Sheldon Regional Airport- Sheldon, IA

Airport Master Plan Kickoff Meeting – April 9, 2026

Agenda

- Introductions
- Airport Master Planning
- Roles & Responsibilities
- Planning Considerations
- Existing Conditions
- Open Discussion



Introductions

- Project Team
  - Airport Engineer – Jason Eygabroad, BEI
  - Aviation Planner – Andrew Zielike, KLJ
  - Aviation Planner – Kent Penney, KLJ
  - Aviation Planner – Jack Vogt, KLJ
- Sheldon Airport/ City of Sheldon
  - City Commission
  - Airport Commission
- Agencies Involved
  - FAA - Junior Lindsey
  - Iowa DOT Office of Aviation - Shane Wright
- Planning Advisory Committee (PAC)
  - Lyle Vust, Midwest Flying Service
  - Nic Vust, Midwest Flying Service
  - Todd Uhl, City of Sheldon
  - Ken Van Kekerix, Airport Commission
  - Sam Wagner, Airport Commission
  - Tom Eggers, City Commission
  - Tania Herrera Gonzales, Sheldon Chamber and Development Corp.
  - Nancy McDowell, O'Brien County Supervisor
  - Josh Kraayenbrink, KT Tools

Roles & Responsibilities

BEI and KLJ Team

- Manage Study, Complete Technical Work, Provide Analysis and Recommendations

Master Plan Advisory Committee

- Identify Wants & Needs
- Ask Questions & Review Analysis
- Provide Feedback & Recommendations

City of Sheldon/Airport Commission

- Provide Guiding Principles, Make Decision(s), Review and Approve Planning Documents & ALP

FAA / Iowa DOT

- Provide Technical Guidance, Approve Critical Design Aircraft, Review Airport Master Plan, Approve ALP



Airport Master Plan

What is it?



