

SUNDRE AIRPORT CONCEPT PLAN Bylaw No. 00/25

Schedule "B"

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1.0 INTRODUCTION

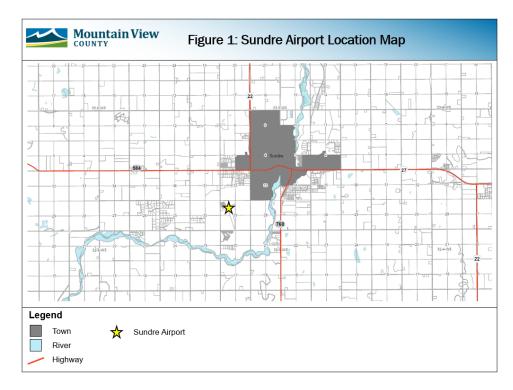
The Sundre Airport Concept Plan has been created to provide guidance on the airport's future growth while identifying compatible surrounding land uses and developments. The plan encompasses six quarter sections: one surrounds the airport's hangars and runways, one contains a portion of a runway but is otherwise undeveloped, two remain bare land, and two are being used for aggregate extraction. The objective of the Concept Plan is to outline a strategy that supports the airport's future expansion while balancing aviation safety with potential activities on neighboring lands.

1.1 BACKGROUND

The Sundre Airport is a registered aerodrome situated about half a mile southwest of the Town of Sundre, within Mountain View County. The location of the airport is shown on Figure 1 and can be accessed via Range Road 55. Community members view the airport as a vital facility that offers unique opportunities for the region, and many would like to see it play a larger role in future economic development.

The airport and its surrounding areas are located within South McDougal Flats, a region governed by municipal policies designed to manage future land use and development. These policies are broadly outlined within the Municipal Development Plan (MDP) and more defined within the South McDougal Flats Area Structure Plan (ASP). The Land Use Concept Map from the ASP is shown in Figure 6, and delineates the various policy areas for South McDougal Flats.

The airport was originally established by Alberta Transportation in 1984 and 1985, but ownership was later transferred to the County. The Sundre Airport, also known as CFN7 by aviators, has two runways. The airport has been beneficial for various sectors, including aviation enthusiasts, the oil and gas industry, pilot training, and firefighting. Additionally, the region is rich in aggregate resources. To the north, there is an active sand and gravel pit, and there is potential for neighboring quarters to extract aggregate in the future. Meanwhile, the eastern quarters remain undeveloped, but they fall within the Concept Plan area.



1.2 LANDS WITHIN CONCEPT PLAN AND OWNERSHIP

Mountain View County owns the lands that contain the Sundre Airport, however, the developed hangar lots are either owned by individuals or companies or are privately leased. The six quarter sections included within the Concept Plan boundaries, as well as their predominant land use and ownership are listed below:

Legal Land Location	Dominant Use	Ownership
NW 29-32-5-5	Sundre Airport	Mountain View County
SW 29-32-5-5	Runway & Vacant Land	Mountain View County
NE 29-32-5-5	Vacant Land	Mountain View County
SE 29-32-5-5	Vacant Land	Mountain View County
SW 32-32-5-5	Aggregate Extraction	Cascade Sand & Gravel Ltd.
SE 32-32-5-5	Vacant Land & Future Aggregate Extraction	Mountain View County

1.3 PROCESS

The South McDougal Flats Area Structure Plan (ASP) Bylaw No. 01/24 was adopted by Mountain View Council on March 27, 2024. Due to the unique land use considerations required to complement the aviation activities at the Sundre Airport, the ASP outlined the need for a separate Concept Plan, which would be developed through its own committee and Public Hearing process.

Council approved the development of the Sundre Airport Concept Plan on August 28, 2024. The Terms of Reference that followed included details about the review topics for the Concept Plan, the appointed members of the steering committee, the scope of work, and the involvement of the public and stakeholders. The Terms of Reference were accepted on September 18, 2024.

1.3.1 Airport Steering Committee

The Steering Committee for the Sundre Airport Concept Plan was established to ensure a diverse range of perspectives in guiding the County on the management, maintenance, and development of the Sundre Airport and its surrounding lands. The committee consists of the Reeve, one Council member, the Mayor of Sundre, three members from the Aviation Advisory Committee, and three members at large. This diverse composition ensures that the committee includes individuals with aviation expertise, municipal representation, and public input, all working collaboratively to create a vision for the appropriate future use of these lands.

1.3.2 Community Consultation

An Open House was held on _____, 2025 at the Sundre Legion to present the draft version of the Concept Plan.

1.4 ROLE OF THE AIRPORT

The Sundre Airport serves multiple purposes, catering to aviation enthusiasts and recreational pilots, as well as providing Medivac services for both fixed-wing aircraft and helicopters. It accommodates charter flights and supports operations for Alberta Sustainable Resources, Forestry, and West Country Emergency Services. The airport is essential for connecting the region to other communities within Alberta and plays a crucial role in the transportation network for the surrounding rural areas.

1.5 **OBJECTIVES**

The objectives for the Sundre Airport Concept Plan are listed below:

- 1. Establish a long-term vision for the future development of the Concept Plan area that will support future economic opportunities, while also complimenting the surrounding community.
- 2. Establish policies to protect the lands surrounding the airport to allow for future airport expansion and the opportunity for aggregate extraction as interim land use.
- 3. Provide guidance for the efficient use of airport lands and to support future development that maintains and improves present standards of safety and appearance of the facility.
- 4. Ensure interim and end uses of the adjacent lands preserve the surrounding environmental features and that allow the potential of future airport expansions.

1.6 GOALS

The goals for the Sundre Airport Concept Plan are:

- 1. Provide guidance on how the Sundre Airport and adjacent lands within the Concept Plan can be developed in the future to support economic opportunities as well as compatible recreational uses.
- 2. Encourage high-end businesses with the opportunity for both aviation related and non-aviation related development.
- 3. Develop land use policies that will protect the future growth of the airport.
- 4. Encourage sustainable development utilizing conservation principles.

1.7 GUIDING PRINCIPLES

The Concept Plan guides decision making for the future development of the airport and encourages efficient use of the lands. In order to accomplish the goals, objectives and the vision for the Sundre Airport, the following guiding principles are provided:

- 1. Safety the primary guiding principle is the safe operation of the airport.
- 2. **Viability** determine the best strategies for managing the future expansion of the airport that will ensure the future viability.
- 3. **Public Service** the airport is not a private airport and is open and available to all pilots and aircraft. The airport will continue to be a registered aerodrome under Transport Canada regulations until such time as Transport Canada requires certification.
- 4. **Community Benefit** the airport development will benefit the community through taxes paid, services rendered and availability for public use and enjoyment.
- 5. Noise and Height Management develop policies that will guide land use and development surrounding the airport to mitigate issues related to noise generated from aircraft and height limitation for aircraft using the Sundre Airport.

