

APPENDIX D

Wetland Report



Wetland Delineation Report

Syracuse Hancock International Airport Land Release

Town of Salina Onondaga Co., New York

CHA Project Number: 077036

Prepared for:
*Syracuse Regional Airport Authority
1000 Col. Eileen Collins Blvd.
Syracuse, NY 13212*

Prepared by:



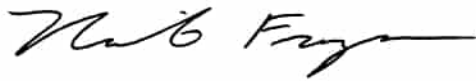
*III Winners Circle
Albany, NY, 12205
Phone: (518) 453-8211
Fax: (518) 453-4773*

November 20, 2023

SIGNATURE PAGE

This report has been prepared and reviewed by the following qualified personnel employed by
CHA.

Report Prepared By:



Nicole Frazer
Principal Scientist

Report Reviewed By:



Christopher Einstein, PWS
Principal Scientist

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	PROJECT AREA DESCRIPTION.....	1
2.0	METHODOLOGY	1
3.0	INVESTIGATION RESULTS.....	2
3.1	RESOURCE REVIEW.....	2
3.1.1	USGS Topographic Map	3
3.1.2	NYSDEC Freshwater Wetlands Map	3
3.1.3	National Wetland Inventory (NWI) Map	3
3.1.4	Soil Survey Map	3
3.1.5	FEMA Floodplain Map	4
3.1.6	Hydrology.....	4
3.2	FIELD INVESTIGATION.....	4
3.2.1	Vegetative Communities	4
3.2.2	Discussion of Terrestrial Communities	5
3.2.3	Discussion of Wetlands and Waterbodies	6
4.0	SUMMARY	6

LIST OF TABLES

Table 4-1.	Wetlands	6
-------------------	-----------------------	----------

LIST OF ATTACHMENTS

Attachment A Figures
Attachment B Wetland Delineation Map
Attachment C Wetland Determination Data Forms
Attachment D Site Photographs
Attachment E Antecedent Precipitation Tool

LIST OF ACRONYMS & ABBREVIATIONS

AC	Acres
CWA	Clean Water Act
FEMA	Federal Emergency Management Agency
FWW	Freshwater Wetland
HUC	Hydrologic Unit Code
JD	Jurisdictional Determination
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NYSDEC	New York State Department of Environmental Conservation
SF	Square Foot
SYR	Syracuse Hancock International Airport
TNW	Traditional Navigable Waters
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

The project area is located on the west side of the Syracuse Hancock International Airport (SYR), in the Town of Salina, Onondaga County, New York (Attachment A). The jurisdictional determination (JD) area totals 46 acres. The approximate center point coordinates of the project area are Latitude 43° 06' 52.42"N; Longitude 76° 07' 31.90"W.

The purpose of this report is to document the wetland community and its boundary within the project area. The wetland has been identified on the Wetland Delineation Map (Attachment B). The report includes a general description of the project area, ecology, wetland description and is complimented by wetland determination data forms (Attachment C) and site photographs (Attachment D).

CHA was retained to delineate and describe the wetlands within the project area that may be regulated by the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). The wetland delineation was conducted by Nicole Frazer, Principal Scientist and Cole Scrivner, Environmental Scientist on November 7, 2023.

1.1 PROJECT AREA DESCRIPTION

The project area is within airport property. The project area consists of pavement, mowed lawn with trees, mowed lawn (airfield), emergent wetland (shallow emergent marsh), successional shrubland and successional northern hardwoods.

2.0 METHODOLOGY

The project area was evaluated in accordance with the procedures provided in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Manual: Northcentral and Northeast Region version 2.0 (January 2012). The "Routine Wetland Determination" method was used.

The wetland boundary was determined in the field based on the three-parameter approach, whereby an area is a wetland if it exhibits vegetation adapted to wet conditions (hydrophytes), hydric soil indicators, and the presence or evidence of water at or near the soil surface during the growing season (hydrology).

Coded surveyor's ribbons (e.g., flag code A-1, A-2, etc.) were placed along the wetland boundary based on observations of vegetation, soils and hydrologic conditions. Delineation flags were GPS located.

Data points were recorded along the wetland boundary. Wetland and upland data points were recorded to show the difference between the wetland and upland habitat. Additionally, points were taken to document the upland conditions of the successional northern hardwoods and successional shrubland community types in the northwest corner of the project area. Wetland determination data forms can be found in Attachment C.

Representative photographs of the wetland and upland portions of the project area are provided in Attachment D.

Vegetative community types within the project area are described according to *Ecological Communities of New York State, Second Edition* (Edinger 2014)¹ and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin 1979)².

The Antecedent Precipitation Tool identified that the drought index (PDSI) was mild wetness and that the delineation was performed under drier than normal conditions (index score of 7) (Attachment E).

