

Aurora State Airport Master Plan Project



Planning Advisory Committee – Working Session
Online Meeting
July 30, 2024

Agenda

Time	Topic
5:00-5:15	Introductions
5:15-5:20	Review Approved Forecast (Draft CH 3 – Working Paper #1)
5:20-5:30	PAC Clarifying Questions
5:30-5:40	Review Facility Requirements (Draft CH 4)
5:40-5:50	PAC Clarifying Questions
5:50-6:10	Comment Themes – Preliminary Alternatives (PAC Meeting #6)
6:10-6:40	Review Refined Preliminary Alternatives
6:40-7:40	PAC Comments
7:40-7:55	Public Comments
7:55-8:00	Next Steps Public comments collected through the website https://publicproject.net/AuroraAirport

Introductions

Oregon Department of Aviation (ODAV)

Kenji Sugahara

Director

Alex Thomas

Planning & Project Manager

Tony Beach

State Airports Manager

Brandon Pike

Aviation Planner

Project Team

Agency Oversight & Funding



Airport Owner (Sponsor)



Planning & Engineering



Public Involvement



Cultural Resources



Archaeological
Investigations
Northwest, Inc.

Environmental Review



AGIS Survey



Project Website Overview

Aurora State Airport Master Plan

[Resources & Documents](#) [Public Meetings](#) [Contact & Comment](#)

AIRPORT MASTER PLAN

The Oregon Department of Aviation (ODAV) in cooperation with the Federal Aviation Administration (FAA) is preparing an Airport Master Plan for the Aurora State Airport to address the airport's needs for the next twenty years.

As required by the FAA, the Airport Master Plan will provide specific guidance in making the improvements necessary to maintain a safe and efficient airport that is economically, environmentally, and socially sustainable. The Airport Master Plan will also:

- Define the current, short-term and long-term needs of the Airport through a comprehensive evaluation of facilities, conditions and FAA airport planning and design standards.
- Look at what is happening around the airport that could affect the future plans, development and operation of the airport such as land use, transportation, environmental, economic development, etc.



<https://publicproject.net/AuroraAirport>

PAC Members & Alternates

- Airport Users/Businesses/Organizations
- Airport Neighbors
- Local Municipalities
- Tribal Organizations
- State Agencies
- Local and Regional Non-Profit Groups
- Environmental / Land Use Groups

PAC Meeting Guidelines

Meetings summaries will **include all comments along with responses/ follow up.**

- Meeting time **for all committee members to speak.** We have added more time for dialogue.
- Comments on **non-agenda items** should be provided in writing.
- Committee members are encouraged to **provide comments on draft work products presented within the allotted review period** provided by the Planning Team.

PAC Meeting Guidelines

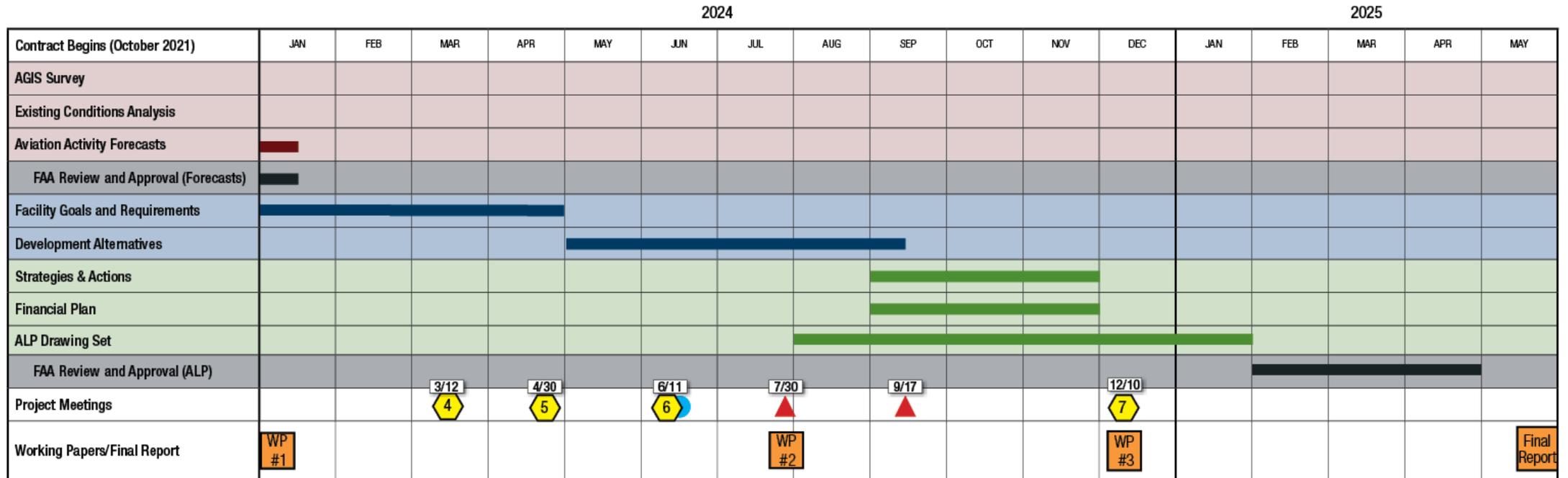
As a committee, we agree to **approach this work with honesty, openness, and willingness to work together.**

- This includes building trust and **assuming good intentions in others** and ensuring that our behavior supports a successful process.
- We will work with each other and staff to **address issues as they arise, utilize tools to ensure clear communication and robust participation, and meet the communication needs of members.**
- PAC members represent their organization, please keep your constituents informed of public meetings and project information.
- **We need all PAC members to name/identify themselves.** Duplicates will be removed from the meeting.

Project Schedule – Where are we?

Updated July 2024

Aurora State Airport - Airport Master Plan Project Schedule (all future dates tentative)



█ Develop Understanding
 █ Explore Solutions
 █ Implementation
 █ FAA Review and Approval

⬡ PAC Meetings
 ● Public Open House
 ▲ PAC Working Session Meeting

4 Forecast Approval Overview

5 Facility Goals and Requirements

6 Review of Comments and Responses from Facility Requirements & Preliminary Alternatives

▲ Review of Comments and Responses from Preliminary Alternatives & Preferred Alternative

7 CP, ALP, and Draft Final for FAA Review

Note - Schedule has been updated July 2024 to reflect the addition of a PAC Working Session on 9/17/2024

Master Plan Forecast



U.S. Department of Transportation
Federal Aviation Administration

Northwest Mountain Region
 Colorado · Idaho · Montana · Oregon · Utah
 Washington · Wyoming

Seattle Airports District Office
 2200 S 216th Street, Rm 1W-422
 Des Moines, WA 98198

November 15, 2023
 *Corrected January 23, 2024

Tony Beach
 State Airports Manager
 Anthony.BEACH@odav.oregon.gov
 Oregon Department of Aviation

Federal Aviation Administration (FAA)
 Aurora (UAO) Aviation Activity Forecast Approval
 Airport Improvement Program Grant Number 3-41-0004-022-2021

The FAA Airports District Office has reviewed the aviation forecast for the Aurora (UAO) Airport Working Paper No. 1 (latest revision dated November 2023). The FAA approves these forecasts for airport planning purposes, including Airport Layout Plan (ALP) development, in addition to the existing and future critical aircraft. The FAA approval is based on the information submitted in Chapter 3, summarized as follows:

Airport Planning and TAF Forecast Comparison				
	Year	Airport Forecast	TAF	AF/TAF (% Difference)
Passenger Enplanements				
Base yr.	2021	0	0	0.0%
Base yr. + 5yrs.	2026	0	0	0.0%
Base yr. + 10yrs.	2031	0	0	0.0%
Base yr. + 15yrs.	2036	0	0	0.0%
Commercial Operations				
Base yr.	2021	2,006	1,727	16.2%
Base yr. + 5yrs.	2026	2,056	1,845	11.4%
Base yr. + 10yrs.	2031	2,108	1,967	7.1%
Base yr. + 15yrs.	2036	2,160	2,097	3.0%
Total Operations				
Base yr.	2021	76,028	76,794	-1.0%
Base yr. + 5yrs.	2026	79,354	78,053	1.7%
Base yr. + 10yrs.	2031	82,825	79,109	4.7%
Base yr. + 15yrs.	2036	86,449	80,198	7.8%

Note: TAF data is on a U.S. government fiscal year basis (October through September).

*Highlighted cells corrected to correspond to values from Table 3-23 Forecast Summary.

Based on the approved forecast, the FAA also approves the C-II family of aircraft, for the existing and future critical aircraft.

Our approval is based on the following:

- The forecast is supported by reasonable planning assumptions and current data
- The forecast appears to be developed using acceptable forecasting methodologies
- The difference between the FAA Terminal Area Forecast (TAF) and the Airport's forecast for total operations is within the 10 percent and 15 percent allowance for the 5 and 10 year planning horizons.

Approval of this forecast does not automatically justify any of the capital improvements shown on the ALP or recommended in the master plan. All future projects will need to be justified by current activity levels at the time of proposed implementation. Lastly, the approved forecasts may be subject to additional analysis, or the FAA may request a sensitivity analysis if this data is to be used for environmental or Part 150 noise planning purposes.

This forecast was prepared at the same time as the evolving impacts of the COVID-19 public health emergency. Forecast approval is based on the methodology, data, and conclusions at the time the document was prepared. However, consideration of the impacts of the COVID-19 public health emergency on aviation activity is warranted to acknowledge the reduced confidence in growth projections using currently-available data.