"Road Map" for meeting aviation needs



Preserves flexibility to respond to future demands



Allows airport to cost-effectively keep pace with aviation growth



Considers environmental and socioeconomic impact of development

Components



AIRPORT MASTER PLAN NARRATIVE REPORT



AIRPORT LAYOUT PLAN



RSA DETERMINATION



EXHIBIT A / PROPERTY MAP



AERONAUTICAL SURVEY

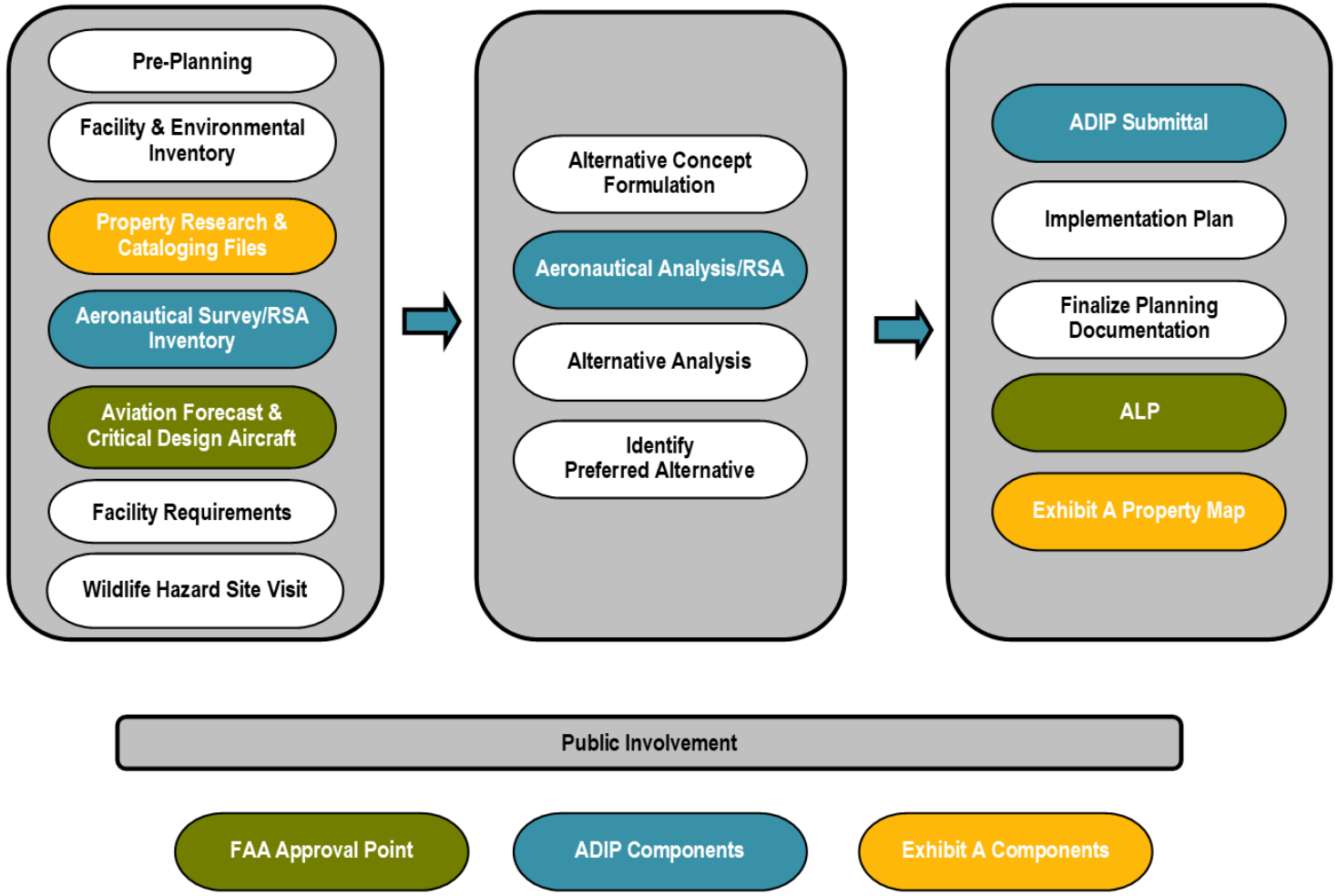


WILDLIFE HAZARD SITE VISIT

Why is Airport Planning Needed Now?

- Update the Airport Layout Plan (ALP) from 2013 to current FAA design standards
- Runway Safety Area standards and land control
- Identify existing and future critical design aircraft
- Evaluate need for a crosswind runway
- Evaluate Airport Zoning needs
- Develop short-, mid-, long-term year (5-20) Airport Capital Improvement Plan (ACIP)

Project Workflow



Aircraft Design Characteristics

Aircraft Approach Category – A through D

- Represents speed that aircraft approaches runway

Airplane Design Group– I through VI

- Represents wingspan and height of aircraft

Taxiway Design Group– 1 through 6

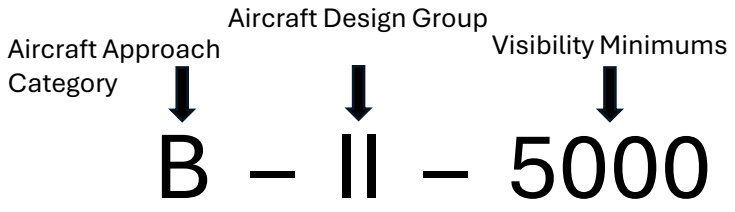
- Represents pavement width and turning clearance needed by aircraft (Main Gear Width and Cockpit to Main Gear Width)

Weight Class

- Small < Less than 12,500 lbs
- Large > Greater than 12,500 lbs

Runway Design Code (RDC)

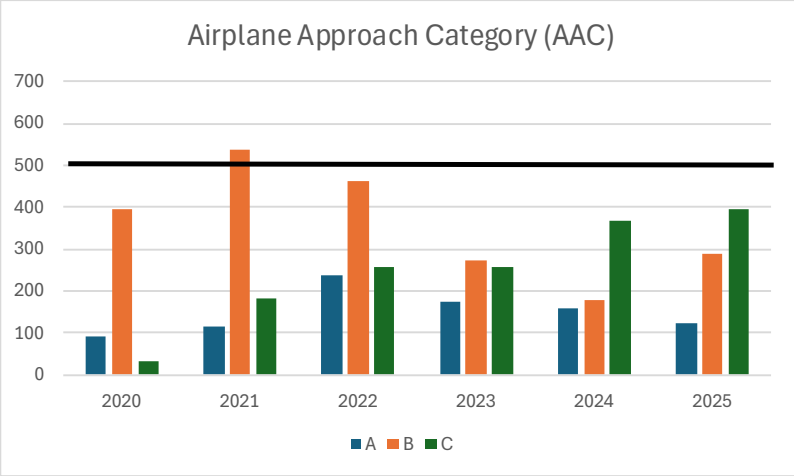
Coding system used to describe the aircraft design characteristics the runway is designed to accommodate.

