industries.
- Support development which generates employment.
- Increase aviation activity at the airport.
- Provide for further growth in aircraft movements.
- Ensure appropriate resources undertake essential planning, budgeting and management of the airport.
- Develop well maintained, appealing and self-sustainable infrastructure.
- Support the continued presence and future growth of the Defence sector in Gippsland.

2.5 Critical Airport Planning Parameters

This section outlines the critical airport planning parameters and considerations of this Master Plan.

2.5.1 Airspace

When activated, the operational airspace above and around WSA is controlled by Air Traffic Control (ATC) personnel at RAAF Base East Sale. Furthermore, designated areas of Restricted Airspace surround the Base to protect and support military training and other flying activities.

Consequently, the times of day, duration, and overall airspace availability for users of WSA are managed and limited in response to military requirements. Military use of active restricted airspace imposes some constraints on the use of that airspace by other pilots and aircraft.

Navigational aids to support flying operation and safety, located at RAAF Base East Sale, are utilised by aircraft operating at WSA.WSA is 8NM from East Sale and well within the 50NM radius of Air Force Controlled Airspace centred at East Sale. This is beneficial for RAAF operations but a deterrent for the occasional General Aviation (GA) pilot as a Class 5 pilot licence is required for operating under RAAF's air traffic control (ATC) at East Sale. The East Sale ATC operates generally from 8am to 5pm Monday to Friday.

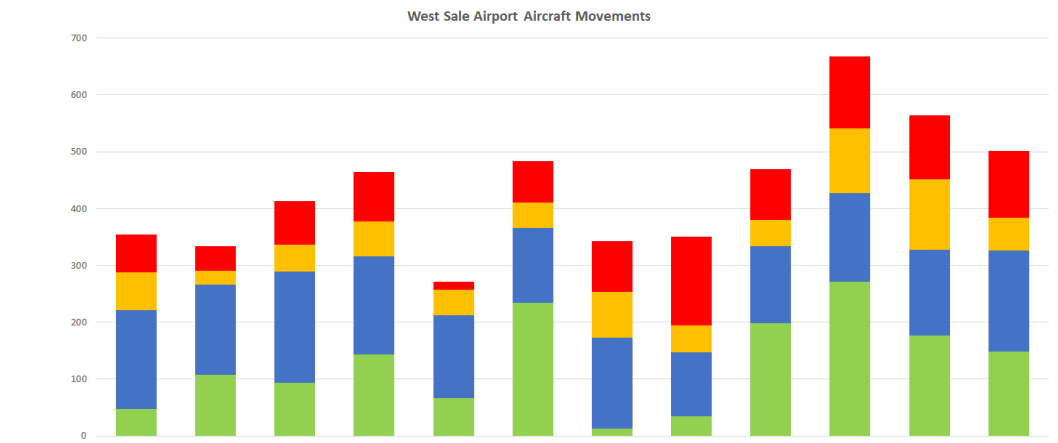
Pilots with the appropriate class licence and relevant endorsements can request ATC approval to access the airspace. However, depending on flying training operations this is may not be approved by East Sale ATC. The 2011 Airspace Review of Regional Services (South East) and East Coast Services (South) conducted by the Office of Airspace Regulation found a substantial amount (54) of reported incidents of aircraft entering East Sale restricted airspace without a clearance (Restricted Airspace (RA) Infringements) between 1/7/2009 – 30/6/2011.

Airspace infringements(AI) of RA's within the review area appear common. This is generally due to the on-off nature of many RA's. Pilot education has been the main mitigating action used by Defence in an attempt to reduce the number of incidents. No specific recommendations for the Restricted Airspace at East Sale were made in the report nor are any proposed within this Master Plan. Council is aware of support for changes to airspace, primarily related to recreational aircraft. Requests for changes to airspace are assessed by the Office of Airspace Regulation (OAR) within CASA and Council would be guided by OAR's recommendations.

2.5.2 Forecast of Future Operations

Aircraft movement data shows that WSA is principally used for military operations and commercial purposes. General aviation and recreational aviation activities, however, represent an important percentage of the total flights.

There were 5,217 aircraft movements (touch and goes, landings and takeoffs) in 2016/17 and the chart below shows proportionate aircraft usage.



	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17
Recreational	66	44	76	86	14	74	90	156	90	126	112	118
General Aviation	66	24	48	62	44	44	80	48	46	114	124	58
Commercial	174	158	196	172	146	132	160	112	136	156	152	178
Military	48	108	93	144	67	234	13	35	198	271	176	148

Military movements will increase upon commencement of East Sale 5428 Pilot Training from 2019/20.

Figure 15: WSA Aircraft Usage 2016

Additionally, as shown in Figure 16 and Figure 17 below, WSA is experiencing solid growth in fuel usage following the installation of refuelling facilities in 2013.

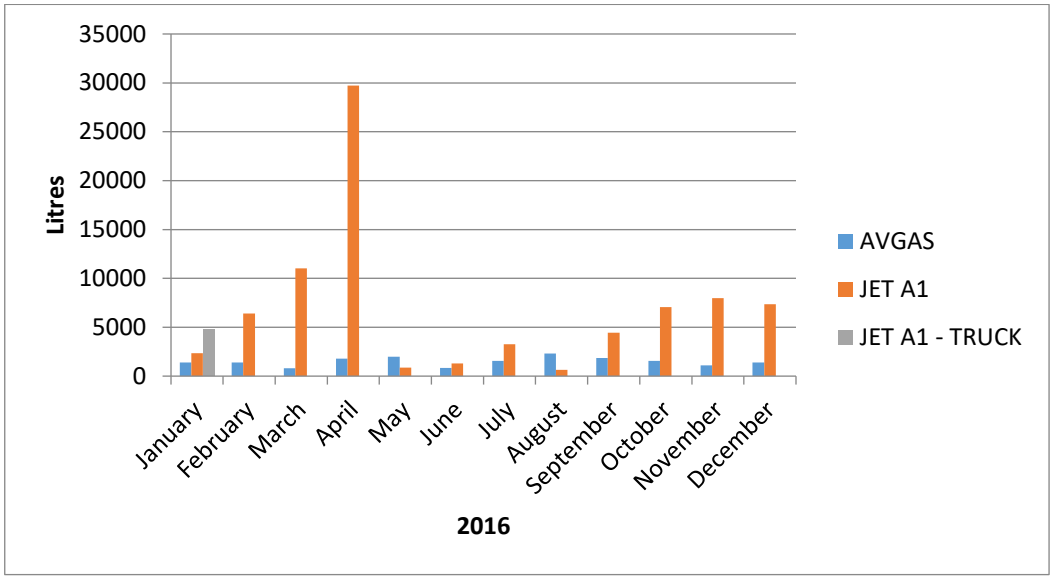


Figure 16: Monthly Fuel Usage 2016

The airport is experiencing a positive trend for the total aircraft usage, as shown in the chart before, and therefore, this Master Plan addressed strategies and approach to satisfy the forecast of future operations.

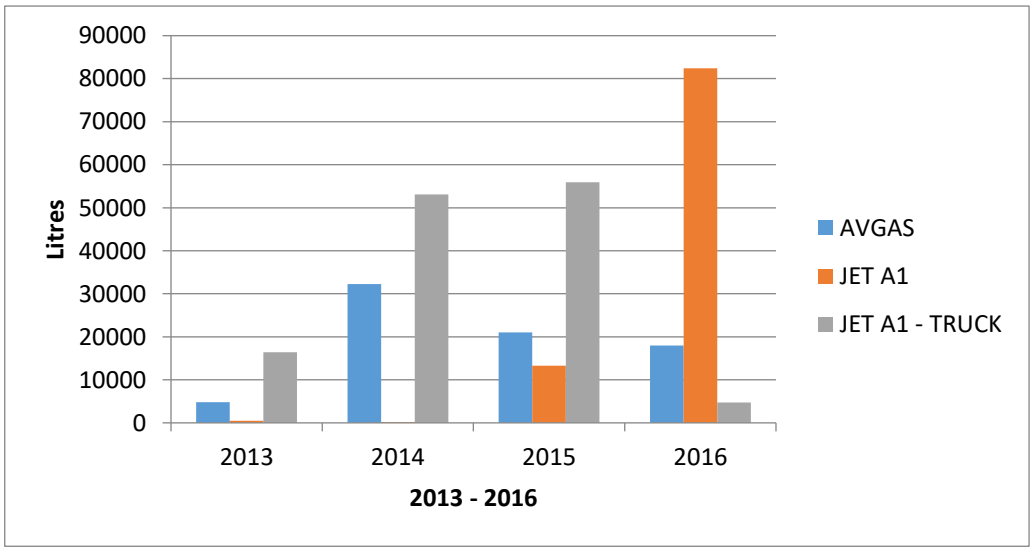


Figure 17: Fuel Usage 2013 - 2016

Air Force use WSA as an auxiliary aerodrome supporting RAAF Base East Sale, where flying operations are based. Following the recent Defence Force announcement regarding the location of the Basic Flying Training School at East Sale, a paper was produced outlining the impacts for West Sale. The AIR5428 Pilot Training System West Sale Airfield Concept of Operations (CONOPS) stated the operating concepts involved in the newly developed Pilot Training System (PTS)

RAAF are withdrawing the CT4 and PC-9 training aircraft replacing them with the PC-21 aircraft. Undergraduate pilots (BFTS training) will predominantly remain at RAAF Base East Sale reducing associated risks at WSA, which will be used by RAAF mostly for:

- Central Flying School (CFS)
- BFTS qualified pilots

Air Force will predominantly use two aircraft types, PC-21 and King Air 350 (KA350). The planned PC-21 flying program conversion begins in 2018 and RAAF has predicted an increase of the flying rate by 2020. WSA operations will involve circuit flying, emergency landing and instrument approach procedures training. Regarding KA350 operations, RAAF predicts that utilisation of WSA will be similar to current usage.

The CONOPS includes following statements regarding WSA:

- RAAF PC-21 operations will markedly increase in 2020. Thus, WSA should adopt the CONOPS recommendations by 2020.
- PC-21 and KA350 aircraft would depart from ESL and return to ESL. WSA would be used for circuit flying training, including targeted training, emergency landing training, and instrument approach procedures training flight profiles. While RAAF does not estimate any full stop at WSA, pilots' training flights would involve up to 30 minutes of operations, including 8 touch-and-go landing at WSA.
- CFS flying instructor training would involve up to six, two-week periods per year.
- CFS pilot conversion training would involve up to six occasions per year.
- The total flying schedule for PC-21 is being estimated around 3000 flights per year.
- WSA could be adopted to train undergraduate pilots in a low portion of RAAF operations

2.5.3 Aerodrome Reference Code System

The International Civil Aviation Organisation (ICAO) methodology is currently adopted in Australia to determine Aerodrome Reference Code. The Aerodrome Reference Code specifies standards and regulations for individual facilities, based on the critical (or design) aircraft.

Currently, WSA is capable of handling Code 3C aircraft and the runways present the following specifications:

- Main sealed runway Code 3C Aircraft.
- Eastern and Western aprons constructed to allow code C aircraft to operate (note that western taxiway holds a code B classification based on the longitudinal gradient exceeding that allowable for code C aircraft. However, it was reconstructed in 2013 to carry the weight of code C aircraft.

Based on this criteria WSA meets the requirements for the Dash 8 Q400 which is the planned design aircraft, notwithstanding that a limiting factor exists in runway pavement strength.

The table below, extracted from the Manual of Standard (MOS), describes the system that ICAO uses to determine the Aerodrome Reference Code.

Aerodrome Reference Code				
Code Element 1		**Code Element 2**		
Code number	**Aeroplane reference field length**	**Code letter**	**Wing span**	**Outer main gear wheel span**
1	Less than 800 m	A	Up to but not including 15 m	Up to but not including 4.5 m
2	800 m up to but not including 1200 m	B	15 m up to but not including 24 m	4.5 m up to but not including 6 m
3	1200 m up to but not including 1800 m	C	24 m up to but not including 36 m	6 m up to but not including 9 m
4	1800 m and over	D	36 m up to but not including 52 m	9 m up to but not including 14 m

		E	52 m up to but not including 65 m	9 m up to but not including 14 m
		F	65 m up to but not including 80 m	14 m up to but not including 16 m

Table 4: Aerodrome Reference Code (MOS Part 139 – Aerodromes)

2.5.4 Selected Design Aircraft

Validating the design aircraft is one of the objectives for the 2017 Master Plan Update. The upgrades to the runway that are required to support the AIR5428 training system provide an opportunity for Council to ensure that the aerodrome meets the needs for future growth beyond military use.

