

Claire Willey
Principal Planning
SLR

October 2025

By email: claire.willey@elementadvisory.com.au

Our reference: 1010701-01

Dear Claire

Re: Flat Rocks Wind Farm Stage 2 Wind Monitoring Tower – Aviation Impact Assessment

Water Corporation is developing the proposed Flat Rocks Stage 2 Wind Farm, located in the Great Southern Region of Western Australia, approximately 13 km southeast of Kojonup. The project will consist of up to 33 wind turbines with a maximum tip height of 200 m.

Water Corporation is pursuing one Meteorological Mast to be installed on the project site to improve bankability of the project.

Aviation Projects has prepared an Aviation Impact Assessment (AIA) for the WMT against relevant aspects of the applicable planning scheme, Civil Aviation Safety Regulations (CASR) Part 139—*Aerodromes* and National Airports Safeguarding Framework (NASF), specifically regarding whether marking and/or lighting are required.

1.1. References

The following information sources were referenced during the preparation of this report:

- Airservices Australia
 - Aeronautical Information Package (AIP), effective 27 November 2025.
 - Designated Airspace Handbook (DAH), effective 27 November 2025.
- Civil Aviation Safety Authority (CASA)
 - Advisory Circular (AC) 91-02 V1.2, *Guidelines for aeroplanes with MTOW not exceeding 5700 kg – suitable places to take off and land.*
 - AC 91-10 v1.6: *Operations in the vicinity of non-controlled aerodromes.*
 - AC 139.E-01 v1.0—*Reporting of Tall Structures.*
 - AC 139.E-05 v1.1 *Obstacles (including wind farms) outside the vicinity of a CASA certified aerodrome.*
 - CASR Part 139 Manual of Standards (MOS)– *Aerodromes.*
 - CASR Part 173 MOS – *Standards Applicable to Instrument Flight Procedure Design.*
 - Civil Aviation Regulations 1988 (CAR).
 - Civil Aviation Safety Regulations 1998 (CASR).

- Australian Government, Department of Infrastructure, Transport, Regional Development, Communications and Arts (DITRDCA), National Airport Safeguarding Framework, Guideline D *Managing the Risk to aviation safety of wind turbine installations (wind farms)/Wind Monitoring Towers*, dated July 2012.
- International Civil Aviation Organization (ICAO)
 - Doc 8168 *Procedures for Air Navigation Services—Aircraft Operations* (PANS-OPS).
 - Annex 14—*Aerodromes*.
- OzRunways, aeronautical navigation charts extracts, dated October 2025.
- Other references as noted.

1.2. Project description

The proposed WMT would be within the Shire of Broomehill-Tambellup Local Government Area (LGA). The proposed WMT would be approximately 13 km southeast of Kojonup.

The WMT's maximum height would be 150 m (492 ft) above ground level (AGL), and the ground elevation of the WMT would be approximately 358 m Australian Height Datum (AHD). This results in a maximum overall height of approximately 508 m AHD (1666.7 ft above mean sea level (AMSL)).

Figure 1 Shows the location of the proposed WMT (Source: Water Corporation, Google Earth).



Figure 1 WMT's location

Details of the proposed WMT are provided in Table 1 (source: email from Cheng Zhu, dated 02 December 2024).

Table 1 Details of the proposed WMTs

Item	WMT (M2) - Option
Location	Easting 534,992, Northing 6,246,957
Ground elevation at the site	358 m AHD
Height of WMT AGL	150 m AGL
Height of WMT (AHD)	508 m AHD (1666.7 ft)

Figure 2 Shows a typical steel lattice and guy wire construction.

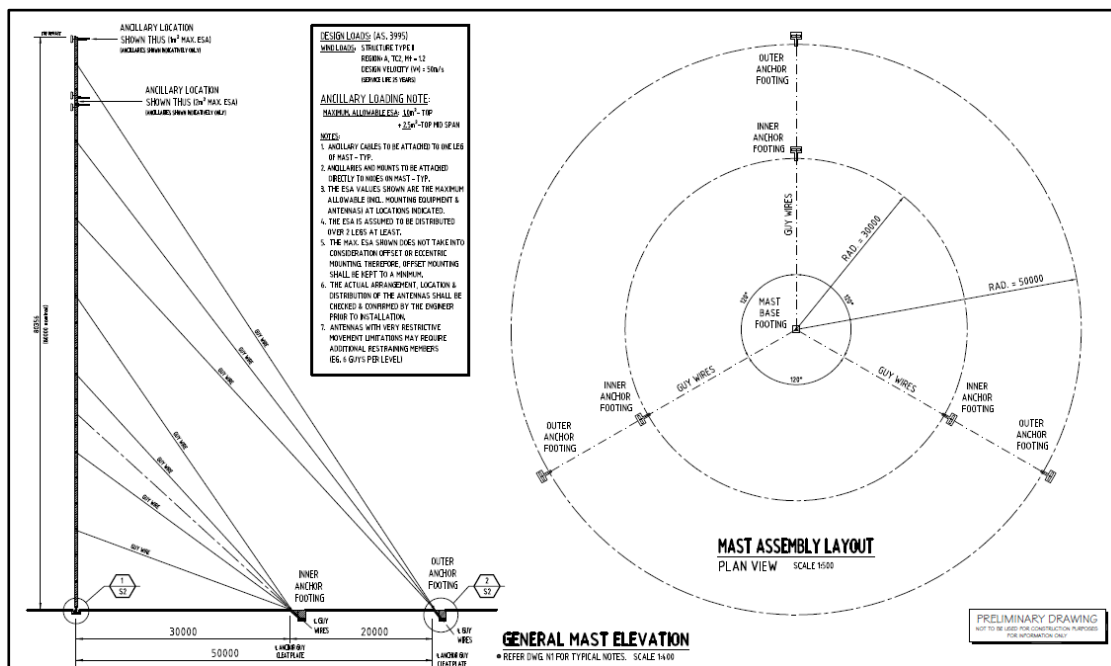


Figure 2 Typical Guyed Lattice Mast - general elevation

1.3. Shire of Broomehill-Tambellup

The Shire of Broomehill-Tambellup published Broomehill-Tambellup Local Planning Policy No. 2 – Wind Farms (November 2024), which includes guidelines and performance outcomes for development close to Aviation facilities to ensure new developments do not create incompatible intrusions or compromise the safety of existing airports and associated navigation facilities.

