



# Joseph State Airport

## Airport Master Plan



Planning Advisory Committee Meeting #3  
Virtual Meeting via Webex  
February 25, 2021

**Please standby – meeting will start promptly at 2:30 PM**

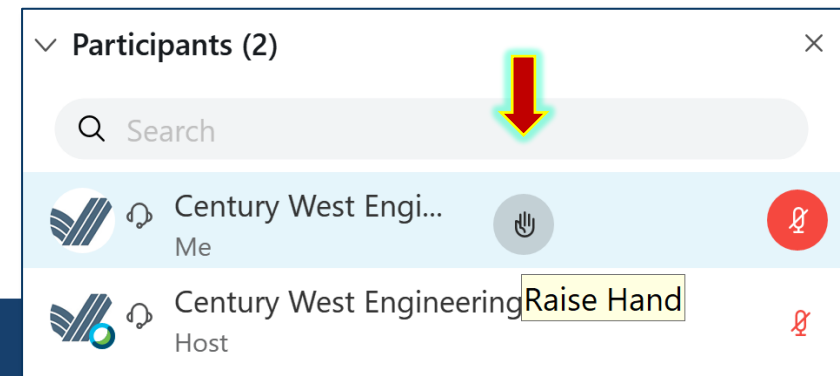
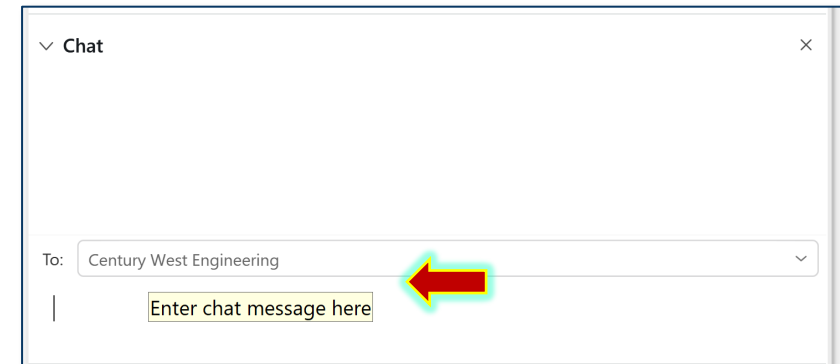
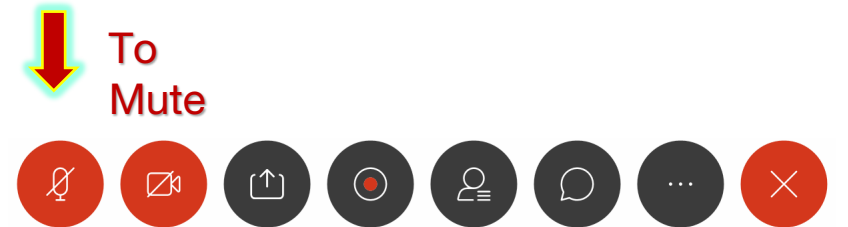
# Online Viewing (via WEBEX)

Or Join by Phone (408) 418-9388

Access Code: 146 324 9773

## Online Viewing Instructions

- Please ensure you're muted when not speaking.
- Please raise your hand or use the chat box if you have a question.
- If you are unable to hear the presentation, but can see the presentation. Try calling in with your phone while viewing online.
- Technical issues during the meeting, please email [WRogers@centurywest.com](mailto:WRogers@centurywest.com)



- Project Schedule
- Brief Recap
  - Forecast Demand
  - Facility Goals and Requirements
- Preliminary Development Alternatives
- Public Comments
- Next Steps



Image: Century West Engineering



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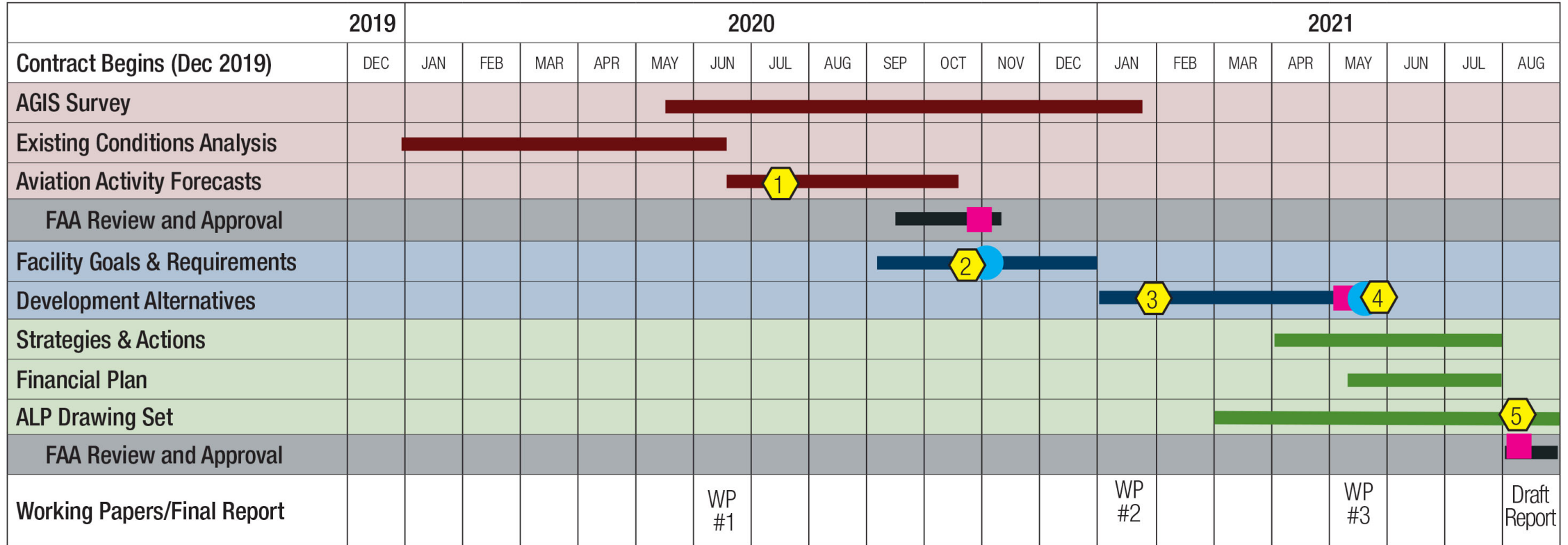
# PAC Membership



Name	Title	Organization
<b>Adam Stein</b>	Self	Airport Tenant
<b>Ken Good</b>	Self	Airport Tenant
<b>Wup (Derek) Winn</b>	Airport Maintenance	Back Country Connection / ODA Maintenance
<b>Ashley Sullivan</b>	Mayor	City of Enterprise
<b>Belinda Buswell</b>	Mayor	City of Joseph
<b>Catherine Dickson</b>	Archaeologist	Confederated Tribes of the Umatilla Indian Reservation
<b>Austin Greene</b>	Tribal Chairman	Confederated Tribes of the Warm Springs Reservation of Oregon
<b>Toby Koehn</b>	CTE Instructor, Retired	Joseph Charter School
<b>Ian Goodrich</b>	Co-Student Representative	Joseph Charter School
<b>Storm Lynch</b>	Co-Student Representative	Joseph Charter School
<b>Peter Benjamin</b>	Region 2 Customer Service Mgr	Life Flight Network