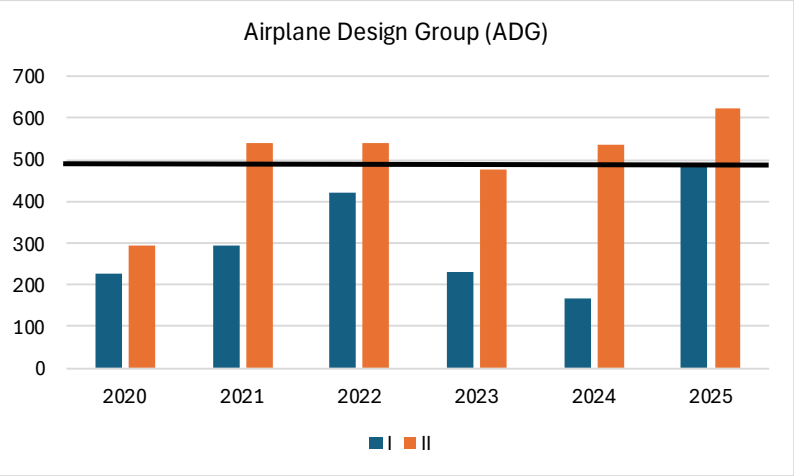


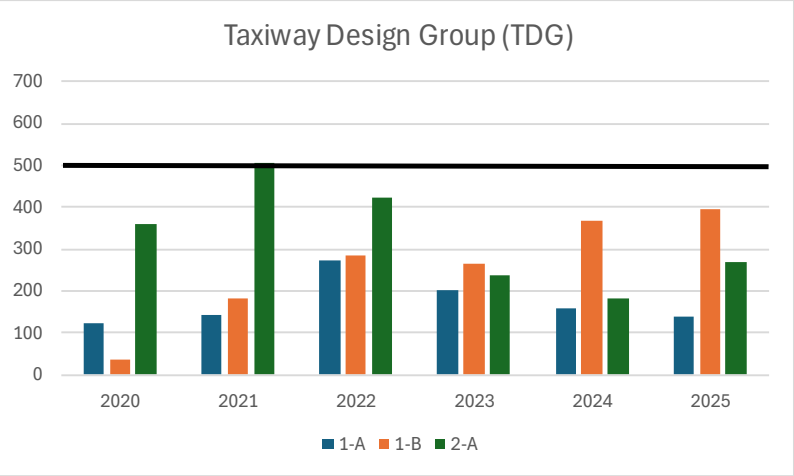
Critical Design Aircraft

Most demanding aircraft grouped by design characteristics that utilizes the airport with 500 or more annual operations.

Aircraft Operations







- TFMSC Operations Depicted - Planes operating under IFR
- VFR Operations are not captured in this data