APPLICATION REQUIREMENTS

In addition to the requirements prescribed in Schedule 2 of the Planning and Development Regulations 2015 and the Shire's Development Application Checklist, all development applications for wind farms must comprise:

k) An Aviation Impact Assessment;

COMMUNITY AND STAKEHOLDER CONSULTATION

Proponents should liaise with all relevant stakeholders early in the process including, but not limited to the Shire, Main Roads WA, Western Power, Civil Aviation Safety Authority, Air Services Australia, Royal Flying Doctor Service, Department of Fire and Emergency Services, Department of Planning, Lands and Heritage, Department of Water and Environmental Regulation, Department of Biodiversity, Conservation and Attractions, Department of Primary Industries and Regional Development, Environmental Protection Authority, local aerial spraying contractors, unlicensed airstrip owners (within a 5km radius of a turbine), any relevant incorporated local aeronautical associations., and any relevant local community groups.

OTHER POTENTIAL IMPACTS

Wind farm proposals should not have negative impact through:

b) Unreasonable interference with normal agricultural or farming activities of nearby rural properties, such as aerial spraying. An aviation assessment by a suitable qualified aviation consultant is required to demonstrate turbines will not impact on aerial spraying activities of surrounding farms or unlicensed airstrips;

1.4. Nearby certified aerodromes

A certified aerodrome is an aerodrome regulated by the Civil Aviation Safety Authority (CASA) under CASR Part 139 with defined standards established in CASR Part 139 MOS.

There is one (1) airport, Katanning Airport (YKNG), within 30 nm of the proposed site.

The 30 nm radius represents the 25 nm minimum sector altitude (MSA) for aerodromes with terminal instrument flight procedures. The 25 nm MSA is determined by assessing obstacles within 30 nm (25 nm plus 5 nm buffer) of the aerodrome reference point or navigational aid on which the MSA is based.

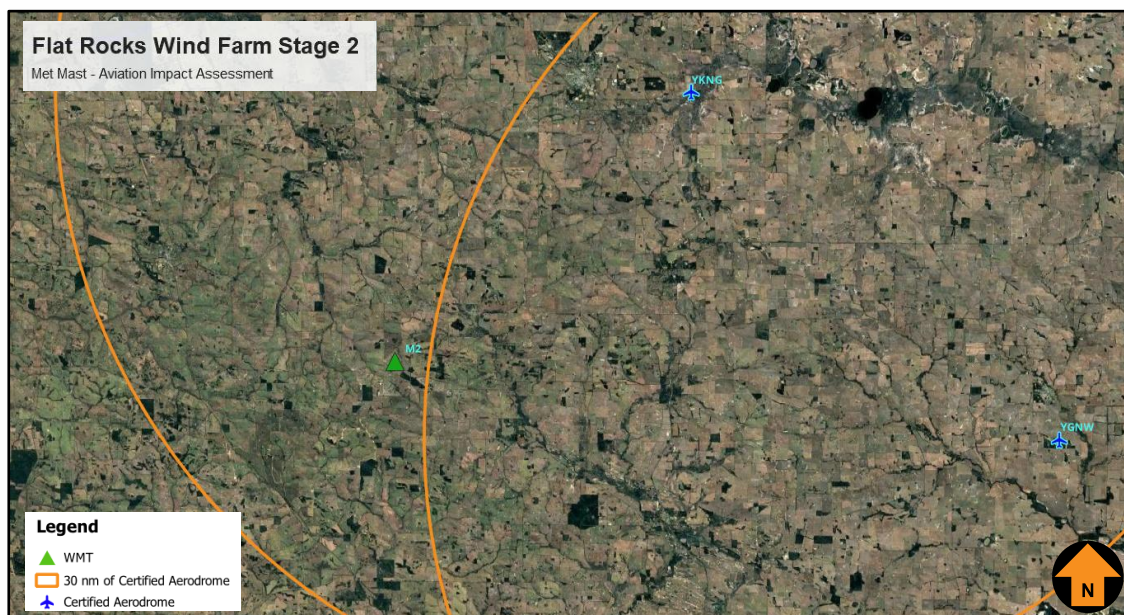


Figure 3 Location of certified airport in relation to the proposed WMT

The location of the WMT's site relative to Katanning Airport (YKNG) and Gnowangerup Airport (YGNW) is shown in Figure 3 (Source: Water Corporation, Google Earth). The orange circle represents a 30 nm radius from the

airport's aerodrome reference point (ARP). The WMT would be outside the 30 nm of Gnowangerup Airport; there is no impact, and no assessment is required for Gnowangerup Airport.

1.5. Katanning Airport (YKNG)

Katanning Airport (YKNG) is a certified aerodrome operated by the Shire of Katanning. Its published aerodrome elevation is 285 m AHD (936 ft AMSL) (source: AIP, effective 04 September 2025).

Katanning Airport's ARP coordinates published in Airservices Australia's Designated Airspace Handbook (DAH) are Latitude 33° 42' 01" S and Longitude 117° 39' 12" E (Source: DAH, effective 12 June 2025).

1.5.1. Obstacle Limitation Surfaces

OLS are established for each certified aerodrome runway. For the Code 1 non-precision runway at Katanning Airport, the maximum lateral extent of the OLS is up to 4.7 km for the conical surface and 1.6 km for the take-off and 2.5 km for the approach surfaces.

The WMT would be approximately 34 km southwest of Katanning Airport's ARP, which is beyond the horizontal extent of the obstacle limitation surfaces.

1.5.2. Instrument approach procedures

A check of the AIP via the Airservices Australia website showed that Katanning Airport is served by non-precision instrument flight procedures for the runway (source: AIP, effective 04 September 2025).

Table 2 Identifies the aerodrome and procedure charts for Katanning Airport, which were designed by Airservices Australia as indicated.

