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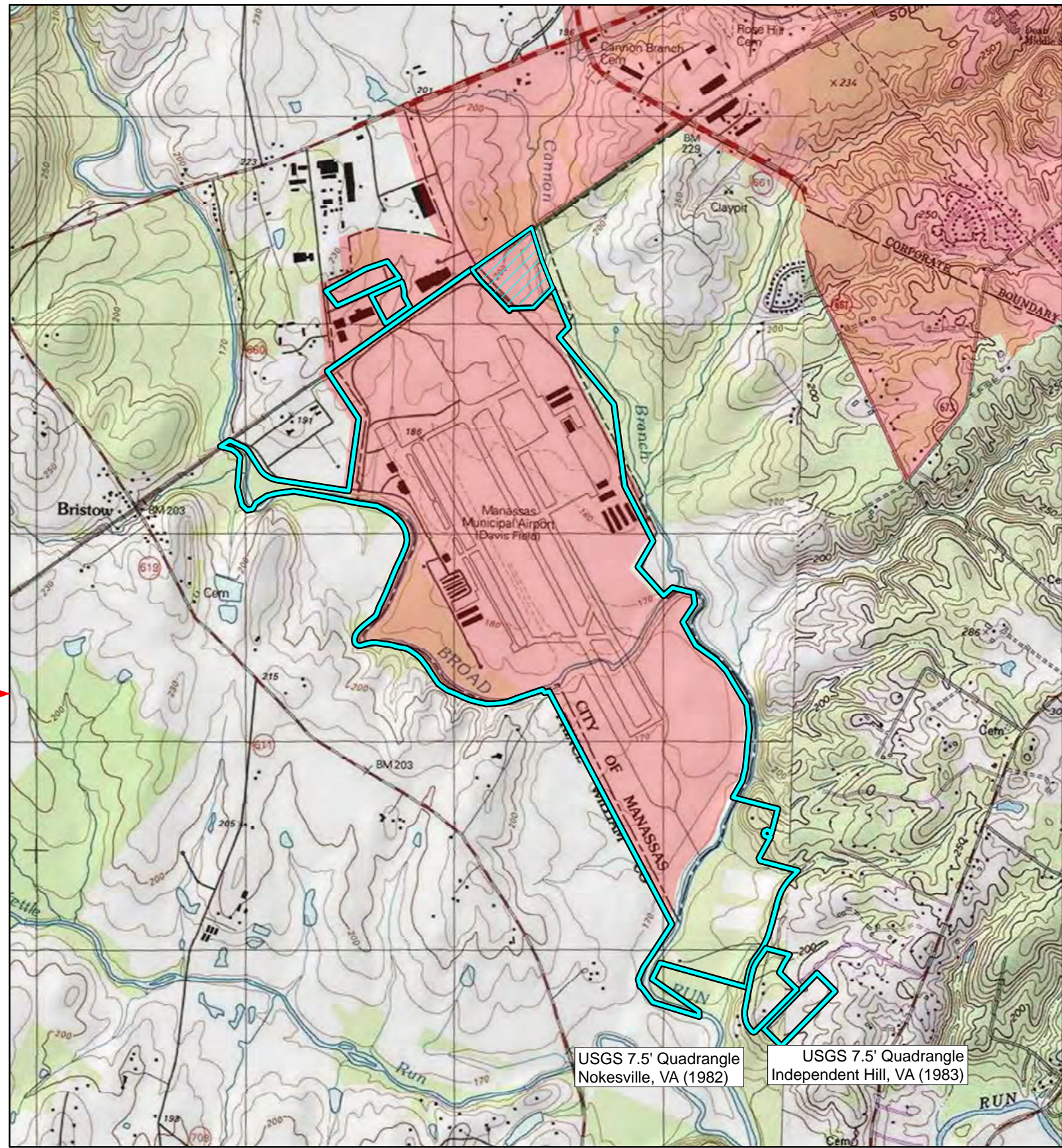
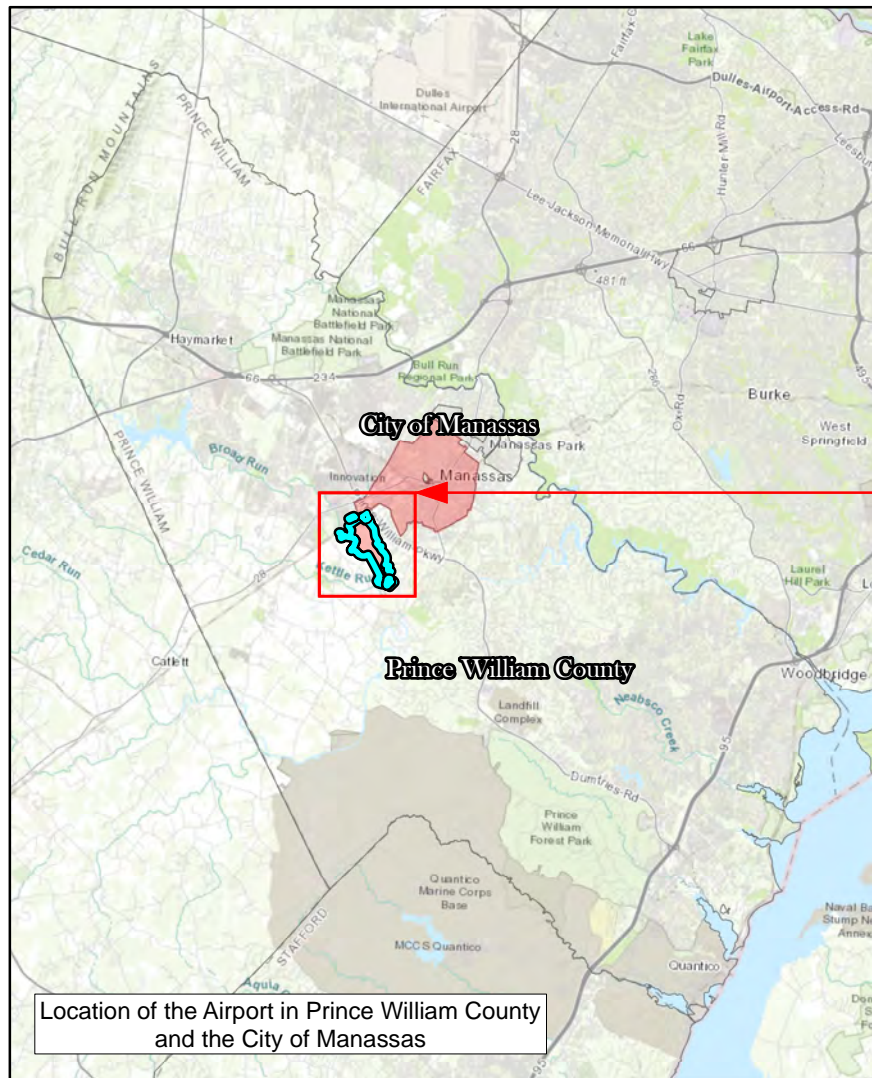
Figure A26: No Action Alternative (2036) 65-75 Noise DNL Contours

Figure A27: No Action Alternative (2041) 65-75 Noise DNL Contours




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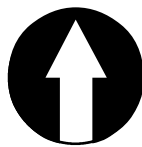
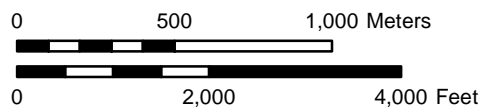
Figure A29: Preferred Alternative –Alternative #2 (2036) 65-75 Noise DNL Contours

Figure A30: Preferred Alternative –Alternative #2 (2041) 65-75 Noise DNL Contours



LEGEND

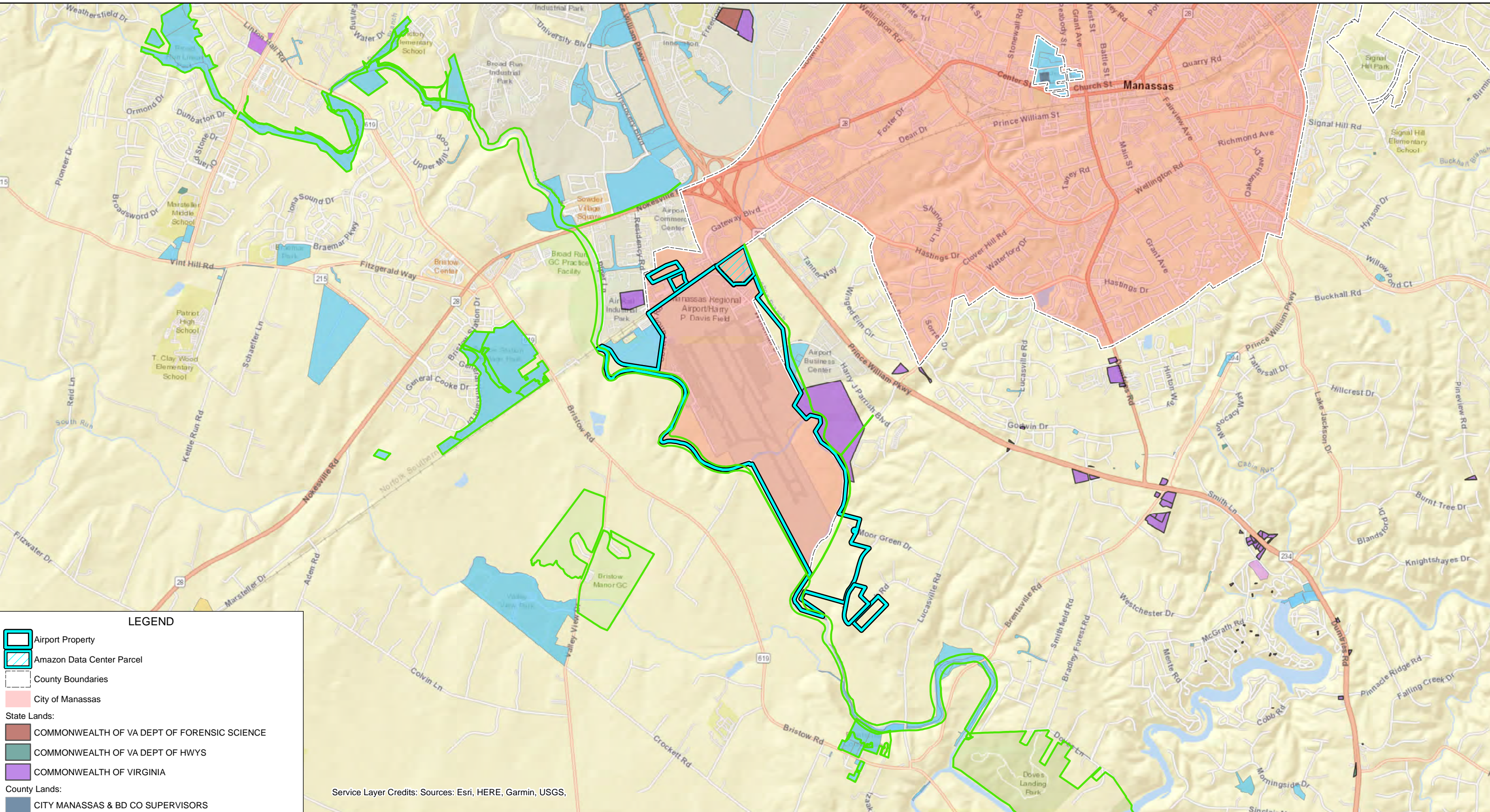
-  Airport Property
-  Amazon Data Center Parcel
-  City of Manassas



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Location of the Airport

Figure
A1



LEGEND

- Airport Property
- Amazon Data Center Parcel
- County Boundaries
- City of Manassas
- State Lands:
 - COMMONWEALTH OF VA DEPT OF FORENSIC SCIENCE
 - COMMONWEALTH OF VA DEPT OF HWYS
 - COMMONWEALTH OF VIRGINIA
- County Lands:
 - CITY MANASSAS & BD CO SUPERVISORS
 - LAKE JACKSON VOLUNTEER FIRE DEPT
 - NOKESVILLE VOLUNTEER FIRE DEPT
 - PWC BOARD OF COUNTY SUPERVISORS
 - PWC BOARD OF COUNTY SUPERVISORS
 - PWC BOCS & NOKESVILLE VOLUNTEER FIRE & RESCUE DEPT
 - PWC SERVICE AUTHORITY
 - Park Boundaries

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS.

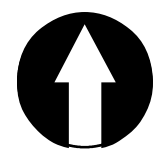
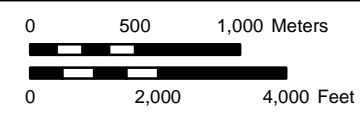


Figure A2

**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

State, County, and Local Jurisdictions

New Lease Parcel F

9980

Wakeman Dr

Wakeman Dr

10400

Harry P. Fish Blvd

10400

New Lease Parcel E

New Lease Parcel A

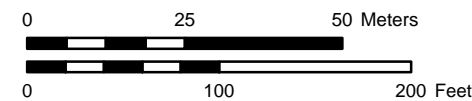
Residual Parcel

New Lease Parcel B

New Lease Parcel C

New Lease Parcel D

Imagery dated 2021 (ESRI Service "Virginia Aerial Imagery 2021")



Project 23-98001.002, Version: 3/23/2026 @ 3:04:13 PM

LEGEND

- Airport Property
- New Lease Parcel Boundary

**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**Franchise Agreement Lease Parcels
A, B, C, D, E.**

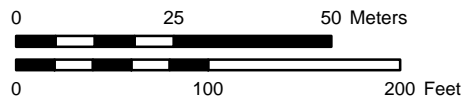
Figure
A3



Imagery dated 2021 (ESRI Service "Virginia Aerial Imagery 2021")

LEGEND

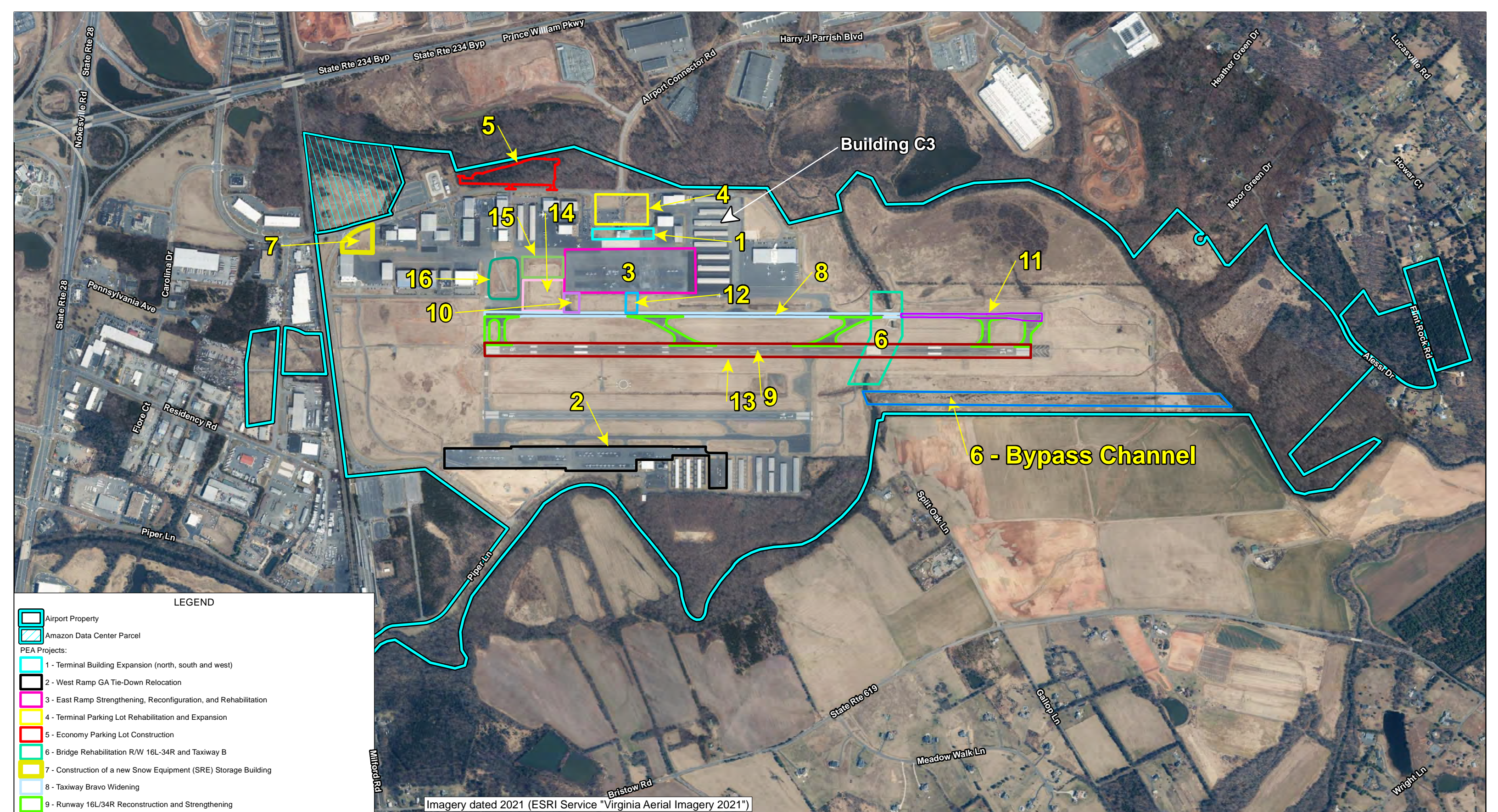
- Airport Property
- New Lease Parcel Boundary