3.0 INVESTIGATION RESULTS

3.1 RESOURCE REVIEW

Prior to visiting the project area, various maps and other sources of background information were reviewed. These included the following:

- United States Geological Survey (USGS) 7.5-minute Topographic Map

¹ Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. *Ecological Communities of New York State*. Second Edition. A revised and expanded edition of Carol Reshke's *Ecological Communities of New York State*. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.

² Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe, 1979. *Classification of wetlands and deepwater habitats of the United States*. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

- New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands (FWW) Map
- United States Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) map
- Natural Resources Conservation Service (NRCS) Soil Survey for Onondaga County
- Federal Emergency Management Agency (FEMA) Flood Zone Map

Refer to Attachment A for each of these figures.

3.1.1 USGS Topographic Map

According to the USGS Topographic Map, the project area is within the limits of the airport and is located along Colonel Eileen Collins Boulevard. The topography is flat.

3.1.2 NYSDEC Freshwater Wetlands Map

Review of the NYSDEC freshwater wetlands map did not identify any mapped state regulated wetlands or associated 100-foot Adjacent Areas within the project area.

3.1.3 National Wetland Inventory (NWI) Map

Review of the NWI map did not identify any mapped wetlands within the project area.

3.1.4 Soil Survey Map

Soil descriptions were obtained from the NRCS Web Soil Survey. This information was used in conjunction with on-site soil sampling to determine the presence of hydric soils. The following soils are mapped as occurring within the project area:

- Croghan loamy fine sand (CrB), 0-6% slopes- This soil is moderately well drained. The depth to water table is about 18 to 24 inches and the depth to restrictive feature is more than 80 inches. This soil is not rated as a hydric soil.
- Minoa fine sandy loam (MtA), 0-2 % slopes- This soil is somewhat poorly drained. The depth to water table is about 6 to 18 inches and the depth to restrictive feature is more than 80 inches. This soil is not rated as a hydric soil.

- Naumburg loamy fine sand (Na), 0-2% slopes- This soil is somewhat poorly drained and poorly drained. The depth to water table is about 6 to 12 inches and the depth to restrictive feature is more than 80 inches. The somewhat poorly drained soil is not rated as a hydric soil and the poorly drained soil is rated as a hydric soil.
- Urban land (Ub)- The information provided above for the other soil types, is not included in the soil survey for this soil type.

3.1.5 FEMA Floodplain Map

Based on review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, no areas of 100-year floodplain are mapped within the project area.

3.1.6 Hydrology

The water quality of surface waters in New York State are classified by the NYSDEC as either “AA”, “A,” “B”, “C”, or “D”. Water quality standards for discharges to a classified stream, river, lake, or other water body accompany each classification. A “(T)” or “(TS)” used with the water quality standard indicates that the stream supports, or may support, a trout population. All streams and water bodies with a water quality standard of C(T) or higher are regulated by the NYSDEC under Article 15 Protection of Waters as are navigable waters.

There are no streams within the project area. The nearest Traditional Navigable Water (TNW) is Onondaga Lake. The aerial miles from the project site to Onondaga Lake are approximately 3.6.

The Hydrologic Unit Codes (HUC) for the project area are 041402020902 (Mud Creek) and 041402011509 (Onondaga Lake).

3.2 FIELD INVESTIGATION

3.2.1 Vegetative Communities

Ecological communities within the project area include mowed lawn with trees, mowed lawn (airfield), emergent wetland (PEM), successional shrubland and successional northern hardwoods. Descriptions of these areas are provided below.

3.2.2 Discussion of Terrestrial Communities

Mowed lawn with trees – This mowed roadside area is along Colonel Eileen Collins Boulevard and is dominated by Kentucky blue grass (*Poa pratensis*) with a row of thornless honey locust trees (*Gleditsia triacanthos* var. *inermis*).

Mowed lawn (airfield)- These areas are associated with the airfield and are dominated by grasses such as Kentucky blue grass. Other species present in lesser occurrences include species such as bird's foot trefoil (*Lotus corniculatus*), queen Anne's lace (*Daucus carota*), English plantain (*Plantago lanceolata*), common plantain (*Plantago major*), white clover (*Trifolium repens*), red clover (*Trifolium pratense*), northern bedstraw (*Galium boreale*), cow vetch (*Vicia cracca*), dandelion (*Taraxacum officinale*), field mint (*Mentha arvensis*), strawberry (*Fragaria virginiana*), northern dewberry (*Rubus flagellaris*), sulphur cinquefoil (*Potentilla recta*), scouring rush (*Equisetum hymale*), yellow foxtail (*Setaria pumila*), spotted knapweed (*Centaurea stoebe*), white campion (*Silene latifolia*), butter-and-eggs (*Linaria vulgaris*), yarrow (*Achillea millefolium*), chicory (*Cichorium intybus*), daisy fleabane (*Erigeron annuus*), white sweet clover (*Melilotus albus*) and hoary alyssum (*Berteroa incana*).