Table 2 Katanning Airport (YKNG) aerodrome and procedure charts

<i>Chart name</i>	<i>Effective date (amendment number)</i>
AERODROME CHART	13 June 2024 (Am 179)
RNP RWY 25	13 June 2024 (Am 179)

1.5.3. PANS-OPS Surfaces

A detailed assessment of the PANS-OPS surfaces associated with the published instrument approach procedures was undertaken:

- MSA Surfaces
- IFR Circling Areas
- PANS-OPS Approach Procedure Surfaces.

MSA surfaces

The MSA applies to each instrument approach procedure at Katanning Airport. An Image of the MSA published for Katanning Airport is shown in Figure 4 (source: AIP, effective 04 September 2025).

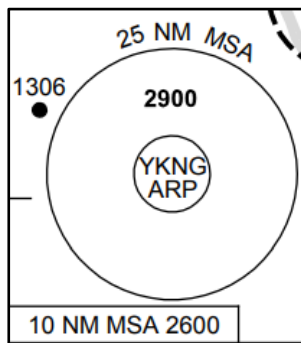


Figure 4 MSA at Katanning Airport

The CASR Part 173 MOS requires a minimum obstacle clearance (MOC) of 984 ft to be applied above the highest terrain or obstacle within the applicable segment.

Obstacles within the 10 nm and 25 nm MSA of Katanning Airport's ARP define the minimum height at which an IFR aircraft can fly when within 10 nm and 25 nm of the airport when not in visual flight conditions.

The WMT would be within the Katanning Airport's 25 nm MSA. Figure 5 (Source: Water Corporation, Google Earth) shows Katanning Airport's 10 nm (10 nm + 5 nm buffer area) and 25 nm MSA (25 nm MSA + 5 nm buffer area) from ARP, and related PANS-OPS surface height (AMSL).

The 25 nm MSA minimum altitude is 884 m AHD (2900 ft AMSL), with a PANS-OPS surface elevation of 584 m AHD (1916 ft AMSL).

The WMT would be 508 m AHD (1666.7 ft AMSL) and would be lower than Katanning Airport's 25 nm MSA.

Therefore, the WMT would not impact both Katanning Airport's MSA surfaces.

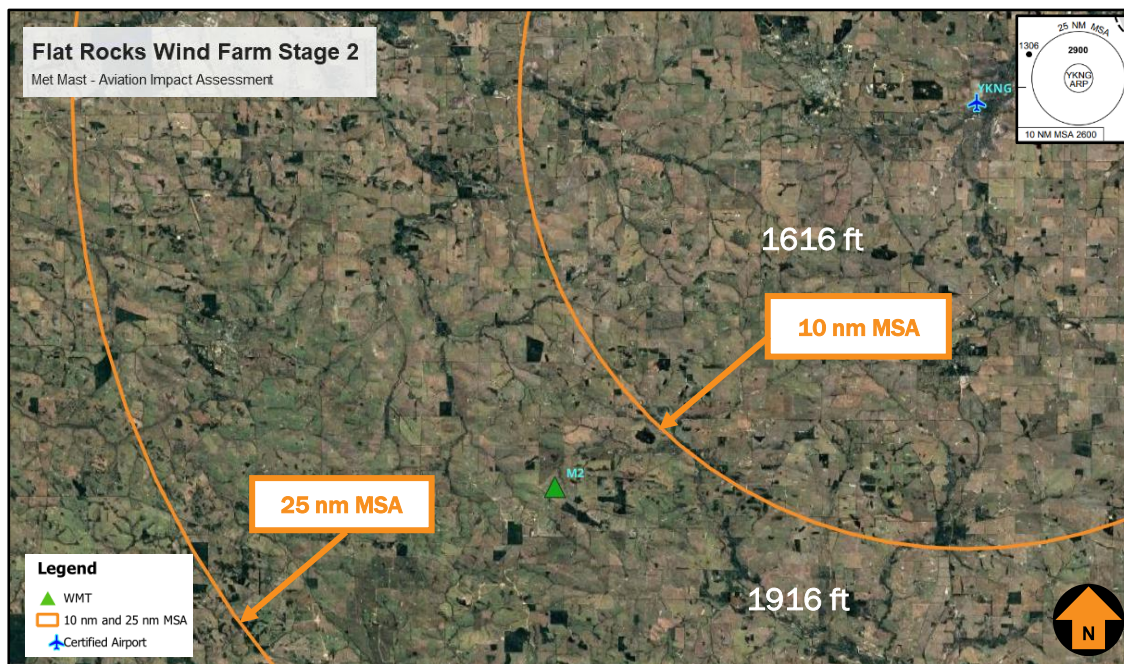


Figure 5 Katanning Airport MSA

IFR Circling areas.

A circling approach is an extension of an instrument approach to the specified circling minima (lowest altitude permitted without visual reference to the ground) at which point the pilot will visually manoeuvre the aircraft to align with the runway for landing. Typically, a circling approach is only conducted where there is no runway-aligned instrument procedure or if the runway used for the approach procedure is not suitable for landing.

Circling areas are established by the instrument flight procedure designer based on International Civil Aviation Organization (ICAO) specifications related to the performance category of the designed aircraft. The circling area is determined by drawing an arc centred on the threshold of each usable runway and joining these arcs by tangents. Category C is the most demanding aircraft category provided for in Katanning Airport's instrument flight procedures.

The radii for each relevant category of aircraft are provided below:

- Category A – 1.68 nm / 3.11 km
- Category B – 2.66 nm / 4.93 km
- Category C – 4.20 nm / 7.78 km

The WMT would be located approximately 35 km / 19 nm from the threshold of Runway 07 and is beyond the circling area for all runway ends at Katanning Airport.

The Project would not impact circling areas established for instrument flight procedures.

PANS-OPS Approach Procedure Surfaces

A detailed assessment of the PANS-OPS surfaces associated with the published instrument approach procedures was undertaken. Table 3 Details the assessment for each instrument approach procedure.