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Franchise Agreement Lease Parcel F

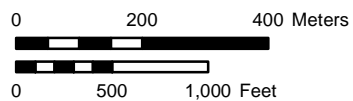
Figure
A4



LEGEND

- Airport Property
- Amazon Data Center Parcel
- PEA Projects:
- 1 - Terminal Building Expansion (north, south and west)
- 2 - West Ramp GA Tie-Down Relocation
- 3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
- 4 - Terminal Parking Lot Rehabilitation and Expansion
- 5 - Economy Parking Lot Construction
- 6 - Bridge Rehabilitation R/W 16L-34R and Taxiway B
- 7 - Construction of a new Snow Equipment (SRE) Storage Building
- 8 - Taxiway Bravo Widening
- 9 - Runway 16L/34R Reconstruction and Strengthening
- 10 - Taxiway Echo Fillet Widening
- 11 - Taxiway B Reconstruction and Strengthening (South of the Bridge)
- 12 - Construction of a new East Ramp Taxiway
- 13 - Runway 16L/34R Widening
- 14 - Aircraft Deicing Pad and Apron Expansion between Taxiways D and E
- 15 - Construction of new Expanded East Ramp and Taxilane between Taxiways Delta and Echo
- 16 - Construction of a new ARFF Facility
- Project #6 - Bypass Channel

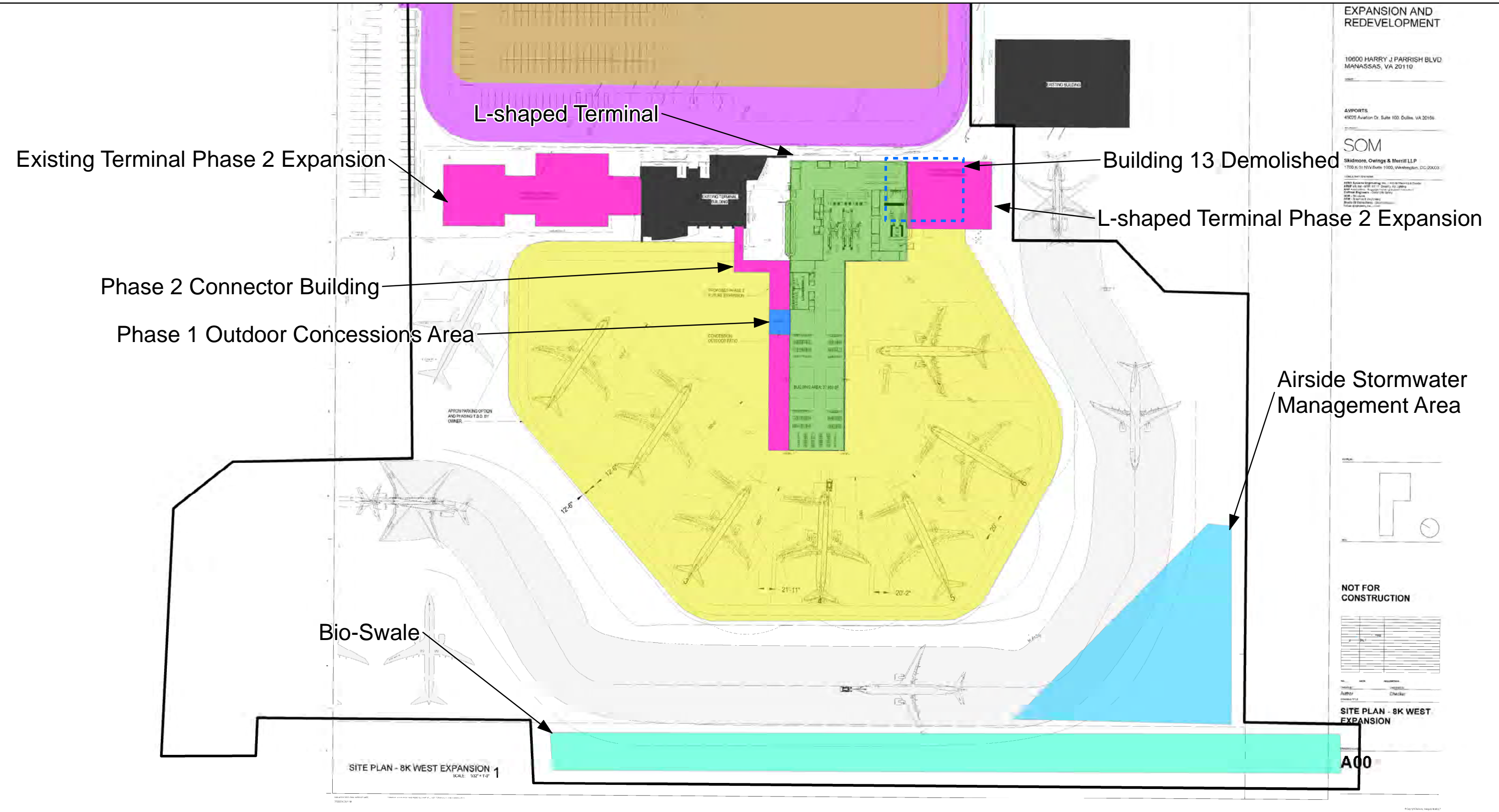
Imagery dated 2021 (ESRI Service "Virginia Aerial Imagery 2021")



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

PEA Projects

Figure
A5



LEGEND

Airport Property	Phase 1 Proposed Terminal Loop	Airside Stormwater Management Area
Terminal Construction Envelope	Phase 1 Proposed Terminal Parking Lot	Existing Building
Butler Building - To Be Demolished	Phase 1 Proposed Gate Area	
Terminal Construction Elements	Phase 2 Proposed Terminal Expansion	
Phase 1 Proposed Terminal Building	Bio-Swale	
Phase 1 Outdoor Concessions Area		

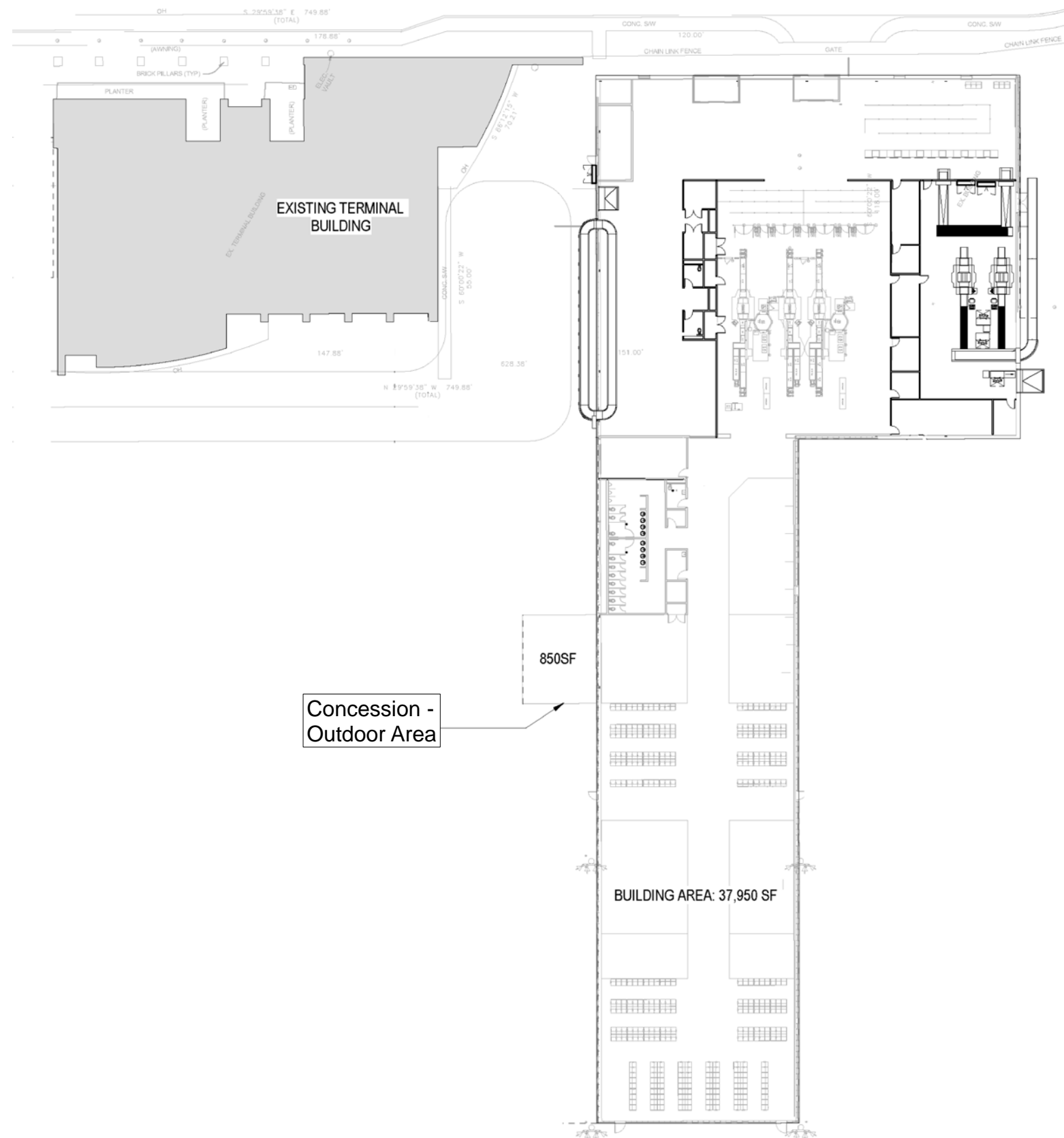
0 25 50 Meters

0 50 100 Feet



Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment
Terminal Construction Plan
Phases 1 and 2

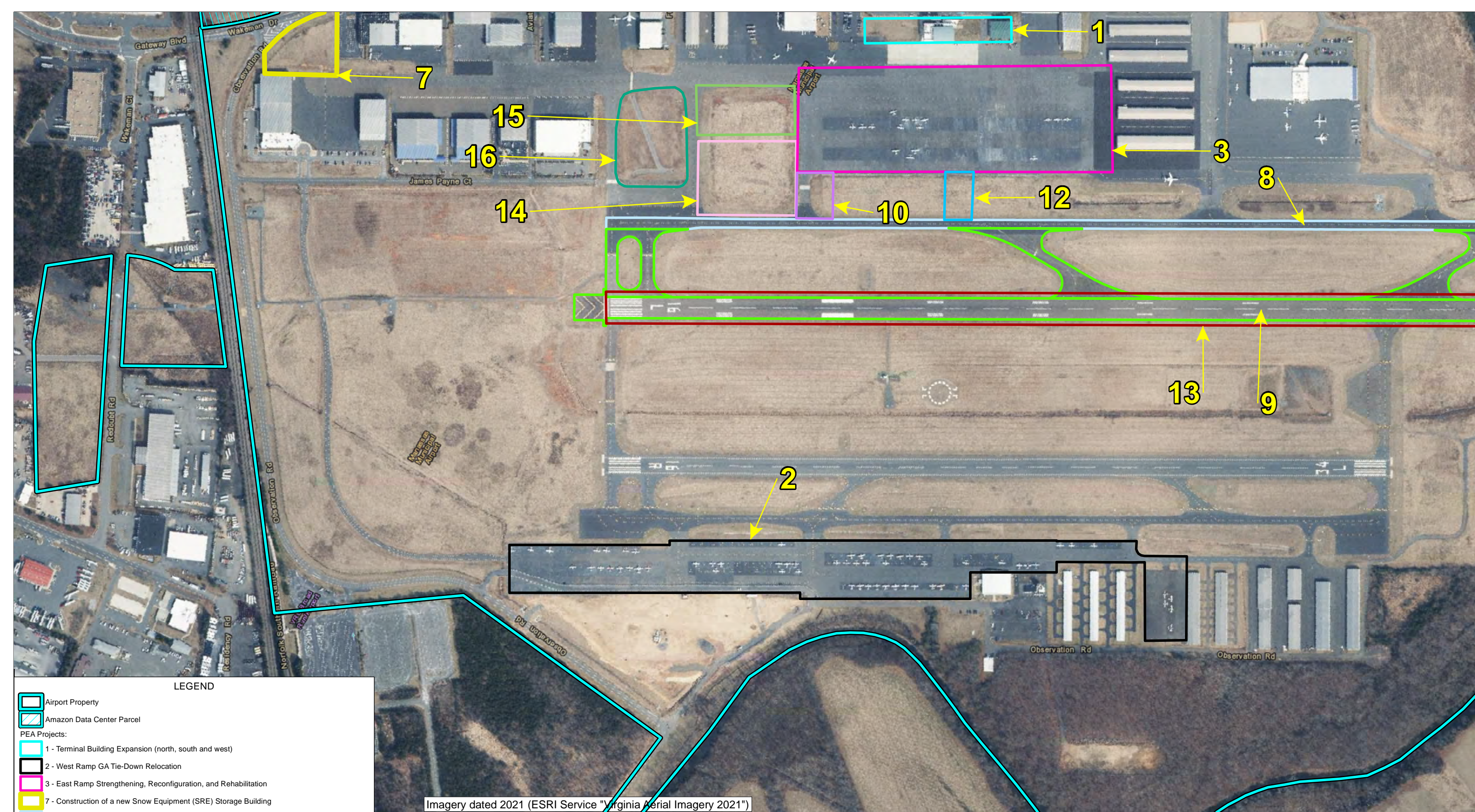
Figure
A6













**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Phase 1 L-shaped Terminal Service Areas

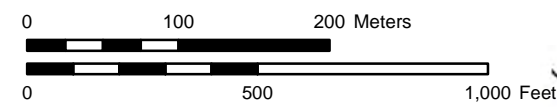
Figure
A7



LEGEND

-  Airport Property
-  Amazon Data Center Parcel
- PEA Projects:
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-  15 - Construction of new Expanded East Ramp and Taxilane between Taxiways Delta and Echo
-  16 - Construction of a new ARFF Facility

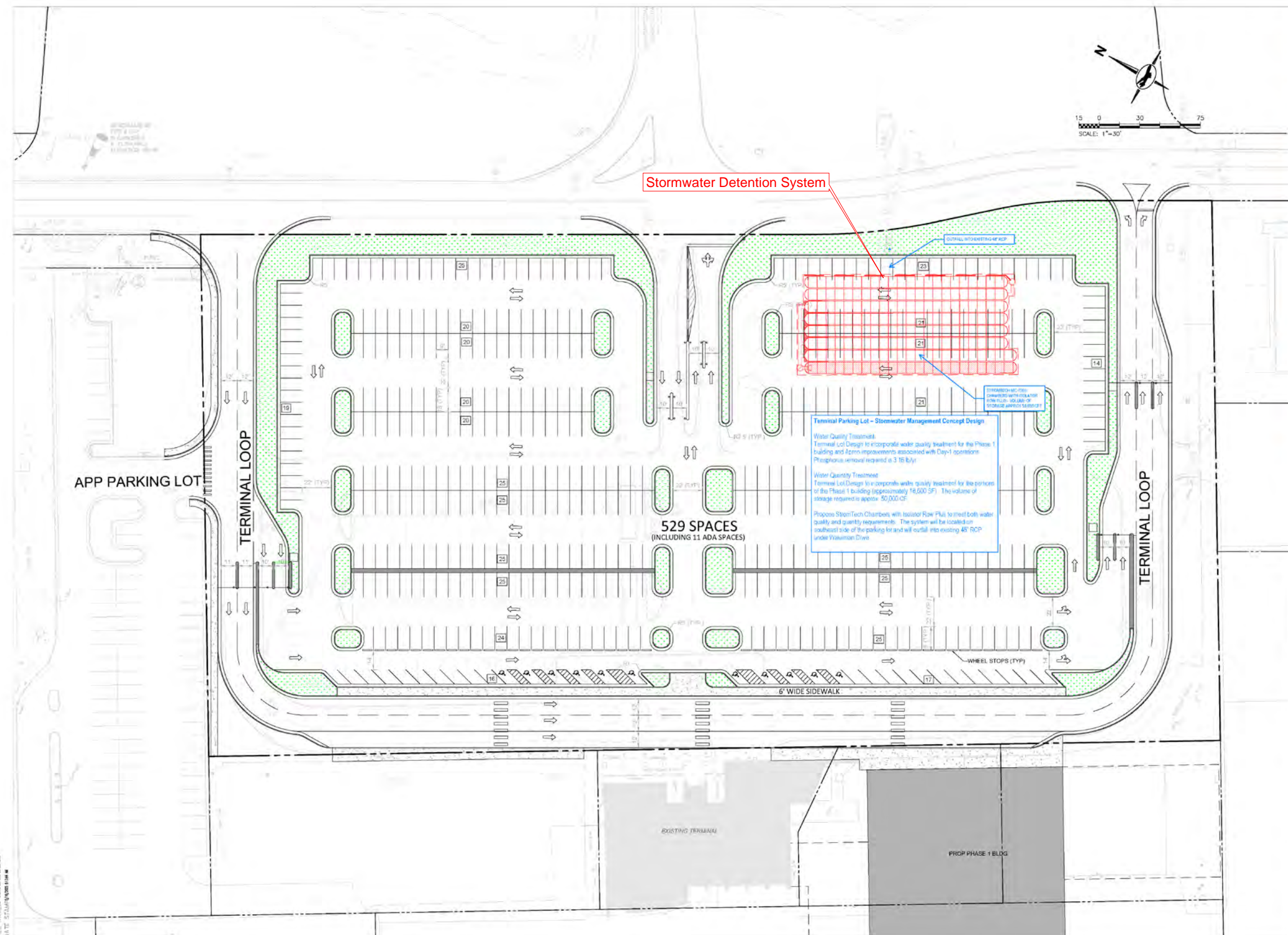
Imagery dated 2021 (ESRI Service "Virginia Aerial Imagery 2021")