Accordingly, FAA approval of this forecast does not constitute justification for future projects. Justification for future projects will be made based on activity levels at the time the project is requested for development. Documentation of actual activity levels meeting planning activity levels will be necessary to justify AIP funding for eligible projects.

If you have any questions about this forecast approval, please call me at (206) 231-4248.

Sincerely,
 Tim House

TIMOTHY ALLEN HOUSE
Digitally signed by TIMOTHY ALLEN HOUSE
 Date: 2024.01.23 14:33:42 -0800

Lead Planner
 SEA Airports District Office

cc: (Samantha Peterson)

Key Takeaways from the Airport Master Plan Forecasts

- Summary:
 - The FAA provided extensive reviews of the draft forecasts at both the region and headquarters levels over an extended period
 - The FAA reviews focused on model relevance and forecast growth rates, compared to national FAA forecasts
 - The final recommended forecast model provides a reasonable projection of activity required for master planning
 - The master plan forecasts were approved by FAA in November 2023
 - The current and future design aircraft is a medium/large business jet - Runway Design Code (RDC): C-II

Key Takeaways from the Airport Master Plan Forecasts

- *Why Air Traffic Control Tower (ATCT) data were not used to project future activity in the recommended forecast:*
- **Air Traffic Data Limits**
 - The Aurora Air Traffic Control Tower started operation in late 2015
 - The small number of years of ATCT data (2016-2021) was insufficient to project a reliable 20-year trend
 - The unprecedented changes in airport activity experienced in 2020 and 2021 (COVID) further reduced ability to define a reliable long-term trend
 - ATCT activity during this brief period yielded a higher growth rate that was not considered sustainable through the 20-year planning period
 - Historical instrument flight plan data was not appropriate for projecting local operations, which is predominantly flight training activity in the traffic pattern

Key Takeaways from the Airport Master Plan Forecasts

- The FAA approved the draft master plan forecasts November 15, 2023
- Recommended Model - PSU 2021-2041 Population Forecast - Marion and Clackamas Counties
 - The population-based model reflects a modest upward trend that is consistent with conditions favorable to increased activity at Aurora State Airport
 - The model does not establish a statistical correlation between population and airport activity
 - The model is consistent with broad economic expectations for the region, including growth in employment
 - The model's average annual growth rate (0.9%) is in line with FAA national aerospace forecasts for GA operations at towered airports (<1% annual average growth)

**Clarifying
Questions?**

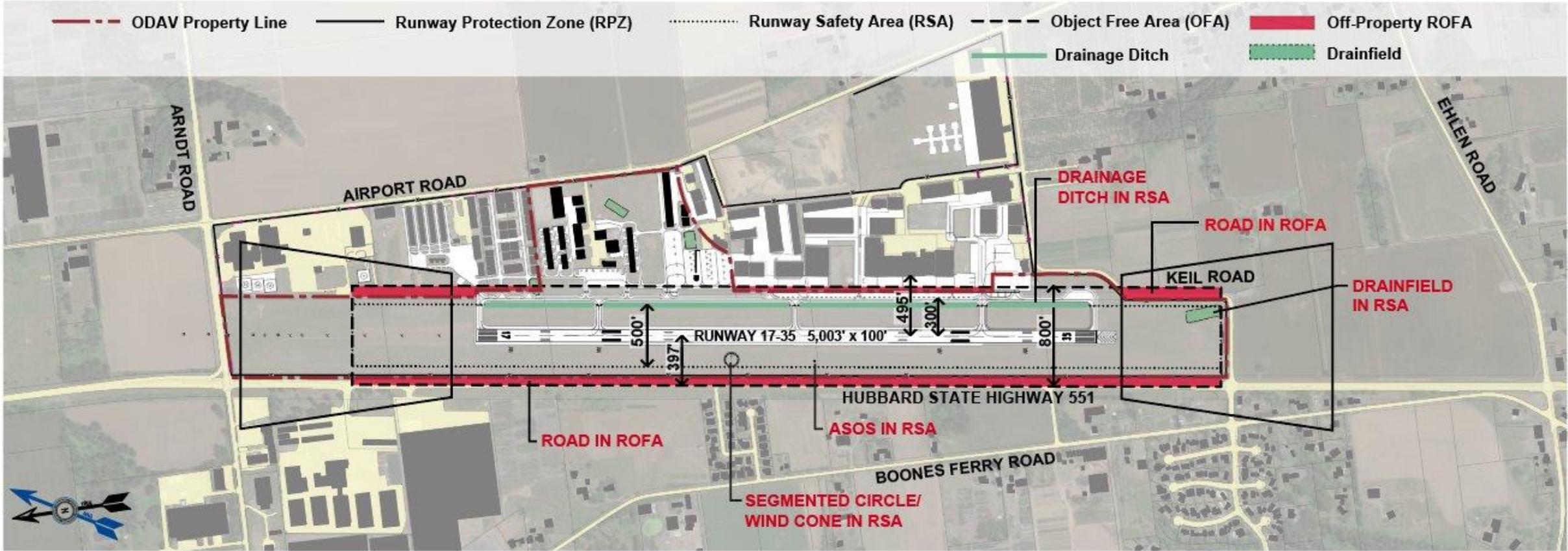
Review:

Facility Requirements Summary

Facility Requirements – Summary of Evaluation

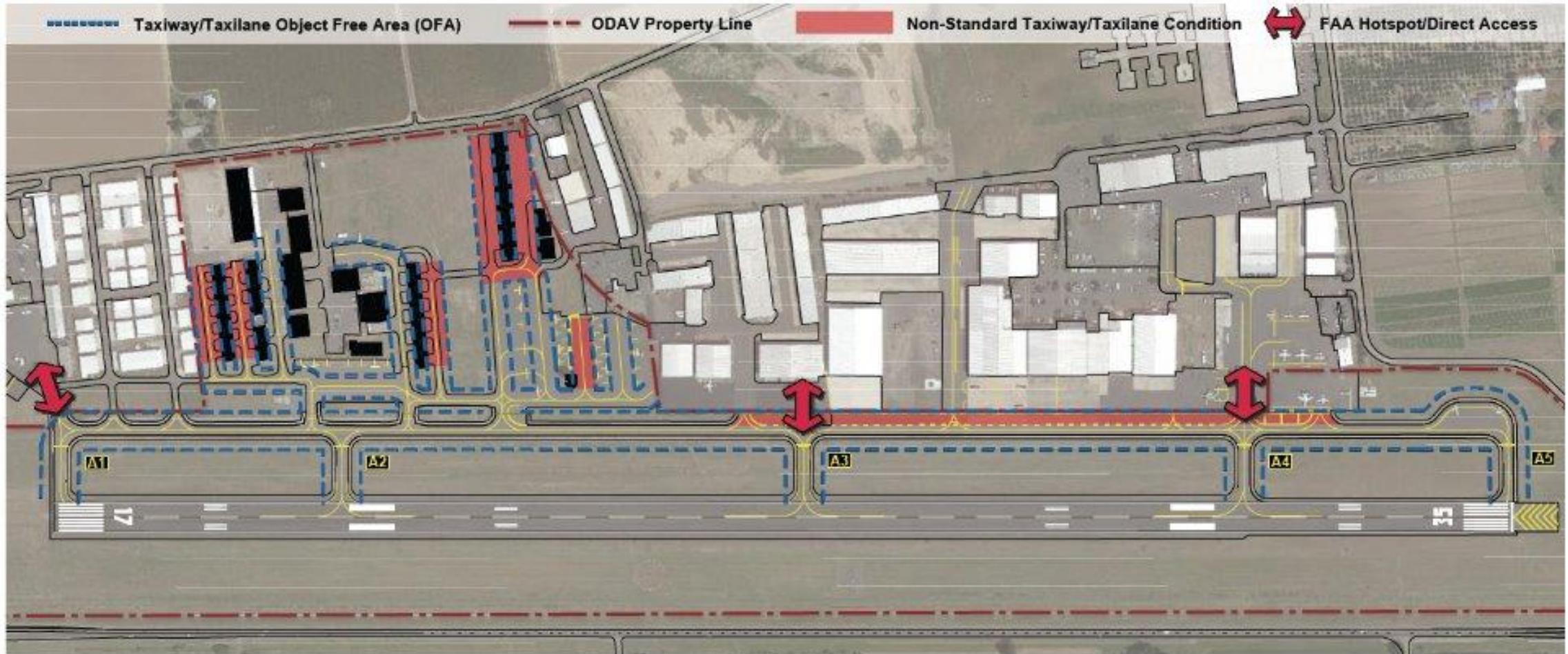
- Existing & Future Design Aircraft – Medium/Large Business Jet
 - C-II standards for runway-taxiway system
 - All airfield components must meet C-II standards
- Runway Length Evaluation: Justified Length: 5,500 feet
 - Based on current and forecast air traffic

Facility Requirements Summary – Airside



Source: Century West Engineering

Facility Requirements Summary – Landside



Source: Century West Engineering

Facility Requirements Review

- Design Standards
 - Runway Object Free Area (ROFA)
 - **Non-standard Items:** Hubbard Highway, Keil Road, ASOS, Wind Cone
 - Runway Safety Area (RSA)
 - **Non-standard Items:** Drain field (south end), open ditches
 - Direct Runway Access
 - **FAA design guidance:** Avoid straight-line direct access taxi routes between aprons/hangars and runway

- Landside Capacity
 - Development/redevelopment of landside areas to accommodate new demand for hangars and aircraft parking