Table 3 Katanning Airport PANS-OPS Assessment

<i>Airport Instrument Approach Title</i>	<i>Minimum Altitude over Project (ft AMSL)</i>	<i>PANS- OPS Surface (ft AMSL)</i>	<i>Impact on the procedure by WMTs</i>	<i>Potential solution</i>	<i>Impact on aircraft ops</i>
RNP RWY 25	2900 (MSA)	1916	Nil – outside protection surface	N/A	N/A

The WMT would be outside the RNP RWY 25 procedure's protection surfaces. Therefore, the WMT would not impact the PANS-OPS procedure at Katanning Airport.

1.6. Nearby uncertified aerodromes

Uncertified aerodromes can take the form of a fully serviceable aerodrome with sealed runways and comprehensive facilities, or they can be a paddock on private property used by the landholder or for aerial agricultural operations. They are not subject to CASR Part 139 regulations.

Searching various aviation datasets will identify uncertified aerodromes near the project area.

The aviation datasets used for the search are:

- AIP aeronautical charts effective 12 June 2025

- OzRunways – which sources its data from Airservices Australia. The aeronautical data provided by OzRunways is approved under CASR Part 175

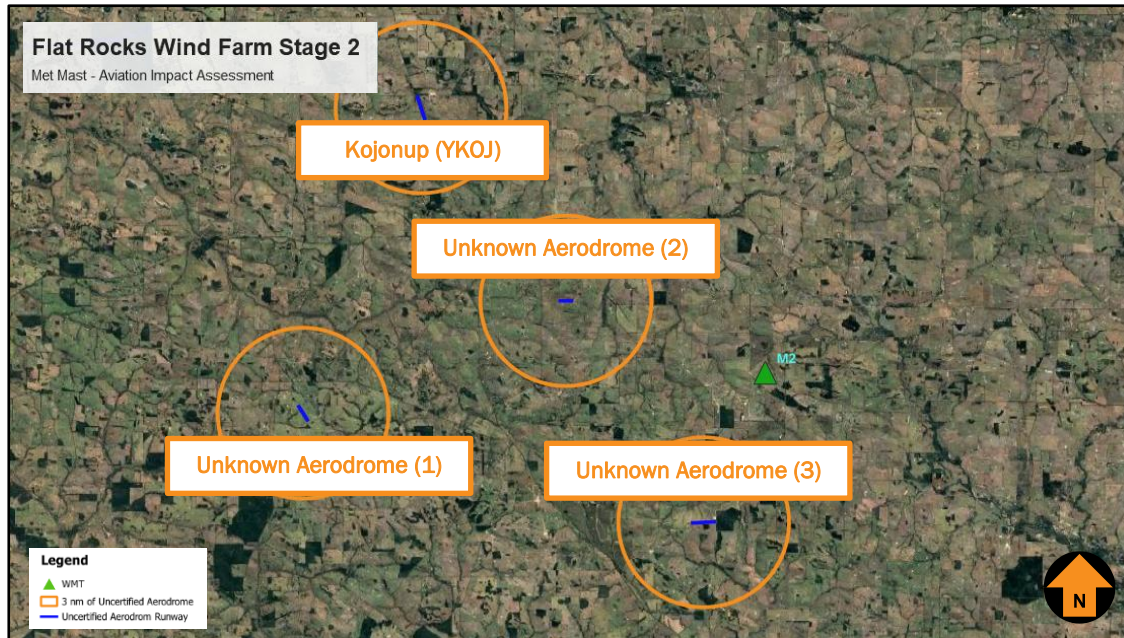


Figure 6 Aerodromes in the vicinity of the WMT's site.

Figure 6 Shows the location of nearby aerodromes relative to the WMT's site and a nominal 3 nm buffer from the closer aerodromes (source: Water Corporation, Google Earth).

Four uncertified aerodromes are the closest in relation to the proposed WMT. The proposed WMT would be located outside the 3 nm radius of those aerodromes. As a guide, an area of interest within a 3 nm radius of an uncertified aerodrome is used to assess the potential impacts of proposed developments on aircraft operations at or within the vicinity of the aerodrome. Therefore, The WMT would not create a hazard to any uncertified aerodromes. No further assessment required.

1.7. Air routes and Grid LSALT

CASR Part 173 MOS requires that the published lowest safe altitude (LSALT) for a particular airspace grid or air route provides a minimum of 1000 ft clearance above the controlling (highest) obstacle within the relevant airspace grid or air route tolerances.

1.7.1. Grid LSALT

The proposed WMT would be within the airspace grid LSALT of 3000 ft AMSL, which has a protection surface of 2000 ft AMSL.

Figure 7 shows the Grid LSALT in proximity to the WMT (source: ERC Low National, OzRunways, Google Earth).

The WMT's height would be 508 m AHD (1666.7 ft AMSL), below the 2000 ft protection surface.

Therefore, the WMT would be not impact the 3000 ft Grid LSALT.