Successional shrubland-This area is located in the northwest corner of the project area. The dominant shrub in this area is quaking aspen (*Populus tremuloides*). Other shrub species present include gray dogwood (*Cornus racemosa*), morrow's honeysuckle (*Lonicera morrowii*), staghorn sumac (*Rhus typhina*), blackberry (*Rubus allegheniensis*) and black raspberry (*Rubus occidentalis*). The herbaceous layer contains species such as blackberry, morrow's honeysuckle and tall goldenrod (*Solidago altissima*).

Successional northern hardwoods- This area is also located in the northwest corner of the project area. The dominant trees in this area are quaking aspen and black cherry (*Prunus serotina*). Sugar maple (*Acer saccharum*) is also present in lesser occurrences. The shrub layer is dominated by quaking aspen and morrow's honeysuckle. Other shrubs present include black cherry, red oak (*Quercus rubra*), buckthorn (*Rhamnus cathartica*), staghorn sumac and gray dogwood. The herbaceous layer contains species such as tall goldenrod, morrow's honeysuckle and pokeweed (*Phytolacca americana*). Vines present include poison ivy (*Toxicodendron radicans*), summer grape (*Vitis aestivalis*) and bittersweet (*Celastrus orbiculatus*).

3.2.3 Discussion of Wetlands and Waterbodies

The identified wetland is described below. No waterbodies were identified within the project area. Refer to Attachment B for the Wetland Delineation Map.

Wetland A – Wetland A is an isolated shallow emergent marsh (PEM) that is dominated by path rush (*Juncus tenuis*) with lesser occurrences of yellow nut sedge (*Cyperus esculentus*).

Observed hydrology indicators included Surface Water (A1), Oxidized Rhizospheres on Living Roots (C3) and Geomorphic Position (D2). The hydric soil indicator is Depleted Below Dark Surface (A11).

The total size of Wetland A is approximately 0.17 acres. This wetland is a small depression, has no inlet or outlet and no connection to tributaries or adjacent wetlands. Wetland A is not adjacent to a TNW, territorial sea, or interstate water. Wetland A is also not adjacent to a water defined as relatively permanent, standing or continuously flowing and does not have a continuous surface connection to those waters. Wetland A is presumed to be non-jurisdictional based on review of the current definition of Waters of the United States as described above.

4.0 SUMMARY


CHA delineated wetlands within an approximately 46-acre project area located in the Town of Salina, Onondaga County, New York. The following table provides the ecological community type for the wetland, size of the feature within the project area and the likely regulatory jurisdiction.

Table 4-1 – Wetlands

FEATURE	COMMUNITY TYPE	SIZE (SF/AC)	JURISDICTION
Wetland A	Shallow Emergent Marsh (PEM)	7,374 SF/ 0.17 AC	Non-jurisdictional
TOTAL		7,374 SF/ 0.17 AC	

