

NEW HOLSTEIN MUNICIPAL AIRPORT



Airport Master Plan



AGENDA

PAC Meeting #3

1. Welcome/Introductions
2. Master Plan Process Review
3. Phase 1 Master Plan Review
4. Review of Phase 2 Material
 - Draft Airport Development Alternatives
5. Open Discussion/Questions
6. Next Steps





Master Plan Process



NEW HOLSTEIN MUNICIPAL AIRPORT

Airport Master Plan



Phase 1 Review



Exhibit 1C: Existing Airside Facilities

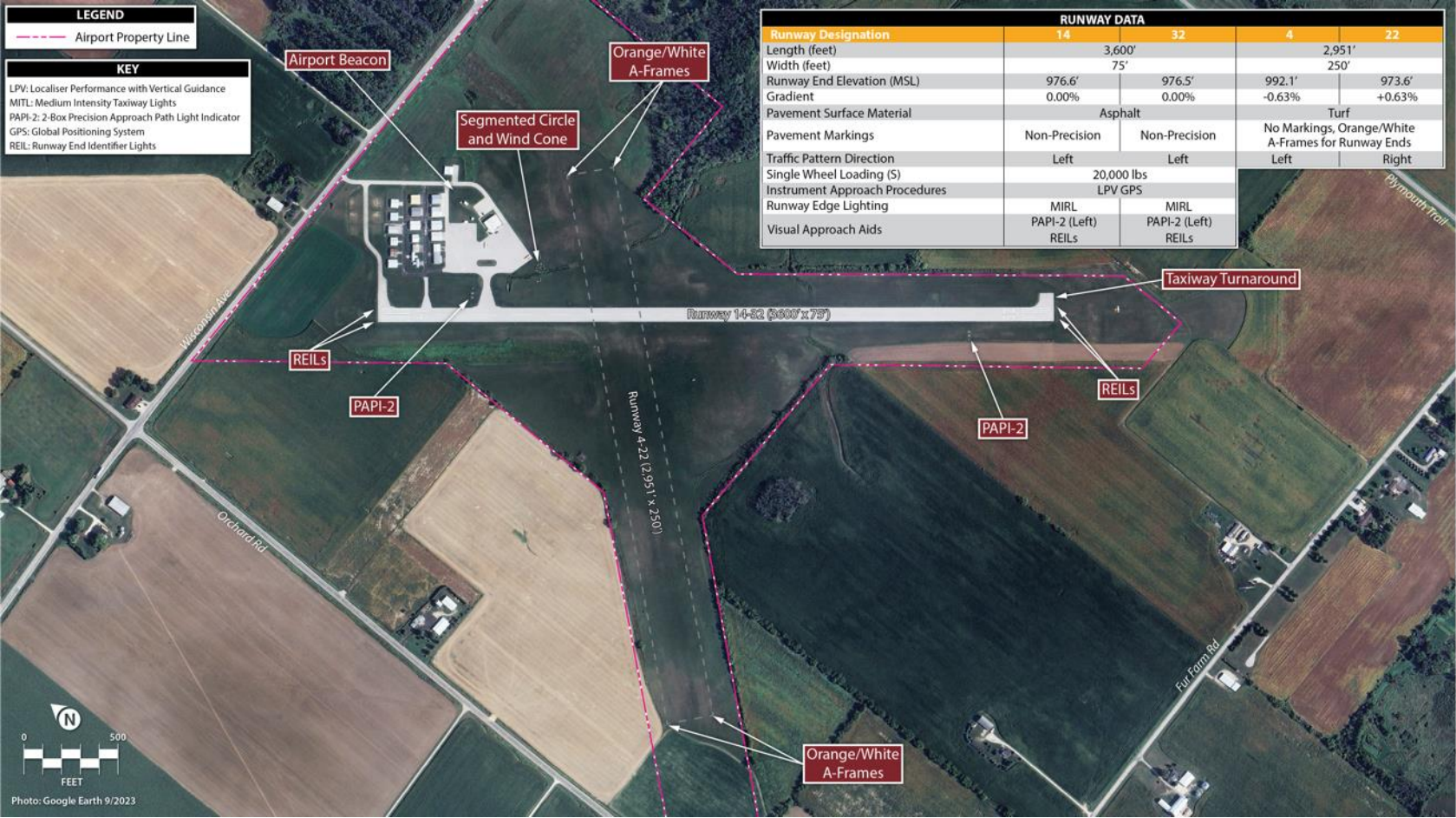




Exhibit 1G: Existing Landside Facilities





Exhibit 1J: Urban Environmental Sensitivities

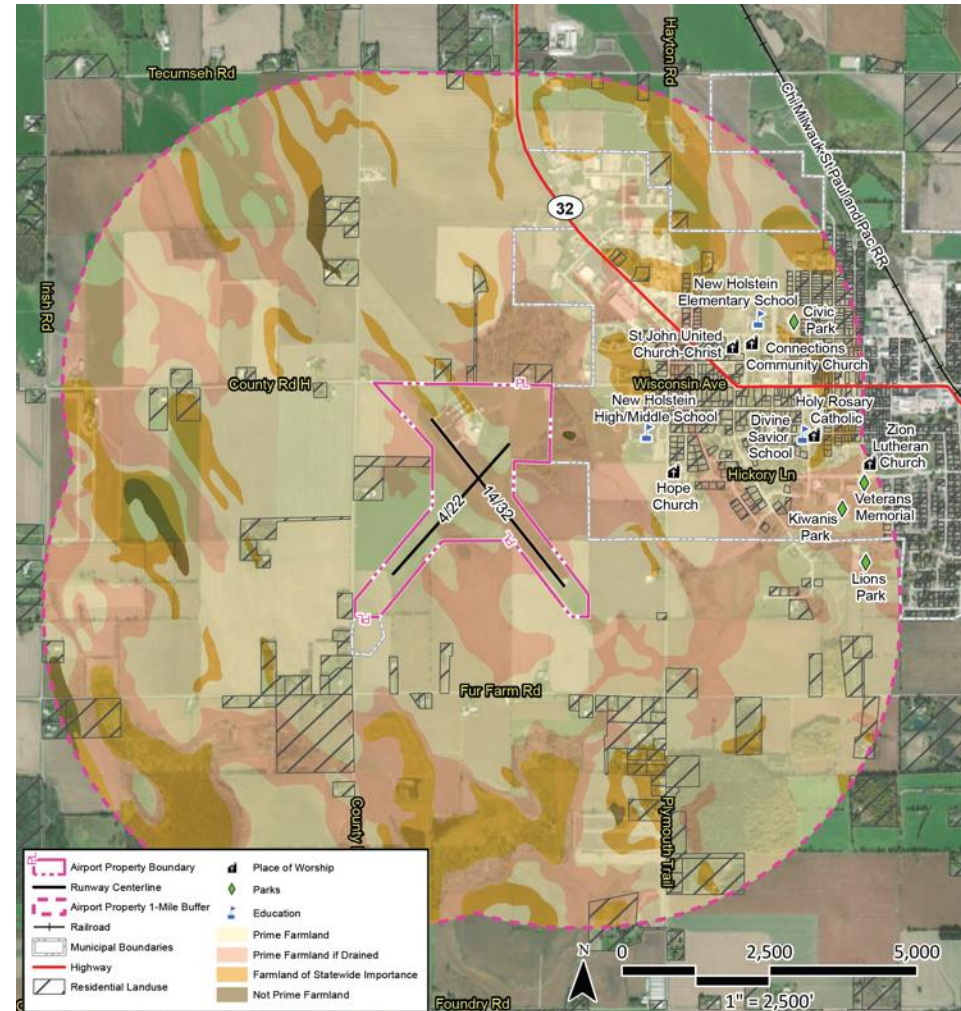