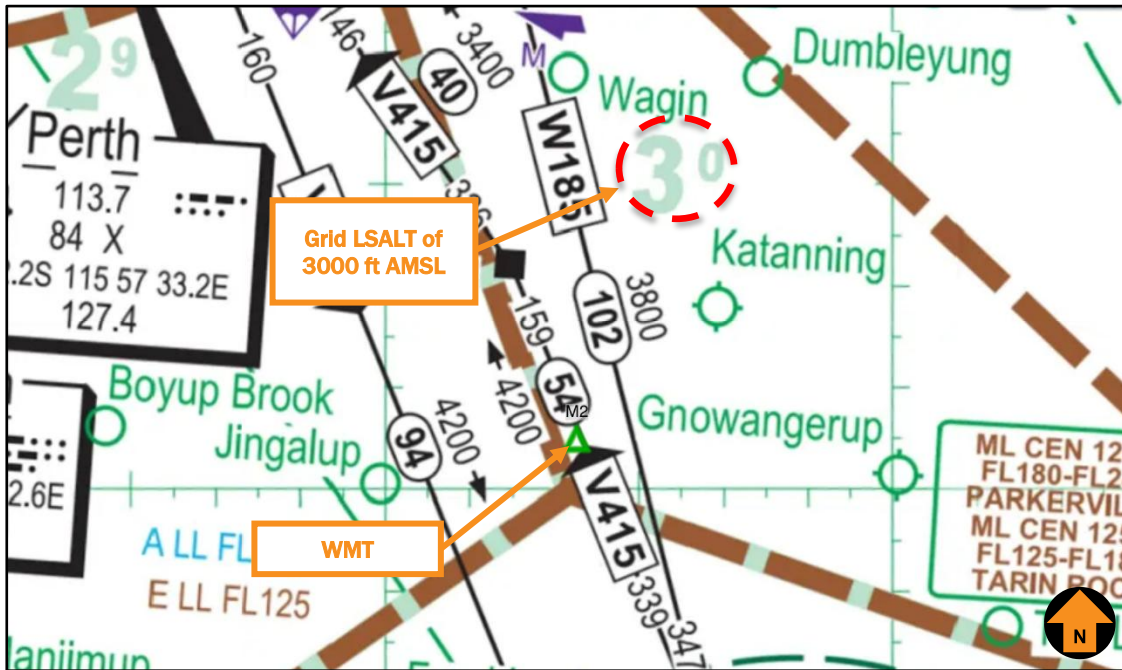


Figure 7 Grid LSALT in proximity to the WMT's site.

1.7.2. Air Route LSALTs

A protection area 7 nm laterally on either side of an air route is used to assess the LSALT for the air route.

There are two (2) air routes within 7 nm of the WMTs' site. The WMT would be below all air route LSALT.

Therefore, there would be no impact on the air route LSALT.

1.8. Airspace

The WMT would be located within Class G airspace.

The WMT would not be located in any Prohibited, Restricted or Danger areas.

The WMT would not have an impact on controlled or designated airspace.

1.9. Aviation navigation facilities

CASR Part 139 MOS Chapter 19 specifies the protection of Communication, Navigation and Surveillance Systems (CNS) from development, which may affect the function of these systems.

The proposed WMT would not be within the prescribed clearance zones or areas of interest specified in CASR Part 139 MOS and will not affect CNS facilities.

1.10. ATC Surveillance Radar Systems

Airservices Australia currently requires an assessment of the potential for wind farms to affect radar lines of sight.

The open lattice construction of slim wind monitoring towers does not impact ATC Surveillance Radar Systems.

1.11. Civil Aviation Safety Authority - regulatory context

The CASA regulates aviation activities in Australia. Applicable requirements include the Civil Aviation Regulations 1988 (CAR), CASR 1998, Advisory Circular (AC) 139 E 0.1-v1.0, and AC.139 E 0.5-v1.1. Relevant provisions are outlined in further detail in the following section.

1.11.1. CASR Part 139—Aerodromes

CASR 139.165 requires the owner of a structure (or proponents of a structure) that will be 100 m or more above ground level to inform CASA. This must be given in written notice and contain information on the proposal, the height and location(s) of the object(s) and the proposed timeframe for construction. This is to allow CASA to assess the effect of the structure on aircraft operations and determine whether or not the structure will be hazardous to aircraft operations.

The proponent of the WMTs is required to report the WMTs to CASA in accordance with CASR 139.165, as soon as *practicable after forming the intention to construct or erect the proposed object or structure*.

The notification should be provided to CASA via email to Aerodromes@casa.gov.au and Airspace.Protection@casa.gov.au.

1.11.2. AC 139.E-01 v1.0—Reporting of Tall Structures

AC 139.E-01 v1.0—*Reporting of Tall Structures*, CASA guides those authorities and persons involved in the planning, approval, erection, extension or dismantling of tall structures so that they may understand the vital nature of the information they provide.

2.2.1 The hazards that such buildings or structures may pose to aircraft requires assessment. CASA routinely performs such assessments however needs to be first notified of the obstacle, structure of source of a hazardous plume. The need to report such hazards is outlined in this AC.

2.2.2 If you are the person who owns, controls or operates the object, structure or a source of a hazardous plume which is either present, imminent or has been approved for erection/construction, details need to be provided about:

– the construction, extension or dismantling of tall structures if the top is:

o 100 m or more above ground level

or

o affects the obstacle limitation surface of an aerodrome as defined in

2.2.3 In addition, tall structures may pose a specific hazard for the operation of low-flying Defence aircraft or to the flight paths of arriving/departing aircraft (refer Paragraph 2.1.3). Therefore, the RAAF and Airservices Australia require information on structures that are 30 m or more above ground level—within 30 km of an aerodrome or 45 m or more above ground level elsewhere for the RAAF, or 30 m or more above ground level elsewhere for Airservices Australia.

2.2.4 Information provided for the database should be accurate and readily interpreted. The tall structure report form has been designed to help owners and/or developers in this respect. The form is available on the Airservices Australia website (including a spreadsheet for reporting multiple structures) at: <https://www.airservicesaustralia.com/industry-info/airport-development-assessments/>

1.11.3.AC 139.E-05-v1.1 Obstacles including wind farms outside the vicinity of a CASA certified aerodrome – October 2022

AC 139.E-05-v1.1 provides advice about the lighting and marking of wind farms and other tall structures in submissions to planning authorities who are considering a wind farm or tall structure proposal.

2.1.2 Regardless of CASA advice, planning authorities make the final determination whether a wind farm or a tall structure not in the vicinity of a CASA regulated aerodrome will require lighting or marking.

2.2.1 All wind turbine developments and tall structures should be assessed to determine whether they could be a risk to aviation safety. This AC augments the information in the National Aerodromes Safeguarding Framework (NASF) Guideline D and provides additional guidance on the assessment of wind farm developments and guidance for establishing what reasonable measures may be put in place to mitigate any adverse effect the wind farm development could be to aviation safety.

2.2.2 For the purposes of this AC, navigable airspace is considered to be the airspace above the minimum altitudes of VFR and IFR flight, including airspace required to ensure the safe take-off and landing of an aircraft. Generally, minimum altitude limits equate to 500 ft (152 m) or 1 000 ft (305 m) above ground level depending on the situation, i.e., whether or not the flying is over a populous area. The presence of wind turbines, wind monitoring masts and other tall obstacles may create a risk to the safety of flight, due to the risk of collision. An entity that is proposing to introduce a hazard into navigable airspace, such as a wind farm, must mitigate the risk of the hazard on airspace users to ensure an acceptable level of safety is maintained.