Name	Title	Organization
<b>Rich Frasch</b>	Self	Airport Tenant
<b>Shannon Wheeler</b>	Tribal Chairman	Nez Perce Tribe
<b>John Wilson</b>	Airport Operations	Oregon Department of Aviation
<b>Patrick Wingard</b>	Regional Representative	Oregon Dept. of Land Conservation & Development
<b>Jessica Keys</b>	Field Representative	Senator Jeff Merkley
<b>Kathleen Cathey</b>	Field Representative	Senator Ron Wyden
<b>Miles Hancock</b>	Aviation Unit Manager	US Forest Service
<b>Franz Goebel</b>	Planning Director	Wallowa County
<b>John Hillock</b>	Commissioner	Wallowa County
<b>Jennifer Piper</b>	Executive Director	Wallowa County Chamber of Commerce
<b>Larry Davy</b>	CEO	Wallowa Memorial Hospital

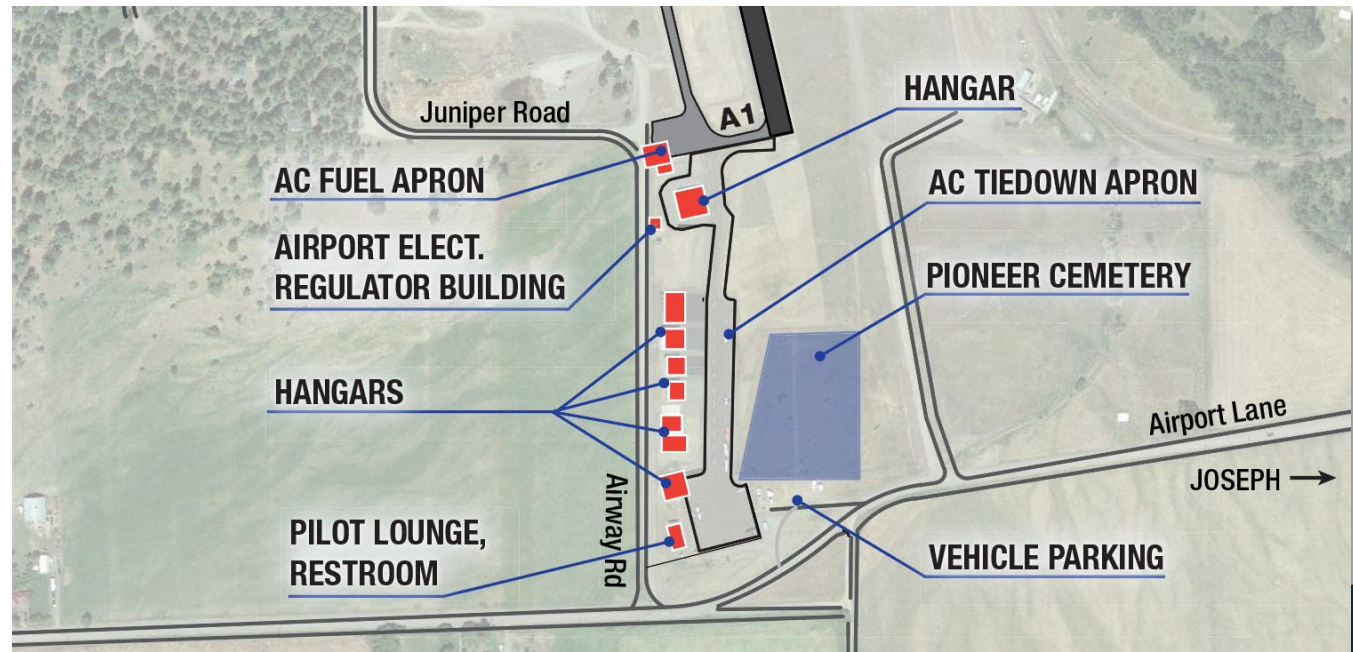
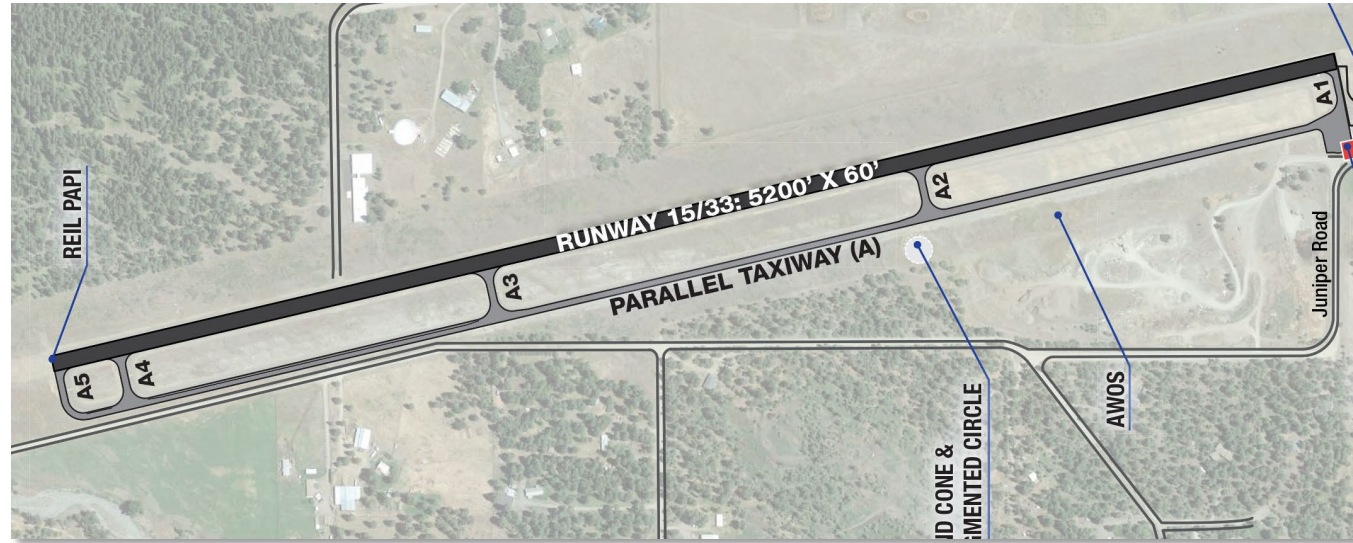
# Project Schedule