Attachment A



Legend
 Project Area

Date Saved: 10/18/2023 • Author: E. Butterfield



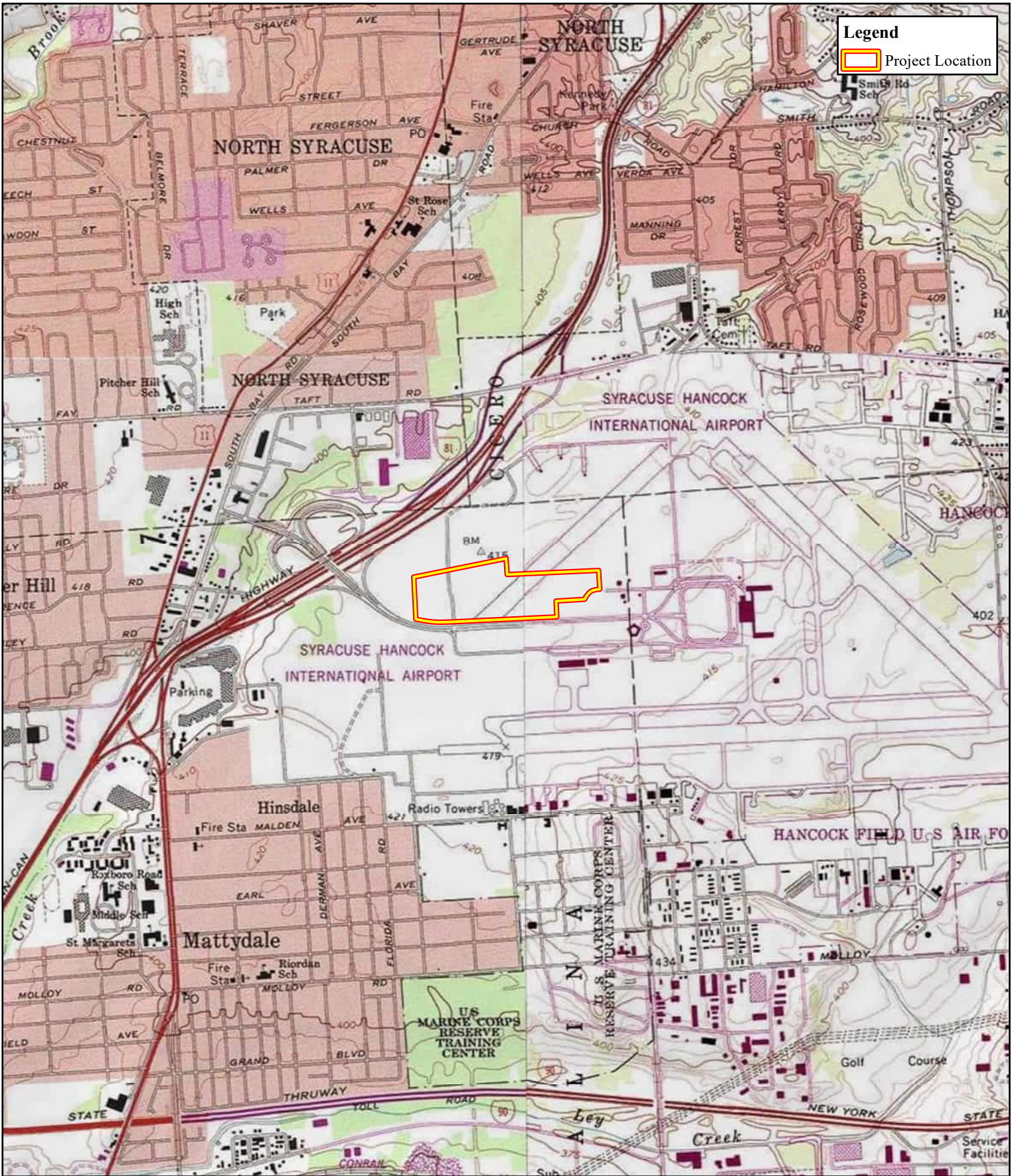
Project Area Map

Syracuse Hancock International Airport
 Col. Eileen Collins Blvd. Land Release
 Onondaga County, NY

Scale 1" = 600'

CHA Project No.
 077036

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community • Photo Date: 2023



Legend
 Project Location

Date Saved: 10/19/2023 • Author: E.Butterfield



USGS Project Location Map

Syracuse Hancock International Airport
 Col. Eileen Collins Blvd. Land Release
 Onondaga County, NY

Scale 1" = 2,000'

CHA Project No.
 077036

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed
 Syracuse West (1979), Syracuse East (1979),