**Clarifying
Questions?**

PAC Meeting #6

Comment Themes

PAC Meeting #6

Comment Themes

- Noise Concerns
- EFU Land Impacts
- Property Acquisition Needs
- Increase in Traffic/Operations
- Impacts to Existing Roads

Review:

Refined Preliminary Alternatives

Assumptions

- Significant changes in assumptions that went into the refined alternatives:
 - Maintaining current non-standard conditions is not acceptable to FAA
 - FAA requires airfield facilities planning to be consistent with forecast demand and the associated design standards
 - Runway may be placed in maintenance only mode by FAA until progress is made towards meeting design standards
 - Failure to make measurable progress may jeopardize future FAA funding

Assumptions

- Significant changes in assumptions that went into the refined alternatives (continued):
 - All airside alternatives will include a parallel taxiway adjacent to the east parallel taxiway to accommodate aircraft movement and access from landside facilities to the taxiway
 - A Vehicle Service Road (VSR) will be provided along the frontage of the east landside areas
 - East Side Property Acquisition - lands currently in aeronautical use in the vicinity of the Aurora State Airport are identified for future property acquisition to insure continued long-term aeronautical use
 - Several land parcels are required to meet FAA design standards and airfield clearances, varies by alternative
 - Other land parcels would be identified on the ALP to allow their purchase to be eligible for FAA funding

Assumptions

- Significant changes in assumptions that went into the refined alternatives (continued):
 - South Runway Extension Option Eliminated
 - Due to the alternative's greater impacts on EFU-zoned land
 - Existing ODOT Hubbard Highway Right-of-Way Width (200' +/-) will be maintained for all airside alternatives.
 - ODOT plans for future highway configuration (lanes, intersection signalization, etc.) have not been determined, but future upgrades are possible if traffic volume increases
 - This requires additional ROW acquisition west of the highway for the highway shift options
 - The shifted ROW would impact several adjacent residential and commercial properties

Review:

**Refined Alternative 1A – Shift Hubbard Highway
West and Extend Runway North to 5,500 feet**

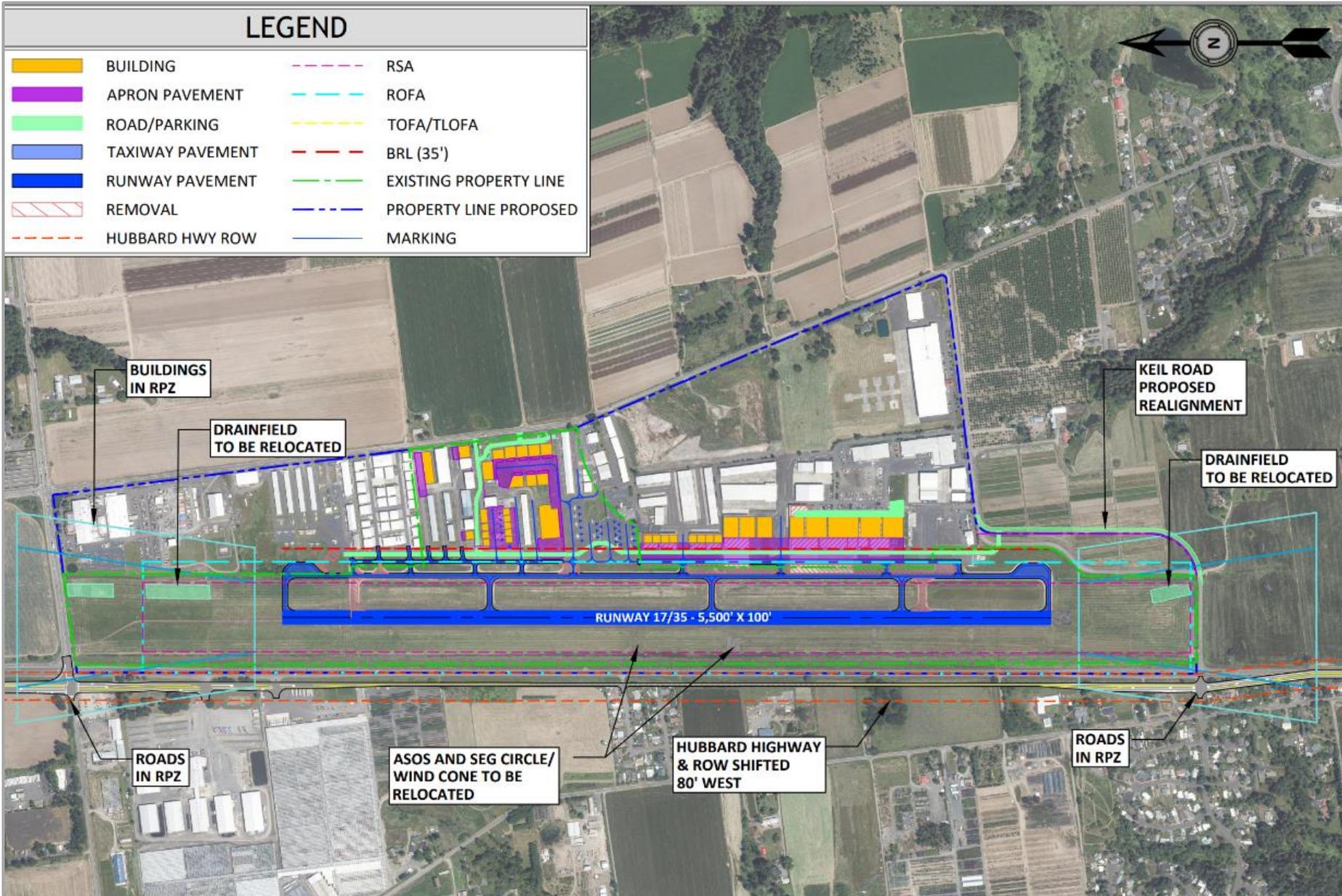
SUMMARY

Refined Alternative 1A –Shift Hubbard Highway West and Extend Runway North to 5,500 feet

- **Refined Option for Preliminary Alternative 1** - Impacts to both aeronautical use facilities and non-aeronautical properties
 - Extends existing runway 497 feet north (5,500 feet)
 - Shifts Hubbard Highway and ODOT right-of way (ROW) approximately 80 feet west to clear ROFA; assumes new highway is centered in ROW and with the same roadway configuration
 - Maintains existing ODOT ROW width (200') by acquiring additional ROW on west side of highway

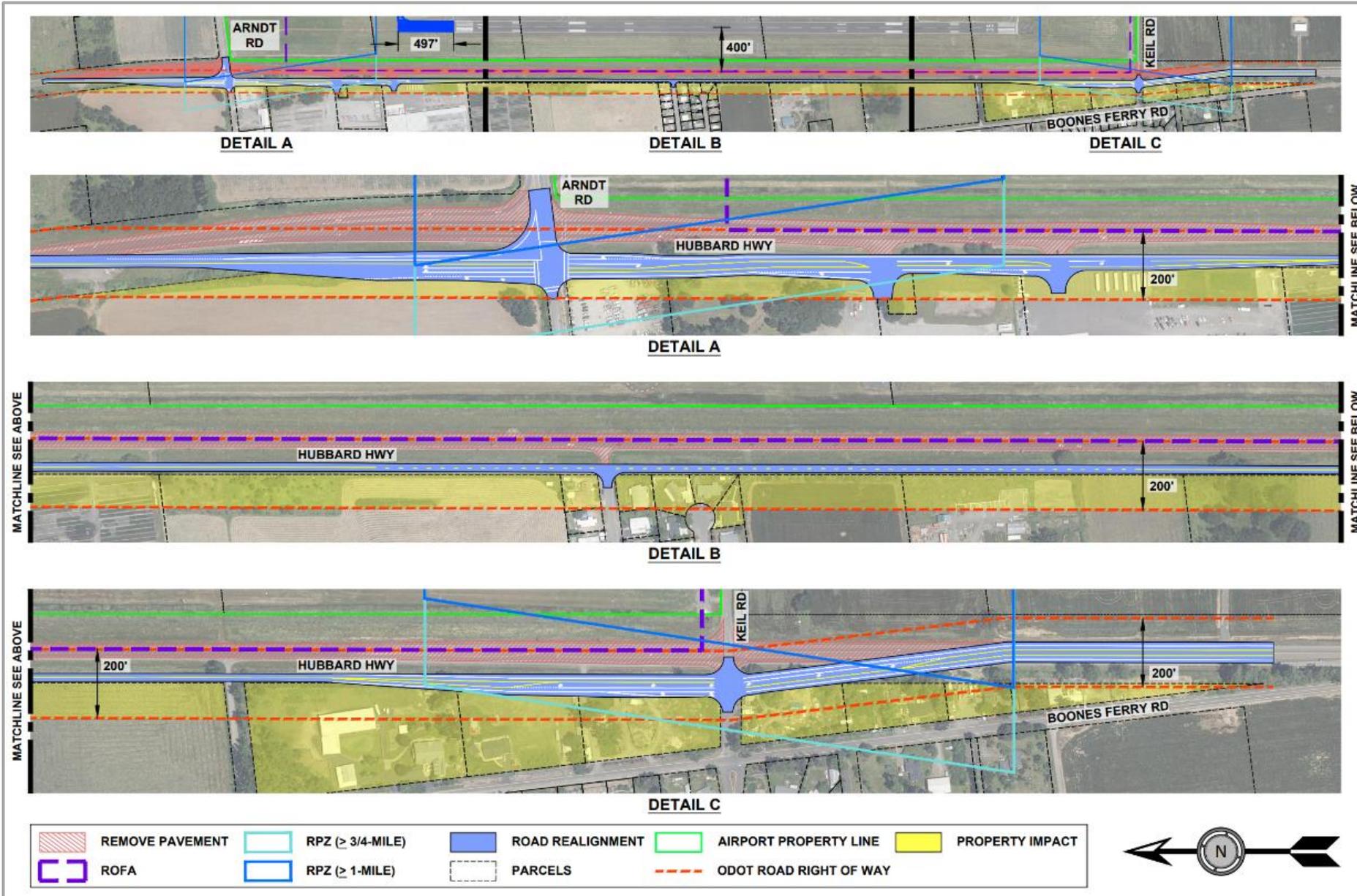
REFINED ALTERNATIVE 1A - Shift Hubbard Highway West and Extend Runway North to 5,500 feet