Council decided to obtain the maximum benefits of the civil works required to satisfy PC-21 requirements. Therefore, considering the future expansion of the runway and the related pavements upgrades (overlay), the Council selected the Bombardier Dash 8 Q400 aircraft as the design aircraft – this is consistent with recent reports. This choice would represent a key strategy in the development, greater use and future growth of the WSA. Indeed, the Dash 8 Q400 is considered one of the most used regional RPT aircraft in Australia. Although, the planned runway extension to 1800m is greater than the required ARFL for the design aircraft, there are other potential benefits of the longer runway including the use of other aircraft types, such as the Challenger 604 and Fokker F50.

Table 5 below shows the characteristics of a range of typical aircraft, including the Dash 8 Q400

Aircraft Type	Seats	Aeroplane Reference Field Length (ARFL m)	Maximum Take-Off Weight (MTOW kgs)	Aircraft Classification Number ACN[1]	Tyre Pressure (kPa)	CODE
Dash 8 Q300	50	1122	18642	10	805	2C
Dash 8 Q400	70	1354	29347	16.5	1020	3C
Jetstream 31	18	1440	6950	4.4	450	3C
ATR 72-600	50	1165	21566	12	748	3C
SAAB-340	35	1220	12370	5.7	655	3C
Metro III	19	991	6577	4	740	2B
Metro 23	19	1341	7545	4	742	2B
Challenger 604	12	1780	21617	13	1420	3B
Hawker 900	8	1513	12700	7	1300	3B
Learjet 55	8	1292	9298	6	793	3A
Fokker F50	50	1760	20820	10	552	3C

Table 5: Typical Aircraft Types[2]

[1] The ACN is based on the aircraft's maximum take-off weight on a flexible pavement with a sub-grade rating of "B".

[2] For indicative purposes only. Specific values for particular aircraft should be obtained from the aircraft operator of the aircraft manufacturer.

Figure 18: Bombardier Dash 8 Q400

2.5.5 Navigation Systems

Aircraft operating at WSA use RAAF Base East Sale navigational aids for non-precision approaches.

2.5.6 Aircraft Movement area

This section describes the upgrades required to satisfy the forecasts for future operations and growth at WSA.

The introduction of the PC-21 aircraft in the RAAF AIR5428 pilot training system will require an extension to the existing runway. Based on the PC-21 requirements and CONOPS, WSA must extend runway RWY 09/27 from the 5000 ft. to a minimum of 5500 ft. The current project scope, however, aims to achieve an extension to 1800m – the full extent permitted for a Code 3C runway, in order to accommodate future Dash 8 Q400 operations.

This decision was made by considering the parameters of the ICAO Aerodrome Reference Code and the advantages and disadvantages associated with the runway length. The Council foresees that the Dash 8 Q400 will be the design aircraft, and thus maintaining a code 3C Aircraft is critical to the optimal strategy for the future growth and development of WSA.

The implementation plan for the runway extension is covered in further detail in Section 3.

2.5.7 Pavement Strength

The pavement strength is determined by the construction materials and the constructed depth of the pavements. For a pavement to be determined suitable for an aircraft operation the designated Pavement Classification Number (PCN) should match the Aircraft Classification Number (ACN), which is determined by the aircraft manufacturer. When the ACN of the aircraft is greater than the PCN of the pavement, the pavement is being overloaded.

Section 6.2.10.2 of the MOS states that "*CASA does not specify a standard for runway bearing strength, however, the bearing strength must be such that it will not cause any safety problems to aircraft. The published PCN value should be suitable for the aircraft that regularly use the runway*".

Moreover, the CASA website states:

Aerodromes operating under CASR Part 139 are to have movement area pavements which can safely support aircraft intended to operate on them. Apart from ensuring the surface of pavements are cleaned of debris and stone, which have the potential to cause foreign object damage to aircraft, and the surface has good friction characteristics, there are no standards required for the design and maintenance of pavements. The aerodrome operator is expected to have in place a pavement management system which will ensure the continued structural integrity of pavements.

Presently, WSA runway RWY 09/27 has an Pavement Classicfication Number (PCN) of 12 and a maximum rated tyre pressure of 87 psi. The planned design aircraft (Dash 8 Q400) has an Aircraft Classifcation Number (ACN) of 16.5.

Furthermore, the tyre pressure of the PC-21, at 154 psi, would probably cause damage to the surface of the runway with frequent use.

Therefore, the pavement strength represents one of the main limiting factors for operations at WSA. Council are envisaging that the runway upgrade in support of the AIR5428 project will also provide confirmation of the Dash 8 Q400 as the design aircraft for WSA in the short to medium term.

The implementation plan is discussed in details in the chapter 5 of the Master Plan.

2.5.8 Aviation Support and Landside Facilities

WSA presents two aircraft aprons as follows:

Eastern Apron

This apron is located at the eastern end of the main runway. It provides charter, Air Ambulance movements. A sealed asphalt pavement, 15 m wide, code C aircraft, called Taxiway Alpha, serves the apron from the eastern end of the runway. The apron is also served by the Taxiway Bravo, which has a Code B aircraft and it is also used for the GA hangars.

Western Apron

The Western Apron, also called Maintenance, Training and Servicing Apron, is located in the south-western section of the Airport. Taxiway Charlie, a sealed asphalt pavement, 10.5 m wide and code B aircraft capable, serves the apron.

The capacity of the current aprons is able to meet the movement frequency at WSA. As discussed in the 'Gippsland Aviation Industries Policies & Opportunities Paper 2014', the Eastern and the Western Apron could absorb a future increase in the aircraft movements. Therefore, the Master Plan Update has not considered any substantial change of the aprons.

2.5.9 Passenger Terminal

The current terminal consists of three small offices, a public seating area to accommodate at least 30 passengers, a small kitchenette and toilet facilities.

Noting the age of the facility and changes in design and access standards, any future upgrade of the terminal will require significant changes to disabled facilities. Whilst the current toilets are useable, a comprehensive refurbishment to these should be incorporated in the scope of any future improvements to the terminal.

2.5.10 Security Requirements

WSA has not been configured to allow for security controlled RPT operations. Previous helicopter operations to offshore platforms required security checks and the terminal area adequately catered for

these operations. The terminal building can be easily configured to respond to any future similar requirement.

2.5.11 Airspace Protection Surfaces

International standards have been adopted which define two sets of invisible surfaces above the ground around an airport. The airspace above these surfaces forms the airport's protected airspace. These two surfaces are the:

- Obstacle Limitation Surface (OLS); and
- Procedures for Air Navigational Services—Aircraft Operations (PANS-OPS) surface.

The OLS is generally the lowest surface and is designed to provide protection for aircraft flying into or out of the airport when the pilot is flying by sight. The PANS-OPS surface is generally above the OLS and is designed to safeguard an aircraft from collision with obstacles when the aircraft's flight may be guided solely by instruments, in conditions of poor visibility.

Airspace protection is critically important for all airports, particularly protection of the airport's Obstacle Limitation Surfaces.

> The CASA *Manual of Standards Part 139 - Aerodromes* defines Obstacle Limitation Surfaces (OLS) as:
>
> *"A series of planes associated with each runway at an aerodrome that defines the desirable limits to which objects may project into the airspace around the aerodrome so that aircraft operations at the aerodrome may be conducted safely."*

The physical dimensions of the OLS must be determined using Tables 7.1-1 and 7.1-2 in the Manual of Standards and are based on the Aerodrome Reference Code number for each runway. PANS-OPS surfaces are generally determined by the instument flight procedure designer.

The airspace protection surfaces are critical for airport safeguarding purposes, in relation to both on-airport and off-airport development.

Within the airport site, the airspace protection surfaces 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 the runway(s) is critical. Future development areas on the aerodrome, particularly close to the runways, should have a maximum building height restriction applied to ensure that buildings and other structures do not intrude into the applicable airspace surfaces. The height of development further away from the runway(s) may increase in accordance with the applicable surfaces.

Outside the aerodrome site, appropriate airspace protection planning controls should be in place based on the applicable airspace surfaces, as recommeded in the *National Airports Safeguarding Framework, Guideline F: Managing the Risk of Intrusions into the Protected Airspace of Airports*.

The 1995 Masterplan identified that an Obstacle Limitation Surface (OLS) drawing had been prepared based on airfield utility at that time – the relevance and airspace protection afforded by that plan to current operations is uncertain – as is its future relevance dependant on any changes in aircraft. Updated OLS have subsequently been completed.

A survey for obstacles at WSA is undertaken annually in September. From that survey, a list of obstacles is identified, NOTAMS issued and entries in aeronautical publications updated by the consultant. Management of the resolution of items identified through the survey of the OLS are the responsibility of the Airport Manager.

WSA is also within the area affected by Obstruction Clearance Surface (OCS) for RAAF Base East Sale aircraft operations. This OCS application relates to controls on the heights of structures or other potential intrusions into the identified airspace. Defence imposes and regulates these controls under the *Defence (Areas Control) Regulations 1989* (Commonwealth) as specified for that Base. Any changes to the OCS for the RAAF Base will require review for implications to the heights of structures – existing and proposed - at WSA.

The objective of Design Development Overlay DD06 is to ensure building height does not adversely affect the operation of the East Sale Royal Australian Air Force Base. It applies to all buildings above 15 metres in height. For structures above this height the application is referred to the responsible authority and must consider:

- Comments from the Facilities Officer of the East Sale RAAF Base.
- Comments from the Director General Facilities – Air Force.
- The location, mass and height of the proposed development.

It is worthy to note that the DOO6 restriction of 15m does not cover WSA's airspace surface. Further details of airspace protection and safeguarding is detailed in section 3.4.2.

2.5.12 Aircraft Noise Contours

The assessment of aircraft noise effects is an important consideration in the development of an airport Master Plan. It aims 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; and
- Airport operations are protected long term from conflicts due to the encroachment of inappropriate development into noise affected areas.

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

Recommendations relating to land use within the ANEF contours are contained in *Australian Standard AS2021-2015 "Acoustics – Aircraft Noise Intrusion – Building Siting and Construction".* These recommendations are summarised in **Table 6** below. This is a summary only; the Australian Standard should be read for full details of the land use recommendations, and associated notes and conditions.

Building Type	ANEF Zone of Site		
	Acceptable[3]	Conditional[4]	Unacceptable[5]
House, home unit, flat, caravan park	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF
Hotel, motel, hostel	Less than 25 ANEF	25 to 30 ANEF	Greater than 30 ANEF

[3] 'Acceptable' means that special measures are usually not required to reduce aircraft noise.

[4] 'Conditional' means that special measures (noise attenuation) are required to reduce aircraft noise.

[5] 'Unacceptable' means that the development should not normally be considered.

School, university	Less than 20 ANEF	20 to 25 ANEF	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		

Table 6: Building Site Acceptability Based on ANEF Zones (Based on Australian Standard AS2021-2015 Table 2.1)

Many airport Master Plans include an ANEF chart along with a discussion of its implications for land use on the airport site and on surrounding land. WSA has developed an ANEF as part of this masterplan update.

The *National Airports Safeguarding Framework Guideline A: Measures for Managing Impacts of Aircraft Noise*, 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.

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 advantages over the ANEF system because it shows noise in a way that a person perceives it – as a number single events per day above a certain decibel level.

The N-contours system is not a new concept, but due to the limitations of the ANEF system and with the introduction of NASF Guideline A, it is increasingly being used by airports to assist in displaying and explaining the aircraft noise effects of aircraft operations.

These matters are discussed further in Section 3.4 of this report in the context of airport safeguarding.

An ANEF has been produced for WSA and has received endorsement from Airservices. The ANEF included in this Master Plan Update will be incorporated into both future airport and planning scheme documents.

2.5.13 Environmental and Heritage Sites

There are no heritage protections over the airport or buildings. However, the eastern portion of the airport and adjoining privately owned land to the east was home of the West Sale Migrant Holding Centre. The centre was operational from 1949 -1953 and housed approximately 700 refugee families.

In 2006 a memorial, designed by international artist Annemieke Mein, was established at the airport to acknowledge those who passed through the centre and their contribution to the social, cultural and economic history of the region.