Beechcraft King Air 200

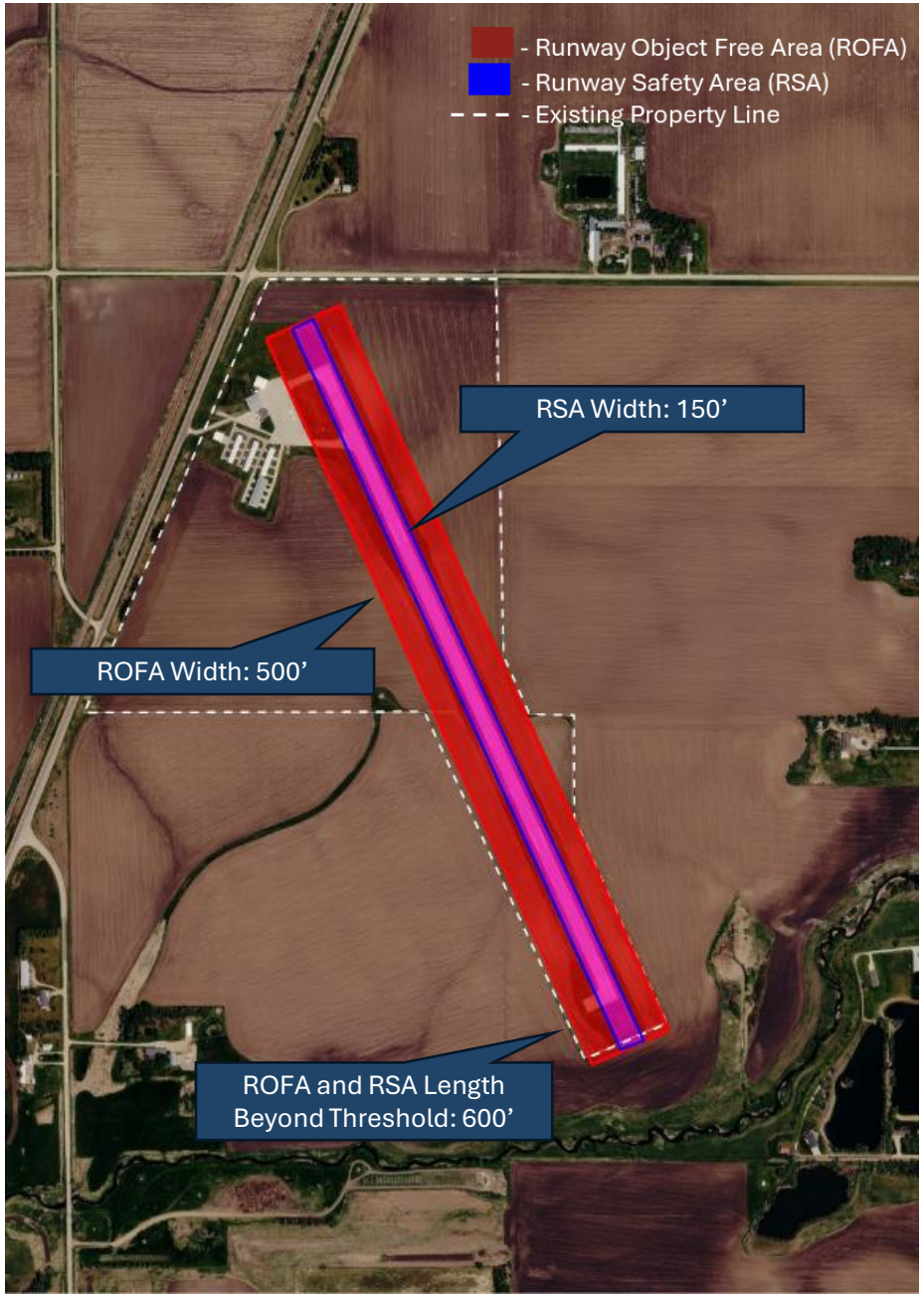


Cessna Citation 650

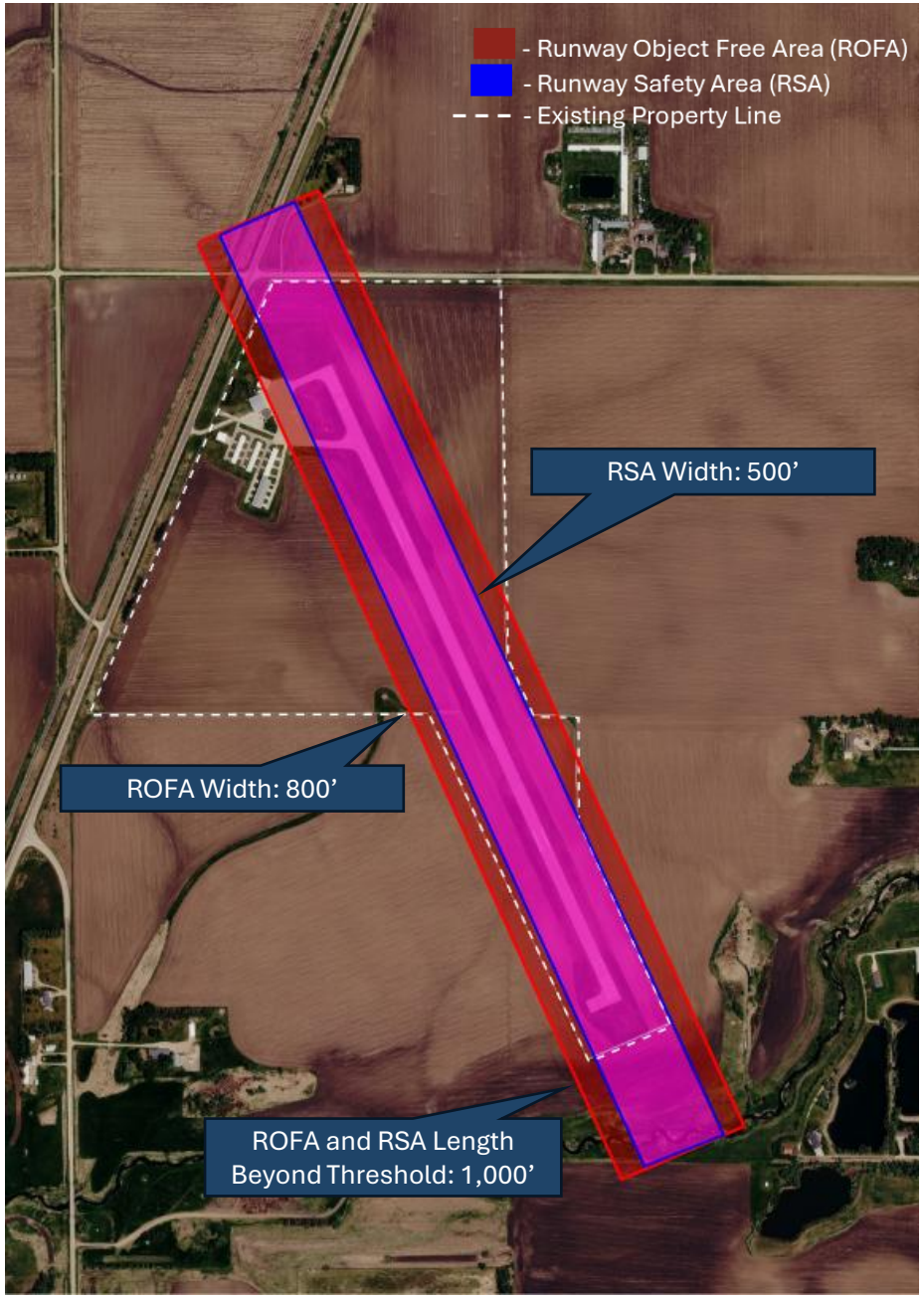


Cessna Citation 550

B-II Design Standards

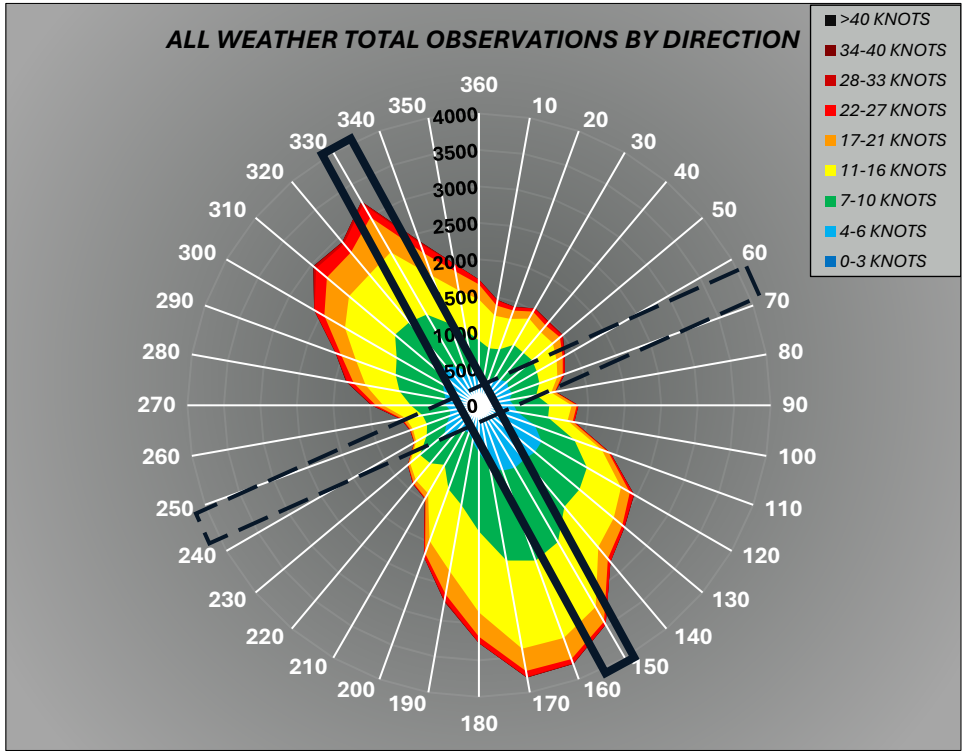


C-II Design Standards



Weather Analysis

- Automated Weather Station (AWOS) exists on airfield
- Crosswind component dictated by AAC and ADG
  - Smaller aircraft most impacted by crosswinds
- 2013 ALP has proposed crosswind runway depicted

