

Airport Master Plan Update

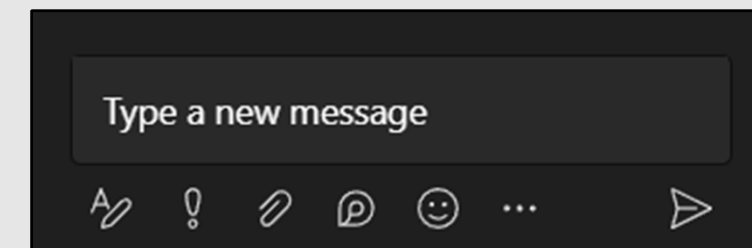
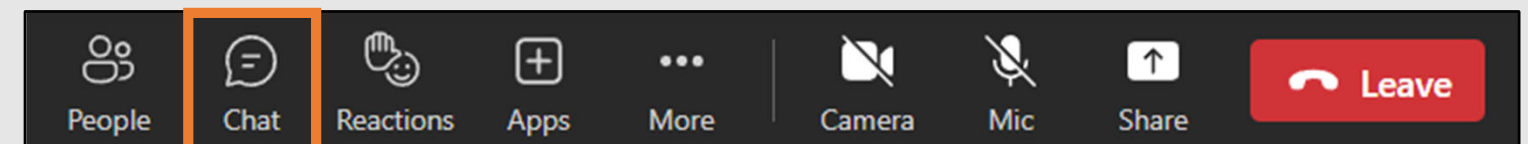
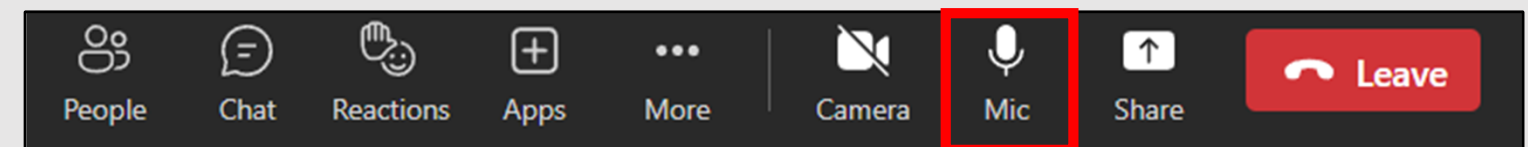
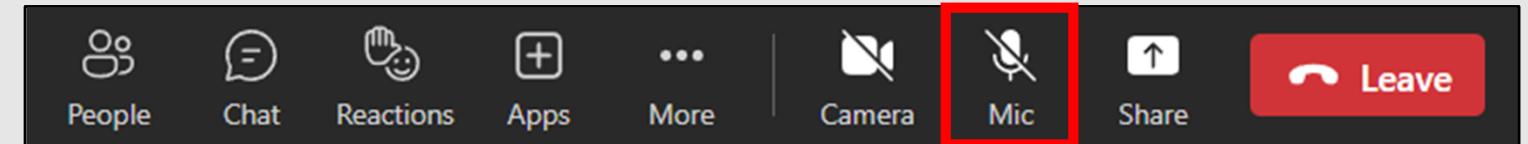
E.F. Knapp State Airport (MPV)

Public Information Meeting
January 25, 2023



Microsoft Teams Meeting Instructions

- If your device has voice capabilities, you can unmute yourself (red square) at any point to speak
- Additionally, you can type out your comment/question via the chat function (orange square)



Today's Agenda

- Overview of Master Plan Process
- Review of Study Findings
 - Airport Inventory
 - Airport Forecast
 - Airport Facility Requirements
 - Recommendations
- Draft Recommended Plan
- Draft Airport Layout Plan
- Next Steps
- Open Discussion/Questions



What is the Purpose of this Meeting?

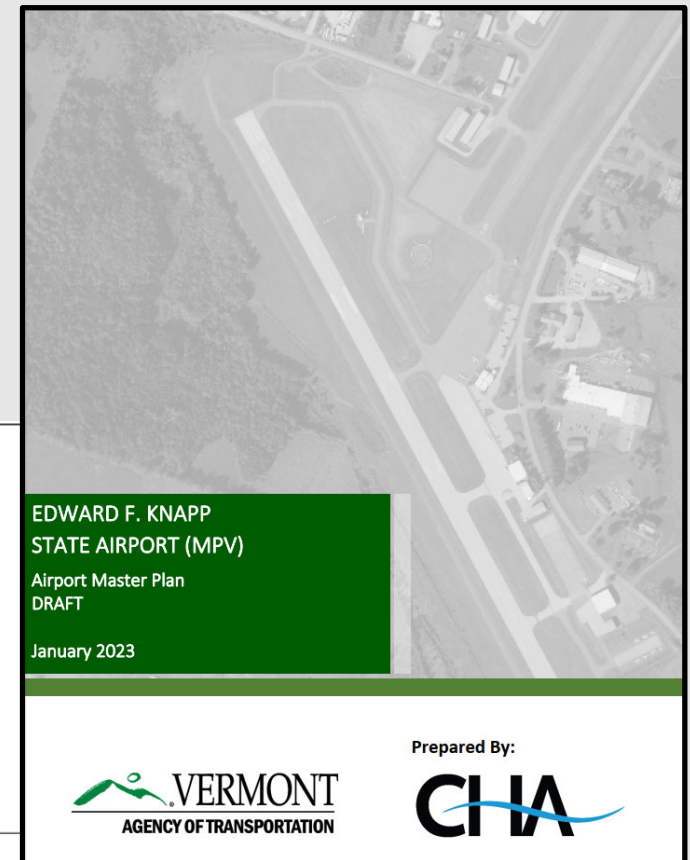
- **Community Engagement:**
 - Present the study findings
 - Answer questions
 - Collection input/comments
- **Public Outreach Activities:**
 - 1 Public Meeting
 - 3 Technical Advisory Committee (TAC) meeting



What is an Airport Master Plan

- A study that guides short and long-term Airport Improvements
- Two Parts:
 - *Master Plan Report*
 - *Airport Layout Plan (ALP) (Drawing Set)*
- Goal is to determine foreseeable aviation demand and customer needs
- Helps to program state and federal funding
- Usually updated every 10 years
- Last Full Master Plan/ALP completed in 2000

Report



ALP Set

VERMONT AGENCY OF TRANSPORTATION
EDWARD F. KNAPP
STATE AIRPORT (MPV)
AIRPORT LAYOUT PLAN
MONTH YEAR
DRAFT

PROJECT LOCATION

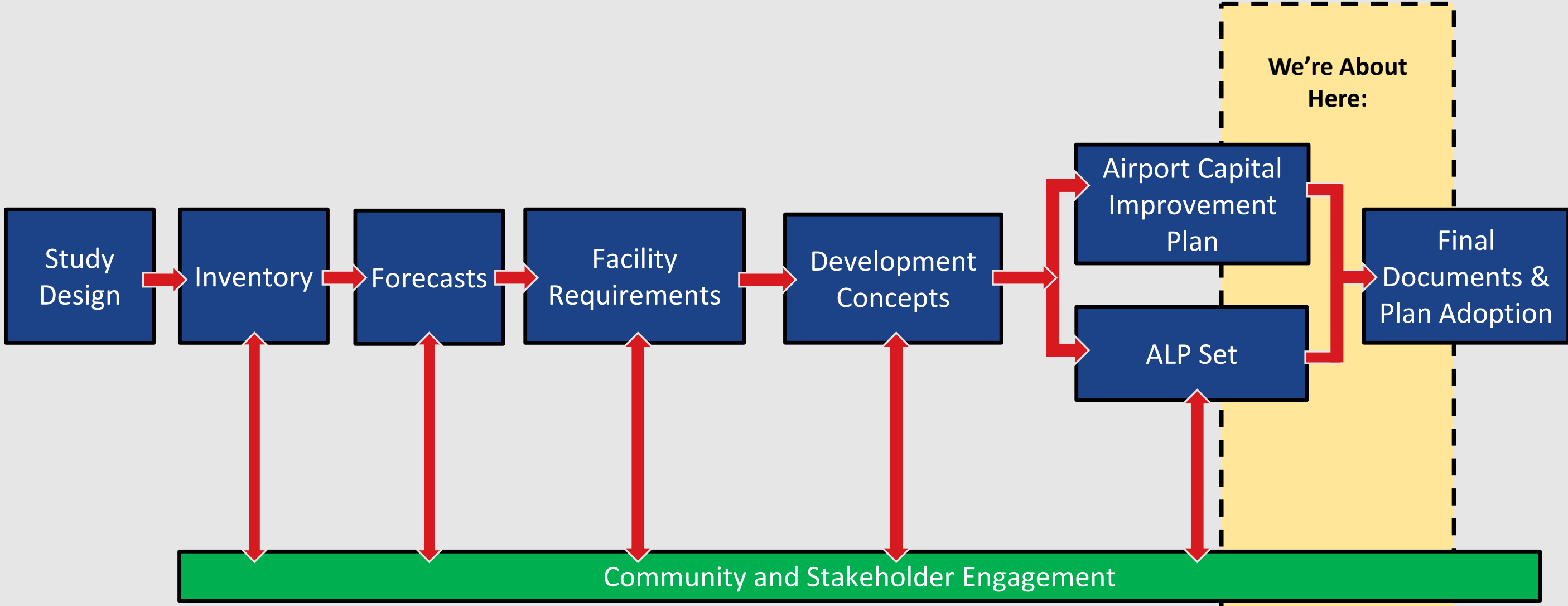
SHEET NO.	DESCRIPTION	REVISION DATE
1	TITLE SHEET	
2	AIRPORT DATA SHEET	
3	EXISTING AIRPORT LAYOUT PLAN	
4	FUTURE AIRPORT LAYOUT PLAN	
5	AIRPORT AIRSPACE PLAN	
6	PLANVIEW 10' APPROACH SURFACE	
7	PLANVIEW 35' APPROACH SURFACE	
8	PLANVIEW 50' APPROACH SURFACE	
9	PLANVIEW OBSTRUCTION DATA OBSTRUCTION	
10	TERMINAL AREA PLAN	
11	LAND USE PLAN	
12	AIRPORT PROPERTY MAP	

REVISIONS			
No.	Description	Date	By

PROJECT NAME: MPV OBSTRUCTION SURVEY
PROJECT NUMBER: AV-FY18-007
FILE NAME: 878-30011a.dgn
PROJECT LEADER: FWM
DESIGNED BY: AJP
TITLE SHEET

PLAT DATE: 3/4/2022
DRAWN BY: MED
CHECKED BY: FWM
SHEET 1 OF XXX

Airport Master Planning Process



Airport Master Plan – Focus Areas

- Industry Trends & Changes Since Previous ALP
- Follow up to the Vermont Aviation System Plan (VASP)
- Specific Focus Areas:
 - Airfield Needs & FAA Design Standards
 - Airspace Obstruction Considerations
 - Potential for Instrument Approach Procedures
 - Hangar/Terminal Development Concepts
 - Financial Considerations / Costs



Review of Study Findings



Key Airport Features

- Approximately 259 acres
- Runway System
 - *Runway 17-35: 5,000' by 100'*
 - *Runway 5-23: 3,001' by 75'*
 - *Instrument Landing System (ILS) with MALSR*
- Two Parallel Taxiways (1 full, 1 partial)
 - Five Taxiway Connectors
- 43 Based Aircraft
- VTrans Offices and Hangar Space
- Hangars and Parking Aprons
- Vermont Flying Service Fixed Base Operator (FBO)



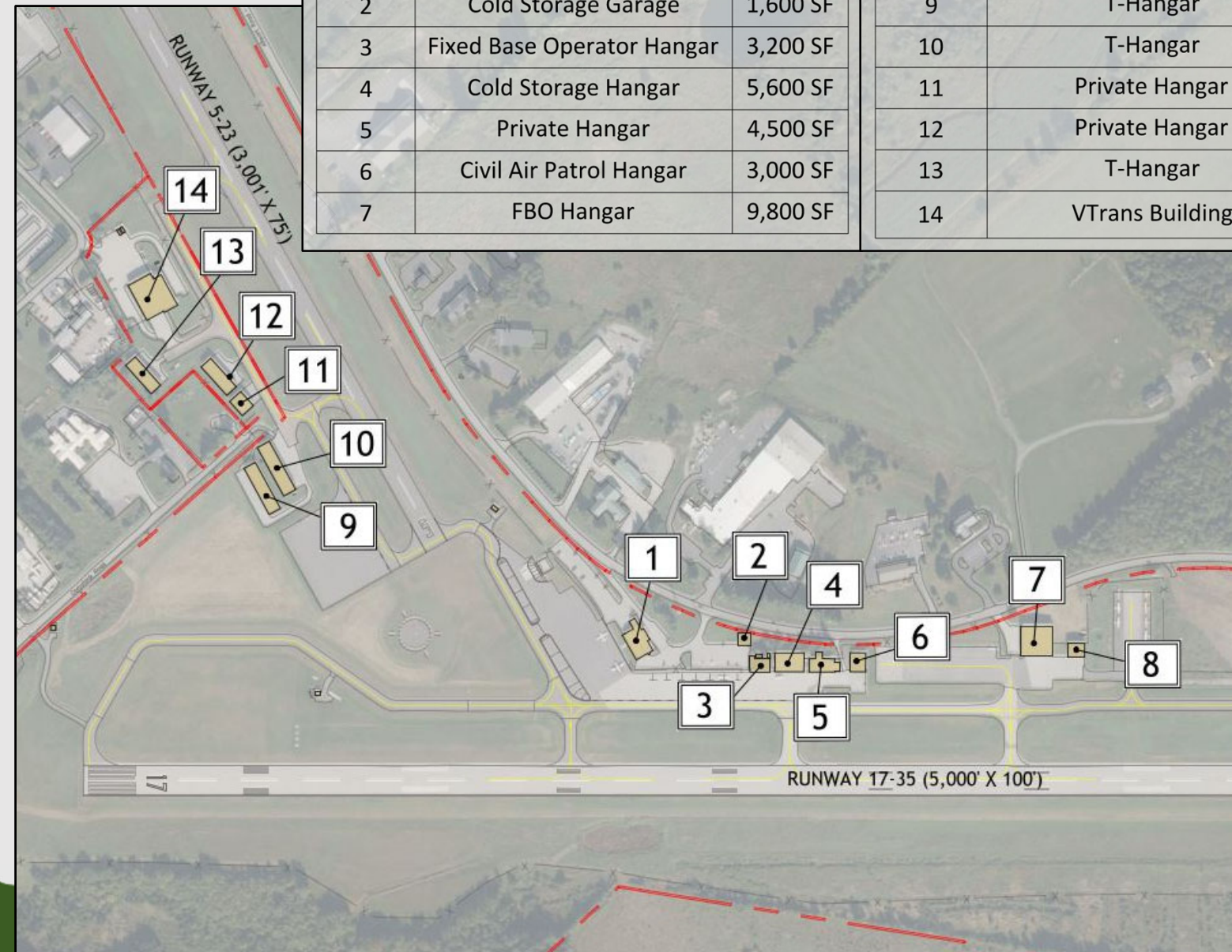
Aprons (Top), Segmented Circle (Left), Beacon (Middle), Runway 17-35 (Right)

Existing Facilities

14 Buildings and Structures Total, including:

- Main Airport Terminal Building
 - Presently leased to a private firm
- 11 Aircraft Hangars
- Aircraft Tie-Downs
- Rotating Beacon
- Fuel Farm/ Aircraft Refueling
- Segmented Circle
- Vehicle Parking Spaces
- Refueling station (100-LL and Jet A)
- VTrans Building (Office and Hangar)
- Five Airport Aprons

No.	Facility	Area	No.	Facility	Area
1	Terminal Building	6,600 SF	8	Private Hangar	2,300 SF
2	Cold Storage Garage	1,600 SF	9	T-Hangar	6,900 SF
3	Fixed Base Operator Hangar	3,200 SF	10	T-Hangar	7,700 SF
4	Cold Storage Hangar	5,600 SF	11	Private Hangar	2,900 SF
5	Private Hangar	4,500 SF	12	Private Hangar	5,100 SF
6	Civil Air Patrol Hangar	3,000 SF	13	T-Hangar	5,000 SF
7	FBO Hangar	9,800 SF	14	VTrans Building	13,500 SF



Airfield Improvements



- Most recent major improvements were undertaken in 2010:
 - Funded by a \$6.2M Stimulus Grant
 - Constructed a full parallel taxiway for the runway
 - Reconstructed Runway 5-23
 - Expanded the terminal apron
 - Improved runways, safety areas, hazard beacons, and snow removal processes

Airport Reference Code


- FAA system to classify airports
- Based on Approach Speed & Wingspan
 - Aircraft Approach Category (AAC)
 - Airplane Design Group (ADG)
- Dictates dimensional requirements of the airfield
- MPV is projected to be categorized as **ARC B-II**
 - Regular/ consistent activity from B-II aircraft
 - Unlikely to increase to ARC C-II given baseline year data
 - Runway 17-35 – **RDC B-II**
 - Runway 5-23 – **RDC B-I Small**

Approach Category	
	Airspeed (knots)
A	< 91
B	91 ≤ 121
C	121 ≤ 141
D	141 ≤ 166
E	166+