The memorial is located to the south of the terminal building. Improvements are required around the memorial to improve its aesthetics and function. It is envisaged that work will be completed to plan for carparking in this precinct.

3 Airport Master Plan

3.1 Land Use

This section outlines the land use plan for WSA, focusing on the Master Plan's land use precincts and general use guidelines.

There is an ongoing requirement to manage airport land and surrounding area to safeguard current and future airport operations including aircraft movements. Key land management requirements, and outline of the issues to be addressed for each, are identified in the following sections.

Planning and Land Use constraints: There are already several planning and land use management measures, based on constraints, to address specific airport requirements. The most significant are the Airport Environs Overlay and the Design & Development Overlay. These overlays specifically highlight aircraft noise and structure heights in the vicinity of RAAF Base East Sale. Other general management aspects are noted in the text of the planning scheme, including policy to protect the operation of the airport, as well as the condition of the sale of the airport to Council. These policies also ensure advice is provided to land occupiers close to the airport in terms of their exposure to aircraft operational impacts, and to inform potential investors and potential new users.

3.1.1 Land Use Precincts

Presently, the Land Use Plan includes three areas; airside, terminal and training precinct, which are displayed in the figure below.

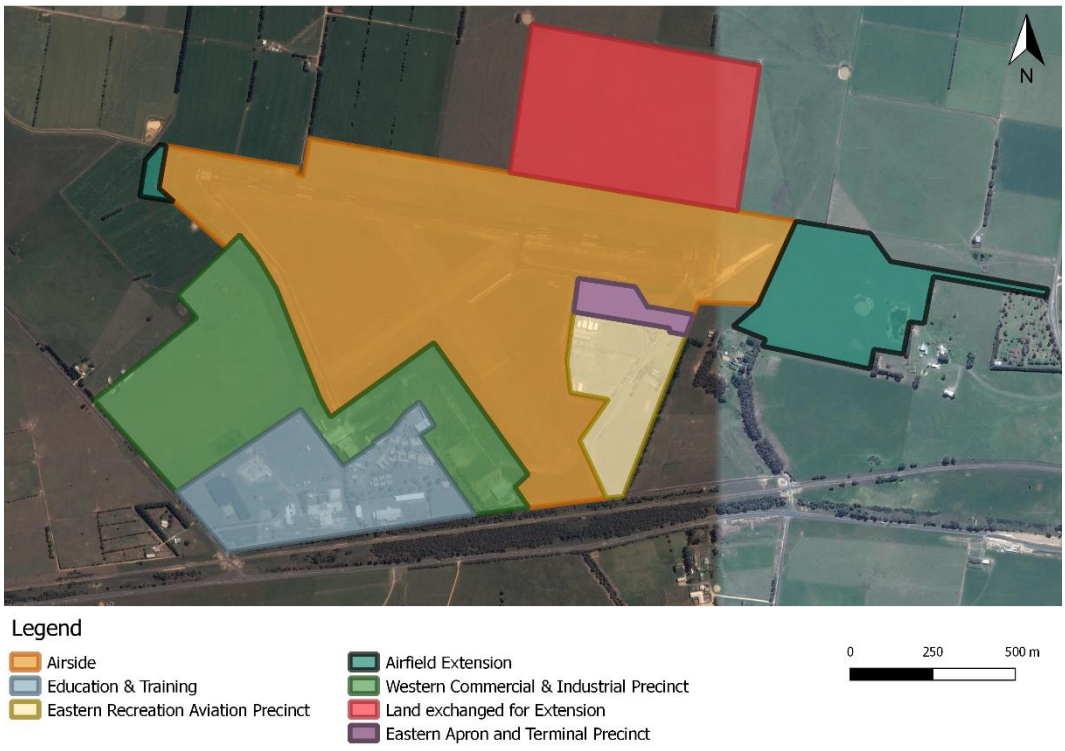


Figure 19: Land Use Plan

In the short-term planning horizon, the proposed runway 09/27 extension represents the major development for the airside precinct and is recognised as critical for WSA future growth and expansion.

Therefore, Council is proposing to modify the current Land Use Plan, identifying different areas and buying a new zone and selling an existent area of the airside. Therefore, this Master Plan Updates identifies the following precincts, as shown in **Figure 19**:

- Airside
- Eastern Apron and Terminal Precinct
- Eastern Recreational Aviation Precinct
- Western Commercial and Industrial Precinct
- Education and Training
- Airfield Extension

Section 3.1.2 describes the different characteristics and long-term planning objectives for each precinct.

3.1.2 Land Use Precincts Guidelines

This section identifies the guidelines for each precinct.

Airfield

The Airfield precinct contains the runway and the taxiways. As this precinct is the most important area at WSA, it must be retained and protected for flight operations in accordance with CASA regulations.

Eastern Terminal Precinct

The Master Plan Update documents the approach taken by Council to develop the WSA Eastern (Recreational Aviation) precinct. The WSA Eastern Precinct Land Sales Framework (LSF) focused on the flying recreational activities and it proposed a strategy to encourage the development of this precinct. The framework outlined:

- An approach to selling freehold lands following a stage-action plan.
- The stage-action plan and the process of selling freehold land within the ERAP.
- Revenue and costs associated with the ERAP development.
- The incentives for individuals who initiate the sale of lots.
- The rental payments approach for purchasers of land in Stage One.

The LSF followed best practice standards for the sale of land, Council's policy and the Local Government Act 1989 (Vic). It also referenced documents and studies that the Council have previously undertaken, which are as follows:

- Report on Land Tenure – The Airport Group (Oct 2013).
- Initial Freehold Development Concept plan – The Airport Group (2013).
- Vegetation Overview and Habitat Hectares Assessment – Ethos NRM (November 2014).
- Review of Wastewater Treatment and Disposal Options – The SMEC Group (March 2015)
- Valuation report – WSA Eastern Precinct – Valuer-General Victoria (January 2015)

Commercial and Industrial Precinct

This precinct, located in the Western area of the airport, is used for different tasks. It contains a storage (Bellman hanger) and a privately-operated Engine Repair workshop. Aircraft servicing and repair business and utilities related infrastructures are located within this precinct, which contains also the air training and joy-flight business and the Armed Forces Museum.

Education and training Precinct

The Federation Training – aviation and non-aviation – facilities are located in the Education and Training precinct. Furthermore, this precinct comprises the fire-fighting training facility used by Country Fire Authority (CFA) and the Sea Survival Training Centre managed by Esso.

Airfield Extension

This precinct is designated to the future runway extension from 1527m to 1800m.
This land should be protected for this purpose in accordance with Clause 22.05: Aerodrome and Environs Policy, described in section 2.1.5.

3.2 Facilities Development Plan

This section outlines the future facility (physical infrastructure) requirements for WSA based on the strategic analysis, strategic direction and critical airport planning parameters.

3.2.1 Movement Area Facilities

Runways

Runway 09-27 has Pavement Classification Number (PCN) of 12 and, as such, on strength considerations, reasonable sized regional RPT aircraft such as a Beechcraft 1900, Dash 8-100, Dash 8-300, Fokker 50, ATR 72, Saab 340 can operate. Although the larger Dash 8-Q400 often used by Qantas Link on major regional routes is just beyond the current PCN classification, it is highly probable that a geotechnical assessment, at a broad cost of $40,000, would result in a higher PCN rating that would allow normal operations of this 70 plus seat aircraft. Therefore, the pavement strength would be a main criterion for the runway development to satisfy the CAN-PCN requirements for the future design aircraft (Dash 8-Q400).
The proposed introduction of the RAAF training operations using the PC-21 and the implementation of the AIR5428 Pilot Training System at WSA require a runway extension and resurfacing.

KA350 operations would not require further development at WSA. However, as referenced in section 2.2.5, WSA RWY 09-27 has a flexible spray seal pavement with a Pavement Classification Number (PCN) of 12 and maximum allowable tyre pressure of 87 PSI. To support regular PC-21 operations the runway will need to be strengthened to prevent surface damage.

Moreover, RAAF specifies runway length prerequisites, as follows:

- KA350 aircraft would not exceed 6,800 kg and 92 psi tyre pressure
- PC-21 aircraft would not exceed 3,100 kg and 154 psi tyre pressure
- PC-21 aircraft require at least 2500 ft. length sealed runway for landing ground roll
- PC-21 aircraft require at least 3000 ft. length sealed runway for take-off distance at 3000 kg mass at 30 °C at sea level.

As referenced in section 2.2.5, WSA runway is presently 1527m (5000 ft.) in length and 30 m wide.

Therefore, RWY 09-27 requires an extension to at least 1676m (5500 ft.) to satisfy the RAAF's operational recommendation for PC-21 aircraft. However, to support future growth plans Council has opted for a proposed extension of the runway to 1800m (5905 ft.).

The CONOPs also specifies that foreign objects (FO), such as stones, on the runway must be controlled to the extent that the risk classification of Foreign Object Damage (FOD), must remain at MEDIUM or less.

The table below summarise the requirements that RAAF requested to WSA in order to continue using WSA as secondary airport for training purpose.

Pilatus PC 21, RAAF runway requirements			
Min Runway Length	**Tyre Pressure**	**Weight**	**Max FOD classification**
5550 ft.	154 psi	3100 Kg	MEDIUM

Table 7: RAAF PC-21 Constraints

The figures below show the upgrade layout plan, including the runway extension to the east part of WSA. The Council plans an expansion on the east side of the airport as it has been identified in previous masterplan and overall development plans and is preferred due to the negotiations and agreements with the adjacent land owner. Therefore, the runway upgrade includes the acquisition and exchange of a number of different areas. The Council believes that the land exchange could be the optimal option for the acquisition of the land required. The figure bellow shows the land acquisition proposal. WSA would exchange the land classified as 1A and 1B for the area A. The boundaries of the existing Special Use Zone will also need to be amended accordingly.