Exhibit 1J: Natural Environmental Sensitivities

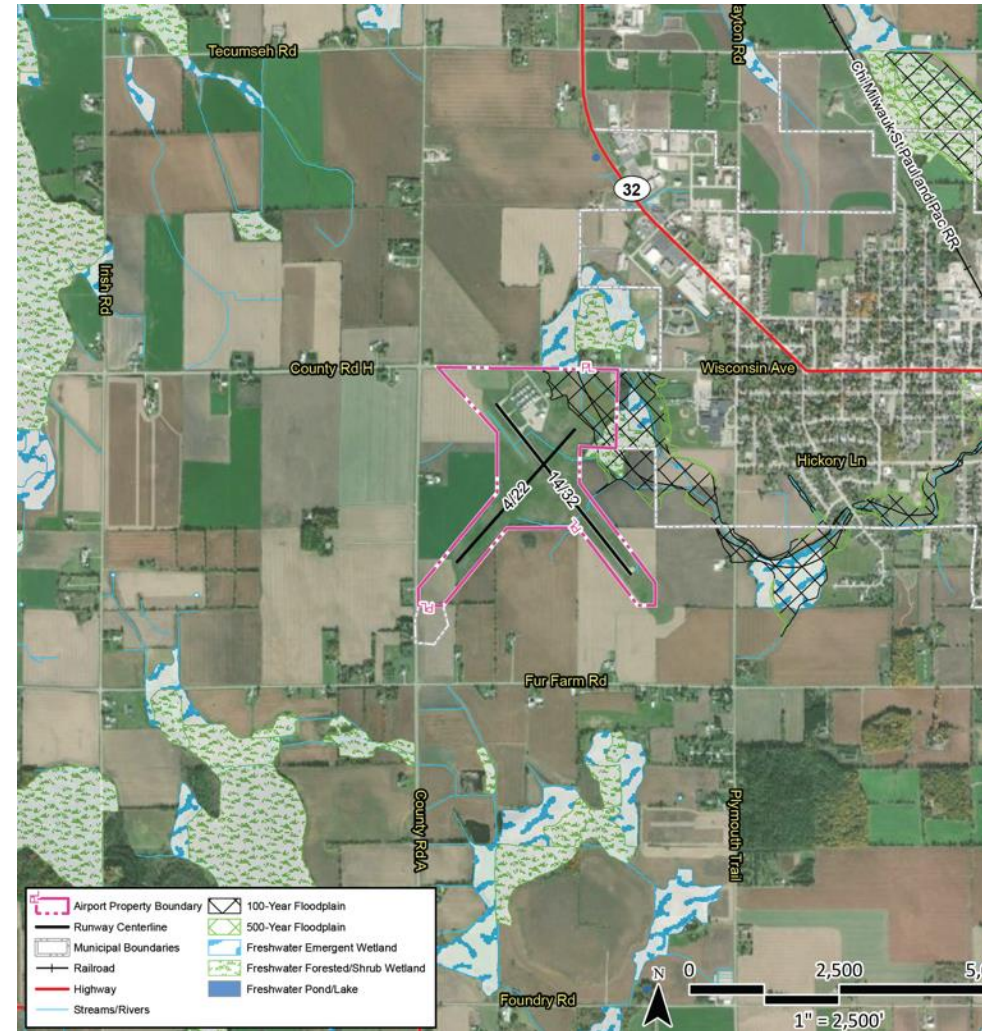
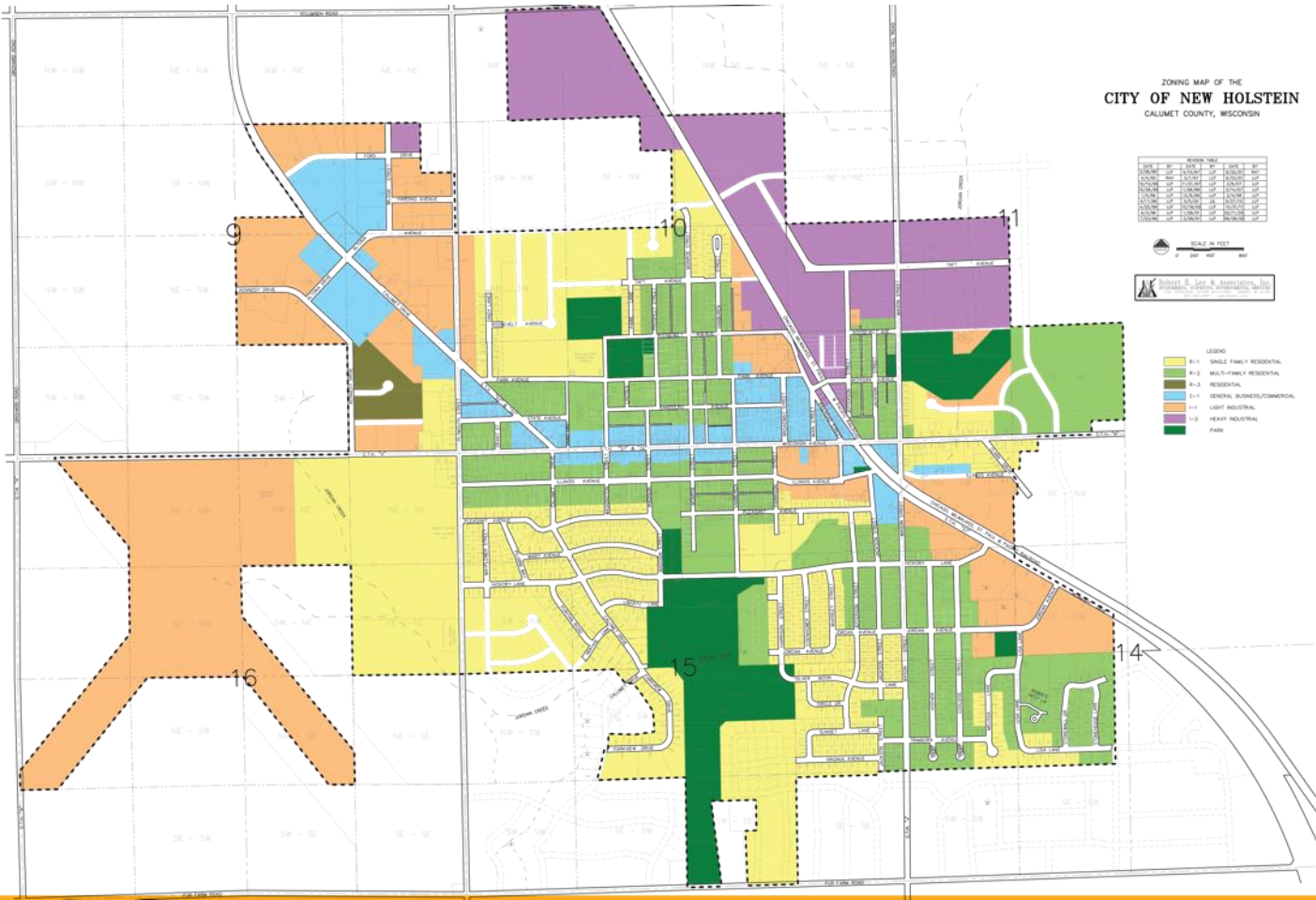




Exhibit 1K: Zoning



NEW HOLSTEIN MUNICIPAL AIRPORT

Airport Master Plan



Chapter Two

Forecasts



Exhibit 2B: Airport Service Area

LEGEND	
	NPIAS Airport
	8D1 Based Aircraft
	FAA Registered Aircraft (2024)
	New Holstein Muni (8D1)
	County Boundary
	30-Minute Drive Time

FAA Registered & 8D1 Based Aircraft		
Distance From 8D1	8D1 Based Aircraft	FAA Registered Aircraft
0-10nm	16	66
10-20nm	5	315
20-30nm	3	524
Total	29*	905
*Five based aircraft are registered to addresses beyond 30nm from 8D1		