Design Group	
	Wingspan (feet)
I	< 49
II	49 ≤ 79
III	79 ≤ 118
IV	118 ≤ 171
V	171 ≤ 214
VI	214 ≤ 262

A-I

Piper Cherokee




Cessna 172



B-I

Cessna 421




Cessna Citation 1




B-II

Embraer 110



Cessna Citation XL



C-II

Bombardier Challenger

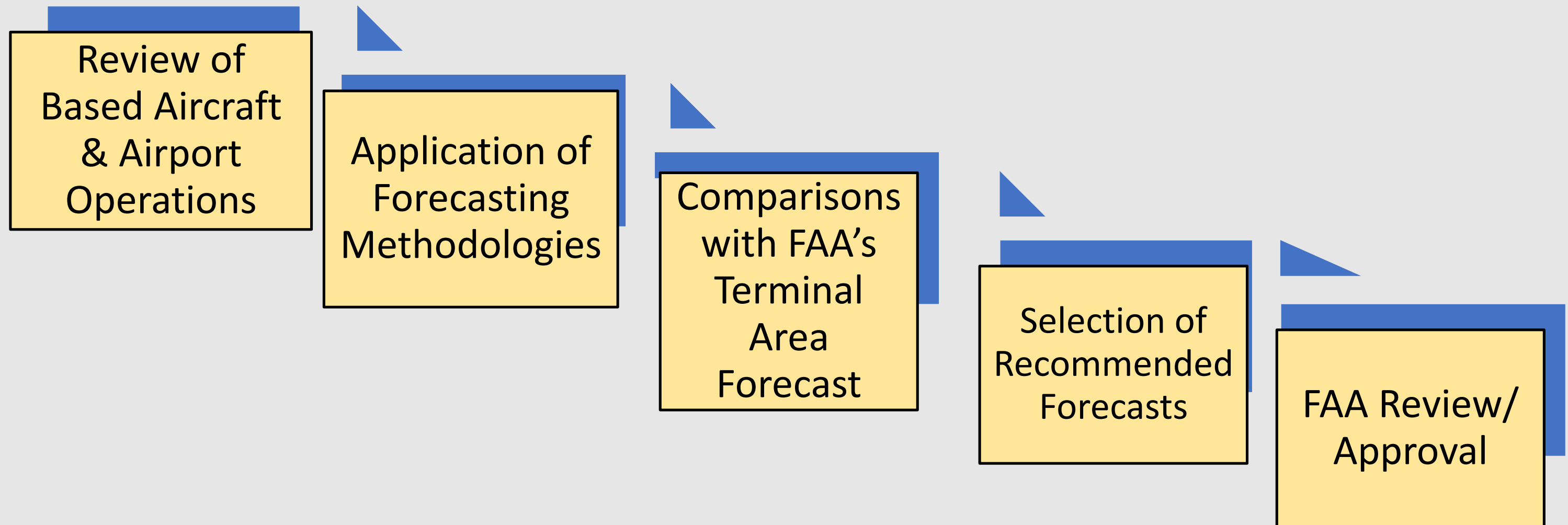


Gulfstream 450



Forecasts of Aviation Demand

Forecasting Process



TAF Based Aircraft & Airport Operations

- FAA Terminal Area Forecast (TAF)
 - Annual based aircraft & airport operations report issued by the FAA
 - Forecasted numbers often remain static (i.e., no growth) for non-commercial airports
- Justification must be Document if Airport Master Plan Operations Forecast Exceeds the TAF by:
 - 10% within 5-years
 - 15% within 10-years

MPV TAF (2020)

Year	Based Aircraft	Airport Operations
2010	54	23,125
2011	54	23,125
2012	53	23,125
2013	53	23,125
2014	53	23,125
2015	54	23,125
2016	53	23,125
2017	51	23,125
2018	51	10,000
2019	43	9,800
2020	43	9,800
TAF Projected		
2021	43	9,800
2026	43	9,800
2031	43	9,800
2036	43	9,800
2041	43	9,800

Base Year
Actual

**Excludes military operations*

MPV Master Plan Forecasts

Recommended Forecasts

- **Based Aircraft**

- Recommended Household Income forecast projects 12 additional aircraft by 2041

Based Aircraft

Year	Recommended Forecast
2020	43
2021	44
2026	46
2031	49
2036	52
2041	55

- **Airport Operations**

- Recommended OPBA forecast projects modest growth by approximately 1,880 additional operations
- Does not exceed TAF parameters

Airport Operations

Year	MPV TAF	Recommended Forecast	Recommended Forecast vs. FAA TAF
2020	9,800	9,800	0.0%
2021	9,800	9,882	1%
2026	9,800	10,304	5% (10% max)
2031	9,800	10,745	10% (15% max)
2036	9,800	11,203	14%
2041	9,800	11,682	19%

Critical Aircraft Determination

- **Critical Aircraft**
 - Type or family of aircraft with 500 or more annual operations at the airport
- Most Aircraft Activity at MPV is from ARC B-I Aircraft with Consistent Activity from A-I thru C-II Aircraft
- ARC B-II was Retained as the sample Critical Aircraft* - Samples: **Citation CJ2, EMB 110**
 - Runway 17-35 – **RDC B-II**
 - Runway 5-23 – **RDC B-I Small**



* Based on data projections

Recorded Flight Plans: Figures

Aircraft Design Type	2011-2020
A-I	4194
A-II	510
B-I	5896
B-II	1882
Grand Total	12,482

Recorded Flight Plans: Percentages

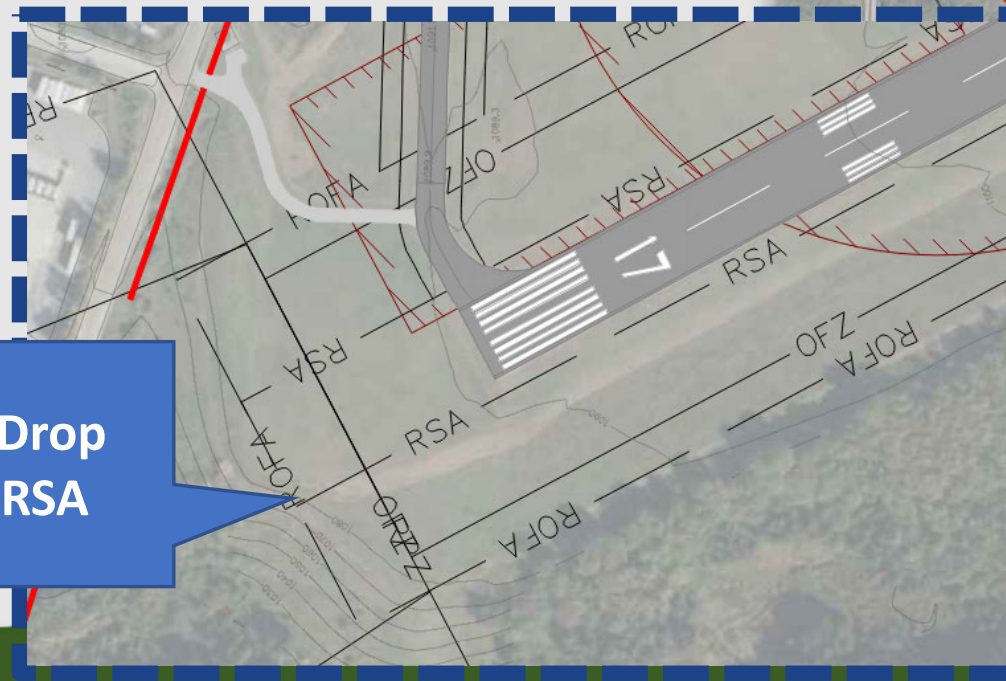
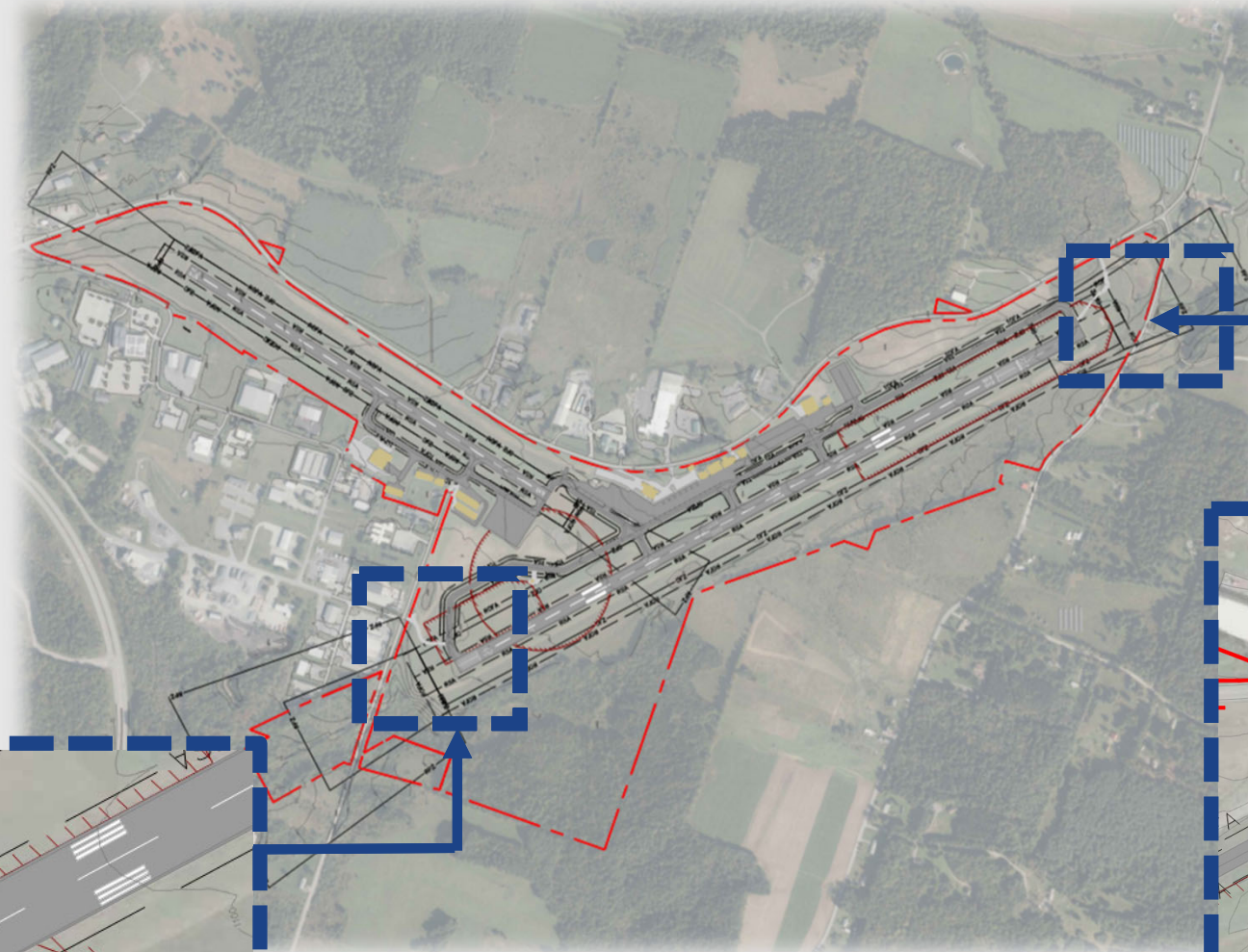
Aircraft Design Type	2011-2020
A-I	30.8%
A-II	3.7%
B-I	42.5%
B-II	13.6%

Airport Facility Requirements

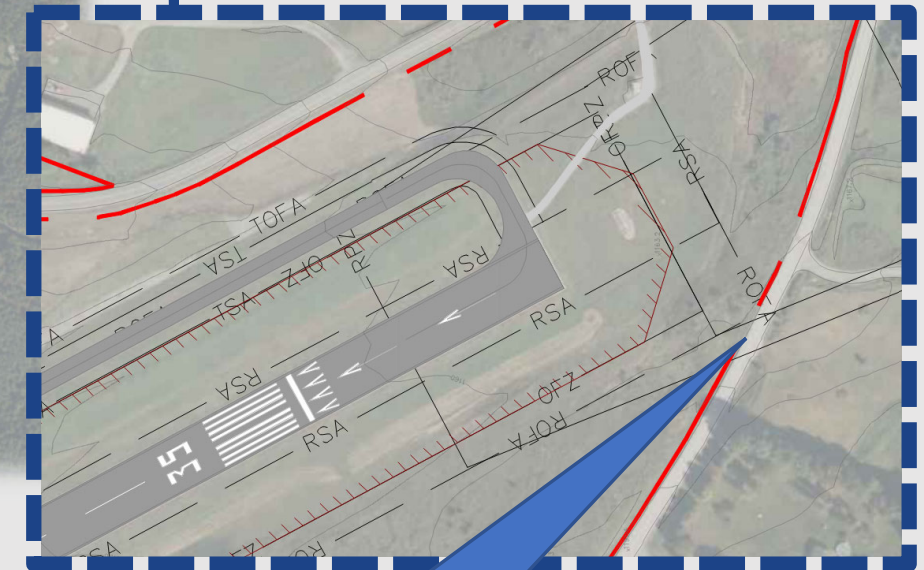


Runway Safety Evaluation

- Runway Safety Area (RSA)
 - Runway 17/35 Width: 150 FT
 - Clear of non-frangible objects
 - Graded to elevation of runway centerline
- Runway Object Free Area (ROFA)
 - Runway 17/35 Width: 500 FT
 - Clear of non-frangible objects
 - Terrain should not be higher than adjacent runway elevation