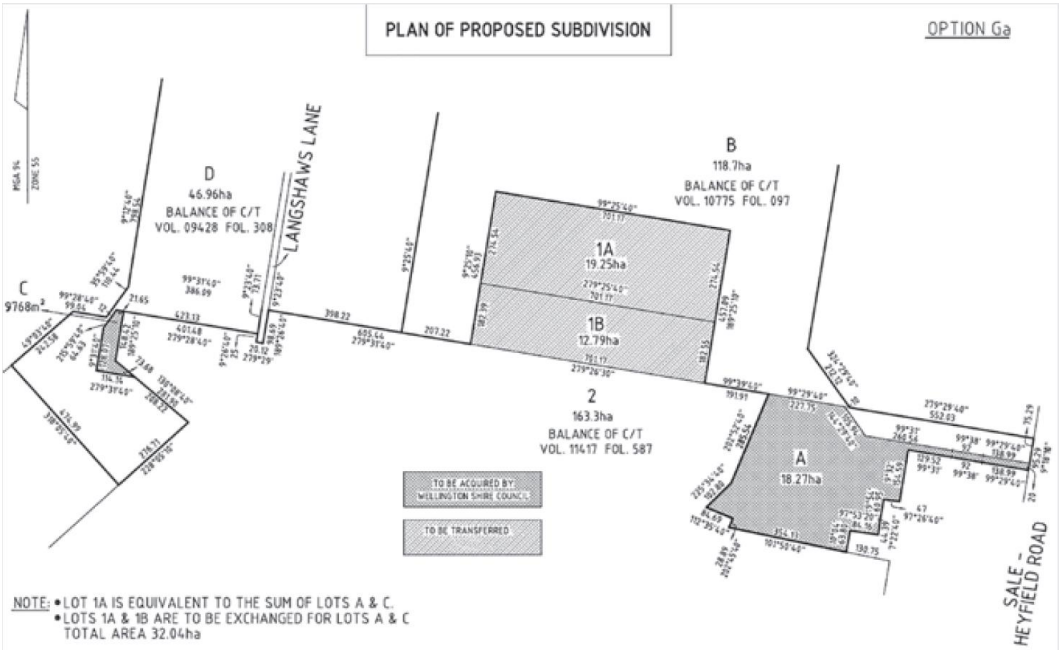


Figure 20: WSA Land Exchange Plan

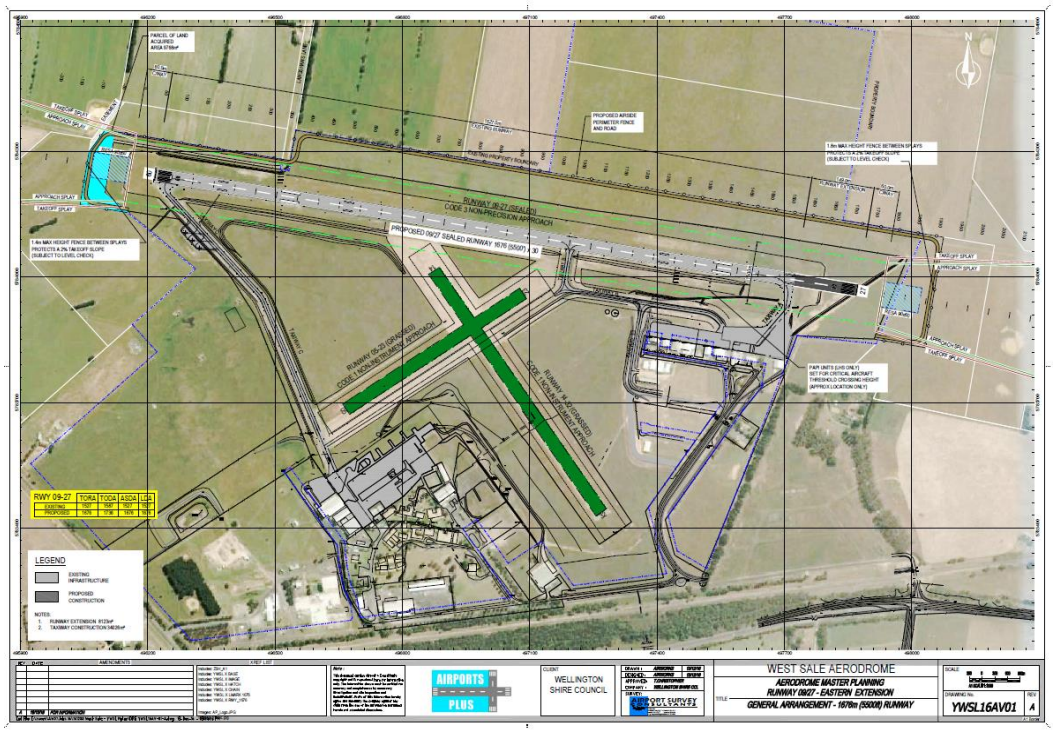


Figure 21: WSA layout plan – 5500' / 1676m

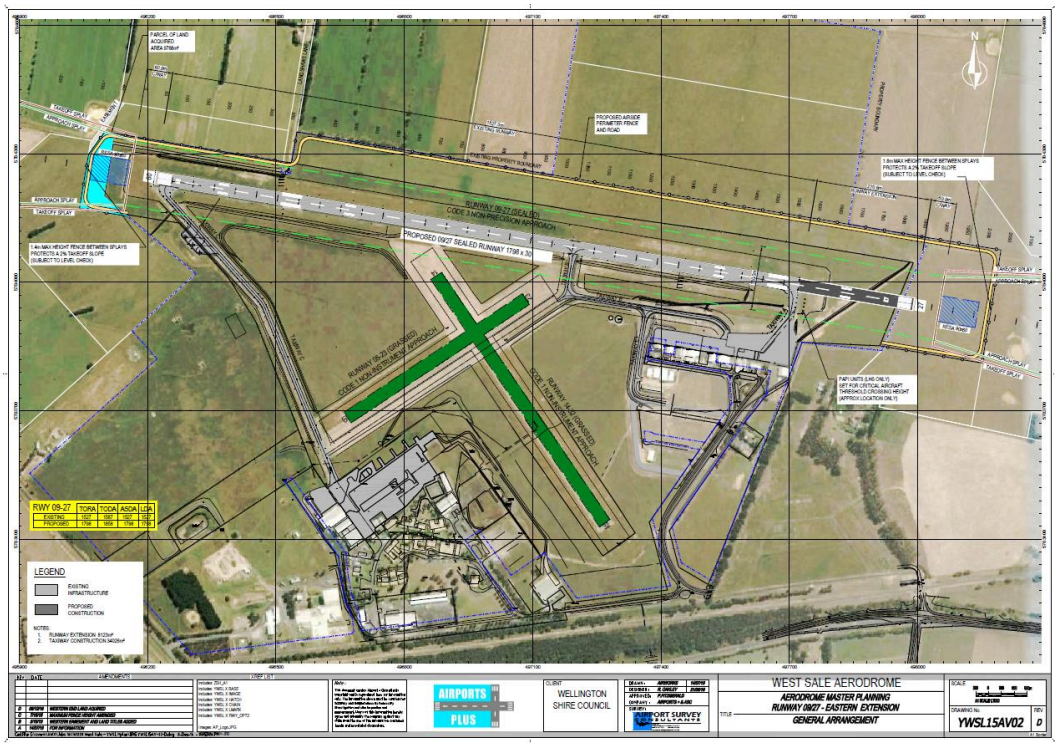


Figure 22: WSA layout plan - 5905' / 1800m

The land exchange as outlined in **Figure 20** would allow works for the runway RWY 09/27 expansion 1800m with the addition of 60m RESAs (Runway End Safety Area).

RAAF requirements are based on the assumption that WSA runway upgrades should be concluded by 2020 in order to support future operations.

An open stormwater drain was built during previous drainage works, as shown in the following picture.

Figure 23: Open stormwater drain

To meet the critical airplane characteristics, a suitable piping and fill with a suitable PCN of the runway should be constructed

Therefore, the upgrade of the runway's pavement strength and its extension from 1527m to 1800m would satisfy the Dash 8-Q400 requirements and the RAAF's requests for the AIR5428 Pilot Training System, which involves PC-21 aircraft.

Cracking and deformations in random areas are common issues identified on the runway. Most recently, on the 12 June 2016, the pavement exhibited these problems, which were subsequently repaired.

Council will continue to implement an Annual Maintenance Plan to assure the safety of the runway, prolong its longevity. The Maintenance Plan includes:

- Serviceability inspections
- Annual Rolling
- Painting
- Vegetation management including weed control
- Wildlife hazard management
- Programmed and reactive maintenance

Surface Water Drainage

Due to the land's tendency to fall away to the north, as shown in the figure below, the Council concluded that a suitable drainage of storm water would be required in association with the runway extension. Pipework and drainage easements already exist on adjacent land.

Figure 24: Surface Water Drainage

Aprons

The Airport has two large aircraft parking aprons as follows.

Eastern Apron

Located just off the eastern end of the main runway, provides for charter, Air Ambulance movements and for both fixed and rotary wing GA operations. This apron is serviced from the main runway on the eastern end by Taxiway Alpha, which is a sealed asphalt pavement, 15m wide and capable of Code C aircraft operations. Taxiway Bravo also serves it from the more central section of the main runway. This Code B taxiway also serves the GA hangars that are situated to the south of the main apron.

Maintenance,

Training and Servicing Apron, called the Western Apron (but located more in the south-western section of the Airport). This underutilised apron is serviced from the main runway on the western end by Taxiway Charlie, which is a spray sealed pavement, 10.5m wide and capable of Code B aircraft operations. This taxiway has the width and pavement strength to accommodate Code C aircraft but a steeper longitudinal grade than the 2% specified for a Code C, and for this reason has been rated a Code B taxiway. This taxiway has an adjoining pavement area for engine run-ups for up to 3 Class A aircraft.

Eastern Recreational Aviation Precinct

ERAP is a key area for WSA development. This area, which is displayed in the figure below, includes 39 lots that could be used for Recreational and General Aviation purposes, as stated in the Manual of Standards (MOS) issued by the Civil Aviation Safety Authority (CASA). The area is served by Code A taxiways, where aircraft have wing span less than 15 metres and the outer main gear wheel span is less than 4.5 metres.

Outlining an approach and concept for selling freehold land at WSA was the main purpose of the Land Sale Framework. The 2013 WSA Report on Land Tenure pointed out the limitations of the lease arrangements with the ERAP and it presented the land tenure options that the Council could adopt. The report on Land Tenure identified three land tenure models:

- Freehold
- Leasehold
- Hybridised models, such as premium lease and incentivised ground lease.

Using a SWOT analysis, the study described advantages and disadvantages that each model could have on the WSA Development. According to the report, the freehold tenures on airport are more convenient for third party occupants than for airport owners/ operators. With a freehold approach the Council should consider the potential loss of profit in the case the land increases its value. Moreover, although the Council would receive an upfront payment and it would absolve all the land costs, a negative impact on future development could arise in the future due to the shortage of owned land. However, for the third party, freehold arrangements could be viewed as the optimal solution. In fact, Parties are free to invest into building development and sublease the land with a potential return on investment. The study recognised that the upfront payment has disadvantageous consequences for the third party, but it also stated that the land could increase its value in the long-term period with a consequent potential profit for the owner.

In response to the 2013 WSA Report on Land Tenure and 2014 Aviation Industries Policies and Opportunities Paper, Council needed to develop a clear and definitive policy on lease agreements. In 2016, the Council finalised the WSA ERAP Staged Planning Permit, which sets the regulations and permit agreements for the ERAP.

Council would like to increase the recreational use of the airport and promote a strategy to develop a selling plan of the ERAP.

Therefore, based on the 2013 WSA Report on Land Tenure information, Council developed a 5-stage plan for selling the lots within the ERAP by freehold arrangements. These stages, which are displayed in the figure below, are:

- Stage 1
- Stage 2
- Stage 1B
- Stage 3
- Stage 4

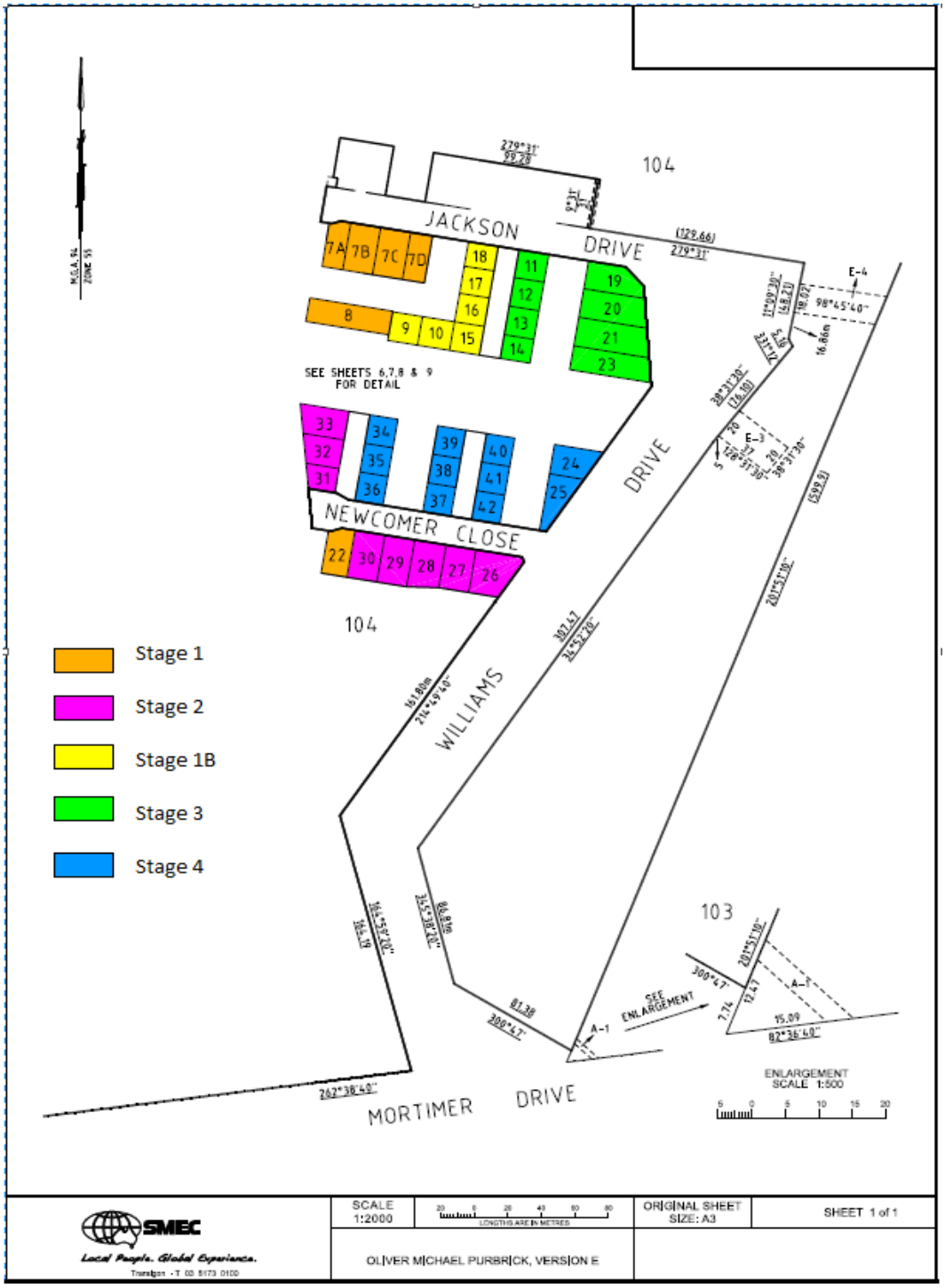


Figure 25: ERAP 4 Stages Selling Plan

To sell the 39 lots and maximise the revenue, Council has identified a strategic approach based on previous studies, as follows:

- The average estimated overhead cost is $92/m2.
- Concessions were applied to Stage 1 to increase the likelihood of achieving successful sales applying discounts for these lots.
- Occupiers and WSA should establish an Annual User Licence Agreement (AULA), which would assist with managing operational aspects. Furthermore, an AULA is an essential tool for airports with freehold landholders that can access airside areas. In lieu of an AULA Council provided an agreement document, which assists airports land occupiers to identify and encourage appropriate and safe use and development of the ERAP.
- The Council has identified an agent to assist with the sale of lots.
- A marketing campaign would be used to assist with the sale of lots.
- A qualified valuer will determine the land values, which are periodically updated in line with the Local Government Acts requirements. should be reviewed every 6 months.
- The selling process should follow specific laws and regulations.

Council uses developed a standard process for selling land, as outlined in **Appendix C – Wellington Shire Council Land Transactions**. This is an internal guideline and is used to monitor progress from a timing and compliance perspective.

The table below shows a summary of the cost plan estimations that will require Council to fund through its annual budget process, as detailed in ERAP Concept and Cost Plan (March 2015).

Stage	Works
Stage 1	$275,000.00
Stage 2	$331,142.50
Stage 1B	$353,320.50
Stage 3	$326,105.00
Stage 4	$518,362.00
	$1,803,930.00

Table 8: ERAP Cost Estimates

Lighting

Existing airfield lighting needs to be upgraded in order to meet the current CASA requirements. Presently, lights are spaced every 300 ft. (90m ± 10m), based on previous regulations. Current standards require spacing at 180 ft. (60 ± 10m) between lights.

The runway and taxiway lights and IWI (illuminated Wing Indicator), aprons and MAGS (Movement Area Guidance Signs) lighting would be upgraded to LED, bringing the following advantages:

- Extended lifespan
- Reduced power consumption
- Decreased maintenance overhead

- Improved durability
- Decreased power usage
- Better colour
- Do not require an upgrade of the current lighting transformer

The new LED lights should be positioned inside the runway seal to reduce problems associated with grass cutting operations and grass lights' obscuration.

Figure 26: Standby Generator Location

WSA would also eliminate the current cable failures and install a standby generator.

The southeast area of the terminal was identified as the optimal location for the standby generator.

Taxiway BRAVO would be upgraded with lighting systems to provide more flexibility for aircraft operations.

The figure below shows the lighting upgrade locations described in this Master Plan.

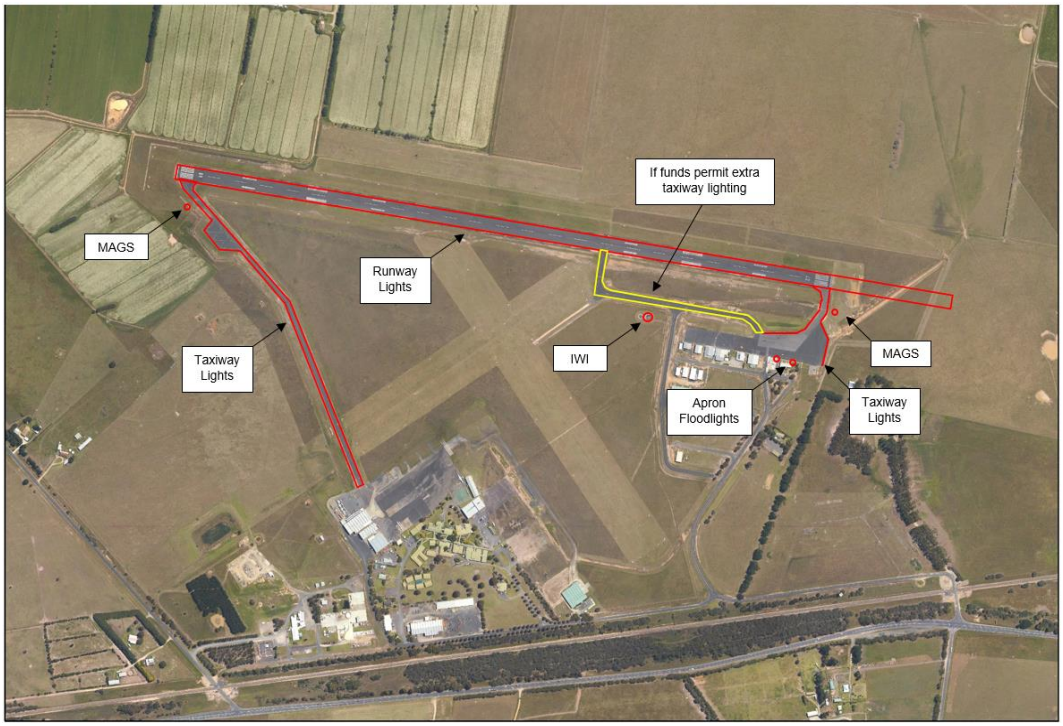


Figure 27: Lighting Update Locations

3.2.2 Aviation Support Facilities

Passenger Terminal

The Terminal Building is adequate for the current level of WSA requirements. The Council indicated that it is occasionally used for airport management and airport user meetings. It has previously served as departure/arrival point for frequent offshore helicopter operators over a period of two years with up to 3 movements a day of 15-20 persons.

Fuel Facilities

Following the construction and commissioning of a new fuel facility in 2013, both Jet A1 and Avgas are available for aircraft refuelling. Two tanks with 20,000 litres capacity each store fuel with provision for a further 20,000 litres tank.

Figure 28: Fuel Facilities

Aircraft Hangars

The extension of the runway will not affect the aircraft hangars and, therefore, the Master Plan, except for the lighting system, does not recognise any particular change or upgrade that involve the hangars.

Navigation Aids

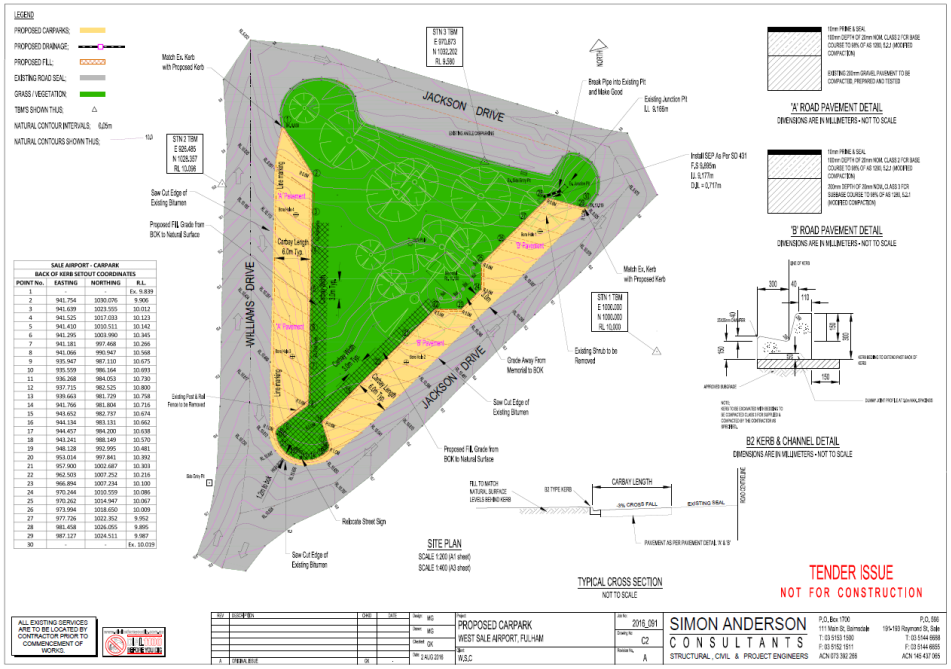
Due to the runway expansion to the east, the eastern Precision Approach Path Indicators (PAPI) will need to be repositioned, as shown in the figure below.

Figure 29: PAPI (Precision Approach Path Indicator) relocation

3.2.3 Other Facilities

Car parks

Plans have been drafted to provide more formalised car parking to the terminal area. The scope involves construction of kerb and channel and line marking.



3.3 Environmental Management Plan

The AAA Regional Airport Master Planning Guideline states that an Environmental Management Plan is optional but may be required if there are areas of environmental significance on the airport site. Furthermore, this section should include any issue or impact that a proposed future development of the airport could have on the surrounding environment of the airport.

In November 2014, Council engaged an environmental specialist to provide a report titled 'Vegetation Overview and Habitat Hectares Assessment', which detailed locations and significance at WSA. The report identifies different vegetation zones, as shown in the figure below.

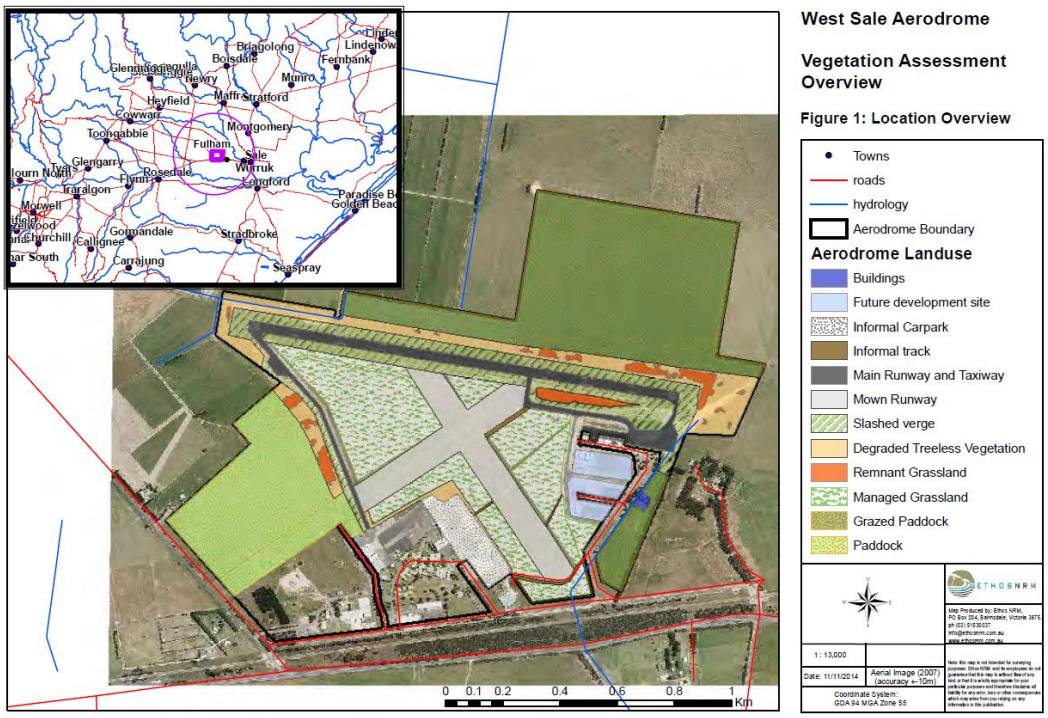


Figure 30: Vegetation Assessment Overview

Based on this study, future airport developments that require native vegetation removal could be subject to:

- Planning Permit (Biodiversity Assessment Guidelines)
- Permit under the Flora and Fauna Guarantee act 1988 (due to PAMA agreement)
- Changes to the PAMA Agreement
- EPBC Act

The Vegetation Overview and Habitat Hectares Assessment provided information and data needed for any future development of WSA. In relation to a potential 500 ft. extension of runway 09/27 the report highlighted the implications that the development would have on the environment.