2.0 REGULATORY AND LEGISLATIVE PARAMETERS

2.1 JURISIDICTION AND AVIATION

Given the current uses within the Sundre Airport Concept Plan area, which include aviation activities, aggregate extraction, and lands of environmental significance that are susceptible to flooding, policies and regulations from all levels of government may apply.

The Sundre Airport is classified as a registered aerodrome. As it is not a certified airport, it is ineligible to apply for Airport Zoning Regulations. However, airport development and operations still fall under federal jurisdiction. Matters related to aeronautics are regulated in accordance with Transport Canada's *Aerodromes Standards and Recommended Practices* (TP312) and the *Canadian Aviation Regulations* (CARs) (SOR/96-433).

Provincial agencies are responsible for highways and play a key role in the approval process for aggregate extraction operations, as well as issues pertaining to water resources, wildlife and environmental protection. Provincial legislation delegates the authority for a municipality to regulate land use through Part 17 of the *Municipal Government Act* (RSA 2000, c. M-26). This allows a municipality to address land use conflicts and to restrict heights and types of structures. Within Mountain View County, statutory plans and Land Use Bylaw regulations provide direction for land use, subdivision, and development.

2.1.1 Transport Canada

Transport Canada (TC) is the federal agency responsible for overseeing the country's transportation systems and manages 236 sets of regulations (TC, 2019, Legislation and Regulations, para. 2). TC is responsible for developing "the legislative and policy framework concerning air" (TC, 2023, Jurisdictional Landscape, para. 1). Since Sundre Airport is not a certified aerodrome, it is subject to periodic inspections by TC to ensure compliance with the *Canadian Aviation Regulations* (CARs) (TC, 2004, p. 105). *The Aeronautics Act* (R.S.C., 1985, c. A-2) governs airspace and the safe operation of airports. While certified aerodromes must adhere to the *Aerodromes Standards and Recommended Practices* (TP312), non-registered and registered aerodromes are exempt from these requirements .

Proposals for changes in land use, subdivision, or development within the Sundre Airport Concept Plan area may be referred to TC who may provide comments to ensure future development does not cause any hazards to aviation operations.

2.1.2 NAV Canada

Since 1996, the Federal Government has employed NAV Canada to manage air navigation and traffic control activities (NAV Canada, n.d.a). Any new navigational aids, lighting requirements, or developments on airport land are communicated to NAV Canada to ensure they do not interfere with the safe operation of the airport.

New forms of land use and development that could introduce line-of-sight obstructions, cause electronic interference with airport equipment, or increase light pollution can pose safety hazards for aerodrome operations (NAV Canada, n.d.b). Proposals for changes in land use, subdivisions, or development may be referred to NAV Canada to ensure that aerodrome safety is not compromised.

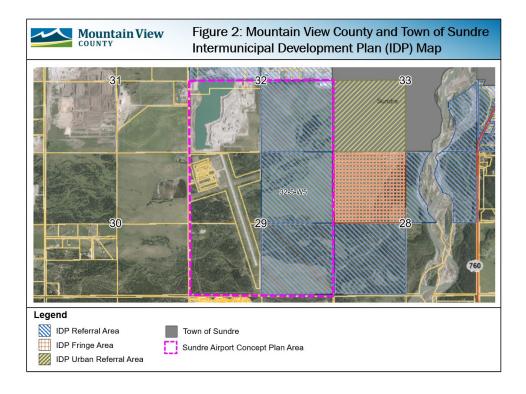
2.2 MUNICIPAL POLICIES

The provincial government delegates authority to municipalities to create bylaws that establish policies for future growth patterns, land use, subdivision and development. Proposals for lands located outside of airport boundaries are the responsibility of the municipality, with the exception of matters that are specifically within provincial jurisdiction. Below is a brief summary of Mountain View County's statutory plans and regulations that apply to lands within the Sundre Airport Concept Plan area.

2.2.1 Mountain View County & Town of Sundre Intermunicipal Development Plan (IDP)

The Intermunicipal Development Plan (IDP) for Mountain View County and the Town of Sundre was established as a collaborative policy document to guide future land use, subdivision and development in the areas surrounding the town. The three quarter sections located in the eastern half of the Sundre Airport Concept Plan area fall within the boundaries of the IDP, which are shown in Figure 2 below.

Although these lands are part of Mountain View County, the IDP outlines processes and guidance to ensure that future developments in this area align with the town's growth. According to the IDP, the eastern half of the Sundre Airport Concept Plan area is designated as a "Referral Area." This means that any future applications for redesignation, subdivision or development listed as a discretionary use within the Referral Area will be forwarded to the Town of Sundre for review and comments.



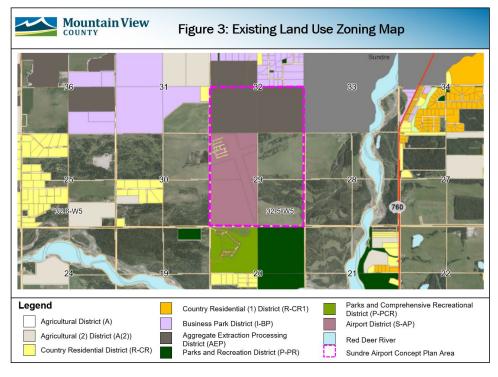
2.2.2 Land Use Bylaw (LUB)

Mountain View County's LUB provides the rules for development and includes detailed descriptions of exempt, permitted and discretionary uses for the various zonings throughout the County, development standards, setbacks and height restrictions. Its purpose is to facilitate the orderly, economical and beneficial development and use of land. As of 2024, the lands within the Sundre Airport Concept Plan area have one of the following zonings:

- Airport District (S-AP): The purpose of this district is to accommodate the safe operation of an aerodrome and allow its economic and financial viability. The Sundre Airport is mostly located within the NW 29-32-5-5; however, the main runway also extends into the SW 29-32-5-5.
- Agricultural District (A): The purpose of this district is to allow for agricultural land uses on larger parcels. Four quarters within the Concept Plan area do not contain any development and are being leased by the County for cattle grazing.
- Aggregate Extraction and Processing District (AEP): The purpose of this district is to allow for the removal, extraction, processing and transmission of raw aggregate materials for commercial purposes. The two most northerly quarter sections within the Concept Plan area are being used for gravel extraction.

The LUB also includes Height Limitations, Noise Exposure Projection and Outer Surface mapping, which were developed to help inform when proposed development within or surrounding the airport could compromise the operational safety or future airport expansion.