Legend

- Project Location
- NWI Wetlands
- NYS DEC Wetlands
- Stream

Date Saved: 10/19/2023 • Author: E. Butterfield



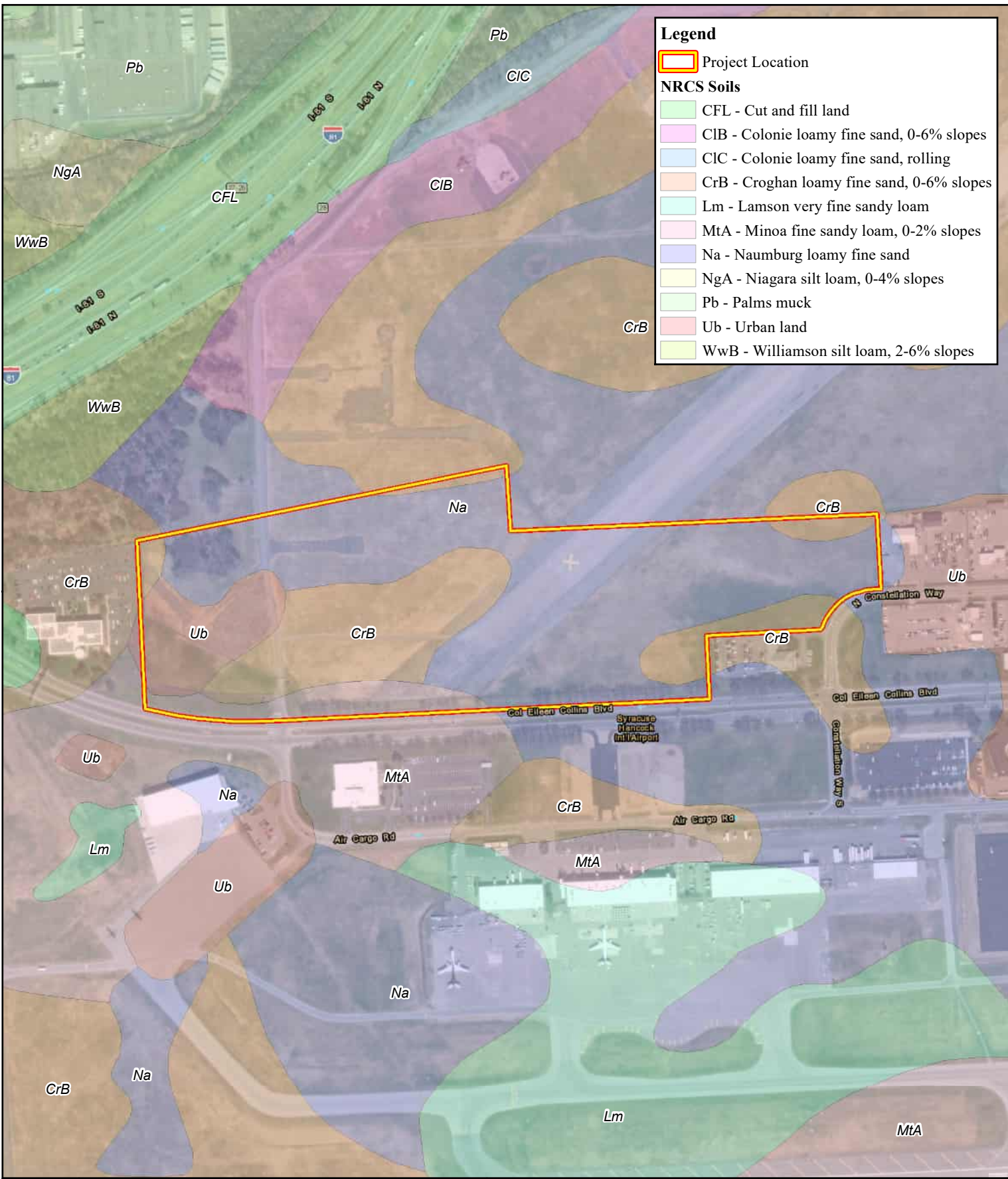
Wetlands Map

**Syracuse Hancock International Airport
Col. Eileen Collins Blvd. Land Release
Onondaga County, NY**

Scale 1" = 600'

**CHA Project No.
077036**

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. National Wetlands Inventory produced by the U.S. Fish and Wildlife Service • Photo Date: 2023



Legend

- Project Location
- NRCS Soils**
- CFL - Cut and fill land
- CIB - Colonie loamy fine sand, 0-6% slopes
- CIC - Colonie loamy fine sand, rolling
- CrB - Croghan loamy fine sand, 0-6% slopes
- Lm - Lamson very fine sandy loam
- MtA - Minoa fine sandy loam, 0-2% slopes
- Na - Naumburg loamy fine sand
- NgA - Niagara silt loam, 0-4% slopes
- Pb - Palms muck
- Ub - Urban land
- WwB - Williamson silt loam, 2-6% slopes

Date Saved: 10/17/2023 • Author: E.Butterfield



NRCS Soils Map

**Syracuse Hancock International Airport
Col. Eileen Collins Blvd. Land Release
Onondaga County, NY**



Scale 1" = 500'

**CHA Project No.
077036**

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. Soil Data Courtesy of the Natural Resource Conservation Service • Photo Date: 2023



Legend

-  Project Location
-  FEMA Floodzone AE

Date Saved: 10/19/2023 • Author: E. Butterfield



FEMA Floodzone Map

Syracuse Hancock International Airport
 Col. Eileen Collins Blvd. Land Release
 Onondaga County, NY

Scale 1" = 600'

CHA Project No.
 077036

Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. Floodzones courtesy of the Federal Emergency Management Agency (FEMA) • Photo Date: 2023

Attachment B

Date Saved: 11/14/2023 • Author: Cole Scrivner



Legend

- Jurisdictional Determination Boundary (46 Acres)
- Wetland Delineation Flags
- Delineated Wetland

Wetland A
(0.17 ac./ 7,374.72 sf.)

A-1
A-2
A-3
A-4
A-5
A-6
A-7
A-8
A-9
A-10

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors

	<p>Scale 1" = 200'</p>		<p>CHA Project No. 077036</p>	<p>Wetland Delineation Map Syracuse Hancock International Airport Col. Eileen Collins Blvd. Land Release Onondaga County, NY</p>	<p>Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. National Wetlands Inventory produced by the U.S. Fish and Wildlife Service • Photo Date: 2023</p>
--	------------------------	--	-----------------------------------	---	--

Attachment C

Project/Site: Syracuse Hancock International Airport City/County: Salina/ Onondaga Sampling Date: 11/7/23
 Applicant/Owner: Syracuse Regional Airport Authority State: NY Sampling Point: A-8 wet
 Investigator(s): N. Frazer & C. Scrivner Section, Township, Range: _____
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 0
 Subregion (LRR or MLRA): LRR L Lat: 43.113783 Long: -76.127722 Datum: WGS84
 Soil Map Unit Name: MtA- Minoa fine sandy loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Mowed isolated shallow emergent marsh.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
---	---