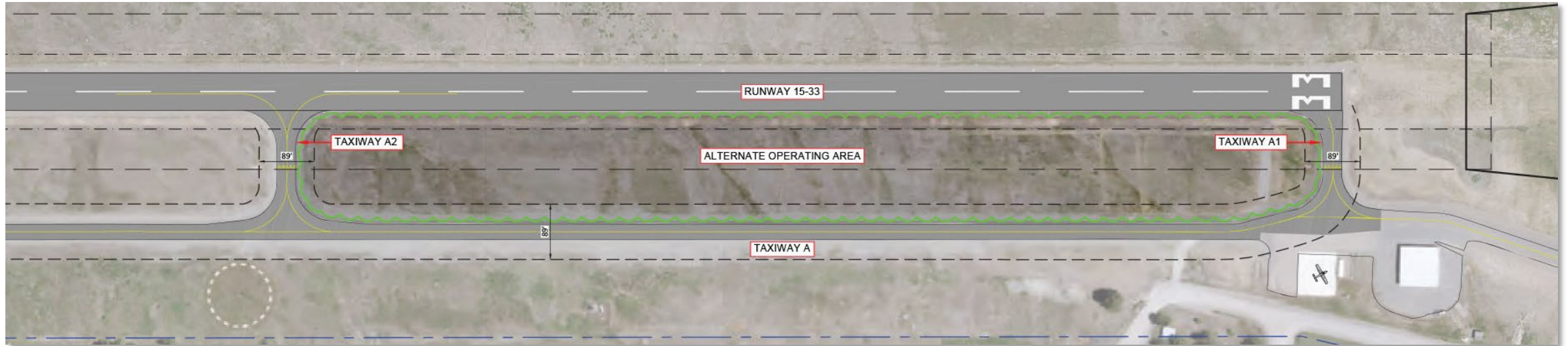
	Regional Setting	Airside Elements	Landside Elements	Airport Administration
Develop Understanding	<ul style="list-style-type: none"> <li>Location &amp; Vicinity</li> <li>Socio-Economic Data</li> <li>Airport Role</li> <li>Airport History</li> </ul>	<ul style="list-style-type: none"> <li>Area Airspace</li> <li>Instrument Flight Procedures</li> <li>Runway/Helipad</li> <li>Taxiways/Taxilanes</li> </ul>	<ul style="list-style-type: none"> <li>Terminal Building</li> <li>Hangars</li> <li>Airport Fencing</li> <li>Airport Surface Roads</li> <li>Vehicle Parking</li> <li>Utilities</li> </ul>	<ul style="list-style-type: none"> <li>Airport Ownership &amp; Management</li> <li>Airport Financials</li> <li>Airport Rates and Charges</li> <li>Local Rules &amp; Regulations</li> <li>Oregon Aviation Laws</li> <li>FAA Compliance Overview</li> </ul>
Explore Solutions	<ul style="list-style-type: none"> <li>Area Airports Context</li> <li>Airport Operations</li> <li>Relevant Studies</li> <li>Environmental Data</li> <li>Local Surface Transportation</li> </ul>	<ul style="list-style-type: none"> <li>Aprons/Tiedowns</li> <li>Pavement Condition</li> <li>Airside Support Facilities</li> </ul>		
Implementation	<ul style="list-style-type: none"> <li>Land Use/Zoning</li> </ul>			



# Existing Conditions



- Limited Airport Land Area (Landside Facilities)
- Airport Instrumentation
- Local Environmental Considerations
- Parallel Taxiway Operational Limits
- Alternate Landing Area (ALA), also known as Alternate Operating Area (AOA) - between runway and parallel taxiway

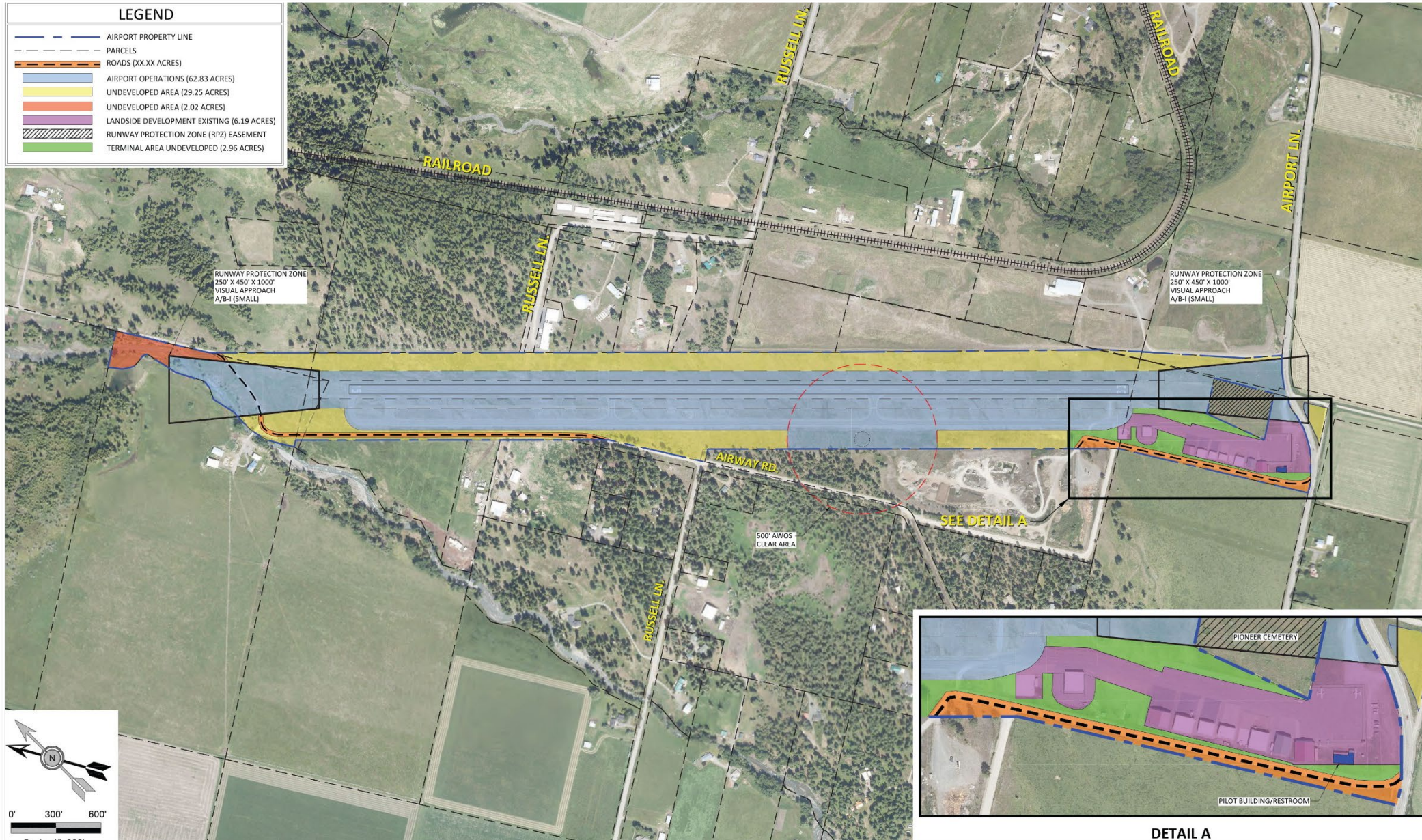


## Located Between Taxiways A1 and A2, Runway and Parallel Taxiway

The turf area is used by tailwheel aircraft and other aircraft capable of operating on unimproved surfaces. Not a designated runway area, pilots use at own risk.