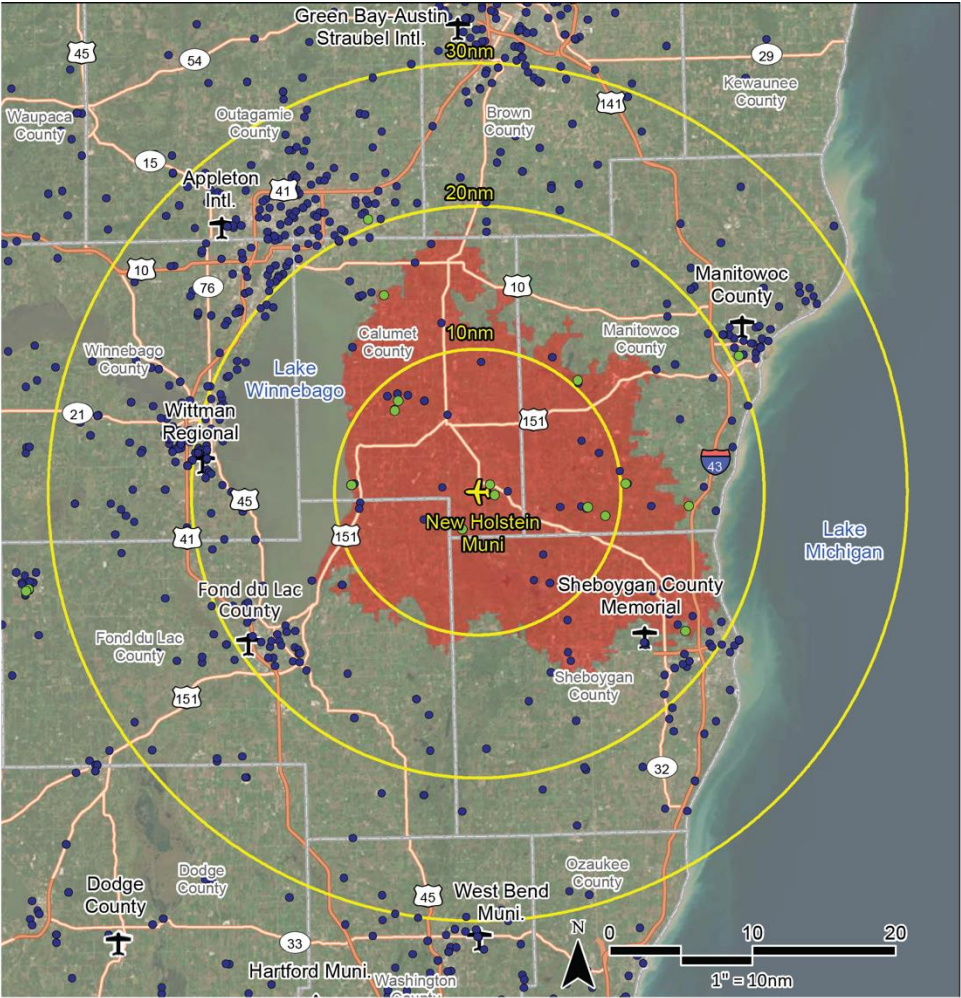




Exhibit 2F: Forecast Summary

	BASE YEAR	FORECAST		
	2024	2029	2034	2044
OPERATIONS				
Itinerant				
Air Carrier	-	-	-	-
Air Taxi	2	2	2	2
Military	200	200	200	200
General Aviation	4060	4400	4500	4800
Subtotal	4,262	4,602	4,702	5,002
Local				
General Aviation	6090	6500	6700	7200
Military	-	-	-	-
Subtotal	6,090	6,500	6,700	7,200
Total Operations	10,352	11,102	11,402	12,202
PEAKING				
Annual	10,352	11,102	11,402	12,202
Peak Month	1,035	1,110	1,140	1,220
Design Day	33	36	37	39
Design Hour	5	5	6	6
Busy Day	42	45	46	49
BASED AIRCRAFT				
Single Engine	29	30	30	31
Multi-Engine	0	0	0	0
Turboprop	0	1	2	3
Jet	0	0	1	2
Helicopter	0	0	0	1
Total Based Aircraft	29	31	33	37



Table 2S: Airport and Runway Classifications

	Runway 14-32		Runway 4-22
	Existing	Ultimate	Existing / Ultimate
Airport Reference Code (ARC)	A/B-I(S)	B-II	A/B-I(S)
Airport Critical Aircraft	A/B-I(S)-1A	B-II-2A	A/B-I(S)-1A
Critical Aircraft (Typ.)	Piper PA-28	King Air 200/300/350	Piper PA-28
Runway Design Code (RDC)	A/B-I(S)-5000	B-II-5000	A/B-I(S)-VIS
Approach Reference Code (APRC)	N/A	TBD	N/A / TBD
Departure Reference Code (DPRC)	N/A	TBD	N/A / TBD
Taxiway Design Group (TDG)	1A	2A	N/A / TBD



Table 3G: Runway Design Standards

	Runway 14-32 (Existing)	Runway 14-32 (Ultimate)	Runway 4-22 (Existing/Ultimate)
Runway Design Code	A/B-I(S)-5000	B-II-5000	A-I(S)-VIS
Visibility Minimums	1-mile	1-mile	Visual
RUNWAY DESIGN			
Runway Width	60	75	60
Blast Pad Length x Width	60 x 80	150 x 95	60 x 80
RUNWAY PROTECTION			
Runway Safety Area			
Width	120	150	120
Length Beyond Departure End	240	300	240
Length Prior to Threshold	240	300	240
Runway Object Free Area			
Width	250	500	250
Length Beyond Departure End	240	300	240
Length Prior to Threshold	240	300	240
Runway Obstacle Free Zone			
Width	250	400	250
Length Beyond Runway End	200	200	200
Approach Runway Protection Zone			
Runway End	14/32	14/32	4/22
Inner Width	250	500	250
Outer Width	450	700	450
Length	1,000	1,000	1,000
Acres	8.04	13.77	8.04
Departure Runway Protection Zone			
Inner Width	250	500	250
Outer Width	450	700	450
Length	1,000	1,000	1,000
Acres	8.04	13.77	8.04
RUNWAY SEPARATION			
Runway Centerline to:			
Hold Line Position	125	200	125
Parallel Taxiway	150	240	150
Aircraft Parking Apron	250	500	250
Note: All dimensions are in feet unless otherwise noted.			



Exhibit 3C: Approach Surface Obstructions



Legend

- FAR Part 77 Approach Surface
- FAA AC 150/5300-13B Approach Surface
- Area with Obstructions
- Fee Simple Airport Property
- Airport Aviation Easement
- Airport Clear Zone Easement

New Holstein Municipal Airport

Runway 14 Approach

Bureau of Aeronautics
Wisconsin Department of Transportation



Prepared By: HD Date: 6/30/2023

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Legend

- FAR Part 77 Approach Surface, FAA AC 150/5300-13B Approach Surface, WI Admin Code Trans 57 Approach Surface
- Surface Obstructions
- Less than 5' below Surface
- 10' - 5' below Surface
- Fee Simple Airport Property
- Statewide Parcels V8 - 2022