Figure 3 below shows the various land use districts within and surrounding the Concept Plan area.



3.0 AIRPORT IMPACTS, NATURAL FEATURES AND SURROUNDING LAND USES

There are a mix of land uses, unique environmental features, and landforms that exist within the Sundre Airport Concept Plan area that must be considered when new applications for changes in land use, subdivision and development are proposed. Below is a summary of some of the most important matters that were considered for this Concept Plan.

3.1 SUNDRE AIRPORT

Two quarter sections are currently zoned as Airport District (S-AP). The current footprint of lots used for hangars covers approximately 18 acres within the northwest corner of NW 29-32-5-5, with a small portion of land extending into the quarter to the south to accommodate a runway. The airport includes airside lots, taxiways, a terminal building, aircraft tie-down areas, and two runways.

The main runway (15/33) is 4,346 feet long with an asphalt surface and extends into the southern quarter. The second runway (06/24) is 2,439 feet long with a turf surface. As of 2025, there are 26 subdivided lots, of which 17 have been developed for airside purposes. There is still an opportunity for additional airside development within this designated area, each of which will have access to taxiways and runways. Potential future expansion of the airport must ensure compliance with the relevant federal regulations, as previously noted. Applications within the surrounding lands should also ensure opportunities to expand the airport are not restricted and hazards for airport operations are avoided.

3.1.1 Height Limitations Mapping

Protecting the airspace around aerodromes is essential for ensuring the safety of aircraft. It is crucial to avoid constructing structures that could obstruct aircraft while they are approaching the runways during takeoff and landing. The Height Limitations Map provides information about the maximum allowable height for developments in areas where aircraft approach both runways at Sundre Airport. Development height allowances grow with increasing distance from the runways.

It is important to consider the grade elevation of the highest point of development, relative to geodetic elevation to determine the height of potential development. The reference points for ground elevation along the runway can be used to estimate the maximum allowable height indicated on the map. Development proposed within the areas impacted by height limitations must adhere to the regulations listed within the LUB. The Sundre Airport Height Limitations Map can be viewed within Appendix B of the Concept Plan.

3.1.2 Noise

Although there are no confirmed long-term health effects from exposure to aircraft noise, it can be disruptive to surrounding populations (Health Canada, 2010). Understanding the noise levels present in areas surrounding an airport can aid in informed land use and development planning.

Aircraft noise can be depicted as contour lines on a map, which show nuisance levels at specific distances from a runway. "The shape and extent of these contours depend on the types of aircraft involved, the flight paths they follow, their proximity to the ground, and the

number of operations performed by each aircraft type" (Transport Canada, 1990, p. 2).

Noise exposure levels for the Sundre Airport are illustrated in Appendix C. The Noise Exposure Projection (NEP) Contours map was developed by HM Aero Aviation Consulting in support of the Sundre Airport Concept Plan. "Noise contours represent a near worst-case 24-hour period and are based on the number of aircraft operations for a 95th percentile busy day" (HM Aero, 2025, p. 1).

3.1.3 Outer Surface Map

Aircraft preparing to land or those that have just taken off require the airspace above the airport to complete their maneuvering or circling procedures. The Outer Surface Map extends 4,000 metres horizontally from the center point of the runway and 45 metres vertically. This information, combined with the Height Limitations Map, helps identify areas where obstacles must be avoided to ensure the airport's operational safety. The Outer Surface area is reflected within the Aerodrome Protection Zone Overlay, which can be found in Appendix D of the Concept Plan.

3.2 NATURAL FEATURES

The Sundre Airport Concept Plan is located in a flatland area north of the Red Deer River. Much of the surrounding land consists of either forested areas or native pasture. It is important to consider specific environmental features and landforms when determining compatible land uses within the plan area and in proximity to the airport, which are further assessed below.

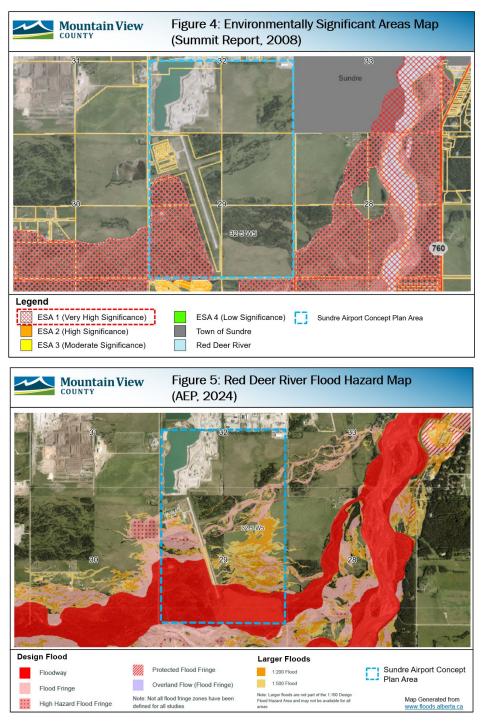
3.2.1 Environmentally Significant Areas (ESAs)

The Environmentally Significant Areas Report, completed by Summit Environmental Consultants Ltd, identifies the southern part of the Sundre Airport Concept Plan area as a Level 1 Environmentally Significant Area (ESA), indicating it has very high environmental significance (Summit, 2008). This classification is based on several factors, including the area's relatively high habitat quality for wildlife and native plants, the uniqueness of its surrounding ecology, and the relatively low level of disturbance (Summit, p. 14). Additional criteria considered in the assessment included the susceptibility for flooding, the ecological and hydrological functions of the region, the presence of unique landforms and microclimates, and the connectivity of wildlife corridors. The ESA areas that have been identified are shown in Figure 4. The potential future land uses, subdivision and development within the Sundre Airport Concept Plan seeks to preserve the integrity of the surrounding environment and protect the natural assets that the area provides.

3.2.2 Flood Hazards

Alberta Environment and Parks (AEP) conducted an extensive study of flood hazard areas along the Red Deer River (AEP, 2024). The provincial study identifies much of the southern portion of the Concept Plan as being within a *floodway*. This area typically represents the highest flood hazard, where water flows are deepest, fastest, and most destructive during a 1-in-100-year flood event (GOA, 2021, p. 3). The quarter section surrounding the current footprint of the Sundre Airport, along with the lands to the east,

contains areas classified as *flood fringe*. These areas typically experience shallower, slower, and less destructive flooding, but they may also include regions classified as *high hazard flood fringe* (GOA, p. 3). Additionally, some areas have been identified as being at risk during 1-in-200 and 1-in-500-year flood events. Figure 5 below illustrates the provincial flood hazard mapping for the area. Any potential development in areas prone to flooding must comply with provincial regulations, as well as the development rules outlined in the County's LUB.