*In consultation with FAA, an evaluation of an alternative landing area will not be included in the evaluation of airside alternatives and the area will not be depicted on the ALP drawing. No change in current use is proposed.*

# Existing Airport Land Utilization



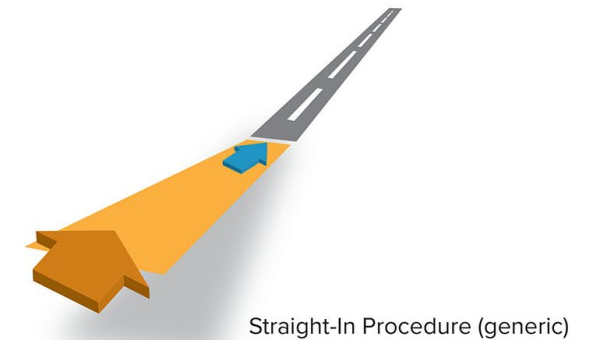
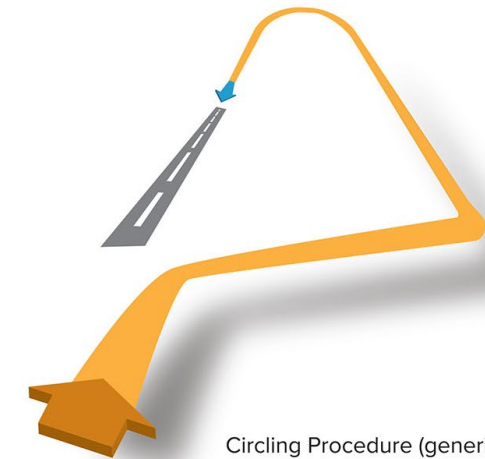
# Airside Development Alternatives / Improvement Options

## Design Aircraft and Airport Reference Code (ARC)

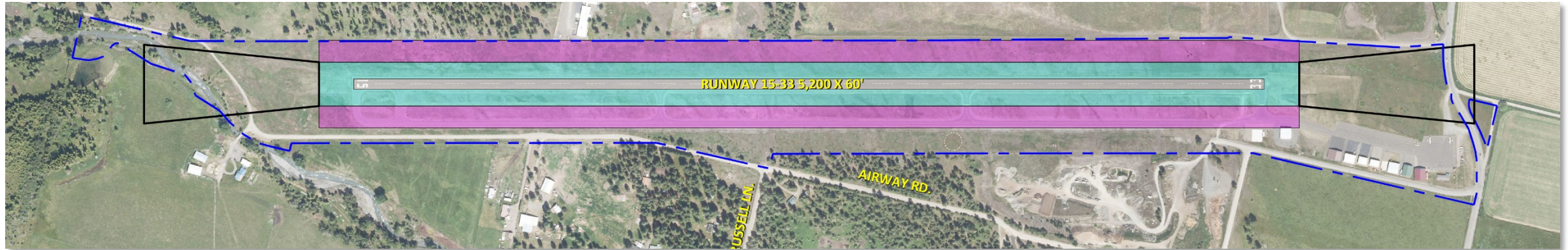
Example Aircraft	Aircraft Approach Category	Minimum Descent Altitude for Aircraft (above ground level) and Minimum Required Airport Visibility	Minimum Descent Altitude for Aircraft (above ground level) and Minimum Required Airport Visibility
		Circling Procedure	Straight-In (Rwy 15) Procedure
<p>A-II, B-II (small) 12,500 lbs. or less</p>  <p>Super King Air 200 Pilatus PC-12 DCH Twin Otter Cessna Caravan</p>	Category A	<p>Not lower than 1,019 feet above airport before establishing visual contact with runway for landing</p> <p>1.25-Mile Visibility Required</p>	<p>Not lower than 615 feet above runway end before establishing visual contact with runway for landing</p> <p>1-Mile Visibility Required</p>
<p>B-I (small) 12,500 lbs. or less</p>  <p>Beech Baron 58 Beech King Air C90 Cessna 402 Cessna 421</p>	Category B	<p>Not lower than 1,539 feet above airport before establishing visual contact with runway for landing</p> <p>1.5-Mile Visibility Required</p>	<p>Not lower than 615 feet above runway end before establishing visual contact with runway for landing</p> <p>1-Mile Visibility Required</p>

Source: Century West Engineering

## Non-Precision Instrument Approach Development



# Non Precision Instrument Approach Circling vs. Straight-In Procedure



- Circling Non Precision Instrument Procedure requires a 250-foot wide Primary Surface
- Straight-In Non Precision Instrument Procedure requires a 500-foot wide Primary Surface

### NPI RUNWAY PRIMARY SURFACE PENETRATION (EXISTING PARALLEL TAXIWAY)



Issue: A review of AGIS survey data indicates that about 75 percent of Taxiway A is elevated above the runway, with a maximum excess elevation of 3.59 feet near its south end. The image depicts the areas of the taxiway (shown in red) that would penetrate the NPI primary surface.

Two runway-taxiway mitigation options are available to address the potential NPI runway primary surface obstruction:

- Lower the parallel taxiway to eliminate the primary surface penetration
- Raise the runway to elevate the primary surface above the parallel taxiway

No runway-taxiway mitigation is required if the current Visual runway primary surface is maintained to support development of a circling NPI approach procedure.

### Reconstruction Taxiway Option A



- Reconstruction of Taxiway A and the northern section of the south apron taxiway.
- Changing the parallel taxiway elevation will also require reconstruction of the exit taxiway connections to maintain FAA design gradient standards.

### Reconstruction Runway Option B



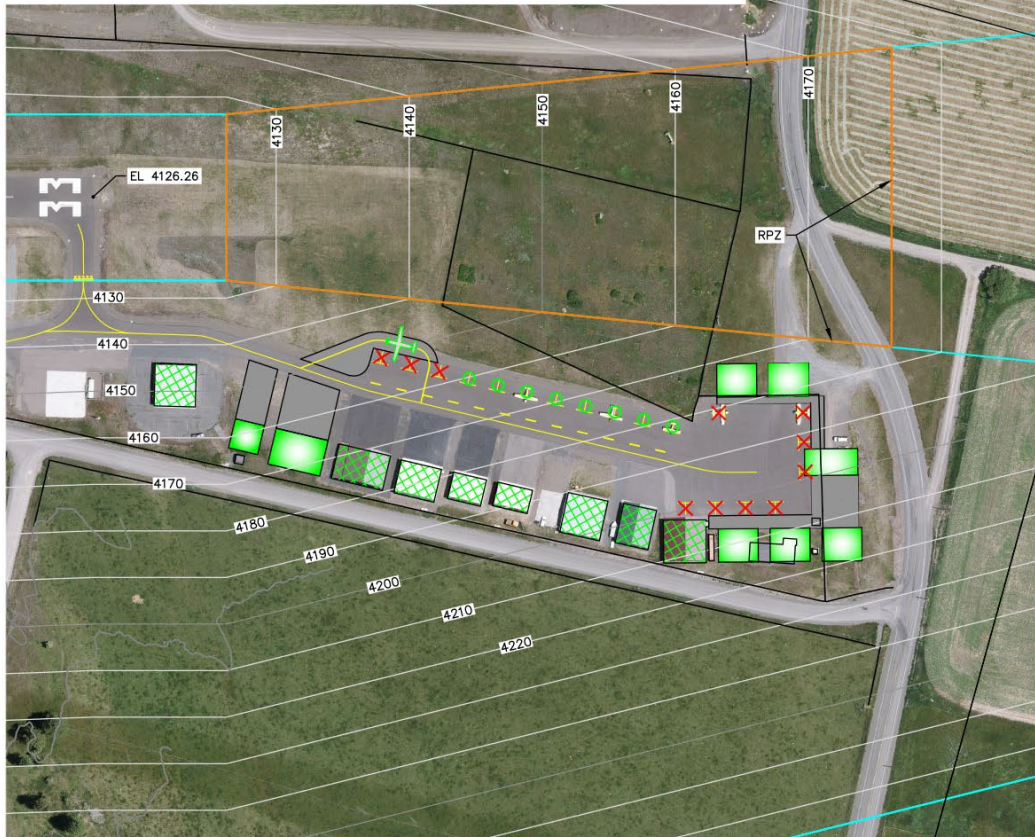
- Reconstruction of Runway 15/33 and its five exit taxiways.
- This alternative reconstructs the runway to elevate it above the parallel taxiway.