New Holstein Municipal Airport

Runway 22 Obstructions

Bureau of Aeronautics
Wisconsin Department of Transportation



Prepared By: HD Date: 6/30/2023

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Exhibit 3D: Safety Areas

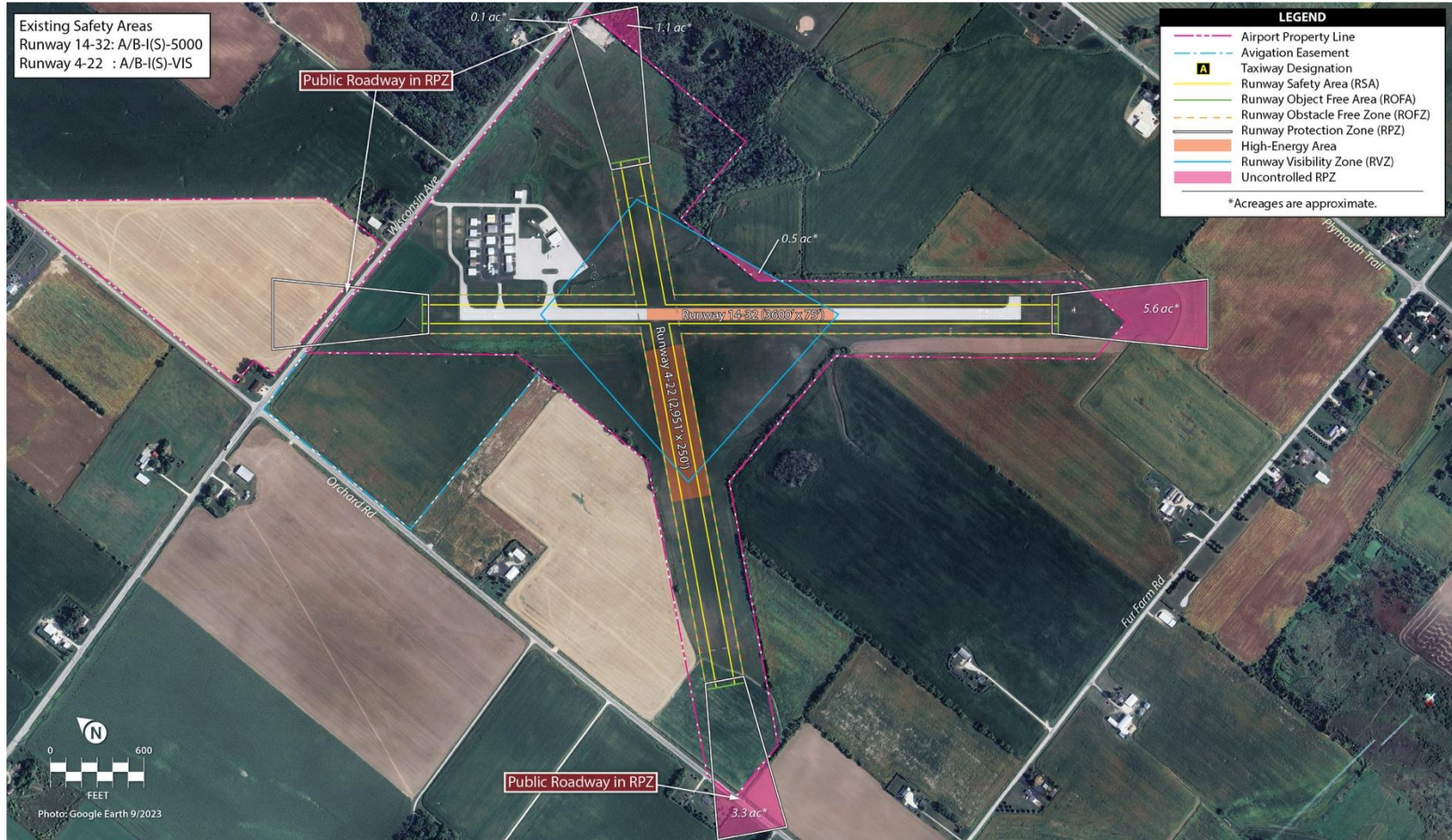




Exhibit 3D: Safety Areas

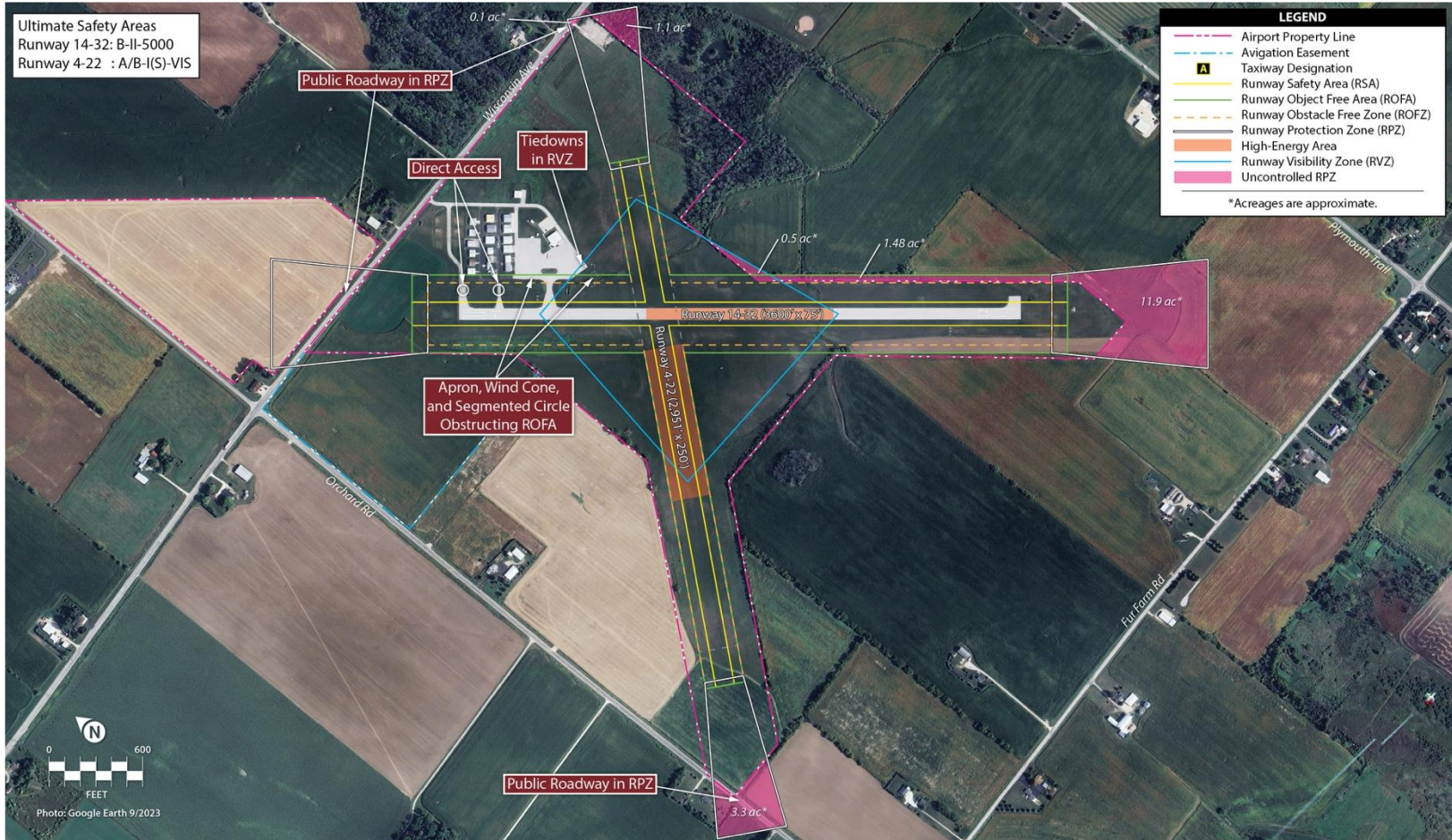




Table 3D: Runway Length Requirements

TABLE 3D Runway Length Requirements				
Airport Elevation		992.2 feet MSL		
Average High Monthly Temperature		81.6°F – July		
Primary Runway End Elevation Difference		0.1'		
Fleet Mix Category	TAKEOFF LENGTHS	LANDING LENGTHS		Final Runway Length
	Raw Runway Length from FAA AC	Runway Length with Gradient Adjustment (+1')	Wet Surface Landing Length for Jets (+15%)*	
75% of fleet at 60% useful load	4,709'	4,710'	5,415'	5,400'
100% of fleet at 60% useful load	5,388'	5,389'	5,500'	5,500'
75% of fleet at 90% useful load	6,255'	6,256'	7,000'	7,000'
100% of fleet at 90% useful load	7,974'	7,975'	7,000'	8,000'
*Max 5,500' for 60% useful load and max 7,000' for 90% useful load in wet condition				
Source: FAA AC 150/5325-4B, Runway Length Requirements for Airport Design				



Exhibit 3E: Airside Facility Requirements

		EXISTING	ULTIMATE	EXISTING/ULTIMATE
RUNWAYS				
	Runway Design Code (RDC)	A/B-I(S)-5000	B-II-5000	A/B-I(S)-VIS
	Dimensions	3,600' x 75'	Consider runway extension	Maintain
	Pavement Strength	20,000 lbs S	30,000 lbs S 60,000 lbs D	Small aircraft only (Turf)
SAFETY AREAS				
	Runway Safety Area (RSA)	Standard RSA	Increase to B-II Standard	Standard RSA (Maintain)
	Runway Object Free Area (ROFA)	Standard ROFA	Increase to B-II Standard; Relocate tiedown, wind cone, and segmented circle; Acquire property within ultimate ROFA	Standard ROFA (Maintain)
	Runway Obstacle Free Zone (ROFZ)	Standard ROFZ	Increase to B-II Standard	Standard ROFZ (Maintain)
	Runway Protection Zone (RPZ)	Both RPZs extend beyond airport property; One public road in RPZ	Consider mitigation of incompatible use	Both RPZs extend beyond airport property; Consider mitigation of potential incompatible use