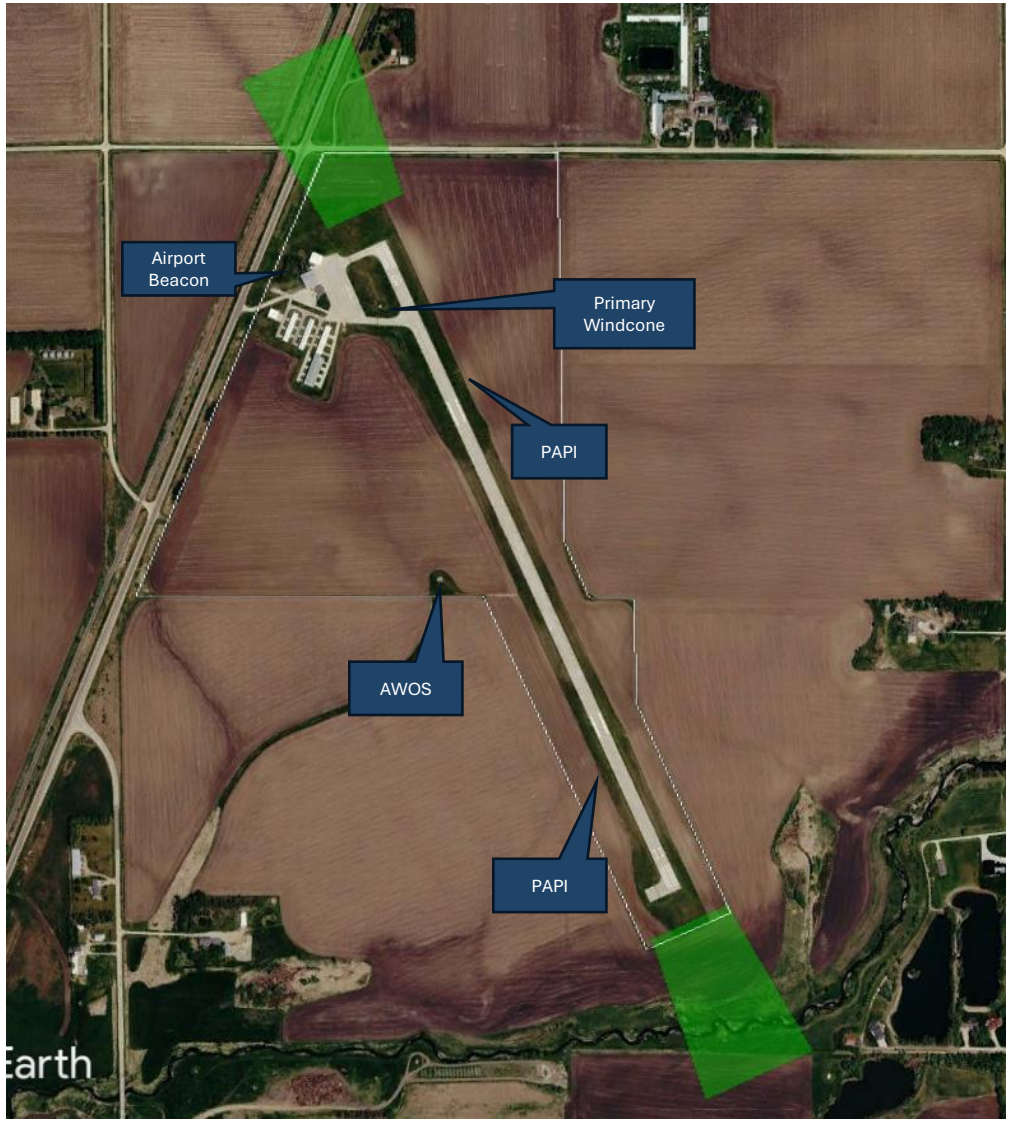


ALL-WEATHER WIND COVERAGE			
CONFIGURATION	CROSSWIND COMPONENT		
	10.5 KNOTS	13 KNOTS	16 KNOTS
RUNWAY 15-33	90.70%	95.49%	98.11%
2013 ALP RUNWAY 6-24	76.31%	86.32%	93.11%
COMBINED	96.77%	98.79%	99.76%
SOURCE: SHL AWOS (2015-2024, HOURLY) FROM NATIONAL CLIMATIC DATA CENTER			
82,400 TOTAL OBSERVATIONS			