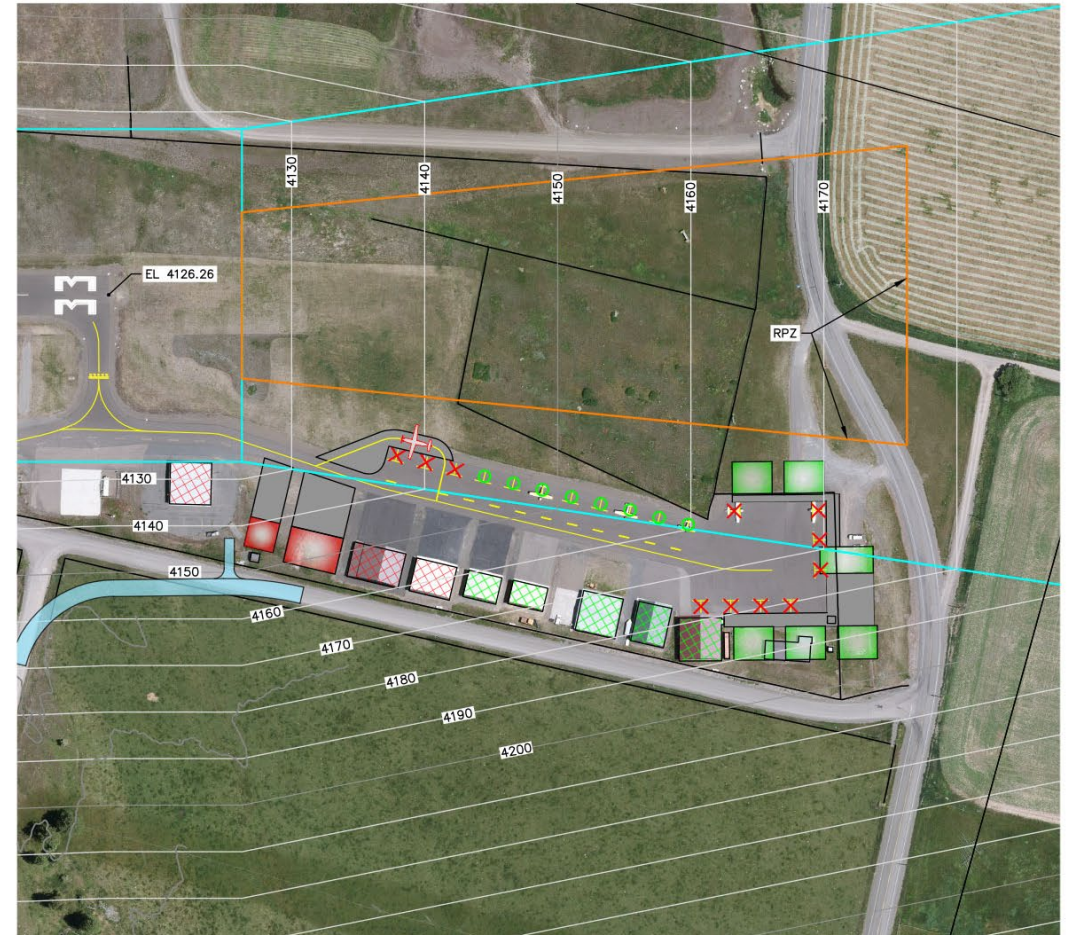
# Landside Development Alternatives / Improvement Options

# Alternative 1A & 1B

LEGEND			
	PROPOSED HANGAR (CONFLICT)		TIEDOWN (REMOVE)
	PROPOSED HANGAR (NO CONFLICT)		TIEDOWN (NO CONFLICT, TO REMAIN)
	PROPOSED ASPHALT PAVEMENT		RUNWAY PROTECTION ZONE
	PROPOSED ROAD REALIGNMENT		PART 77 AIRSPACE
	EXISTING HANGAR (CONFLICT)		PILATUS PC-12 (NO CONFLICT)
	EXISTING HANGAR (NO CONFLICT)		PILATUS PC-12 (CONFLICT)



ALTERNATIVE 1A (EXISTING, VISUAL AIRSPACE)



ALTERNATIVE 1B (PROPOSED NON-PRECISION INSTRUMENT AIRSPACE)