Overview



REFINED ALTERNATIVE 1A - Shift Hubbard Highway West and Extend Runway North to 5,500 feet

Highway Alignment Detail



SUMMARY

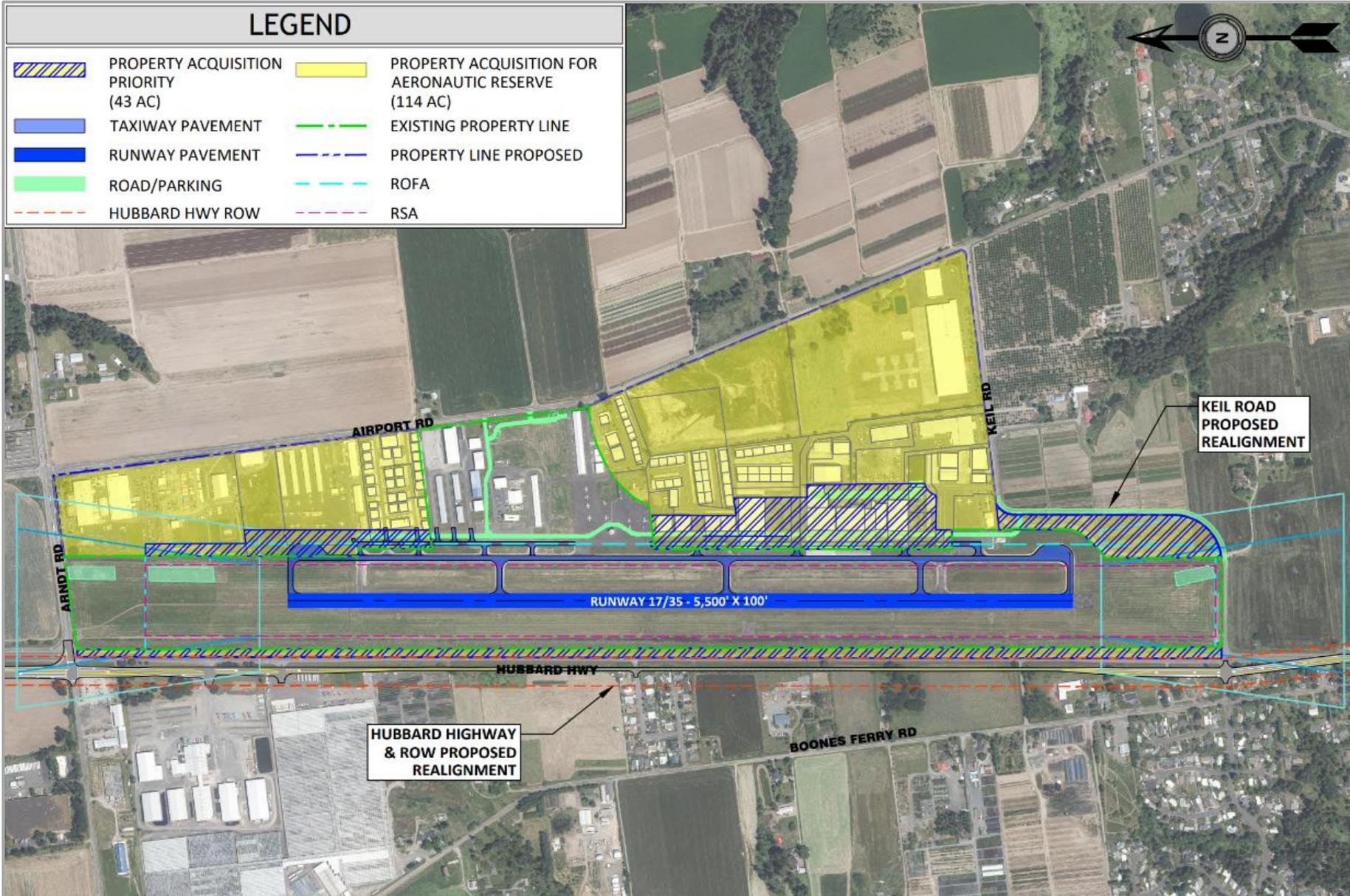
Refined Alternative 1A –Shift Hubbard Highway West and Extend Runway North to 5,500 feet

- **Land Requirements**

- Approx. 43 acres of property acquisition required to shift Hubbard Highway and ROW west and to construct a parallel taxiway and vehicle service road east of Taxiway A.
 - Shifting the ODOT highway ROW impacts 13 residential properties and 4 commercial properties located adjacent (west) of Hubbard Highway
- Approx. 114 acres of property adjacent to the east side of the Airport identified for potential acquisition to preserve long term aeronautical use, if available

REFINED ALTERNATIVE 1A - Shift Hubbard Highway West and Extend Runway North to 5,500 feet

Property Overview



SUMMARY

Refined Alternative 1A –Shift Hubbard Highway West and Extend Runway North to 5,500 feet

- **Aeronautical Development/Redevelopment**

- Includes a full length parallel taxiway and vehicle service road (VSR) east of Taxiway A to address direct runway access and VPD issues
- Requires removal of existing hangars to accommodate VSR
- Redevelopment of south apron aeronautical large hangars depicted east of current location
- ASOS, segmented circle/windsock in the ROFA, and drain fields in the RSA to be relocated pending further study
- Reroutes Keil Road to clear ROFA and TOFA
- Accommodates existing ATCT location

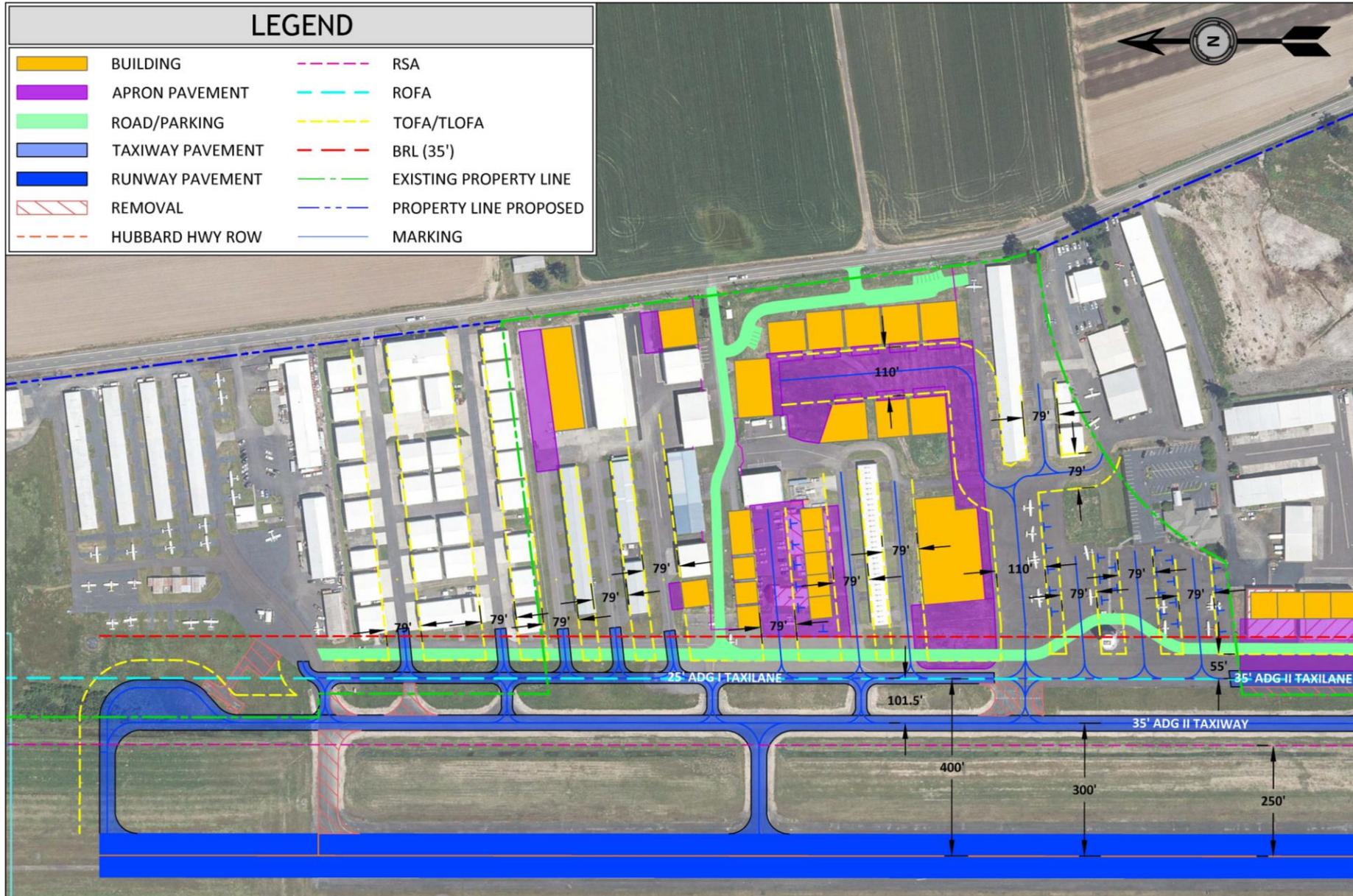
SUMMARY

Refined Alternative 1A –Shift Hubbard Highway West and Extend Runway North to 5,500 feet