3.3 BIRD AND WILDLIFE CONTROL

Wildlife around airports and aerodromes can pose safety risks to aircraft by entering airtraffic corridors and affecting departure, approach, and landing areas. Several factors contribute to wildlife hazards for aircraft, including growing bird populations, increased aircraft usage, surrounding land use, and expanding development pressures (Transport Canada, n.d., p. 3)

The Sundre Airport is not fenced and is surrounded by lands previously used for pasture grazing to the east and south. It is important to avoid land uses that may attract wildlife, thereby reducing potential risks for aircraft. Transport Canada provides useful documents that help identify land uses that may be incompatible with aerodromes due to their potential to increase wildlife interactions, such as *Safety Above All* (n.d.) and *Sharing the Skies: An Aviation Industry Guide to the Management of Wildlife Hazards* (TP13549). These resources also include tools for minimizing or mitigating risks, as outlined in the Sundre Airport Concept Plan policies.

3.4 ADJACENT LAND USES

Future land uses outlined in the Sundre Airport Concept Plan take into account the types of development and existing activities in the surrounding areas. To the east and west, there are agricultural lands, while to the south, there are recreational areas. To the north, the area is characterized by industrial and highway commercial developments. Additionally, the Town of Sundre is located immediately northeast of the Concept Plan area and has its own planned future land uses within its boundaries.

The Sundre Airport Concept Plan aims to consider both current and intended future uses of the surrounding lands to align with long-term goals that promote compatibility and logical development. Figure 3 details the land use designations within and surrounding the Concept Plan area.

3.5 AGGREGATE RESOURCES

The Sundre Airport Concept Plan area is known to have an abundance of aggregate reserves, which are an important resource to the County. There is an active gravel pit within the SW 32-32-5-5, as well as a new pit that has been recently approved to operate within SE 32-32-5-5, both within the north portion of the Concept Plan area. It is also known that the east portion of the Plan area has additional aggregate resources. One of the objectives of the Concept Plan is to protect future opportunities for aggregate extraction and allowing these lands to continue being used as pastureland as an interim use, which will not restrict resource development.

4.0 CONCEPT PLAN VISION

While considering the mix of land uses, unique environmental features and landforms previously noted, the following section highlights the opportunities that can be considered within the Sundre Airport Concept Plan area.

4.1 SUNDRE AIRPORT OPPORTUNITIES

Given the airport's unique location in close proximity to the town, the Red Deer River, and along the eastern slopes of the rocky mountains, the Sundre Airport has many opportunities to attract industry workers in relation to employment in resource sectors, as well as visitors that can take advantage of the surrounding amenities.

4.1.1 Commercial and Industrial Opportunities

The Sundre Airport facilitates the transportation of workers within the resource sector to access the remote areas in the region and supports the local economy. There is also the potential for local businesses to easily ship products to and from the airport to enhance their operations and increase exposure to different markets.

4.1.2 Flight School Training

There is a great need for new pilots within the aviation industry (TC, 2024) and many airports that are closer to major urban centres can be difficult for training due to the amount of aircraft traffic. The Sundre Airport allows for training within a rural area that has both a turf strip and asphalt runways, while also encountering less aircraft traffic.

4.1.3 Recreational Uses

The region offers a diversity of activities for tourists and recreational users, being on the footsteps of the Rocky Mountains. The Red Deer River is a beautiful natural amenity that also supports a variety of outdoor activities. There is an RV Resort and golf course south of the Concept Plan area. The Sundre Airport attracts people to the region and the Concept Plan supports efforts that can enhance tourism opportunities that complement the natural surroundings and are compatible with the airport.

4.1.4 Emergency Services

The Sundre Airport should continue supporting emergency services, especially given the forest fires risks that have increased in recent years. Air ambulance also ensures local people are connected to major health care centers in the event of an emergency.

4.1.5 Aircraft and Hangars

There are a variety of aircraft that fly into the Sundre Airport, and include Cessnas (150, 172 and 185), Piper Cherokees, De Havilland DHC-2 Beavers, Piper PA-30 Twin Comanches and Douglas DC-3s, along with helicopters. Having a main asphalt runway, along with the turf strip allows smaller aircraft to take-off and land when there are stronger crosswinds.

The Sundre Airport Concept Plan designates lands that surround the runways for future airside lots, ensuring that there is sufficient space for developing hangars for aircraft, along with the necessary taxiways for aircraft movement within the airport.

4.2 OPPORTUNITIES FOR LANDS SURROUNDING SUNDRE AIRPORT

The lands that surround the airport have specific qualities that help inform the potential future land uses within the Concept Plan area, which are noted below.

4.2.1 Agricultural Uses

Mountain View County supports agricultural uses that are compatible with airport operations. Most of the Sundre Airport Concept Plan area is zoned for Agricultural land uses and the undeveloped lands have historically been used as pastureland for area farmers. The use of the lands for agriculture can continue into the future, until such time that an alternate use is proposed, in accordance with Municipal Policies, and obtains a potential approval through a redesignation application and Public Hearing process.

4.2.2 Aggregate Extraction

The Sundre Airport Concept Plan seeks to protect those lands that contain aggregate resources to allow for possible future extraction. The current agricultural uses may continue and the potential for a future aggregate extraction will be subject to approval through provincial agencies, as well as land use redesignation and Development Permit approvals.

4.2.3 Low Impact Recreation

The Concept Plan aims to preserve most of the southern part of the Plan area to protect environmentally significant lands. There may be opportunities for future low-impact recreational uses that are compatible with the environment, as well as the Sundre Airport. Types of uses that may be considered are categorized as "passive recreation", which includes non-motorized activities that take place in natural settings with minimal development or facilities, emphasizing the importance of the environment and surrounding setting.

5.0 LAND USE PLAN

The following are a list of policies for all of the lands within the Sundre Airport Concept Plan area, with additional policies noted for each one of the quarter sections within the plan area.

5.1 ADMINISTRATIVE POLICIES AERODROME PROTECTION ZONE OVERLAY

5.1.1 General Provisions

- a) Applications for redesignation, subdivision or development shall be evaluated against the *Aerodrome Protection Zone Overlay* regulations of the Land Use Bylaw. The purpose of the Overlay is to ensure that policies guiding future development in the vicinity of the Sundre Airport remain compatible with safe airport operations and do not restrict or limit the airport's ability to grow in the future.
- b) The *Aerodrome Protection Zone Overlay*, as shown in Appendix D, is the same as the Aerodrome Protection Zone Overlay in the Land Use Bylaw and consists of:
 - i. Height Limitation based on the Take-Off/Approach Surface and the Transitional Surface of the Obstacle Surface Limitation (OSL);
 - ii. Noise Exposure Projection (NEP) Contours based on the Noise Exposure Forecast (NEF); and
 - iii. Outer Surface of the Obstacle Surface Limitation (OSL) where aircraft conduct circling procedures or maneuvering in the vicinity of the aerodrome.
- c) Use and development of the lands identified as Aerodrome Protection Zone Overlay, shall be based on the current designations under the County's Land Use Bylaw that are in place as of the date the Concept Plan is adopted.