The assessment concluded that the largest percentage of the site is covered by Plains Grassy Woodland (PGW) with an Ecological Vegetation Class (EVC) of 55 and it identified 6 Habitat Zones, as shown in the figure below and described in the table below.

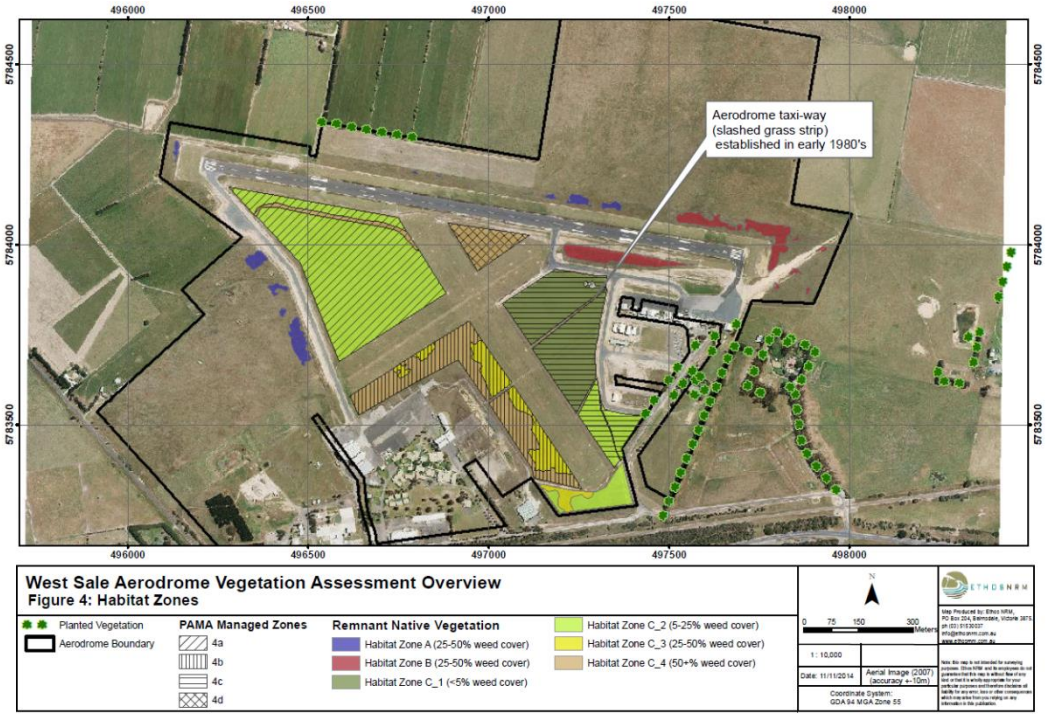


Figure 31: Habitat Zones at WSA

Habitat Zone	EVC	Conservation Status	Habitat Score	Total Area	Aerodrome Zone Identifier
A	Plains Grass Woodland	Endangered	0.27	1.14 ha	3c
B	Plains Grass Woodland	Endangered	0.22	2.22 ha	3d
C_1	Plains Grass Woodland	Endangered	0.37	6.2 ha	4c
C_2	Plains Grass Woodland	Endangered	0.33	15.08 ha	4a, 4c
C_3	Plains Grass Woodland	Endangered	0.27	23.74 ha	4b
C_4	Plains Grass Woodland	Endangered	0.25	6.24 ha	4b

Table 9: Habitat Zones at WSA

This data is based on the Vegetation Quality Assessment Manual issued by the Department of Environment and Primary Industries (DEPI).

Cross-referencing the proposed runway extension with the habitat zones in Figure 32, development site, presently owned by WSA, has areas of habitat Zone B.

State Policy for vegetation removal requires, any weed removal is assessed by a risk level-based framework (low, moderate and high risk). The risk based approach relies on two parameters; extent risk (i.e. the amount of vegetation proposed to be removed) and location risk (i.e. the risk based on the DEPI model). The report assessment concluded that the DEPI 'Biodiversity impact and offset requirements report' identifies the Aerodrome site as a high-level risk area for any future vegetation removal. The DEPI standards declare that, where vegetation removal cannot be avoided, a provision of offsets is required to compensate for the impacts on biodiversity. An offset strategy is compulsory for moderate and high-risk pathway applications. DEPI regulations states that offsets could be achieved through:

- Long-term protection, enhancement and management of the quality and quantity of native vegetation on private or a third-party land.
- Native Vegetation Credits (sourced by accredited native vegetation Offset Brokers).

DEPI (DEPI, 2013a) requires that a compliant offset must be secured before the native vegetation is removed with a security agreement for the site including an onsite (Offset) management plan or an evidence of a secured third-party offset.

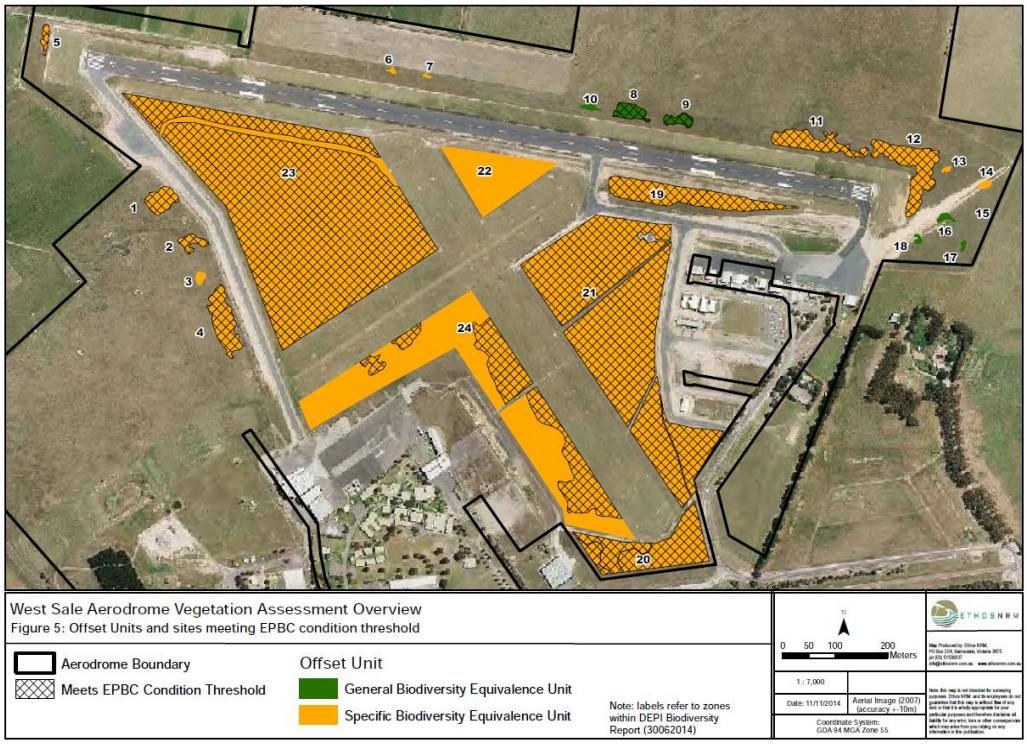


Figure 32: EPBC Act Protection Areas at WSA

The 2014 Vegetation Overview and Habitat Hectares Assessment (ETHOS NRM Pty Ltd) identified an area of remnant native vegetation, designated Habitat Zone B, of which two areas are assessed as meeting the EPBC Condition Threshold. According to the report these areas meet, or are likely to be afforded protection under the EPBC Act due to their size and diversity of species present.

In Figure 32, the area numbered (12) meets the EPBC Condition Threshold and about 50% of that area would be impacted by the development of the runway. As such the impact to this area should be assessed in accordance with EPBC Significant Impact Guidelines (DOE, 2013). If significant impact to this area is anticipated or cannot be discounted, then the matter must be referred to the Minister for approval.

Other areas of remnant vegetation within Habitat Zone B which are impacted by the planned extension of runway 09/27, have not been assessed as meeting the EPBC Condition Threshold and can therefore be offset under State guidelines which can be summarised as:

- Provide an equivalent native vegetation offset onsite
- Provide an equivalent native vegetation offset at another site owned by Council
- Purchase an equivalent native vegetation 'offset credit' from an Accredited Brokering Organisation

3.4 Airport Safeguarding Plan

3.4.1 National Airports Safeguarding Framework

Site for airports are scarce and finding new appropriately located and unconstrained land to replace or expand existing airports is difficult. Existing airport sites in many cases pre-date significant urban/township development. Urban expansion and densification has increased tensions between residential and industrial development and airport operations.

The capacity of an airport to operate unencumbered as an airport is fundamentally dependent on what occurs on the land surrounding it. The erection of structures that physically intrude into the flight paths of arriving and departing aircraft can clearly limit or prevent use of the airport. So too can other developments that are less obvious. For example:

- Residential developments adjacent to airports and under flight paths may lead to complaints about aircraft noise and eventually lead to the introduction of curfews or even the closure of an airport
- Industrial activities that generate smoke or similar hazards may constrain use of an airport
- Other activities such as agriculture, animal husbandry or wetland developments may attract birds and/or wildlife species and pose a hazard to aviation.

As outlined in section 2.1.5, the National Airports Safeguarding Framework (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 aviation safety requirements are recognised in land use planning decisions.

It represents a collective commitment from governments to ensure that an appropriate balance is maintained between the social, economic and environmental needs of the community and the effective use of airport sites.

It currently consists of seven principles and seven guidelines with potentially two further guidelines under development addressing Public Safety Zones and protection of helicopter facilities.

The Australian Airports Association (AAA) has produced a practice note titled *Planning Around Airports – Safeguarding for the Future* which provides guidance to airport operators and planning authorities on how to implement NASF. The key issue in relation to airport protection is to ensure that the use and development of land surrounding the airport does not prejudice the ongoing operation of the airport. The two most important safeguarding requirements for smaller regional airports such as WSA involve ensuring that:

- development proposals near the airport and under flight paths do conflict with the airport's Obstacle Limitation Surfaces (OLS); and
- changes of land use near the airport and under flight paths are not for land uses that may be sensitive to aircraft noise (e.g. residential land uses).

These two critical safeguarding matters, as they relate to WSA, are discussed below.

3.4.2 Airspace Protection Surfaces

WSA's airspace protection surface were discussed in section 2.5.11 of this Master Plan Update report.

An Obstacle Limitation Surface (OLS) assessment is undertaken annually and the last report, dated July 2016, includes the objects that could affect the runway 09-27 extension. From the 2016 OLS report, three obstacles and three resulting corrective actions were identified, as follows:

- Obstacle 3 (Eucalyptus Tree): obstacle should be lopped or removed; if not possible, it should be referred to CASA and a NOTAM issued.
- Obstacle 8 (Natural Surface: obstacle should be lowered or referred to CASA.
- Obstacle 2 (Cypress Tree): obstacle should be lopped or removed; if not possible, it should be referred to CASA and a NOTAM issued.

Figure 33: 2016 OLS Assessment

With the proposed extension runway RWY 09/27 the OLS for WSA will require redesign to ensure that the aerodrome continues to comply with MOS 139.

WSA has instrument procedures for non-precision approaches, however the current minima are well above the OLS surfaces and at this stage maintaining a separate overlay for PANS-OPS surfaces is not warranted as any penetration of the OLS surface would include a review of these procedures.

3.4.3 Aircraft Noise Contours

Section 2.5.12 of this Master Plan discussed the aircraft noise contours and relevant issues and regulations. In order to satisfy the requirements of the Australian Standard AS2021-2015 "Acoustics – Aircraft Noise Intrusion – Building Siting and Construction, Wellington Shire Council has received approval for the WSA ANEF by Airservices June 2017.