Field Observations: Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>0.5</u> Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: A-8 wet

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
_____ =Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>18</u> x 2 = <u>36</u> FAC species <u>75</u> x 3 = <u>225</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>103</u> (A) <u>301</u> (B) Prevalence Index = B/A = <u>2.92</u>	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
_____ =Total Cover					
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Juncus tenuis</u>	<u>75</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Cyperus esculentus</u>	<u>18</u>	<u>No</u>	<u>FACW</u>		
3. <u>Poa pratensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
_____ =Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____ =Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.	
_____ =Total Cover					Hydrophytic Vegetation Present? Yes <u>X</u> No _____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point A-8 wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 2/1	100					Loamy/Clayey	with organics
7-18	10YR 4/1	82	10YR 5/4	10	C	M	Sandy	Distinct redox concentrations
			2.5YR 3/6	8	C	PL/M		Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Mesic Spodic (A17)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- High Chroma Sands (S11) (**LRR K, L**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (**LRR K, L**)
- Red Parent Material (F21) (**MLRA 145**)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Red Parent Material (F21) (**outside MLRA 145**)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none
 Depth (inches):

Hydric Soil Present? Yes X No

Remarks:

Project/Site: Syracuse Hancock International Airport City/County: Salina/ Onondaga Sampling Date: 11/7/23
 Applicant/Owner: Syracuse Regional Airport Authority State: NY Sampling Point: A-8 upl
 Investigator(s): N. Frazer & C. Scrivner Section, Township, Range: _____
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0
 Subregion (LRR or MLRA): LRR L Lat: 43.113878 Long: -76.127907 Datum: WGS84
 Soil Map Unit Name: CrB-Croghan loamy fine sand NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Mowed airfield.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
--	---

Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: A-8 upl

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30'</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
				=Total Cover
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
				=Total Cover
Herb Stratum (Plot size: <u>5'</u>)				
1.	<u>Poa pratensis</u>	90	Yes	FACU
2.	<u>Galium boreale</u>	5	No	FAC
3.	<u>Mentha arvensis</u>	10	No	FACW
4.	<u>Plantago lanceolata</u>	5	No	FACU
5.	<u>Taraxacum officinale</u>	2	No	FACU
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		112		=Total Cover
Woody Vine Stratum (Plot size: <u>30'</u>)				
1.				
2.				
3.				
4.				
				=Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>5</u>	x 3 = <u>15</u>
FACU species <u>97</u>	x 4 = <u>388</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>112</u> (A)	<u>423</u> (B)
Prevalence Index = B/A = <u>3.78</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point A-8 upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-15	10YR 3/2	95	10YR 5/6	5	C	M	Sandy	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)</p> <p><input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Mesic Spodic (A17) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p>(MLRA 144A, 145, 149B) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Marl (F10) (LRR K, L)</p> <p><input checked="" type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Red Parent Material (F21) (MLRA 145)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)</p> <p><input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</p> <p><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)</p> <p><input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)</p> <p><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)</p> <p><input type="checkbox"/> Red Parent Material (F21) (outside MLRA 145)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (F22)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
---	--

Restrictive Layer (if observed):
 Type: none
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Project/Site: Syracuse Hancock International Airport City/County: Salina/ Onondaga Sampling Date: 11/7/23
 Applicant/Owner: Syracuse Regional Airport Authority State: NY Sampling Point: forested upl
 Investigator(s): N. Frazer & C. Scrivner Section, Township, Range: _____
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0
 Subregion (LRR or MLRA): LRR L Lat: 43.115469 Long: -76.129874 Datum: WGS84
 Soil Map Unit Name: Na-Naumburg loamy fine sand NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Successional northern hardwoods- northwest corner of project area.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
--	---

Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: forested upl

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Prunus serotina</u>	25	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>11.1%</u> (A/B)
2. <u>Populus tremuloides</u>	40	Yes	FACU	
3. <u>Acer saccharum</u>	5	No	FACU	
4. _____				
5. _____				
6. _____				
7. _____				
	<u>70</u>	=Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>24</u> x 3 = <u>72</u> FACU species <u>161</u> x 4 = <u>644</u> UPL species <u>11</u> x 5 = <u>55</u> Column Totals: <u>196</u> (A) <u>771</u> (B) Prevalence Index = B/A = <u>3.93</u>
1. <u>Prunus serotina</u>	2	No	FACU	
2. <u>Populus tremuloides</u>	20	Yes	FACU	
3. <u>Quercus rubra</u>	2	No	FACU	
4. <u>Rhamnus cathartica</u>	3	No	FAC	
5. <u>Lonicera morrowii</u>	35	Yes	FACU	
6. <u>Rhus typhina</u>	8	No	UPL	
7. <u>Cornus racemosa</u>	15	No	FAC	
	<u>94</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lonicera morrowii</u>	8	Yes	FACU	
2. <u>Solidago altissima</u>	10	Yes	FACU	
3. <u>Phytolacca americana</u>	5	Yes	FACU	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>23</u>	=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. <u>Toxicodendron radicans</u>	6	Yes	FAC	
2. <u>Vitis aestivalis</u>	3	Yes	FACU	
3. _____				
4. _____				
	<u>9</u>	=Total Cover		
Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>				

Remarks: (Include photo numbers here or on a separate sheet.)