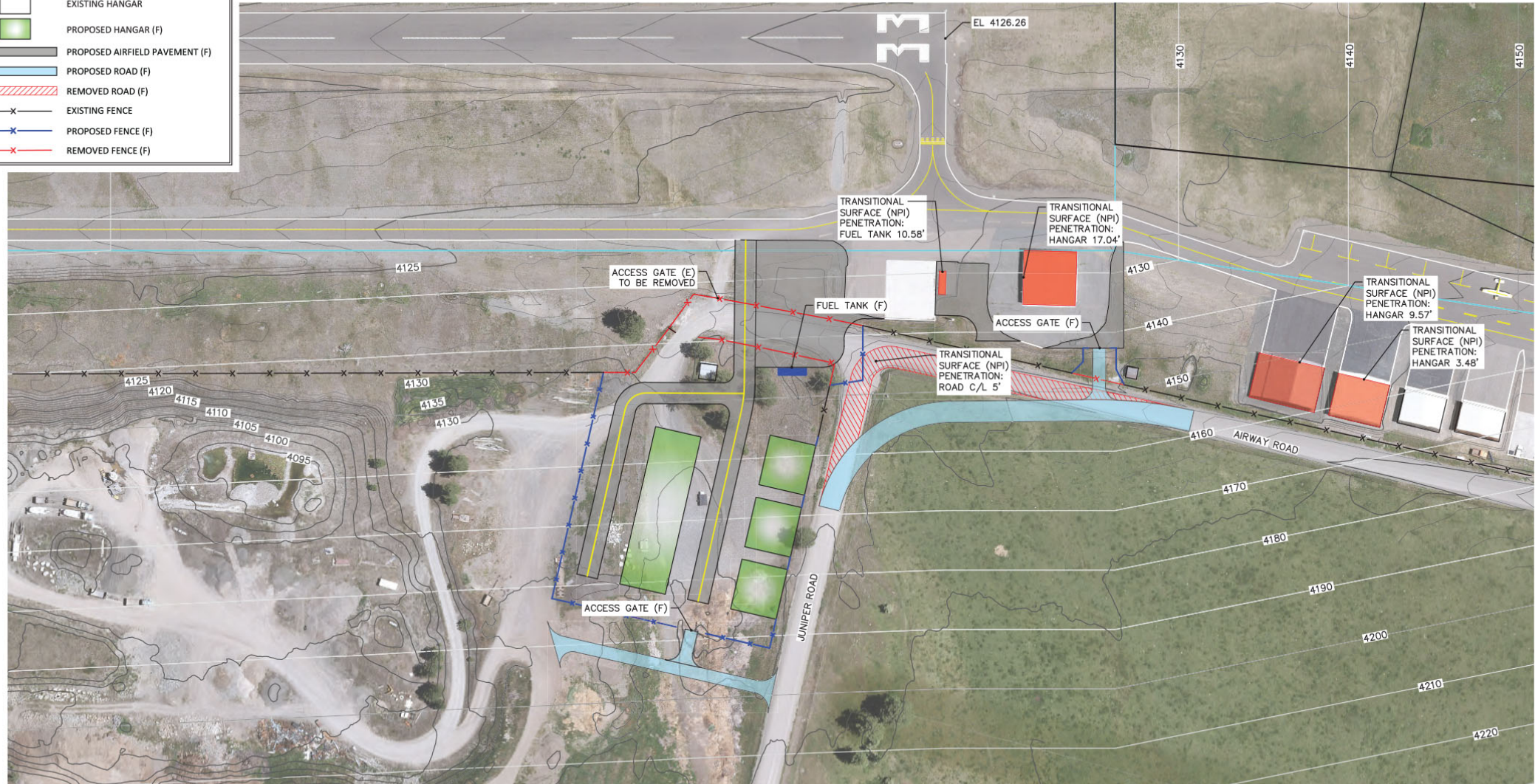
# Alternative 2A

LEGEND	
	EXISTING HANGAR
	PROPOSED HANGAR (F)
	PROPOSED AIRFIELD PAVEMENT (F)
	PROPOSED ROAD (F)
	REMOVED ROAD (F)
	EXISTING FENCE
	PROPOSED FENCE (F)
	REMOVED FENCE (F)



ALTERNATIVE 2A - WEST SIDE HANGAR DEVELOPMENT AREA - FAR PART 77 (VIS) AIRSPACE

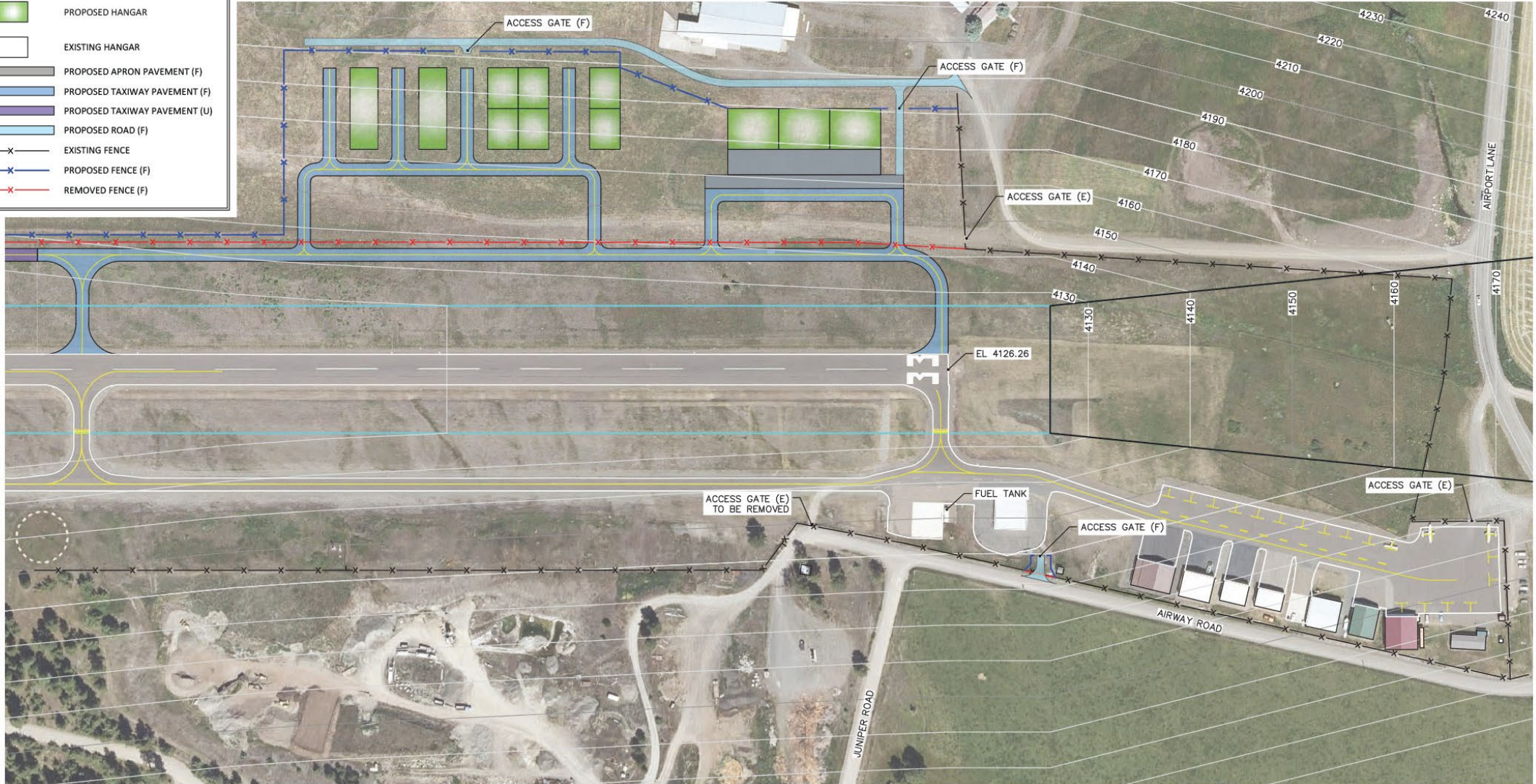
LEGEND	
	EXISTING HANGAR
	PROPOSED HANGAR (F)
	PROPOSED AIRFIELD PAVEMENT (F)
	PROPOSED ROAD (F)
	REMOVED ROAD (F)
	EXISTING FENCE
	PROPOSED FENCE (F)
	REMOVED FENCE (F)