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**Extent of West Ramp to be Used for
GA Aircraft Tie-Down Locations**

Figure
A8



CLIENT

AVPORTS
AVPORT MANASSAS LLC
4525 AVIATION DRIVE,
SUITE 100
DULLES, VA 20166-7524

ARCHITECT

PGAL

3131 BRIARPARK DRIVE
SUITE 200
HOUSTON, TX 77042
(713) 622-1444
www.pgal.com
PGAL TBPE REG. NO. F-2742

DESIGN - BUILDER

WT
WHITING-TURNER

THE WHITING-TURNER
CONTRACTING COMPANY
6305 IVY LANE, SUITE 800
GREENBELT, MD 20770
(301) 656-7800

CONSULTANT

ADCI

AIRPORT DESIGN
CONSULTANTS INC.
8260 GREENSBORO DR
SUITE 120
MCLEAN, VA 22102
(703) 410-4659
www.adci-corp.com

REGISTRATION

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DRAWING HISTORY

PROJECT NAME
TERMINAL LOT
CONFIGURATIONS

PROJECT LOCATION
WAKEMAN DRIVE
MANASSAS, VA
20110

PROJECT NUMBER

SHEET TITLE
TERMINAL
PARKING LOT
LAYOUT - Angled
Parking Close to
Terminal
MAY 13, 2025

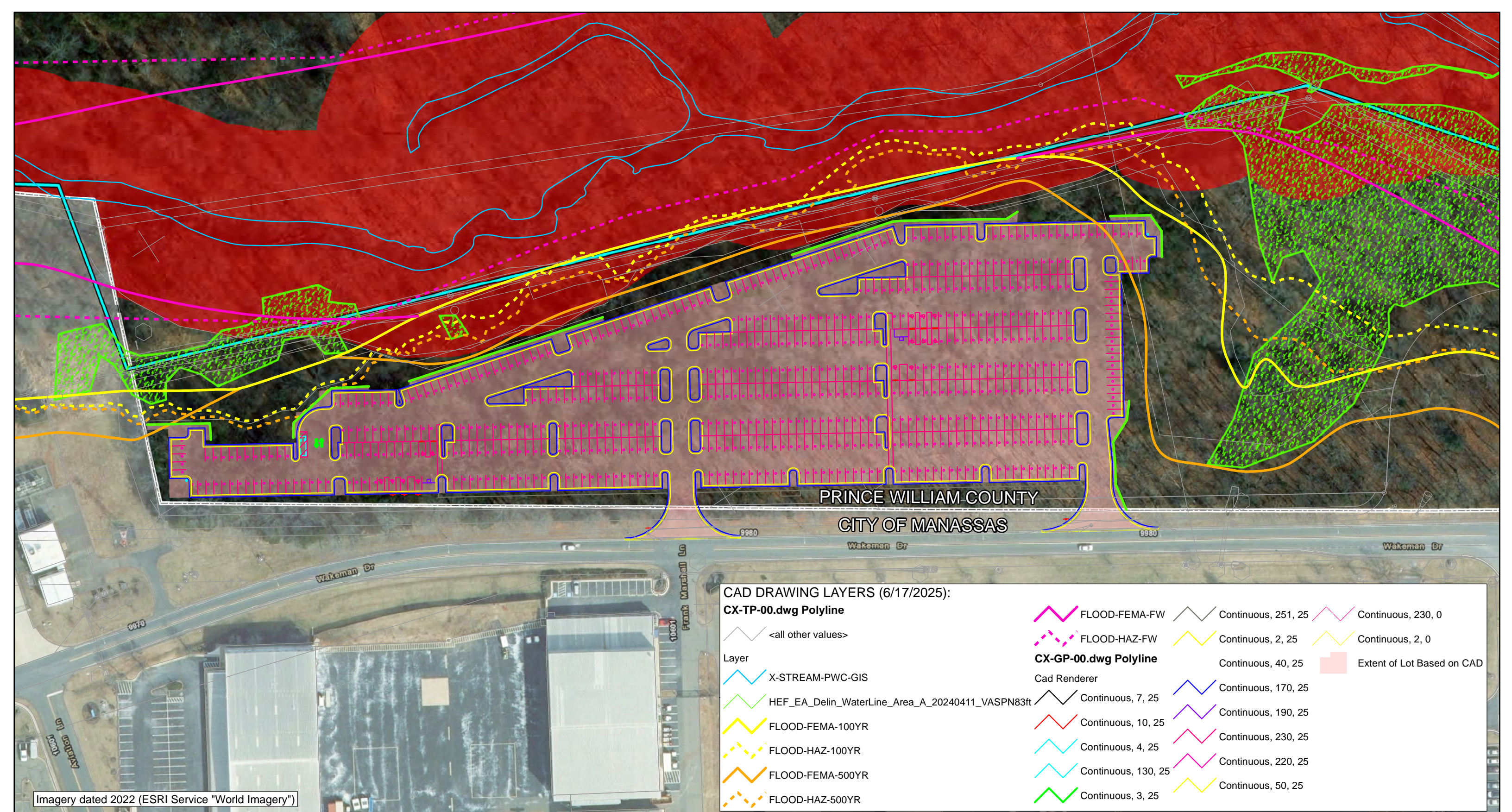
SHEET NUMBER



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Proposed Terminal Parking Lot Detail

Figure
A9



CAD DRAWING LAYERS (6/17/2025):

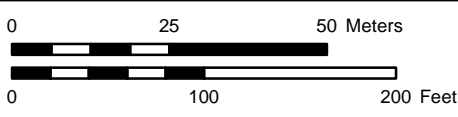
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Layer	FLOOD-HAZ-FW	Continuous, 2, 25	Continuous, 2, 0
X-STREAM-PWC-GIS	CX-GP-00.dwg Polyline	Continuous, 40, 25	Extent of Lot Based on CAD
HEF_EA_Delin_WaterLine_Area_A_20240411_VASPN83ft	Cad Renderer	Continuous, 7, 25	Continuous, 170, 25
FLOOD-FEMA-100YR	Continuous, 10, 25	Continuous, 190, 25	Continuous, 230, 25
FLOOD-HAZ-100YR	Continuous, 4, 25	Continuous, 230, 25	Continuous, 220, 25
FLOOD-FEMA-500YR	Continuous, 130, 25	Continuous, 220, 25	Continuous, 50, 25
FLOOD-HAZ-500YR	Continuous, 3, 25		

Imagery dated 2022 (ESRI Service "World Imagery")

LEGEND

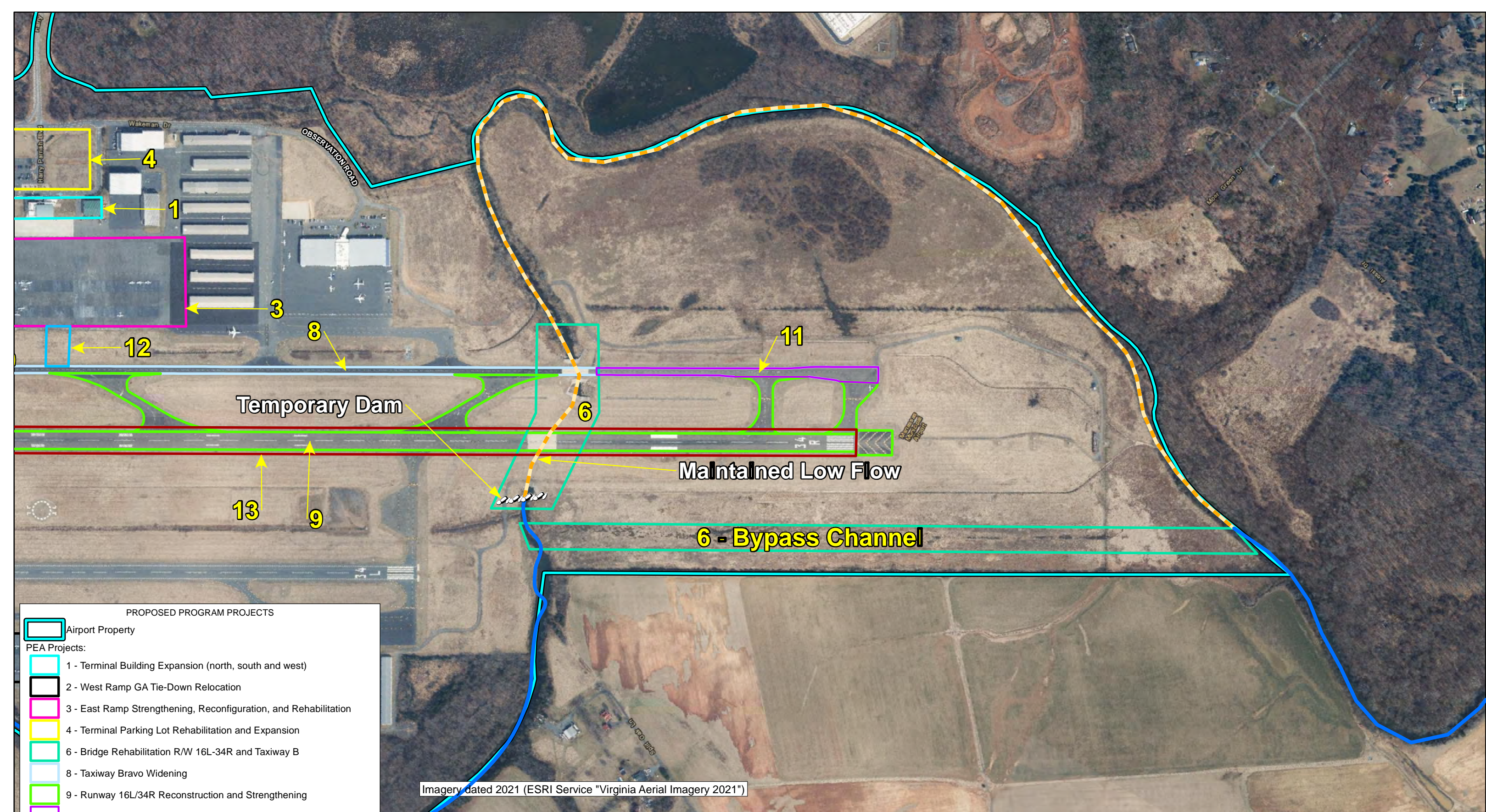
	Airport Property
	City of Manassas Boundary
	Extent of Lot Based on CAD
	Retaining Wall
	Delineated Wetland Area
	Resource Protection Area (RPA, PW Co.)



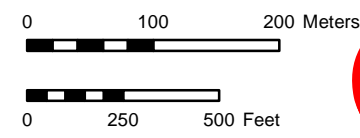
**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Economy Parking Lot Layout

Figure
A10

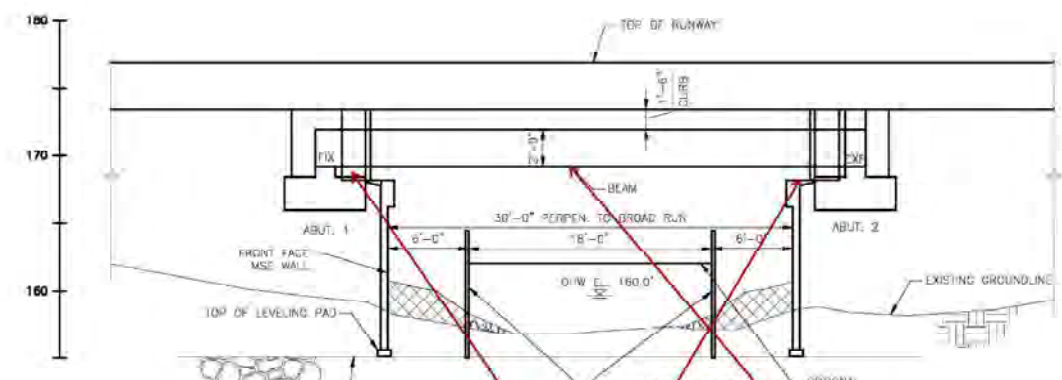
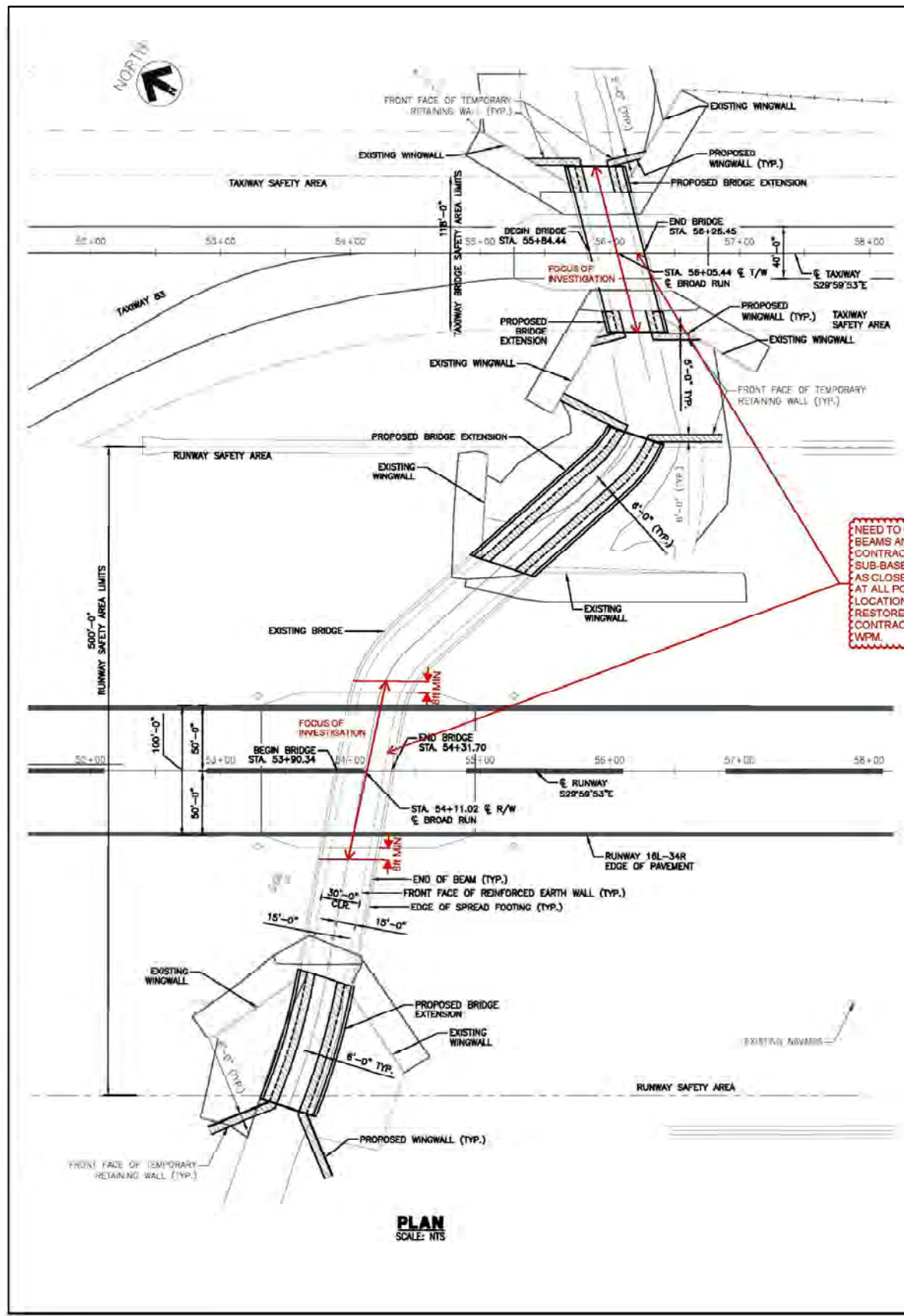


- PROPOSED PROGRAM PROJECTS**
- Airport Property
 - PEA Projects:**
 - 1 - Terminal Building Expansion (north, south and west)
 - 2 - West Ramp GA Tie-Down Relocation
 - 3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
 - 4 - Terminal Parking Lot Rehabilitation and Expansion
 - 6 - Bridge Rehabilitation R/W 16L-34R and Taxiway B
 - 8 - Taxiway Bravo Widening
 - 9 - Runway 16L/34R Reconstruction and Strengthening
 - 11 - Taxiway B Reconstruction and Strengthening (South of the Bridge)
 - 12 - Construction of a new East Ramp Taxiway
 - 13 - Runway 16L/34R Widening
 - Broad Run Temporary Bypass:**
 - Broad Run
 - Maintained Low Flow
 - Temporary Dam



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment
R/W 16L-34R and T/W B
Bridge Strengthening Action Areas**

Figure
A11



NEED TO OBSERVE TOP SURFACE OF BOX BEAMS AND JOINTS WHICH REQUIRES CONTRACT REMOVING PAVEMENT AND SUB-BASE COMPACTED FILL PREFERABLY AS CLOSE TO RUNWAY CENTER LINE (IF AT ALL POSSIBLE) AT UP TO 4 TEST PIT LOCATIONS TOTAL. CONDITIONS TO BE RESTORED TO ORIGINAL BY CONTRACTOR AFTER OBSERVATIONS BY I/PM.