5.1.2 General Land Use Policies

- a) Changes in land use designation for non-agricultural uses of lands within the Concept Plan area shall demonstrate that the non-agricultural use is compatible with the Airport and shall consider:
 - i. The potential for discharge of toxic or noxious emissions;
 - ii. Processes that could generate smoke, dust or steam in sufficient volumes to potentially impact visibility in the vicinity of the airport;
 - iii. The potential for radiation or other interferences from electronic equipment;
 - iv. The potential for fire or any explosive hazards;
 - v. Proposed uses and accumulation of any materials or waste that could increase hazards related to wildlife interactions;
 - vi. Proposed uses that require extensive lighting;
 - vii. The height of any proposed structures;
 - viii. Noise Exposure Forecast mapping that may require a Noise Impact Assessment and other necessary engineering studies in support of the proposed development;
 - ix. Uses that involve water retention areas, other than dugouts used for agricultural

purposes;

- x. Other provisions of this plan.
- b) Agricultural land uses that do not have negative impacts on the safe operation of the airport shall be encouraged to continue within the Concept Plan area.
- c) Within the Concept Plan area, applications for redesignation and/or subdivision may be referred to Transport Canada and NAV Canada for comment.

5.1.3 General Development Policies

- a) All development approved within the Concept Plan area must be in conformance with the policies and direction in this plan.
- b) Individual water wells and sewage systems that meet provincial and municipal standards are permissible.
- c) A Stormwater Management Plan, prepared by a qualified professional engineer, may be required for all future subdivision and/or development in accordance with provincial regulations.
- d) The applicant for a communication tower or communication structure within the Concept Plan area, as shown in Figure 7, shall provide copies of any reports and/or applications submitted to federal and provincial regulatory bodies.
- e) Development permit applications for new communication towers within the Concept Plan area shall not be supported if the use interferes with the safe operation of the airport.
- f) Alternative/Renewable Energy, Commercial shall not be supported within the Concept Plan area to protect the airport from hazardous glare and impact on aviation equipment and instruments.
- g) Changes in land use or proposed development shall be evaluated against Transport Canada's document Land Use in the Vicinity of Aerodromes (TP1247).
- h) Should change in land use or a proposed development have the potential to attract wildlife, the application may also be evaluated against the following Transport Canada documents:
 - i. Safety Above All;
 - *ii.* Sharing the Skies: An Aviation Industry Guide to the Management of Wildlife Hazards (TP13549)
 - *iii.* Wildlife Control Procedures Manual (TP11500)

5.2 NW 29-32-5-5 SUNDRE AIRPORT LANDS (HEREAFTER "THE QUARTER SECTION")

5.2.1 Land Use Policies

- a) The quarter section shall maintain airport zoning in support of the Sundre Airport.
- b) Additional subdivisions may be considered within the quarter section in support of the future expansion of the Sundre Airport.
- c) Phase 1A and Phase 1B are the preferred areas for future subdivision and development.

Phase 1A is favored because it has an existing access and utility connections located immediately north of an existing block of hangars; Phase 1B is favored due to its potential for direct access from Range Road 51 and its proximity to the main runway. Phase 1A and 1B will be prioritized for initial development to optimize use of the established infrastructure.

- d) Within Phase 1A, future lots shall be for airside development, while Phase 1B should give preference to airside but may accommodate groundside lots.
- e) Phase 2 and Phase 3 subdivision and development will only be permitted if legal and physical access is established from the northern or eastern boundaries of the quarter section connecting either north through SE 32-32-5-5 or SW 32-32-5-5 or east through NE 29-32-5-5. These roads shall be developed to County standards.

5.2.2 Development Policies

- a) Undeveloped portions of the airport and airport operational reserve within the quarter section can continue to be leased for agricultural operations until required for redesignation, subdivision and development.
- b) While Leadership in Energy and Environmental Design (LEED) certification is not a requirement, all development is encouraged to incorporate elements of LEED into their designs.
- c) Applications for development of individual lots shall comply with the provisions of the Land Use Bylaw and the Business, Commercial and Industrial Design Guidelines.
- d) No development will be permitted that may jeopardize the future certification of the airport.

5.2.3 Lot Layout Policies

- a) The lot layout of future phases 1A, 1B, 2 and 3 shall take into account:
 - i. Access to sites and future connectivity;
 - ii. Taxiway access for airside development;
 - iii. Open space (Municipal Reserve) where applicable, and
 - iv. Buffering where required to separate uses.

5.3 SW 29-32-5-5 LANDS SOUTH OF THE SUNDRE AIRPORT (HEREAFTER "THE QUARTER SECTION")

5.3.1 Land Use Policies

- a) According to Alberta's Upper Red Deer River Flood Study finalized in 2024, the quarter section includes significant portions within the *Floodway* of the Red Deer River. The lands are also within an Environmentally Significant Area. Future land uses, subdivision or development shall have regard for the environmental sensitivity of these lands and preserve the surrounding natural features.
- b) The airport zoning shall be maintained for the portion of the runway within this quarter section and the portion of land to the east of the runway in support of the Sundre Airport.

- c) Change in land use designation should consider future expansion of the main runway of the airport.
- d) Change in land use designation for passive, recreational uses may be considered for the remainder of the quarter section that lies west of the runway if the following criteria are met:
 - i. May consist of low-impact, non-motorized activities that require minimal development.
 - ii. The importance of the environment or setting for the activities are greater than in developed or active recreation settings.
 - iii. Is compatible with the safe operation of Sundre Airport.
 - iv. Future connectivity between sites is considered.
 - v. Complies with Section 8.1 Environmentally Significant Areas of the ASP.
 - vi. Appropriate legal, physical, and emergency access is provided.
 - vii. Preserves runway expansion potential towards the south.
- e) For lands prone to flooding, as shown on Figure 5, retention of tree cover should be strongly promoted.
- f) The MDP policies for redesignation and subdivision and the Land Use Bylaw regulations shall guide development where any part of the subject land is identified in the Flood Hazard Area (Floodway or Flood Fringe) of an approved provincial study in addition to section 8.2 Flood Hazard of the ASP.
- g) When changes of land use, subdivision or development within the area of a sensitive feature is to be considered, the proposal shall comply with Section 8.1 Environmentally Significant Areas of the ASP.
- h) When a change of land use, subdivision, or development is proposed within or adjacent to a sensitive feature, the County may require a wildlife study to determine what conditions may need to be placed as a condition of approval to conserve habitat and species.