VEGETATION Continued – Use scientific names of plants.

Sampling Point: forested upl

<u>Tree Stratum</u>	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
	<u>70</u>	=Total Cover		
<u>Sapling/Shrub Stratum</u>				
8. <u>Rubus allegheniensis</u>	<u>6</u>	<u>No</u>	<u>FACU</u>	
9. <u>Rubus occidentalis</u>	<u>3</u>	<u>No</u>	<u>UPL</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
	<u>94</u>	=Total Cover		
<u>Herb Stratum</u>				
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
23. _____	_____	_____	_____	
24. _____	_____	_____	_____	
	<u>23</u>	=Total Cover		
<u>Woody Vine Stratum</u>				
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>9</u>	=Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point forested upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/3	100					Sandy	
3-15	10YR 2/2	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1) Dark Surface (S7)
- Histic Epipedon (A2) Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Black Histic (A3) Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- Hydrogen Sulfide (A4) High Chroma Sands (S11) (**LRR K, L**)
- Stratified Layers (A5) Loamy Mucky Mineral (F1) (**LRR K, L**)
- Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2)
- Thick Dark Surface (A12) Depleted Matrix (F3)
- Mesic Spodic (A17) Redox Dark Surface (F6)
- (MLRA 144A, 145, 149B)** Depleted Dark Surface (F7)
- Sandy Mucky Mineral (S1) Redox Depressions (F8)
- Sandy Gleyed Matrix (S4) Marl (F10) (**LRR K, L**)
- Sandy Redox (S5) Red Parent Material (F21) (**MLRA 145**)
- Stripped Matrix (S6) Red Parent Material (F21) (**MLRA 145**)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Red Parent Material (F21) (**outside MLRA 145**)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none

Depth (inches):

Hydric Soil Present? Yes No X

Remarks:

Project/Site: Syracuse Hancock International Airport City/County: Salina/ Onondaga Sampling Date: 11/7/23
 Applicant/Owner: Syracuse Regional Airport Authority State: NY Sampling Point: Shrubland upl
 Investigator(s): N. Frazer & C. Scrivner Section, Township, Range: _____
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0
 Subregion (LRR or MLRA): LRR L Lat: 43.115438 Long: -76.135093 Datum: WGS84
 Soil Map Unit Name: Na- Naumburg loamy fine sand NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Successional shrubland-northwest corner of project area.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
--	---

Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Shrubland upl

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				=Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. <u>Populus tremuloides</u>	55	Yes	FACU	
2. <u>Cornus racemosa</u>	15	No	FAC	
3. <u>Lonicera morrowii</u>	15	No	FACU	
4. <u>Rhus typhina</u>	8	No	UPL	
5. <u>Rubus allegheniensis</u>	5	No	FACU	
6. <u>Rubus occidentalis</u>	5	No	UPL	
7. _____	_____	_____	_____	
				103 =Total Cover
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. <u>Lonicera morrowii</u>	5	Yes	FACU	
2. <u>Solidago altissima</u>	5	Yes	FACU	
3. <u>Rubus allegheniensis</u>	5	Yes	FACU	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
				15 =Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				=Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>90</u>	x 4 = <u>360</u>
UPL species <u>13</u>	x 5 = <u>65</u>
Column Totals: <u>118</u> (A)	<u>470</u> (B)
Prevalence Index = B/A = <u>3.98</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Shrubland upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/3	100					Sandy	
3-15	10YR 2/2	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Mesic Spodic (A17)
- (MLRA 144A, 145, 149B)**
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- High Chroma Sands (S11) (**LRR K, L**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (**LRR K, L**)
- Red Parent Material (F21) (**MLRA 145**)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Red Parent Material (F21) (**outside MLRA 145**)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ none _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Attachment D



Photo 1-Wetland A facing northeast.



Photo 2-Wetland A soils.



SITE PHOTOGRAPHS

**Syracuse Hancock International Airport
Town of Salina, Onondaga Co., NY**



Photo 3-Upland A facing northwest.



Photo 4-Upland A soils.



SITE PHOTOGRAPHS

**Syracuse Hancock International Airport
Town of Salina, Onondaga Co., NY**



Photo 5-Successional northern hardwoods facing east.



Photo 6- Successional northern hardwoods soils.



SITE PHOTOGRAPHS

**Syracuse Hancock International Airport
Town of Salina, Onondaga Co., NY**



Photo 7-Successional shrubland facing west.



Photo 8- Successional shrubland soils.