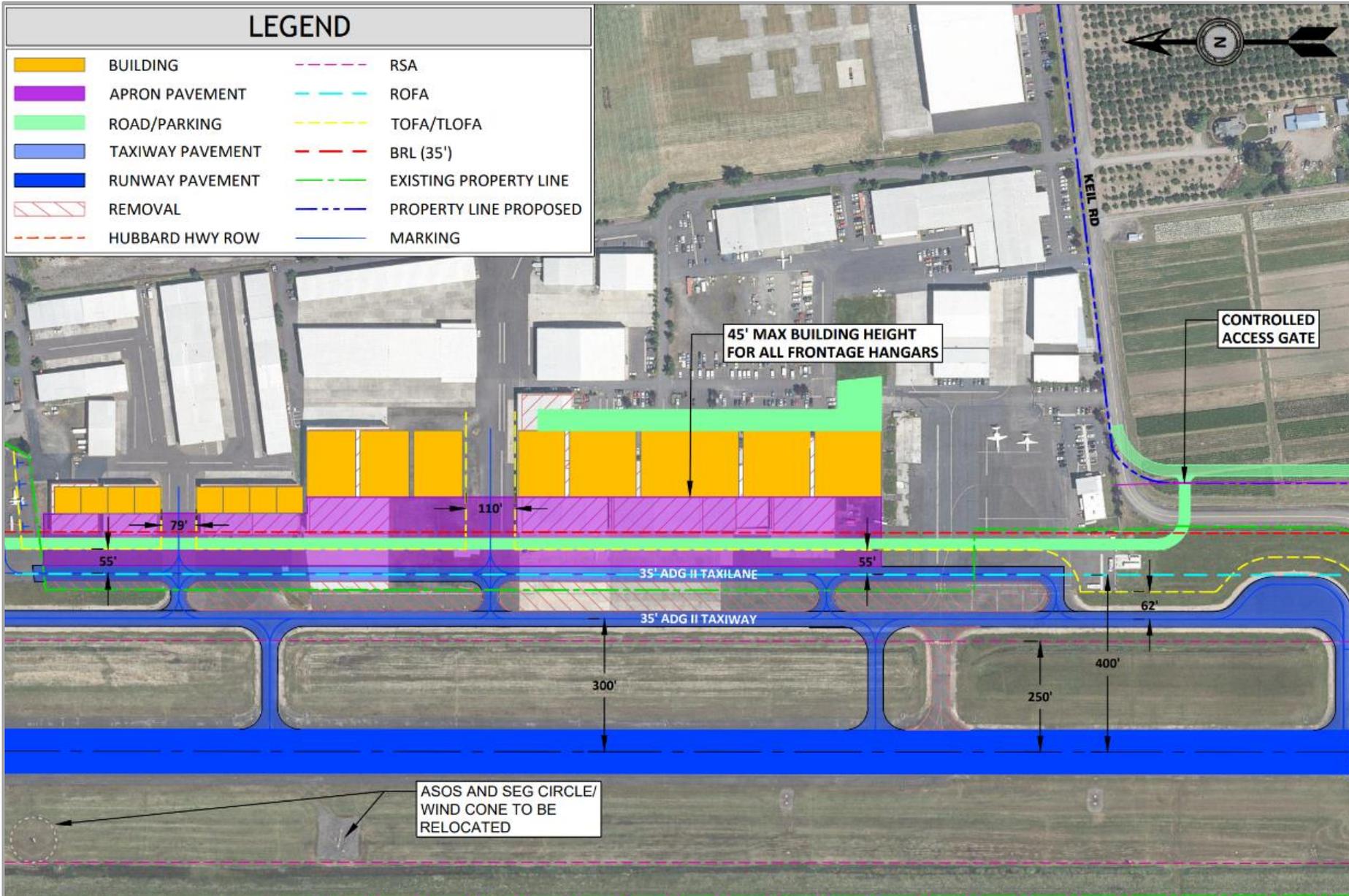
• **Aeronautical Development/Redevelopment (Continued)**

- South Apron aeronautical properties are acquired, and hangars removed to accommodate parallel taxilane and vehicle service road
 - Approx. 237,000 square feet of existing hangars space removed
- New hangars constructed along south apron at appropriate setback from parallel taxilane and vehicle service road
 - Approx. 195,000 square feet of new hangar space
- North landside area reconfigured to accommodate parallel taxilane and vehicle service road
 - Approx. 149,000 square feet of new hangar space
 - 29 small aircraft tiedowns
 - No helicopter parking
 - No large aircraft pull-through parking positions
 - Accommodates existing ATCT location

REFINED ALTERNATIVE 1A - Shift Hubbard Highway West and Extend Runway North to 5,500 feet Landside North



REFINED ALTERNATIVE 1A - Shift Hubbard Highway West and Extend Runway North to 5,500 feet Landside South



Review:

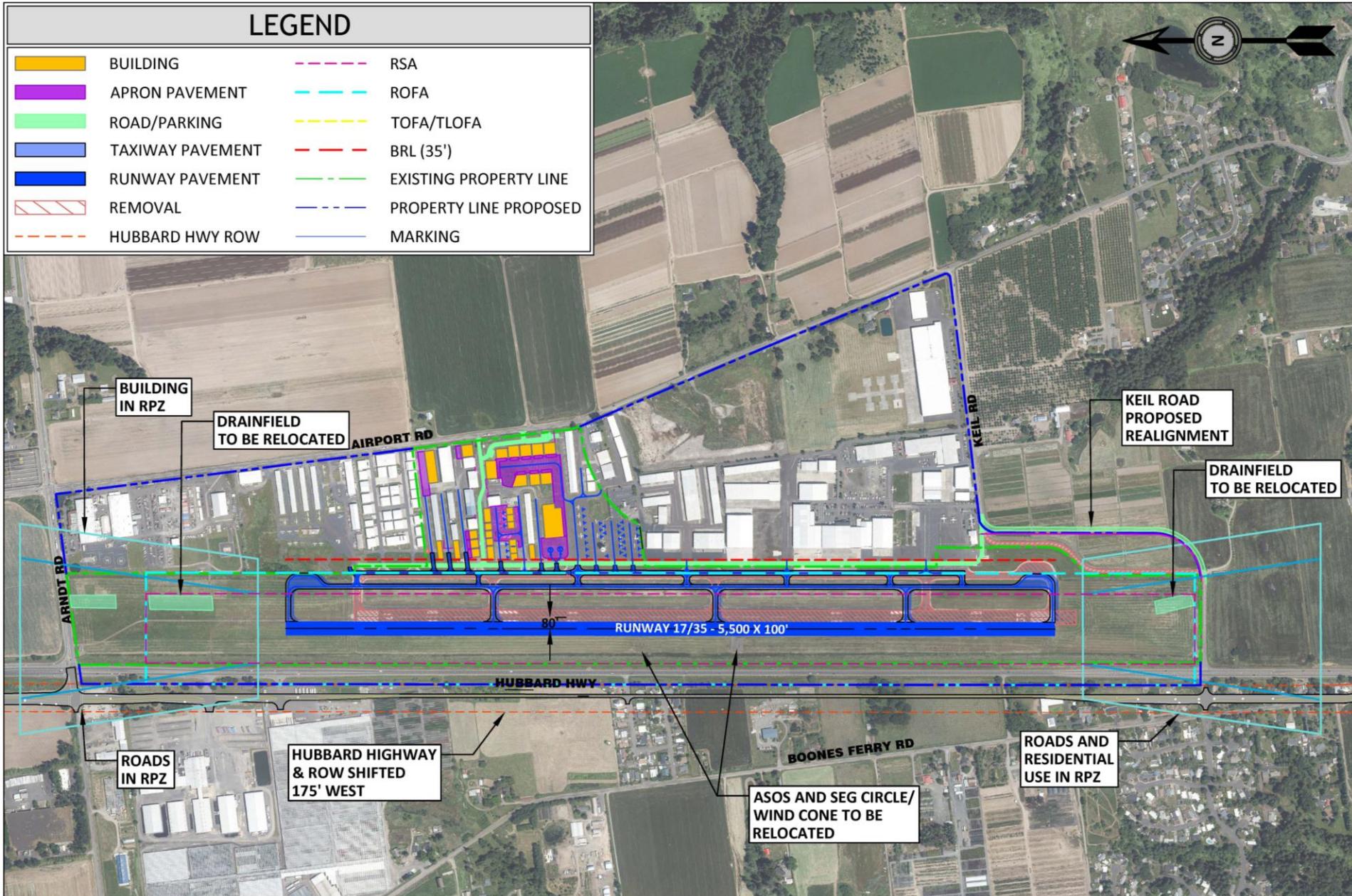
Refined Alternative 1B –Shift Runway and Hubbard Highway West and Extend Runway North to 5,500 feet