ALTERNATIVE 2B - WEST SIDE HANGAR DEVELOPMENT AREA - FAR PART 77 (NPI) AIRSPACE

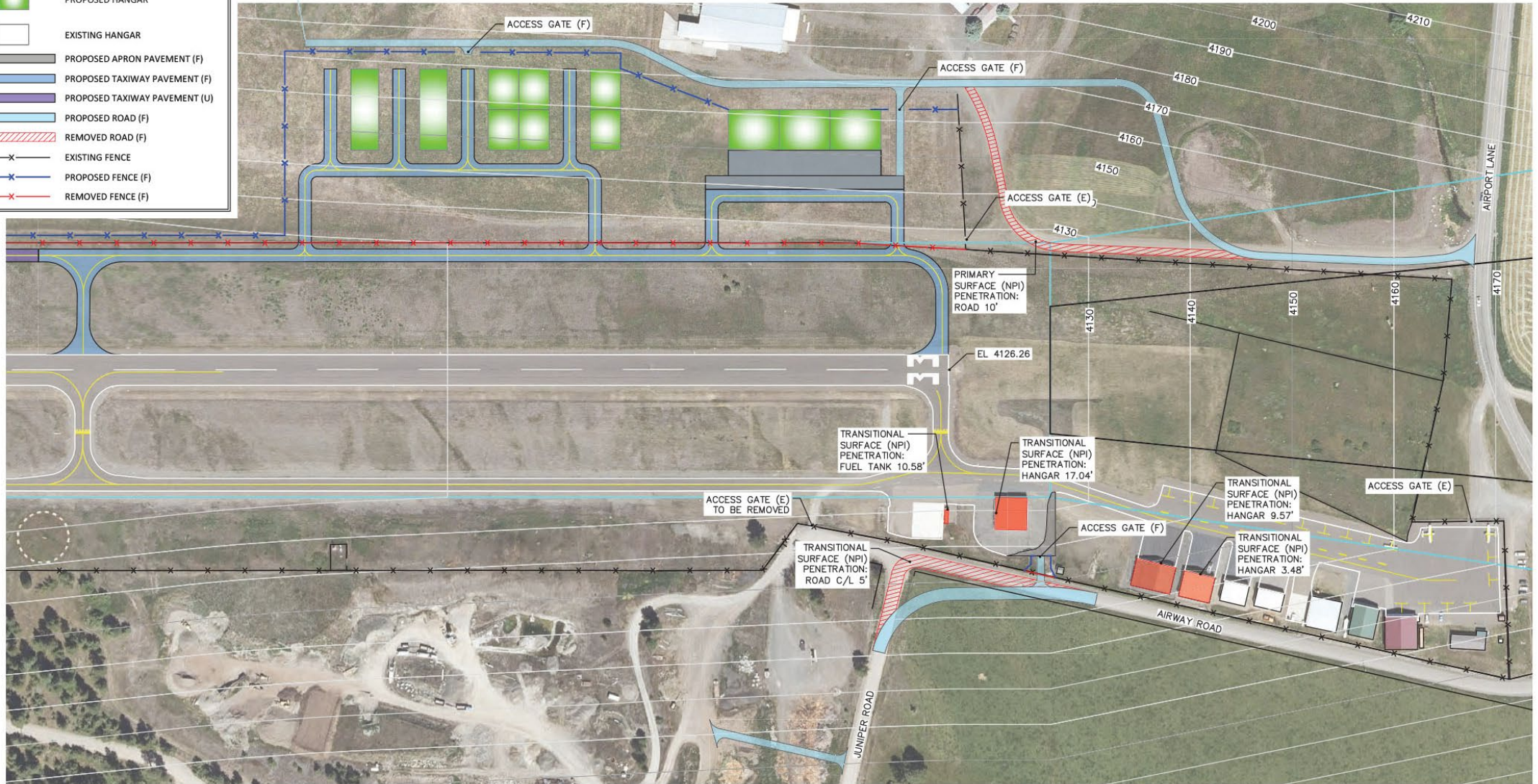
# Alternative 3A

LEGEND	
	PROPOSED HANGAR
	EXISTING HANGAR
	PROPOSED APRON PAVEMENT (F)
	PROPOSED TAXIWAY PAVEMENT (F)
	PROPOSED TAXIWAY PAVEMENT (U)
	PROPOSED ROAD (F)
	EXISTING FENCE
	PROPOSED FENCE (F)
	REMOVED FENCE (F)



# Alternative 3B

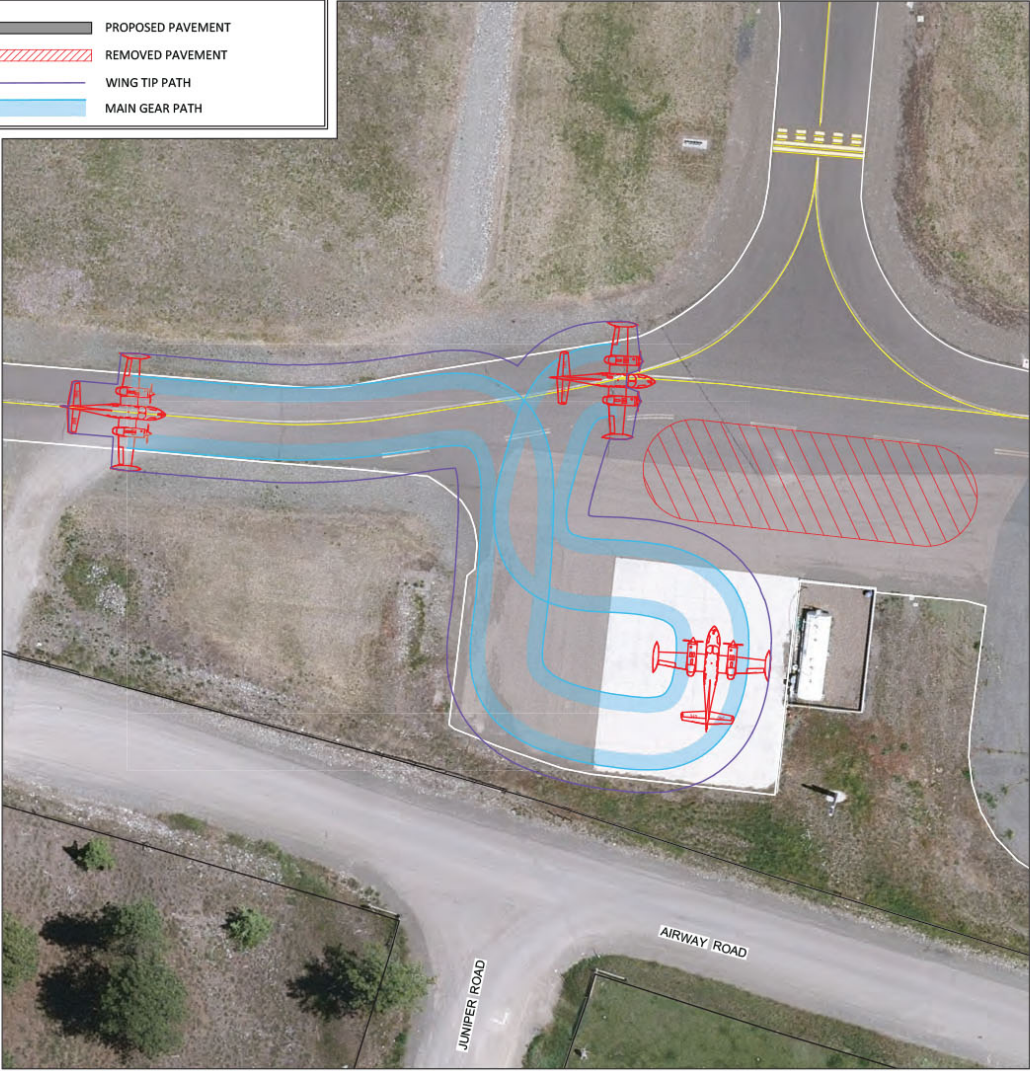
LEGEND	
	PROPOSED HANGAR
	EXISTING HANGAR
	PROPOSED APRON PAVEMENT (F)
	PROPOSED TAXIWAY PAVEMENT (F)
	PROPOSED TAXIWAY PAVEMENT (U)
	PROPOSED ROAD (F)
	REMOVED ROAD (F)
	EXISTING FENCE
	PROPOSED FENCE (F)
	REMOVED FENCE (F)