2.2.4.1 Part 139 of the Civil Aviation Safety Regulations 1998 (CASR), regulates obstacles within the vicinity of certified aerodromes. This is supported by Part 139 (Aerodromes) Manual of Standards (MOS) which provides the definition of an obstacle as well as the standards for marking and lighting of an obstacle. Any wind turbine (where the height is defined to be the maximum height reached by the tip of the turbine blades), wind monitoring mast or other tall structure that penetrates an Obstacle Limitation Surface (OLS) of an aerodrome will be assessed in accordance with the provisions of Part 139 of CASR and the MOS.

2.2.6.1 Outside the vicinity of an aerodrome, which is defined as being outside the OLS of an aerodrome, wind farms and other tall structures may constitute a risk to low-flying aviation operations which may be conducted down to 500 ft above ground level (AGL) over non-populous areas. Additionally, wind monitoring masts can also be hazardous to aviation, given they are very thin and difficult to see. Wind farms can also affect the performance of communications, navigation and surveillance (CNS) equipment operated by Airservices or the Department of Defence.

2.5 Aviation hazard lighting - International best practice

2.5.2 Australian regulations state that aircraft in uncontrolled airspace may operate under visual flight rules (VFR), which requires the pilot to remain clear of clouds and to adhere to visibility minima.

- in Class G airspace below 3000 ft Above Mean Sea Level (AMSL) or 1000 ft AGL (whichever is the higher) – remain clear of cloud with minimum visibility of 5000 m.

- in Class G airspace below 10 000 ft AMSL (subject to the above) – remain 1000 ft vertically and 1500 m horizontally from cloud and with 5000 m visibility.

Note: Helicopters may be permitted to operate in lower visibility and that further exemptions may apply to special cases such as military, search and rescue, medical emergency, agricultural and fire-fighting operations.

2.5.4 2000 candela medium intensity obstacle lighting recommendation satisfies the 5000 m VFR visibility requirements, according to practical exercises undertaken by the FAA and documented in AC 70/7460-1L (FAA, 2015).

2.5.5 In Australia, CASA has accepted the use of 200 candela lighting in some circumstances due to a lack of back lighting in rural and remote areas, meaning that a lower intensity light is still visible to pilots at an acceptable distance to permit a pilot to see and avoid the obstacle.

2.6 Hazard Lighting

2.6.1 This describes the reasoning behind CASA's preference to recommend aviation hazard lighting for tall structures and aircraft detection systems for wind farms.

2.6.2 Hazard lighting for wind farms and other tall structures is intended to alert pilots, flying at low altitude, to the presence of an obstacle allowing them sufficient awareness to safely navigate around or avoid it. The pilot is responsible for avoiding other traffic and obstacles based on the "alerted" see-and-avoid principle.

2.6.3 Unless the wind farm or tall structure is located near an airport, it is not expected to pose a risk to regular public transport operations. The kind of air traffic that is usually encountered at low altitude in the vicinity of a wind farm or tall structure includes light aircraft (private operators, flight schools, sport aviation, agricultural, survey, fire spotting and control) and helicopters (military, police, medical emergency services, survey, fire spotting and control). Hazard lights are therefore designed to provide pilots with sufficient awareness about the presence of the structure(s), so they can avoid it. This means that the intensity of the hazard lights should be such that the acquisition distance is sufficient for the pilot to recognise the danger, take evasive action and avoid the obstacle by a safe margin in all visibility conditions. This outcome considers the potential speed of an aircraft to determine the distance by which the pilot must become aware of the obstacle to have enough time and manoeuvrability to avoid it.

2.7 CASA's commitment to aviation safety

2.7.1 CASA will consider the lighting intensity management and systems that achieve an acceptable level of aviation safety on a case-by-case basis during its assessment.

2.7.2 A CASA determination will consider the environmental setting when determining the need and level of lighting required on a wind farm or tall structure. This may include consideration of lower lighting intensities for obstacles away from an aerodrome. The backlighting of some locations is almost non-existent, meaning the risk of an aviation hazard light being compromised by background lighting from a rural and remote town is lower than would otherwise apply in a residential area closer to a city.

There is no regulatory requirement to provide obstacle lighting on the WMT. Generally, for WMT that would be installed prior to WTG installation and WMT that are not in close proximity to a WTG, the voluntary provision of obstacle lighting should be considered to ensure visibility in low light and deteriorating atmospheric conditions. CASA will review the WMT for potential hazards to aircraft operations and may recommend lighting the WMT.

1.12. National Airport Safeguarding Framework Guideline D

NASF Guideline D: *Managing the Risk to Aviation Safety of Wind Turbine Installation (Wind Farms)/Wind Monitoring Towers* provides guidance to State/Territory and local government decision-makers, airport operators and developers of wind farms to jointly address the risk to civil aviation arising from the development, presence and use of wind farms and wind monitoring towers.

When wind turbines over 150 metres above ground level are to be built within 30 kms of a certified or registered aerodrome, the proponent should notify the Civil Aviation Safety Authority (CASA) and Airservices. If the wind farm is within 30km of a military aerodrome, Defence should be notified.

The Aeronautical Information Service of the Royal Australian Air Force (RAAF AIS) maintains a database of tall structures in the country. The RAAF AIS should be notified of all tall structures meeting the following criteria:

- 30 metres or more above ground level for structures within 30km of an aerodrome; or
- 45 metres or more above ground level for structures located elsewhere.

Marking and lighting of wind monitoring towers

Before developing a wind farm, it is common for wind monitoring towers to be erected for anemometers and other meteorological sensing instruments to evaluate the suitability or otherwise of a site. These towers are often retained after the wind farm commences operations to provide the relevant meteorological readings. These structures are very difficult to see from the air due to their slender construction and guy wires. This is a particular problem for low flying aircraft including aerial agricultural operations. Wind farm proponents should take appropriate steps to minimise such hazards, particularly in areas where aerial agricultural operations occur. Measures to be considered should include:

- *the top 1/3 of wind monitoring towers to painted in alternating contrasting bands of colour. Examples of effective measures can be found in the Manual of Standards for Part 139 of the Civil Aviation Safety Regulations 1998. In areas where aerial agriculture operations take place, marker balls or high visibility flags can be used to increase the visibility of the towers;*
- *marker balls or high visibility flags or high visibility sleeves placed on the outside guy wires;*
- *ensuring the guy wire ground attachment points have contrasting colours to the surrounding ground/vegetation; or*
- *a flashing strobe light during daylight hours.*

1.13. Consultation

The following list of stakeholders was identified as requiring consultation:

- Airservices Australia.
- Department of Defence.
- Royal Flying Doctor.
- Katanning Aero Club.
- Shire of Katanning.
- Other Private management body of Katanning (if required)

Details and results of the consultation of the WMT at a height of 150 m AGL will be provided in Table 4 once received.