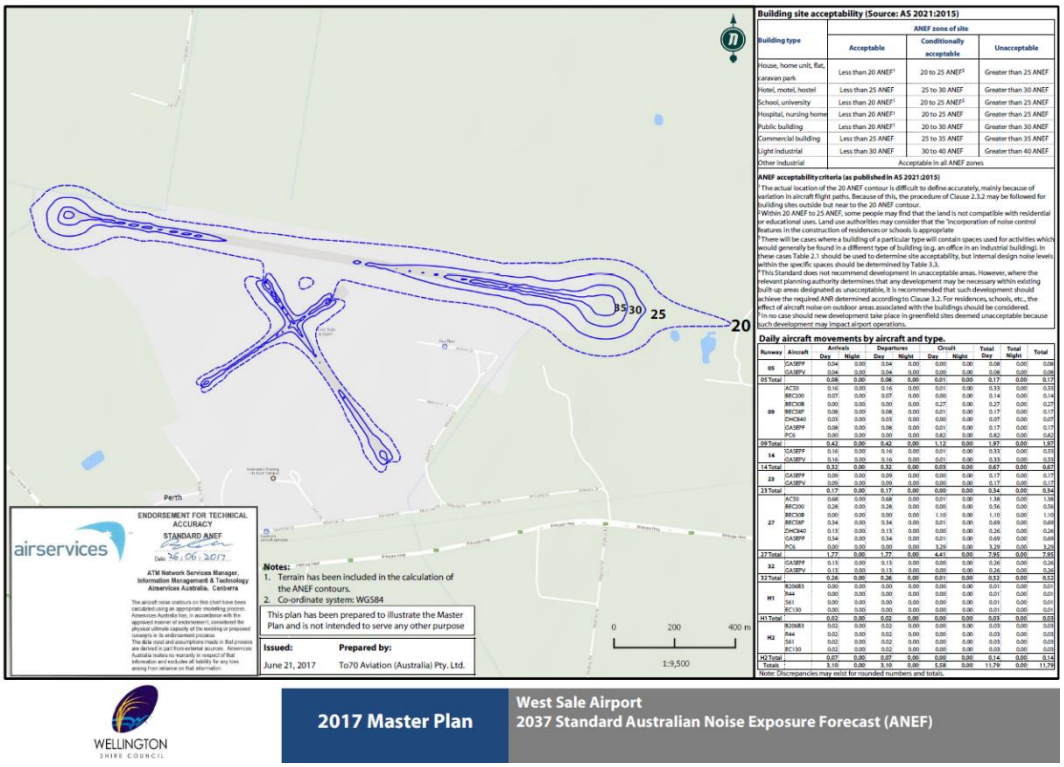


Figure 34 West Sale Airport ANEF

3.4.4 Public Safety Area (PSA)

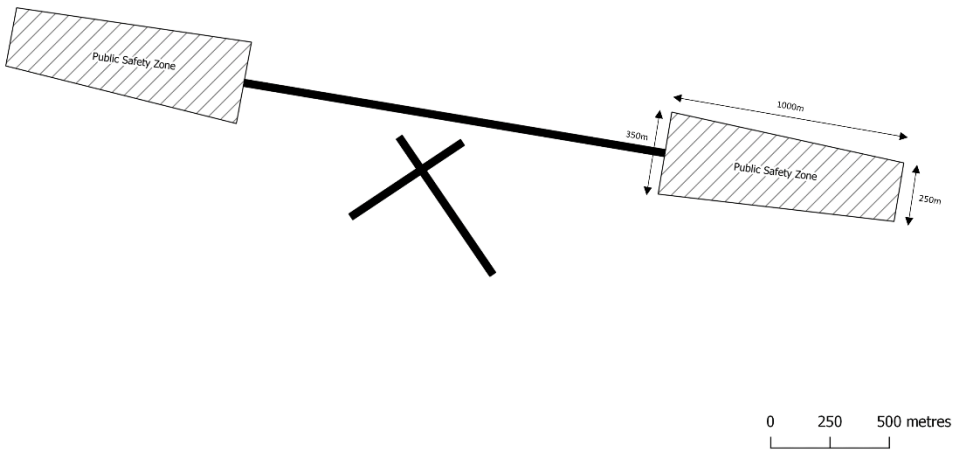


Figure 35 Public Safety Area

In lieu of a formal framework for PSA, the above diagram has used the dimensions of the model currently in use in Queensland and depicted a PSA at either end of the proposed extended runway at WSA.

3.4.5 Planning Policies and Controls

It is imperative to the future realisation of aeronautical opportunities at WSA that the capability to undertake aircraft operations in accordance with prescribed safety standards and regulatory requirement is protected.

A number of planning tools and controls exist within the Victorian Planning provisions for safeguarding Airports:

- The Local Planning Policy Framework, including the Municipal Strategic Statement and Local Planning Policies can be used to highlight the strategic importance of protecting the ongoing operation of the airport;
- Zoning is used to ensure that future land use and development around the airport is responsive to ongoing aviation activities; and
- Overlays such as the Airport Environs Overlay (AEO) and Design and Development Overlay (DDO) deal with matters such as protecting aircraft noise contours and operational airspace surfaces.

The existing planning policies and controls applying to WSA were discussed Section 2.1.6 of this report. The following recommendations are made to improve these policies and controls and enhance the safeguarding of WSA:

- The existing Aerodrome and Environs Policy (Clause 22.05) will need to be reviewed and updated to reflect the new Master Plan, ANEF and OLS, in line with NASF guidelines.

- The Special Use Zone (SUZ) will need to be amended to refer to the new Master Plan and the boundaries of the zone will need to be amended to accommodate the proposed land exchange and extension to the runway.
- The Airport Environs Overlay (AEO), Schedules 1 and 2 will need to be amended in line with the WSA ANEF which also incorporates the extended runway.
- A Design and Development Overlay (DDO) should be applied to protect the airport's airspace surfaces in accordance with a revised OLS incorporating the extended runway (similar to the DDO that applies to East Sale RAAF Base).

A Planning Scheme Amendment should be prepared incorporating these matters once the new Master Plan, OLS and ANEF have been approved.

3.5 Implementation Plan

This section identifies specific actions required to implement the plan, trigger points for each action and broad indication of likely timing.

Action	Trigger Point	Indicative Timing
Master Plan / Strategic		
Release of Final Masterplan	Council adoption of the Master Plan.	July 2017
Planning		
Review the zoning and Planning Scheme controls over the airport to ensure it is responsive and allows future growth and development.	Recent assessment of planning controls confirms a review is required.	2017/2018
Undertake a planning scheme amendment	Completed land exchange.	2017/2018
Update AEO	Availability of updated ANEF mapping	2017/18
Operational Management		
Finalise land acquisition for runway extension preferably via agreed land exchange as opposed to compulsory acquisition	Extension of runway 09/27 is required.	2017
Review the procedure and policy requirements necessary for an upgraded runway (identify implications for Aerodrome Manual etc.)	Respond to legislative or regulatory framework.	Concurrently with Master Plan and runway extension project.
Identify the triggers for review of the Governance model	Significant change in airport operations and demand	TBC
Development Plan for capital expenditure.	Future asset renewal	Annually

Communication and engagement	Facilitate and participate in ongoing discussions with stakeholders regarding initiatives: • Airfield works and improvements. • The review of airspace. • General operations.	2017/18
Detailed Obstacle Limitation Survey	Runway extension, new development	Annual Review
Develop a Western Precinct Plan to inform: • Future lease tenure arrangements • Traffic management e.g. access, alternative road access • Identify development capacity • Accommodate potential relinquishment of Federation Training site and identify aviation related development options. Potential for non-aeronautical development	Could be undertaken separately or as part of the comprehensive master plan review.	From 2018
Branding & Marketing		
Development of a Branding and Marketing Strategy to promote growth – including consideration of targeted incentives to attract investment.	Defence and aviation related industries, education / training, freight services.	2018
Establish relationships with key Airport and aviation businesses to inform them of the opportunities that WSA offers.		Ongoing
Infrastructure		
Extension, overlay, lighting and associated works to 09/27 runway	Defence operational requirements ($6M)	2017-2019
Connection to mains wastewater	Increase in demand on the current wastewater system ($750K-$1M)	Major new development
Bellman Hanger refurbishment	Request for increased use other than storage and agreement on funding model. ($350K+)	As required
Relocation of Gippsland Armed Forces Museum	Increased demand for industrial / airside land or receipt of grants acknowledging the importance of its	On demand

	educational and tourist potential ($850K+)	
Design and cost estimates for construction of new Taxiway “Foxtrot” (to serve lots to south of western apron)	Requirement or demand for new development supported by necessary funding.	Future Master Plan
Urban design, place making and landscaping improvements to entrance and migrant memorial.	Stage 3 of ERAP.	From 2019/20
Terminal Building upgrade (incorporating all access/disabled facilities)	Significant change in operational use. Increased air traffic and usage of the facilities ($450K)	As required
Improvement of current road / entry point into the Airport.	Component of current Princes Highway duplication works.	2016
Development of Vacant land for commercial / industrial purposes	Subject to demand	
Construct alternate road access into the Airport (off the Sale-Heyfield Road)	Subject to demand or substantial new development	As required

Table 10: Implementation Plan

Appendix A – List of stakeholders

Lessees:

1. Federation Training
2. Esso (Training Facility)
3. Country Fire Authority
4. Southern Aviation Services
5. Rudy's Aero Engines
6. Lessee's (fronting eastern and western aprons)
7. Aero Refuellers

Freehold owners located on:

1. Mortimer Drive.
2. Jackson Drive.

Others:

3. RAAF Base East Sale ATC
4. Gippsland Armed Forces Museum
5. Regional Development Victoria
6. Toll Transport
7. Surrounding properties
8. GEO Fulham
9. Gippsland Water
10. VicRoads
11. Wellington Regional Tourism
12. Sale Business Association
13. GAM
14. Ambulance Vic
15. RFDS
16. Latrobe City Council
17. East Gippsland Shire Council
18. Southern Rural Water
19. Department of Environment, Land, Water and Planning
20. Department of Transport, Planning and Local Infrastructure
21. Environment Protection Authority
22. Gunaikurnai Land and Waters Aboriginal Corporation
23. Public Transport Victoria (PTV)
24. West Gippsland Catchment Management Authority

Appendix B – Stakeholder Feedback

Date	From	Summary	Response
9 May 2017	Hans Matsoo	Hans indicated that YWSL does have instrument procedures. Therefore, the last statement in paragraph 3.4.2 may be incorrect.	To70 acknowledge that the comment is correct and that 3.4.2 states incorrectly that there are no instrument procedures at YWSL. This has been corrected. In fact, YWSL does have non-precision instrument approach procedures in place (which are included in the ANEF). Section 3.4.2 has been updated.
9 May 2017	Southern Rural Water	SRW assessed the proposal and has concluded that it has no impact on their business interest. Therefore, SRW concluded that they have no objections.	Noted that SRW have no objection to the Master Plan Update.
10 May 2017	West Gippsland Catchment Management Authority	West Gippsland CMA reviewed the proposed Master Plan indicated their support. WGCMA also provided updated information regarding local waterways and the 1 in 100-year flood overlay.	Noted the support provided for the Master Plan by WGCMA.
26 May 2017	Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC)	GLaWAC formally advised that they do not have concerns regarding the proposal and they are comfortable with the project progression.	Noted that GLaWAC have no objections to the Master Plan Update.
29 May 2017	Department of Environment, Land, Water & Planning	The department offers the following comments: • The Master Plan Update adequately identifies the significant biodiversity assets on airport land. • Potential work will impact the threatened flora community. The department acknowledged that the Master Plan Update has	Noted the acknowledgement from DELWP regarding the Master Plan Update environmental section and support for the ongoing management of retained grassland at the site.

Date	From	Summary	Response
		demonstrated minimisation of any impact on the most significant areas from the location of works. • Any native vegetation removal may require approval under the *Environmental Protection and Biodiversity Conservation Act 1999, Flora and Fauna Guarantee Act 1988* and the *Planning and Environment Act 1987.* • The biodiversity value of the land that the airport is seeking to acquire through the land-swap has not been fully established.	
31 May 2017	Transport for Victoria	Transport for Victoria supports Council in planning for long-term development and offered the following comments: *Public Safety Zone (NASF)* Recommended the inclusion of Public Safety Zones based on the Queensland model to assist planning pending NASF publishing a guideline.	*Public Safety Zone (NASF)* In lieu of NASF guidelines, the Master Plan Update has drawn the dimensions of the Queensland based Public Safety Zone and included as a table. Further assessment on impacts would be required following implementation and at time of next Master Plan.
		Ground Transport Options Consideration of more detail for ground transport options and provision of a shuttle service.	*Ground Transport Options* Council believes the Master Plan Update covers ground transport sufficiently pending further investigation of RPT services as part of future Master Planning.