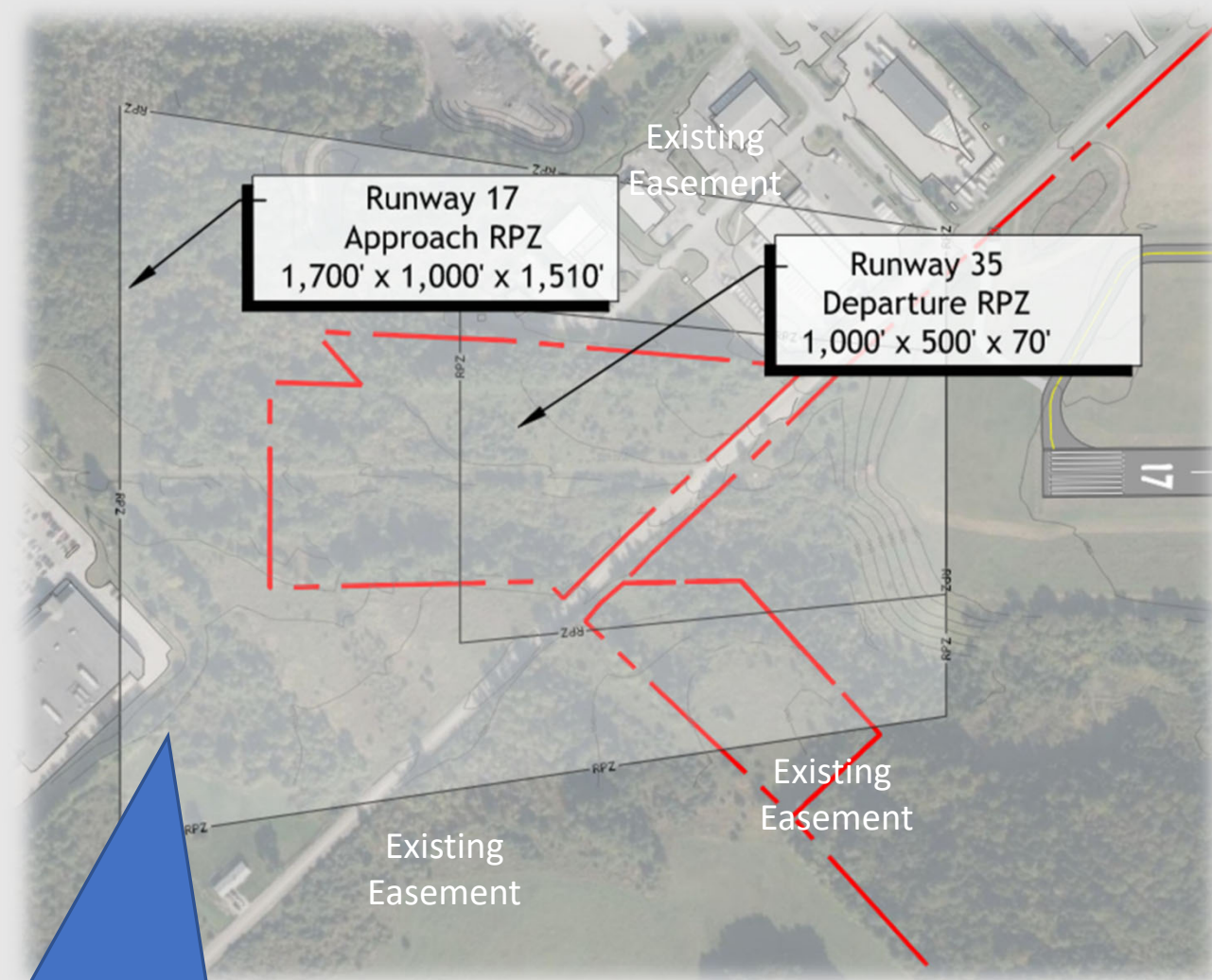


**Terrain Drop
within RSA**

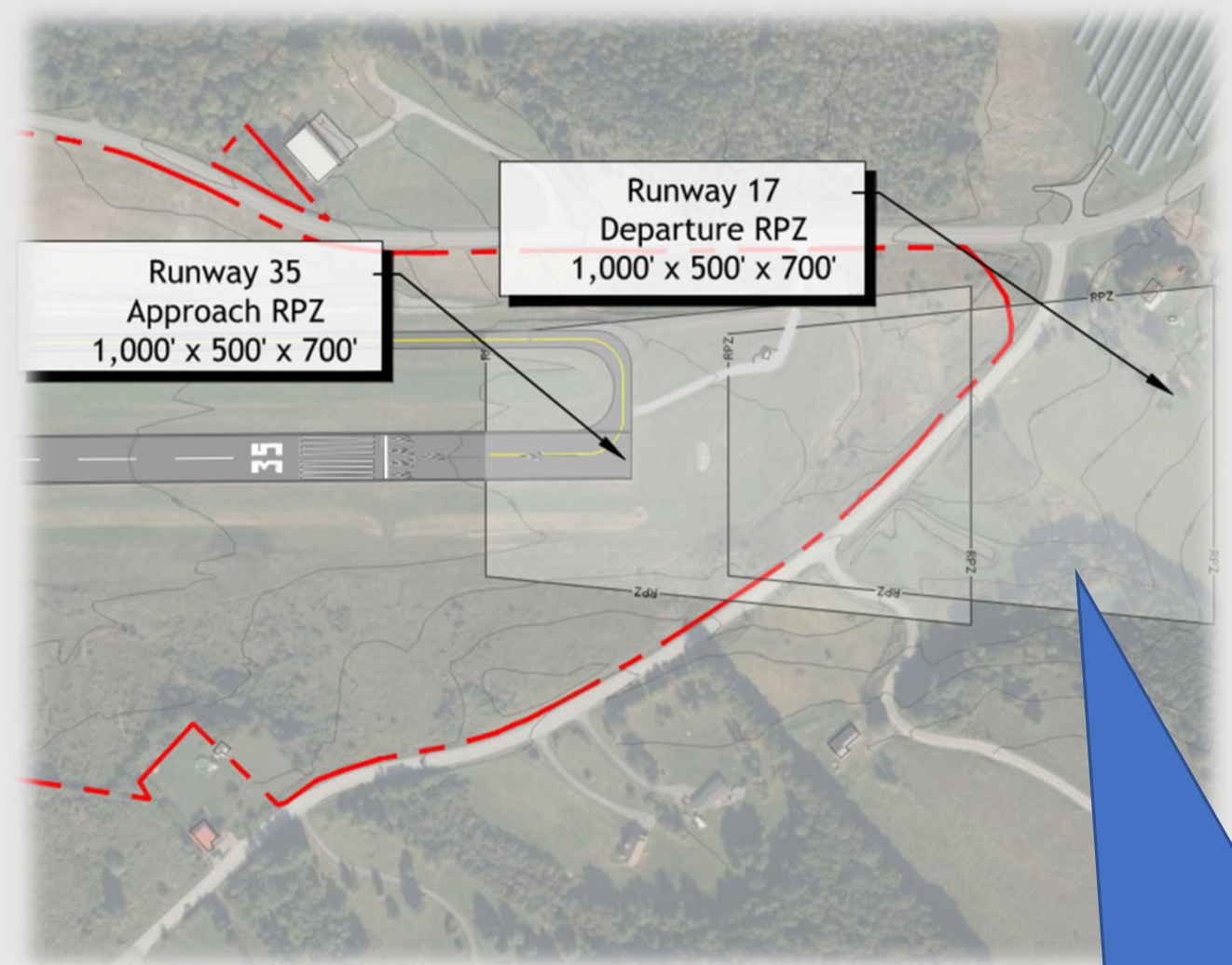


**ROFA off Airport
Property**

Runway Protection Zone (Avigation Easements)

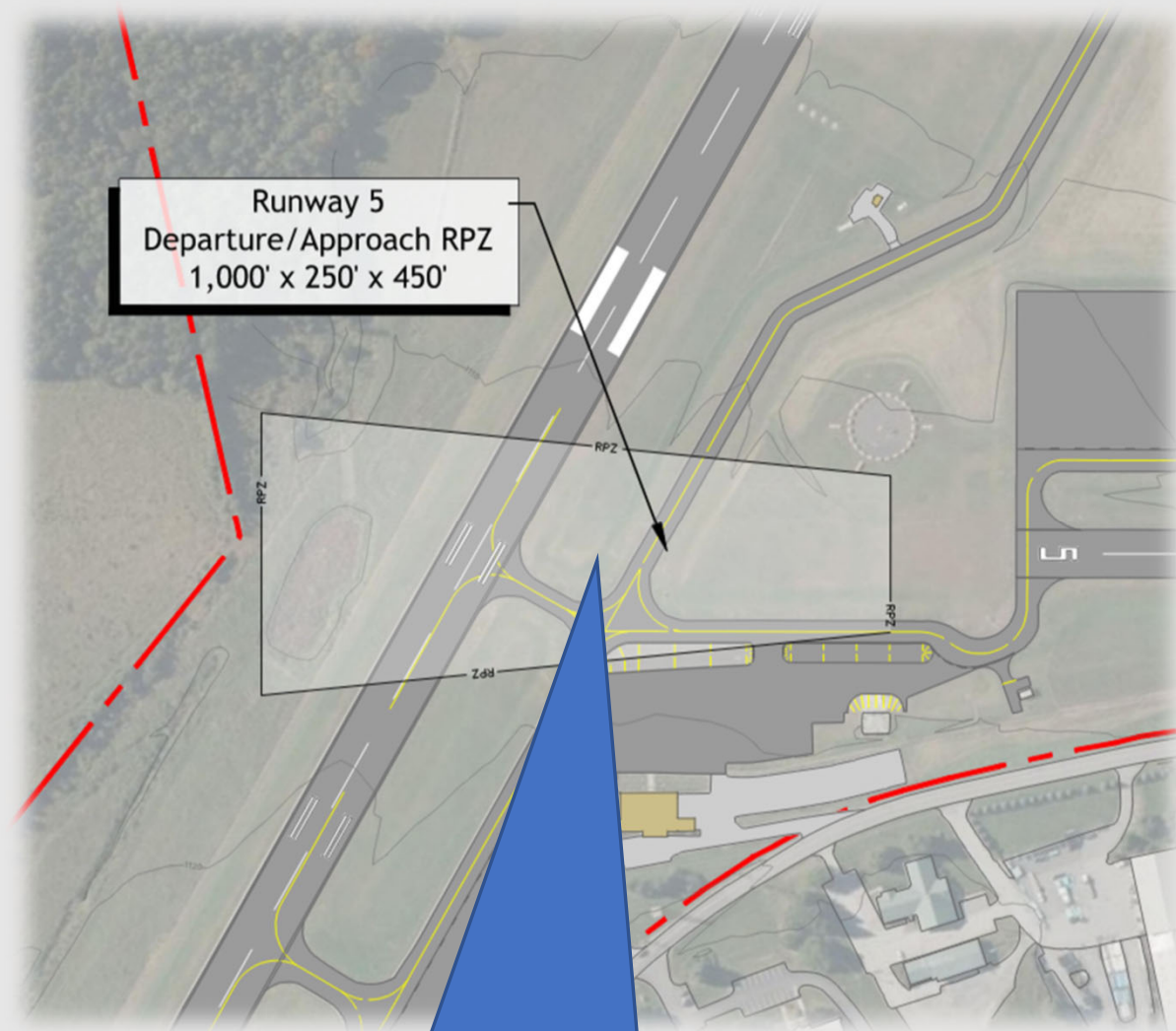


Recommended Easements
RPZ located off-airport property

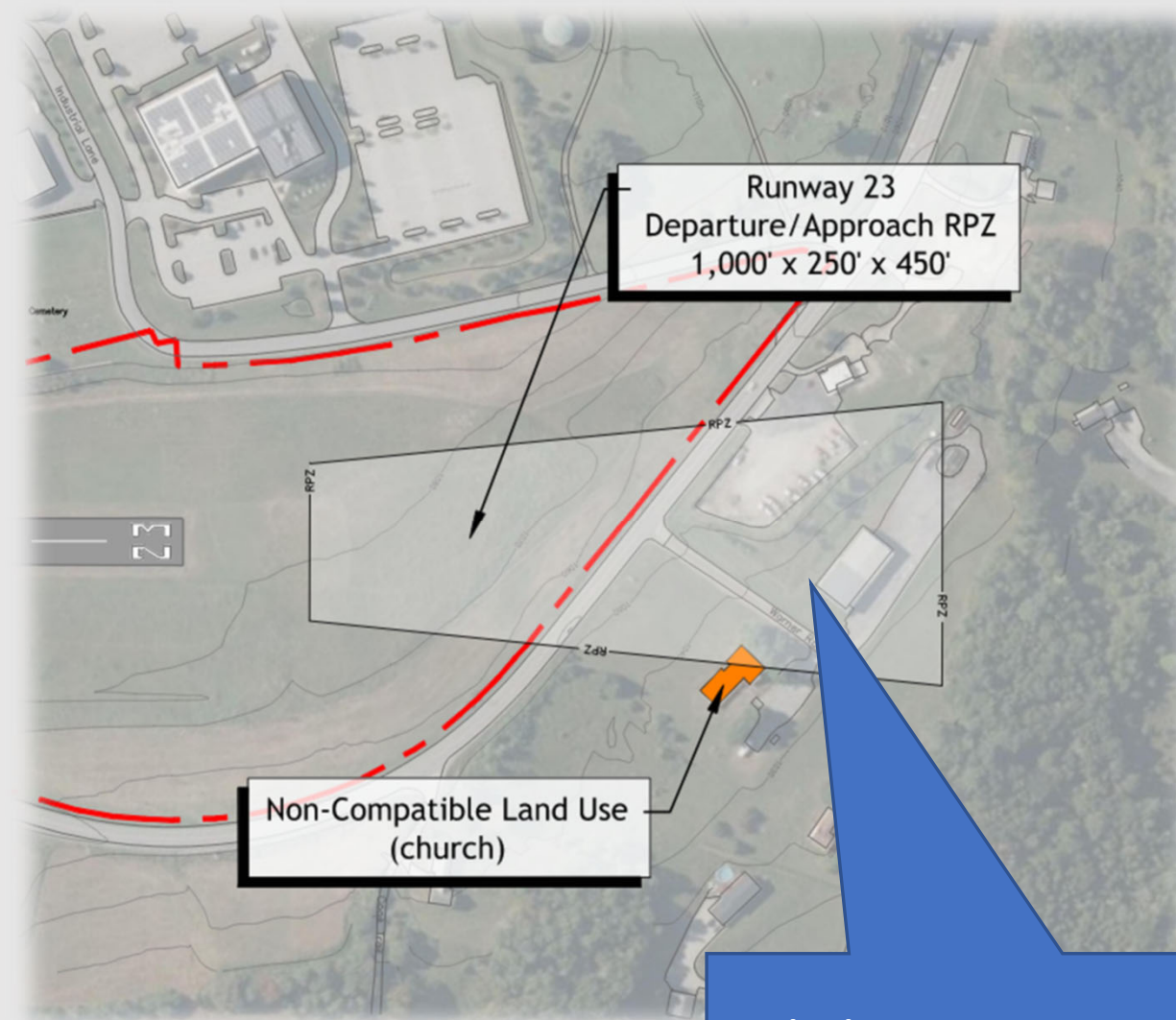


Recommended Easements
RPZ located off-airport property

Runway Protection Zone (Avigation Easements)



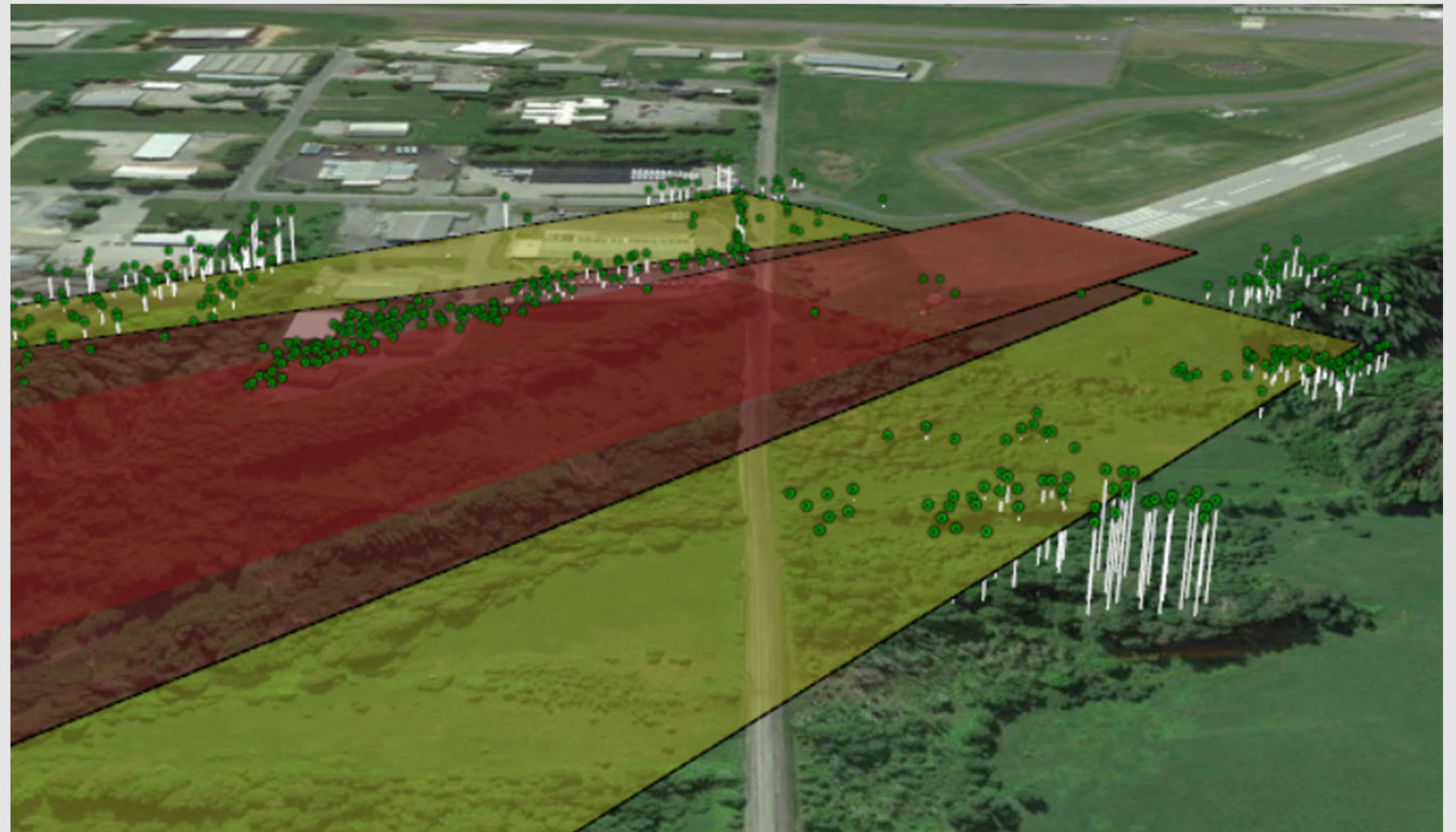
Entire RSA within Airport Property



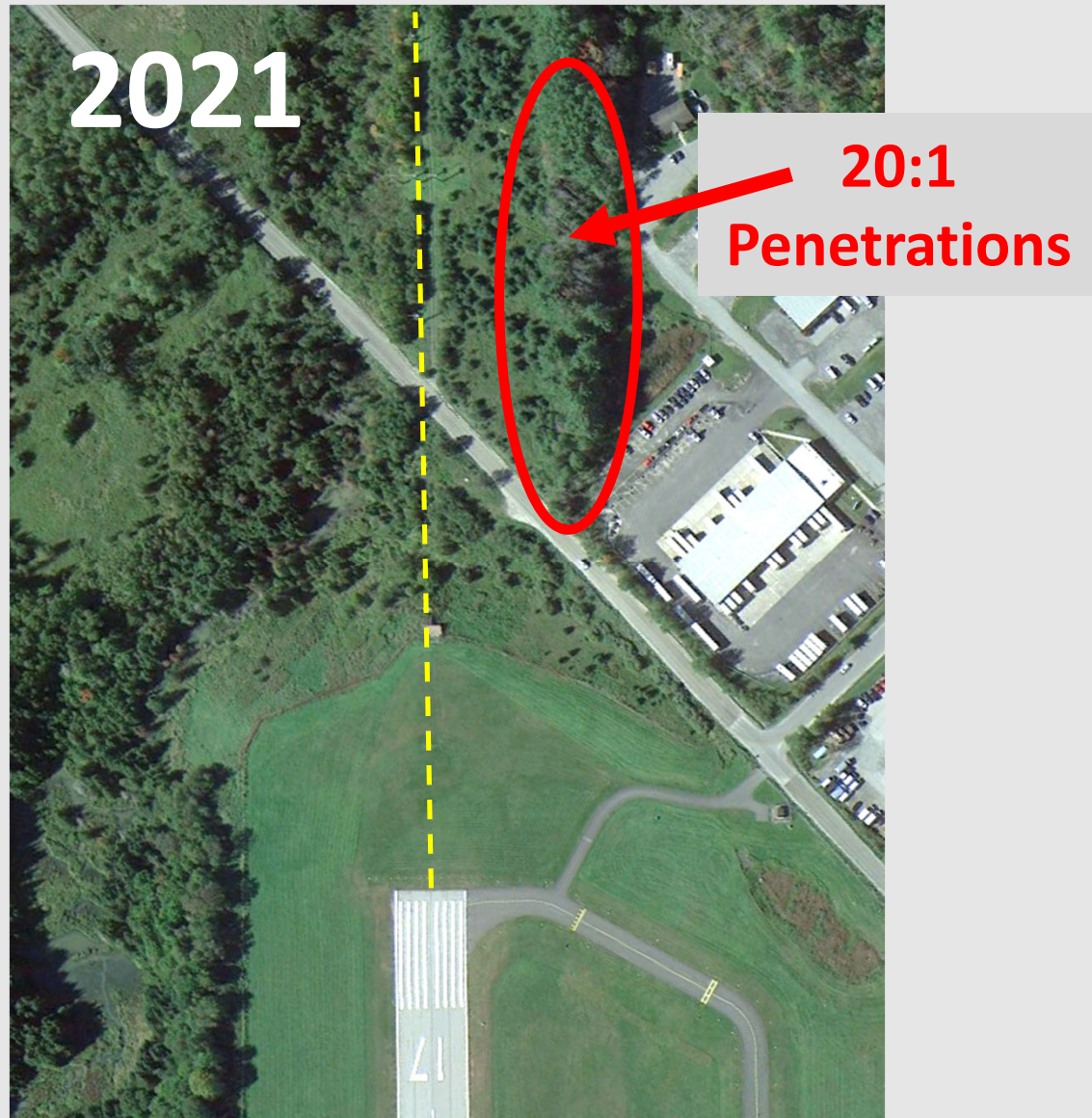
Existing Easements on Off-Airport Property Portion of RSA