Table 4 Stakeholder consultation details

Agency/Contact	Activity/Date	Response/ Date	Issues Raised During Consultation	Action Proposed
Airservices Australia	Email sent on 5 February 2025	Email received on 27 March 2025 And 10 September 2025	<p>Airspace Procedures</p> <p>With respect to procedures designed by Airservices in accordance with ICAO PANS-OPS and Document 9905, at the maximum height of 494m (1621ft) AHD the masts will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Katanning Aerodrome.</p> <p>Note: procedures not designed by Airservices at Katanning Aerodrome were not considered in this assessment.</p> <p>Communications/Navigation/Surveillance (CNS) Facilities</p> <p>We have assessed the proposed activity to the above specified height for any impacts to Airservices Precision/Non-Precision Navigation Aids, Anemometers, HF/VHF/UHF Communications, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links and have no objections to it proceeding.</p> <p>Note: Meteorological instruments not owned by Airservices were not considered in this assessment. Please consult with the Bureau of Meteorology to ensure that the proposed activity does not adversely impact their equipment.</p> <p>Air Traffic Control (ATC) Operations</p> <p>There are no additional instructions or concerns from ATC.</p> <p>Summary</p>	<p>Vertical Obstacle Notification</p> <p>As this proposed activity is more than 30m (99ft) AGL, please follow the below notification process:</p> <ol style="list-style-type: none"> 1. Complete the Vertical Obstacle Notification Form: ATS-FORM-0085_Vertical_Obstruction_Data_Form.pdf (airservicesaustralia.com) 2. Submit completed form to: VOD@airservicesaustralia.com as soon as the development reaches the maximum height. <p>For further information regarding the reporting of tall structures, please contact the VOD team:</p> <ul style="list-style-type: none"> • Phone - (02) 6268 5622 • Email - VOD@airservicesaustralia.com • Or refer to: Civil Aviation Safety Regulation Part 175 – Airservices and You - Airservices (airservicesaustralia.com)

AVIATION PROJECTS

			The proposed activity does not impact Airservices operations or facilities at Katanning aerodrome.	
Department of Defence	Email sent on 5 February 2025 and 19 August 2025		<p>The Department of Defence (Defence) has conducted an assessment of the proposed Flat Rocks Wind Farm proposal for potential impacts on the safety of military low flying operations as well as possible interference to Defence communications and radar.</p> <p>As the proposed wind farm meets the requirement for reporting tall structures, Defence requests that you provide Air Services Australia (AsA) with vertical obstacle notification.</p>	Defense requests that Air Services Australia (AsA) be provided with vertical obstacle notification.
Royal Flying Doctor	Email sent on 19 August 2025	Email received on 22 September 2025	No issues from the RFDS	No Action required
Katanning Aero Club	Could not identify the owner			
Shire of Katanning	Email sent on 19 August 2025	Email received on 04 September 2025	<p>There are no issues with the proposal, from a town planning perspective.</p> <p>The development is proposed to occur in a different Shire to Katanning.</p>	No Action required

1.14. CASA advice

Shire of Broomehill Tambellup referred the Project to CASA, and received the feedback from CASA: on 30 September 2025.

From the information provided to CASA and with particular reference to the Flat Rocks Wind Farm Stage 2 Wind Monitoring Tower- Aviation Impact Assessment (AIA) (Aviation Projects, August 2025), CASA is not aware of any civil certified aerodrome in the vicinity of the proposed WMT site for which there would be an Obstacle Limitation Surface (OLS) that would require protection; therefore, it is outside CASA's formal regulatory framework for aerodromes. The nearest identified certified aerodrome is Katanning Airport, approximately 34 km to the northeast of the wind farm project site.

CASA is also unaware of any unregulated aerodrome such as an 'Aeroplane Landing Area' (ALA) which is not published in the Aeronautical Information Publications (AIP) being within 2.5km of the proposed WMT site. Should there be an unregulated aerodrome within 2.5km of the proposed WMT site, the CASA Advisory Circular 91-02 Guidelines for aeroplanes with MTOW not exceeding 5 700 kg - suitable places to take off and land enclosed, makes recommendations with regard to enabling the safe take-off and landing of aircraft. Enquiries regarding whether there are any ALA's in close proximity to the proposed WMT site, should be directed to the local council officers.

From the information provided, the structure of the WMT is a guyed mast structure with alternating markings for at least the top third of the mast; and recommended to have marker balls or high visibility flags or high visibility sleeves placed on the upper third of the outside guy wires to assist with its visibility to aircraft. Obstacle marking and lighting information can be found in chapter 8, section 8.110 and chapter 9, division 4 of Part 139 (Aerodromes) - Manual of Standards. A copy of these Manual of Standards is available from the following link: [Part 139 \(Aerodromes\) Manual of Standards 2019 \(legislation.gov.au\)](https://www.legislation.gov.au/Part139AerodromesManualofStandards2019).

Given the WMT will be approximately 150 m Above Ground Level (AGL) or approximately 508 m AHD (as indicated in the Aviation Projects AIA) and the surrounding land use appearing to be mostly agricultural, CASA recommends that in addition to the above marking, low intensity obstacle lighting is recommended due to the potential for day time low level aerial agricultural flying, and during poor light and/or dusk. Consideration will need to be given to potential community impacts from the obstacle lighting during the hours of darkness.

CASA is aware that Airservices has completed an assessment (WA-WF-065 P2) of this WMT and confirmed no impact to airspace procedures, air traffic control or communications/navigation/surveillance {CNS} facilities.