SUMMARY

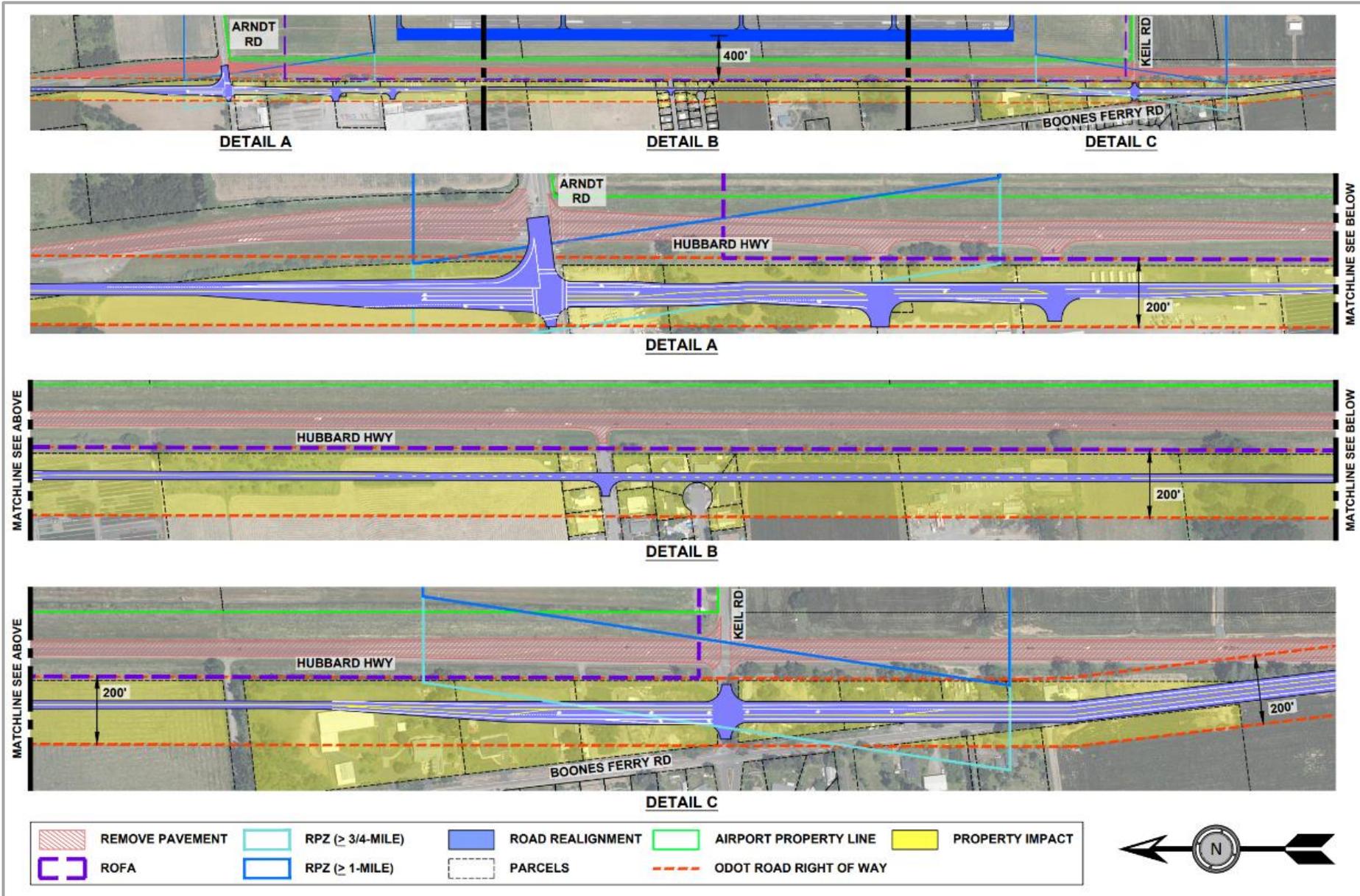
Refined Alternative 1B – Shift Runway and Hubbard Highway West and Extend Runway North to 5,500 feet

- **Refined Option for Preliminary Alternative 1** - Minimizes impacts to aeronautical facilities with greater impacts to non-aeronautical properties
 - Extends Runway 497 feet north (5,500 feet)
 - Shifts Runway approximately 80 feet west to accommodate parallel taxiway and vehicle service road on east side
 - Maintains existing 200' wide Hubbard Highway right-of way and shifts ROW approximately 175 feet west to clear ROFA
 - Includes a full length parallel taxiway and vehicle service road east of Taxiway A to address direct runway access and VPD issues
 - Reduced impacts to existing east hangars

Overview



REFINED ALTERNATIVE 1B - Shift Runway and Hubbard Highway West and Extend Runway North to 5,500 feet Highway Alignment Detail



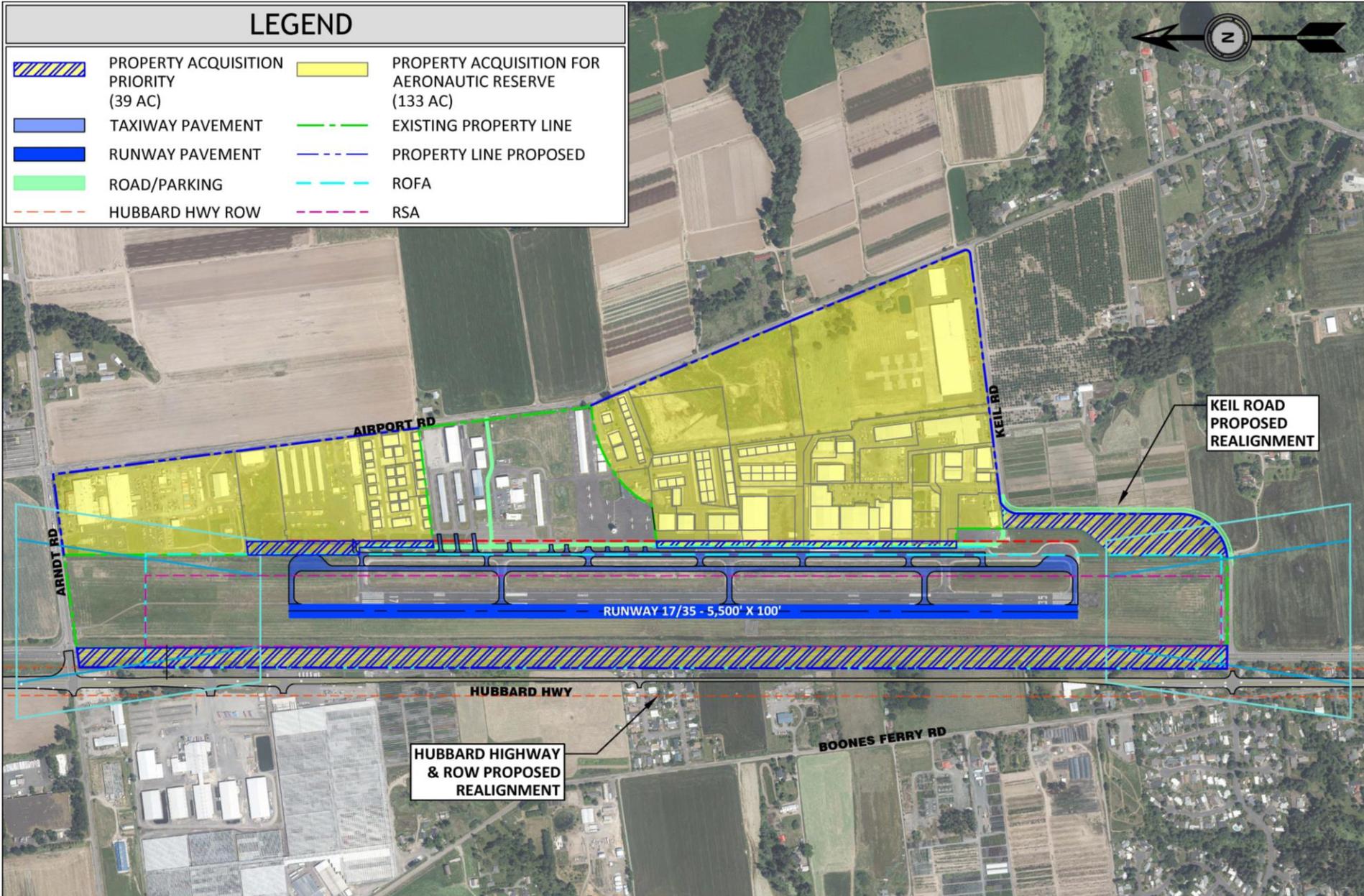
SUMMARY

Refined Alternative 1B –Shift Hubbard Highway West and Extend Runway North to 5,500 feet

- **Land Requirements**

- Approx. 39 acres of property acquisition required to shift Hubbard Highway and ROW west and to construct a parallel taxiway and vehicle service road east of Taxiway A
 - Shifting the ODOT highway ROW impacts 20 residential properties and 4 commercial properties located adjacent (west) of Hubbard Highway
- Approx. 133 acres of property adjacent to the east side of the Airport identified for potential acquisition to preserve long term aeronautical use, if available