5.4 SE 29-32-5-5 LANDS SOUTHEAST OF THE SUNDRE AIRPORT (HEREAFTRER, "THE QUARTER SECTION")

5.4.1 Land Use Policies

- a) According to Alberta's Upper Red Deer River Flood Hazard Study finalized in 2024, the quarter section includes portions within the Floodway of the Red Deer River. The lands are also within an Environmentally Significant Area. Future land uses, subdivision or development shall have regard for the environmental sensitivity of these lands and preserve the surrounding natural features.
- b) Recognizing the high potential for aggregate resources in the quarter section area outside of the Floodway, the County maintains ownership to ensure future access to these resources for infrastructure needs. While there are no current plans or approvals for aggregate extraction, development in the area outside of the Floodway should be

limited to preserve future aggregate extraction opportunities. Should the need for these resources arise, the County shall pursue the required Municipal and Provincial approvals.

- c) The MDP policies for redesignation and subdivision and the Land Use Bylaw regulations shall guide development where any part of the subject land is identified in the Flood Hazard Area (Floodway or Flood Fringe) of an approved provincial study in addition to section 8.2 Flood Hazard of the ASP.
- d) Changes in land use designation outside of the Floodway within the quarter section may be considered for aggregate resource extraction as an interim use and shall comply with the IDP and Section 8.3 Natural Resource Extraction of the ASP.
- e) Proposals for passive recreational land uses may be considered for portions within the Floodway or as an ultimate or final land use for portions outside of the Floodway, if the following criteria are met:
 - i. May consist of low-impact, non-motorized activities that require minimal development.
 - ii. The importance of the environment or setting for the activities are greater than in developed or active recreation settings.
 - iii. Is compatible with the safe operation of Sundre Airport.
 - iv. Future connectivity between sites is considered.
 - v. Complies with Section 8.1 Environmentally Significant Areas of the ASP.
 - vi. Appropriate legal and physical access and emergency access is provided.
- f) The Land Use Bylaw shall set out regulations to guide development where any part of the subject land is identified in the Flood Hazard Area (Floodway or Flood Fringe) of an approved provincial study.

5.5 NE 29-32-5-5 LANDS EAST OF THE SUNDRE AIRPORT (HEREAFTER "THE QUARTER SECTION")

- a) Recognizing the high potential for aggregate resources in the quarter section, the County maintains ownership to ensure future access to these resources for infrastructure needs. While there are no current plans or approvals for aggregate extraction, development in the quarter should be limited to preserve future aggregate extraction opportunities. Should the need for these resources arise, the County will pursue the required Municipal and Provincial approvals.
- b) Change in land use designation within the quarter section should consider road access to the lands east of the airport runway within NW 29-32-5-5 in support of Phases 2 and 3 of the Sundre Airport, as shown in Figure 8.
- c) Change in land use designation with the quarter section should consider future expansion of the secondary runway of the Sundre Airport.
- d) Changes in land use designation may be considered for aggregate resource extraction within the quarter section as an interim use and shall comply with the IDP and Section 8.3 Natural Resource Extraction of the ASP.
- e) Change in land use designation for passive, recreational uses may be considered as an

ultimate or final land use if the following criteria are met:

- i. May consist of low-impact, non-motorized activities that require minimal development.
- ii. The importance of the environment or setting for the activities are greater than in developed or active recreation settings.
- iii. Is compatible with the safe operation of Sundre Airport.
- iv. Future connectivity between sites is considered.
- f) The MDP policies for redesignation and subdivision and the Land Use Bylaw shall set out regulations to guide development where any part of the subject land is identified in the Flood Hazard Area (Floodway or Flood Fringe) of an approved provincial study.

5.6 SW 32-32-5-5 LANDS NORTH OF THE SUNDRE AIRPORT (HEREAFTER "THE QUARTER SECTION")

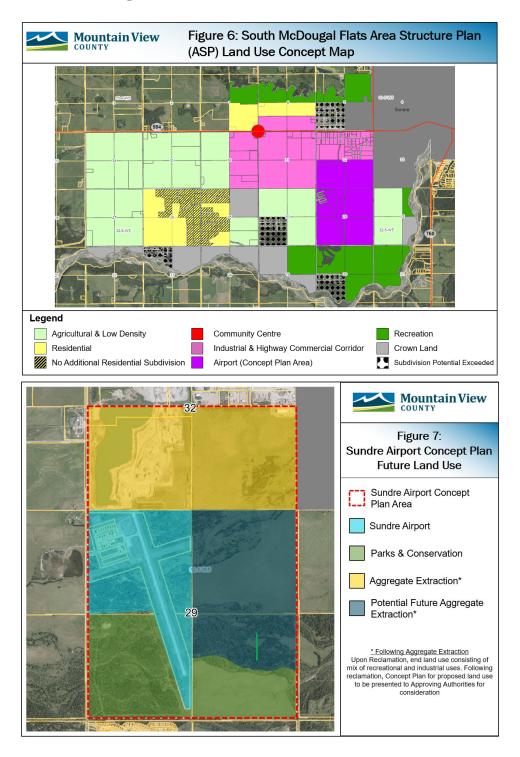
- a) The quarter section contains lands with an active aggregate extraction operation and zoning for aggregate extraction and processing. Options for future ultimate or final land use may include commercial / industrial uses, as well as recreational uses that are compatible with the Sundre Airport.
- b) The quarter section may consider additional subdivisions as part of the reclamation for the aggregate extraction operations and acceptable ultimate or final land use. Consideration for future land use and subdivisions shall be accompanied by a Concept Plan as defined in the ASP for the quarter section and an application for redesignation and subdivision submitted to the County.
- c) Change in land use designation and subdivision within the quarter section should consider road access to accommodate future legal and physical access that will support the potential Phase 2 and Phase 3 of Sundre Airport's Phasing Plan within NW 29-32-5-5, as shown in Figure 8.