Obstruction Evaluation & Removal (Trees)

- Obstruction Study identified numerous airspace penetrations:
 - Runways 17, 35 & 23
- Environmental Assessment (EA) was completed & approved
- Short-term Tree Removal Project in progress
- Most remaining obstruction are located off-airport, and will require easements



Obstruction Evaluation & Removal (Trees)



Airport Facility Requirements Summary

- **Runways:**

- Address nonstandard conditions (RSA, ROFA, RPZ)
- Rehabilitate 17-35
- Install Runway 35 PAPI
- Tree Obstruction Removal

- **Taxiways:**

- Address nonstandard conditions (TSA, TOFA, etc.)
- Realign portion of Taxiway "A"
- Extend Taxiway "H" to full parallel
- Pavement rehabilitation as needed

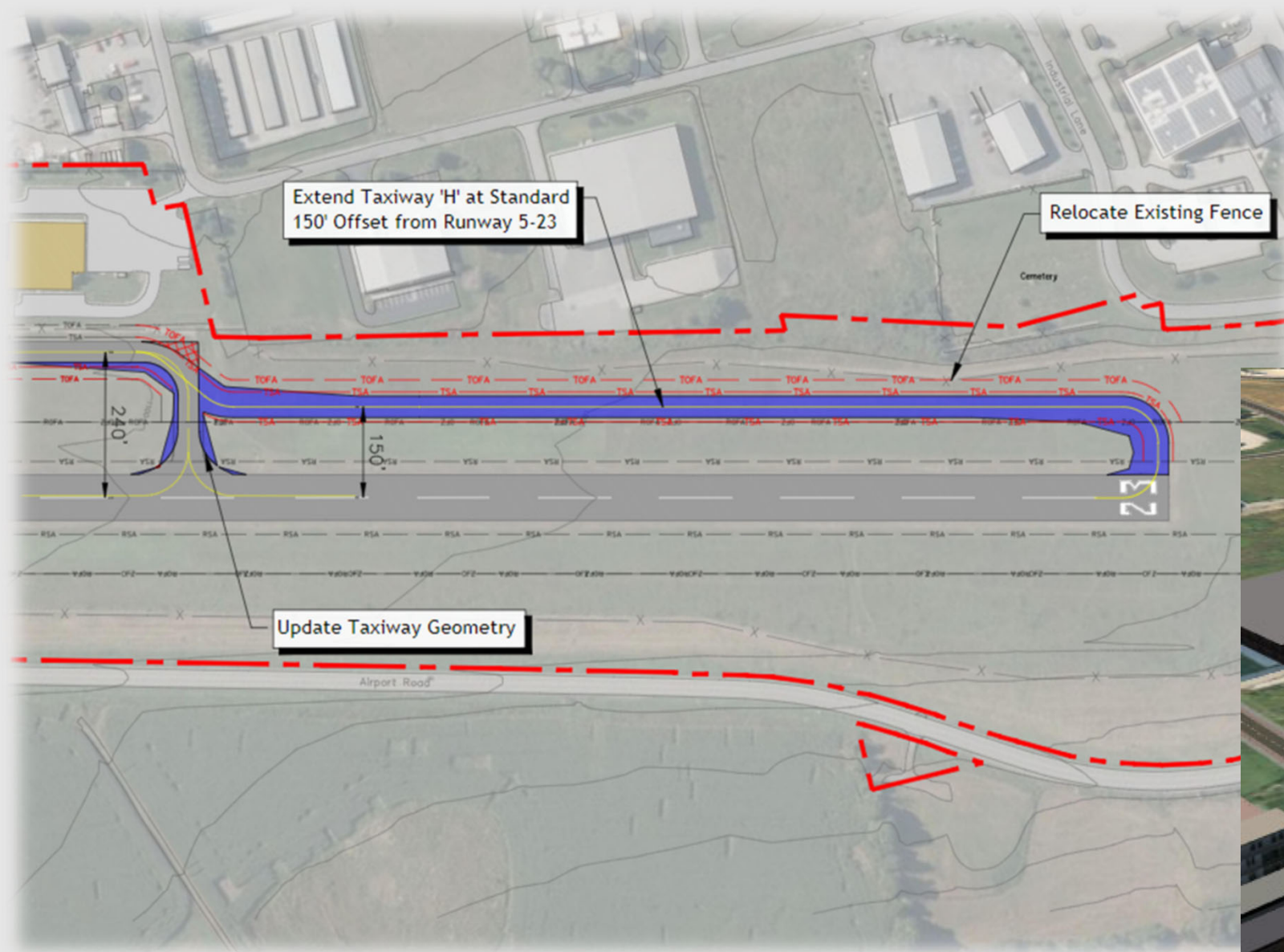
- **Hangars/Aprons:**

- Construct Additional Hangars (i.e., permitting)
- Apron Rehabilitation

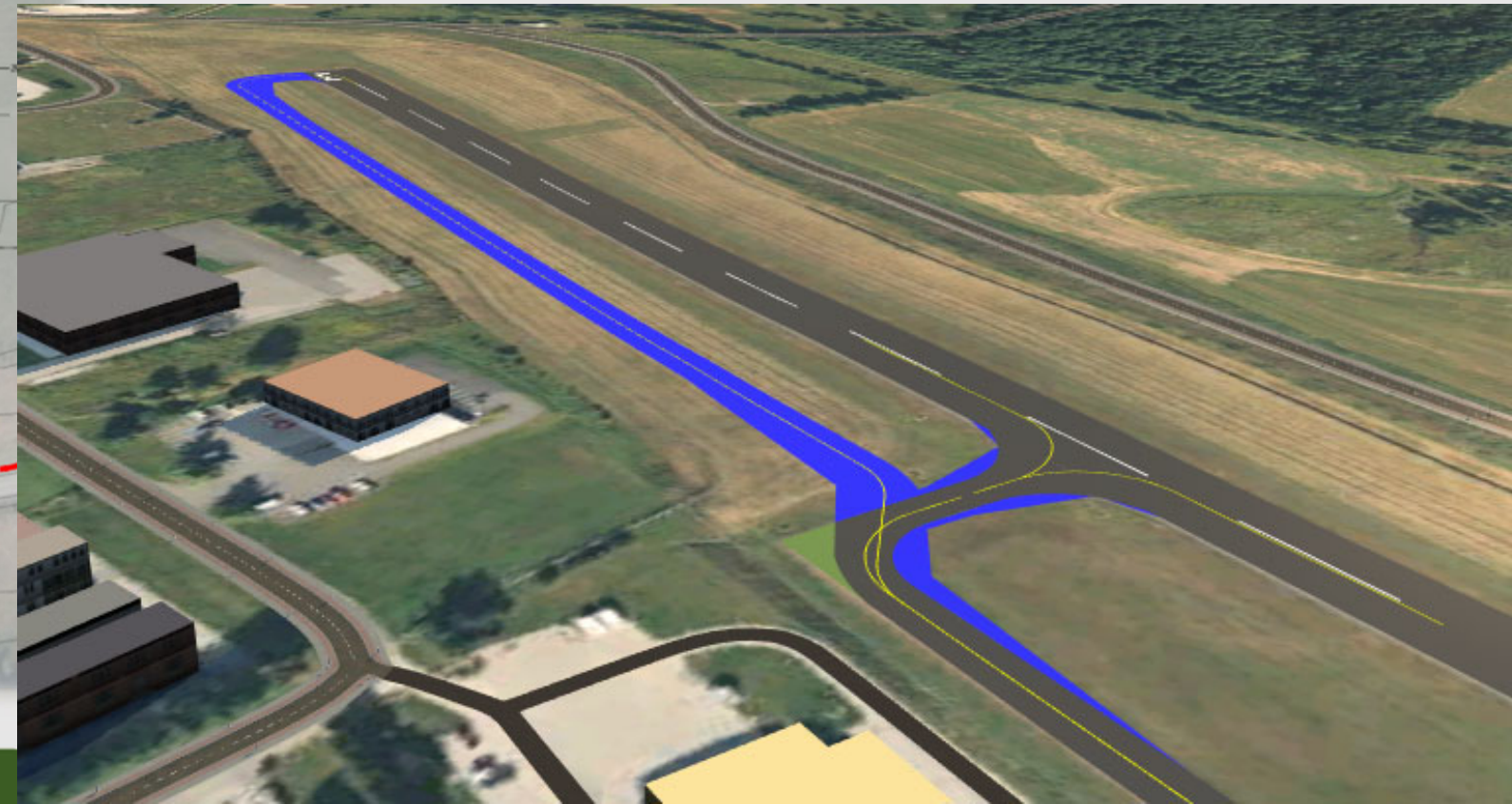
Development Concepts



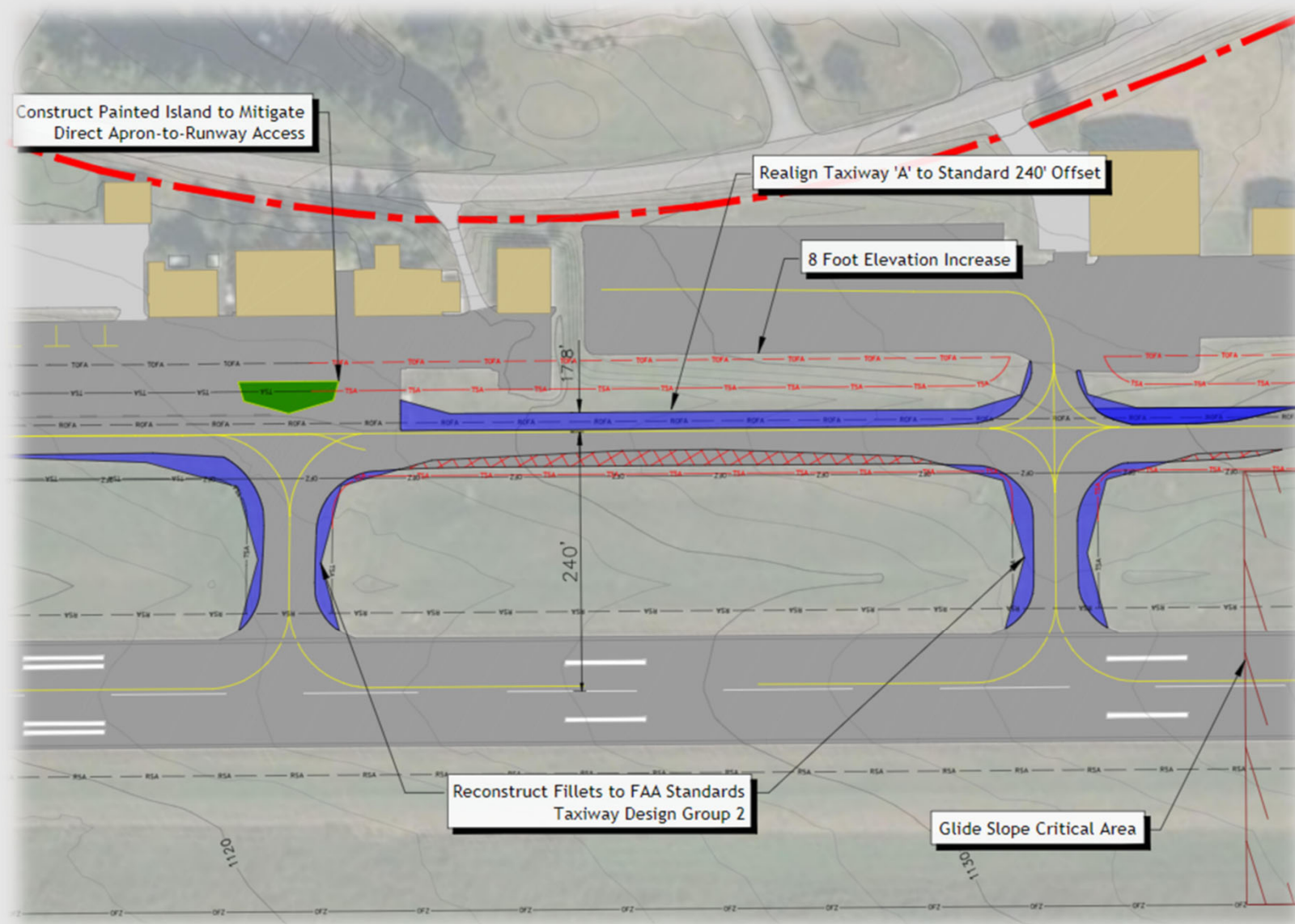
Master Plan Concept Shortlist



- Taxiway 'H' Extension
 - Provides full parallel taxiway to Runway 23 end
 - Standard B-I, 150' offset