KEY:

AWOS - Automated Weather Observation System
D - Dual Wheel Loading
GPS - Global Positioning System


MIRL - Medium Intensity Runway Lighting
MITL - Medium Intensity Taxiway Lighting
PAPI - Precision Approach Path Indicator

REIL - Runway End Identification Lights
S - Single Wheel Loading

VIS - Visual
VOR - Very High Frequency
Omni-directional Range



Exhibit 3E: Airside Facility Requirements

		EXISTING	ULTIMATE	EXISTING/ULTIMATE
TAXIWAYS				
	Design Group	1A/B	2A/B	N/A
	Parallel Taxiway	N/A	Taxiway A (Potential)	N/A
	Parallel Taxiway Separation from Runway	N/A	240'	N/A
	Widths	25'	35'	N/A
	Holding Position Separation	125'	200'	N/A
	Notable Conditions	Direct access	Consider implementing a taxiway system or parallel taxiway	Consider implementing a taxiway system or parallel taxiway
NAVIGATIONAL AND WEATHER AIDS				
	Instrument Approaches	1-mile GPS/VOR	Maintain; Analyze ¾-mile	None
	Weather Aids	Wind cones/tee; Rotating beacon	Consider AWOS	Wind cones/tee; Rotating beacon; Consider AWOS
	Approach Aids	PAPI-2; REILs on both runway ends	PAPI-4; Maintain REILs	None
LIGHTING AND MARKING				
	Runway Lighting	MIRL	Maintain	None
	Runway Marking	Non-Precision Instrument	Maintain	Orange and white A-frames
	Taxiway Lighting	Limited MITL	Consider expanding MITL	None
	Airfield Signage	Runway/taxiway designation; Routing; Runway exits; Mandatory instruction signs	Maintain; Consider runway distance remaining signage	None; Consider runway designation and mandatory instruction signs

KEY:

AWOS - Automated Weather Observation System

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S - Single Wheel Loading


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VOR - Very High Frequency

Omni-directional Range



Exhibit 3F: Landside Facility Requirements

	Available	Short Term	Intermediate Term	Long Term
Aircraft Storage Hangars				
				
Aircraft to be Hangared	27	29	30	34
T-Hangar Area (sf)	1,900	1,900	1,900	6,100
Executive/Conventional Hangar Area (sf)	34,000	50,000	54,500	61,000
Service/Maintenance Area (sf)	-	3,600	3,800	4,300
Total Hangar Storage Area (sf)	35,900	55,500	60,200	71,400
Aircraft Parking Apron				
				
Aircraft Parking Positions	11	13	16	18
Total Public Apron Area (sy)	10,520	11,200	13,600	16,000
General Aviation Terminal Facilities and Parking				
				
Building Space (sf)	5,100	1,300	1,600	2,100
Total GA Parking Spaces	16	19	22	27

NEW HOLSTEIN MUNICIPAL AIRPORT

Airport Master Plan



Chapter Four

Alternatives

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Exhibit 4B: Alternatives Considerations

AIRSIDE CONSIDERATIONS

- Evaluate improvements necessary to meet the appropriate existing and ultimate Federal Aviation Administration (FAA) design standards
- Examine a potential runway extension on Runway 14-32
- Examine potential options for a parallel taxiway for Runway 14-32
- Analyze options to mitigate incompatible land uses within the runway safety areas (RSA, ROFA, ROFZ, RPZ)
- Analyze options to mitigate Part 77 approach surface obstructions for Runway 14 and Runway 02
- Consider increased runway pavement strength on Runway 14-32
- Evaluate the taxiway system in meeting airfield safety, design, and geometry standards
- Examine options for additional lighting and markings for taxiways and Runway 4-22





Exhibit 4B: Alternatives Considerations

LANDSIDE CONSIDERATIONS

- Determine efficient land uses that allow the airport to meet the demands of aviation users and promote non-aviation uses where possible
- Analyze options to mitigate Part 77 transitional surface obstructions for Runway 14-32
- Identify locations for hangar development and additional aircraft apron area to meet projected demand
- Evaluate potential options to construct support facilities such as perimeter fencing, access gates, snow removal equipment (SRE), and potential for additional fuel storage needed for aviation activities