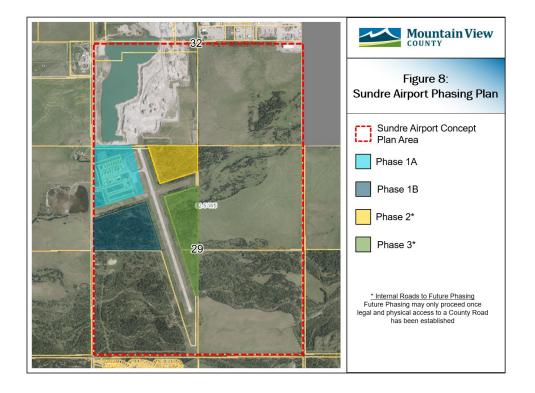
5.7 SE 32-32-5-5 LANDS NORTHEAST OF THE SUNDRE AIRPORT (HEREAFTER "THE QUARTER SECTION")

- a) The quarter section contains lands with an active aggregate extraction operation and zoning for aggregate extraction and processing. Options for future ultimate or final land use may include commercial / industrial, and public service uses as well as recreational uses that are compatible with the Sundre Airport.
- b) The quarter section contains lands with a Development Permit for the Phase 1 & 2 (+/-60 acres) and zoning of the entire quarter section for aggregate extraction and processing and operates under an Intermunicipal Collaboration Agreement for the life of the pit. This operation is projected to be active for the next 50 years. Options for future ultimate or final land use may include commercial / industrial and public service uses, as well as recreational uses that are compatible with the Sundre Airport.
- c) The quarter section may consider additional subdivisions as part of the reclamation for the aggregate extraction operations and acceptable ultimate or final land use. Consideration for future land use and subdivisions shall be accompanied by a Concept

Plan as defined in the ASP for the quarter section and an application for redesignation and subdivision submitted to the County.

d) Change in land use designation and subdivision within the quarter section should consider road access to accommodate future legal and physical access that will support the potential Phase 2 and Phase 3 of Sundre Airport's Phasing Plan within NW 29-32-5-5 as shown in Figure 8.





Aerodrome Reference Point: A designated geographical location of an aerodrome given to the nearest second of latitude and longitude. Note: The aerodrome reference point is located near the initial or planned geometric centre of the aerodrome and normally remains where first established. (Abbreviation: ARP) (TC, 2020).

Aircraft Movement: A takeoff, landing, or simulated approach by an aircraft (TC, 2020).

Airport Operational Reserve: applied to the lands used for airport infrastructure, such as runway, taxiway and aprons, as well as the lands on airport property with highly restricted development potential due to take off / approach areas and transition areas. This land can be developed for any use required for the successful operation of the airport, including terminal building and fueling facility. This land can also be used for extensive agricultural purposes until such time as it is required for airport use. This area also applies to land for future runway extensions. There is a small portion of land that extends into the northwest quarter of the section that may be required for acquisition by the County at some time in the future to allow for runway extension.

Airside Development: development within an aerodrome that is applied to all lands where development needs direct access to an apron, taxiway, or runway. These private or commercial uses shall be aviation related and complimentary to aircraft hangars or facilities.

Circling Procedure: A manoeuvre initiated by the pilot to align the aircraft with a runway for landing when a straight-in landing from an instrument approach is not possible or is not desirable. Note: After verifying with ICAO and FAA, NAV CANADA removed the term procedure from the circling procedure phraseology. (Also called: circling approach procedure, circling manoeuvre) (TC, 2020).

Crosswind: When referring to wind conditions, a wind not parallel to the runway or the path of an aircraft (TC, 2020).

Groundside Development: development within an aerodrome that is applied to lands that do not need direct airside access. Even though direct airside access is not available, uses shall be aviation related. The regulations controlling groundside development will not allow any use that negatively impacts the airport, such as but not limited to; smoke, steam, bird attraction or electronic interference.

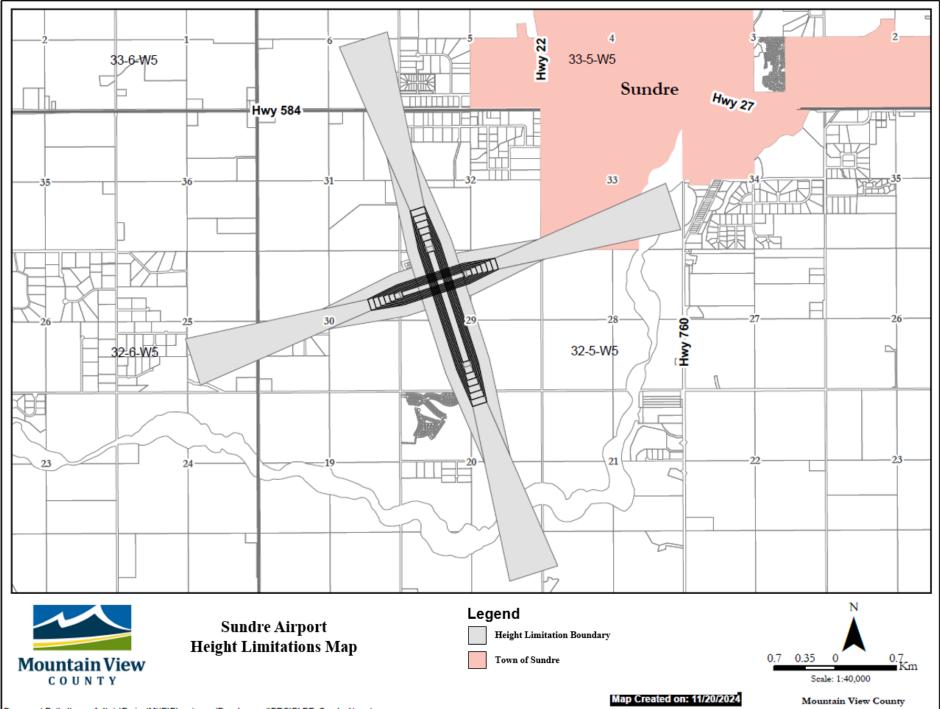
Runway: defined rectangular area located on a land aerodrome and prepared for the landing and takeoff runs of aircraft along its length. (Abbreviation: RWY) (TC, 2020).

Taxiway: A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:

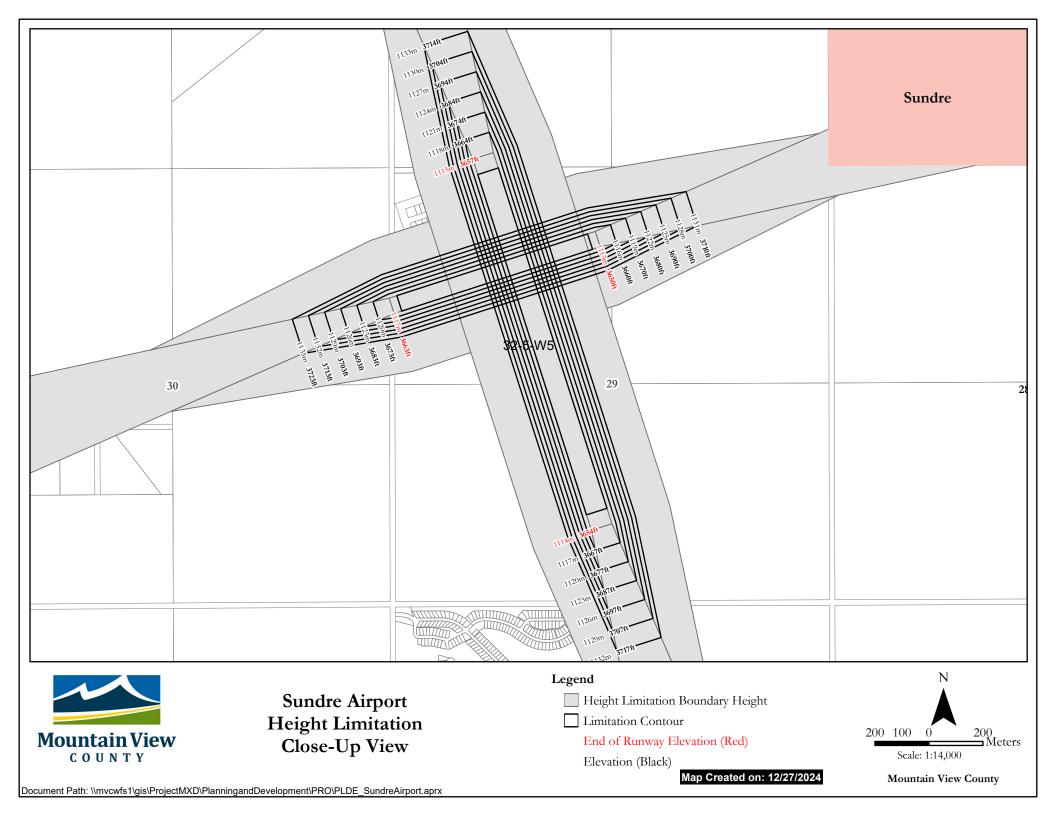
- (a) the aircraft stand taxilane;
- (b) the high speed taxiway; and
- (c) the pathway for the air, hover or ground taxiing of helicopters.

(Abbreviation: TWY) (TC, 2020).

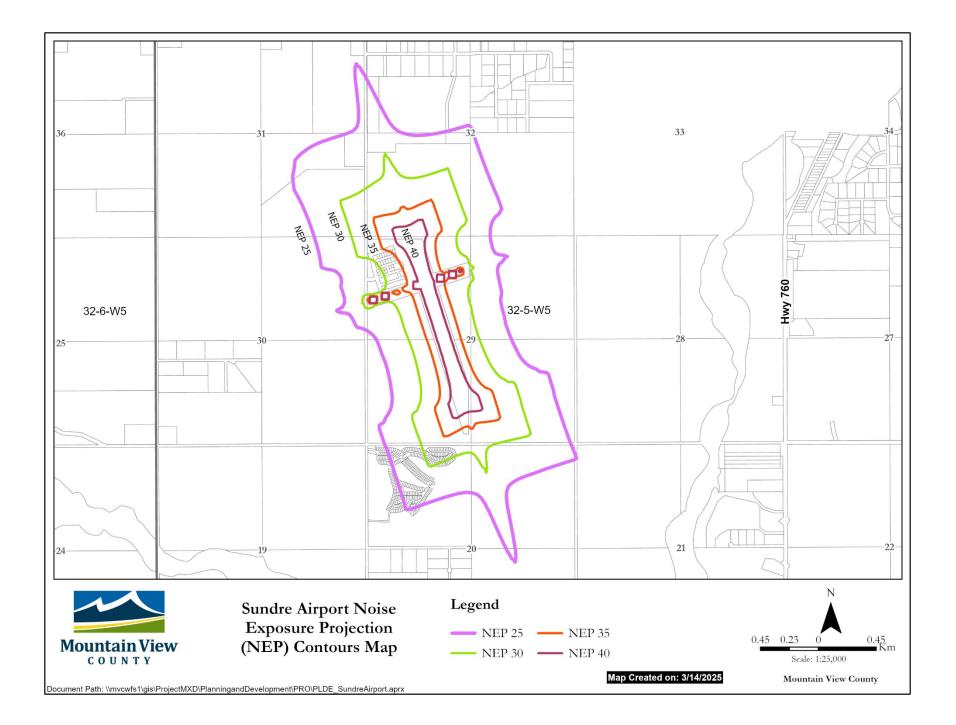
APPENDIX B HEIGHT LIMITATIONS MAP



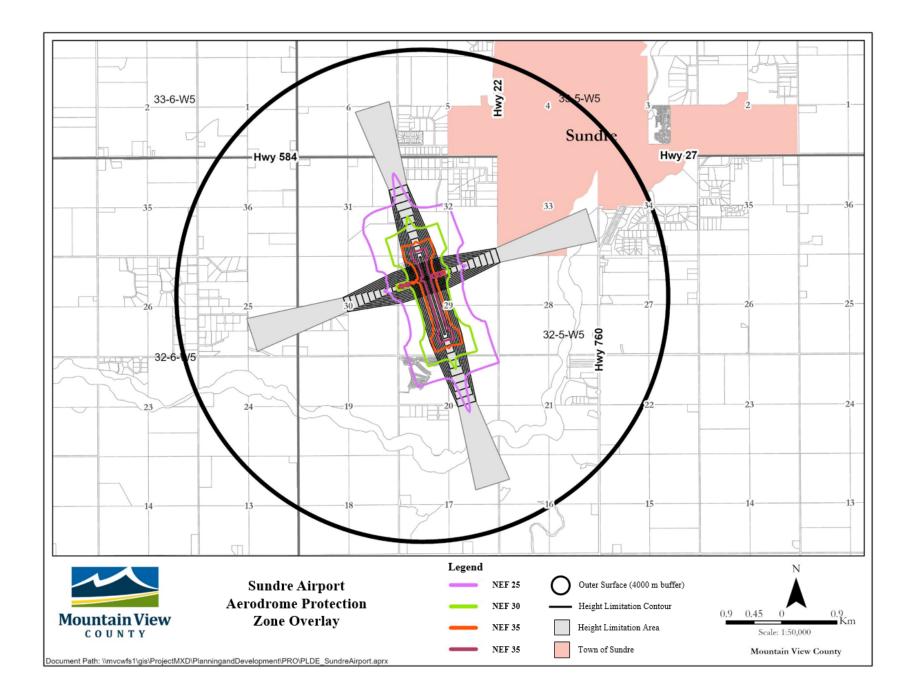
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APPENDIX C NOISE EXPOSURE PROJECTION (NEP) CONTOURS MAP



APPENDIX D SUNDRE AIRPORT AERODROME PROTECTION ZONE OVERLAY



APPENDIX E NOISE EXPOSURE PROJECTION CONTOURS REPORT FROM HM AERO

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