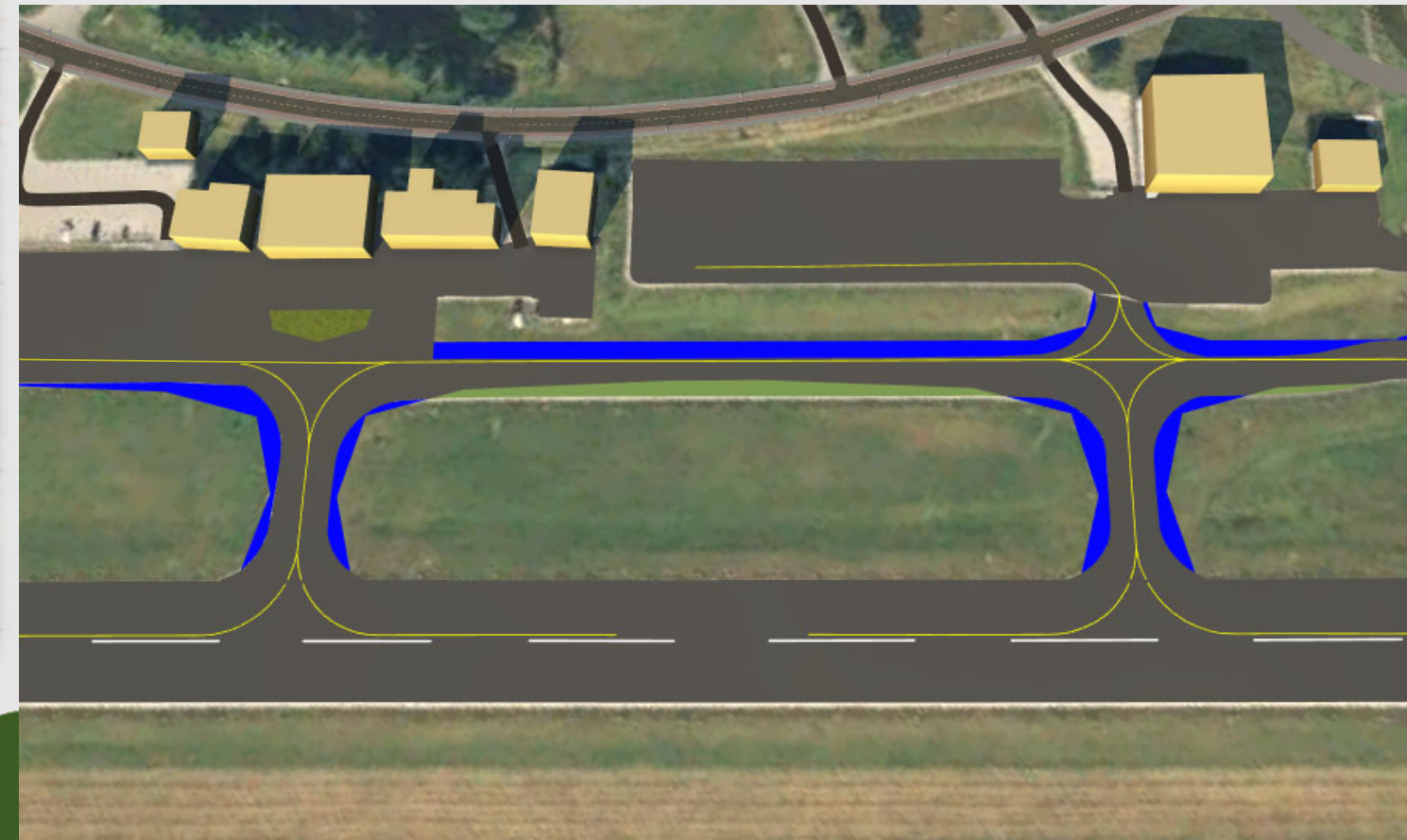


Master Plan Concept Shortlist



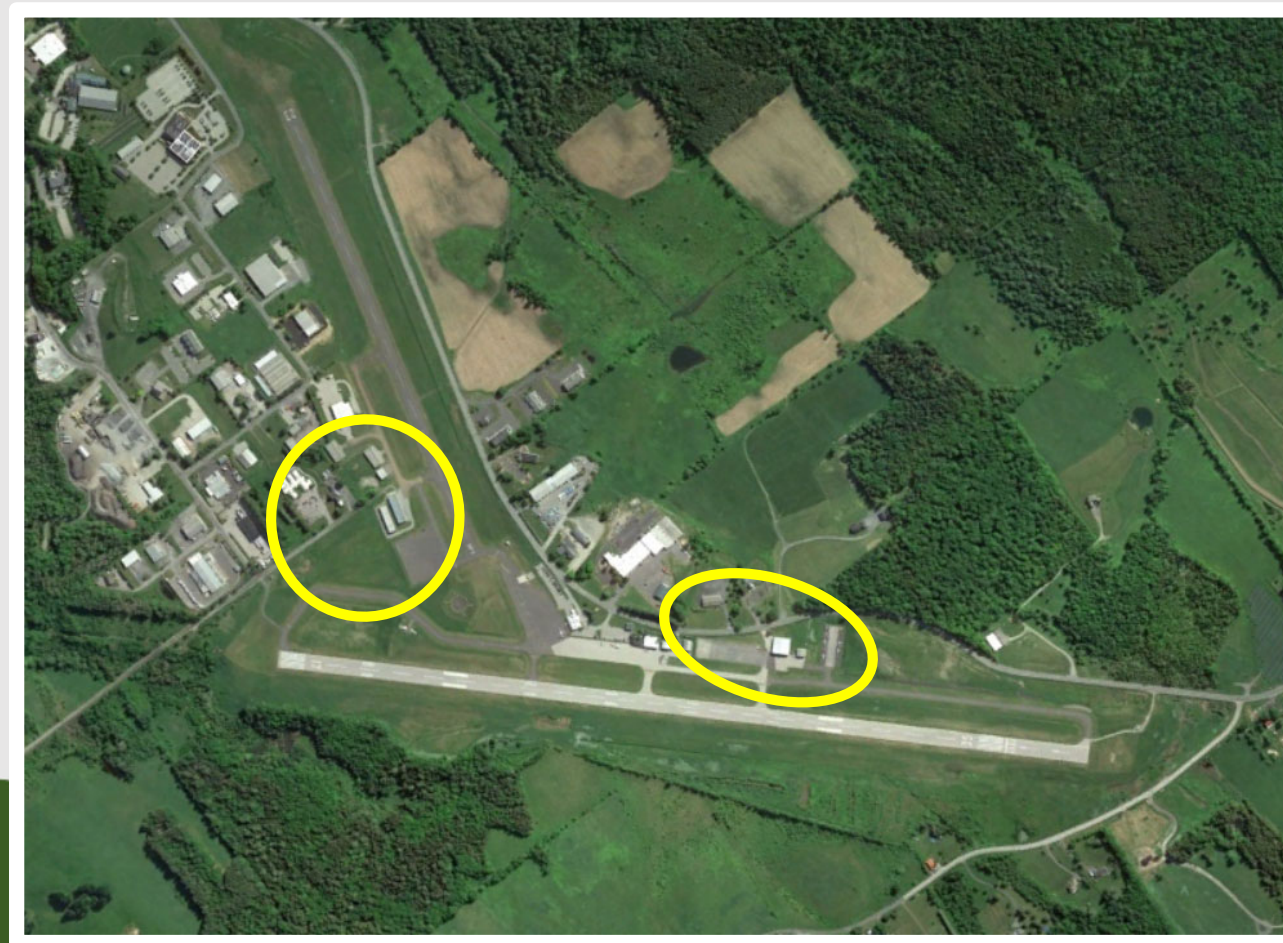
- Taxiway 'A' Realignment

- Shift Taxiway 'A' 15 feet towards the east to standard offset of 240 feet
- Include Painted island to mitigate direct apron-to-runway access

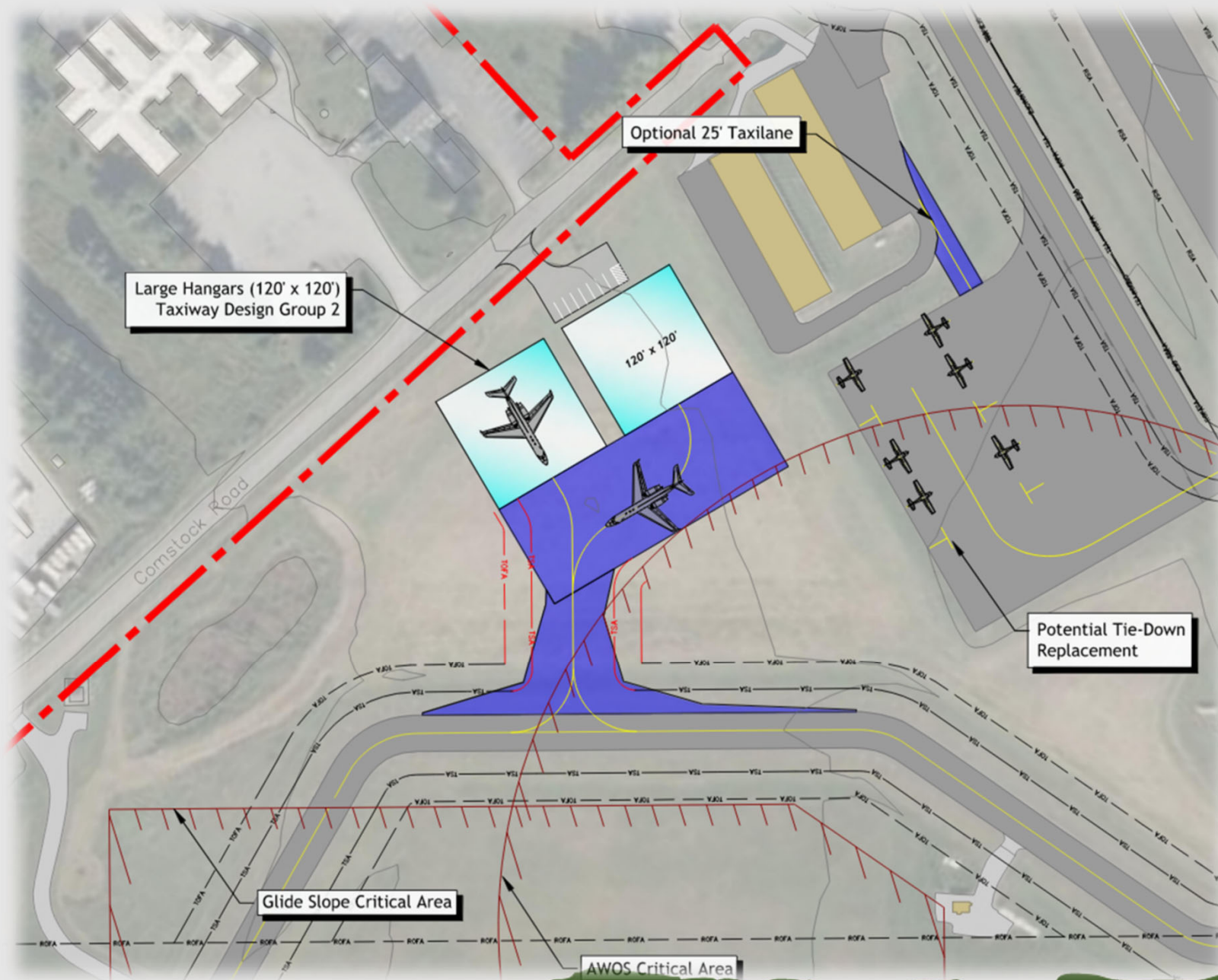


Potential Hangar Concepts

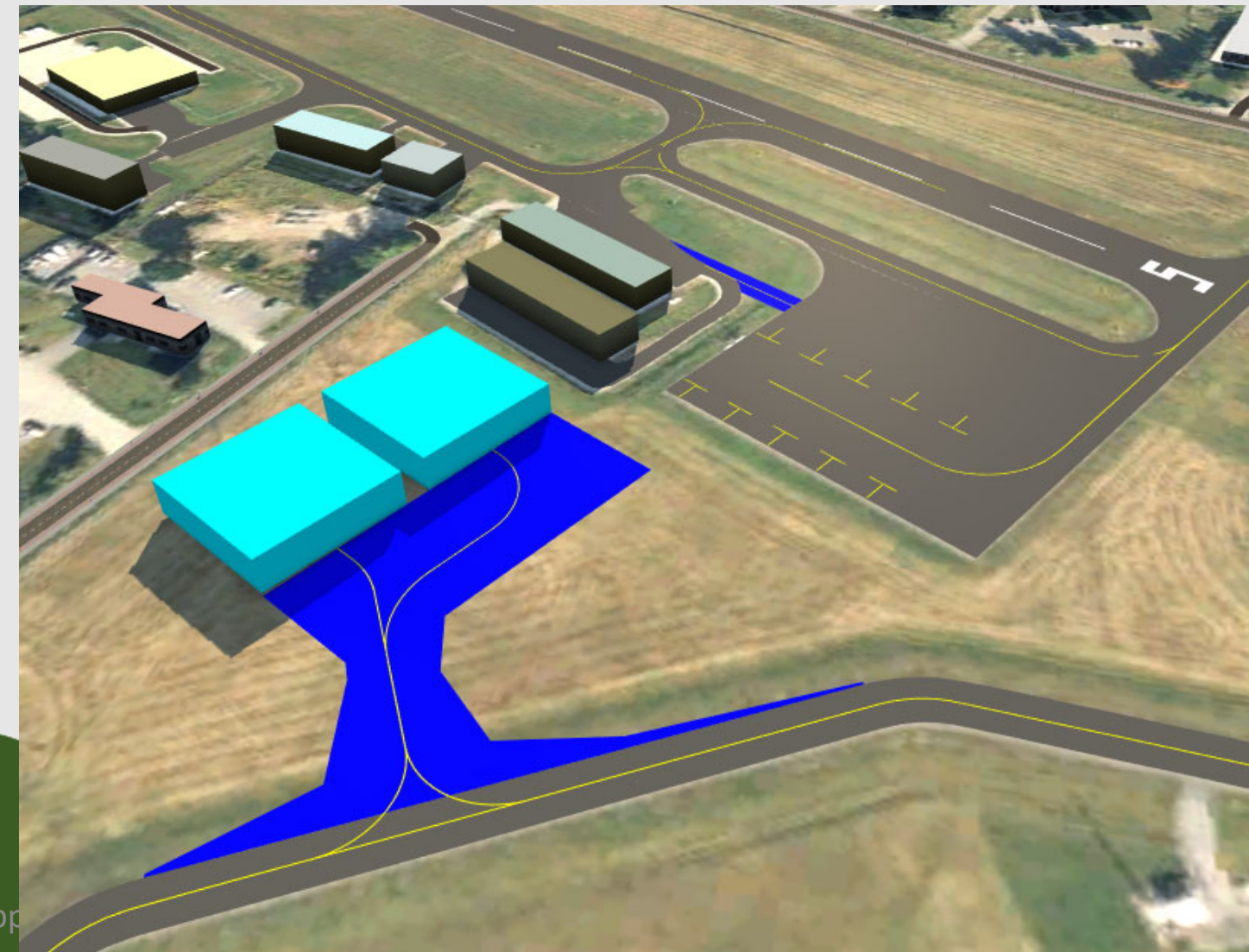
- **VTRANS Hangar Permitting** – VTrans is advancing an effort to “pre-permit” hangar sites to streamline private hangar development
- At MPV, the master plan is reviewing a few locations, which will be included on the Airport Layout Plan (ALP)