Property Overview



SUMMARY

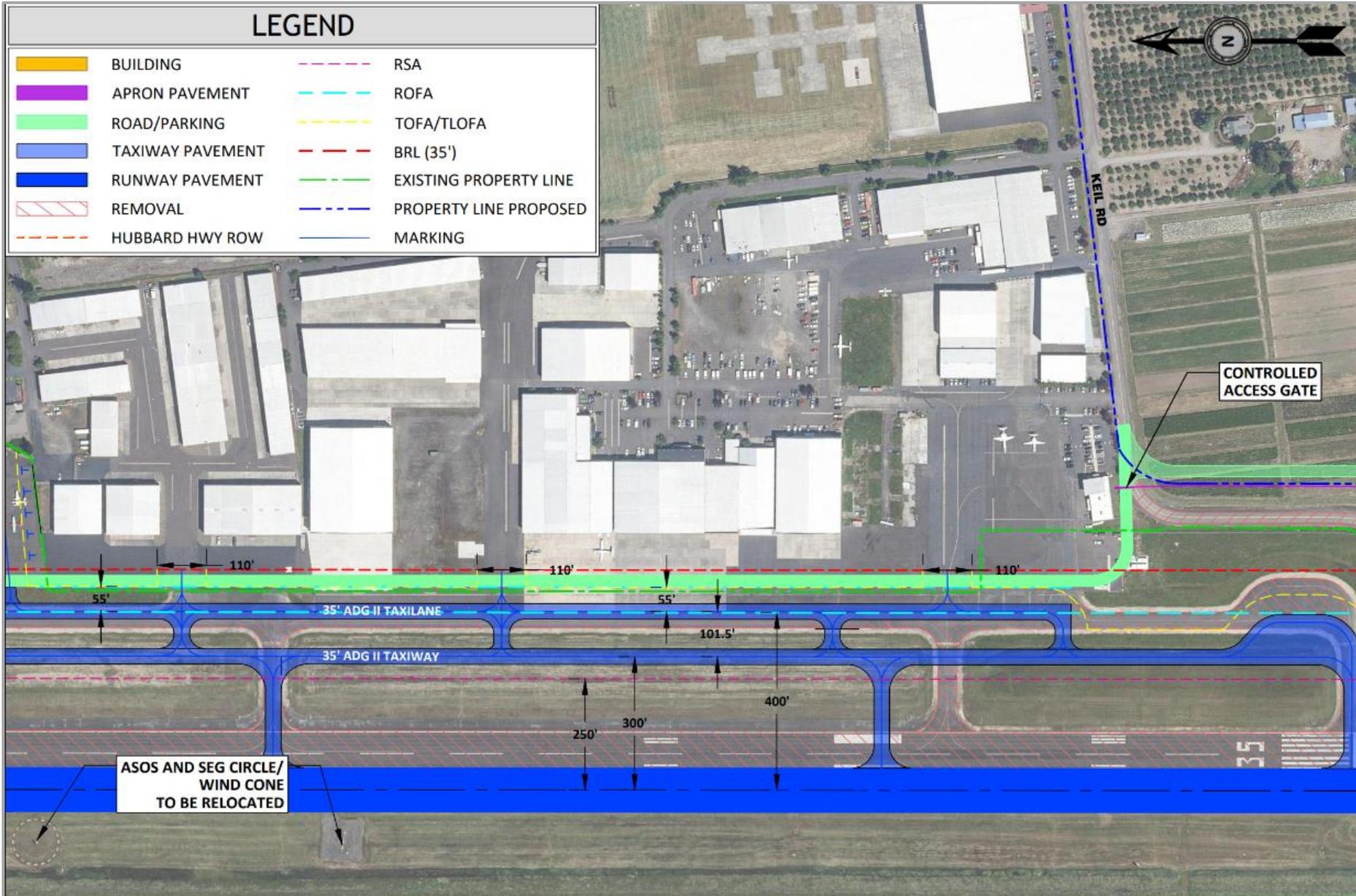
Refined Alternative 1B – Shift Runway and Hubbard Highway West and Extend Runway North to 5,500 feet

- **Aeronautical Development/Redevelopment**
 - North landside area redesigned to accommodate parallel taxiway and vehicle service road
 - 178,000 square feet of new hangar space
 - 36 small aircraft tiedowns
 - 2 helicopter parking positions
 - No large aircraft pull-through parking positions
 - Accommodates existing ATCT location
 - Reroutes Keil Road to clear ROFA and TOFA
 - ASOS, segmented circle/windsock in the ROFA, and drain fields in the RSA to be relocated pending further study

REFINED ALTERNATIVE 1B - Shift Runway and Hubbard Highway West and Extend Runway North to 5,500 feet Landside North



Landside South



Review:

**Refined Alternative 2 - Shift Runway East and Extend
Runway North to 5,500 feet**

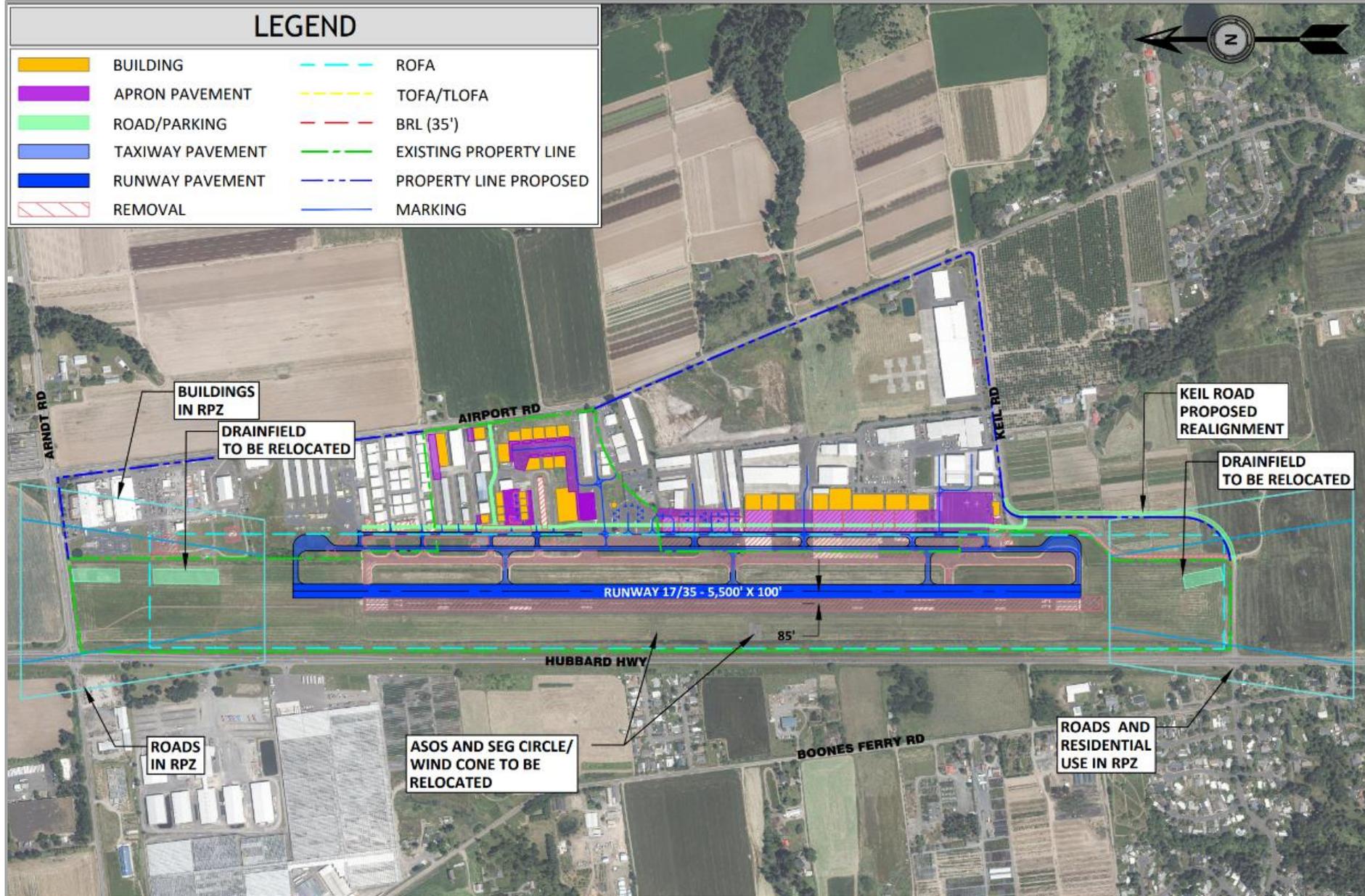
SUMMARY

Refined Alternative 2 - Shift Runway East and Extend Runway North to 5,500 feet

- **Refined Option for Preliminary Alternative 2**
 - Extends Runway 497 feet north (5,500 feet)
 - Runway & Parallel Taxiway is shifted 85 feet east to clear Hubbard Highway
 - No change to Hubbard Highway required
 - No property acquisition required west of Hubbard Highway
 - Maintains existing ODOT ROW and west airport property boundary
 - Reroutes Keil Road to clear ROFA and TOFA