1.15. Summary

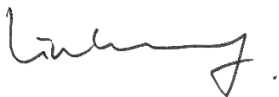
The following list of findings summarises the outcome of this assessment, based on the maximum height of the 150 m AGL WMT of 508 m AHD (1666.7 ft AMSL):

- There is one certified aerodrome located within 30 nm (55.6 km) of the WMT – Katanning Airport (YKNG)
 - The WMT would not impact the OLS of any airport.
 - The WMT would not impact the MSA surfaces of any airport.
 - The WMT would not impact the IFR Circling areas of any airport.
 - The WMT would not impact the PANS-OPS Approach Surfaces of any airport.

- There are no uncertified aerodromes identified within 3 nm of the WMT's site.
- The WMT would not affect any Grid or airway route segment LSALT.
- The WMT would not have an impact on controlled or designated airspace.
- CASA recommended marking on the WMT:
 - Obstacle marking for at least the top 1/3 of the mast and be painted in alternating contrasting bands of colour.
 - Marker balls or high visibility flags or high visibility sleeves placed on the outside guy wires.
 - Guy wire ground attachment points in contrasting colours to the surrounding ground/vegetation.
- CASA recommend low intensity obstacle lighting due to the potential for day time low level aerial agricultural flying, and during poor light and/or dusk.
- Due to exceeding 100 m AGL, details of the WMT must be reported to CASA as soon as practicable after forming the intention to construct or erect the proposed object or structure in accordance with CASR Part 139.165(1)(2).
- Final details of WMT coordinates and elevation should be provided to Airservices Australia at least two weeks prior to construction commencing, by submitting the form at this webpage: https://www.airservicesaustralia.com/wp-content/uploads/ATS-FORM-0085_Vertical_Obstruction_Data_Form.pdf to the following email address: vod@airservicesaustralia.com.

If you wish to clarify or discuss the contents of this correspondence, please get in touch with me on 0433 747 835.

Kind regards



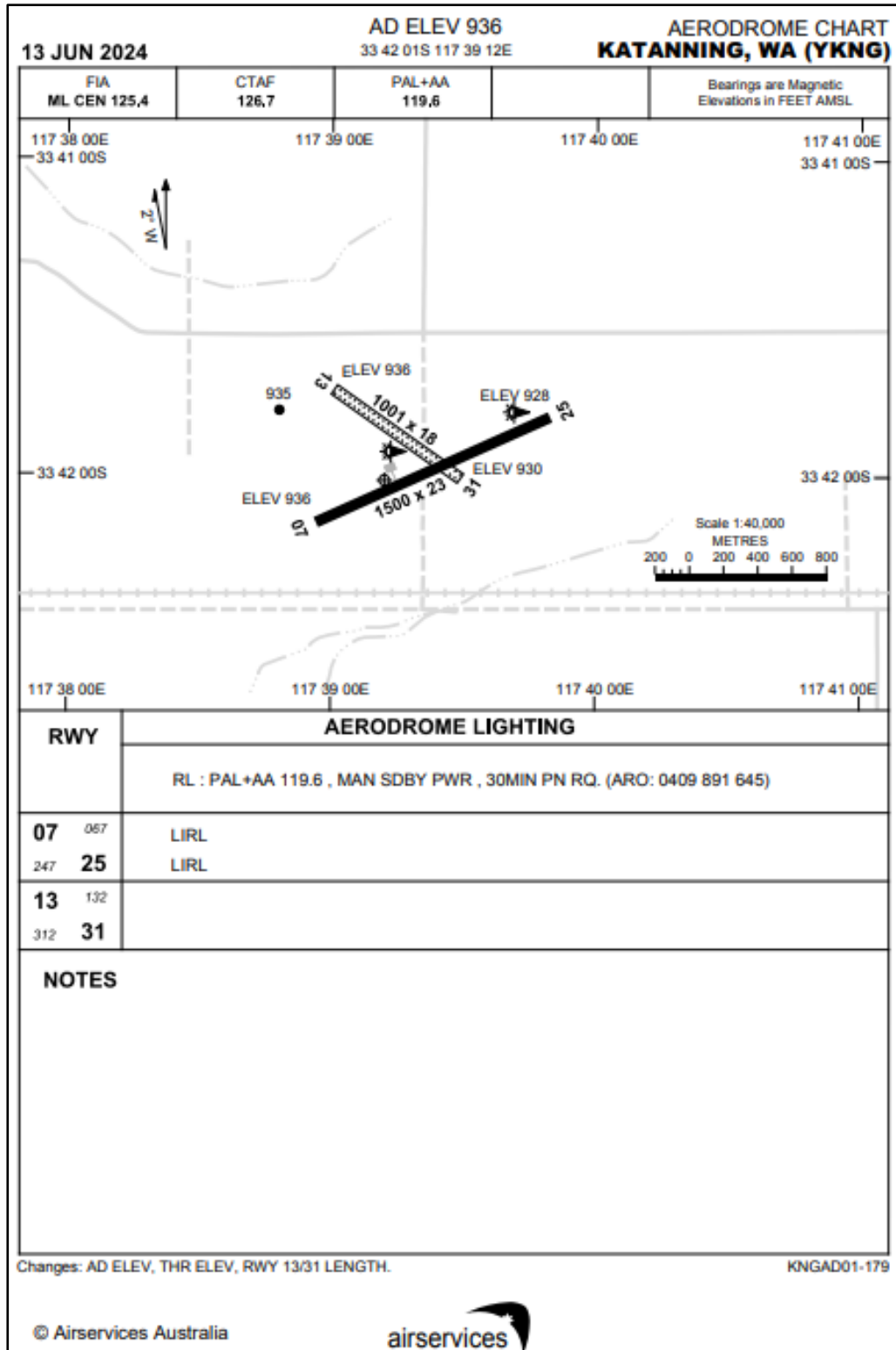
Lyn Wang

Aviation Specialist Consultant

28 October 2025

Appendix – Katanning Airport (YKNG) Aerodrome and Procedure Charts

Aerodrome Chart



Procedure Chart – RNP RWY 25