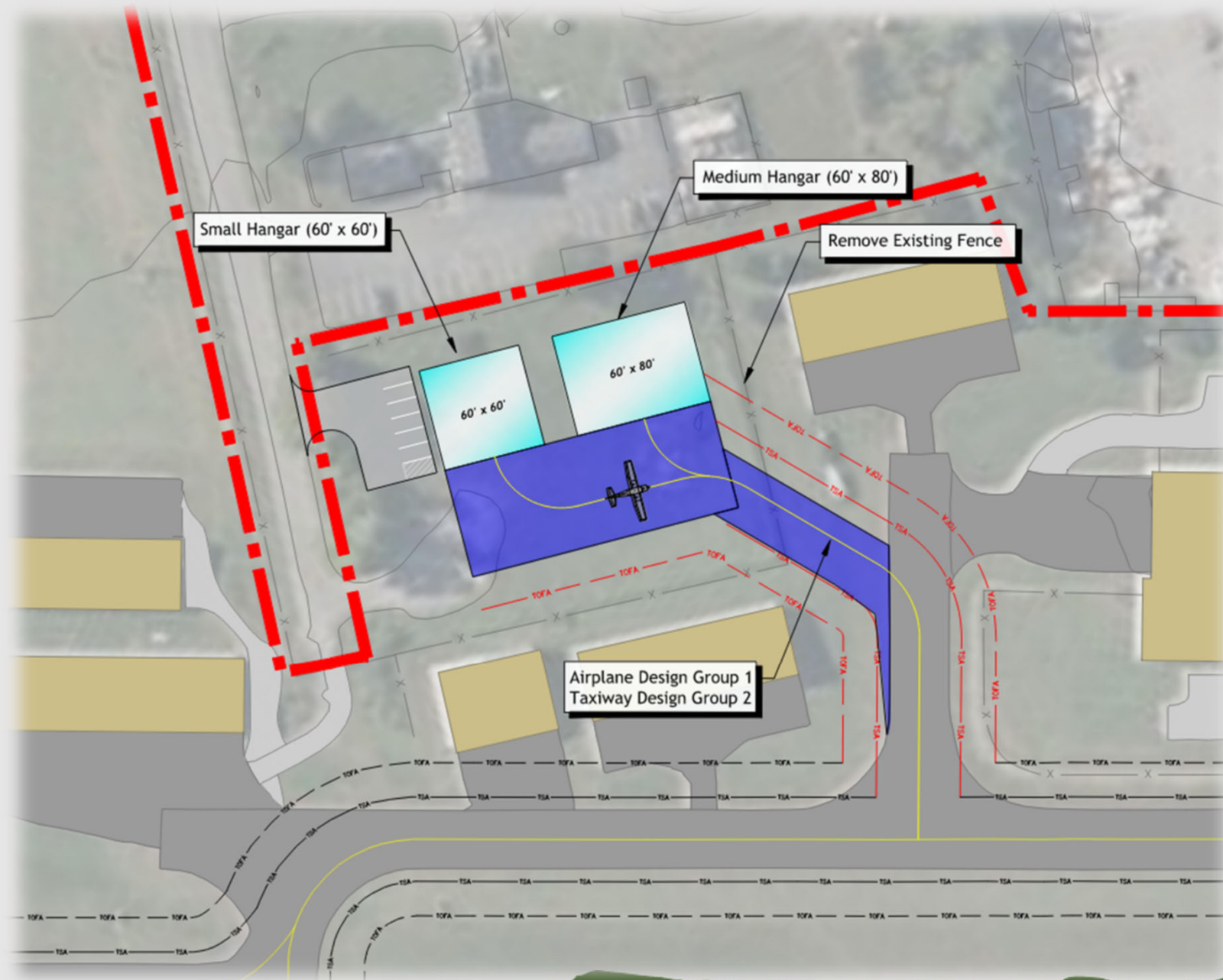
Master Plan Concept Shortlist



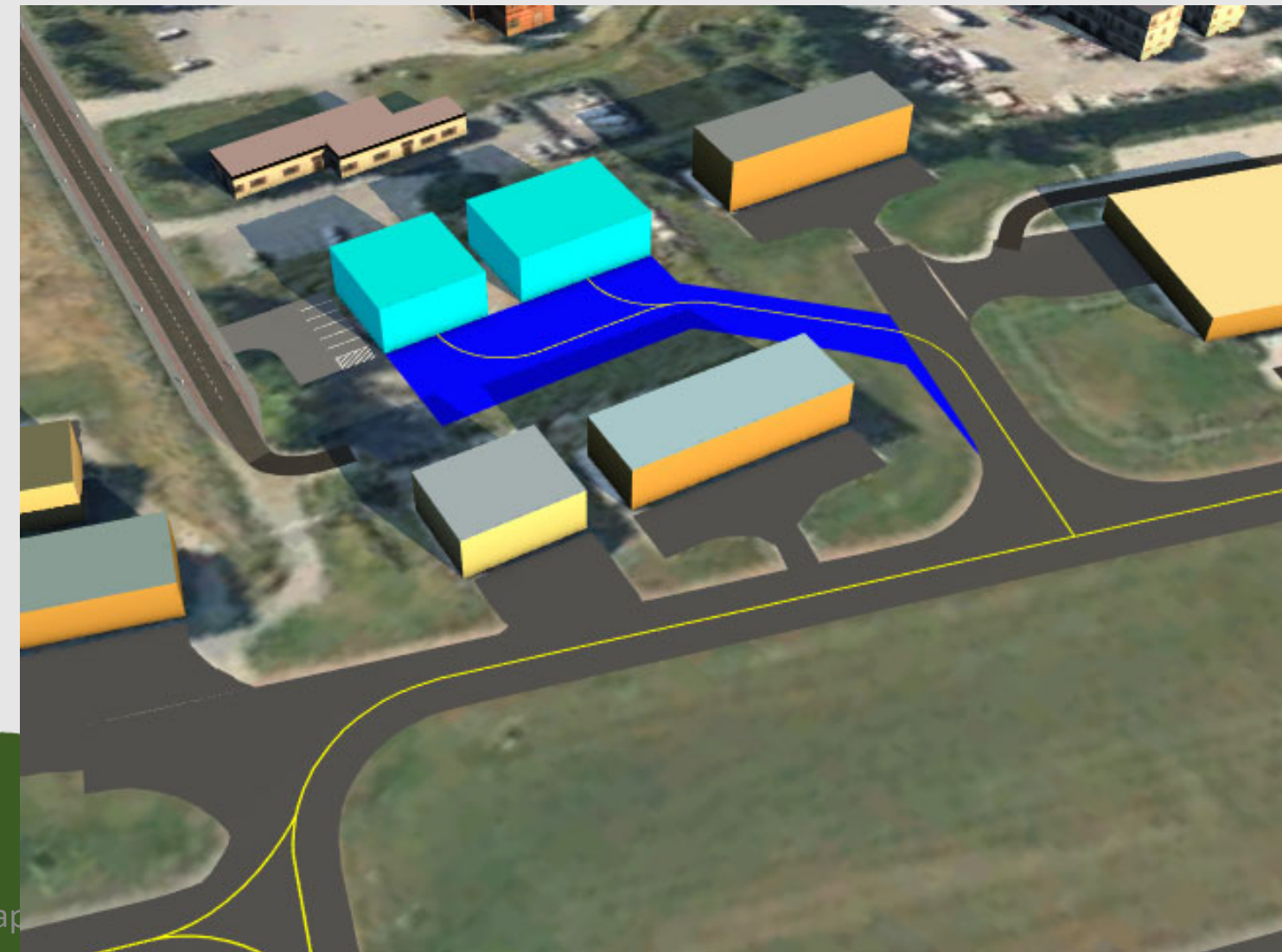
- North Development Site 1
 - Provides additional hangar for corporate GA aircraft
 - Provides Tie-down parking on under-utilized Jet Ramp



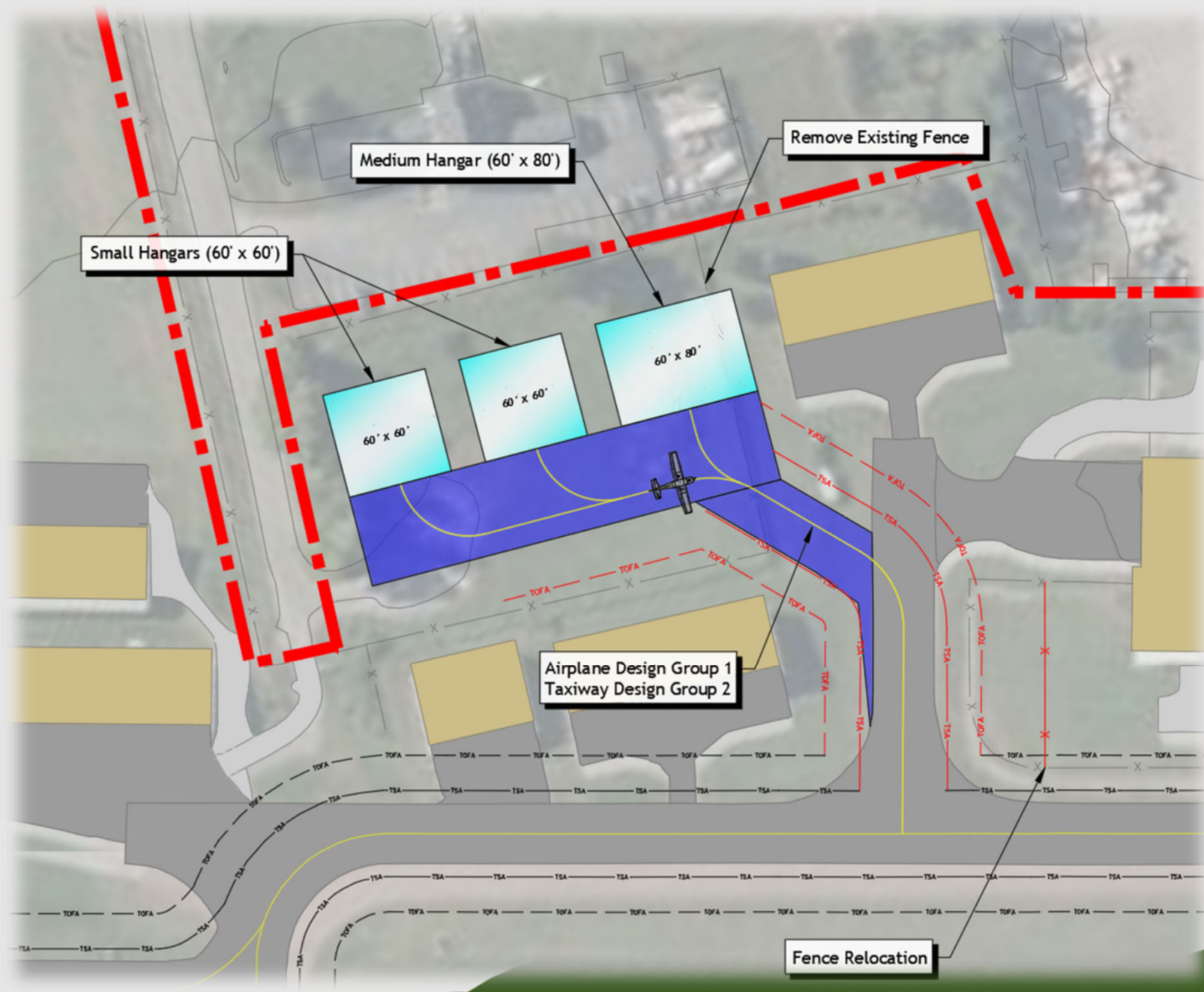
Master Plan Concept Shortlist



- North Development Site 2
 - Provides additional hangar for corporate and small GA aircraft
 - Provides vehicle access and parking off Comstock Rd.



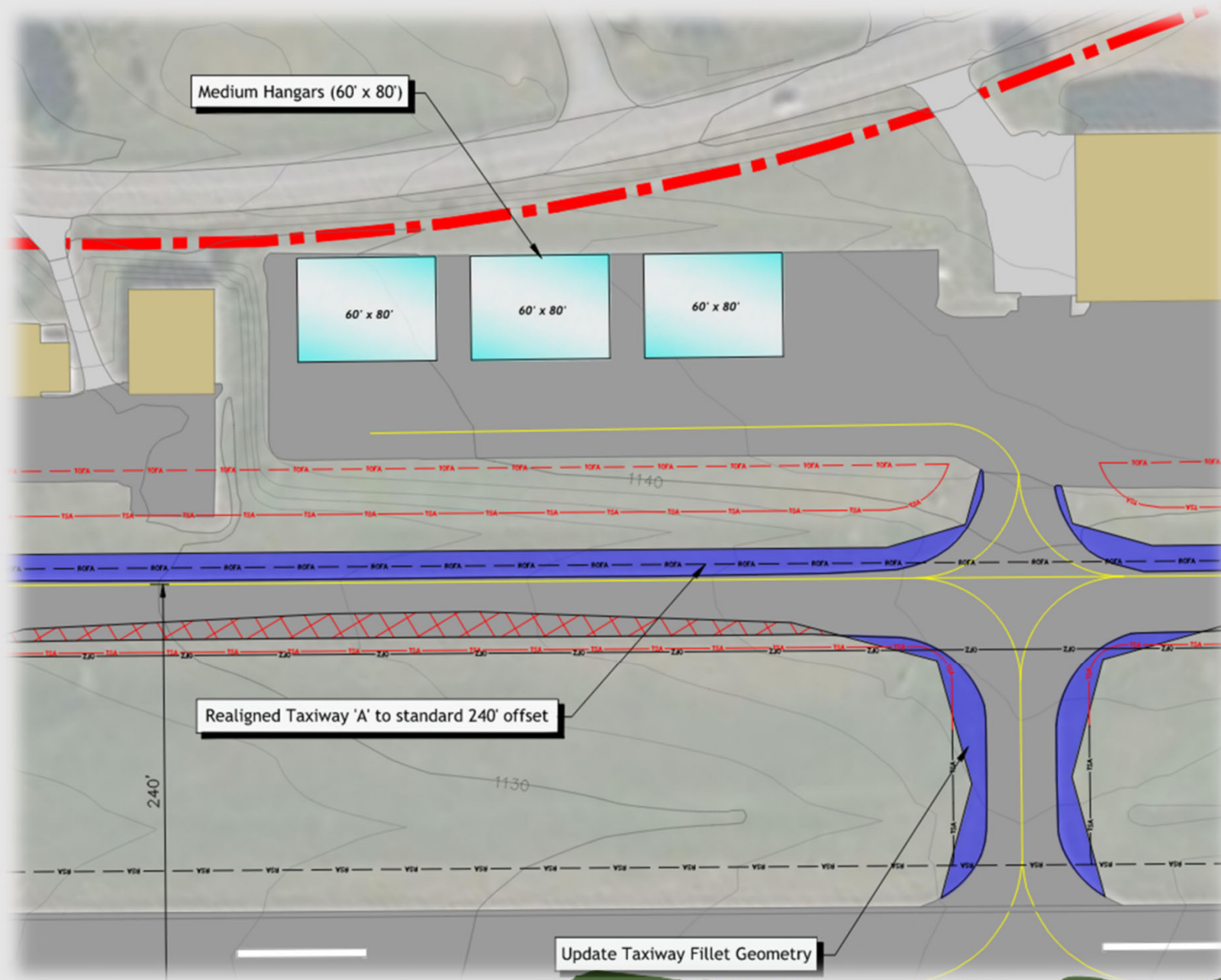
Master Plan Concept Shortlist



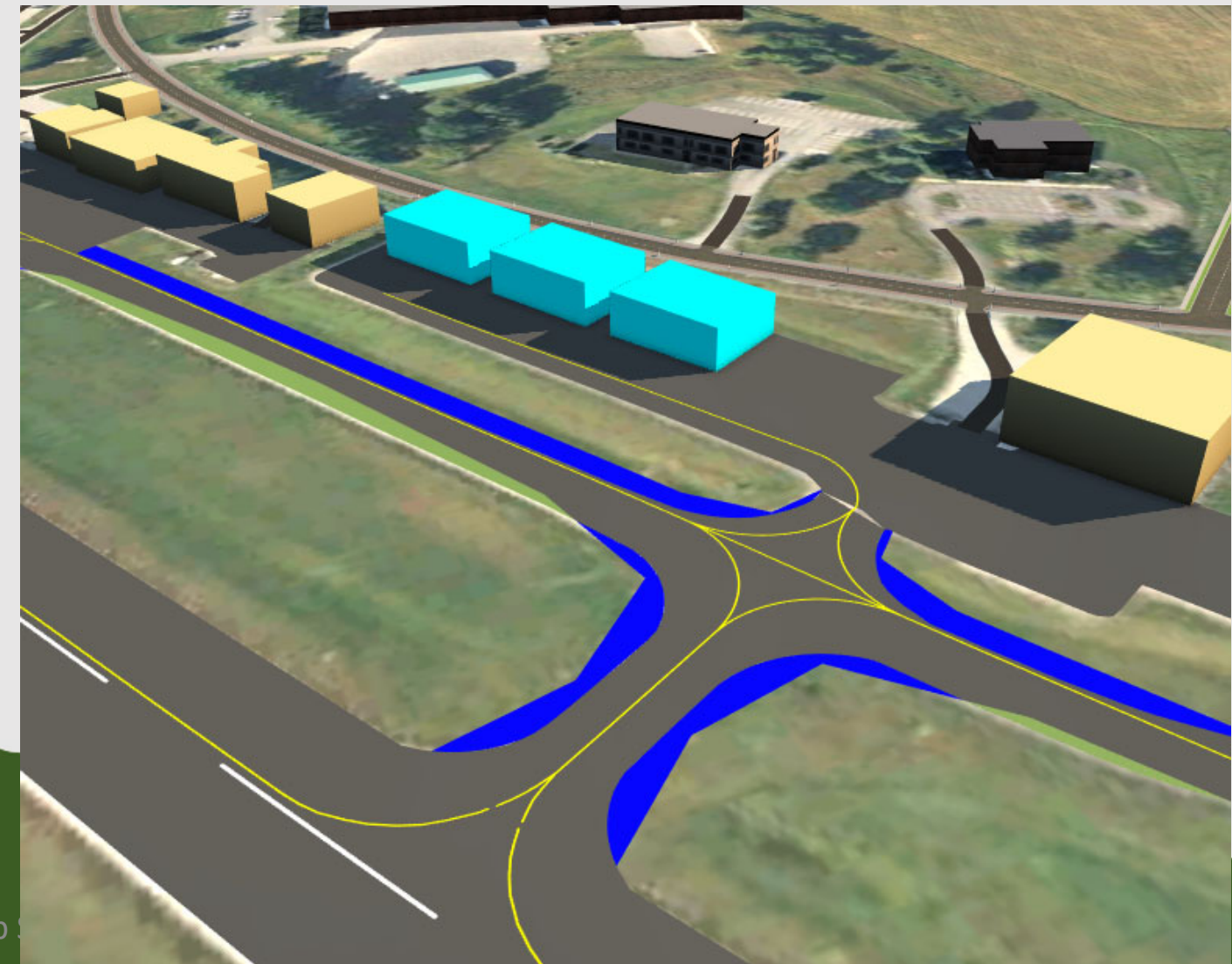
- North Development Site 2
 - Provides additional hangar for corporate and small GA aircraft
 - Accessed via Gate near VTrans Building #14