REFINED ALTERNATIVE 2 - Shift Runway East and Extend Runway North to 5,500 feet

Overview



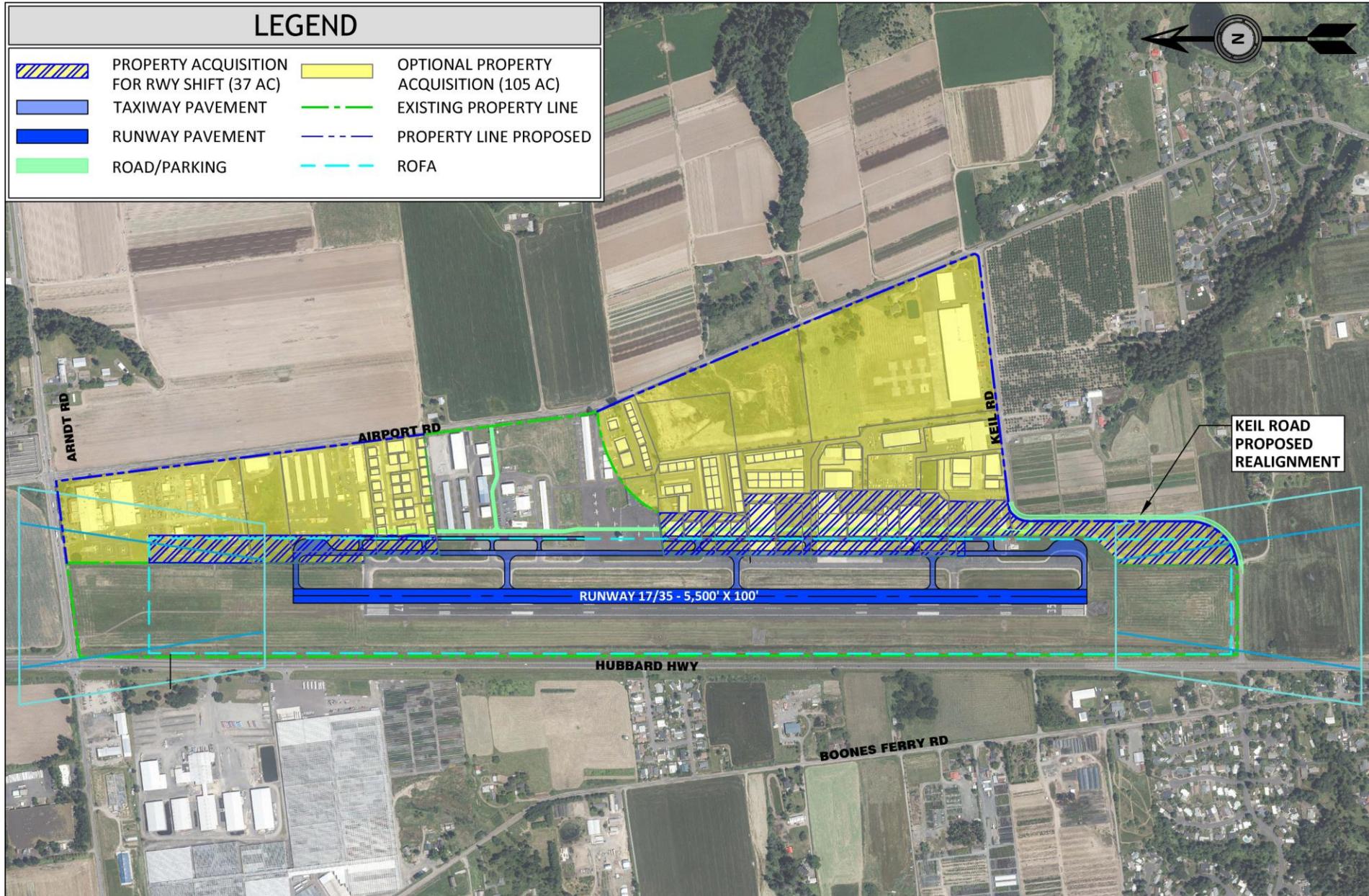
SUMMARY

Refined Alternative 2 – Shift Runway East and Extend Runway North to 5,500 feet

- **Land Requirements**

- Approx. 37 acres of property acquisition required shift the runway/parallel taxiway and to construct parallel taxiway and vehicle service road
- No properties west of Hubbard Highway are impacted
- Approx. 105 acres of property adjacent to the east side of the Airport identified for potential acquisition to preserve long term aeronautical use, if available

Property Overview



SUMMARY

Refined Alternative 2 - Shift Runway East and Extend Runway North to 5,500 feet

- **Refined Option for Preliminary Alternative 2**
 - Requires removal of existing hangars to accommodate VSR
 - Redevelopment of south apron large hangars depicted east of current location
 - Includes a full length parallel taxiway and vehicle service road west of Taxiway A to address direct runway access and VPD issues
 - ASOS, segmented circle/windsock in the ROFA, and drain fields in the RSA to be relocated pending further study
 - ATCT to be relocated pending further study

SUMMARY

Refined Alternative 2 – Shift Runway East and Extend North to 5,500 feet

- **Aeronautical Development/Redevelopment**

- South apron aeronautical properties are acquired, and hangars removed to accommodate shifted runway, parallel taxiway and vehicle service road
- 242,000 square feet of existing hangars space removed
- New hangars constructed along south apron at appropriate setback from parallel taxiway and vehicle service road
- 142,000 square feet of new hangar space
 - Includes 5,000 square foot FBO building

SUMMARY

Refined Alternative 2 – Shift Runway East and Extend North to 5,500 feet

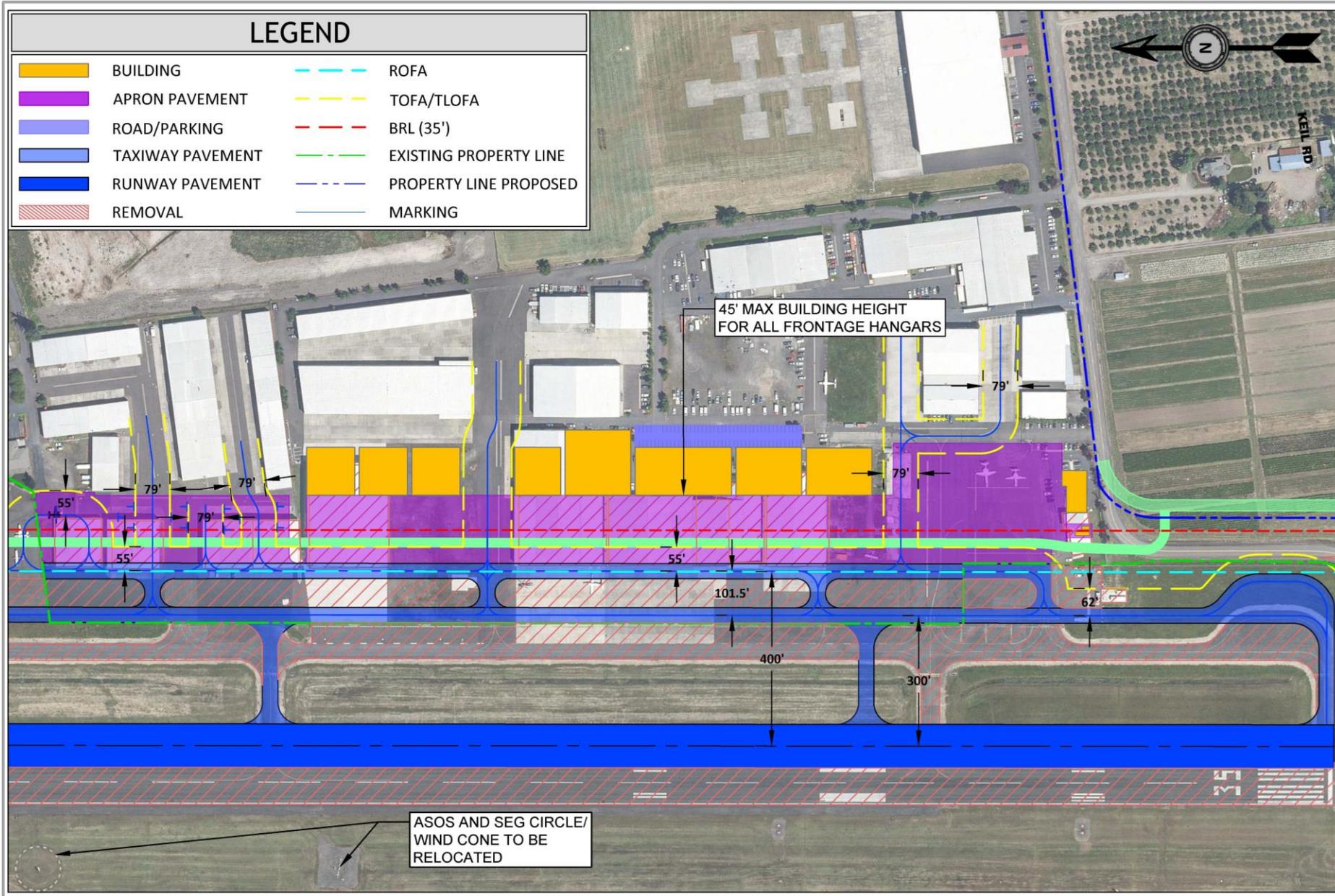
- **Aeronautical Development/Redevelopment**

- North landside area redesigned to accommodate parallel taxiway and vehicle service road
 - 35,000 square feet of existing hangar space is removed
 - 143,000 square feet of new hangar space
 - 27 small aircraft tiedowns
 - No helicopter parking
 - 1 large aircraft pull-through parking position
 - ATCT to be relocated pending further study

Landside North



Landside South



PAC Comments?

Public Comments?

Next Steps

Next Steps

- Receive PAC/Public Input into Refined Preliminary Alternatives
 - PAC feedback due no later than August 20th
 - Public feedback due no later than August 20th

Note – It is important to provide feedback within the allotted feedback period in order for ODAV and the Planning Team to review and incorporate into the analysis. Any late feedback will be documented in the feedback summaries; however, may not be considered in the review of the refined alternatives.

- Review PAC and Public input and Refine Alternatives as needed
- Next meeting is scheduled for September 17th, 2024

Thank You

Alex Thomas – ODAV

Tony Beach – ODAV

Brandy Steffen – JLA Public Involvement

David Miller – Century West Engineering



Project Website: <https://publicproject.net/AuroraAirport>