Exhibit 4C: Interim Airside Alternative 1

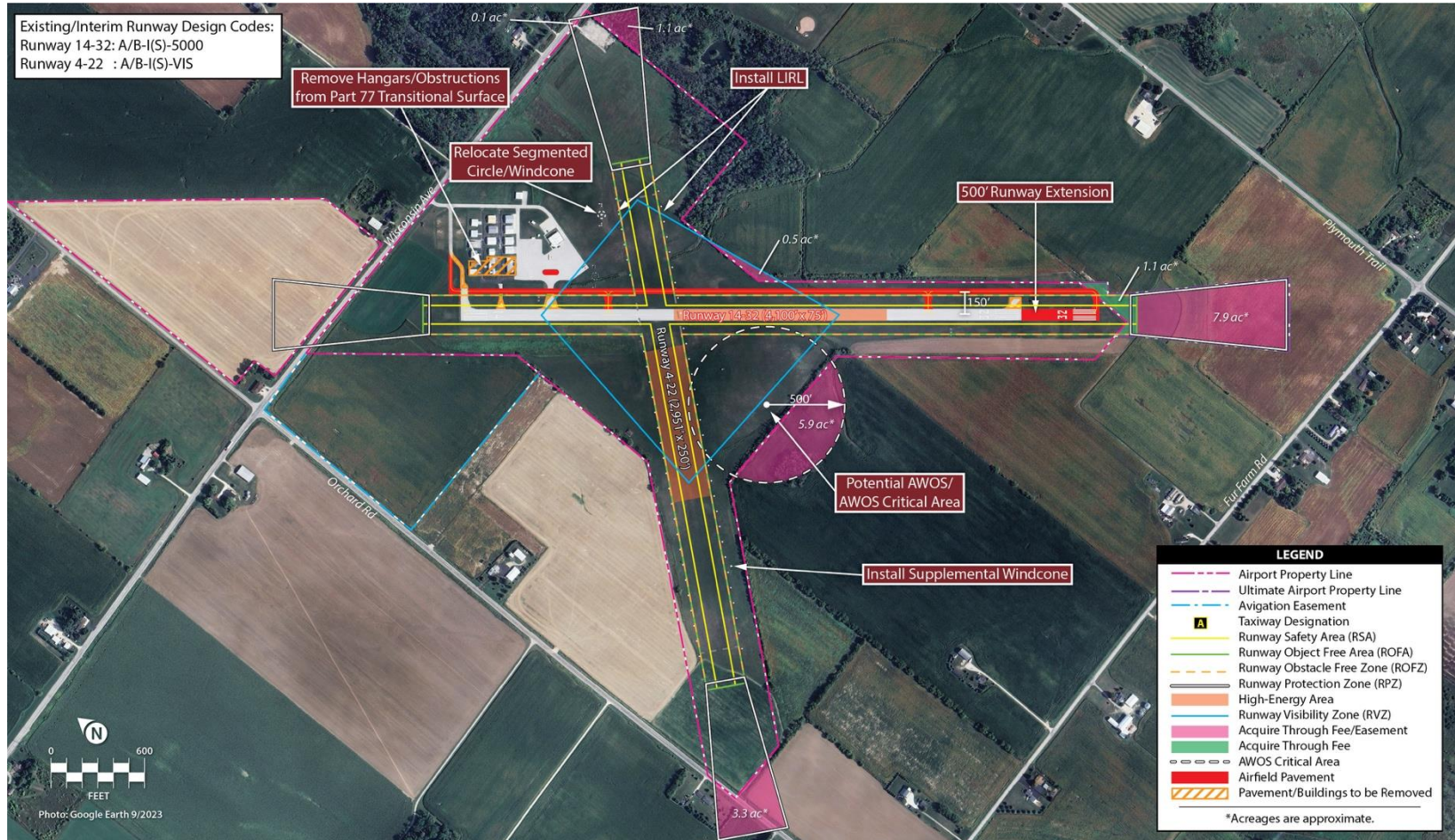




Exhibit 4D: Interim Airside Alternative 2

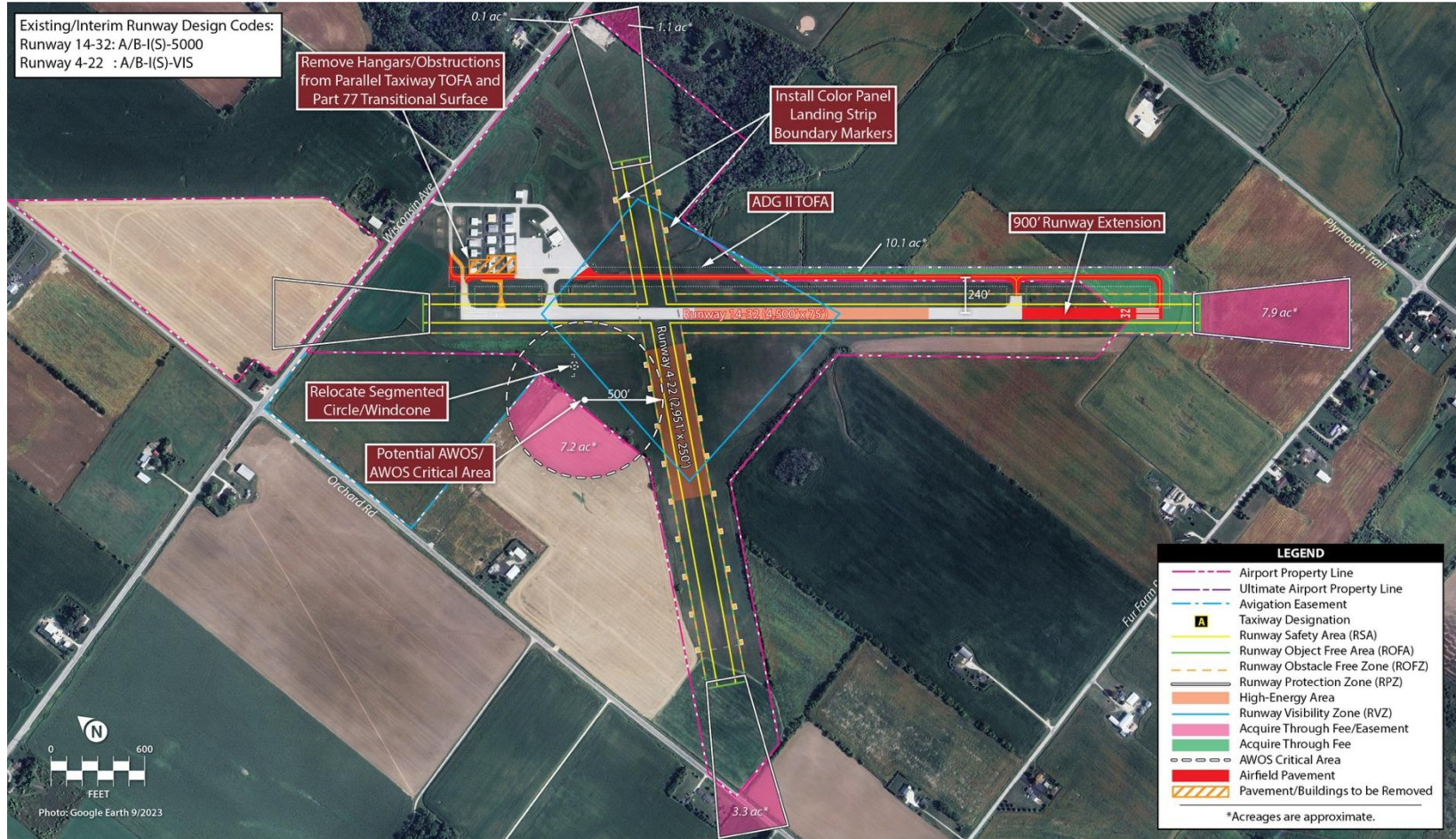




Exhibit 4E: Ultimate Airside Alternative 3

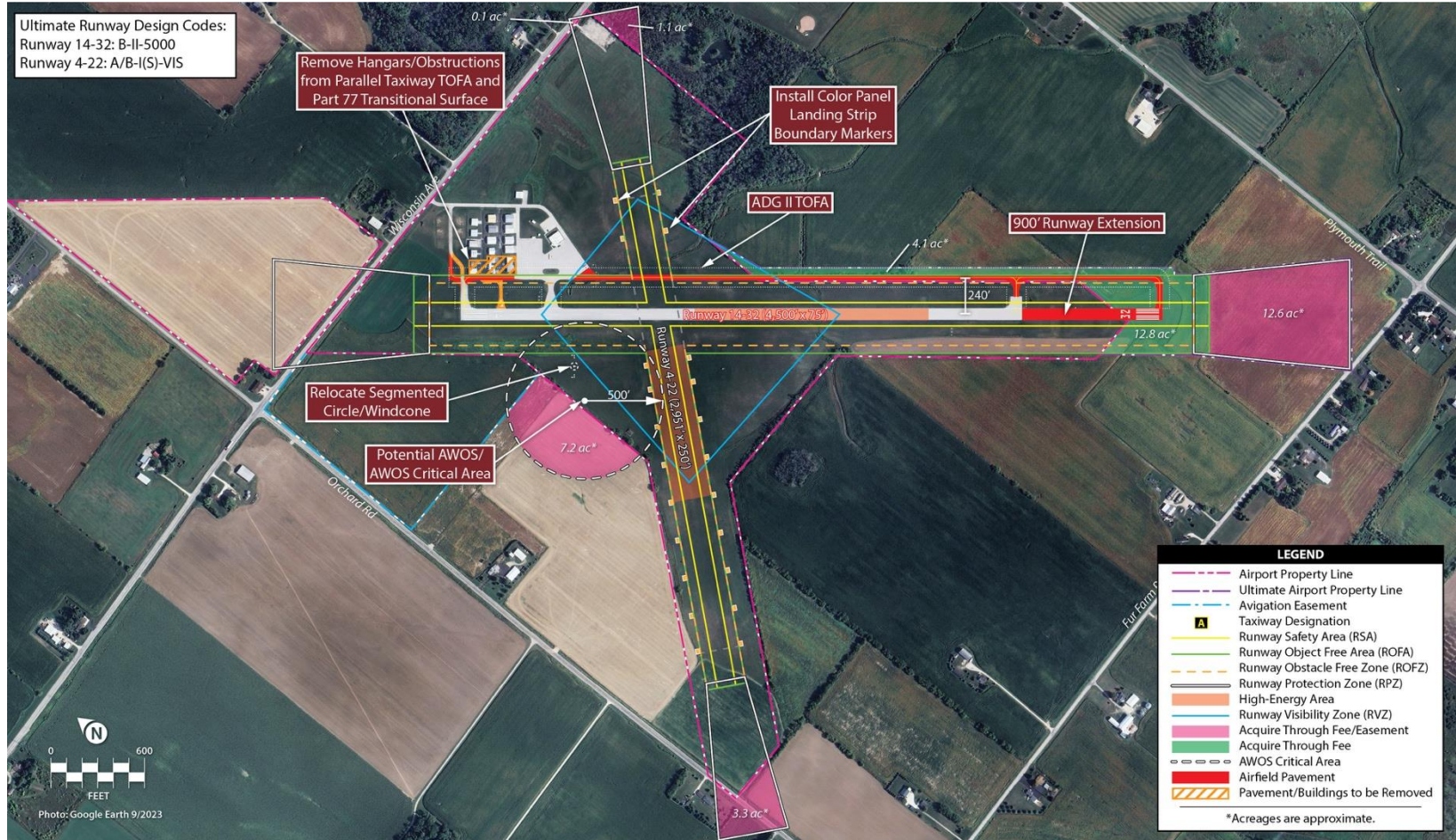




Exhibit 4F: Ultimate Airside Alternative 4

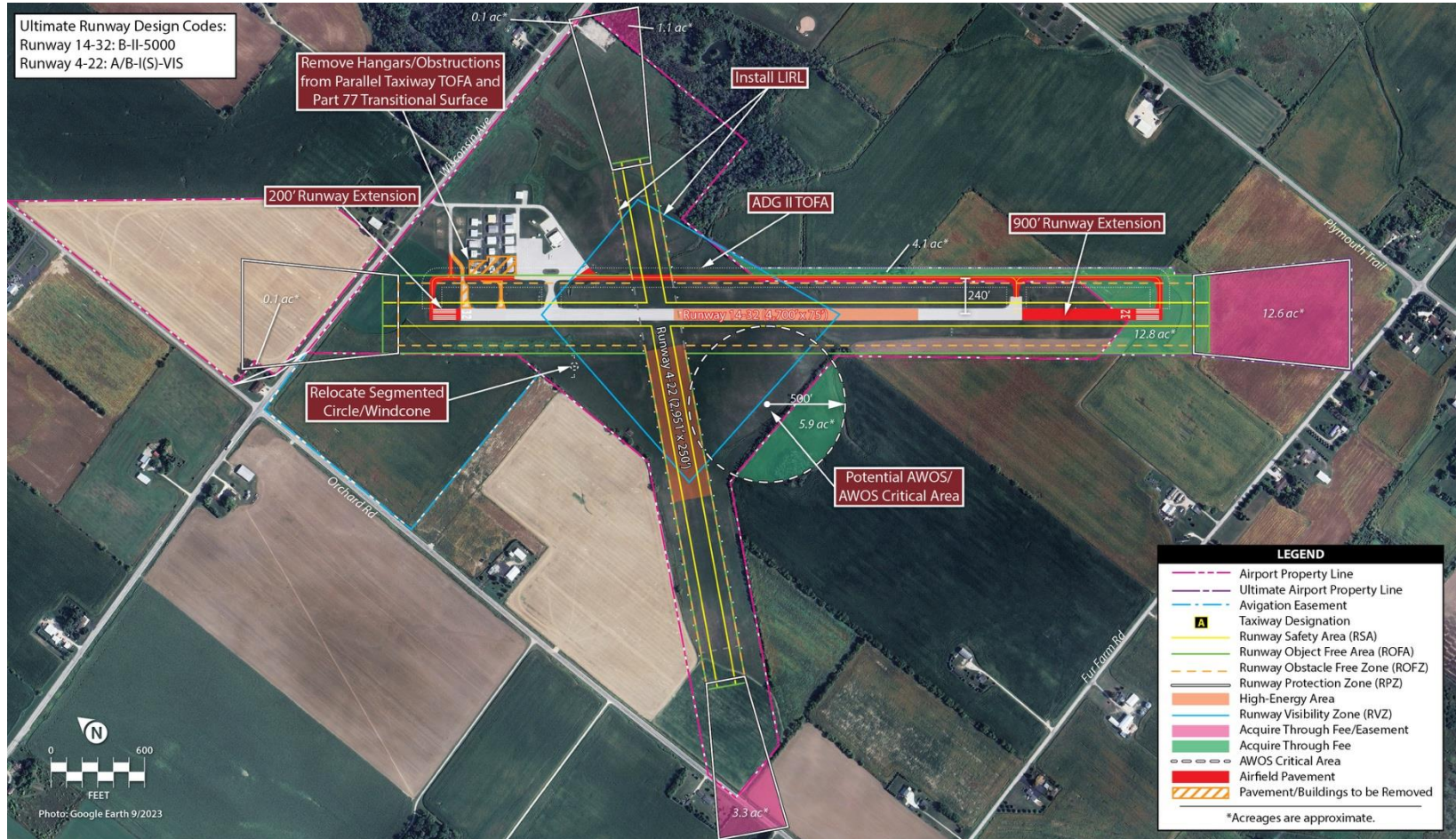




Exhibit 4G: Landside Alternative 1