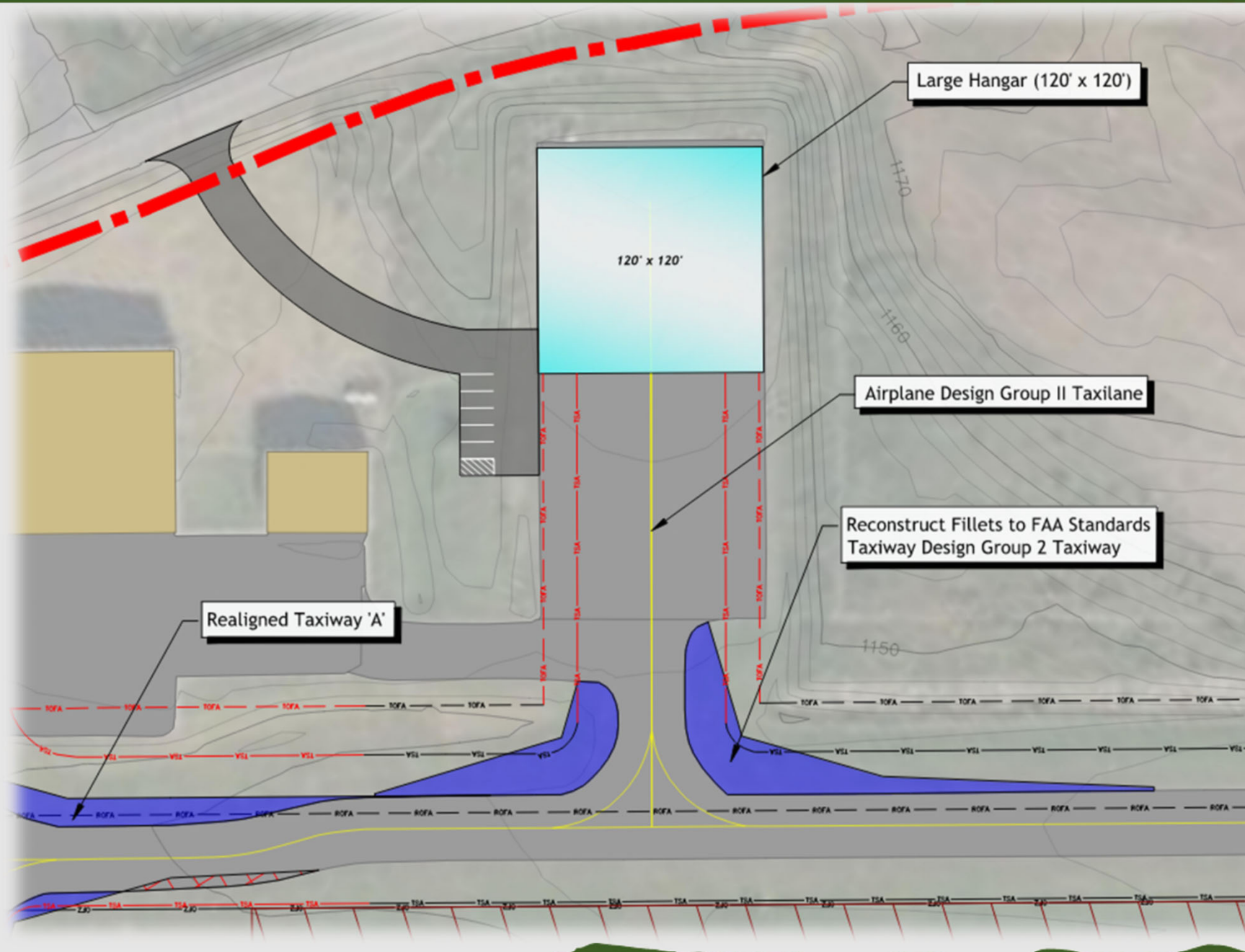
Master Plan Concept Shortlist



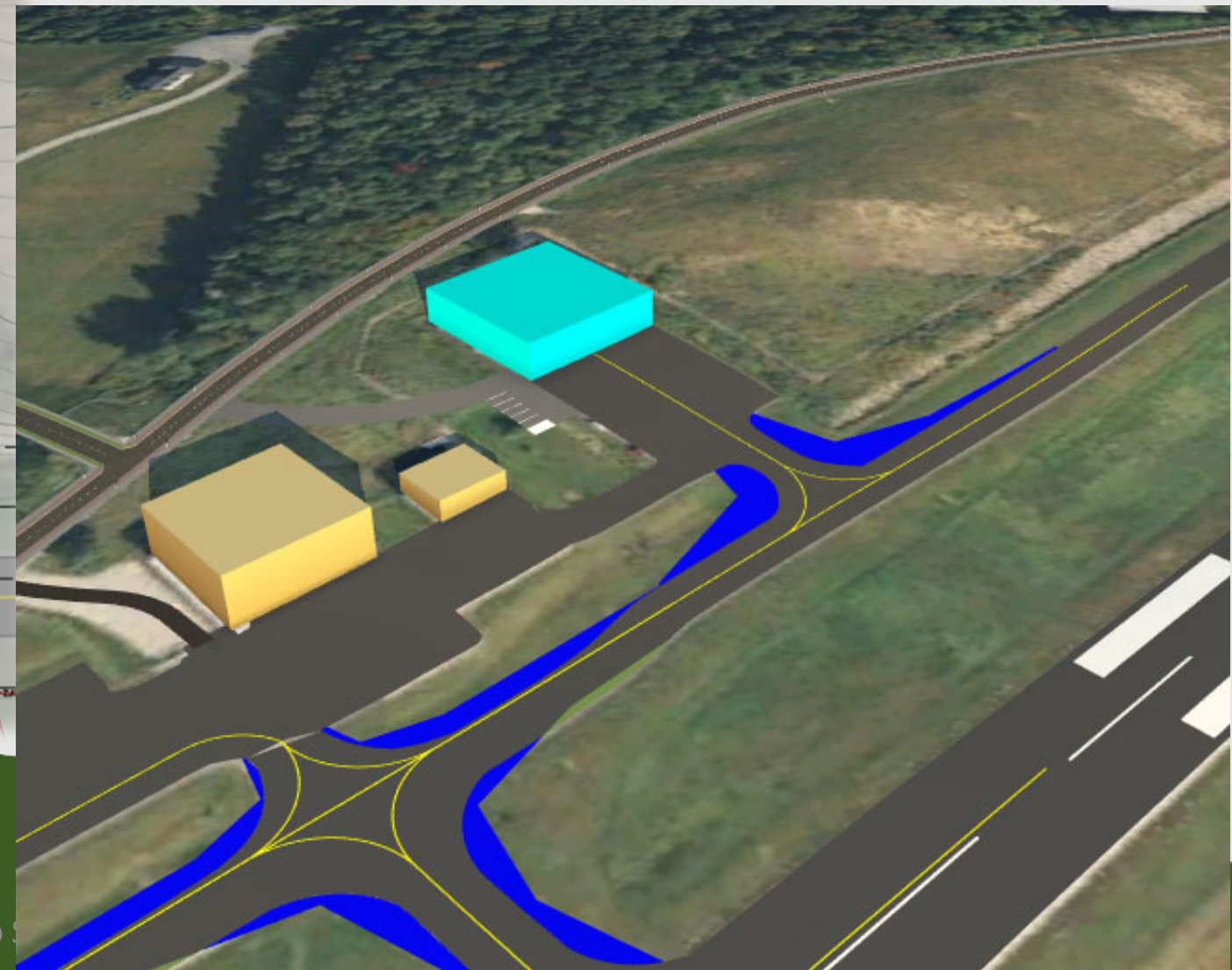
- Upper Ramp Development Area
 - Provides additional hangar for corporate and small GA aircraft



Master Plan Concept Shortlist



- Tie-Down Ramp Development Area
 - Provides additional hangar for corporate GA aircraft
 - Provides vehicle access and parking off Airport Road



Master Plan Concept Shortlist

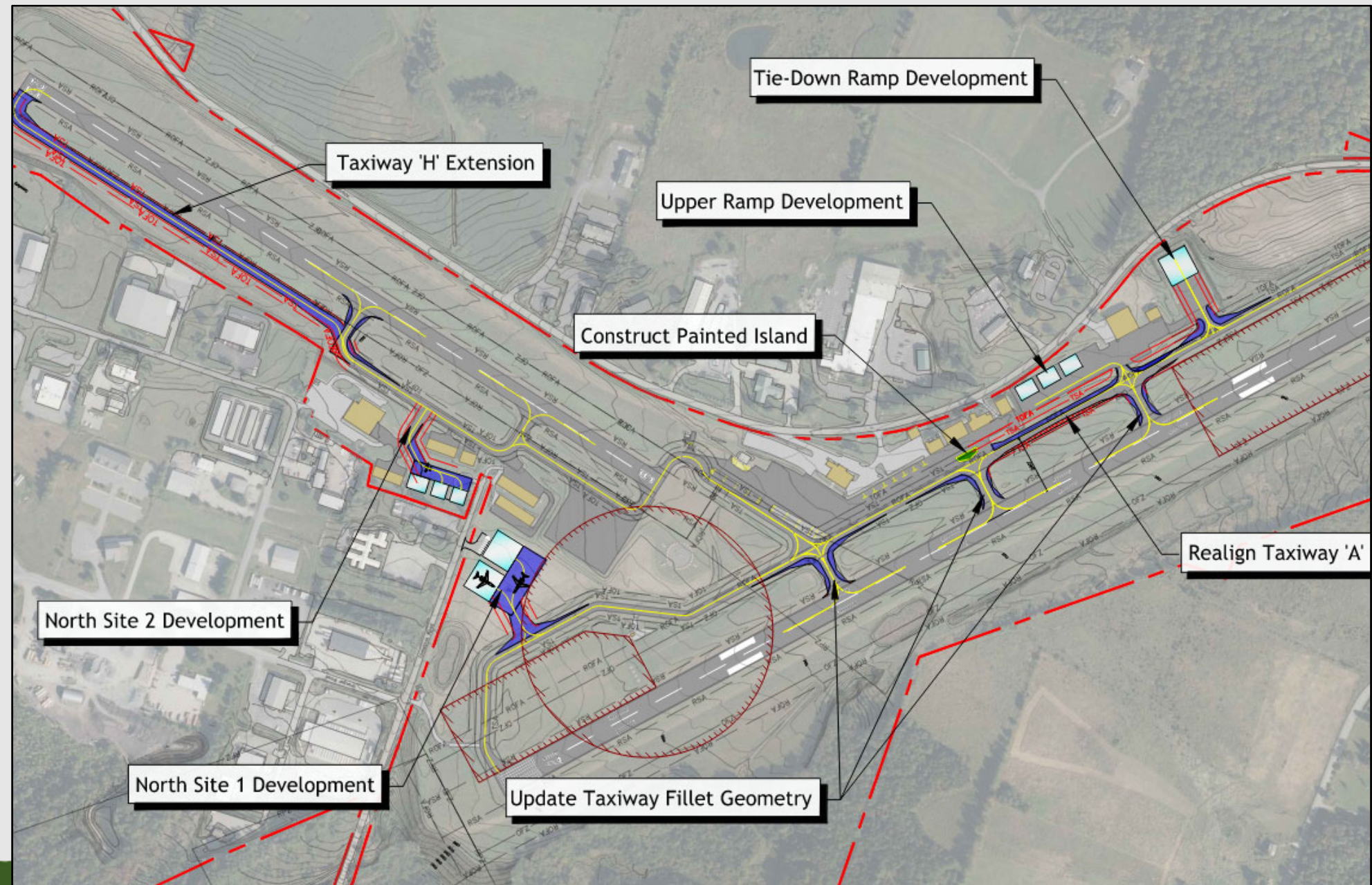


- Terminal Building Improvements
 - Rehabilitate Building
 - Area for flight planning & public facilities
 - Additional area for lease



Draft Recommended Plan

- Airfield Design Standard Upgrades
- Avigation Easements
- RPZ Acquisition
- Tree Clearing
- Taxiway "H" Extension
- Taxiway "A" Realignment
- North Hangar Development
- South Hangar Development
- Terminal Building Renovations
- Airfield Pavement Maintenance



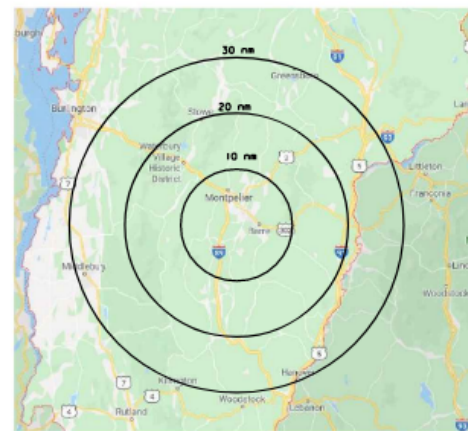
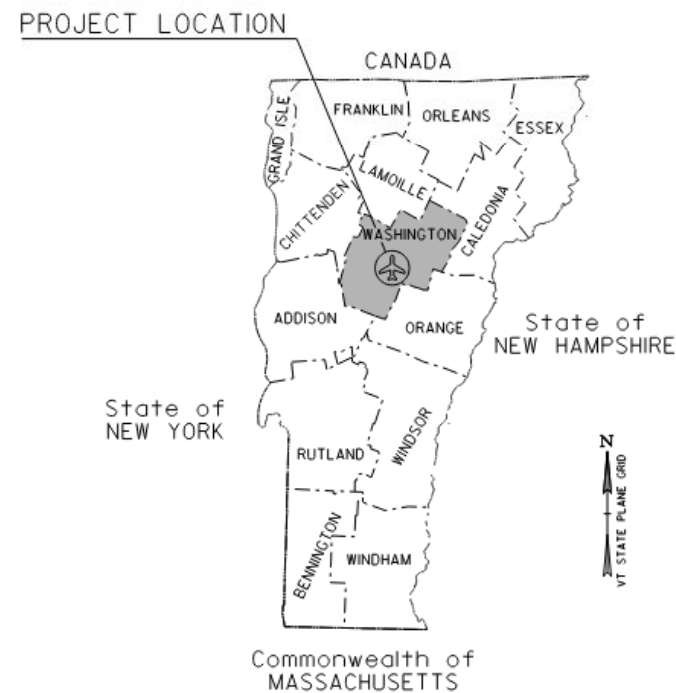
Airport Capital Improvement Plan (ACIP)

Project	Estimated	Federal (90%)	VTrans (10%)
Short-Term (0 - 5 Years)			
Environmental Assessment (Short-Term Projects)	\$ 250,000	\$ 225,000	\$ 25,000
Avigation Easement Acquisition	\$ 200,000	\$ 180,000	\$ 20,000
Obstruction Removal	\$ 370,000	\$ 315,000	\$ 55,000
Runway 17-35 Rehabilitation (PE & Permits)	\$ 300,000	\$ 270,000	\$ 30,000
Runway 17-35 Rehabilitation (Final Design & Construction)	\$ 3,000,000	\$ 2,700,000	\$ 300,000
Hangar Development Areas	\$ 450,000	\$ 405,000	\$ 45,000
Apron Rehabilitation (assumed FBO - Dark Green & Tiedown - Salmon)	\$ 350,000	\$ 315,000	\$ 35,000
Total	\$ 4,920,000	\$ 4,410,000	\$ 510,000
Long-Term (5 - 20 Years)			
1 - Taxiway 'H' Extension	\$ 4,790,000	\$ 4,311,000	\$ 479,000
2 - Corporate Hangar Development (North Site #1)		Privately Funded	
3 - Small Hangar Development (North Site #2)		Privately Funded	
4 - Upper Ramp Hangar Development		Privately Funded	
5 - Tie-Down Ramp Hangar Development		Privately Funded	
6 - Install Runway 35 PAPI (4-Box)	\$ 380,000	\$ 342,000	\$ 38,000
7 - Runway Obstruction Removal (Runway 5 end - Easements & EA)	\$ 360,000	\$ 324,000	\$ 36,000
8 - Taxiway A - Magenta - 216,000SF (Mill & Overlay)	\$ 2,070,000	\$ 1,863,000	\$ 207,000
a - Taxiway Geometry Update - New Pavement - 7,000SF	\$ 590,000	\$ 531,000	\$ 59,000
9 - Taxiway 'A' Realignment	\$ 1,970,000	\$ 1,773,000	\$ 197,000
10 - Runway 5-23 - Cyan - 235,000SF (Mill & Overlay)	\$ 2,950,000	\$ 2,655,000	\$ 295,000
11 - Taxiway G & H - Purple - 52,000SF (Mill & Overlay)	\$ 650,000	\$ 585,000	\$ 65,000
12 - Taxiway E & Terminal Apron - Yellow - 120,000 SF (Mill & Overlay)	\$ 1,170,000	\$ 1,053,000	\$ 117,000
a - Taxiway Geometry Update - New Pavement - 9,000SF	\$ 730,000	\$ 657,000	\$ 73,000
13 - Taxiway F & Jet Apron - Green - 96,000SF	\$ 1,050,000	\$ 945,000	\$ 105,000
14 - Taxiway C Apron - Blue - 19,000 SF (Full Depth)	\$ 420,000	\$ 378,000	\$ 42,000
15 - Upper Apron (if hangar development is not pursued) - Gold - 52,000SF	\$ 930,000	\$ 837,000	\$ 93,000
16 - Replace AWOS	\$ 380,000	\$ 342,000	\$ 38,000
Total	\$ 18,440,000	\$ 16,596,000	\$ 1,844,000
Grand Total	\$ 23,360,000	\$ 21,006,000	\$ 2,354,000

Draft Airport Layout Plan – Title Sheet

VERMONT AGENCY OF TRANSPORTATION
 EDWARD F. KNAPP
 STATE AIRPORT (MPV)
 AIRPORT LAYOUT PLAN
 MONTH YEAR
DRAFT

SPACE RESERVED FOR
 FAA APPROVAL



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REVISIONS			
NO.	Description	Date	By



PROJECT NAME: MPV OBSTRUCTION SURVEY
 PROJECT NUMBER: AV-FY18-007
 FILE NAME: 219h3001title.dgn PLOT DATE: 9/6/2022
 PROJECT LEADER: POM DRAWN BY: MED
 DESIGNED BY: AJF CHECKED BY: POM
 TITLE SHEET SHEET 1 OF XXX

Draft Airport Layout Plan – Data Sheet

AIRPORT DATA		
EF KNAPP STATE AIRPORT North Clarendon, VT 05759 1979 Airport Road Barre, VT 05641		
ITEM	Existing	Future
AIRPORT OWNER	Vermont Agency of Transportation	
STATE SERVICE LEVEL	National Service Airport *	
NPIAS SERVICE LEVEL	National/Regional Airport *	
AIRPORT REFERENCE CODE / CRITICAL AIRCRAFT	ARC B-II/ Cessna Citation II	ARC B-II/ Cessna Citation II
MEAN MAXIMUM TEMPERATURE OF HOTTEST MONTH	81.3° F (July)	
AIRPORT ELEVATION (MSL) NAVD 88	1,166 FT	
MAGNETIC DECLINATION	14° 8' W ± 0° 23' changing by 0° 5' E per year	
AIRPORT REFERENCE POINT (NAD 83)	LAT: 44° 12' 12.56" N LONG: 72° 33' 43.55" W	LAT: 44° 12' 12.56" N LONG: 72° 33' 43.55" W
AIRPORT NAVIGATIONAL AIDS AND MISCELLANEOUS FACILITIES	ILS, RNAV (GPS), MALSR, REIL, ASOS, PAPI, Lighted Wind Indicator / Segmented Circle	