NEED TO CLOSELY OBSERVE END OF BOX BEAMS WHERE THEY BEAR ON ABUTMENTS TO OBSERVE BEARING PADS AND ABUTMENT CONDITIONS

NEED TO CLOSELY OBSERVE AND "HAMMER SOUND" UNDERSIDE OF BOX BEAMS AND THEIR JOINTS

CONSTRUCTION NOTES:

1. REMOVE CONFLICTING RIPRAP AND SHOULDER CONTROL BANDS FOR INSTALLATION OF TEMPORARY RETAINING WALL.
2. INSTALL TEMPORARY RETAINING WALL.
3. GRADE ORIGINAL BRACING STRUT BETWEEN TEMPORARY RETAINING WALLS.
4. DEWATER BEHIND TEMPORARY RETAINING WALL.
5. REMOVE EXISTING RIPRAP AS NEEDED.
6. FORM AND CONSTRUCT LEVELING PAD FOR MSE WALL.
7. CONSTRUCT MSE WALL.
8. REMOVE TEMPORARY RETAINING WALL.

LEGEND:

- [Hatched Box] ESTIMATED LIMITS OF CONSTRUCTION IMPACTS
NOTE: ALL OFFSETS 6'-0" FROM FRONT FACE OF MSE WALL (RUNWAY)
ALL OFFSETS 6'-0" FROM FRONT FACE OF MSE WALL (TAXIWAY)
- [Cross-hatched Box] REMOVAL OF EXISTING RIPRAP
- [Dotted Box] EXISTING RIPRAP TO REMAIN

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Virginia Registration No. 48745(01) 14H-0404



MANASSAS REGIONAL AIRPORT
HARRY P. DAVIS FIELD



RUNWAY 34R EXTENSION AND RELATED WORK PACKAGE 2 BRIDGE STRUCTURE EXTENSIONS

CONSULTANTS

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 3-18-12
REVIEWED BY: BMS
DRAWN BY: AWP
DESIGNED BY: AWP
AEP PROJECT NUMBER: 222-1115-001

SHEET TITLE
BRIDGE STRUCTURES PERMIT PLAN

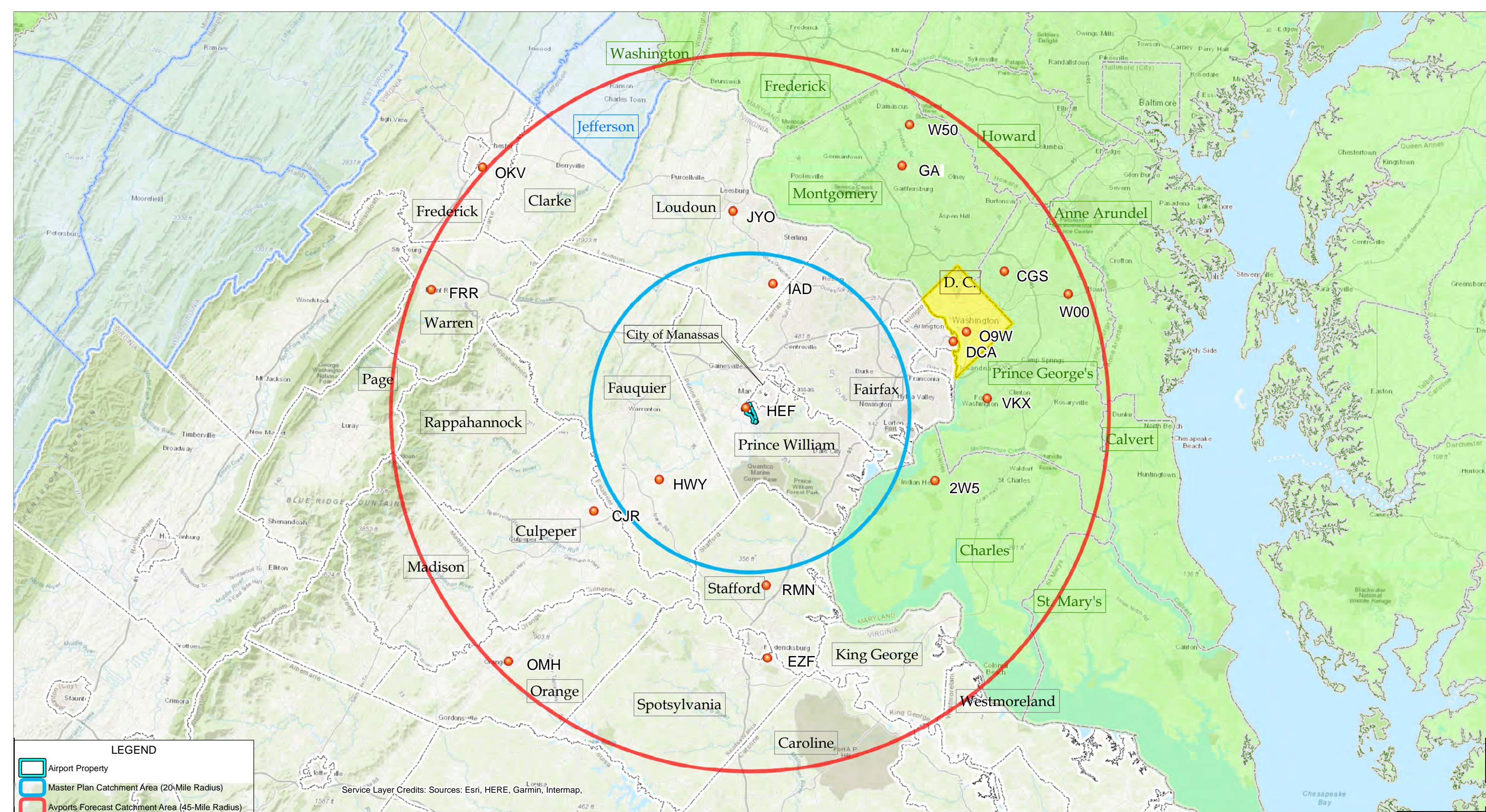
SHEET NUMBER
\$128
SHEET 48 OF 56
BID DOCUMENTS



Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment

Bridge Action Area Detail

Figure A12



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap,

LEGEND

- Airport Property
- Master Plan Catchment Area (20-Mile Radius)
- Airports Forecast Catchment Area (45-Mile Radius)
- Virginia Counties
- Washington D. C.
- Maryland Counties
- West Virginia Counties
- Public Use Airports within Catchment

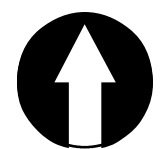
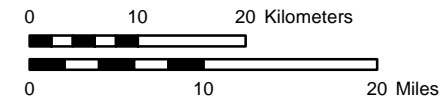
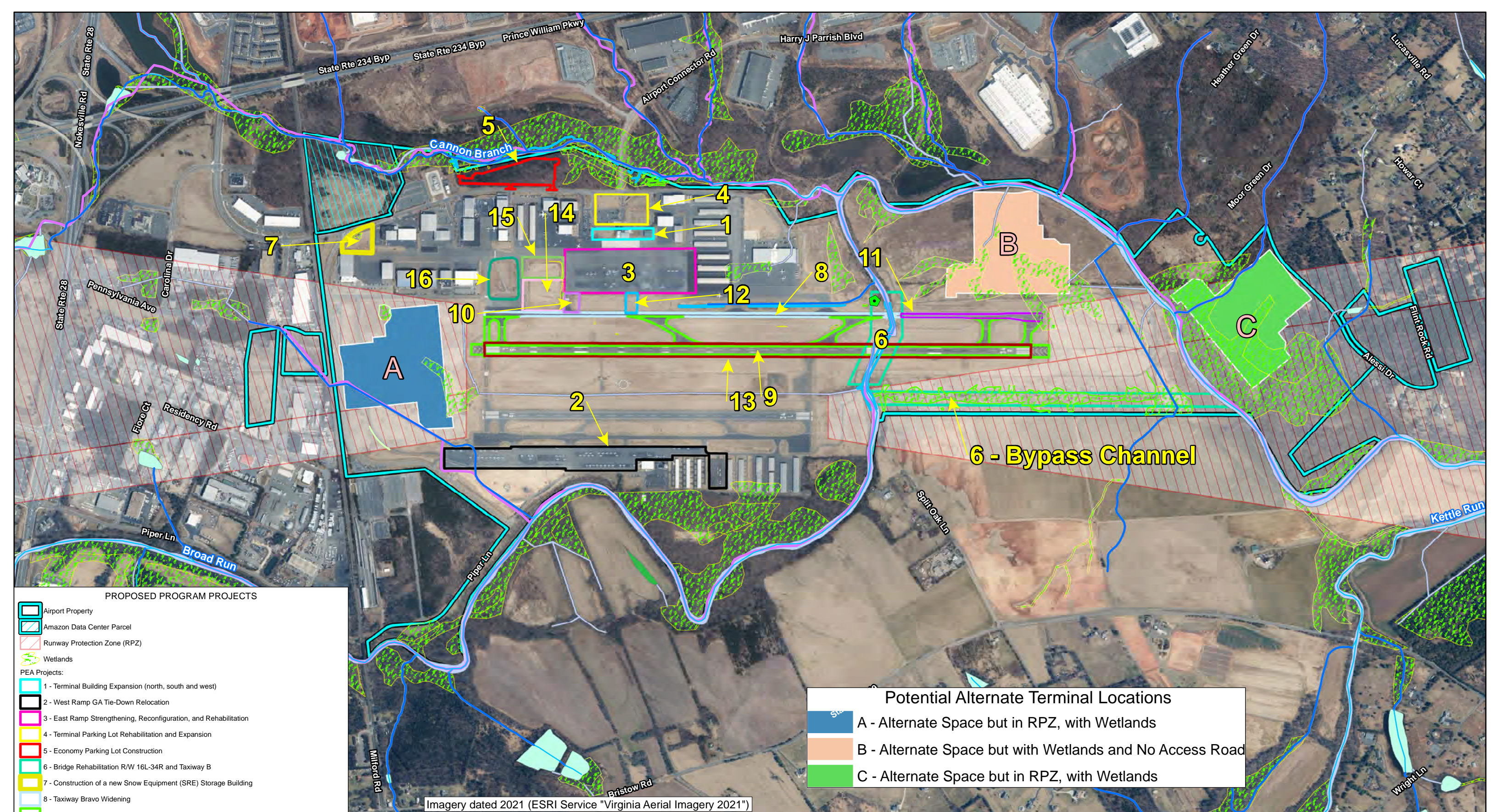


Figure A13

**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Forecast Catchment Area Comparison



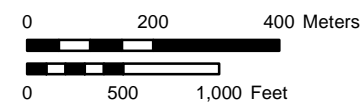
6 - Bypass Channel

Imagery dated 2021 (ESRI Service "Virginia Aerial Imagery 2021")

- PROPOSED PROGRAM PROJECTS**
- Airport Property
 - Amazon Data Center Parcel
 - Runway Protection Zone (RPZ)
 - Wetlands
- PEA Projects:**
- 1 - Terminal Building Expansion (north, south and west)
 - 2 - West Ramp GA Tie-Down Relocation
 - 3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
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 - 16 - Construction of a new ARFF Facility
 - Project #6 - Bypass Channel

Potential Alternate Terminal Locations

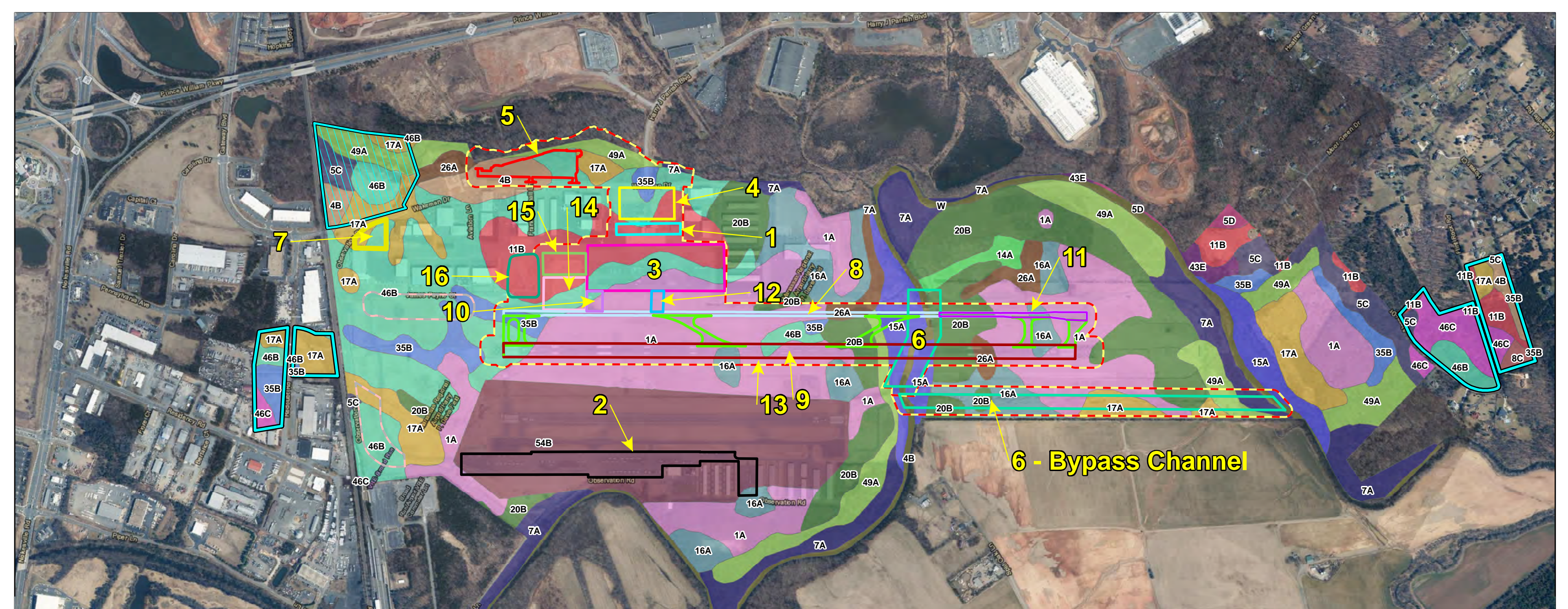
- A - Alternate Space but in RPZ, with Wetlands
- B - Alternate Space but with Wetlands and No Access Road
- C - Alternate Space but in RPZ, with Wetlands



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**Alternative #5: New Terminal Construction
Alternate Location**

Figure
A14



LEGEND

- Airport Property
- Amazon Data Center Parcel
- Area of Investigation, Current Projects
- Former Projects, No Longer Active

PEA Projects:

- 1 - Terminal Building Expansion (north, south and west)
- 2 - West Ramp GA Tie-Down Relocation
- 3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
- 4 - Terminal Parking Lot Rehabilitation and Expansion
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- 15 - Construction of new Expanded East Ramp and Taxilane between Taxiways Delta and Echo
- 16 - Construction of a new ARFF Facility

Aerial imagery dated 2021
(ESRI Service "Virginia Aerial Imagery 2021")