Weather Condition	Percentage	Days Per Year	Hours Per Year
VMC	89.53%	326.8	7,843
Usable IMC	8.27%	30.2	724
Usability	**97.80%**	**357.0**	**8,567**
Below Weather Minimums	2.20%	8.0	193
Total	**100.00%**	**365.0**	**8,760**

Existing Airfield

- Runway 15-33
  - 4,199 feet long X 75 feet wide
  - RDC: B-II
  - Weight: 28,000 Lbs. SW
  - Concrete – Fair Condition
  - GPS Approach both ends
    - 1 mi visibility
    - 300 feet cloud ceiling
  - 2-light PAPI on both ends



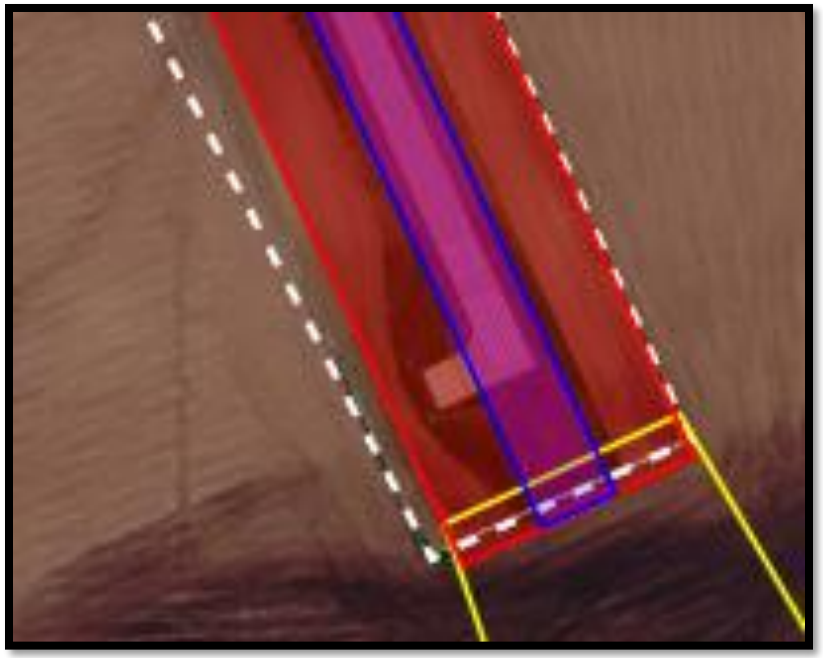
Existing Airfield Considerations

- RSA Extends off property
- Potential change in critical design aircraft
- Road and Railroad in Runway 15 RPZ
- Direct access from apron to runway

Roads and Railroad in RPZ



RSA Standards



Terminal & Apron Area

- Apron
  - ~4,800 SY
  - 9 nested tiedowns (ADG-I)
- Fuel – In ground
  - 100LL and Jet A
- 6 Hangars
  - 4 T-Hangars (6 Units)
  - 2 Conventional Box Hangars
- 21 Validated Based Aircraft
  - 3 Jets
  - 16 Single Engine
  - 2 Multi Engine



Open Discussion/Talking Points

- Other Airport Users / Airport Events
- Accessibility and Operational Challenges
- Terminal / Hangar / Equipment Needs
- Any over-the-horizon challenges?
- What's working well?

Next Steps

- Complete Airport Inventory
- Outreach to Stakeholders
- Draft Aviation Forecasting and Critical Design Aircraft and submit to FAA and Iowa DOT
- Receive Critical Design Aircraft determination and approval from FAA

- Next Meeting: Critical Design Aircraft & Facility Requirements

- **Master Plan Website:** https://inputcentral.com/shl-airportplan

Thank you for participating!

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