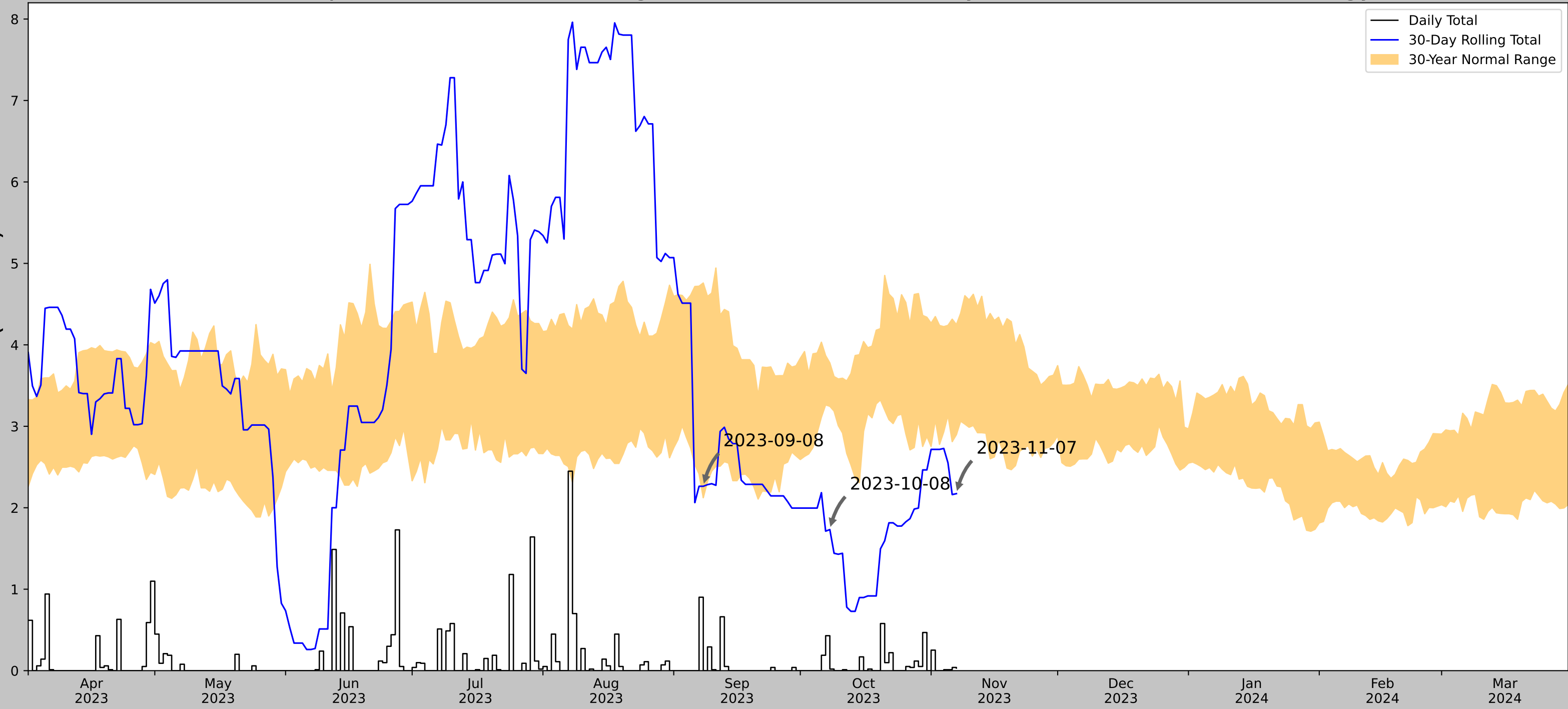
SITE PHOTOGRAPHS

**Syracuse Hancock International Airport
Town of Salina, Onondaga Co., NY**

Attachment E


Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Rainfall (Inches)




Coordinates	43.113783, -76.127722
Observation Date	2023-11-07
Elevation (ft)	415.116
Drought Index (PDSI)	Mild wetness (2023-10)
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-11-07	2.897638	4.248425	2.173228	Dry	1	3	3
2023-10-08	3.245669	3.778347	1.732284	Dry	1	2	2
2023-09-08	2.122441	4.759449	2.26378	Normal	2	1	2
Result							Drier than Normal - 7



Figures and tables made by the
Antecedent Precipitation Tool
Version 2.0

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center



Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
SYRACUSE HANCOCK INTL AP	43.1111, -76.1039	410.105	1.216	5.011	0.553	11347	89
SUNY ESF SYRACUSE	43.0344, -76.1344	568.898	5.519	158.793	3.36	4	0
SYRACUSE 2.7 S	43.0015, -76.1395	430.118	7.783	20.013	3.658	0	1
BREWERTON LOCK 23	43.2386, -76.1964	376.969	9.966	33.136	4.815	1	0

CHA