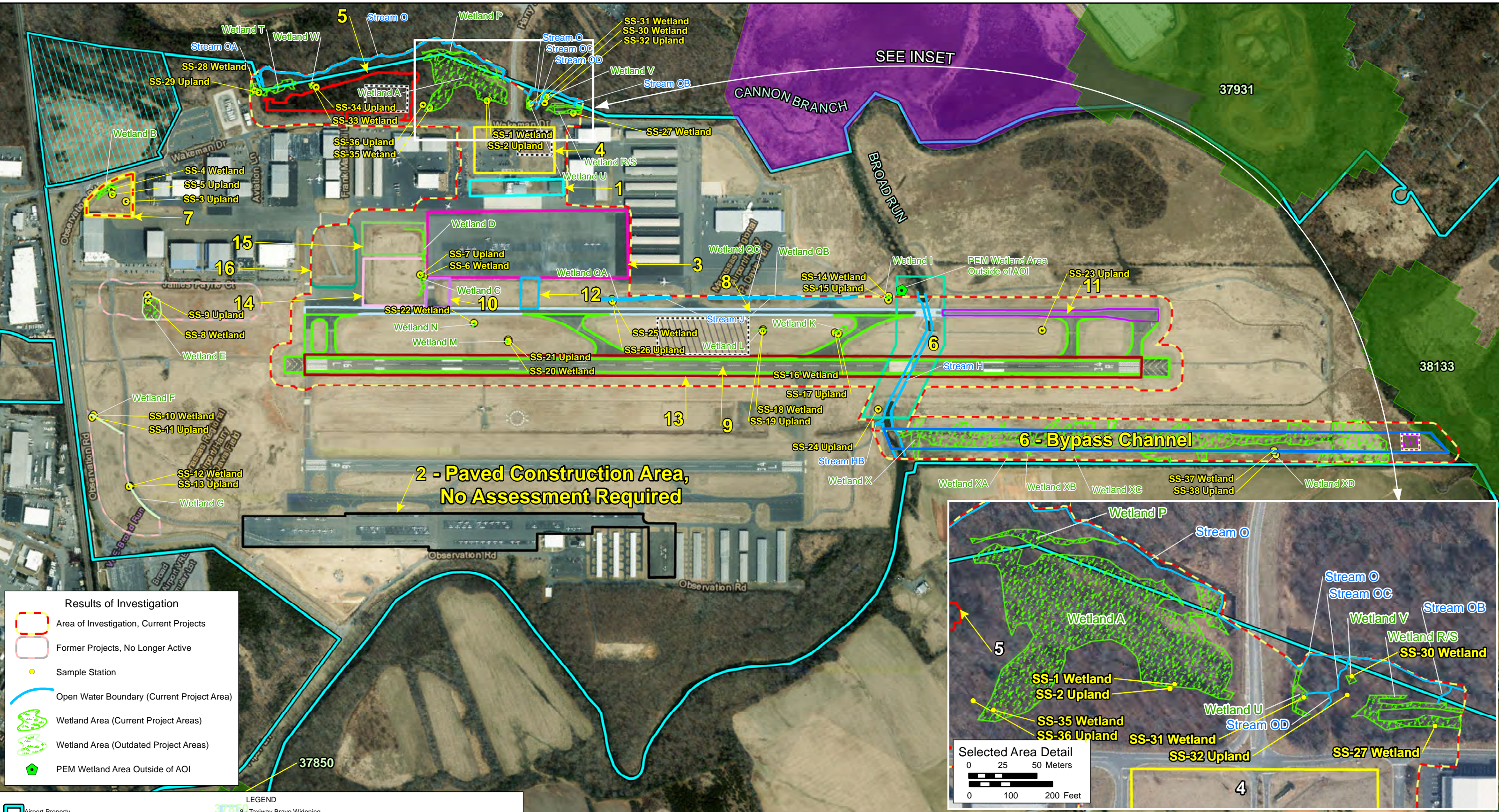
<ul style="list-style-type: none"> 11B - Calverton silt loam, 0 to 7 percent slopes 14A - Codorus loam, 0 to 2 percent slopes 15A - Comus loam, 0 to 2 percent slopes 	<ul style="list-style-type: none"> 16A - Delanco fine sandy loam, 0 to 4 percent slopes 17A - Dulles silt loam, 0 to 2 percent slopes 1A - Aden silt loam, 0 to 2 percent slopes 	<ul style="list-style-type: none"> 20B - Elsinboro sandy loam, 2 to 7 percent slopes 26A - Hatboro silt loam, 0 to 2 percent slopes 35B - Manassas silt loam, 2 to 7 percent slopes 	<p>Soil Series</p> <ul style="list-style-type: none"> 43E - Nestoria gravelly silt loam, 25 to 50 percent slopes 46B - Panorama silt loam, 2 to 7 percent slopes 46C - Panorama silt loam, 7 to 15 percent slopes 	<ul style="list-style-type: none"> 49A - Rowland silt loam, 0 to 2 percent slopes 4B - Arcola silt loam, 2 to 7 percent slopes 54B - Urban land-Udorthents complex, 0 to 7 percent slopes 	<ul style="list-style-type: none"> 5C - Arcola-Nestoria complex, 7 to 15 percent slopes 5D - Arcola-Nestoria complex, 15 to 25 percent slopes 7A - Bermudian silt loam, 0 to 2 percent slopes 	<ul style="list-style-type: none"> 8C - Braddock loam, 7 to 15 percent slopes W - Water
--	---	--	---	--	--	---



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**Airport Soils,
Natural Resource Conservation Service (NRCS)
Soil Survey Geographic Database (SSURGO)**

Figure A15



Results of Investigation

- Area of Investigation, Current Projects
- Former Projects, No Longer Active
- Sample Station
- Open Water Boundary (Current Project Area)
- Wetland Area (Current Project Areas)
- Wetland Area (Outdated Project Areas)
- PEM Wetland Area Outside of AOI

LEGEND

- Airport Property
- Amazon Data Center Parcel
- Ecological Core C5: General
- VDOT Wetlands Mitigation Bank

PEA Projects:

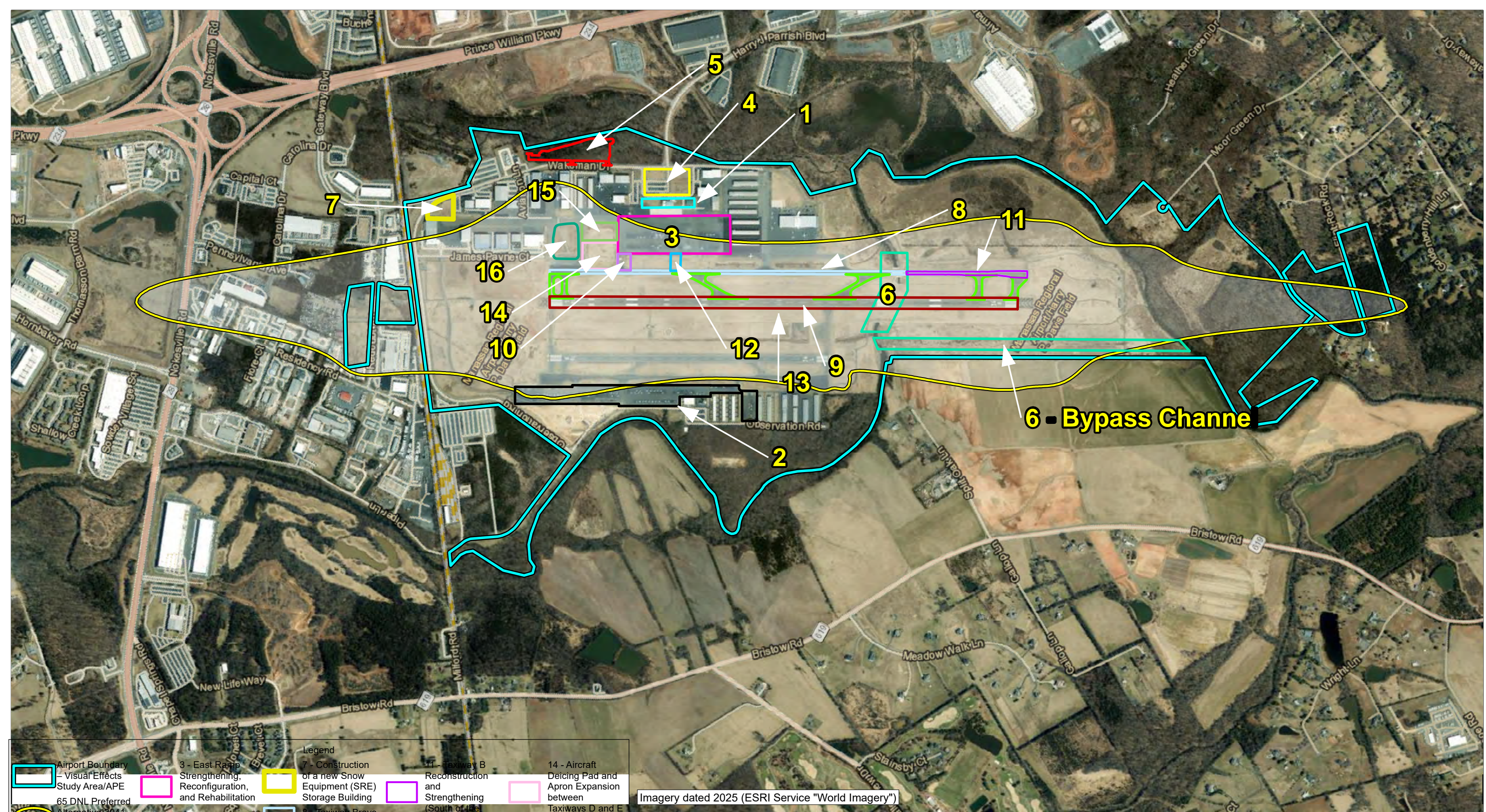
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- 4 - Terminal Parking Lot Rehabilitation and Expansion
- 5 - Economy Parking Lot Construction
- 6 - Bridge Rehabilitation R/W 16L-34R and Taxiway B
- 7 - Construction of a new Snow Equipment (SRE) Storage Building
- 8 - Taxiway Bravo Widening
- 9 - Runway 16L/34R Reconstruction and Strengthening
- 10 - Taxiway Echo Fillet Widening
- 11 - Taxiway B Reconstruction and Strengthening (South of the Bridge)
- 12 - Construction of a new East Ramp Taxiway
- 13 - Runway 16L/34R Widening
- 14 - Aircraft Deicing Pad and Apron Expansion between Taxiways D and E
- 15 - Construction of new Expanded East Ramp and Taxiway between Taxiways Delta and Echo
- 16 - Construction of a new ARFF Facility
- Project #6 - Bypass Channel
- Approximate Location of Proposed Underground Detention Area for New Hardscaped Surfaces
- Approximate Location of Soil Removal for Floodplain Balancing



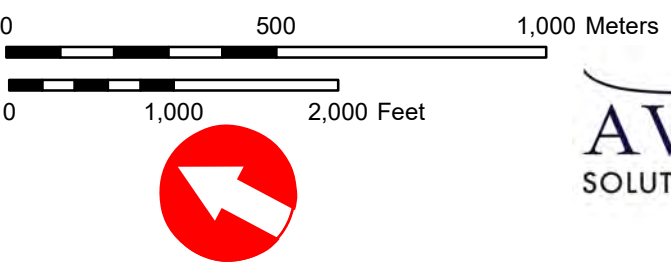
Figure
A16

**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Delineated Features



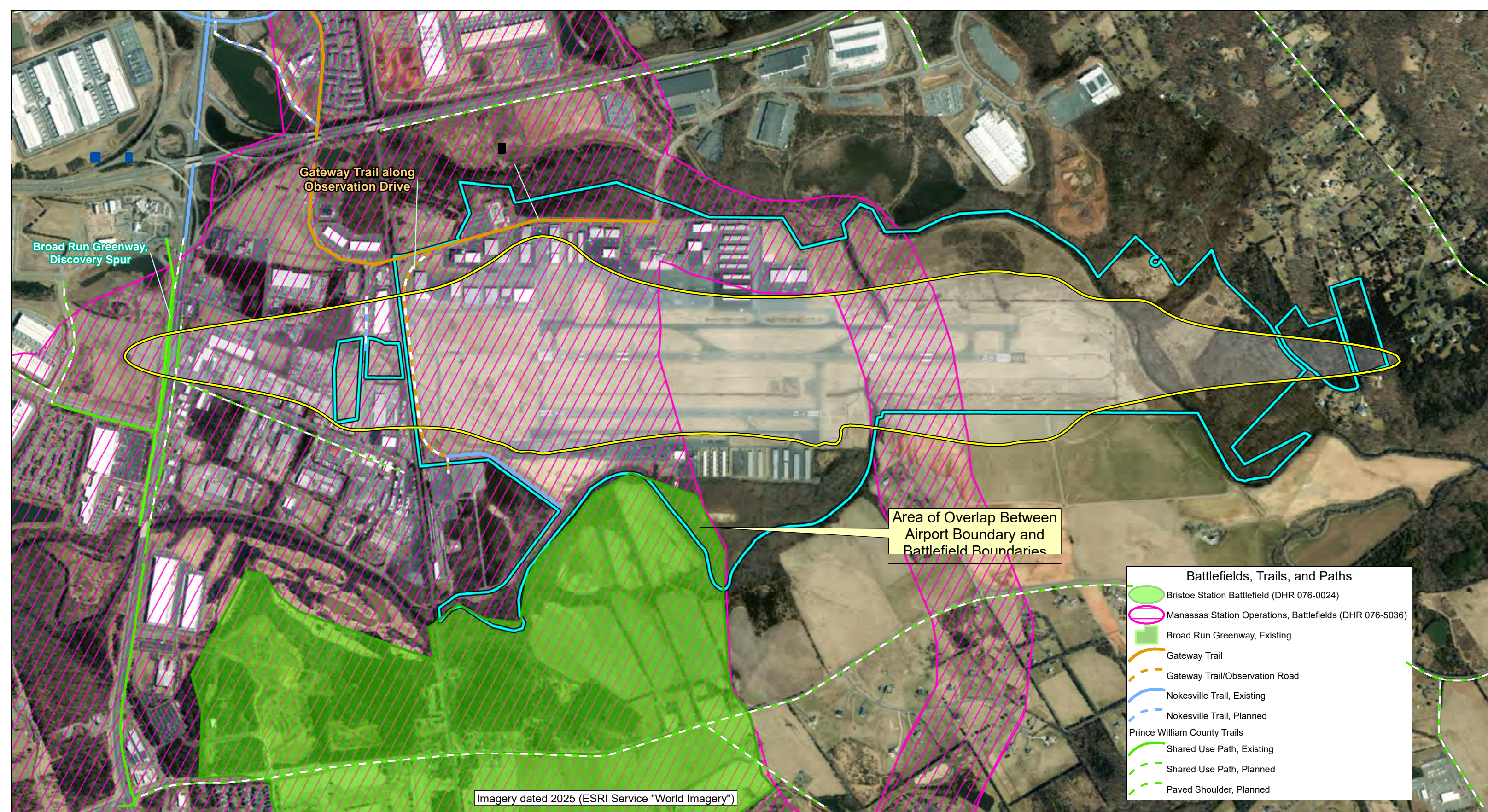
Imagery dated 2025 (ESRI Service "World Imagery")



Legend			
Airport Boundary - Visual Effects Study Area/APE	3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation	7 - Construction of a new Snow Equipment (SRE) Storage Building	11 - Taxiway B Reconstruction and Strengthening (South of Delta Bridge)
65 DNL Preferred Alternative 2041 - Auditory Effects Study Area/APE	4 - Terminal Parking Lot Rehabilitation and Expansion	8 - Taxiway Bravo Widening	14 - Aircraft Deicing Pad and Apron Expansion between Taxiways D and E
PEA Projects:	5 - Economy Parking Lot Construction	9 - Runway 16L/34R Reconstruction and Strengthening	15 - Construction of new Expanded East Ramp and Taxilane between Taxiways Delta and Echo
1 - Terminal Building Expansion (north, south and west)	6 - Bridge Rehabilitation R/W 16L-34R and Taxiway B	10 - Taxiway Echo Fillet Widening	16 - Construction of a new ARFF Facility
2 - West Ramp GA Tie-Down Relocation		12 - Construction of a new East Ramp Taxiway	
		13 - Runway 16L/34R Widening	

Figure A17

**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment
Section 4(f) Study Areas, HAAC APes,
and PEA Projects**



Gateway Trail along Observation Drive

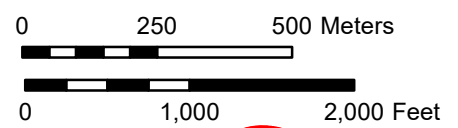
Broad Run Greenway, Discovery Spur

Area of Overlap Between Airport Boundary and Battlefield Boundaries

Imagery dated 2025 (ESRI Service "World Imagery")

- Battlefields, Trails, and Paths**
- Bristoe Station Battlefield (DHR 076-0024)
 - Manassas Station Operations, Battlefields (DHR 076-5036)
 - Broad Run Greenway, Existing
 - Gateway Trail
 - Gateway Trail/Observation Road
 - Nokesville Trail, Existing
 - Nokesville Trail, Planned
 - Prince William County Trails**
 - Shared Use Path, Existing
 - Shared Use Path, Planned
 - Paved Shoulder, Planned