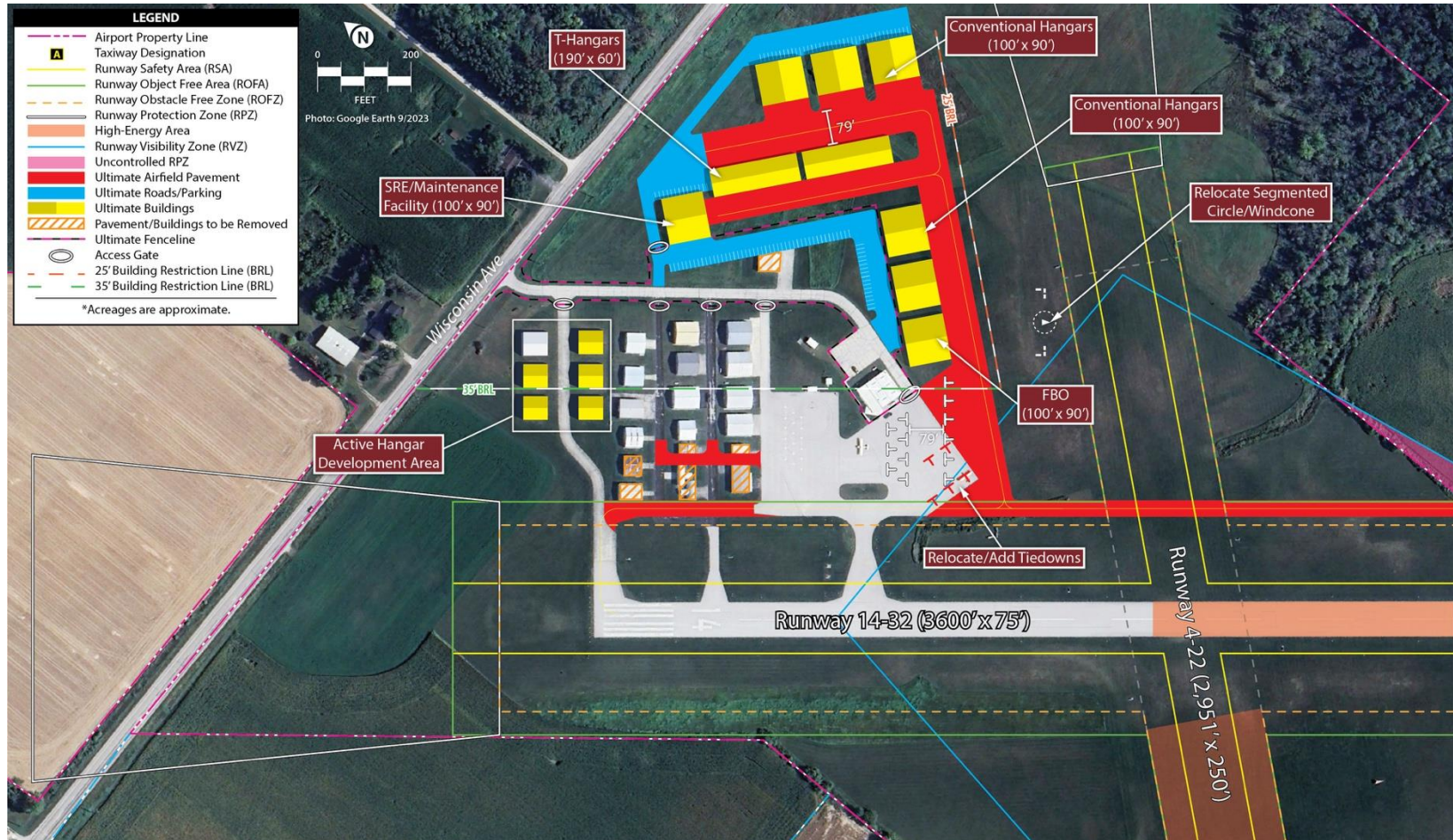




Exhibit 4H: Landside Alternative 2

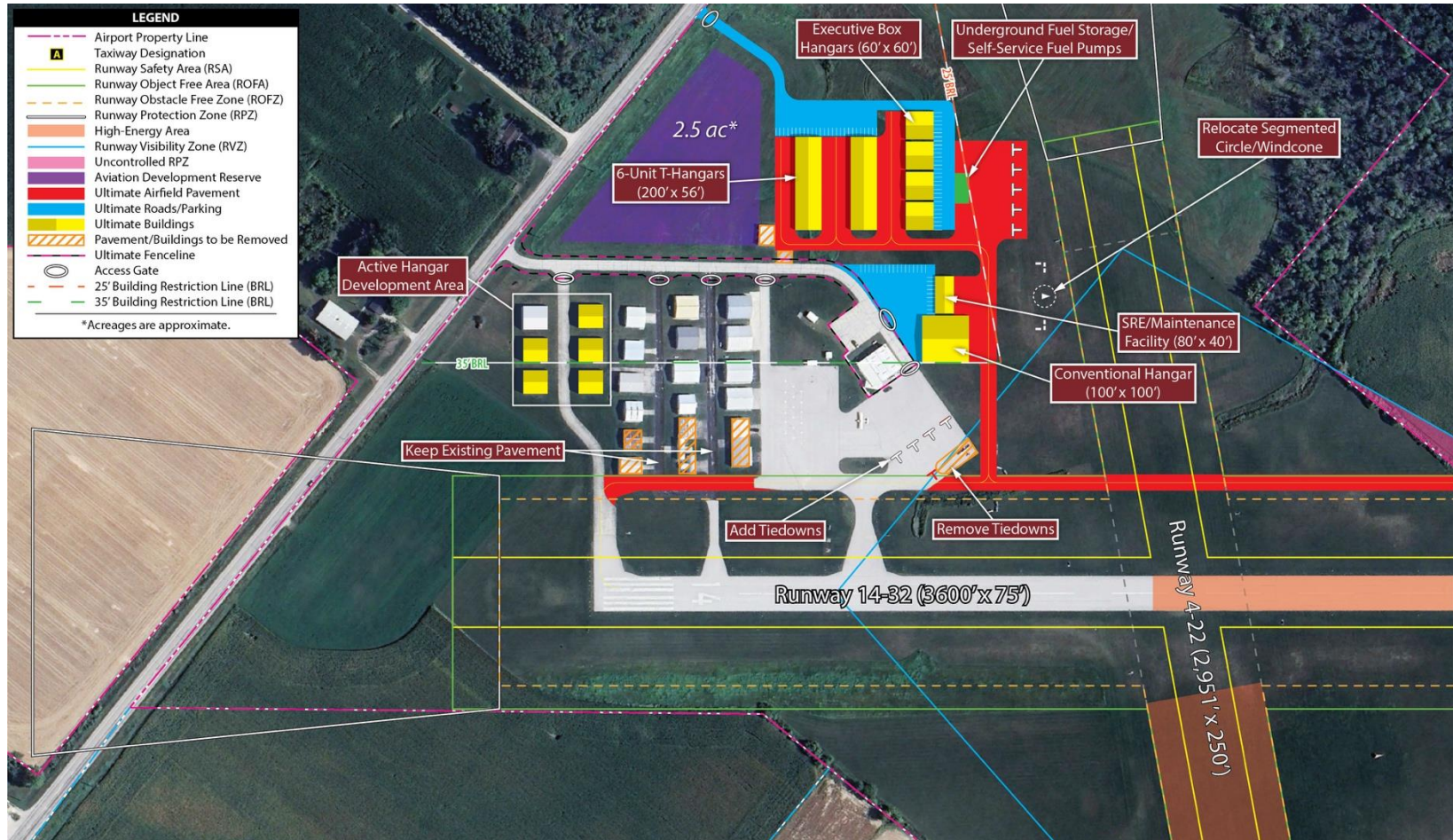
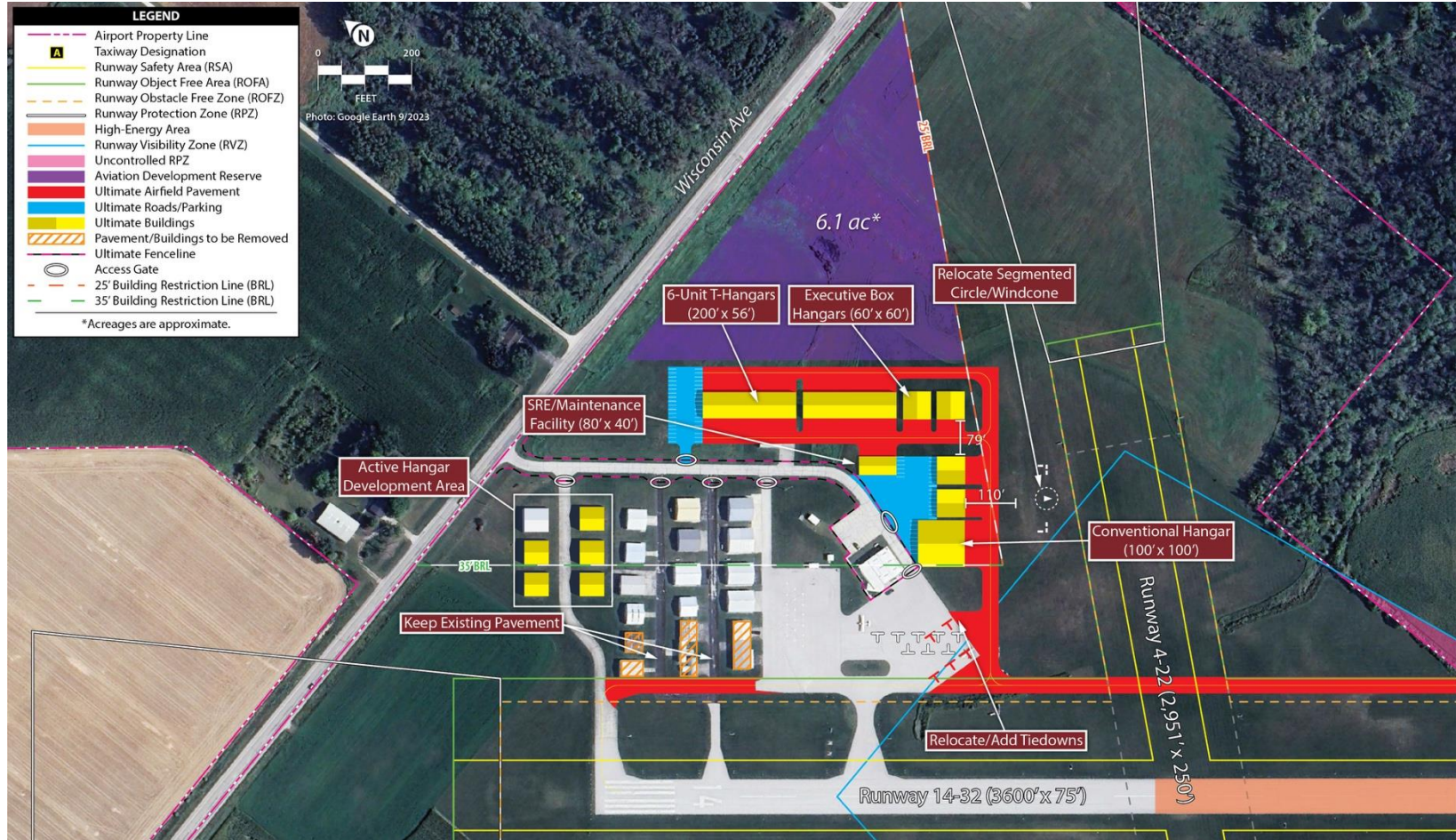




Exhibit 4J: Landside Alternative 3





NEXT STEPS

- ▶ **Phase 3 Elements** – Airport Development Concept and Capital Improvement Program
- ▶ **PAC Meeting #4** – Late Spring/Early Summer 2026; draft documents available for review approximately one week prior to meeting



QUESTIONS?

We want to hear from you!

Direct any questions or comments after this meeting to Mike Dmyterko
Or Aiden Cowles with Coffman Associates at 816-524-3500 or
miked@coffmanassociates.com and acowles@coffmanassociates.com
or visit the project website to submit comments online.

Project Website: <http://newholstein.airportstudy.net>