Date	From	Summary	Response
		Dash 8 – Q400 TFV supports planning for Q400 as the design aircraft but notes a lack of detail pertaining to plans for such an aircraft to operate at West Sale and terminal infrastructure to deal with the capacity. TFV expressed its support for any terminal expansion and refurbishment when an increase in passenger services is likely.	*Dash 8 – Q400* The Q400 was used as the design aircraft considering pavement strength and PCN compatibility. Requirements within the RAAF CONOPS is the influencing factor for the runway length (PC-21 landing plus take-off roll) in addition to previous Master Plan's identifying 1,800m as the ultimate runway length. Furthermore, considering the scope of the Master Plan Update, an investigation into future RPT services and required infrastructure planning would form part of a subsequent Master Planning initiative.
		Land Sales Transport for Victoria is concerned at the proposal to sell land within the airport. It has been suggested amending this policy in favour of more long-term lease arrangements.	*Land Sales* Council acknowledge the concern of TFV. However, there has been considerable research into the approach and Council is mindful of balancing lease arrangements for the ERAP site against higher levels of interest and ultimately growth in aviation related activities. The strong interest that Council is attracting for the current phase of the development indicates that the scheme is encouraging aviation businesses to consider West Sale.
		Long term industrial development Although Transport for Victoria supports the long-term planning for the approved planning scheme C89, located southeast of the airport, it is concerned that the Princess Highway and Melbourne-Bairnsdale Railway	*Long term industrial development* The concern of TFV is noted and although this development is not specifically related to the airport master plan, Council would like to note that traffic studies would form part of any

Date	From	Summary	Response
		separates two airport sites, forming a connectivity barrier, potentially increasing congestion and safety risk.	development for that planning scheme with regard to connectivity to the airport.
		Land Exchange Transport for Victoria suggested Council consider acquiring the land required for the runway extension rather than exchanging it. Transport of Victoria considers that the acquisition would be more advantageous for YWSL.	*Land Exchange* Council acknowledge the comment and would seek to reassure TFV that the decision to exchange, rather than acquire land, was thoroughly investigated and has delivered the best possible outcome for West Sale Airport, the land-holder and Council.
		2nd sealed runway TFV enquired whether the demand or need for a second sealed runway has been considered or investigated.	*2nd sealed runway* The Master Plan Update 2017 has not considered the expansion or re-surfacing of a second runway as the scope of operations being considered does not justify any investigation at this stage. This question could certainly be a worthwhile discussion during subsequent Master Planning iterations.
		Princes Highway East Duplication Transport of Victoria advised that nine sections funded by the $260M Princes Highway East Duplications will not be completed until mid-2019 and the Fulham 2 section is scheduled for completion by mid-2018. Therefore, please correct the statement regarding the project in the Master Plan Update.	*Princes Highway East Duplication* To70 has corrected Section 2.1.3 of the Master Plan Update with the information provided by TFV.
2 June 2017	Avisure Pty Ltd	Avisure specialise in wildlife and bird strike risk management, Avisure's team of aviation ecologists have been helping airports and aviation industry stakeholders throughout Australia and around the globe since 1996.	Wildlife Hazard Management policies and procedures are not in scope for the Master Plan Update. Council has proposed that based on previous interactions with Avisure and participation in the RAAF East Sale Aviation Wildlife

Date	From	Summary	Response
		Avisure provided the following comments: • Wildlife hazard management strategy is not mentioned, apart in the overview of NASF and MOS 139 generic requirements. • In section 1.2, Avisure recommended to include 'ensuring the safe and efficient transport of people to and from the region' as core objectives and purposes of the MP. • Section 2.2 should include existing wildlife hazards and wildlife strike information. • Section 2.3.4 should address wildlife hazard risk and potential changes in risks, considering the airport development. Local weather patterns and likely effect on scheduled operations should also be mentioned. • Wildlife hazards should be included in the Critical Airport Planning Parameters (Section 2.5). This should include an analysis of existing and future on-airport features and off-airport locations that attract wildlife. • Section 2.5.2 should include aircraft type in the movement data. • **Table 6** acronyms and definitions need to be expanded and clarified. Avisure also commented on the runway extension in relation to PC-21 operations and commercial validity of selecting the Q400 as the design aircraft. • Section 3.1.1 needs to include reference to NASF, other documentation and reference to landscaping and waste management guidelines.	Hazard Group, that West Sale Airport consider current practices regarding wildlife hazard management during day to day operations. There are already some processes in place to minimise wildlife interaction with aircraft such as improved fencing and baiting programs. It should be noted that there have been minimal hazardous interactions with wildlife at West Sale. T070 will update Table 6, including acronyms and explanations. Commercial rationale of RPT services was not within scope of the MP update.

Date	From	Summary	Response
		• Avisure raised questions about the runway extension in relation of PC-21 requirements. • Section 3.5 does not include assessing and monitoring wildlife hazards as part of the actions.	
2 June 2017	Moorabbin Airport Corporation (MAC)	MAC is fully supportive of the West Sale Airport Master Plan Update.	Council would like to thank Moorabbin Airport Corporation for the support.
5 June 2017	Department of Defence (Defence)	Defence welcomes the upgrades proposed for the West Sale aerodrome and appreciates Council's support for the relocation of the Basic Flying Training School to RAAF Base East Sale. Defence wants to note that its use of restricted airspace for training purposes is expected to increase. Therefore, Defence provided the following comments: 1. Page 15 of the Master Plan refers to Restricted Airspace (RA1). Defence advised that East Sale restricted areas are under review for change to Conditional Status RA2. 2. Page 35 of the Master Plan Update states that East Sale offers a great opportunity for Class C licence pilots. Defence advised that civilian access to East Sale aerodrome will not be available, and access to the East Sale control zone is unlikely to be approved during flying training operations.	Council notes the positive response from Defence and is looking forward to working closely with RAAF East Sale in the future. Council will continue to support Defence throughout the process of engaging airspace regulators and the Office of Airspace Review to develop an optimal solution for the local airspace, including availability and ongoing management. The proposed changes to airspace have no impact on the Master Plan Update however Council will facilitate discussions between the aviation community and Department of Defence to ensure greater understanding between stakeholders and Council on how RAAF's increased use of West Sale will impact access.
23 June 2017	RDA Gippsland	RDA Gippsland strongly supports the West Sale Airport Masterplan Update.	Council would like to thank RDA Gippsland for their support for an asset that has regional significance.

Appendix C – Wellington Shire Council Land Transactions

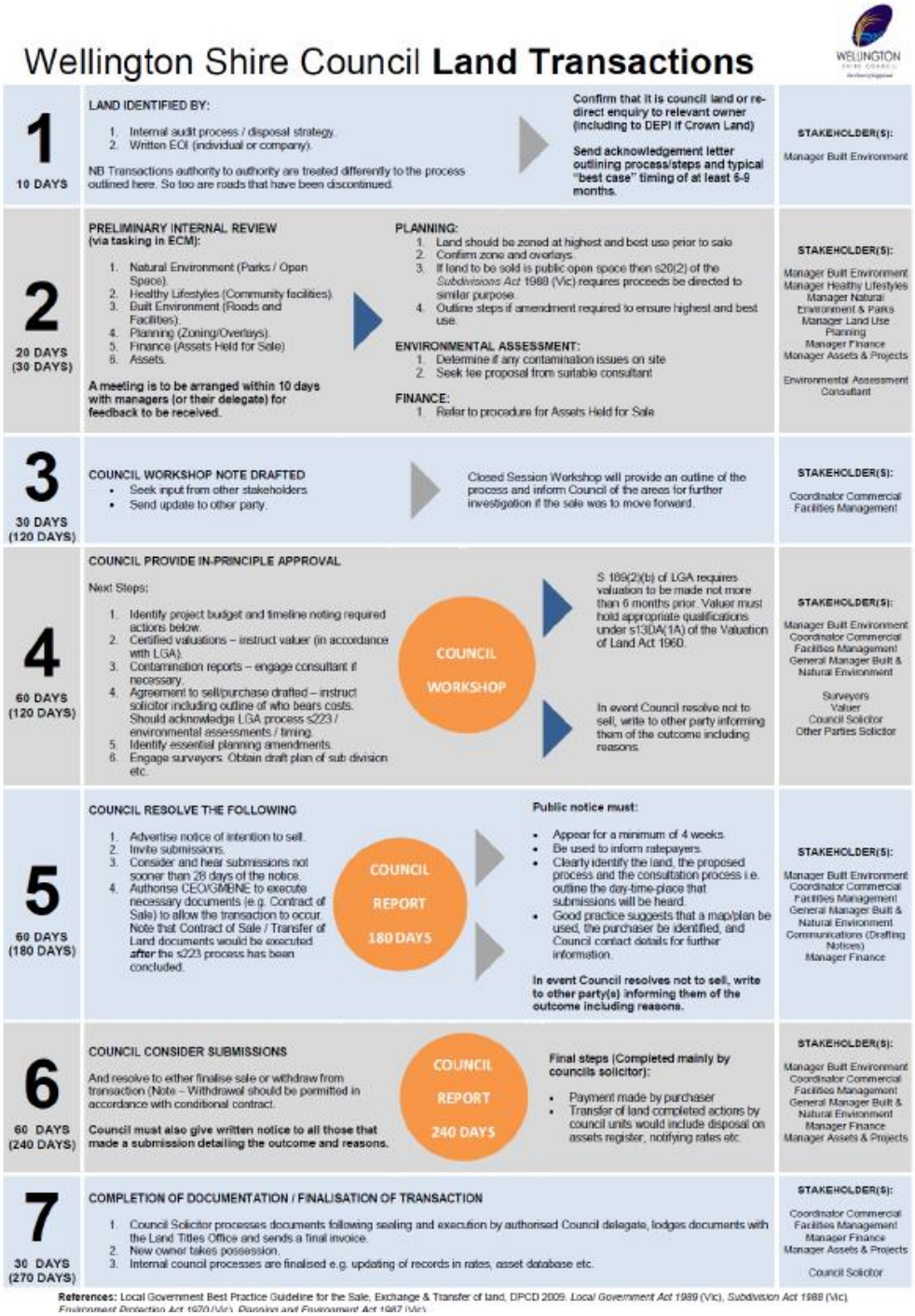
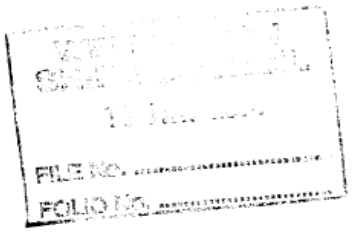


Figure 31: Council Land Transactions

Appendix D – 2004 DOTARS Amendment

Australian Government
Department of Transport and Regional Services

Mr Lyndon Webb
Chief Executive Officer
Wellington Shire Council
PO Box 506
SALE VIC 3850



Dear Mr Webb

Following consideration of the Australian Government's involvement in the Aerodrome Local Ownership Plan (ALOP), the Hon John Anderson MP, Minister for Transport and Regional Services has decided upon a liberalisation of policy towards applications under the ALOP transfer deeds. This will provide aerodrome owners with a greater level of flexibility in the operation of their asset.

The current provisions in the transfer deeds require aerodrome owners to seek the consent of the Secretary of the Department of Transport and Regional Services (DOTARS) prior to selling, leasing or otherwise disposing of all or part of their aerodrome.

The Australian Government now waives its right to enforce the relevant clause of the transfer deed that requires aerodrome owners to seek consent from the Secretary of DOTARS for alternative use of their aerodrome, except in certain circumstances. These circumstances are where the alternative use will:

- result in the closure of the aerodrome, or
- result in the aerodrome no longer continuing to operate as an aerodrome.

In all other circumstances owners need not contact the Department for approval.

It would be expected that aerodrome owners will have consulted with the relevant local and state/territory governments as applicable prior to seeking consent from DOTARS.

This amendment takes effect immediately.

Yours sincerely

Nick Bogiatzis
A/g First Assistant Secretary
Policy and Research Group

13 January 2004

GPO Box 594 Canberra ACT 2601 Australia • Telephone: 02 6274 7111 • Facsimile: 02 6257 2505
Website: www.dotars.gov.au ABN 86 267 354 017