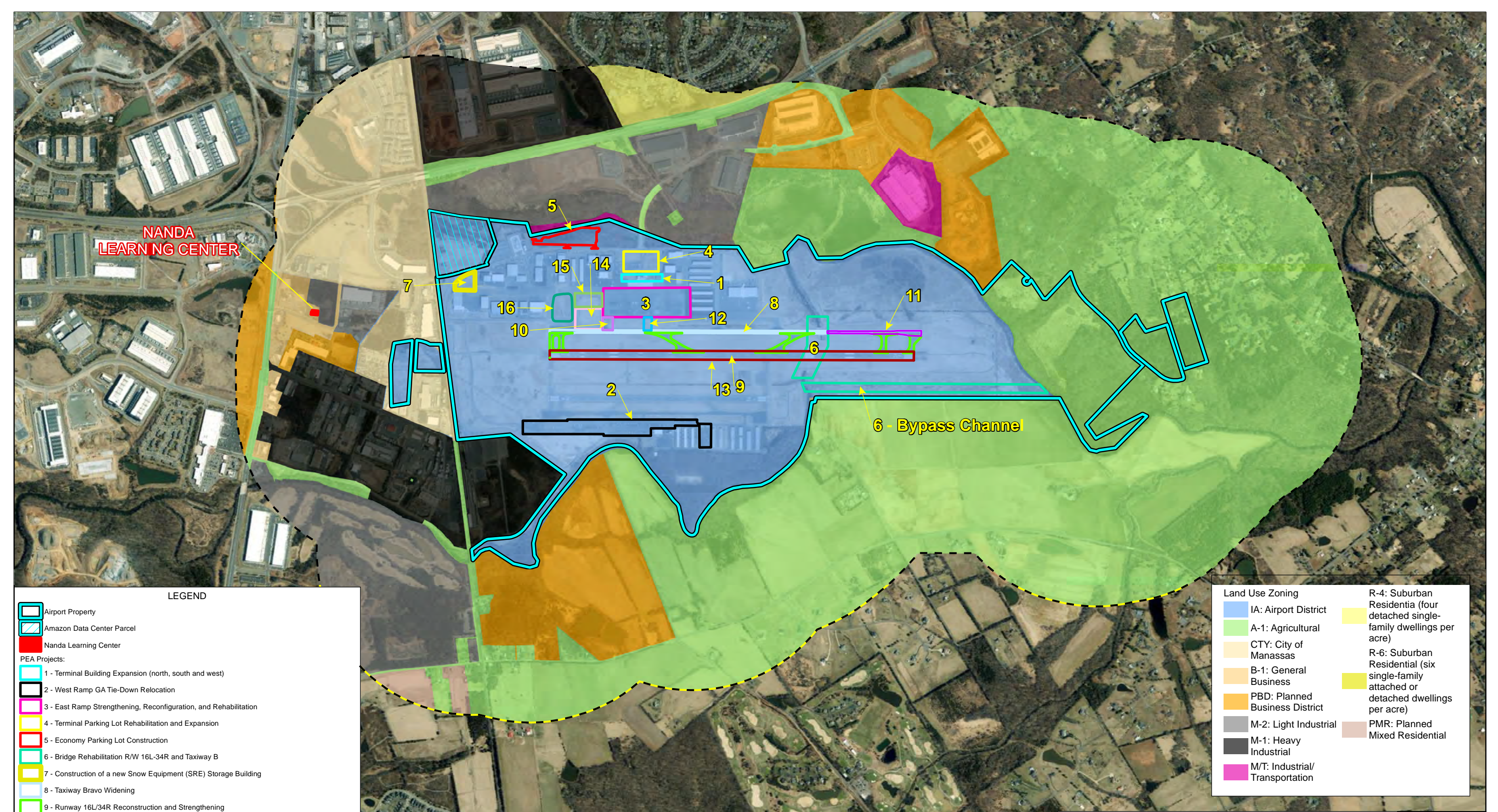
- Legend**
- Airport Boundary – Visual Effects Study Area
 - 65 DNL Preferred Alternative 2041 – Auditory Effects Study Area



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**Section 4(f) Recreation Areas and
HAAC Battlefields in the Study Area**

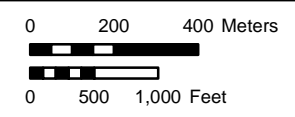
Figure A18



LEGEND

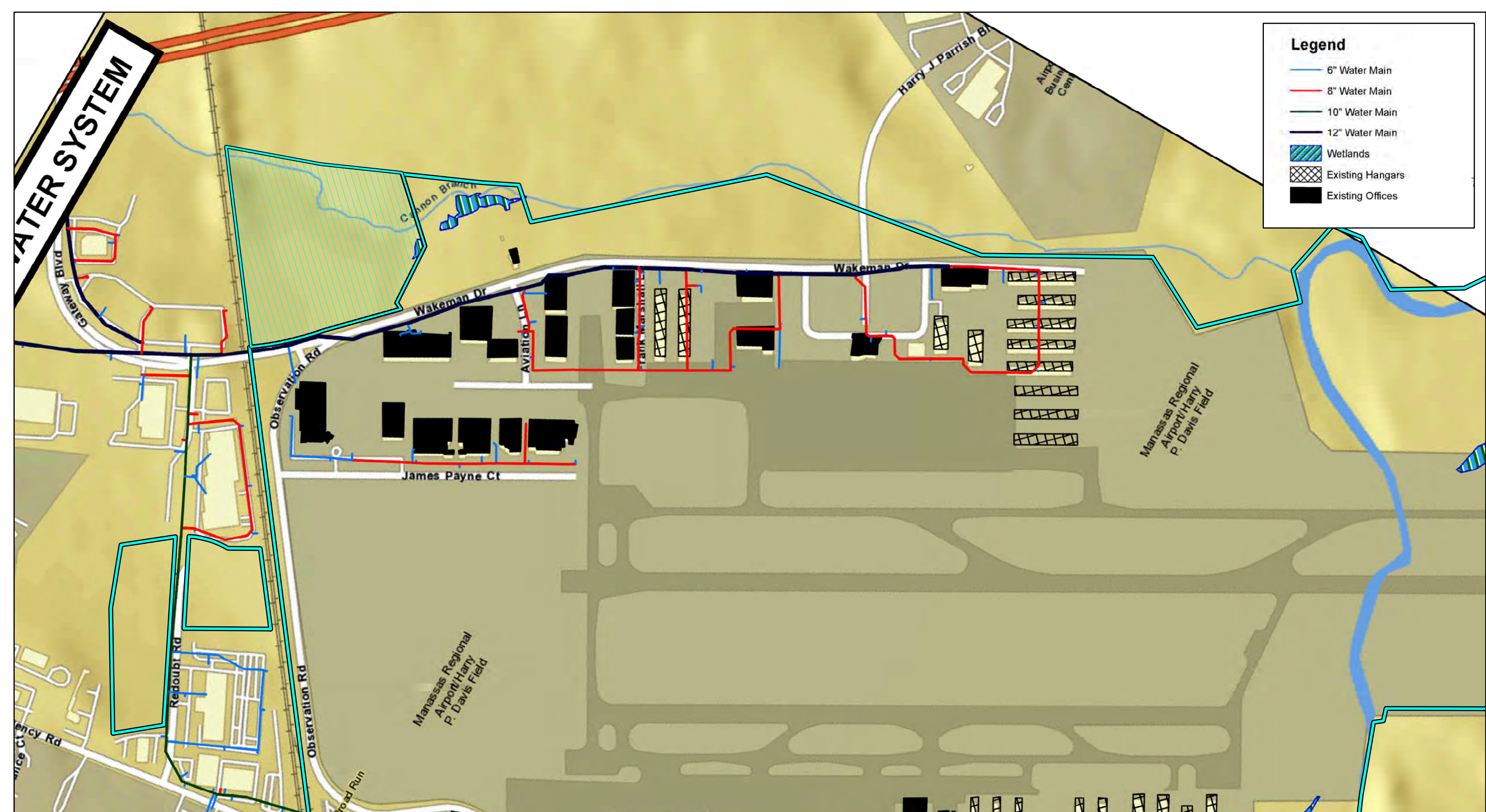
	Airport Property
	Amazon Data Center Parcel
	Nanda Learning Center
PEA Projects:	
	1 - Terminal Building Expansion (north, south and west)
	2 - West Ramp GA Tie-Down Relocation
	3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
	4 - Terminal Parking Lot Rehabilitation and Expansion
	5 - Economy Parking Lot Construction
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	10 - Taxiway Echo Fillet Widening
	11 - Taxiway B Reconstruction and Strengthening (South of the Bridge)
	12 - Construction of a new East Ramp Taxiway
	13 - Runway 16L/34R Widening
	14 - Aircraft Deicing Pad and Apron Expansion between Taxiways D and E
	15 - Construction of new Expanded East Ramp and Taxilane between Taxiways Delta and Echo
	16 - Construction of a new ARFF Facility
	Half-Mile Buffer of Airport

Land Use Zoning	
	IA: Airport District
	A-1: Agricultural
	CTY: City of Manassas
	B-1: General Business
	PBD: Planned Business District
	M-2: Light Industrial
	M-1: Heavy Industrial
	M/T: Industrial/Transportation
	R-4: Suburban Residential (four detached single-family dwellings per acre)
	R-6: Suburban Residential (six single-family attached or detached dwellings per acre)
	PMR: Planned Mixed Residential



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment
Land Use in the Vicinity
(Prince William County and
City of Manassas Combined)**

Figure
A19



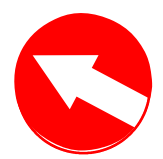
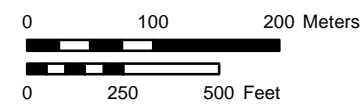
Legend

- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- Wetlands
- Existing Hangars
- Existing Offices

LEGEND

- Airport Property
- Amazon Data Center Parcel

Figure 2.2 from
Kimley Horn
2021 Manassas Regional Airport
Water and Sanitary Sewer

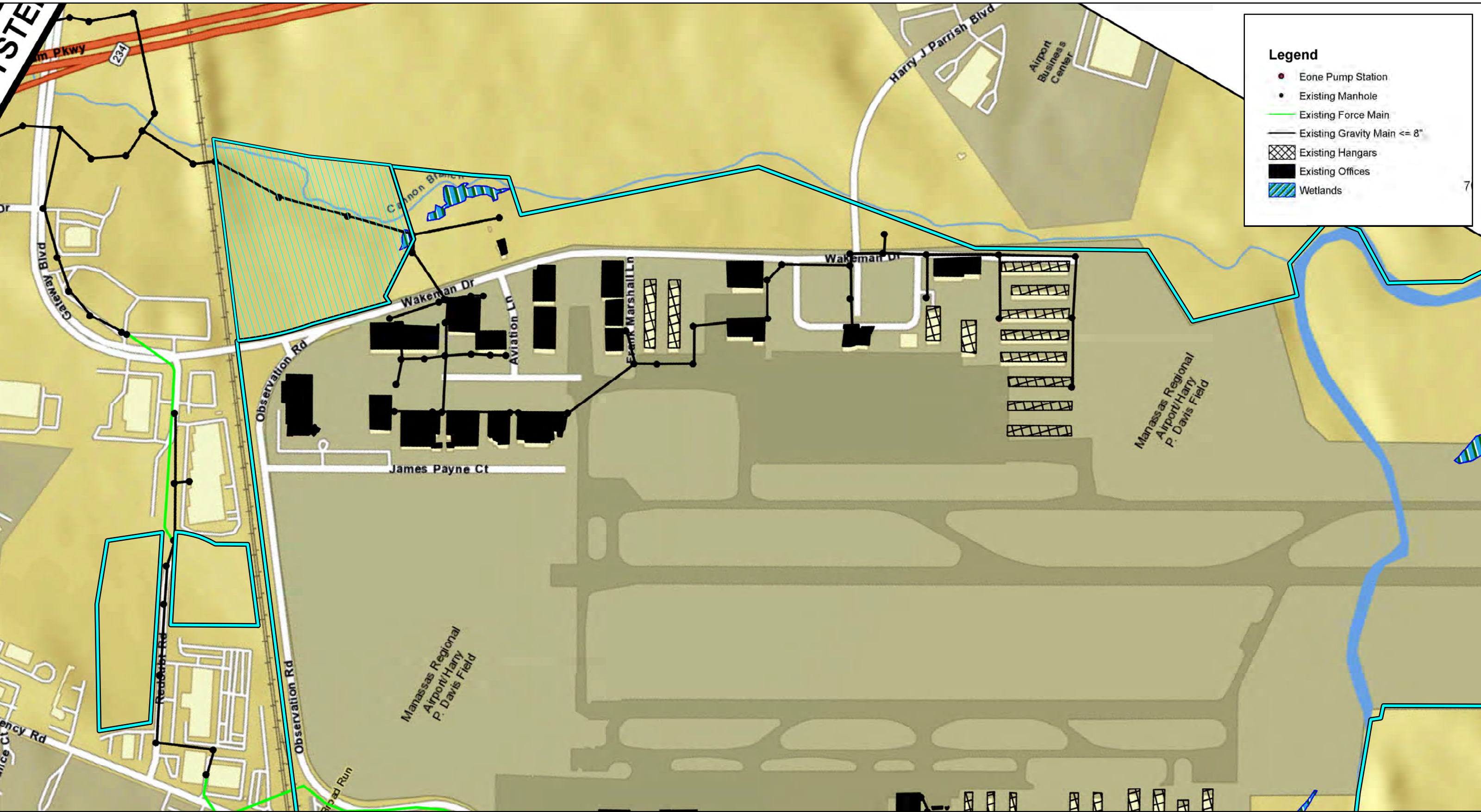


**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

East Side Water Lines

Legend

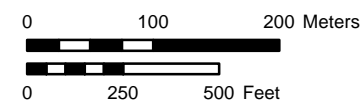
- Eone Pump Station
- Existing Manhole
- Existing Force Main
- Existing Gravity Main <= 8"
- ▨ Existing Hangars
- Existing Offices
- ▨ Wetlands



LEGEND

- ▭ Airport Property
- ▨ Amazon Data Center Parcel

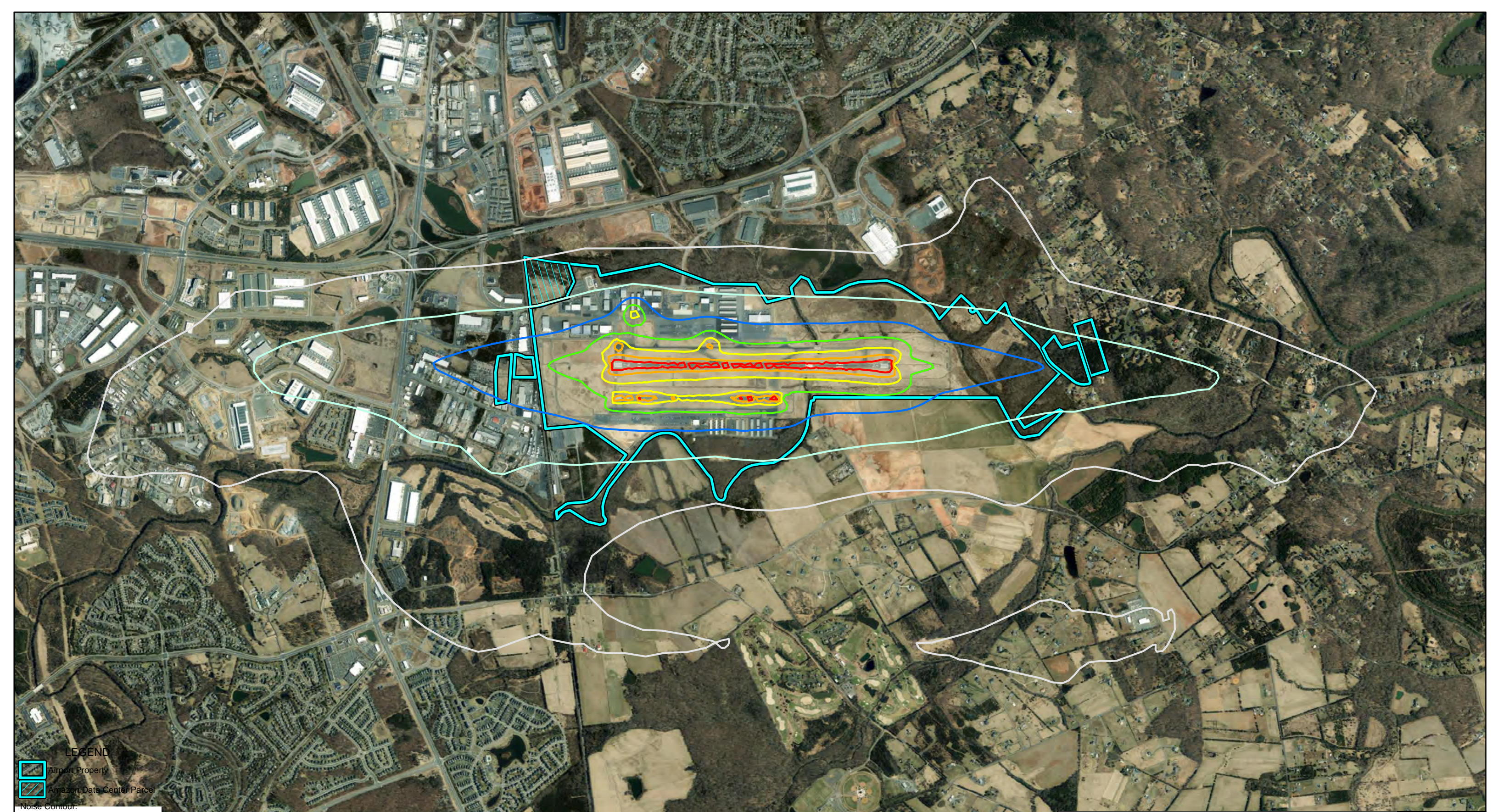
Figure 2.7 from
Kimley Horn
2021 Manassas Regional Airport
Water and Sanitary Sewer