Note 1: Vermont Airport System Plan
Note 2: National Plan of Integrated Airport Systems (NPIAS)

RUNWAY SAFETY AREA DATA					
DESCRIPTION	RUNWAY 17-35		RUNWAY 5-23		
	EXISTING/FUTURE	EXISTING/FUTURE	EXISTING/FUTURE	EXISTING/FUTURE	
RUNWAY SAFETY AREA (RSA)	(R) LENGTH BEYOND RUNWAY END	300 FT	300 FT	240 FT	240 FT
	(P) LENGTH PRIOR TO RUNWAY END	300 FT	300 FT	240 FT	240 FT
	(C) WIDTH	150 FT	150 FT	120 FT	120 FT
RUNWAY OBJECT FREE AREA (ROFA)	(R) LENGTH BEYOND RUNWAY END	300 FT	300 FT	240 FT	240 FT
	(P) LENGTH PRIOR TO RUNWAY END	300 FT	300 FT	240 FT	240 FT
	(C) WIDTH	500 FT	500 FT	400 FT	400 FT
APPROACH RUNWAY PROTECTION ZONE (RPZ)	(L) LENGTH	1,700 FT	1,000 FT	1,000 FT	1,000 FT
	(U) INNER WIDTH	1,000 FT	500 FT	500 FT	500 FT
	(V) OUTER WIDTH	1,510 FT	700 FT	700 FT	700 FT
DEPARTURE RUNWAY PROTECTION ZONE (RPZ)	(L) LENGTH	1,000 FT	1,000 FT	1,000 FT	1,000 FT
	(U) INNER WIDTH	500 FT	500 FT	500 FT	500 FT
	(V) OUTER WIDTH	700 FT	700 FT	700 FT	700 FT
RUNWAY OBSTACLE FREE ZONE (ROFZ)	LENGTH BEYOND RUNWAY END	200 FT	200 FT	200 FT	200 FT
	WIDTH	400 FT	400 FT	120 FT	120 FT
PRECISION OBSTACLE FREE ZONE (POFZ)	LENGTH BEYOND RUNWAY END	200 FT	N/A	N/A	N/A
	WIDTH	800 FT	N/A	N/A	N/A

RUNWAY DESIGN STANDARDS				
	NOT TO SCALE			

EXISTING/FUTURE OBSTACLE CLEARANCE SURFACES (OCS)							
RUNWAY	ROW/TYPE	SLOPE	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E
17	4	20:1	200 FT	400 FT	3,400 FT	10,000 FT	0 FT
	6	30:1	0 FT	300 FT	1,520 FT	10,000 FT	0 FT
	7	40:1	450 FT	470 FT	7,512 FT	12,152 FT	6,160 FT
35	4	20:1	200 FT	400 FT	3,400 FT	10,000 FT	0 FT
	7	40:1	450 FT	470 FT	7,512 FT	12,152 FT	6,160 FT
	2	20:1	0 FT	250 FT	700 FT	2,250 FT	2,750 FT
5	4	20:1	200 FT	400 FT	3,400 FT	10,000 FT	0 FT
	2	20:1	0 FT	250 FT	700 FT	2,250 FT	2,750 FT
	4	20:1	200 FT	400 FT	3,400 FT	10,000 FT	0 FT

Source: FAA Engineering Brief 95A

MODIFICATIONS TO FAA DESIGN STANDARDS			
APPROVAL DATE	AIRSPACE CASE NO.	MODIFIED STANDARD	DESCRIPTION
NONE			

TAXIWAY DATA					
TAXIWAY NAME	TAXIWAY LIGHTING	TAXIWAY DESIGN GROUP	TAXIWAY WIDTH	TAXIWAY SAFETY AREA	TAXIWAY OBJECT FREE AREA
EXISTING/FUTURE	EXISTING/FUTURE	EXISTING/FUTURE	EXISTING/FUTURE	EXISTING/FUTURE	EXISTING/FUTURE
A	MTL	2	35 FT	79 FT	131 FT
B	MTL	2	35 FT	79 FT	131 FT
C	MTL	2	40 FT	79 FT	131 FT
D	MTL	2	50 FT	79 FT	131 FT
E	MTL	2	35 FT	79 FT	131 FT
F	MTL	2	35 FT	79 FT	131 FT
G	MTL	2	35 FT	79 FT	131 FT
H	MTL	2	35 FT	79 FT	131 FT

RUNWAY DATA				
DESCRIPTION	RUNWAY 17-35		RUNWAY 5-23	
	EXISTING	FUTURE	EXISTING	FUTURE
RUNWAY LENGTH	5,000 FT		3,001 FT	
RUNWAY WIDTH	100 FT		75 FT	
PAVEMENT TYPE / SURFACE TYPE	ASPHALT		ASPHALT	
PAVEMENT CONDITION	GOOD		GOOD	
PAVEMENT CONDITION NUMBER	74		93	
PAVEMENT STRENGTH (SINGLE)	31,000 lbs		30,000 lbs	
PAVEMENT STRENGTH (DUAL)	70,000 lbs		46,000 lbs	
EFFECTIVE RUNWAY GRADIENT	1.5%		1.0%	
MAXIMUM RUNWAY GRADIENT	1.5%		1.0%	
RUNWAY MEETS LINE OF SIGHT REQUIREMENTS? (YES/NO)	Yes		Yes	
APPROACH TYPE	PRECISION	NON-PRECISION	VISUAL	VISUAL
APPROACH VISIBILITY MINIMUM	3/4 MILE	1 MILE	N/A	N/A
RUNWAY CATEGORY (14 CFR PART 77) / SLOPE	PRECISION / 50:1	NON-PRECISION / 34:1	VISUAL / 20:1	VISUAL / 20:1
DESIGN AIRCRAFT	CESSNA CITATION JET II			
RUNWAY DESIGN CODE (RDC)	B-II			
APPROACH RUNWAY REFERENCE CODE (APRC)	B / II / 4000	B / II / 5000	B / I / VIS	B / I / VIS
DEPARTURE RUNWAY SURFACE	YES	YES	NO	NO
OBSTACLE CLEARANCE SURFACE (EB 99A TABLE 3-2)	SEE OCS TABLE		SEE OCS TABLE	
TOUCHDOWN ZONE ELEVATION	1,135.6 FT	1,158.4 FT	1,191.8 FT	1,191.8 FT
HORIZONTAL / VERTICAL DATUM	NAD 83	NAD 83	NAD 83	NAD 83
AERONAUTICAL SURVEY	VGS	VGS	NVGS	NVGS
RUNWAY MARKINGS	PRECISION	NON-PRECISION	BASIC	BASIC
RUNWAY LIGHTING	MIRL			
APPROACH LIGHTING	MALSR	PAPI-4	NONE	NONE
INSTRUMENT & NAVIGATIONAL AIDS	ILS/OME, RNAV (GPS)	RNAV (GPS)	NONE	NONE
DISPLACED THRESHOLD COORDINATES & ELEVATIONS	LATITUDE	N/A	44° 11' 44.72" N	N/A
	LONGITUDE	N/A	72° 33' 34.72" W	N/A
	DISTANCE	N/A	502 FT	N/A
	ELEVATION	N/A	1,158 FT	N/A
RUNWAY END COORDINATES & ELEVATIONS	LATITUDE	44° 12' 23.82" N	44° 11' 40.36" N	44° 12' 42.52" N
	LONGITUDE	72° 34' 04.01" W	73° 33' 31.46" W	72° 33' 25.54" W
	ELEVATION	1,091.5 FT	1,165.6 FT	1,115.5 FT
DECLARED DISTANCES	TORA	N/A	N/A	N/A
	ASDA	N/A	N/A	N/A
	LODA	N/A	N/A	N/A
	CLEARWAY	N/A	N/A	N/A
	STOPWAY	N/A	N/A	N/A

ALL-WEATHER WIND COVERAGE

IFR CONDITION WIND COVERAGE

VFR WEATHER WIND COVERAGE

IFR WEATHER WIND COVERAGE

RUNWAY	10.5 KNOTS	13 KNOTS	16 KNOTS
17-35	98.66%	99.48%	99.93%
5-23	92.04%	95.38%	98.74%
COMBINED	99.32%	98.86%	99.98%

RUNWAY	10.5 KNOTS	13 KNOTS	16 KNOTS
17-35	98.57%	99.44%	99.93%
5-23	92.06%	95.59%	99.00%
COMBINED	99.38%	99.89%	99.99%

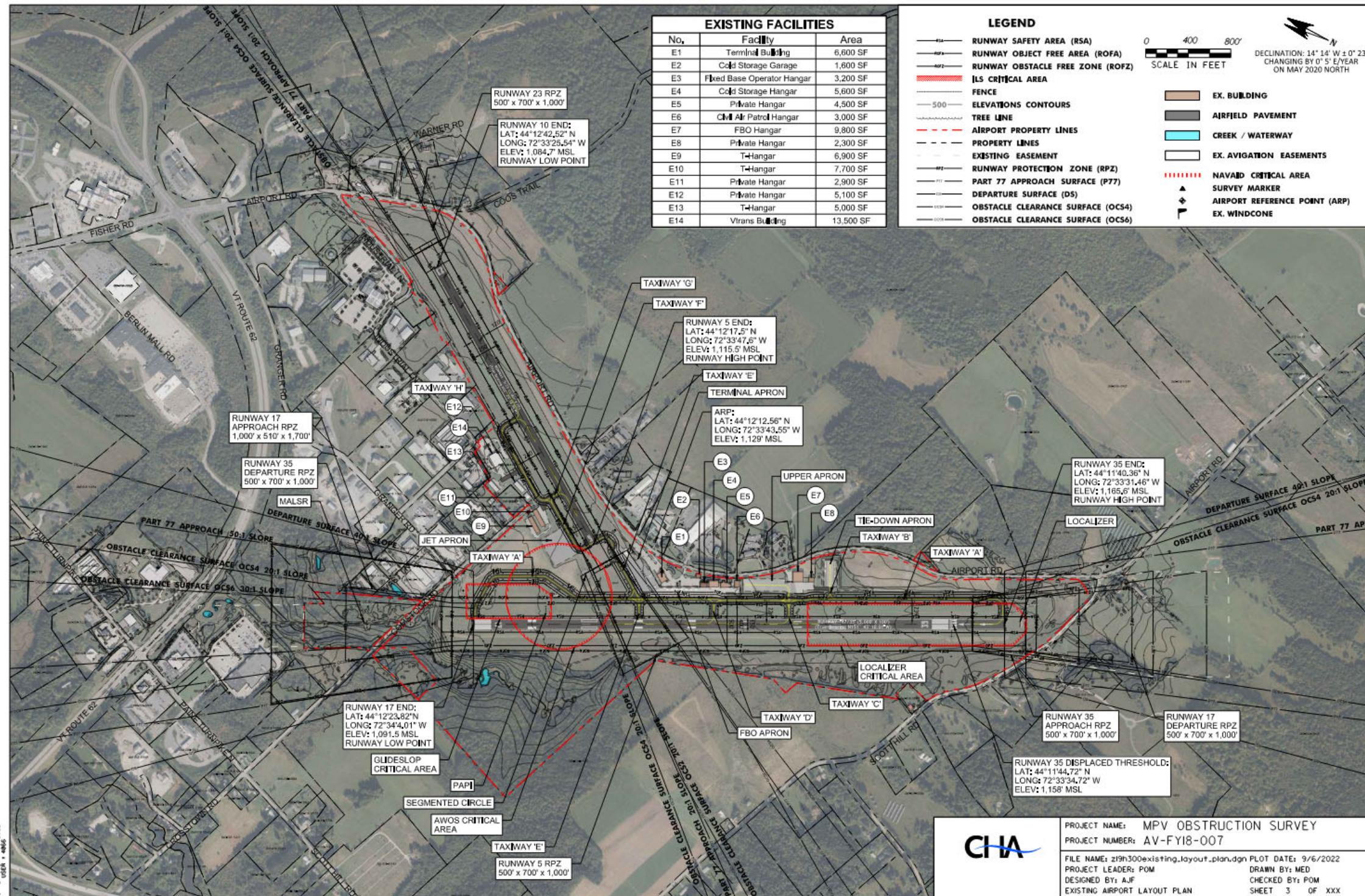
18 Winners Circle, PO Box 5289
Albany, NY 12205-0289
518.433.4000 • www.chaerps.com

PROJECT NAME: MPV OBSTRUCTION SURVEY
PROJECT NUMBER: AV-FY18-007

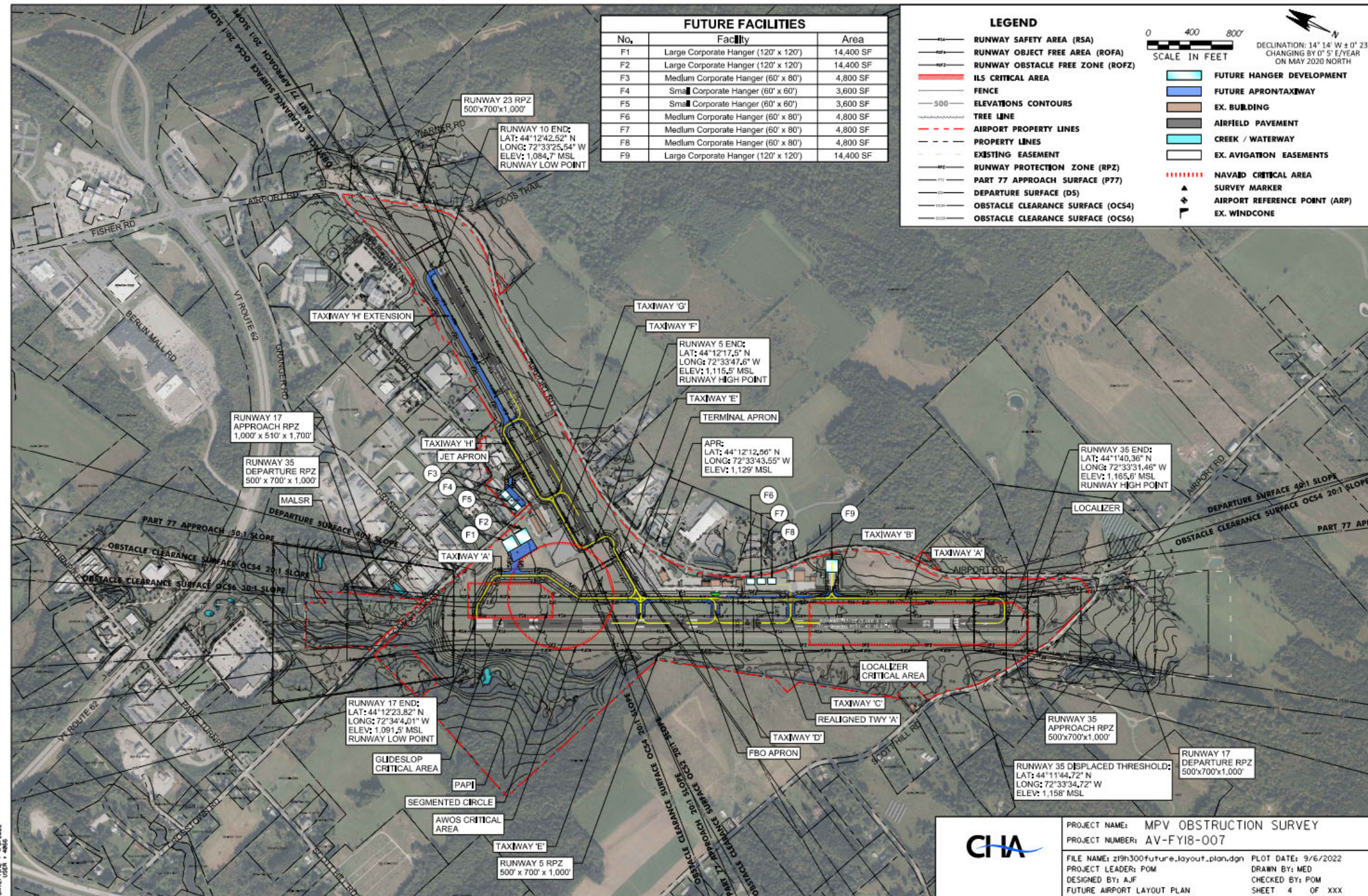
FILE NAME: z19h300data.dgn
PROJECT LEADER: POM
DESIGNED BY: A.J.F.
AIRPORT DATA SHEET

PLOT DATE: 1/17/2023
DRAWN BY: MED
CHECKED BY: POM
SHEET 2 OF XXX

Draft Airport Layout Plan – Existing Layout Sheet



Draft Airport Layout Plan – Future Layout Sheet



Next Steps

- Final Documents – March 2023
- FAA Approval – April/May 2023



Questions/Comments

**Questions or comments regarding the Airport Master Plan?
Available for contact:**

AOT.RailAviationProjectDeliveryFolders@vermont.gov
VTrans Rail & Aviation Bureau

Draft Master Plan Report available:

<https://vtrans.vermont.gov/aviation/airports/knapp>