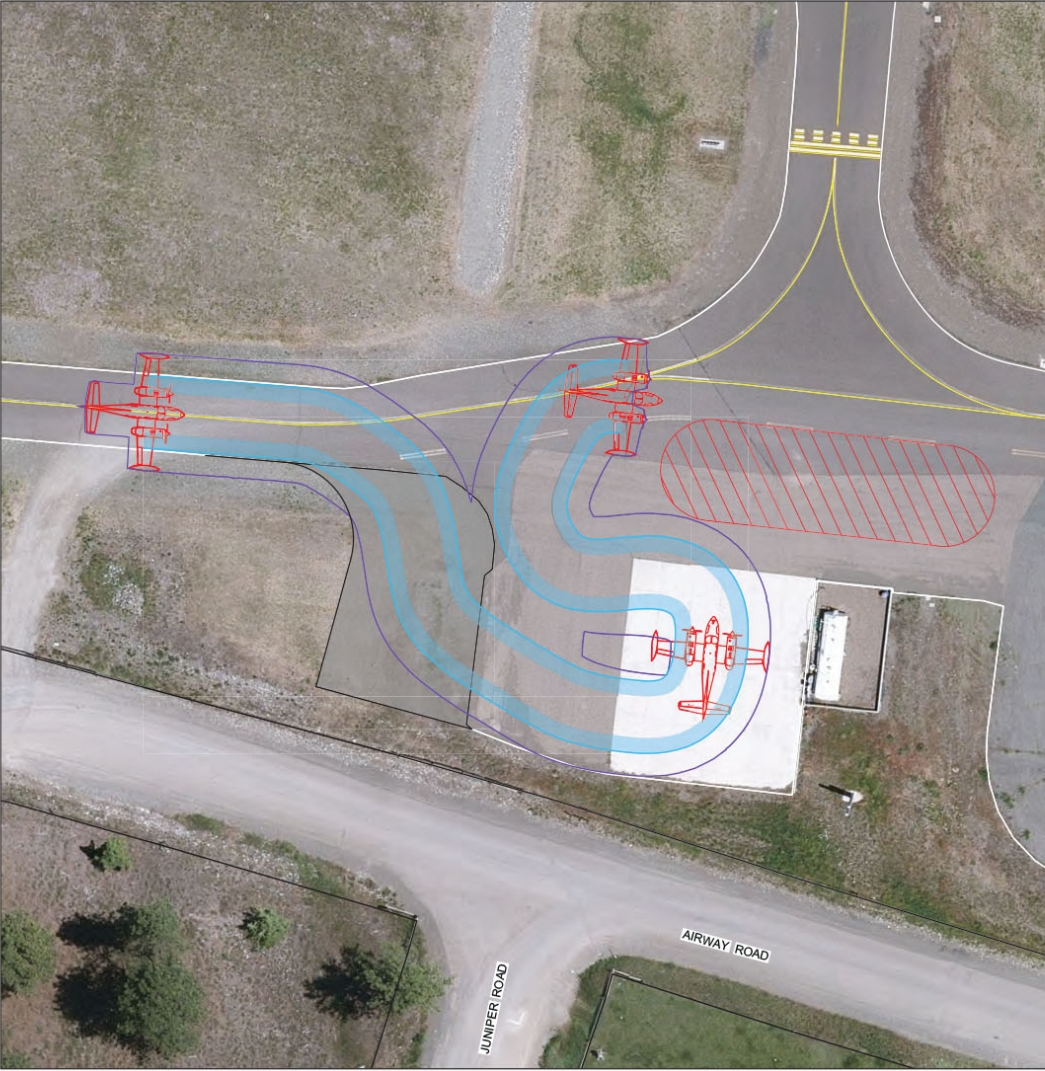
# Alternative 4A



LEGEND	
	PROPOSED PAVEMENT
	REMOVED PAVEMENT
	WING TIP PATH
	MAIN GEAR PATH

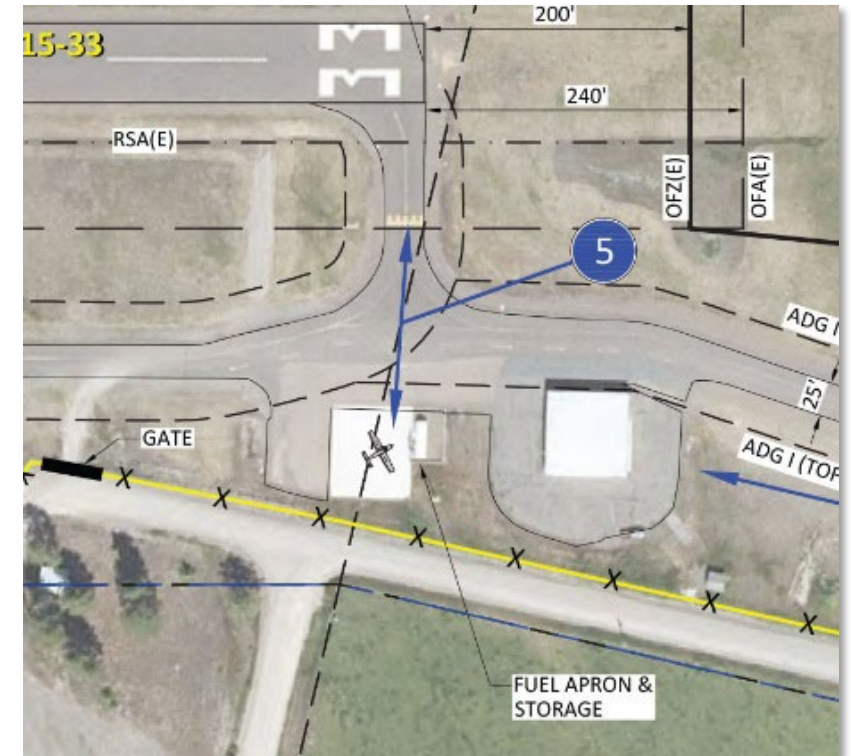


ALTERNATIVE 4A - EXISTING APRON PAVEMENT



ALTERNATIVE 4B - EXPANDED APRON PAVEMENT

- FAA Runway Incursion Standard (Apron to Runway)
  - The aircraft fueling apron is directly aligned with Taxiway A1, providing direct access between the apron and the runway
  - FAA design guidance requires changes in taxiing direction between aprons and runways to increase pilot situational awareness





- Preliminary Development Alternatives
  - Draft Alternatives Analysis chapter
    - PAC Meeting and Project Open House (February 25, 2021)
    - Documents Available for PAC and public review/comment [centurywest.com/joseph-state-airport-master-plan/](https://centurywest.com/joseph-state-airport-master-plan/)
    - Submitted to FAA for formal review/comment
- Airport Development Alternatives Refinement
  - ODA will analyze PAC review comments and all other stakeholder review comments provided on Draft Alternatives Analysis chapter
  - ODA will define the elements of the preliminary preferred alternative and/or identify additional evaluations required to support decision
  - The Alternatives Analysis chapter will be updated to include the recommended preferred alternative, and presented for PAC, stakeholder, and public review.
  - ODA will present its recommendations to the State Aviation Board at its April 1, 2021 meeting.

# Thank You



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Matt Rogers - [wrogers@centurywest.com](mailto:wrogers@centurywest.com)

## Project Website

[www.centurywest.com/joseph-state-airport-master-plan/](http://www.centurywest.com/joseph-state-airport-master-plan/)