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Airport Force and Gravity Mains

Figure
A21



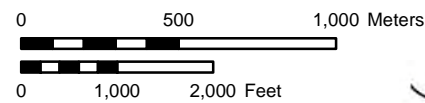
LEGEND

Airport Property

Amazon Data Center Parcel

Noise Contour:

- DNL55
- DNL60
- DNL65
- DNL70
- DNL75
- DNL80
- DNL85



Project 23-98001.002, Version: 3/23/2026 @ 5:13:34 PM

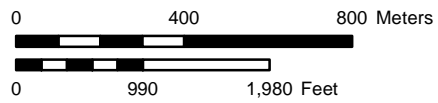
**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Aircraft Noise Contours: Existing Condition

Figure
A22



Imagery dated 2021 (ESRI Service "Virginia Aerial Imagery 2021")



LEGEND

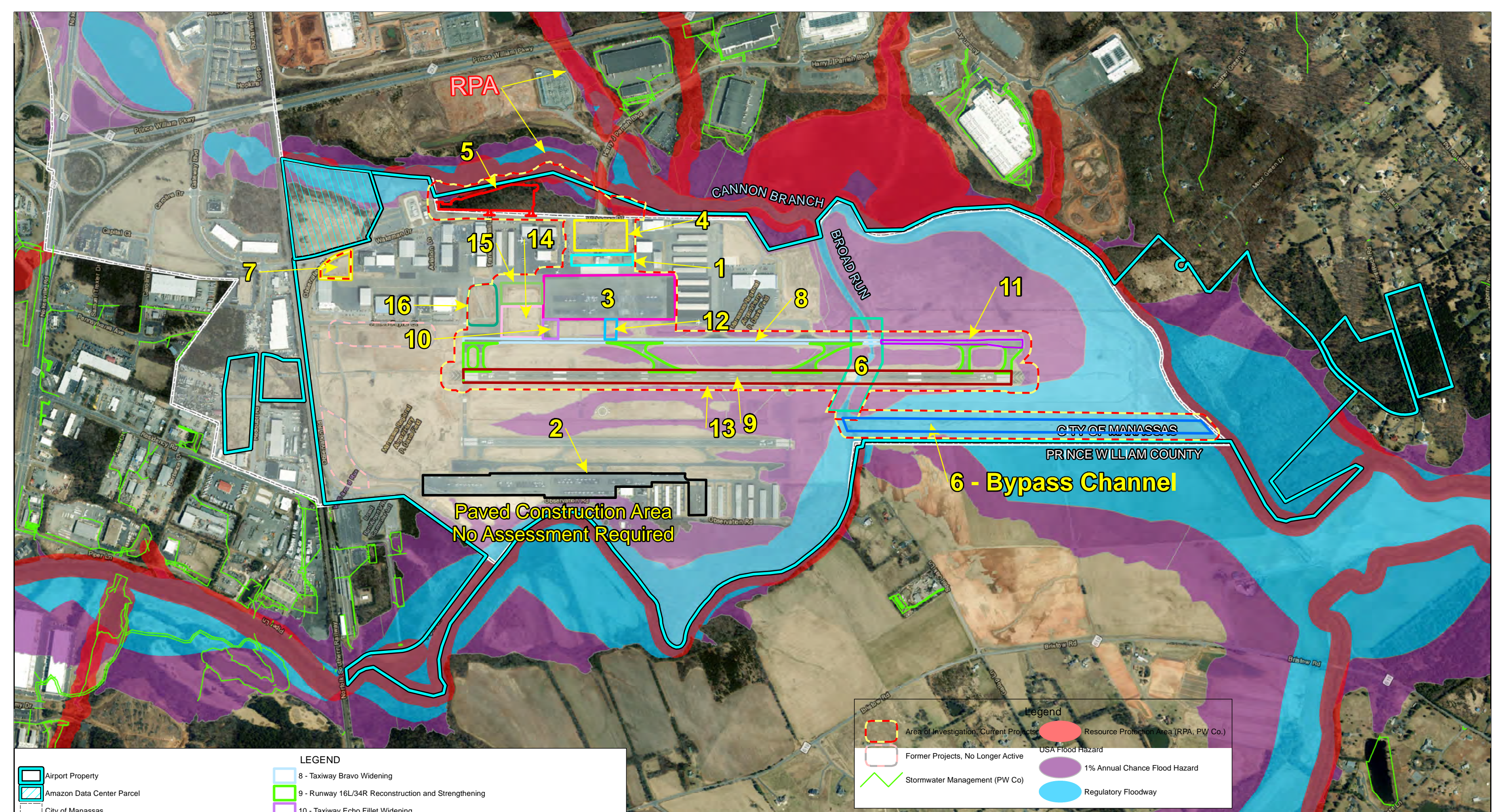
- Airport Property
- Amazon Data Center Parcel
- Half-Mile Buffer of Airport
- Census Tract Boundary



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Census Tracts

Figure
A23



**Paved Construction Area
No Assessment Required**

6 - Bypass Channel

LEGEND	
	Airport Property
	Amazon Data Center Parcel
	City of Manassas
PEA Projects:	
	1 - Terminal Building Expansion (north, south and west)
	2 - West Ramp GA Tie-Down Relocation
	3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
	4 - Terminal Parking Lot Rehabilitation and Expansion
	5 - Economy Parking Lot Construction
	6 - Bridge Rehabilitation R/W 16L-34R and Taxiway B
	7 - Construction of a new Snow Equipment (SRE) Storage Building
	8 - Taxiway Bravo Widening
	9 - Runway 16L/34R Reconstruction and Strengthening
	10 - Taxiway Echo Fillet Widening
	11 - Taxiway B Reconstruction and Strengthening (South of the Bridge)
	12 - Construction of a new East Ramp Taxiway
	13 - Runway 16L/34R Widening
	14 - Aircraft Deicing Pad and Apron Expansion between Taxiways D and E
	15 - Construction of new Expanded East Ramp and Taxilane between Taxiways Delta and Echo
	16 - Construction of a new ARFF Facility
	Project #6 - Bypass Channel

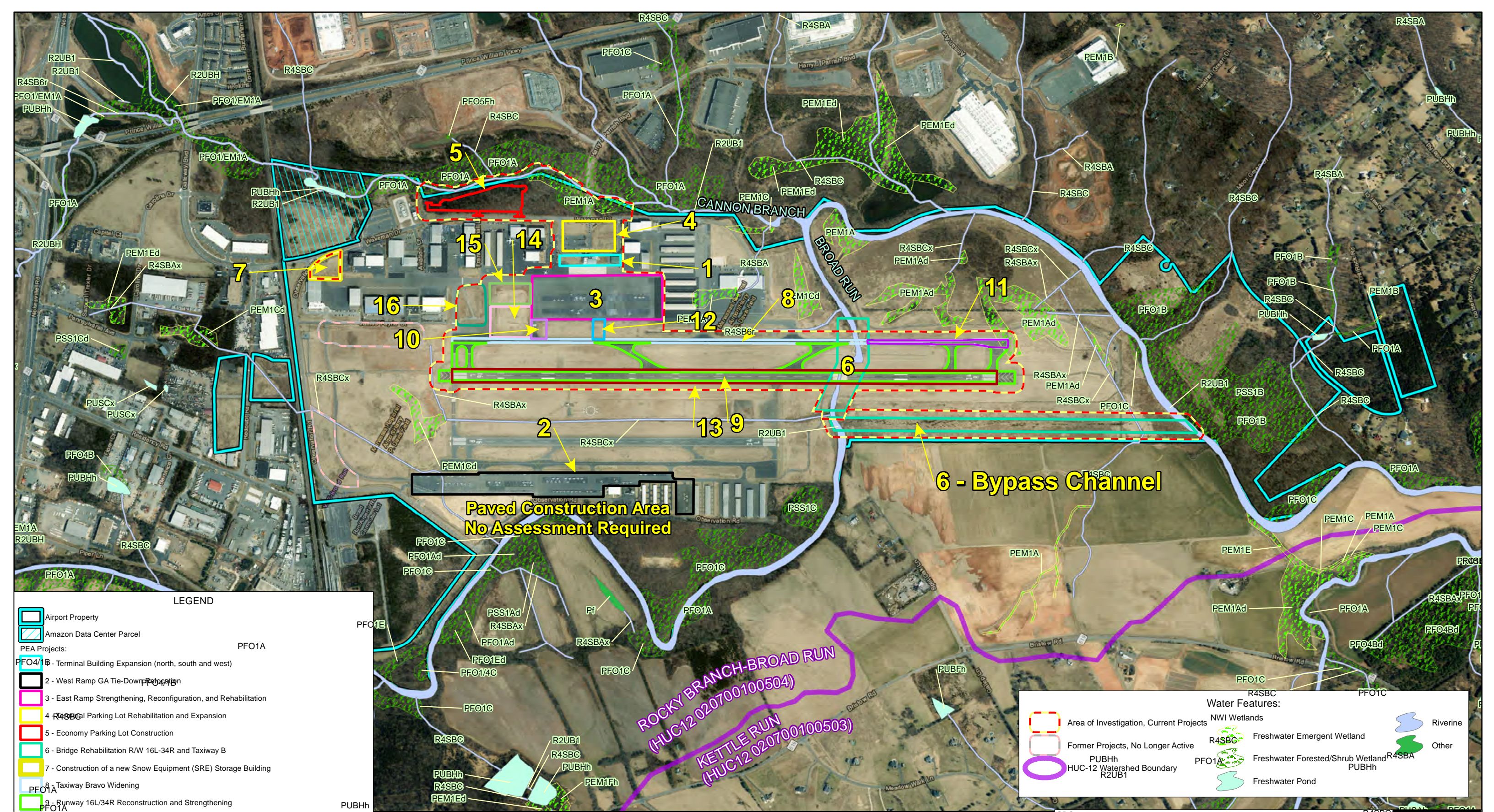
Legend	
	Area of Investigation, Current Projects
	Former Projects, No Longer Active
	Stormwater Management (PW Co)
	Resource Protection Area (RPA, PW Co.)
	USA Flood Hazard
	1% Annual Chance Flood Hazard
	Regulatory Floodway



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**State and Local Water Features
in the Vicinity of the Airport**

Figure
A24

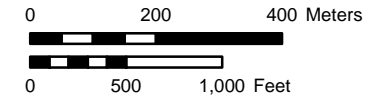


LEGEND

Airport Property
 Amazon Data Center Parcel
PEA Projects:
 PFO1A/B - Terminal Building Expansion (north, south and west)
 2 - West Ramp GA Tie-Down
 3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
 4 - General Parking Lot Rehabilitation and Expansion
 5 - Economy Parking Lot Construction
 6 - Bridge Rehabilitation R/W 16L-34R and Taxiway B
 7 - Construction of a new Snow Equipment (SRE) Storage Building
 8 - Taxiway Bravo Widening
 9 - Runway 16L/34R Reconstruction and Strengthening
 10 - Taxiway Echo Fillet Widening
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 Project #6 - Bypass Channel

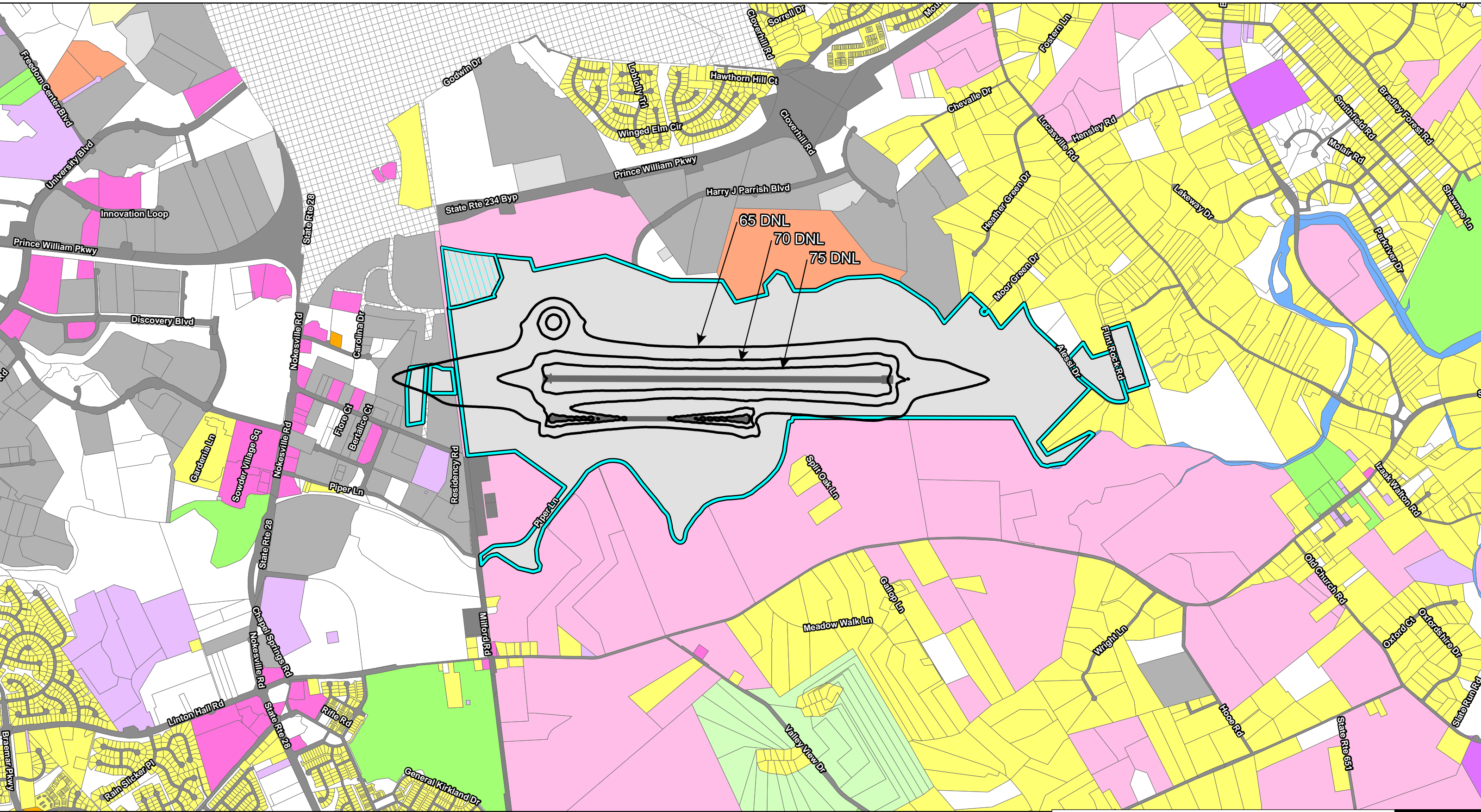
Water Features:
 NWI Wetlands
 R4SBC Freshwater Emergent Wetland
 PFO1A Freshwater Forested/Shrub Wetland
 Freshwater Pond
 Riverine
 Other

Wetland classification for NWI based on Cowardin, L.M., V. Carter V., F.C. Golet, and E.T. LaRoe.
 1979 Classification of Wetlands and Deepwater Habitats of the United States.
 U.S. Fish and Wildlife Service Report No. FWS/OBS/- 79/31. Washington, D.C.



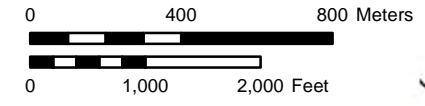
Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment
NWI Water Features and Watersheds
on the Airport

Figure A25



LEGEND

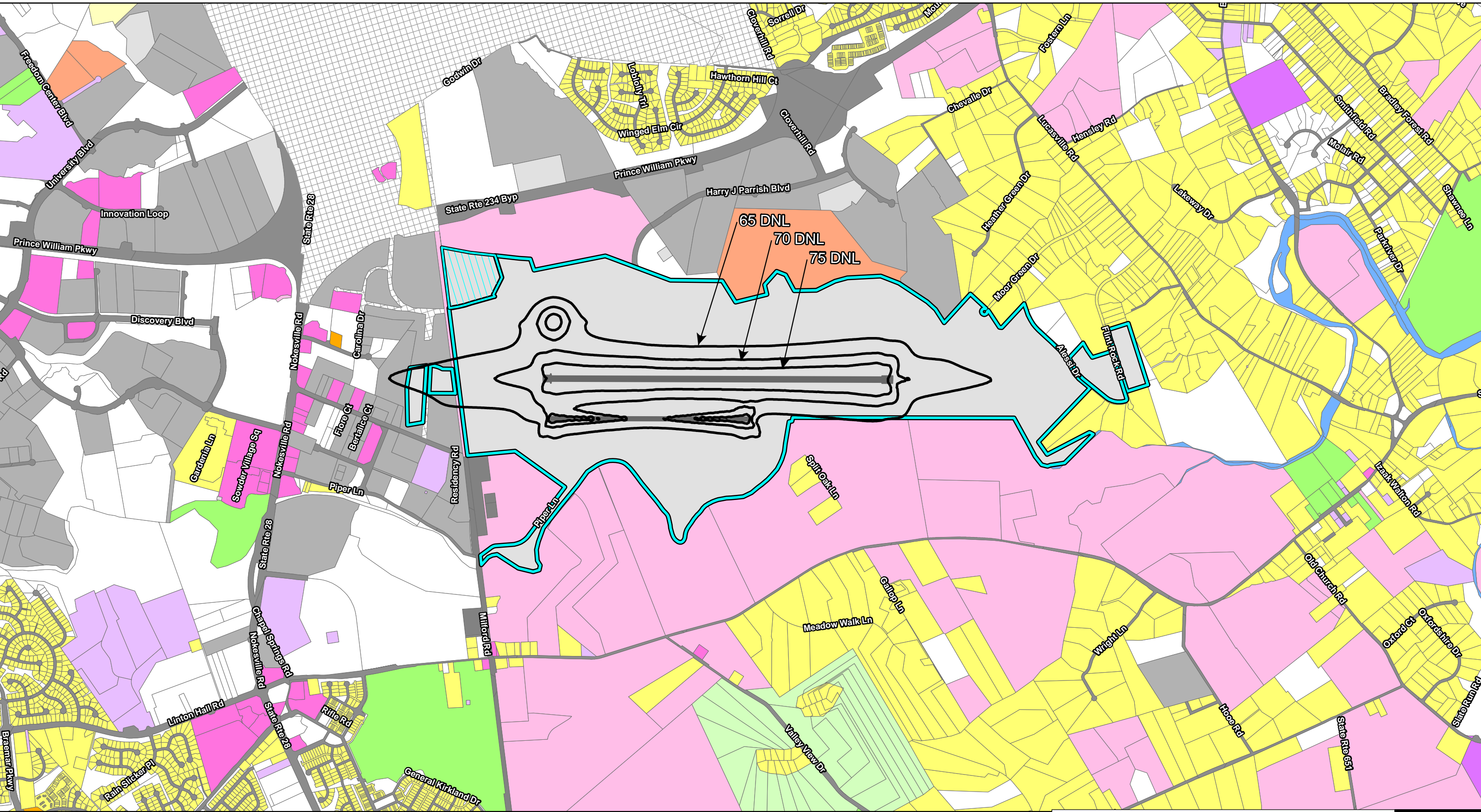
Airport Property	Land Use: Agriculture	Industrial	Residential	School (Private)	Right-of-Way
Amazon Data Center Parcel	Airport	Institutional	Rail	Federal Land	Water
Runway	Commercial	City of Manassas	Recreational	Utility	
Noise Contour (DNL) - No Action, 2036	Golf Course	Open Space	Rural Crossroads	State Land	



Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment

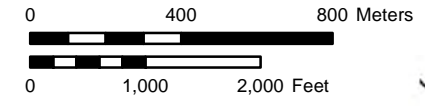
No Action Alternative (2036)
65-75 Noise DNL Contours

Figure
A26



LEGEND

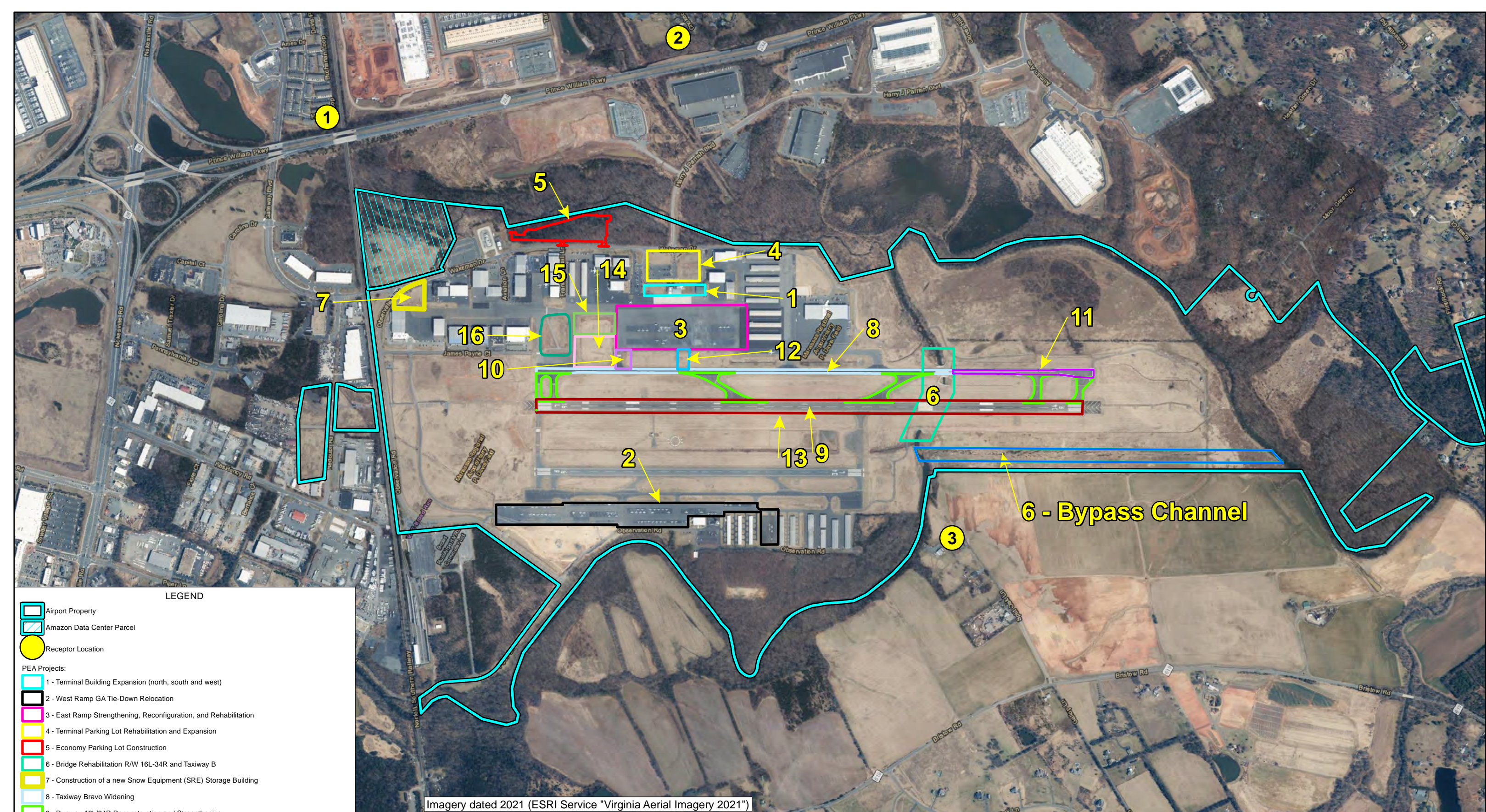
Airport Property	Land Use: Agriculture	Industrial	Residential	School (Private)	Right-of-Way
Amazon Data Center Parcel	Airport	Institutional	Rail	Federal Land	Water
Runway	Commercial	City of Manassas	Recreational	Utility	
Noise Contour (DNL) - No Action, 2041	Golf Course	Open Space	Rural Crossroads	State Land	



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**No Action Alternative (2041)
65-75 Noise DNL Contours**

Figure
A27



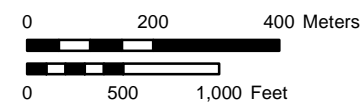
LEGEND

- Airport Property
- Amazon Data Center Parcel
- Receptor Location

PEA Projects:

- 1 - Terminal Building Expansion (north, south and west)
- 2 - West Ramp GA Tie-Down Relocation
- 3 - East Ramp Strengthening, Reconfiguration, and Rehabilitation
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- 16 - Construction of a new ARFF Facility
- Project #6 - Bypass Channel

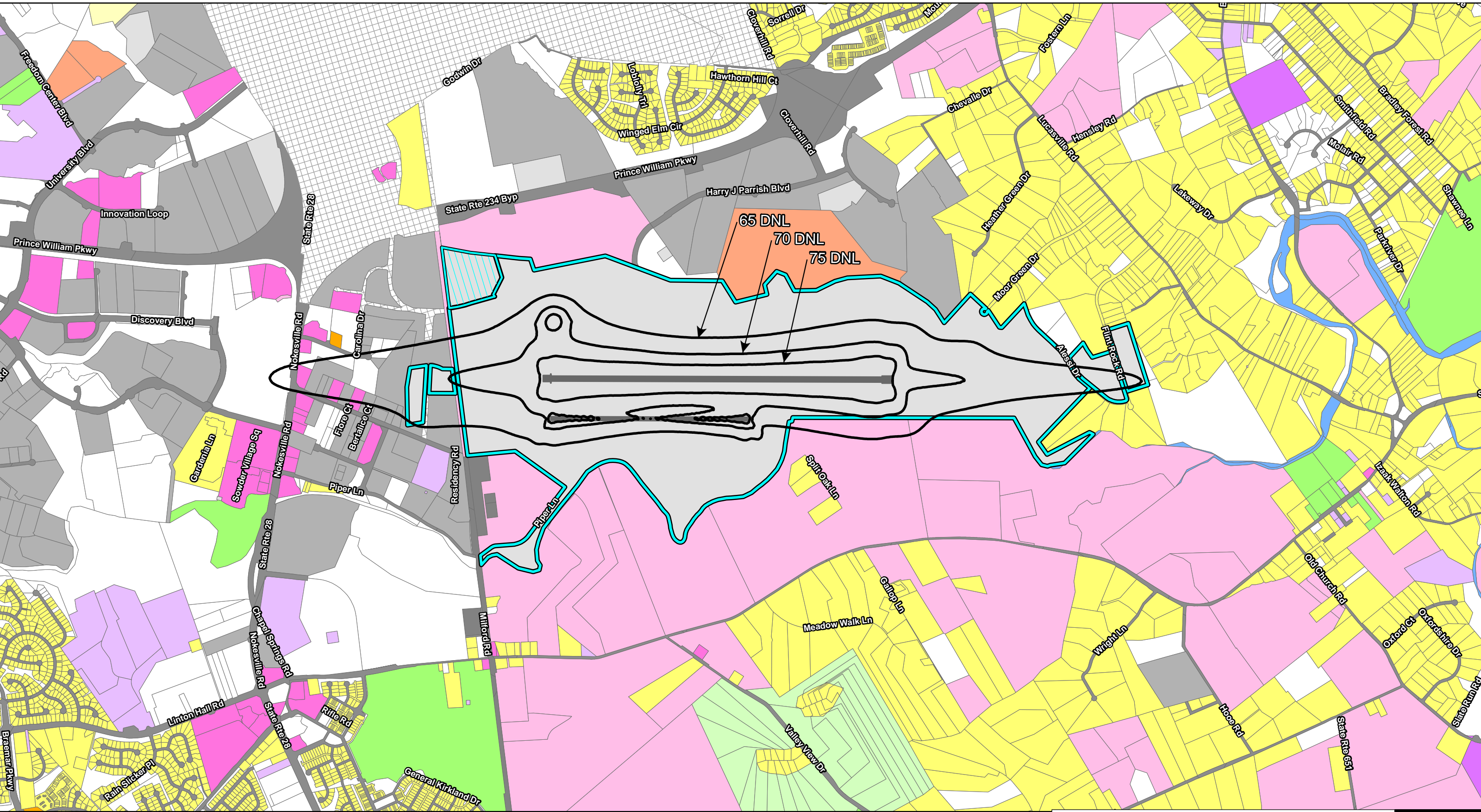
Imagery dated 2021 (ESRI Service "Virginia Aerial Imagery 2021")



**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

Receptor Locations

Figure
A28



LEGEND					
Airport Property	Land Use: Agriculture	Industrial	Residential	School (Private)	Right-of-Way
Amazon Data Center Parcel	Airport	Institutional	Rail	Federal Land	Water
Runway	Commercial	City of Manassas	Recreational	Utility	
Noise Contour (DNL) - Preferred Action, 2036	Golf Course	Open Space	Rural Crossroads	State Land	

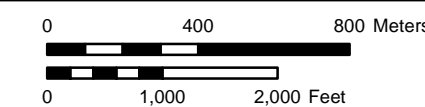
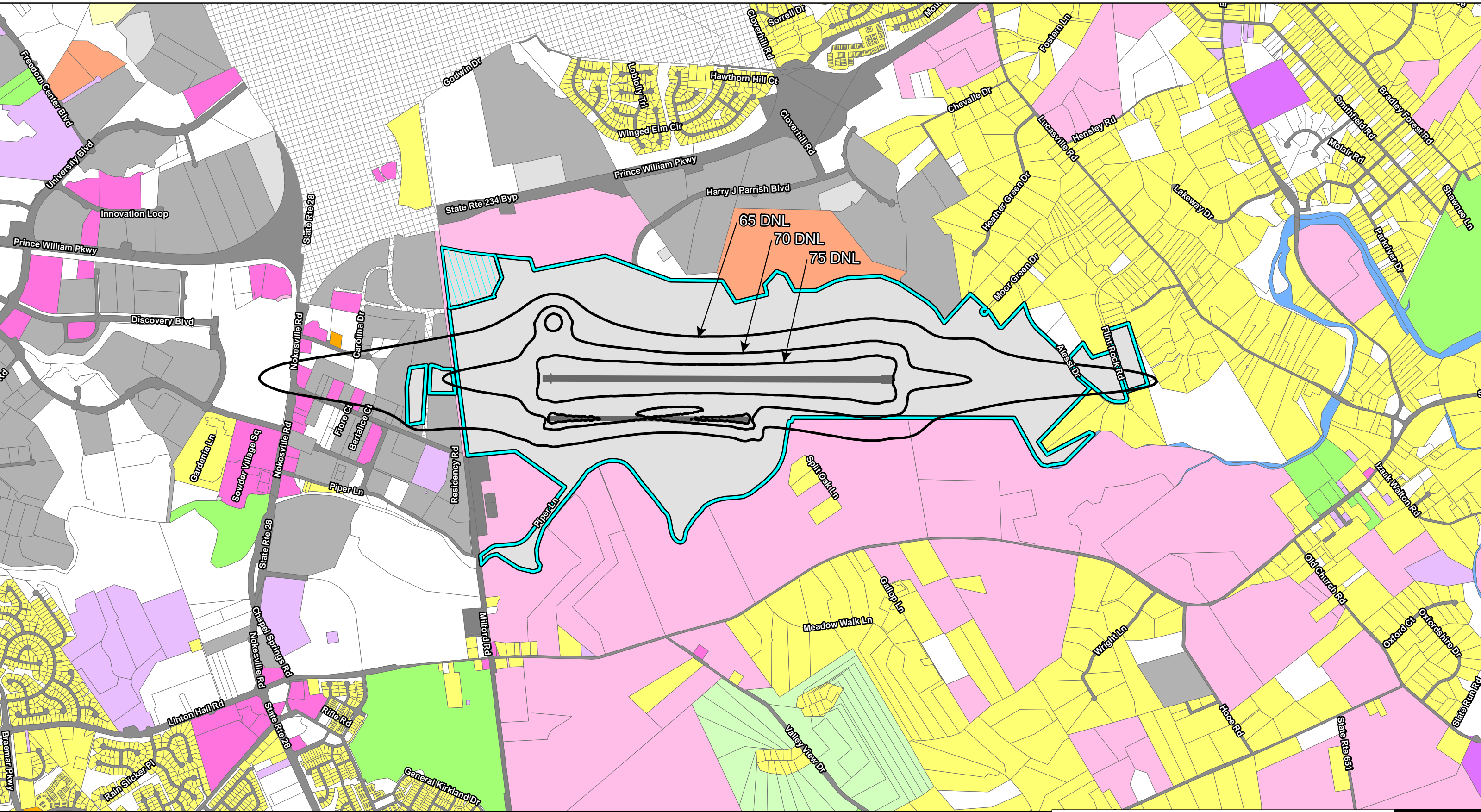


Figure
A29

**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**Preferred Alternative - Alternative #2 (2036)
65-75 Noise DNL Contours**



LEGEND					
	Airport Property		Agriculture		Industrial
	Amazon Data Center Parcel		Airport		Institutional
	Runway		Commercial		Open Space
	Noise Contour (DNL) - Preferred Action, 2041		Golf Course		Recreational
			Residential		School (Private)
			Federal Land		Water
			Rail		Utility
			City of Manassas		State Land
			Rural Crossroads		
			Right-of-Way		

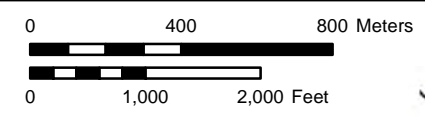


Figure
A30

**Manassas Regional Airport (HEF)
Proposed Part 139 Certification and Terminal
Redevelopment Project Environmental Assessment**

**Preferred Alternative - Alternative #2 (2041)
65-75 Noise DNL Contours**